

*APPENDIX E.  
HUMAN HEALTH RISK  
ASSESSMENT*

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APPENDIX E. HUMAN HEALTH RISK ASSESSMENT  
TECHNICAL REPORT



## E.1 INTRODUCTION

The human health risk assessment (HHRA) estimates cancer risks, chronic (long-term) non-cancer health hazards, and acute (short-term) non-cancer health hazards associated with exposure to toxic air contaminants (TAC) that would be emitted during construction and operation of the Terminal Modernization and Development Project (Proposed Project) at Oakland International Airport (Airport or OAK).

### E.1.1 Proposed Project

The primary objective of the Proposed Project is to modernize and expand passenger terminal and support facilities such that they accommodate the market-based aviation demand, improve the passenger experience, and financially support sustainable development, operations, and practices at OAK. The Proposed Project includes modernizing Terminals 1 and 2, consolidating passenger processing functions (e.g., ticketing, baggage check-in, baggage claim, security screening), constructing expanded international arrival facilities, constructing a new terminal, relocating existing cargo and support facilities, and improving the terminal area roadway, parking areas, and support facilities. To accommodate the construction of new facilities at OAK, some existing facilities would be demolished and most of those facilities would be relocated at the Airport.

The modifications to the terminals and ground access facilities and construction of the new terminal would alter the locations and amounts of TAC released by aircraft while taxiing, ground support equipment (GSE), vehicles, and stationary sources. In addition, construction of the Proposed Project would release TAC.

As with all activities at facilities that accommodate vehicles and equipment that consume fuel, activities at OAK release TAC to the air. These TAC may come from aircraft; GSE; other motor vehicles; combustion of fossil fuels to produce hot water, steam, and power; and other sources. These operational releases, and releases during construction activities, are analyzed to see if there could be an effect on people living and working in the vicinity of the Airport. Impacts to human health associated with TAC releases may include increased cancer risks, increased chronic (long-term) non-cancer health hazards, and increased acute (short-term) non-cancer health hazards from inhalation of TAC.

The objective of this HHRA is to assess the potential health impacts from changes in TAC exposure from the construction and operation of the Proposed Project. For this analysis, construction of the Proposed Project was assumed to begin in 2025 and end in 2030, with incremental operations starting in 2028 and market-based demand forecast through 2038. Operational emissions were quantified for existing conditions (2019), Future Year 2028, and Future Year 2038. The approach and methods used in this HHRA follow the Oakland International Airport Terminal Modernization and Development Project –Human Health Risk Assessment Methodology Protocol (or HHRA Protocol, see **Attachment 1**), January 6, 2023, which was reviewed by the Bay Area Air Quality Management District (BAAQMD) prior to the initiation of this HHRA. The analysis discloses whether implementation of the Proposed Project would increase health risks for people living, working, or attending school near OAK.

### E.1.2 General Approach

This HHRA presents an analysis of incremental human health risks and hazards associated with airborne releases of TAC which would occur during construction and operation of the Proposed Project. The calculation of cancer risks, as well as the chronic and acute non-cancer health hazard assessments, depended on the estimation of TAC concentrations in air in two steps: (1) emissions of TAC associated with construction and operation were estimated and concentrations were subsequently estimated using dispersion modeling of those TAC to downwind receptor locations; and (2) health risks were estimated associated with the inhalation of those TAC. Estimated emission rates were used, along with meteorological and geographic information, as inputs to an air dispersion model. The dispersion model predicted possible concentrations of TAC released during construction within the HHRA study area around the Airport as defined in the HHRA Protocol. Modeled concentrations were used to estimate human health risks and hazards, which were the basis of the significance determinations for the Proposed Project.

Potential impacts to human health were estimated using modeled TAC concentrations in air and methods developed by the CalEPA and the USEPA, as described below. Results of the analysis were then interpreted by comparing incremental cancer risks and chronic and acute non-cancer health hazards to regulatory thresholds. For the purposes of assessing the significance of any health impacts, these comparisons were made for maximally exposed individuals (MEI) at locations where TAC concentrations were predicted to be the highest by air dispersion modeling. An impact was considered significant<sup>1</sup> if cancer risks and/or chronic non-cancer health hazards for MEI was predicted to exceed significance thresholds. In addition, the range of possible risks and hazards was addressed by evaluating risks for all modeled locations within the defined HHRA study area.

Methods for conducting this HHRA are presented in Section E.2; TAC emission calculation approach and results and a discussion of the dispersion analysis are presented in Section E.3; associated health risks are presented in Section E.4; and uncertainties are discussed in Section E.5.

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<sup>1</sup> The term "significant" is used as defined under CEQA regulations and does not imply an independent judgment of the acceptability of risks or hazards.

## E.2 METHODOLOGY

The methodology for the HHRA is documented in the HHRA Protocol, which was presented to BAAQMD prior to the initiation of this HHRA. Because this protocol is included as **Attachment 1**, this methodology is summarized below.

The HHRA was developed following State of California statutes and regulations,<sup>2</sup> and was conducted in four steps as defined in BAAQMD, CalEPA, and USEPA guidance<sup>3, 4, 5</sup> consisting of:

- Selection of TAC of Concern - Identification of TAC that may be released in sufficient quantities to present a public health risk
- Exposure Assessment - Analysis of ways in which people might be exposed to TAC
- Toxicity Assessment - Evaluation of the toxicity of TAC that may present public health risks

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<sup>2</sup> California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, Air Toxics Hot Spots Information and Assessment Act of 1987, Section 44300; California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments, February 2015.

<sup>3</sup> Bay Area Air Quality Management District, California Environmental Quality Act – 2022 Air Quality Guidelines, April 2023. Available: <https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines>. Accessed: April 2023.

<sup>4</sup> California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, Air Toxics Hot Spots Program Risk Assessment Guidelines, Part I: The Determination of Acute Reference Exposure Levels for Airborne Toxicants, March 1999. Available: <https://oehha.ca.gov/air/cnr/adooption-air-toxics-hot-spots-risk-assessment-guidelines-part-i-technical-support-document>. Accessed: April 2023.

California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, Air Toxic Hot Spots Program Risk Assessment Guidelines, Technical Support Document for Exposure Assessment and Stochastic Analysis, August 2012. Available:

<https://oehha.ca.gov/air/cnr/notice-adoption-technical-support-document-exposure-assessment-and-stochastic-analysis-aug>. Accessed: April 2023.

California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, Air Toxics Hot Spots Program Risk Assessment Guidelines, Technical Support Document for the Derivation of Noncancer Reference Exposure Levels, June 2008. Available:

<https://oehha.ca.gov/media/downloads/cnr/noncancersdfinal.pdf>. Accessed: April 2023.

California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, Air Toxics Hot Spots Program Risk Assessment Guidelines, Technical Support Document for Cancer Potency Factors: Methodologies for derivation, listing of available values, and adjustments to allow early life stage exposures, May 2009. Available:

<https://oehha.ca.gov/media/downloads/cnr/tsdcancerpotency.pdf>. Accessed: April 2023.

California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments, February 2015.

<sup>5</sup> U.S. Environmental Protection Agency, Office of Emergency and Remedial Response, Risk Assessment Guidance for Superfund, Volume I, Human Health Evaluation Manual (Part A), Interim Final, EPA/540/1-89/002, December 1989. Available:

[https://www.epa.gov/sites/production/files/2015-09/documents/rags\\_a.pdf](https://www.epa.gov/sites/production/files/2015-09/documents/rags_a.pdf). Accessed: April 2023.

- Risk Characterization - Characterization of the magnitude of health risks for the exposed community, and of locations in the community where the greatest risks or hazards may be realized

HHRA analyses for the Proposed Project address the following issues and provide additional information on the potential for human health impacts:

- Quantitative assessment of cancer risks due to release of TAC associated with construction and operational activities for the Proposed Project. For the construction scenario, the starting year of exposure for each receptor was adjusted to yield the highest risk over the exposure period for individual receptors, i.e., starting year may be different for each receptor.
- Quantitative assessment of cancer burden due to release of TAC associated with construction and operational activities for the Proposed Project.
- Quantitative assessment of chronic non-cancer health hazards due to release of TAC associated with construction and operational activities for the Proposed Project (selecting the year of exposure that generated the highest total chronic hazard based on the TAC annual concentrations).
- Quantitative evaluation of possible acute non-cancer health hazards due to release of TAC during construction or operational activities for the Proposed Project.
- Quantitative evaluation of possible 8-hour non-cancer health hazards due to release of TAC during construction or operational activities for the Proposed Project.

Health protective<sup>6</sup> methods that are likely to overestimate rather than underestimate possible health risks were used to estimate cancer risks and chronic and acute non-cancer health hazards. Incremental risks and hazards associated with the Proposed Project were calculated for individuals assumed to live, work, or attend school at locations where TAC concentrations were predicted to be highest, even if people are not currently present at these locations. For example, school-aged children were evaluated for all locations within residential areas, even though no schools existed or were anticipated to be opened at most of these locations.

Further, these individuals were assumed to be exposed to TAC for almost all days of the year and for many years to maximize estimates of possible exposure. No attempt was made to account for issues such as residents that work outside of the HHRA study area or move in or out of the HHRA study area, workers that change jobs and locations or have jobs that require movement within and/or outside the HHRA study area.

MEI are hypothetical individuals used to represent receptors that would be subject to the highest exposures. Risk estimates for MEI are upper-bound predictions that could in theory be experienced by people working or living near OAK who breathe TAC released during construction and Airport operations associated with the Proposed Project. If hypothetical individuals that receive the highest exposures would be protected, actual members of the

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<sup>6</sup> The terms "protective" and "conservative" are often used interchangeably to indicate that risk assessment methods were designed to err on the side of over-estimating risk. "Protective" is used in this HHRA to avoid confusion over what "conservative" means in different situations. For example, a "conservative" estimate of the time that someone might live in a given residence could imply to some readers that a minimum time was identified.

population near OAK would also be protected. The locations of receptors were extended sufficiently to include the East Oakland community.

The HHRA for the Proposed Project also evaluated the potential for short-term (1-hour) exposures to cause immediate, or acute, non-cancer health impacts. These estimates were also intentionally conservative; they used, for example, the highest 1-hour concentrations for assessing acute impacts regardless of whether individuals might have access to locations where maximum concentrations occur. This approach helped ensure that actual exposure concentrations in off-Airport areas were not underestimated.

### E.2.1 Selection of TAC of Concern

California Assembly Bill 2588 (AB 2588) identifies TAC for which Office of Environmental Health Hazard Assessment (OEHHA) has developed cancer slope factors and chronic and/or acute reference exposure levels (RELs). For this analysis, TAC of concern were derived based on the AB 2588 list, emissions estimates, human toxicity information, and results of several previous California airport health risk assessments conducted for CEQA evaluations.<sup>7,8,9,10,11,12</sup> This list of TAC was further refined to include only TAC with chronic RELs, acute RELs, and cancer potency values identified by the CalEPA OEHHA.<sup>13</sup> The

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- <sup>7</sup> Port of Oakland, Draft Oakland International Airport - Airport Development Program (ADP) Supplemental Environmental Impact Report, Section 3.2 - Supplemental Toxic Air Contaminants Analysis, September 2003.
- <sup>8</sup> City of Los Angeles, Final Environmental Impact Report for Los Angeles International Airport (LAX) Proposed Master Plan Improvements, (SCH 1997061047), Section 4.24.1 - Human Health Risk Assessment, Technical Report 14a - Health Risk Assessment, and Technical Report S-9a - Supplemental Health Risk Assessment, April 2004. Available: <https://www.lawa.org/en/lawa-our-lax/environmental-documents/documents-certified/2004-lax-master-plan-program/final-environmental-impact-report-feir>. Accessed: April 2023.
- <sup>9</sup> City of Long Beach, Long Beach Airport Terminal Area Improvement Project Draft Environmental Impact Report, Section 3.2-Air Quality and Human Health Risk Assessment, and Appendix C - Air Quality Impact Analysis and Human Health Risk Assessment Technical Report, revised November 3, 2005.
- <sup>10</sup> City of Los Angeles, Los Angeles World Airports, Final Environmental Impact Report for Los Angeles International Airport (LAX) Specific Plan Amendment Study, (SCH 1997061047), Section 4.7.1 - Human Health Risk Assessment, and Appendix G1 - Human Health Risk Assessment, January 2013. Available: <https://www.lawa.org/lawa-our-lax/environmental-documents/documents-certified/specific-plan-amendment-study/documents>. Accessed: April 2023.
- <sup>11</sup> City of Los Angeles, Los Angeles World Airports, Final Environmental Impact Report for Los Angeles International Airport (LAX) Landside Access Modernization Program, (SCH 2015021014), Appendix F - Air Quality, Greenhouse Gas Emissions, and Human Health Risk Assessment, February 2017. Available: <https://cloud1lawa.app.box.com/s/z3992x8we0qtknlvai30u648maijga1>. Accessed: April 2023.
- <sup>12</sup> City of Los Angeles, Los Angeles World Airports, Final Environmental Impact Report for Los Angeles International Airport (LAX) Airfield and Terminal Modernization Program, (SCH 2019049020), Appendix C - Air Quality, Human Health Risk Assessment, Greenhouse Gas Emissions, and Energy, August 2021. Available: <https://cloud1lawa.app.box.com/s/r3zfljff9opmjq5955y3tvn4qfcl51dx>. Accessed: April 2023.
- <sup>13</sup> Chemical-specific toxicity criteria used in the health risk calculations consider toxicity values developed by CalEPA, USEPA, or both as described in Section 4 of the protocol.

resulting list of TAC of concern evaluated in this HHRA is provided in **Table E-1**. Although not all of these TAC contribute substantively to possible incremental health impacts, the TAC listed in this table were carried through the risk assessment process to comply with CalEPA risk assessment policy and guidance and to verify TAC contributions to total health impacts.

**TABLE E-1  
TOXIC AIR CONTAMINANTS OF CONCERN FOR THE PROPOSED PROJECT**

Toxic Air Contaminant	Type	Toxic Air Contaminant	Type
Acetaldehyde	VOC <sup>/a/</sup>	Arsenic	PM <sup>/b/-</sup> Metal
Acrolein	VOC	Cadmium	PM-Metal
Benzene	VOC	Chromium III	PM-Metal
1,3-Butadiene	VOC	Chromium VI	PM-Metal
Ethylbenzene	VOC	Cobalt	PM-Metal
Ethyl chloride	VOC	Copper	PM-Metal
Ethylene glycol	VOC	Lead	PM-Metal
Formaldehyde	VOC	Manganese	PM-Metal
n-Hexane	VOC	Mercury	PM-Metal
Methyl alcohol	VOC	Nickel	PM-Metal
Methyl ethyl ketone	VOC	Selenium	PM-Metal
Methyl tert-butyl ether	VOC	Vanadium	PM-Metal
Phenol	VOC		
Propylene	VOC	Ammonium Ion	PM-Inorganics
Styrene	VOC	Chlorine	PM-Inorganics
Toluene	VOC	Silicon (as crystalline Silica)	PM-Inorganics
Xylene (total)	VOC	Sulfates	PM-Inorganics
Naphthalene	PAH <sup>/c/</sup>	Diesel PM	Diesel Exhaust

/a/ VOC = Volatile organic compounds

/b/ PM = Particulate matter

/c/ PAH = Polycyclic organic hydrocarbons

Source: CDM Smith, 2023.

## E.2.2 Exposure Assessment

### E.2.2.1 Exposure Population

The following sensitive receptors were selected for quantitative evaluation: on-Airport (non-project) workers, off-Airport workers, off-Airport adult residents, off-Airport child residents, and off-Airport school children. Hazards to on-Airport Proposed Project workers were also evaluated using the methodology described in Section E.2.4.6 below. Each receptor represents a unique population and set of exposure conditions (i.e., location and duration of exposure). As a whole, they cover a range of exposure scenarios for people who may be affected by OAK emissions to the greatest extent. Receptors for which exposure scenarios are prepared were selected to provide risks and hazards estimates for MEI, and to demonstrate the range of risks and hazards in the vicinity of the Airport. The final boundaries of the analysis are defined by the 1 in 1-million cancer risk zone associated with Proposed Project TAC emissions, which is determined through the dispersion modeling and

risk assessment analysis. By evaluating impacts for the most exposed individuals for determination of significance, the general population is protected.

#### E.2.2.2 Exposure Pathways

Different receptors (e.g., off-site workers, school children) could be exposed to TACs through several exposure pathways. Exposure scenarios are developed for each receptor. Each scenario considers various pathways through which each receptor may be exposed to TACs.

An exposure pathway consists of four parts:

- A TAC source (e.g., construction equipment fuel combustion)
- A release mechanism (e.g., construction equipment engine exhaust)
- A means of transport from point of release to point of exposure (e.g., local winds)
- A route of exposure (e.g., inhalation)

If any of these elements of an exposure pathway is absent, no exposure can take place, and the pathway is considered incomplete. Incomplete pathways were not evaluated in this HHRA.

For this analysis, it was anticipated that the direct inhalation pathway will be the primary contributor to exposure and, thus, to risk/hazard. However, soil ingestion, soil dermal contact, and ingestion of mother's milk were also assessed. For the Proposed Project, the inhalation pathway was quantitatively evaluated for all receptors. The soil ingestion and soil dermal contact were evaluated for both residential and worker receptors, and the ingestion of mother's milk was evaluated for residential receptors only.

#### E.2.2.3 Exposure Concentrations

Analyses of cancer risk and non-cancer health hazards, both chronic and acute exposures, were included in the exposure assessment for the receptors identified in **Section E.2.2.1**. Chronic and acute exposure to TAC from Proposed Project-specific construction and Airport-related operations were estimated by:

- Estimation of annual (for chronic exposure) and peak daily (for acute exposure) construction source emissions.
- Dispersion modeling of construction emissions over an area that consists of the Airport property and nearby urban areas to the north, east, and south.
- Dispersion modeling of Proposed Project incremental operational emissions over the same areas as for the construction sources. Note that the Proposed Project incremental operational emissions are the difference in emissions between the Proposed Project in 2028 through 2038 and the existing conditions emissions in 2019 for each TAC.

Locations where the highest modeled TAC concentrations were calculated (MEI locations) were used to estimate incremental human health risks and hazards. These estimates served as the basis for significance determinations for the Proposed Project. To estimate cancer risks and the potential for adverse non-cancer health hazards, total TAC exposure for each receptor were estimated.

In February 2015, CalEPA OEHHA released the Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. Exposure equations and parameter

values presented in this report come from that guidance, unless otherwise noted. The guidance recommends the use of a software program, Hot Spots Analysis and Reporting Program Version 2 (HARP2) developed by the California Air Resources Board (CARB), for calculating and presenting health risk assessment results for the Hot Spots Program. For this HHRA, the HARP2 equations and calculations were built into Excel spreadsheets to allow for customization of the calculations to address Proposed Project-specific criteria and for the ease of conducting multiple iterations of calculations.

Per the HHRA Protocol (January 6, 2023) for the Proposed Project, TAC doses were developed from the modeled concentrations using the exposure dose calculations included in Section 3.3.2 of the HHRA Protocol. TAC doses were developed from modeled concentrations for direct inhalation, soil ingestion, soil dermal contact, and infant ingestion of mother's milk. Cancer risks as well as chronic and acute non-cancer hazards were then calculated following the methodologies described in the Guidance Manual for Preparation of Health Risk Assessments (February 2015), Chapter 8 prepared by OEHHA for the Air Toxics Hot Spots Program.

Assessment of potential chronic human health impacts due to release of TAC associated with operation of the Proposed Project assumed that receptors would be exposed to concentrations of TAC over a 9- or 30-year period for off-Airport residential receptors; a 12-year period for off-Airport school children; and a 25-year period for off-Airport and on-Airport (non-project) workers.

For the construction analysis, the focus of construction activities was assumed to move as different portions of the Proposed Project are constructed throughout the construction period (2025 to early 2030). To incorporate this variability into the model, construction emissions were modeled separately for each year of construction. Risks for receptors were calculated by grid point for each year of construction and then added together to determine total risk by grid point. Operational TAC concentrations were added to the construction TAC concentrations between 2028 and 2030 when Proposed Project operations were assumed to commence while construction continued on other phases of the Proposed Project. Operational TAC concentrations were also estimated in 2038. For receptors whose exposure periods would extend beyond the future year 2038, the future year 2038 incremental TAC concentrations from operations were used for the remainder of their exposure period.

Exposure parameters used to calculate the risks and hazards for all receptors are summarized in **Table E-2**. Exposure parameters were based on CalEPA Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments<sup>14</sup> and USEPA Exposure Factors Handbook.<sup>15</sup>

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<sup>14</sup> California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments, February 2015.

<sup>15</sup> U.S. Environmental Protection Agency, Exposure Factors Handbook, EPA/600/R-09/052F, September 2011.

**TABLE E-2  
EXPOSURE PARAMETERS BY RECEPTOR TYPE**

Exposure Parameters for Inhalation Pathway	Adult Resident	Child Resident	School Child	Worker <sup>/h/</sup>
Exposure Frequency (fraction of year, unitless)	0.96 (350 days/ 365 days) <sup>/a/</sup>	0.96 <sup>/a/</sup>	0.96 <sup>/a/</sup>	0.685 (250 days/ 365 days) <sup>/a/</sup>
Exposure Duration (years)	30 <sup>/a,b,f,g/</sup>	9 <sup>/a/</sup>	12 <sup>/a/</sup>	25 <sup>/a/</sup>
Exposure Time (hours/day)	24 <sup>/d/</sup>	24 <sup>/d/</sup>	8 <sup>/a/</sup>	8 <sup>/a/</sup>
Absorption Fraction (unitless)	1 <sup>/a/</sup>	1 <sup>/a/</sup>	1 <sup>/a/</sup>	1 <sup>/a/</sup>
Fraction of Time at Home (unitless)	0.73 <sup>/a/</sup>	1 <sup>/a,e/</sup>	1 <sup>/a,e/</sup>	0.73 <sup>/a/</sup>
Averaging Time, Non-cancer (days)	10,950; 25,550 <sup>/a,d/</sup>	3,285 <sup>/d/</sup>	4,380 <sup>/d/</sup>	9,125 <sup>/a/</sup>
Averaging Time, Cancer (days)	25,550 <sup>/a,d/</sup>	25,550 <sup>/a,d/</sup>	25,550 <sup>/a,d/</sup>	25,550 <sup>/a,d/</sup>

/a/ California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments, February 2015.

/b/ 30-year exposure duration was used as basis for determining significance to the MEI resident.

/c/ Professional judgment.

/d/ U.S. Environmental Protection Agency, Office of Emergency and Remedial Response, Risk Assessment Guidance for Superfund, Volume I, Human Health Evaluation Manual (Part A), Interim Final, EPA/540/1-89/002, December 1989. Available: [https://www.epa.gov/sites/production/files/2015-09/documents/raggs\\_a.pdf](https://www.epa.gov/sites/production/files/2015-09/documents/raggs_a.pdf).

/e/ It was assumed that children attended school within the study area; thus, the Fraction of Time at Home = 1.

/f/ Evaluation of 9-year and 30-year cancer risks will begin with exposure during the third trimester and will sum individual age group risks from that point forward.

/g/ 30-year residential cancer risks will be calculated at residential locations, sensitive receptor locations (such as hospitals), and school sites.

/h/ For the health risk assessment, the parameters in this table are applied to off-airport and on-airport workers that would not be proposed project construction workers.

**Source:** CDM Smith, 2023.

Several specific parameters for soil concentrations and water concentrations were also used, including:

- Soil half-life for metals,  $t_{1/2} = 1.0E+08$  days
- Soil elimination constant,  $K_s = 6.93E-09$  day<sup>-1</sup>
- Total soil deposition duration,  $T_t = 25,550$  days
- Soil accumulation integral,  $X = 2.26$  days
- Deposition rate, Dep-rate = 0.02 meter/second
- Soil mixing depth, SD = 0.01 meter
- Soil bulk density, BD = 1,333 kilograms/cubic meter
- Water surface area, SA = 1.235E+07 square meters (area of over-water modeling grid points)
- Water volume, WV = 6.18E+10 liters (with a density of 1 kilogram per liter)
- Adult body weight, BW = 70 kilograms

In addition to the exposure parameters presented in **Table E-2**, some of the exposure parameters varied according to age groups to address the methodology detailed in the

CalEPA Air Toxics Hot Spots Program Guidance.<sup>16</sup> These exposure parameters are presented in **Table E-3**.

**TABLE E-3  
EXPOSURE PARAMETERS BY AGE GROUP**

Exposure Parameters <sup>/a/</sup>	3 <sup>rd</sup> trimester	0 < 2 years	2 < 9 years	2 < 16 years	16 < 30 years
Residential Daily Breathing Rate (L/kg-day) <sup>/b/</sup>	361	1,090	861	745	335
Worker 8-hr Daily Breathing Rate (L/kg-day)	NA	NA	NA	NA	240
School Child 8-hr Daily Breathing Rate (L/kg-day)	NA	NA	640	520	240
Age Sensitivity Factor (unitless)	10	10	3	3	1
Fraction of Averaging Time (unitless) <sup>/c/</sup>	0.0036 = 0.25/70	0.0286 = 2/70	0.1 = 7/70	0.2 = 14/70	0.2 = 14/70
Soil Ingestion Rate (mg/kg-day) <sup>/d/</sup>	3	40	--	10	3
Annual Dermal Load (mg/kg-day)	2,400	2,900	--	8,100	2,400
Water Ingestion Rate (mL/kg-day) <sup>/e/</sup>	47	196	--	61	47
Milk Ingestion Rate (g/kg-day) <sup>/f/</sup>	NA	139	NA	NA	NA
Gastrointestinal relative absorption factors (for soil and water), and Fraction of water from contaminated sources (all unitless)	1	1	1	1	1

/a/ California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments, February 2015.

/b/ L/kg-day = liters per kilogram body weight per day.

/c/ Fractions provided here are for reference based on a receptor being in the designated age group for their entire exposure period. In the calculations, the fractions used may vary from what is shown on this table depending on the age range of the receptor during the period that they are exposed (i.e., the receptor’s age during his exposure period may not coincide with the length of time in the age group).

/d/ mg/kg-day = milligrams per kilogram body weight per day.

/e/ mL/kg-day = milliliters per kilogram body weight per day.

/f/ g/kg-day = grams per kilogram body weight per day.

**Source:** CDM Smith, 2023.

### E.2.3 Toxicity Assessment

Risks from exposure to TAC were calculated by combining estimates of potential exposure with chemical-specific toxicity criteria developed by CalEPA. A toxicity assessment initially examined quantitative toxicity criteria for TAC as required under Sections (§) 69021(a), (b),

<sup>16</sup> California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments, February 2015.

and (c) of the *Toxicity Criteria for Human Health Risk Assessments, Screening Levels, and Remediation Goals* rule.<sup>17</sup>

Acute RELs developed by the State of California were used in the characterization of potential acute non-cancer health hazards associated with the Proposed Project. Cancer unit risk factors, cancer slope factors, and chronic RELs developed by the State of California were used to characterize cancer risks and chronic non-cancer health hazards associated with longer-term inhalation of emissions from construction and operational activities. Both types of toxicity criteria are based on studies of chronic exposure in animals or, in some cases, to people. Inhalation unit risk and cancer slope factors are presented in **Table E-4**. Chronic RELs and 8-Hour exposure RELs are presented in **Table E-5** and **Table E-6**, respectively.

**TABLE E-4**  
**CANCER SLOPE FACTORS AND UNIT RISK FACTORS**

TAC of Concern	Inhalation Cancer Slope Factor <sup>/a,d/</sup> ( $\mu\text{g}/\text{kg}\text{-day}$ ) <sup>-1</sup>	Inhalation Unit Risk Factor <sup>/b,d/</sup> ( $\mu\text{g}/\text{m}^3$ ) <sup>-1</sup>	Tumor Site/ Inhalation	Cancer Classification <sup>/c/</sup>
<b>VOC</b>				
Acetaldehyde	0.01	0.0000027	Respiratory	B2
Acrolein <sup>/e/</sup>	NA <sup>/f/</sup>	NA	NA	C <sup>/e/</sup>
Benzene	0.1	0.000029	Blood	A
1,3-Butadiene	0.6	0.00017	Reproductive System, Blood,	B2 <sup>/g/</sup>
Ethylbenzene	0.0087	0.0000025	Kidney	D
Formaldehyde	0.021	0.000006	Respiratory	B1
Methyl tert-butyl ether	0.0018	0.00000026		
<b>PAH</b>				
Naphthalene	0.12	0.000034	Respiratory System	C
<b>Diesel Exhaust</b>				
Diesel Particles	1.1	0.0003	Respiratory	D <sup>/h/</sup>
<b>PM-Metal</b>				
Arsenic	12	0.0033	Respiratory	A
Cadmium	15	0.0042	Respiratory	B1
Chromium VI	510	0.15	Respiratory	A
Cobalt <sup>/i/</sup>	27	0.0077		
Lead	0.042	0.000012	NA	B2
Nickel <sup>/j/</sup>	0.91	0.00026	Respiratory	A

<sup>17</sup> California Department of Toxic Substances Control (DTSC) Human and Ecological Risk Office (HERO), Human Health Risk Assessment (HHRA) Note Number 10, Toxicity Criteria, February 25, 2019. Available: <https://dtsc.ca.gov/wp-content/uploads/sites/31/2019/02/HHRA-Note-10-2019-02-25.pdf>. Accessed: April 2023.

- /a/ mg/kg/day - milligram per kilogram per day.
  - /b/  $\mu\text{g}/\text{m}^3$  = microgram per cubic meter.
  - /c/ U.S. Environmental Protection Agency, Guidelines for Carcinogen Risk Assessment, Federal Register 51(185):33992-34003, 1986. Available: <http://www.epa.gov/ncea/raf/>. U.S. Environmental Protection Agency, Provisional Guidelines for Carcinogen Risk Assessment, EPA/600/P-92/003c, April 1996. Available: [https://cfpub.epa.gov/ncea/raf/pdfs/propcra\\_1996.pdf](https://cfpub.epa.gov/ncea/raf/pdfs/propcra_1996.pdf):
  - A Human carcinogen
  - B1 Probable human carcinogen - indicates limited evidence in humans
  - B2 Probable human carcinogen - indicates sufficient evidence in animals and inadequate or no evidence in humans
  - C Possible human carcinogen
  - D Not classifiable as human carcinogen
  - /d/ California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, Toxicity Criteria Online Database. Available: <http://oehha.ca.gov/chemicals>, accessed January 15, 2020,
  - /e/ Although acrolein has been classified as a possible human carcinogen, its potential carcinogenicity cannot be determined because the existing "data are inadequate for an assessment of human carcinogenic potential for either the oral or inhalation route of exposure." U.S. Environmental Protection Agency, Guidelines for Carcinogen Risk Assessment, Review draft, NCEA-F-0644, July 1999. Risk Assessment Forum.
  - /f/ NA = Not available.
  - /g/ Under USEPA's 1999 Guidelines for Carcinogen Risk Assessment, 1,3butadiene is characterized as carcinogenic to humans by inhalation.
  - /h/ Under USEPA's 1999 Guidelines for Carcinogen Risk Assessment, diesel exhaust is likely to be carcinogenic to humans by inhalation from environmental exposures.
  - /i/ Cancer slope and unit risk factors for Cobalt obtained from the Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values, dated April 28, 2023. Available at: <https://ww2.arb.ca.gov/sites/default/files/classic/toxics/healthval/contable04282023.pdf>. Accessed May 1, 2023.
  - /j/ Value for nickel is nickel refinery dust.
- Source:** CDM Smith, 2023.

**TABLE E-5  
CHRONIC REFERENCE EXPOSURE LEVELS FOR TAC OF CONCERN**

TAC of Concern	Chronic Inhalation REL <sup>a/</sup> ( $\mu\text{g}/\text{m}^3$ )	Chronic Target Organ	Uncertainty Factor
<b>VOC</b>			
Acetaldehyde	140	Respiratory System	300
Acrolein	0.35	Respiratory System	200
Benzene	3	Hematologic system	200
1,3-Butadiene	2	Reproductive System	300
Ethylbenzene	2,000	Alimentary system (liver); kidney; endocrine system; development	30
Ethyl chloride	30,000	Development, alimentary system (liver)	
Ethylene glycol	400	Respiratory system, kidney, development	
Formaldehyde	9	Respiratory System	10
n-Hexane	7,000	Nervous System	30
Methyl alcohol	4,000	Developmental	30
Methyl tert-butyl ether	8,000	Kidney; eyes; alimentary system (liver)	
Phenol	200	Alimentary system (liver), cardiovascular system, kidney, nervous system	
Propylene	3,000	Respiratory System	100
Styrene	900	Nervous System	3

<b>TAC of Concern</b>	<b>Chronic Inhalation REL<sup>/a/</sup> (µg/m<sup>3</sup>)</b>	<b>Chronic Target Organ</b>	<b>Uncertainty Factor</b>
Toluene	420	Acquired color vision impairment (dyschromatopsia)	
Xylenes	700	Nervous and respiratory systems; eyes	30
<b>PAH</b>			
Naphthalene	9	Respiratory System	1,000
<b>Diesel Exhaust</b>			
Diesel Particles	5	Respiratory System	30
<b>PM-Metal</b>			
Arsenic	0.015	Inhalation and oral: Development; cardiovascular system; nervous system; respiratory system; skin	30
Cadmium	0.02	Inhalation: Kidney; respiratory system Oral: kidney	30
Chromium (III)	0.06		
Chromium (VI)	0.2	Inhalation: Respiratory system Oral: Hematologic system	100
Manganese	0.09	Nervous System	300
Mercury	0.03	Inhalation and Oral: Nervous system; development; kidney	300
Nickel	0.014	Inhalation: Respiratory system; hematologic system Oral: Development	100
Selenium	20	Inhalation and oral: Alimentary system (liver); cardiovascular system; nervous system	3
<b>PM-Inorganics</b>			
Ammonium	200	Respiratory system	10
Chlorine	0.2	Respiratory System	30
Silicon	3	Respiratory system	3

/a/ REL = Reference Exposure Level (obtained from OEHHA Online Toxicity Criteria database, accessed May 1, 2023. RELs are concentrations in air that would not result in toxic effects even if exposure continued for a lifetime.). These values are used in the quantitative risk assessment calculations.

**Source:** CDM Smith, 2023.

**TABLE E-6  
EIGHT-HOUR REFERENCE EXPOSURE LEVELS FOR TAC OF CONCERN**

<b>TAC of Concern</b>	<b>8-Hour REL<sup>/a/</sup> μg/m<sup>3</sup></b>	<b>Target Organ</b>
Acetaldehyde	300	Respiratory system (sensory irritation); eyes
Acrolein	0.7	Respiratory system (sensory irritation); eyes
Benzene	3	Developmental; Immune system; Hematologic system
1,3-Butadiene	9	Development
Formaldehyde	9	Eyes (sensory irritation)
Toluene	830	Respiratory, nervous systems; eyes
Arsenic	0.015	Development; cardiovascular system; nervous system
Chromium III	0.12	(added to OEHHA Toxicity Criteria database on 8/31/2022)
Manganese	0.17	Nervous system
Mercury	0.06	Reproductive/ development
Nickel	0.06	Immune system

/a/ Values obtained from OEHHA Online Toxicity Criteria database, accessed May 1, 2023.

**Source:** CDM Smith, 2023.

Acute RELs were used to characterize potential hazards associated with short-term exposure (usually from exposures on the order of 1-hour). RELs are based on the most sensitive, relevant, adverse health effect reported in the medical and toxicological literature. Since margins of safety<sup>18</sup> are incorporated to address data gaps and uncertainties, exceeding an REL does not automatically indicate an adverse health impact. Acute RELs are applicable to all receptors, children and adults, and hazards are the ratio of estimated or measured concentrations and the REL. Acute RELs for the TAC of concern included in this analysis are provided in **Table E-7**.

<sup>18</sup> Margin of safety is a ratio of the no-observed-effect level to the estimated exposure dose. Margins of safety are incorporated in the development of toxicity values to account for differences in dose-response among individuals. For example, the same dose of alcohol may have a greater effect on a woman than a man, not only because a woman is smaller in body size but also because men and women metabolize alcohol at different rates.

**TABLE E-7  
ACUTE REFERENCE EXPOSURE LEVELS FOR TAC OF CONCERN**

<b>TAC of Concern</b>	<b>Acute REL<sup>/a/</sup> μg/m<sup>3</sup></b>	<b>Target Organ</b>
Acetaldehyde	470	Respiratory system (sensory irritation); eyes
Acrolein	2.5	Respiratory system (sensory irritation); eyes
Benzene	27	Developmental; Immune system; Hematologic system
1,3-Butadiene	660	Development
Formaldehyde	55	Eyes (sensory irritation)
Methyl alcohol	28,000	Nervous system
Methyl ethyl ketone	13,000	Respiratory system; eyes
Phenol	5,800	Respiratory system; eyes
Styrene	21,000	Respiratory system; eyes, reproductive/ development
Toluene	5,000	Respiratory, nervous systems; eyes
Xylenes Total	22,000	Nervous and respiratory systems; eyes
Ammonia	3,200	Respiratory system; eyes
Arsenic	0.2	Development; cardiovascular system; nervous system
Chlorine	210	Respiratory system; eyes
Chromium III	0.48	(added to OEHHA Toxicity Criteria database on 8/31/2022)
Copper	100	Respiratory system
Mercury	0.6	Nervous system; development
Nickel	0.2	Immune system
Sulfates	120	Respiratory system
Vanadium pentoxide <sup>/b/</sup>	30	Respiratory system; eyes

/a/ Values obtained from OEHHA Online Toxicity Criteria database, accessed May 1, 2023.

/b/ Acute value for vanadium pentoxide was used for vanadium in the risk calculations.

**Source:** CDM Smith, 2023.

## E.2.4 Risk Characterization

Risk characterization combines information developed for exposure and for toxicity to produce quantitative estimates of health impacts to receptors in the HHRA study area. Methods used are similar under CalEPA and USEPA guidance.

### E.2.4.1 Maximally Exposed Individuals (MEI)

For the Proposed Project, approximately 3,000 grid points were analyzed within the HHRA study area. Concentrations of each TAC at these grid points representing locations of potentially exposed populations, including locations for MEI exposure scenarios (worker, resident, student), and toxicity criteria were used to calculate cancer risk, and chronic and acute non-cancer health hazard estimates associated with the proposed Project. These calculations were used to identify locations with maximum cancer risks and maximum non-cancer health hazards and serve as the basis for significance determinations.

MEI estimates were partially land use specific. For off-Airport locations, land uses were designated as either residential, school, hospital, or worker (commercial/industrial) based on internet searches and reviews of receptor locations in Google Earth Pro. These land use

identifications were used to determine appropriate receptors (workers at commercial/industrial locations; adult and child residents at residential locations). Locations of schools and hospitals were identified as sensitive receptor locations and evaluated for both worker and residential exposures. In addition, the school sites were also evaluated for the school child exposure.

Finally, several locations were identified as recreational (e.g., parks and golf courses) – these were analyzed as worker locations for those that work at the parks or golf courses. Risks for people recreating at these locations would be lower than those for workers because of much shorter times spent in recreational activities. No risks were calculated for recreational exposure. Where risks would not be significant for other receptor groups, risks for recreational visitors near OAK could also be considered less than significant.

#### E.2.4.2 Methodology for Evaluation Cancer Risks

Cancer risks were estimated by multiplying exposure estimates for carcinogenic chemicals by corresponding cancer slope factors. The result is a risk estimate expressed as the probability of developing cancer. Consistent with OEHHA guidance,<sup>19</sup> cancer risks were based on exposure durations of 30 years for adult residents, 9 years for child residents, 12 years for school children, and 25 years for off- and on-Airport workers. The 30-year period for adult residents represents the 90th to 95th percentile for time of residency of Californians at a single location. The 9-year period for child residents represents the average of the time of residency for Californians at a single location. The 12-year period for the school child is the duration from 1st grade through 12th grade (high school senior) at a single school. The 25-year period for off-Airport workers approximately represents the 95th percentile of time spent with the same employer in the U.S.

The methodology is conservative, as it assumes individuals would be exposed to TAC for almost every hour of each day of the receptor's respective exposure duration. For each receptor's years of exposure after construction, the increment of future operational risk over the 2019 operational risk was added to the risk calculated for the construction period. Impacts of exposure to multiple TAC were accounted for by summing cancer risk estimates for exposure to each individual TAC.

To determine whether releases of TAC during construction and operation of the Proposed Project would be significant, incremental human health risks for the Proposed Project were compared to the appropriate threshold of significance identified in BAAQMD CEQA guidance:<sup>20</sup> cancer risk threshold of 10 in 1 million.

#### E.2.4.3 Methodology for Evaluating Chronic Non-Cancer Health Hazards

Chronic non-cancer health hazard estimates were calculated by dividing exposure estimates by RELs. RELs are estimates of highest exposure levels that would not cause adverse

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<sup>19</sup> California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments, February 2015. Available: <https://oehha.ca.gov/air/crnrr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0>. Accessed: April 2023.

<sup>20</sup> Bay Area Air Quality Management District, California Environmental Quality Act – Air Quality Guidelines, May 2017.

health effects even if exposures continue over a lifetime. The ratio of exposure concentration to reference concentration is termed the hazard quotient (HQ). A HQ greater than 1 indicates the potential for adverse health effects and a HQ less than 1 indicates that adverse health effects are unlikely. RELs are developed by OEHHA and account for the most vulnerable members of a population. Therefore, it is generally accepted that HQs only slightly higher than 1 are associated with low or no risks of adverse effects and the potential for adverse effects increases as the HQ gets larger.<sup>21</sup>

Exposure to multiple TAC with the potential to cause adverse chronic non-cancer health effects were accounted for by summing HQs for chemicals that would affect like target organs or tissues in the human body. This sum is the total chronic Hazard Index (HI) which reflects the total possible chronic non-cancer health hazard increment. Exposure to TAC has the potential to affect multiple organ systems. Therefore, the combined risk for each target organ system was evaluated for exposure to TAC associated with the Proposed Project. The modeled annual average concentration of each TAC at each location was used to estimate the HQ and total chronic HI values.

To determine whether releases of TAC during construction or operation of the Proposed Project would be significant, incremental human health risks for the Proposed Project were compared to the appropriate threshold of significance identified in BAAQMD CEQA guidance:<sup>22</sup> non-cancer chronic HI of 1.

#### E.2.4.4 Methodology for Evaluating Acute Non-Cancer Health Hazards

Short-term concentrations for TAC associated with construction of the Proposed Project were estimated by modeling 1-hour maximum concentrations. Acute non-cancer health hazards were then estimated at each receptor location by dividing estimated maximum 1-hour TAC concentrations in air by acute RELs to determine the HQ.

An acute REL is a concentration in air below which adverse effects are unlikely for people, including sensitive subgroups, exposed for a short time on an intermittent basis. USEPA defines intermittent exposure as an exposure lasting less than 24 hours and occurring no more than monthly.<sup>23</sup> RELs for acute non-cancer health hazards do not distinguish between adults and children, and are established at levels that are considered protective of sensitive populations. Since margins of safety are incorporated to address data gaps and uncertainties, exceeding the REL does not automatically indicate an adverse health impact. Most RELs have been developed for a 1-hour exposure duration, although several are based

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<sup>21</sup> California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments, February 2015. Available: <https://oehha.ca.gov/air/cnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0>. Accessed: April 2023.

<sup>22</sup> Bay Area Air Quality Management District, California Environmental Quality Act – Air Quality Guidelines, May 2017.

<sup>23</sup> California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, Air Toxics Hot Spots Risk Assessment Guidelines Technical Support Document for the Derivation of Noncancer Reference Exposure Levels, June 2008. Available: <http://oehha.ca.gov/media/downloads/cnr/noncancertsdfinal.pdf>. Accessed: April 2023.

on an 8-hour exposure period. CalEPA's OEHHA has developed acute RELs for several of the TAC of concern identified for the Proposed Project.

Exposure to multiple TAC with the potential to cause adverse acute non-cancer health effects were accounted for by summing HQs for chemicals that would affect like target organs or tissues in the human body. This sum is the total acute HI, which reflects the total possible acute non-cancer health hazard increment. The resulting acute HIs were compared to the BAAQMD CEQA guidance<sup>24</sup> TAC acute HI significance threshold of 1. HIs less than 1 indicate that adverse acute non-cancer health hazard impacts are not expected.

#### E.2.4.5 Methodology for Evaluating Cumulative Impacts

The BAAQMD has specified that cumulative impact analysis should include evaluating the total impacts from all past, present, and foreseeable future sources within a 1,000-foot radius from the fence line of a source plus contribution from the project. The potential past, present, and foreseeable future sources were determined by reviewing public notices on permit applications between 2019 and 2023,<sup>25</sup> Title V permit renewal notices and current Title V Permits,<sup>26</sup> synthetic minor permits,<sup>27</sup> and permit applications received for facilities in the cities of Oakland, Alameda, and San Leandro.<sup>28</sup> The list of facilities identified within the 1,000-foot radius of Airport property is included in **Attachment 3**.

#### E.2.4.6 Methodology for Evaluating Occupational Health Hazards

Impacts to on-Airport Proposed Project construction workers were evaluated based on Cal/OSHA PELs.<sup>29</sup> PELs are established to protect on-site workers from hazardous exposure. For each TAC of concern for which Cal/OSHA PEL thresholds have been established, the maximum 8-hour modeled concentration was compared against the corresponding Cal/OSHA PEL.

#### E.2.4.7 HHRA Significance Thresholds

The BAAQMD has developed health risk and hazard significance thresholds for CEQA impact analyses. These thresholds are provided in **Table E-8**. Proposed Project incremental impacts for comparison to the incremental significance thresholds were determined by using

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<sup>24</sup> Bay Area Air Quality Management District, California Environmental Quality Act – Air Quality Guidelines, May 2017.

<sup>25</sup> Bay Area Air Quality Management District, "Public Notices." Available: <https://www.baaqmd.gov/permits/public-notices>, accessed May 8, 2023.

<sup>26</sup> Bay Area Air Quality Management District, "Title V Permits." Available: <https://www.baaqmd.gov/permits/major-facility-review-title-v/title-v-permits>, accessed May 8, 2023.

<sup>27</sup> Bay Area Air Quality Management District, "Synthetic Minor Permits." Available: <https://www.baaqmd.gov/permits/major-facility-review-title-v/synthetic-minor-permits>, accessed May 8, 2023.

<sup>28</sup> Bay Area Air Quality Management District, "Permit Applications Received." Available: <https://www.baaqmd.gov/permits/public-notices/permit-applications-received>, accessed May 8, 2023.

<sup>29</sup> California Occupational Safety and Health Administration, Table AC-1, Permissible Exposure Limits for Chemical Contaminants. Available: [https://www.dir.ca.gov/title8/5155table\\_ac1.html](https://www.dir.ca.gov/title8/5155table_ac1.html), accessed April 14, 2022.

the Proposed Project construction and incremental operational emissions as described in **Section E.2.2.2** to calculate the Proposed Project health impacts.

**TABLE E-8  
HEALTH RISK AND HEALTH HAZARD SIGNIFICANCE THRESHOLDS**

<b>Health Risk or Hazard</b>	<b>Project Incremental Significance Threshold</b>	<b>Cumulative Significance Threshold<sup>/a/</sup></b>
Cancer Risk (MEI Resident or MEI Worker)	Maximum Incremental Cancer Risk > 10 in 1 million	Maximum Cumulative Cancer Risk >= 100 in 1 million
Chronic Non-Cancer Hazards	Chronic Hazard Index (HIc) >= 1.0	Chronic Hazard Index (HIc) >= 10.0
Acute Non-Cancer Hazards	Acute Hazard Index (HIa) >= 1.0	N/A <sup>/b/</sup>
PM <sub>2.5</sub>	Annual Avg Conc.c > 0.3 µg/m <sup>3</sup>	Annual Avg Conc. <sup>/c/</sup> > 0.8 µg/m <sup>3</sup>

Notes:

/a/ Cumulative includes the total impacts from all past, present, and foreseeable future sources within a 1,000-foot radius from the fence line of a source plus contribution from the project.

/b/ N/A = Not applicable.

/c/ µg/m<sup>3</sup> = micrograms per cubic meter.

**Source:** Bay Area Air Quality Management District, May 2017.

In addition, on-site concentrations are compared to Permissible Exposure Limits<sup>30</sup> – Time-Weighted Average or Threshold Limit Values for Proposed Project workers. An exceedance of any of PELs for one or more TACs would be considered a significant impact.

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<sup>30</sup> California Division of Occupational Safety and Health (DOSH, also known as Cal/OSHA), Table AC-1 Permissible Exposure Limits for Chemical Contaminant. Available: [https://www.dir.ca.gov/title8/5155table\\_ac1.html](https://www.dir.ca.gov/title8/5155table_ac1.html). Accessed: April 2023.

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## E.3 TAC EMISSIONS AND DISPERSION

### E.3.1 TAC Emissions

The first step in the process of establishing concentrations of TAC in air was estimation of TAC emissions during project construction. During the construction phase, emissions of diesel particulate matter (DPM) were expected to provide the major contribution to total incremental cancer risks. Other TACs were evaluated for incremental contributions to total cancer risk, and for contributions to chronic and acute non-cancer health hazards. Sources of TAC emissions during construction include off-road heavy duty construction equipment; on-road equipment and vehicles; construction materials (e.g., volatile organic compounds (VOC) from striping, asphalt paving, and architectural coating), and construction dust, with engine exhaust associated with highest estimates for possible health impact.

The basis for TAC emission estimates were total organic gases (TOG) and particulate matter with an aerodynamic diameter less than or equal to 10 micrometers (PM<sub>10</sub>) emission calculations. Once these emissions were determined, estimates of TAC emissions were developed from speciation profiles developed by CARB. The profiles used in this analysis are summarized in **Table E-9**.

**TABLE E-9**  
**SPECIATION PROFILES FOR PM AND TOG**

Source Agency and PM Profile No.	PM Speciation Profile Source Description	Source Agency and TOG Profile No.	TOG Speciation Profile Source Description
CARB 400	Gasoline Vehicle Exhaust - Catalyzed	CARB 2303/2304	Gasoline Vehicle Stabilized Exhaust – Catalyzed (summer/winter), use average
CARB 425	Diesel Vehicle Exhaust	CARB 818	Diesel Vehicle Exhaust (Farm Equipment)
US Navy	Aircraft Jet A Fuel Trace Elements	CARB 5861	Aircraft Engine Exhaust – Turbofan, Turbojet, and Turboprop Engines
CARB 1415	General Aviation Engine Exhaust (AvGas Fueled Aircraft)	CARB 413	Gasoline Exhaust, Non-Catalyzed
CARB 420	Construction Dust	CARB 716	Paving
CARB 472	Tire Wear	CARB 717	Architectural Coatings
CARB 473	Brake Wear		

**Sources:** California Air Resources Board (CARB) 2022. Speciation Profiles Used in CARB Modeling. Available at: <https://ww2.arb.ca.gov/speciation-profiles-used-carb-modeling>; <https://ww2.arb.ca.gov/sites/default/files/2022-08/pmchemprofile20jun22.xlsx>, and <https://ww2.arb.ca.gov/sites/default/files/2022-08/orgprofile20jun22.xlsx> U.S. Navy 2000. Trace Element and Polycyclic Aromatic Hydrocarbon Analyses of Jet Engine Fuels: Jet A, JP5, and JP8, Technical Report 1845 (December).

### E.3.2 Exposure Concentrations

TAC concentrations were estimated in two steps: first, dispersion modeling was used to estimate total TOG and PM<sub>10</sub> concentrations, and then individual organic or particulate TAC concentrations were calculated using CARB speciation profiles to break down (speciate) TOG and PM<sub>10</sub> concentrations into individual elements and compounds (species). For example, if

total TOG at a given location was 0.1 microgram per cubic meter ( $\mu\text{g}/\text{m}^3$ ) and a given volatile TAC makes up 1 percent of this total, the concentration of that TAC at that location would be 0.001  $\mu\text{g}/\text{m}^3$ . All dispersion modeling was performed using the USEPA required AERMOD dispersion model. Aircraft, auxiliary power unit (APU), and GSE inputs for AERMOD were developed using FAA's Aviation Environmental Design Tool – Version 3e (AEDT 3e).

Proposed Project-related concentrations for TAC from Proposed Project sources were estimated using the air dispersion model (AERMOD) with model options for 1-hour maximum, 8-hour maximum and annual average concentrations selected.<sup>31</sup> Annual average concentrations for carcinogens were determined for every year of construction (2025 through 2030), and for 2028 through 2038 operations. Construction and operational concentrations were combined for 2028 through 2030. Incremental operational concentrations were linearly interpreted between 2028 and 2038. After 2038, incremental operational concentrations were assumed to be equal to the 2038 values.

#### E.3.2.1 Source Areas

Area or volume sources were used to model construction areas and construction roadway travel. Specifically, the pollutant emissions estimated for the sources were grouped by the source area that each was associated with, based on data in the resource-loaded construction schedule. Each construction area or site was modeled as a polygon area in AERMOD. Construction source parameters were based on the BAAQMD Localized Significance Threshold Methodology.<sup>32</sup> Construction equipment exhaust emissions were modeled with a 5-meter release height with a 1.4-meter initial vertical dimension, and construction dust ( $\text{PM}_{10}$ ) was modeled at ground level with a 1-meter initial vertical dimension. Construction truck exhaust emissions on roadways were modeled as volume-line sources with an approximate 3.4-meter release height with a plume height of 6.8 meters.

#### E.3.2.2 Receptors

TAC concentrations were estimated at approximately 3,000 sensitive receptor locations within the HHRA study area around the Airport. Locations of receptors were selected such that peak ambient air pollutant impacts associated with the Proposed Project were identified. OAK property line receptors and community receptors around OAK were included in the analysis. The dispersion analyses were conducted using coarse grids and receptor spacing. Receptor spacing along property lines are 100 meters or less. Initial offsite

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<sup>31</sup> The AERMOD modeling system is a steady-state plume model that incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of both surface and elevated sources, and both simple and complex terrain. Additional information, documentation, and guidance regarding the AERMOD modeling system, including the model code and documentation for AERMOD is available on the USEPA's website at <https://www.epa.gov/scram/air-quality-dispersion-modeling-preferred-and-recommended-models>. Accessed: April 2023.

<sup>32</sup> South Coast Air Quality Management District, Final Localized Significance Threshold Methodology, Revised July 2008. Available: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-1st-methodology-document.pdf?sfvrsn=2>. Accessed: April 2023.

receptors within 2.5 kilometers of the Airport center also had 100-meter spacings, and receptors from 2.5 to 5.0 kilometers had 250-meter spacings. The receptor locations were used to determine the type of receptor – resident, school child, or worker. These locations (designated as grid points in the air quality model) were used to identify where Proposed Project-related emissions would have the greatest impact. Modeled concentrations at these locations were used to estimate incremental human health risks and hazards for making determinations of significance of health impacts for the Proposed Project. The modeled receptors are shown on **Figure E-1**.

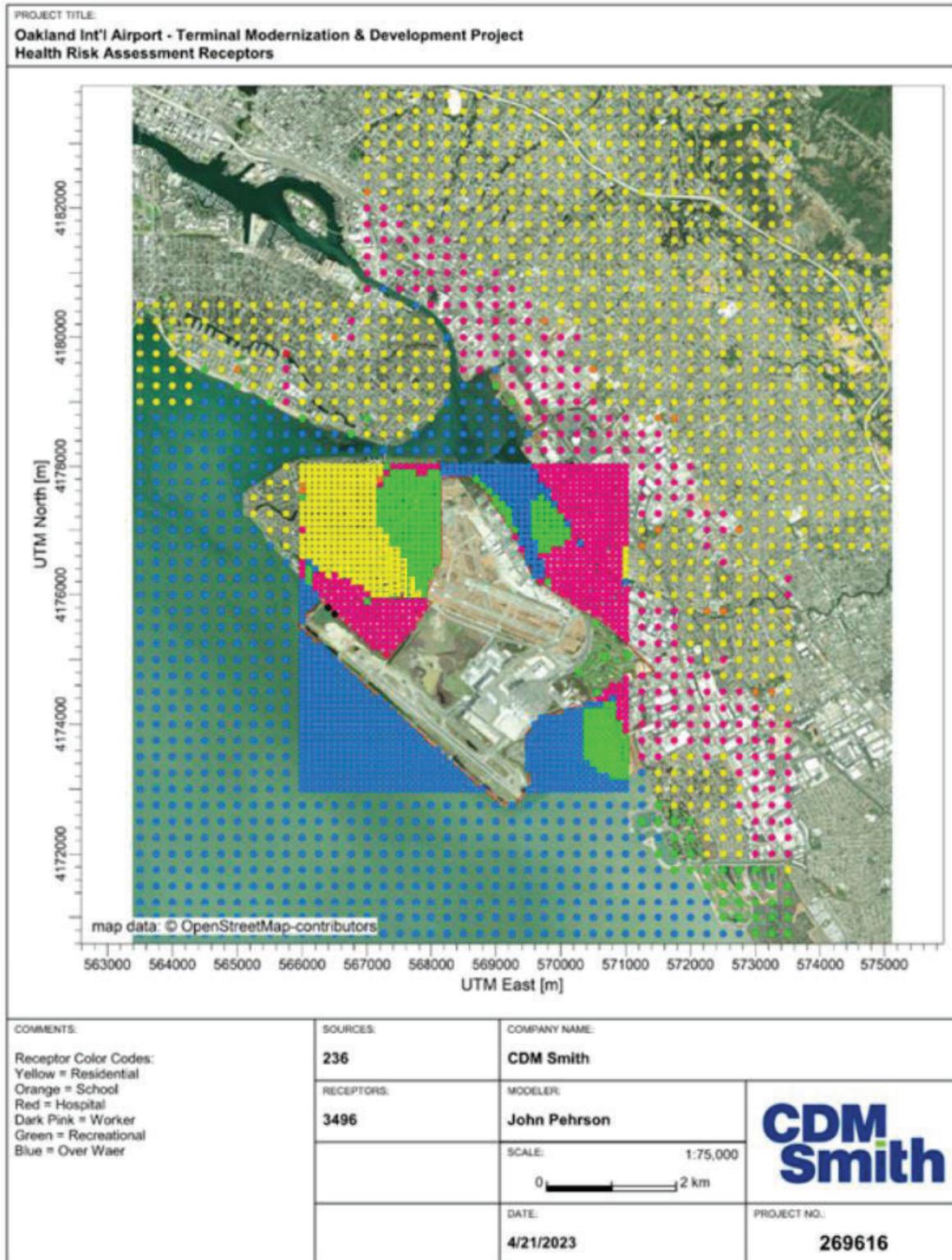
#### E.3.2.3 Meteorology

Meteorological data for OAK is available from the BAAQMD in post-processed form,<sup>33</sup> and from the National Oceanic and Atmospheric Administration's (NOAA) National Centers for Environmental Information (NCEI) and Earth System Research Laboratory (ESRL) Radiosonde Database in raw form. Because AEDT requires several intermediate files to be saved from the AERMET processor which are not kept in the BAAQMD meteorological online data sets, the most recent, available five years of surface and upper air data for OAK will be obtained from NOAA. This data was processed through the AERMET pre-processor, and with AERMINUTE and AERSURFACE, to produce the intermediate as well as final meteorological data files for the AERMOD dispersion analysis. The wind rose for the five years of OAK meteorological data is presented in **Figure E-2**.

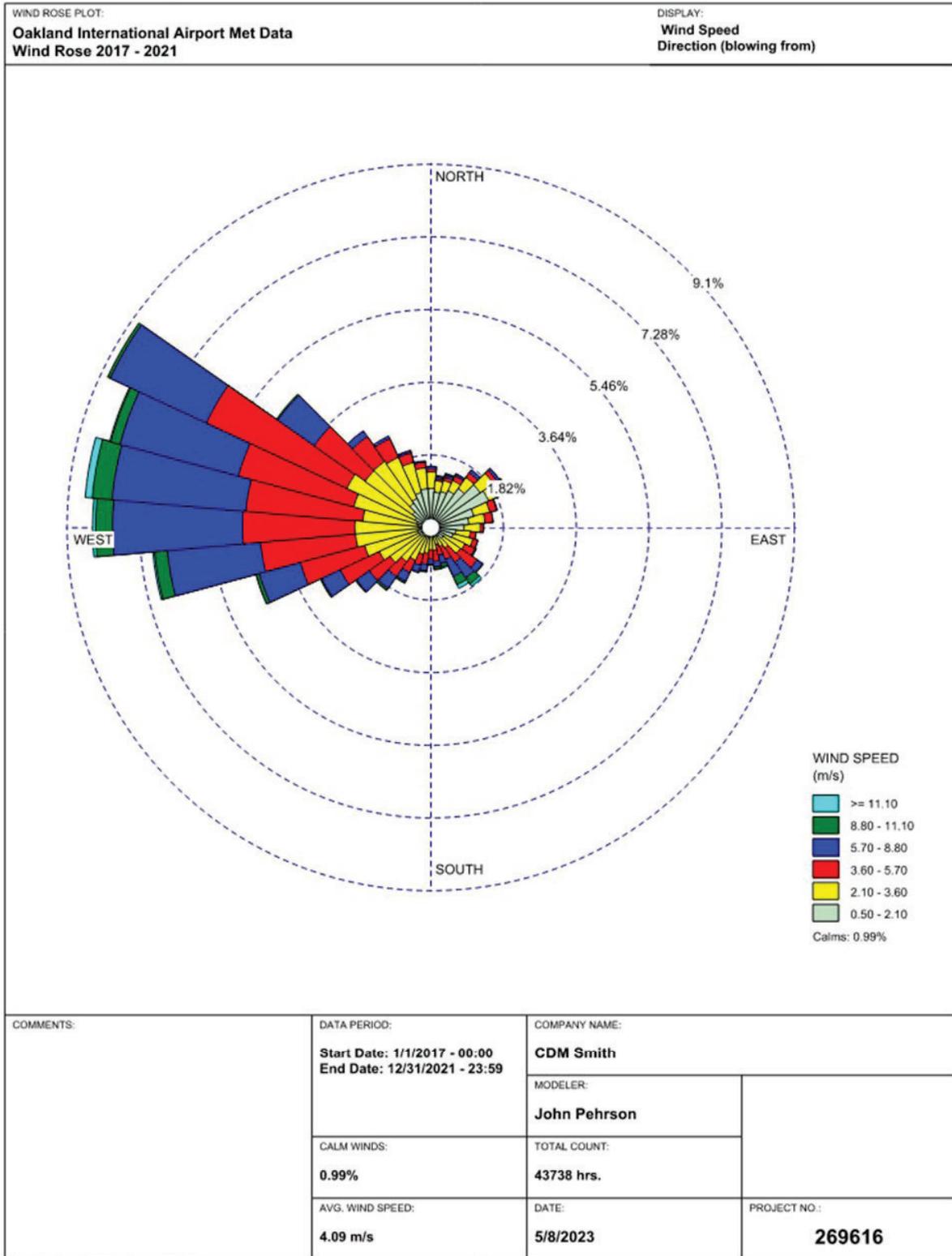
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<sup>33</sup> Bay Area Air Quality Management District, BAAQMD Health Risk Assessment Modeling Protocol, December 2020. Available at: [https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd\\_hra\\_modeling\\_protocol-pdf.pdf](https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol-pdf.pdf). Accessed: April 2023.

**FIGURE E-1  
CONSTRUCTION AND OPERATIONS RECEPTOR GRID LOCATIONS**



**FIGURE E-2  
OAKLAND INTERNATIONAL AIRPORT WIND ROSE FOR 2017-2021**



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## E.4 HUMAN HEALTH RISK ASSESSMENT

This HHRA assesses incremental changes to health impacts for people who would be exposed to TAC resulting from construction and operational activities associated with the Proposed Project. Cancer risk and chronic non-cancer health hazard estimates for impacts of the Proposed Project were based on estimated construction and operational emissions, and air dispersion modeling as discussed above, and are discussed in the following sections. Acute non-cancer health hazard estimates were also addressed using emission estimates and dispersion modeling.

For determining significance, the following scenario was evaluated:

- Proposed Project construction impacts combined with incremental operations impacts. Risks and hazards associated with multi-pathway exposures were estimated for each year of construction (2025-2030), combined with overlapping incremental operations between 2028 and 2030, followed by incremental operations exposures between 2031 and 2038. For cancer risk calculations associated with adult residents and off-Airport workers, the exposure in 2038 was held constant through the final year of the risk calculation (2054 for the 30-year residential exposure and 2049 for the 25-year worker exposure).

Risk calculation results, presented in **Attachment 2** and **Attachment 3** to this report, indicate that estimates of cancer risks associated with emissions during construction and operations with implementation of the Proposed Project would be below the threshold of significance within the HHRA study area. Chronic non-cancer health hazards and acute non-cancer HIs would also be below the threshold of significance.

Since health risks were evaluated at locations throughout the HHRA study area and TAC concentrations vary from grid point to grid point, maximum risks and hazards apply to a small subset of receptors in areas around the Airport.

The following subsections discuss incremental cancer risk and chronic and acute non-cancer health hazard estimates for impacts of the Proposed Project by scenario and receptor.

### E.4.1 Cancer Risks and Non-Cancer Health Hazards Associated with the Proposed Project

Cancer risk estimates from exposure to construction and operational sources are presented below for off-Airport workers, residents, and school children. Acute and chronic non-cancer health hazards are also discussed.

#### E.4.1.1 Cancer Risks and Chronic Non-Cancer Health Hazards for Maximally Exposed Individuals – Residents and School Children

Grid points analyzed within the HHRA study area in the vicinity of the Airport are shown on **Figure E-1**. Concentrations at these grid point locations were predicted by the air dispersion modeling. The maximum incremental concentrations at these residential and commercial receptors were used to evaluate exposure to a MEI. Thus, risks and hazards calculated at these grid points provide a ceiling for risks and hazards for off-Airport residents, workers, and students. In essence, these calculations assumed that people spend all their time within this HHRA study area - living, working, and going to school. This assumption is obviously conservative. Because emissions are dispersed over distance from

the source, exposures or risks due to emissions from OAK within the community outside of the HHRA study area are unlikely to be higher than those calculated in this HHRA.

Air concentrations for TAC for construction and operational sources were developed using emissions estimates and dispersion modeling as described in **Sections E.3.1** and **E.3.2**. Incremental Proposed Project operational TAC concentrations were determined by comparing 2028 through 2038 Proposed Project conditions to 2019 existing conditions. The difference between each future condition and the 2019 existing conditions was used to determine incremental Proposed Project-related operational concentrations in 2028 and beyond. Construction emissions are zero because no Proposed Project-related construction occurred in 2019; therefore, construction emissions were modeled directly without subtracting any emissions from the existing conditions. Using these incremental emission estimates, exposure parameters for potential receptors, and current toxicity values, cancer risks and chronic non-cancer health hazards were calculated for adult residents, resident children ages 0 to 9 years, and for school children at locations where air concentrations for TAC were predicted. These Proposed Project incremental impacts were used for comparison to the significance thresholds. Peak cancer risks and chronic non-cancer health hazards for MEI are presented in **Table E-10** and **Table E-11**, respectively, and summarized in the following sections. Calculation results are presented in **Attachment 2**.

**TABLE E-10  
INCREMENTAL CANCER RISKS FOR MAXIMALLY EXPOSED INDIVIDUALS FROM PROPOSED PROJECT CONSTRUCTION AND OPERATION**

Receptor Type	Multi-Pathway <sup>/a/</sup> Incremental Cancer Risks <sup>/b/</sup> per Million People		
	Construction and Operations Combined <sup>/c,d/</sup>	Operations Only <sup>/c,d/</sup>	Construction Only
On-Airport Worker, 25 years	-1.3	-1.3	1.0
Off-Airport Worker, 25 years	-0.033	-0.039	0.24
Adult Resident, 30 years	-0.12	-0.24	0.050
Child Resident, 9 years	-0.033	-0.17	1.5
School Child, 12 years	-0.17	-0.19	0.24

/a/ The exposure pathways analyzed include: inhalation, soil ingestion, soil dermal contact, and infant mother’s milk ingestion for resident child and resident adult; and soil ingestion and dermal contact for the worker and school child.

/b/ Values provided are changes in the number of cancer cases per million people. Values greater than the threshold are in bold.

/c/ Negative values indicate a beneficial impact.

/d/ For operations, receptors are exposed to operations-related TAC beginning in 2028 and continuing through the remainder of the receptors’ exposure periods.

**Source:** CDM Smith, 2023.

**TABLE E-11  
INCREMENTAL CHRONIC NON-CANCER HUMAN HEALTH HAZARDS FOR MAXIMALLY  
EXPOSED INDIVIDUALS FROM PROPOSED PROJECT CONSTRUCTION AND OPERATION**

Receptor Type	Incremental Chronic Non-Cancer Hazard Indices <sup>/a/</sup>		
	Construction and Operations Combined <sup>/b,c/</sup>	Operations Only <sup>/b/</sup>	Construction Only <sup>/c/</sup>
Resident	0.023	0.023	0.0018
School	0.011	0.011	0.0011
Off-Airport Worker	0.081	0.055	0.022
On-Airport Workers	0.89	0.89	0.083

/a/ Hazard indices (HI) are unitless.

/b/ During operations, receptors are exposed to operations-related TAC from 2028 through 2038.

/c/ During construction, receptors are exposed to construction-related TAC from 2025-2030.

Source: CDM Smith, 2023.

Residents (Adults and Young Children)

Residential risks were evaluated using 1,092 gridded off-Airport receptor locations. Incremental MEI cancer risks for 30-year adult residents and 9-year child residents were estimated to be -0.12 in 1 million and -0.033 in 1 million, respectively. Both values are below the threshold of significance of 10 in 1 million. The negative values indicate that compared to the 2019 existing conditions, the Proposed Project would result in decreases of some TAC concentrations (most notably DPM), which would thereby result in decreases in cancer risk estimates, producing beneficial impacts for residents. DPM is primarily emitted from diesel construction equipment, haul trucks, and concrete trucks, as well as diesel-fueled Airport ground support equipment (GSE). Over 80 percent of the cancer risk is driven by DPM, and DPM emissions from on-road trucks, shuttle trips, and Airport GSE would be lower under the Proposed Project than in 2019, producing the reduction in cancer risk. The reduction in DPM emissions for the equipment is due to state and federal regulations that require reductions in on-road and off-road truck and equipment emissions for newer model year vehicles. Because children have a shorter exposure period than adults and beneficial effects are cumulative with each year of exposure, they would experience less beneficial impacts than adults, resulting in the higher incremental cancer risk estimate.

The MEI cancer risk location for residents is shown on **Figure E-3**. Since the combined construction and incremental operational residential cancer risks are negative at all locations studied, no isopleth figure was generated for the residential cancer risks.

Incremental chronic non-cancer health hazards for residents were predicted to be 0.023, below the significance threshold of 1. At the peak HI location, the HI is primarily attributable to acrolein (86 percent), with additional contributions from formaldehyde and 1,3-butadiene.

Chronic non-cancer health hazards were evaluated for residential, school, and hospital locations by initially calculating maximum HI by summing the HQs for all TAC, irrespective of target organ. If the screening had resulted in an HI exceeding the HI threshold of 1, a detailed analysis would have been used, which would have summed the HQs of all TAC known to affect organ systems and presented the maximum HI for any organ system. However, as shown in **Table E-11**, the maximum total HI for chronic exposure to all TAC

during construction would not be greater than the threshold of 1; thus, assessing organ-system-specific impacts was not necessary. The MEI chronic hazard location for residents is shown also shown on **Figure E-3**.

#### School Children

School child risks were evaluated using 17 representative off-Airport receptor locations identified as school locations. Incremental MEI cancer risk for school children is estimated to be -0.17 in 1 million, which is below the threshold of significance of 10 in 1 million. DPM would contribute to the majority of the cancer risk. The MEI cancer risk location for school children is shown on **Figure E-3**.

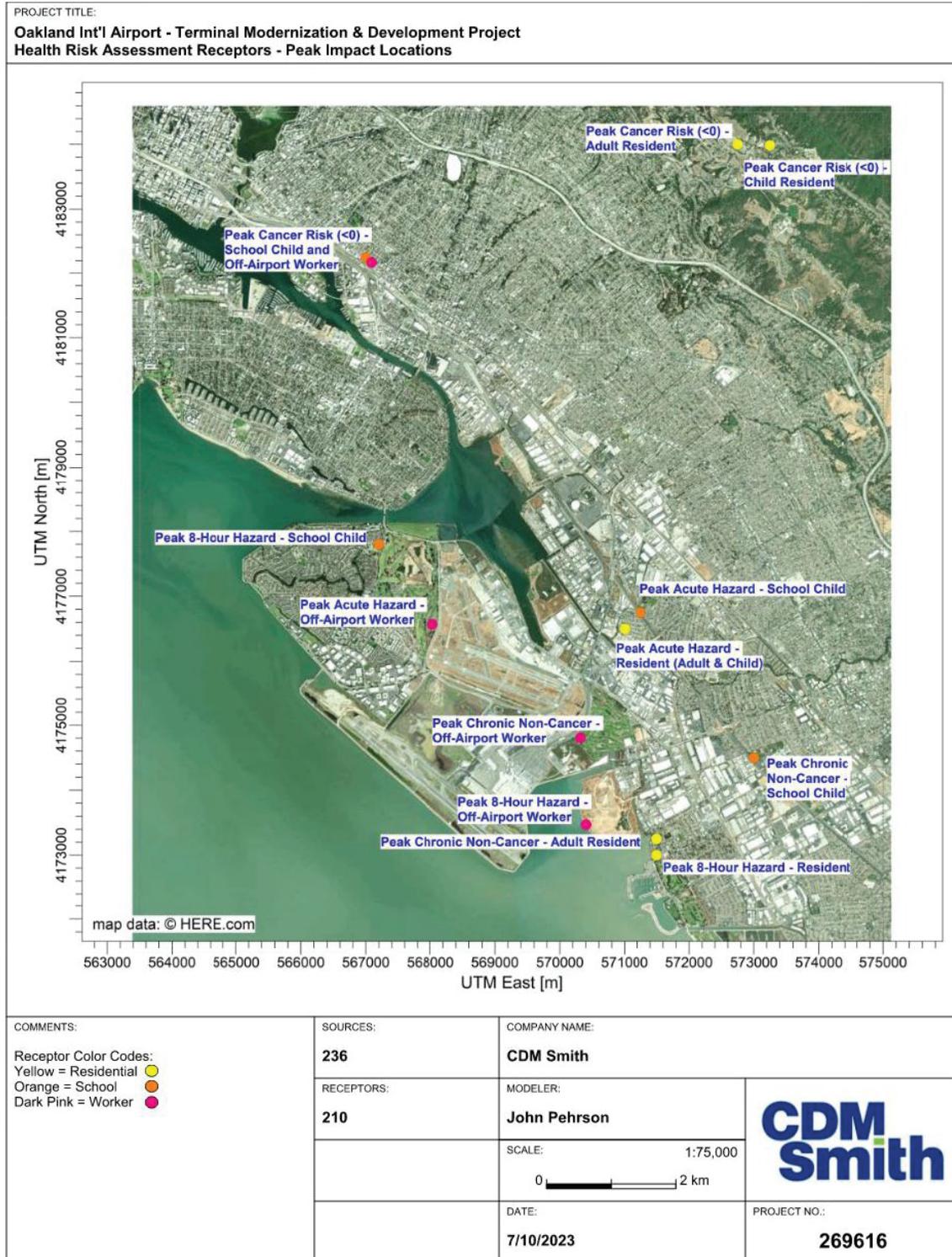
The maximum chronic non-cancer HI for the 17 school locations was 0.011, below the significance threshold of 1. Similar to the residential sites, acrolein was the primary TAC generating the chronic non-cancer HI.

#### Off-Airport and On-Airport Workers

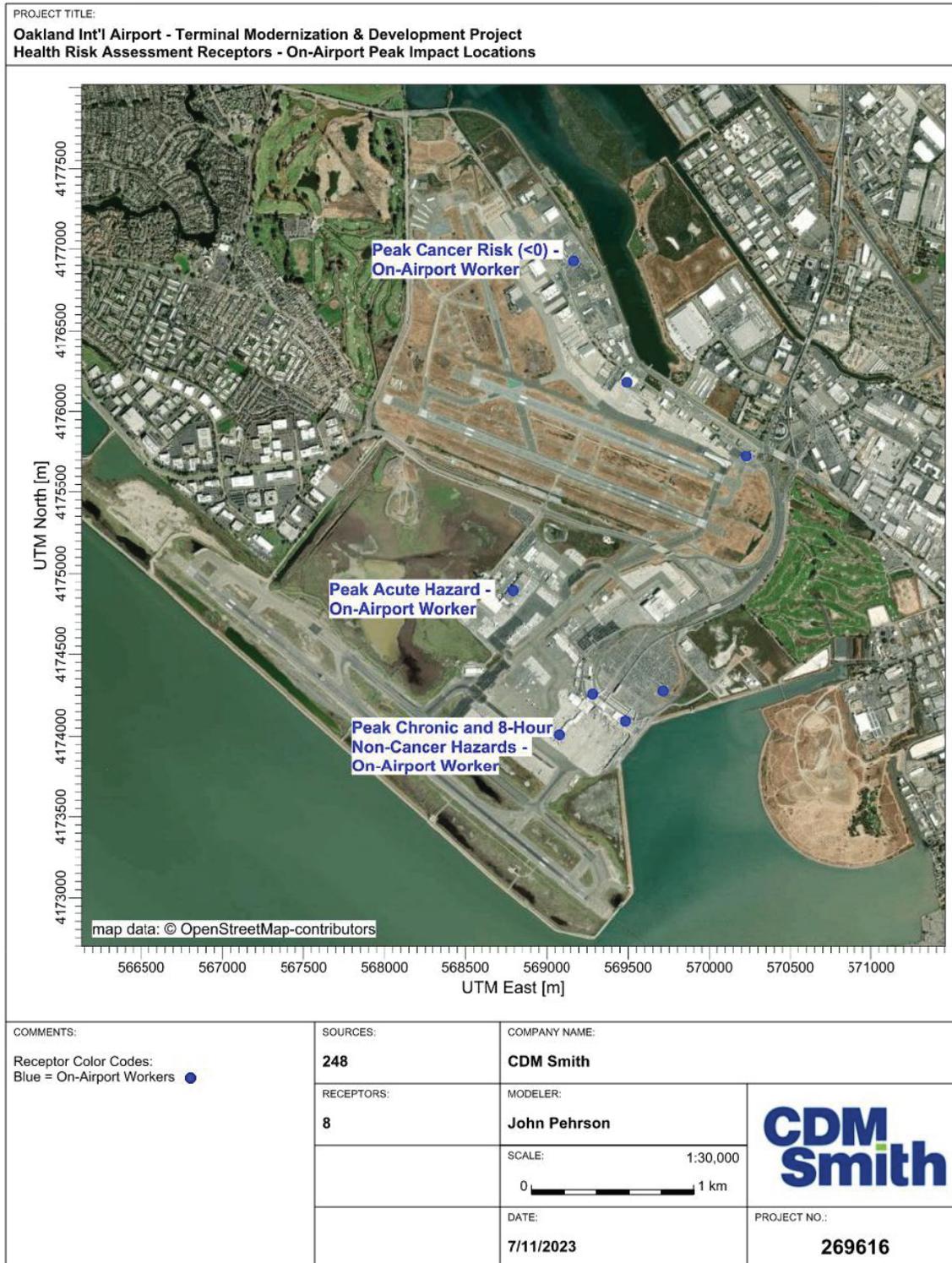
Off-airport workers were evaluated at 1,106 representative off-Airport receptor locations identified as worker, school, or hospital. On-airport workers were evaluated at 8 representative locations in the commercial aviation and general aviation areas of the airport. Incremental MEI cancer risk for off-Airport workers was estimated to be -0.033 in 1 million and that for the on-Airport workers was estimated to be -1.3 in 1 million. These results are below the threshold of significance of 10 in 1 million. DPM from construction equipment would contribute to most of the cancer risk. As with residential risk, the negative values indicate that compared to 2019, the Proposed Project would result in decreases of some TAC concentrations (most notably DPM). The MEI cancer risk location for off-Airport workers during Proposed Project construction is shown on **Figure E-3**, and the location for on-Airport workers is shown on **Figure E-4**.

The peak Proposed Project-related chronic non-cancer HI for the off-Airport worker was estimated to be 0.081, and for the on-Airport worker was estimated to be 0.89. The peak off-Airport worker chronic hazard location is shown on **Figure E-3**, and that for the on-Airport worker is shown on **Figure E-4**. All incremental chronic non-cancer health indices for off-airport and on-airport workers were predicted to be below the significance threshold of 1. At the peak HI location, hazards were primarily attributable to DPM (41 percent) and silicon as crystalline silica (43 percent). Silica is a component of construction dust.

**FIGURE E-3  
PEAK INCREMENTAL CANCER RISK AND NON-CANCER HAZARD LOCATIONS – COMBINED  
PROPOSED PROJECT CONSTRUCTION AND OPERATIONS**



**FIGURE E-4**  
**PEAK INCREMENTAL CANCER RISK AND NON-CANCER HAZARD LOCATIONS – COMBINED**  
**PROPOSED PROJECT CONSTRUCTION AND OPERATIONS AT ON-AIRPORT RECEPTORS**



AERMOD View - Lakes Environmental Software

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**E.4.1.2 Eight-Hour Non-Cancer Health Hazards**

As with long-term chronic non-cancer health hazards, eight (8) hour hazards were analyzed at all grid points within the HHRA study area. Eight-hour concentrations for TAC associated with construction and operation of the Proposed Project were estimated by modeling 8-hour maximum concentrations. All TAC identified in the Proposed Project emissions and for which CalEPA has developed 8-hour RELs were evaluated.

All off-Airport hazard indices due to 8-hour exposures were below 1 for all evaluated off-Airport grid points within the study area. Hence, no 8-hour non-cancer health impacts are expected from construction or operation of the Proposed Project beyond the airport property. However, the maximum on-Airport hazard indices due to 8-hour exposures were estimated to exceed the threshold of 1 at two locations. Maximum hazards associated with exposure to emissions from the Proposed Project are summarized in **Table E-12**. Peak locations are shown on **Figures E-3** and **E-4**. Calculations are provided in **Attachment 2** to this report. Acrolein dominates the eight-hour impacts to the on-Airport receptors, and is primarily associated with jet aircraft emissions during idle and taxi operating modes.

**TABLE E-12  
PEAK PROPOSED PROJECT-RELATED INCREMENTAL 8-HOUR NON-CANCER HAZARD INDICES**

Receptor Type	Incremental 8-Hour Non-Cancer Hazard Indices <sup>/a/</sup>		
	Construction and Operations Combined <sup>/b,c/</sup>	Operations Only <sup>/b/</sup>	Construction Only <sup>/c/</sup>
Resident	0.55	0.55	0.007
School	0.30	0.30	0.0053
Off-Airport Worker	0.96	0.96	0.022
On-Airport Worker	2.0	2.0	0.073

/a/ Hazard indices (HI) are unitless.

/b/ For operations, receptors are exposed to operations-related TAC from 2028 through 2038.

/c/ For construction, receptors are exposed to construction-related TAC from 2025-2030.

Source: CDM Smith, 2023.

**E.4.1.3 Acute Non-Cancer Health Hazards**

As with cancer risks and chronic non-cancer health hazards, acute non-cancer health hazards were analyzed at grid points within the HHRA study area. Short-term concentrations for TAC associated with construction and operation of the Proposed Project were estimated by modeling 1-hour maximum concentrations. All TAC identified in the Proposed Project emissions and for which CalEPA has developed acute RELs were evaluated for potential acute non-cancer health hazards. All acute non-cancer health hazard estimates are specific for Airport emissions and are independent of county-wide estimates developed by USEPA.

Land use distinctions and different exposure scenarios are irrelevant for assessment of acute non-cancer health hazards. For example, someone visiting a commercial establishment would potentially be subject to the same acute non-cancer health hazards as someone working at the establishment. For the acute non-cancer health hazards analysis, all of the grid points were distinguished by their receptor type although the calculation for the acute non-cancer health hazard was the same. Retaining land use designations puts

some perspective on who might be subject to exposure to the highest short-term concentrations of TAC.

All of the off-Airport hazard indices due to acute exposure were below 1 for all evaluated off-Airport grid points within the HHRA study area. Hence, no acute non-cancer health impacts are expected from construction or operation of the Proposed Project beyond the airport property. As with the eight-hour non-cancer hazards, the maximum on-Airport hazard indices due to acute 1-hour exposures were estimated to exceed the threshold of 1 at one location. Maximum acute non-cancer health hazards associated with emissions from the Proposed Project construction are summarized in **Table E-13**. Peak locations are shown in **Figures E-3** and **E-4**. Calculation results are provided in **Attachment 3** to this report. Acrolein and 1,3-butadiene were the TAC with the highest acute HI estimates, and are associated with jet aircraft engine emissions at low power settings.

**TABLE E-13  
PEAK PROPOSED PROJECT-RELATED INCREMENTAL ACUTE NON-CANCER HAZARD INDICES**

Receptor Type	Incremental Acute (1-Hour) Hazard Indices <sup>/a/</sup>		
	Construction and Operations Combined <sup>/b,c/</sup>	Operations Only <sup>/b/</sup>	Construction Only <sup>/c/</sup>
Resident	0.38	0.38	0.0029
School	0.33	0.33	0.0022
Off-Airport Worker	0.69	0.56	0.0089
On-Airport Worker	3.4	3.4	0.017

/a/ Hazard indices (HI) are unitless.

/b/ For operations, receptors are exposed to operations-related TAC from 2028 through 2038.

/c/ For construction, receptors are exposed to construction-related TAC from 2025-2030.

**Source:** CDM Smith, 2023.

#### E.4.1.4 Comparison of On-Airport Air Concentrations with Cal/OSHA Limits for On-Airport Proposed Project Construction Workers

On-Airport Proposed Project worker exposure to on-Airport air concentrations from the proposed Project construction were evaluated by comparing modeled on-Airport maximum 8-hour concentrations for each TAC during construction against the corresponding Cal/OSHA 8-hour Time-Weighted Average Permissible Exposure Levels (PEL-TWAs).<sup>34</sup> On-Airport worker exposure was assessed at six on-Airport locations within the construction areas. These receptors were evaluated for occupational health only as they are neither ambient air, nor peak impact areas. Estimated air concentrations and PEL-TWAs for TAC of concern for unmitigated construction are presented in **Table E-14**. The resulting 8-hour concentrations ranged from a few to several orders of magnitude below PELs for all TAC. This result indicates that air concentrations from Airport emissions with implementation of the proposed Project would not be expected to exceed Cal/OSHA standards.

<sup>34</sup> California Occupational Safety and Health Administration, Table AC-1, Permissible Exposure Limits for Chemical Contaminants, Available: [https://www.dir.ca.gov/title8/5155table\\_ac1.html](https://www.dir.ca.gov/title8/5155table_ac1.html), accessed May 1, 2023.

**TABLE E-14  
COMPARISON OF CAL/OSHA PERMISSIBLE EXPOSURE LIMITS TO MAXIMUM 8-HOUR  
ON-AIRPORT CONCENTRATIONS DURING PROPOSED PROJECT CONSTRUCTION**

TAC of Concern	Cal/OSHA PEL (µg/m³)	Max 8-Hr Conc. (µg/m³)	TAC of Concern	Cal/OSHA PEL (µg/m³)	Max 8-Hr Conc. (µg/m³)
Acetaldehyde	45,000	0.25	Arsenic	10	0.000060
Acrolein	250	0.00000085	Cadmium	5	0.00012
Benzene	3,190	0.078	Chromium III	500	0.00062
1,3-Butadiene	2,200	0.0066	Chromium VI	5	0.000062
Ethylbenzene	22,000	0.038	Cobalt	20	0.00032
Ethyl chloride	264,000	0.016	Copper	100	0.00039
Ethylene glycol	100,000	0.013	Lead	50	0.0017
Formaldehyde	920	0.51	Manganese	200	0.0027
n-Hexane	180,000	0.0057	Mercury	25	0.000072
Methyl alcohol	260,000	0.0010	Nickel	500	0.00020
Methyl ethyl ketone	590,000	0.051	Selenium	200	0.000017
Methyl tert-butyl ether	144,000	0.000057	Vanadium	50	0.00079
Phenol	19,000	0.000000			
Propylene	NA	0.090	Ammonium Ion	18,000	0.0043
Styrene	215,000	0.0021	Chlorine	1,500	0.010
Toluene	37,000	0.13	Silicon (as crystalline Silica)	50	0.57
Xylene (total)	435,000	0.10	Sulfates (as sulfuric acid)	10	0.031
Naphthalene	500	0.0032	Diesel PM	NA	--

Source: CDM Smith, 2023.

### E.4.2 Annual PM<sub>2.5</sub> Concentrations

Annual PM<sub>2.5</sub> concentrations associated with Proposed Project construction and operational sources were modeled for all off-Airport locations that would impact residents, workers, schools, and hospitals. The results indicate that peak PM<sub>2.5</sub> annual concentrations would be approximately 0.26 µg/m<sup>3</sup>. This value would occur during the first year of construction (2028) and includes the impacts for both construction and operational sources during that year. The peak impact occurs on the Metropolitan Golf Links golf course near Bessie Coleman Drive. This location is used to represent the nearest non-Airport worker. The maximum PM<sub>2.5</sub> concentration outside of Airport property is 0.21 µg/m<sup>3</sup> at the Park 'N Fly off-Airport parking lot just east of the 98th Avenue and Airport Access Road intersection. The annual PM<sub>2.5</sub> concentrations are below (better than) the BAAQMD significance threshold of 0.3 µg/m<sup>3</sup> at all receptor locations. The contour plot of the maximum project related annual PM<sub>2.5</sub> concentrations is presented in **Figure E-4**.

### E.4.3 Cumulative Risks and Non-Cancer Health Hazards Associated with the Proposed Project

#### E.4.3.1 Cumulative Cancer Risks

The peak project-related cancer risks from combined construction and Proposed Project incremental operations were less than zero for all receptor types analyzed. Therefore, the cumulative cancer risk impacts at all receptors would be less with the Proposed Project than those with the existing conditions.

#### E.4.3.2 Cumulative Chronic Non-Cancer Health Hazards

The peak project-related chronic non-cancer annual health hazard indices from combined construction and Proposed Project incremental operations were less than 0.1 for all receptor types analyzed. Thus, combining this value with any other existing, approved, or proposed projects within 1,000 ft of the Airport property line would not likely cause the cumulative chronic annual hazard index for a given human organ or biological system to exceed 10.

The peak project-related chronic non-cancer 8-hour health hazard indices from combined construction and Proposed Project incremental operations were no greater than 0.4 for all receptor types analyzed. Thus, combining this value with any other existing, approved, or proposed projects within 1,000 ft of the Airport property line would not likely cause the cumulative chronic 8-hour hazard index for a given human organ or biological system to exceed 10.

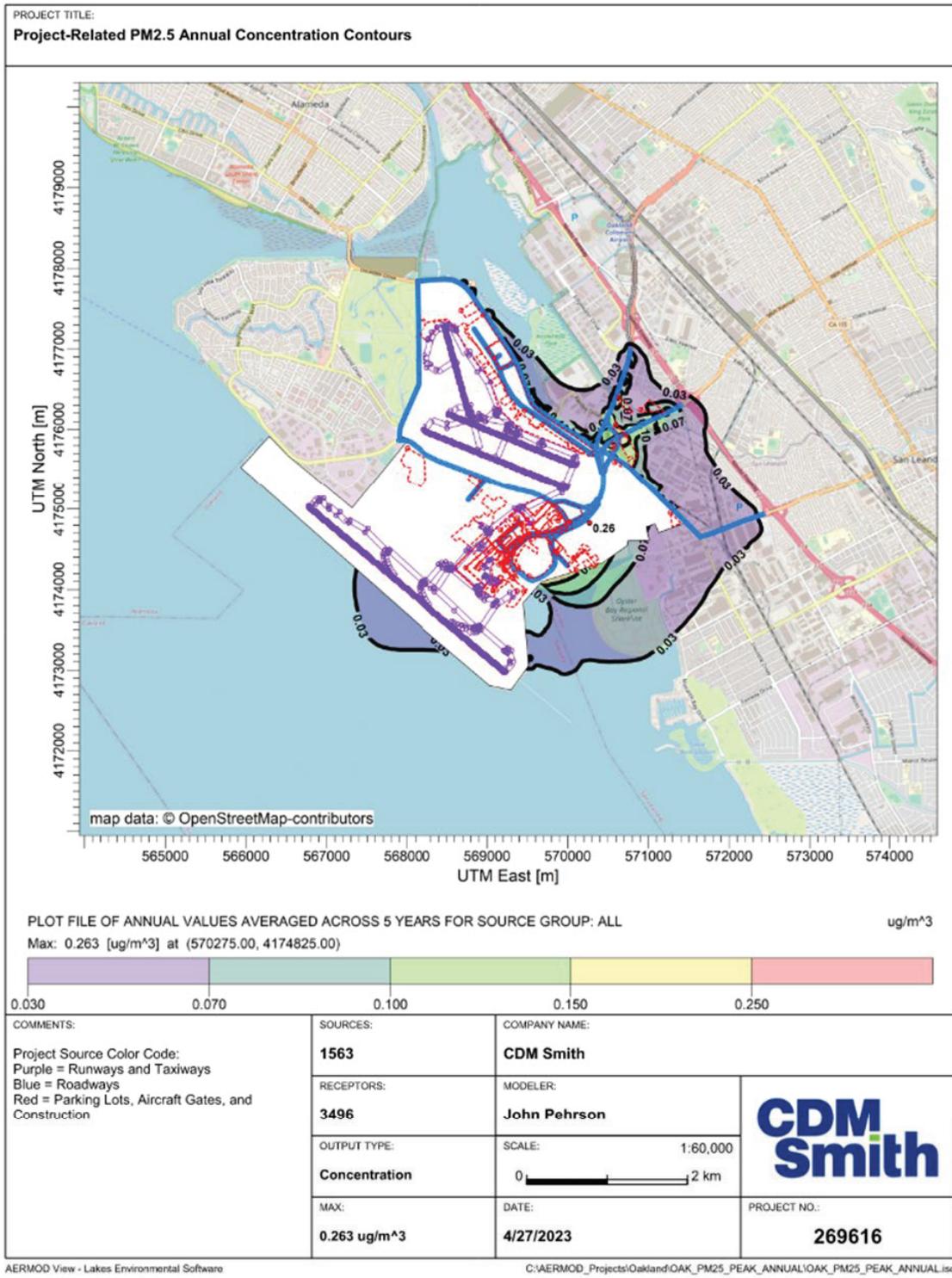
#### E.4.3.3 Cumulative PM<sub>2.5</sub> Annual Concentrations

The peak project-related annual PM<sub>2.5</sub> concentrations when combined with the cumulative concentrations from past, present, and planned sources within the 1,000-foot radius beyond Airport property did not exceed the health risk threshold of 0.8 µg/m<sup>3</sup>. The results of the combined project plus cumulative PM<sub>2.5</sub> concentrations are shown in **Figure E-5**.

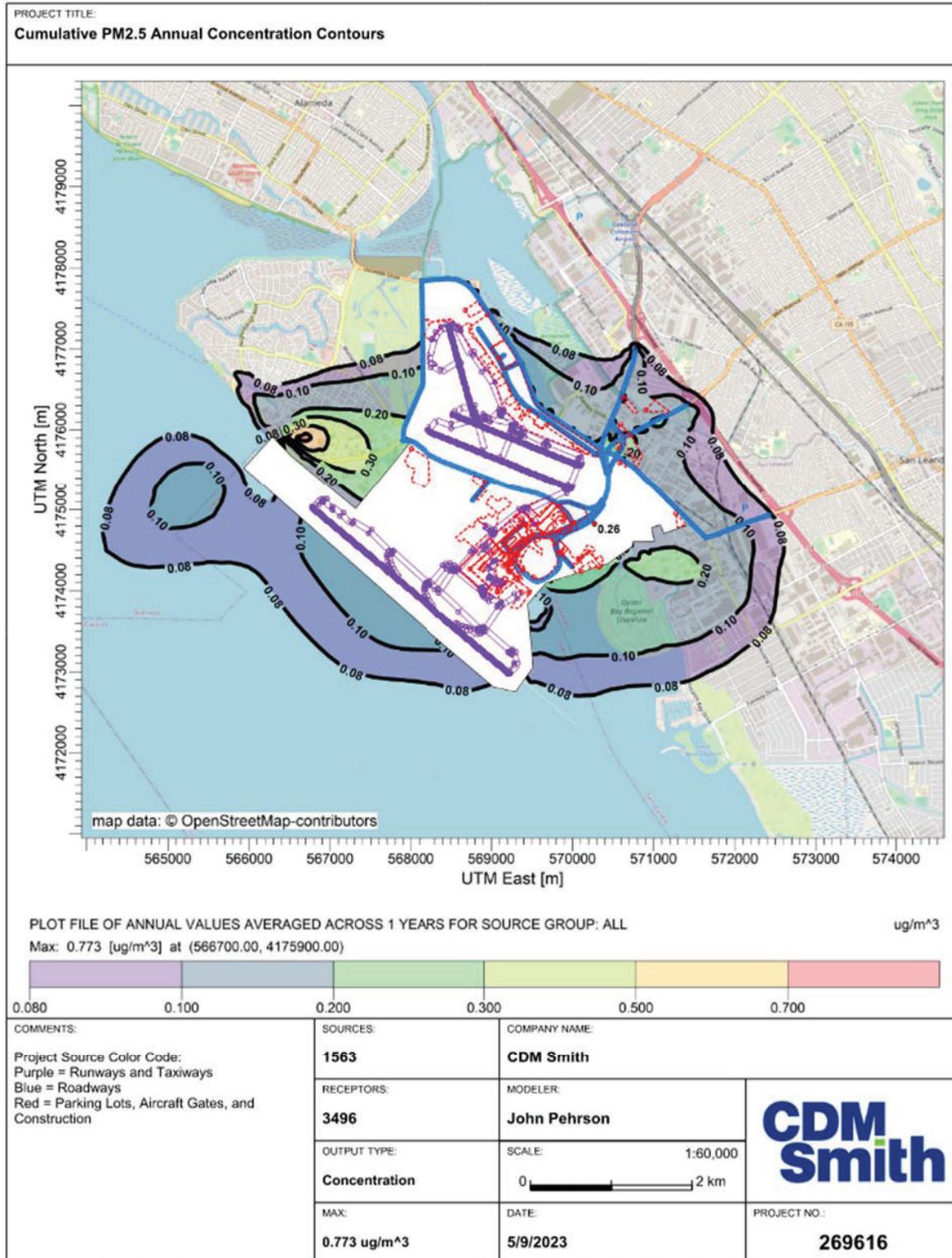
#### E.4.3.4 Conclusions

The results of this cumulative health risk assessment indicate that combined project and nearby non-project source impacts will not exceed the cumulative risk assessment thresholds adopted by the BAAQMD, as listed in **Table E-8** above.

**FIGURE E-4**  
**PEAK ANNUAL PM<sub>2.5</sub> CONCENTRATION CONTOURS – COMBINED PROPOSED PROJECT**  
**CONSTRUCTION AND INCREMENTAL OPERATIONS**



**FIGURE E-5  
CUMULATIVE PM<sub>2.5</sub> ANNUAL CONCENTRATIONS**



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## E.5 UNCERTAINTIES

Uncertainties are present in all facets of human health risk assessment. These uncertainties are briefly summarized below.

### E.5.1 Uncertainties Associated with Emission Estimates and Dispersion Modeling

Risk estimates were based on chemical concentration estimates obtained through emissions and dispersion modeling. Emissions estimates are sensitive to the values used to represent the numerous emission source variables (e.g., project construction and future traffic assumptions) and to the air toxic emission factor values used for each source.

Consequently, estimated emissions values are subject to uncertainties. Different assumptions and values of variables would result in different emissions estimates. The HHRA used well-accepted methods and best available emission factor data to develop estimates of emissions, and estimates and assumptions are reasonable and appropriate. Actual emissions are unlikely to be meaningfully greater than those used in the analyses.

### E.5.2 Evaluation of Sensitive Receptor Populations

Risk estimates presented in the HHRA represent a wide range of potential exposures including the highest that can be reasonably expected. Thus, even though risk estimates are not provided for all potentially sensitive receptors in the HHRA study area, populations not specifically evaluated are still expected to be represented. For example, quantitatively evaluated populations include those with the highest expected exposure durations and exposure frequencies (e.g., residents). Exposures are, therefore, expected to be less for other populations, even those with higher chemical sensitivities.

### E.5.3 Uncertainties Associated with Exposure Parameter Assumptions

Evaluating human exposure requires many assumptions about how people actually contact chemicals in the environment. Key issues associated with exposure assessment are discussed below.

In accordance with the CalEPA guidance, an exposure duration of 30 years was used to estimate possible cancer risks associated with the Proposed Project for the resident for the significance determination. This exposure duration combined with other exposure parameters used in this HHRA assumed that an individual exists who resides where maximum impacts would occur in a location near construction anticipated for OAK, and that the individual would be sedentary, spending essentially all of his/her time at home. The person was assumed to be constantly exposed to emissions at the point of greatest impact for 30 years. This combination of factors is highly unlikely, and any estimates of cancer risk based on such a combination would greatly overestimate possible cancer risks for everyone in the HHRA study area.

Although the 30-year residential scenario was used for the significance determination, the 70-year residential scenario was also calculated to determine cancer burden for evaluation of population-wide risks. These 70-year results are presented in Table 4-3 and Section 4.2 of this report. Varying exposure duration within a reasonable range for residents evaluated for the Proposed Project would not materially affect conclusions about the cancer risk impact of the Proposed Project. Conclusions regarding significance of cancer risk associated with the Proposed Project would remain the same.

## E.5.4 Uncertainties Associated with Toxicity Assessment

Quantitative evaluation of chemical toxicity requires assumptions to extrapolate toxicity information in the literature to possible impacts on people from exposure to chemicals in the environment. Key assumptions are discussed briefly below.

### E.5.4.1 Uncertainties Associated with Toxicity Criteria

A potentially large source of uncertainty is inherent in the derivation of the CalEPA toxicity criteria (cancer slope factors and RELs). In many cases, data used to develop toxicity criteria must be extrapolated from animals to sensitive humans. For example, the application of uncertainty factors to estimate no-observable-adverse-effects-levels (NOAELs) or lowest-observed-adverse-effects-levels (LOAELs) are typically used to develop RELs. While these factors are designed to be protective, they often result in toxicity criteria that overestimate the differences between humans and animals, and among humans.

In some cases, however, toxicity criteria may be based on studies that did not detect the most sensitive adverse effects. For example, many past studies have not measured possible toxic effects on the immune system. Moreover, some chemicals may cause subtle effects not easily recognized in animal studies. Overall, toxicity criteria are likely to be protective for most or all exposed populations. These criteria are constantly being reconsidered in light of new research and are subject to occasional change during this process. The nature and direction of these changes cannot be predicted and currently available criteria are the best source of toxicity information for use in health risk assessments.

### E.5.4.2 Uncertainties Associated with Unavailable Toxicity Values

Naphthalene, n-hexane, propylene, silicon, cadmium, hexavalent chromium, cobalt, lead, selenium, and DPM do not have acute RELs that have been developed by OEHHA. However, cadmium has an acute toxicity screening level from the ATSDR in the form of published acute minimal risk levels (MRLs) for hazardous substances. MRLs were established to provide a screening tool for public health professionals to use to identify if potential human health hazards exist from contamination at hazardous waste sites. MRLs are often based on animal studies because relevant human studies are lacking. ATSDR assumes that humans are more sensitive than animals to the effects of hazardous substances and that certain persons may be particularly sensitive. Thus, ATSDR recommendations for MRLs may be as much as a hundred-fold below levels shown to be nontoxic in laboratory animals. This approach is protective for public health. Acute inhalation MRLs for cadmium is 0.03  $\mu\text{g}/\text{m}^3$ . The maximum estimated one-hour concentrations for cadmium during construction was 0.000007  $\mu\text{g}/\text{m}^3$ . It's unlikely that acute non-cancer health hazards associated with cadmium would contribute to the maximum levels developed in this study. Lack of inclusion of these chemicals in the quantitative risk assessment would not be expected to change the conclusions of the acute non-cancer health hazard evaluation.

Although DPM does not have an acute REL, several components of DPM (such as arsenic, chlorine, mercury, nickel, vanadium, and sulfates) were evaluated in the acute non-cancer health hazard analysis. Therefore, in order to account for potential acute impacts from DPM, the speciated components of DPM (arsenic, chlorine, mercury, nickel, vanadium, and sulfates) were evaluated in the acute non-cancer health hazard analysis. As noted in Section 5.1, Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk

Assessments indicates that toxicity values for DPM were developed for whole diesel exhaust (gas and particulate matter). As such, DPM should be the only TAC considered in the calculation of cancer risks and chronic non-cancer health hazards for diesel engine emissions; speciated diesel exhaust components (e.g., PAHs, metals) should not be evaluated along with DPM. Studies used to support the DPM toxicity value also indicate that "potential cancer risk from inhalation exposure to whole diesel exhaust will outweigh the multipath way cancer risk from the speciated components."

The potential impact of not having acute inhalation toxicity values for the remaining chemicals without acute inhalation toxicity screening levels on the conclusions of the acute risk evaluation is unknown.

Similarly, copper, lead, and sulfates did not have chronic RELs that have been developed by OEHHA nor did they have EPA chronic inhalation reference concentrations. These chemicals also did not have chronic inhalation toxicity screening levels in the form of ATSDR MRLs. Thus, the potential impact of not having toxicity values for these chemicals on the conclusions of the chronic risk evaluation is unknown.

### E.5.5 Uncertainties in Risk Characterization

Combining estimates of exposure and toxicity to estimate risks and hazards to human health require the use of methods that simplify actual exposure. For the inhalation pathway, important issues for risk characterization are discussed below.

The Proposed Project HHRA evaluated the potential complete exposure pathway of direct inhalation of TAC which would be released during construction of the Proposed Project. Cancer risks were also evaluated for soil ingestion, soil dermal contact, and infant ingestion of mother's milk. The contribution of these other pathways to residential cancer risk during construction was only one to two percent of the inhalation pathway risk.

Other exposure pathways, such as residents who have gardens could ingest TAC taken up from soil into plants.

In a study conducted for the Los Angeles International Airport (LAX) Master Plan Environmental Impact Report, other potential exposure pathways were analyzed in a two-step screening process described in Technical Report 14a Attachment B, Section 2.5.3 of the LAX Master Plan Final EIR (2004). In the first step, air dispersion modeling was used to determine potential TAC concentrations in air on or near LAX, and these concentrations were used to estimate deposition of TAC onto soils over time. In the second screening step, concentrations of TAC estimated in soil were compared to the range of background concentrations of these chemicals to determine the relative impacts of deposition from air. This analysis indicated that impacts to soils from deposition of TAC from Airport construction would be negligible and that the estimated contribution from LAX emissions would result in no measurable difference in expected background concentrations of metals.

## E.6 SUMMARY

The purpose of this HHRA is to address potential human health impacts from inhalation of TAC related to construction and operation of the Proposed Project, including both cancer risks and acute (short-term) and chronic (long-term) non-cancer health hazards. Risk assessment is an evolving and highly uncertain process. Large uncertainties exist in emission estimates and dispersion modeling, evaluation of sensitive receptor populations, exposure parameter assumptions, toxicity assessment, the assumptions inherent in the 2015 OEHHA Air Toxics Methodology, and interactions among acrolein and criteria pollutants. This HHRA relied upon the data and methods based on the current state of the science.

Although OAK aviation activity projected in the forecasts would occur regardless of whether the Proposed Project is implemented, the modifications and additions to the airfield, terminals, and ground access facilities would alter the locations of TAC released by aircraft, GSE, vehicles, and stationary sources in ways that could result in impacts on human health. In addition, construction of the proposed improvements would release TAC. Potential impacts to human health associated with releases of TAC may include increased cancer risks and increased acute and chronic non-cancer health hazards from inhalation of TAC.

The significance thresholds used in the analysis represent a best effort to understand and evaluate the potential impacts to human health in terms of cancer risk to workers, residents and children within the HHRA study area, chronic non-cancer health hazards, and acute non-cancer health hazards.

The primary findings of the HHRA are as follows:

- The incremental cancer risks for combined construction and operations for adult residents, child residents, school children, and off-Airport workers would be less than 2019 existing conditions, and would be less than the significance threshold of 10 in 1 million. Exposure to construction emissions alone did show an increase in cancer risks relative to existing conditions, but not above the significant threshold levels. When the effect of reduced TAC emissions from certain sources, particularly on-road and off-road diesel vehicles under future conditions is incorporated, the overall long-term cancer risks drop below the levels for existing conditions.
- The incremental chronic non-cancer health hazards for both residents and workers would be greater than existing conditions during both construction and operations. However, impacts would be less than the significance threshold of 1.
- The incremental acute non-cancer health hazards for both residents and off-airport workers would be greater than existing conditions during both construction and operations but would be less than the significance threshold of 1. Incremental acute non-cancer hazards would be greater than the significance threshold of 1 for one location analyzed within the Airport property.
- The incremental 8-hour non-cancer health hazards for both residents and off-airport workers would be greater than existing conditions during both construction and operations but would be less than the significance threshold of 1. Incremental 8-hour non-cancer hazards would be greater than the significance threshold of 1 for two locations analyzed within the Airport property.

- The cumulative risks and hazards associated with exposure to project and nearby non-project emission sources would not result in levels exceeding the BAAQMD cumulative risk thresholds.

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## Attachment 1

### Final Human Health Risk Assessment Modeling Protocol

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**PORT OF OAKLAND**

# **Oakland International Airport Terminal Modernization and Development Project**

FINAL  
Human Health Risk Assessment –  
Inhalation Pathway Modeling Protocol

December 22, 2022

**CDM  
Smith**

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# Oakland International Airport

## Terminal Modernization and Development Project

### DRAFT

### Human Health Risk Assessment - Inhalation Pathway Modeling Protocol

December 22, 2022

*Prepared for:*

RS&H  
369 Pine Street, Suite 610  
San Francisco, CA 94104

and

Port of Oakland  
Oakland International Airport  
530 Water Street  
Oakland, CA 94607

*Prepared by:*

CDM Smith  
46 Discovery, Suite 250  
Irvine, California 92618

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# Section 1

## Human Health Risk Assessment General Approach

As owner and operator of Oakland International Airport (OAK or Airport), the Port of Oakland Port is the sponsor and Lead Agency of the Terminal Modernization and Development Project (Proposed Project) pursuant to the California Environmental Quality Act (CEQA) Section 21067. As required by CEQA, the Port is preparing an Environmental Impact Report (EIR) which will review and analyze potential air quality impacts resulting from the Proposed Project, including the Human Health Risk Assessment (HHRA).

The objective of this HHRA is to assess incremental changes to health impacts for people exposed to Toxic Air Contaminants (TACs) resulting from construction and operation associated with the Proposed Project. The results of the HHRA will indicate whether the Proposed Project would significantly<sup>1</sup> increase health risks for people living, working, or attending school near Oakland International Airport (OAK or Airport).

This HHRA protocol outlines the approach and methodologies that will be used to develop the HHRA analysis. The HHRA will focus on analysis of incremental human health risks and hazards associated with airborne releases of Toxic Air Contaminants (TACs) during construction and operation of the Proposed Project. Cancer risks, as well as chronic and acute non-cancer health hazard assessments depend on estimating potential exposure to incremental TACs associated with the Proposed Project.

This protocol is consistent with State of California statutes and regulations as well as U.S. Environmental Protection Agency (USEPA) risk assessment guidance.<sup>2,3,4,5,6,7</sup> It was also developed to be generally consistent with Bay Area Air Quality Management District (BAAQMD

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<sup>1</sup> Thresholds of significance for health risks and hazards are presented in Section 6, Table 6-1 of this protocol.

<sup>2</sup> California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Information and Assessment Act of 1987*, Section 44300.

<sup>3</sup> California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments*, February 2015.

<sup>4</sup> California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program, Risk Assessment Guidelines, Technical Support Document for the Derivation of Noncancer Reference Exposure Levels*, June 2008 (with updates through July 2014).

<sup>5</sup> California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program, Risk Assessment Guidelines, Technical Support Document for Cancer Potency Factors: Methodologies for derivation, listing of available values, and adjustments to allow for early life stage exposures*, May 2009 (with updates through May 2019).

<sup>6</sup> California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program, Risk Assessment Guidelines, Technical Support Document for Exposure Assessment and Stochastic Analysis*, August 2012.

<sup>7</sup> U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation, *Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual (Part F, Supplemental Guidance for Inhalation Risk Assessment)*, Final. January 2009.

health risk assessment and modeling guidance.<sup>8,9,10</sup> This protocol describes the following four primary steps typically used to assess health risk:

- Selection of TACs of Concern - Identification of TACs that may be released in sufficient quantities to present a public health risk;
- Exposure Assessment - Analysis of ways in which people might be exposed to TACs;
- Toxicity Assessment - Evaluation of the toxicity of TACs that may present public health risks; and
- Risk Characterization - Characterization of the magnitude of health risks for the exposed individuals and populations, and of locations in the community where the greatest risks or hazards may be realized.

The remaining sections of this protocol describe the methodologies used to select the TACs of Concern, estimate exposure to Proposed Project-related TACs, evaluate TAC toxicity, and characterize the magnitude of potential risks.

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<sup>8</sup> Bay Area Air Quality Management District, *BAAQMD Air Toxics NSR Program Health Risk Assessment (RA) Guidelines*, December 2016. Available at: [https://www.baaqmd.gov/~media/files/planning-and-research/permit-modeling/hra\\_guidelines\\_12\\_7\\_2016\\_clean-pdf.pdf](https://www.baaqmd.gov/~media/files/planning-and-research/permit-modeling/hra_guidelines_12_7_2016_clean-pdf.pdf).

<sup>9</sup> Bay Area Air Quality Management District, *BAAQMD Health Risk Assessment Modeling Protocol*, December 2020. Available at: [https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd\\_hra\\_modeling\\_protocol-pdf.pdf](https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol-pdf.pdf).

<sup>10</sup> Bay Area Air Quality Management District, *California Environmental Quality Act – Air Quality Guidelines*, May 2017. Available at: [https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa\\_guidelines\\_may2017-pdf.pdf?la=en](https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en).

## Section 2

### Selection of TACs of Concern

In general, TACs of concern selected for the HHRA are based on TACs identified under California Assembly Bill (AB) 2588 and for which the California Environmental Protection Agency (CalEPA), Office of Environmental Health Hazard Assessment (OEHA) has developed cancer slope factors, chronic reference levels, and/or acute reference levels.

The method for identifying TACs of concern for the Proposed Project was based on the particulate matter and organic compound speciation profiles developed by the California Air Resources Board (CARB) applied to project-related source emissions of particulate matter less than or equal to 10 microns in diameter (PM<sub>10</sub>) and total organic gases (TOG)<sup>11</sup>. The speciation profiles that will be used in this analysis are presented in **Table 2-1**.

**Table 2-1. Speciation Profiles for PM and TOG**

Source Agency & PM Profile No.	PM Profile Source Description	Source Agency & TOG Profile No.	TOG Profile Source Description
CARB 400	Gasoline Vehicle Exhaust - Catalyzed	CARB 2303/2304	Gasoline Vehicle Stabilized Exhaust – Catalyzed (summer/winter), use average
CARB 425	Diesel Vehicle Exhaust	CARB 818	Diesel Vehicle Exhaust (Farm Equipment)
US Navy	Aircraft Jet A Fuel Trace Elements	CARB 5861	Aircraft Engine Exhaust – Turbofan, Turbojet, and Turboprop Engines
CARB 1415	General Aviation Engine Exhaust (AvGas Fueled Aircraft)	CARB 413	Gasoline Exhaust, Non-Catalyzed
CARB 420	Construction Dust	CARB 716	Paving
CARB 472	Tire Wear	CARB 717	Architectural Coatings
CARB 473	Brake Wear		

Sources: California Air Resources Board (CARB) 2022. Speciation Profiles Used in CARB Modeling. Available at:

<https://ww2.arb.ca.gov/speciation-profiles-used-carb-modeling>;

[https://ww2.arb.ca.gov/sites/default/files/2021-06/chem30apr21\\_2.xlsx](https://ww2.arb.ca.gov/sites/default/files/2021-06/chem30apr21_2.xlsx);

<https://ww2.arb.ca.gov/sites/default/files/2021-11/webfraction03nov21.xlsx>;

<https://ww2.arb.ca.gov/sites/default/files/2021-06/orgprofile18dec20%20%281%29.xlsx>;

<https://ww2.arb.ca.gov/sites/default/files/2021-11/pmchemprofile03nov21.xlsx>.

U.S. Environmental Protection Agency/Federal Aviation Administration 2009. *Recommended Best Practice for Quantifying Speciated Organic Gas Emissions from Aircraft Equipped with Turbofan, Turbojet, and Turboprop Engines, Version 1.0*, EPA-420-R-09-901 (May).

U.S. Navy 2000. *Trace Element and Polycyclic Aromatic Hydrocarbon Analyses of Jet Engine Emissions: Jet A, JP5, and P8*, Technical Report 1845 (December).

<sup>11</sup> Total organic gases (TOG) include all organic gases, while volatile organic compounds (VOC) are only those that react in the atmosphere to form ozone; therefore, VOCs are a subset of compounds included in TOG. VOCs will be calculated for the criteria pollutant emission inventories. TOG emissions will be estimated by multiplying the VOC emissions by appropriate factors to convert them to TOG emissions.

The list of individual compounds included in each of the speciation profiles noted in **Table 2-1** were cross-referenced with the TACs included in BAAQMD Regulation 2-5: New Source Review of Toxic Air Contaminants. Those compounds found on one or more speciation profiles AND in Regulation 2-5 will be included in the list of TACs of concern used in this HHRA. In addition, annual concentrations of particulate matter less than or equal to 2.5 microns in diameter (PM<sub>2.5</sub>) will be modeled under the health risk assessment for comparison to the BAAQMD health risk and health hazard CEQA significance thresholds for PM<sub>2.5</sub>. The resulting TACs of concern are presented in **Table 2-2**.

**Table 2-2. Toxic Air Contaminants (TAC) of Concern for the Human Health Risk Assessment**

Toxic Air Contaminant	Type	Toxic Air Contaminant	Type
Acetaldehyde	VOC	Arsenic	PM-Metal
Acrolein	VOC	Cadmium	PM-Metal
Benzene	VOC	Chromium VI	PM-Metal
1,3-Butadiene	VOC	Cobalt	PM-Metal
Ethylbenzene	VOC	Copper	PM-Metal
Ethyl chloride	VOC	Lead	PM-Metal
Ethylene glycol	VOC	Manganese	PM-Metal
Formaldehyde	VOC	Mercury	PM-Metal
n-Hexane	VOC	Nickel	PM-Metal
Methyl alcohol	VOC	Selenium	PM-Metal
Methyl ethyl ketone	VOC	Vanadium	PM-Metal
Methyl tert-butyl ether	VOC		
Methyl chloride	VOC	Ammonium Ion	PM-Inorganics
Phenol	VOC	Chlorine	PM-Inorganics
Propylene	VOC	Silicon (as crystalline Silica)	PM-Inorganics
Styrene	VOC	Sulfates	PM-Inorganics
Toluene	VOC		
Xylene (total)	VOC	Diesel PM	Diesel Exhaust
Naphthalene	PAH	Fine Particulate Matter	PM <sub>2.5</sub>

Notes:

PA = Polycyclic aromatic hydrocarbons

PM = Particulate matter

VOC = Volatile organic compounds

## Section 3

# Exposure Assessment

### 3.1 Exposure Populations

For the HHRA analysis of the existing conditions and future Proposed Project, the following receptor types will be evaluated: on-airport workers (both project and non-project workers), off-airport workers, off-airport adult residents, off-airport child residents, and off-airport school children. Each receptor represents a unique population and set of exposure conditions. As a whole, they cover a range of exposure scenarios for people who may be affected by OAK emissions to the greatest extent. Receptors for which exposure scenarios are prepared were selected to provide risks and hazards estimates for the maximally exposed individuals (MEI), and to demonstrate the range of risks and hazards in the vicinity of OAK. The final boundaries of the analysis will be defined by the 10 in 1-million cancer risk zone associated with Proposed Project TAC emissions, which is determined through the dispersion modeling and risk assessment analysis.

### 3.2 Exposure Pathways

Different receptors e.g., off-site workers, school children could be exposed to TACs through several exposure pathways. Exposure scenarios are developed for each receptor. Each scenario considers various pathways through which each receptor may be exposed to TACs.

An exposure pathway consists of four parts:

- A TAC source (e.g., construction equipment fuel combustion),
- A release mechanism (e.g., construction equipment engine exhaust),
- A means of transport from point of release to point of exposure (e.g., local winds), and
- A route of exposure e.g., inhalation.

If any of these elements of an exposure pathway is absent, no exposure can take place and the pathway is considered incomplete. Incomplete pathways will not be evaluated in the HHRA.

The exposure pathways that will be analyzed are summarized in **Table 3-1**. The table also indicates the type of receptors that will be included for each pathway. These pathways are the mandatory pathways required under the BAAQMD Health Risk Assessment Modeling Protocol, dated December 2020.<sup>12</sup>

<sup>12</sup> Bay Area Air Quality Management District, *BAAQMD Health Risk Assessment Modeling Protocol*, December 2020. Available at: [https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd\\_hra\\_modeling\\_protocol.pdf](https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol.pdf).

**Table 3-1 Exposure Pathways and Associated Receptor Types**

Inhalation	Resident Adult, Resident Child, School Child, and Offsite Worker
Soil Ingestion <sup>a</sup>	Resident Adult, Resident Child, School Child, and Offsite Worker
Dermal Exposure to Contaminated Soil	Resident Adult, Resident Child, School Child, and Offsite Worker
Breast Milk Consumption <sup>b</sup>	Resident Child

Notes:

<sup>a</sup> Cadmium and nickel, although subject to deposition, are only treated as carcinogenic by the inhalation route, although their oral route oral doses will still be estimated for calculation of noncancer hazards.

<sup>b</sup> Due to the physical-chemical properties of chemicals, the breast milk ingestion exposure pathway is only applicable to lead, creosotes, polychlorinated biphenyls, dioxins and furans, and polycyclic aromatic hydrocarbons. Of these chemicals, only lead and naphthalene are included as a TAC for this project, thus only lead and naphthalene will be evaluated for this pathway.

### 3.3 Exposure Concentrations

The TAC project emission calculation methodology will follow the methods used for estimating criteria pollutant emissions. Completing the assessment of TAC emissions for dispersion modeling is described below.

#### 3.3.1 Air Dispersion Modeling to Estimate TAC Concentrations

Air dispersion modeling will be used to estimate incremental TAC concentrations between the Proposed Project and Existing Conditions. Three model runs will be conducted, one for the environmental baseline conditions, one for project construction, and one for operations after project completion. This Proposed Project-related contribution to ambient concentrations will be compared to the CEQA thresholds presented in **Section 6, Table 6-1**.

As noted in **Section 2** above, at least 35 individual TACs, including diesel particulate matter (DPM), will be analyzed for health risk. In addition, PM<sub>2.5</sub> annual concentrations will be estimated for comparison to BAAQMD PM<sub>2.5</sub> health risk CEQA thresholds. The TACs are typically associated with either PM<sub>10</sub> or TO<sub>10</sub>. Therefore, PM<sub>10</sub> and TOG emissions from both construction and operational sources will be incorporated into the dispersion analysis to produce acute and chronic ground-level concentrations of PM<sub>10</sub> and TO<sub>10</sub> associated with each source type (e.g., construction dust, aircraft engine exhaust). DPM concentrations will be the dispersion results for PM<sub>10</sub> from diesel-powered vehicles and equipment. The risk parameters developed for DPM are based on exposure to whole diesel engine exhaust, thus do not need to be speciated for risk calculations. California or federal speciation profiles for each source type will be used to determine individual TAC ground level concentrations for each source. The individual source results for a given TAC are then summed across all sources to obtain the total TAC concentrations at each receptor. The speciation profiles allow the analysis of multiple TACs while requiring dispersion modeling of only two pollutants (PM<sub>10</sub> and TOG). The speciation profiles that will be used for this health risk assessment are summarized in **Table 2-1** in **Section 2** above. Note that temporal profiles to be used in the analyses are discussed in **Section 3.3.1.5**. Note

The air dispersion analysis will be performed in accordance with Federal Aviation Administration (FAA) <sup>13,14</sup> and BAAQMD<sup>15</sup> modeling guidelines. The air dispersion analysis requires the following: 1) selection of the dispersion model, 2) evaluation of potential terrain considerations, 3) selection of appropriate dispersion coefficients based on land use, 4) selection and/or preparation of meteorological data, 5) identification of source locations and modeling parameters, 6) selection of receptor locations, and 7) selection of appropriate averaging time periods. Each of these steps is described in greater detail in the sections that follow.

### 3.3.1.1 Model Selection

The first step in an air dispersion analysis is the selection of an applicable model. The required air dispersion model for analysis of air quality impacts at airports is FAA's AEDT program, which uses USEPA's AERMOD model for conducting the dispersion analysis. AEDT is also required by FAA to analyze airport noise impacts on the surrounding areas. The version of AEDT at the time when the analyses associated with this project were substantially underway was Version 3e. The current version of AERMOD at the time of the drafting of this protocol is Version 22112.

### 3.3.1.2 Coordinate System and Terrain

The coordinate system used in the dispersion modeling analysis will be the Universal Transverse Mercator (UTM) system, UTM Zone 10 North, referenced to World Geodetic System 1984 datum. Terrain data will be incorporated in the analysis using, in order of preference, National Elevation Dataset (NED) one-third arc-second data or NED one arc-second data available from the U.S. Geological Survey. The terrain data will be used to set the base elevation for each source and each receptor incorporated into the model.

### 3.3.1.3 Land Use

Another important consideration in an air dispersion modeling analysis is the selection of rural or urban dispersion coefficients. Auer's method<sup>16</sup> of classifying land use as either rural or urban has been used to analyze the surrounding region. This method calls for analysis of a 3-kilometer radius around a facility to determine if the majority of the land can be classified as either rural (i.e., undeveloped) or urban. The BAAQMD has developed a method that applies Auer's general approach with the land use data contained in the 2016 National Land Cover Database (NLCD\_2016) and summarizes categories of land use for specific locations using the USEPA's

<sup>13</sup> U.S. Department of Transportation, Federal Aviation Administration, *Aviation Emissions and Air Quality Handbook*, Version 3, Update 1, January 2015. Available: [https://www.faa.gov/regulations\\_policies/policy\\_guidance/envir\\_policy/airquality\\_handbook/media/Air\\_Quality\\_Handbook\\_Appendices.pdf](https://www.faa.gov/regulations_policies/policy_guidance/envir_policy/airquality_handbook/media/Air_Quality_Handbook_Appendices.pdf).

<sup>14</sup> U.S. Department of Transportation, Federal Aviation Administration, *Aviation Environmental Design Tool (AEDT)*. Available: <https://aedt.faa.gov/>.

<sup>15</sup> Bay Area Air Quality Management District, *BAAQMD Health Risk Assessment Modeling Protocol*, December 2020. Available at: [https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd\\_hra\\_modeling\\_protocol-pdf.pdf](https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol-pdf.pdf).

<sup>16</sup> Auer, A., Jr. 1978. "Correlation of Land Use and Cover with Meteorological Anomalies," *J. of Applied Meteorology*, V.17, pp. 636-643.

AERSURFACE program.<sup>17</sup> AERSURFACE Version 20060 (or later) will be used with NLCD\_2016 data to determine whether rural or urban dispersion coefficients will be used for OAK.

### 3.3.1.4 Meteorological Data

Meteorological data for OAK is available from the BAAQMD in post-processed form,<sup>18</sup> and from the National Oceanic and Atmospheric Administration's (NOAA) National Centers for Environmental Information (NCEI) and Earth System Research Laboratory (ESRL) Radiosonde Database in raw form. Because AEDT requires several intermediate files to be saved from the AERMET processor which are not kept in the BAAQMD meteorological online data sets, the most recent, available five years of surface and upper air data for OAK will be obtained from NOAA. This data will be processed through the AERMET pre-processor, and with AERMINUTE and AERSURFACE, to produce the intermediate as well as final meteorological data files for the AERMOD dispersion analysis.

### 3.3.1.5 Source Parameters

The following emission sources identified in the CEQA/NEPA air quality evaluation protocol will be modeled for dispersion: 1) aircraft engines, 2) auxiliary power units (APU) and ground support equipment (GSE), 3) ground access vehicles, 4) construction equipment and activities, and 5) new stationary combustion sources installed for the project (e.g., building space heaters, water heaters, and emergency generators). The location of the sources will be determined from the airport layout plan, maps, aerial photos and other information provided by the Port of Oakland (Port) for existing conditions, as well as plans for the Proposed Project scenarios. All sources require the identification of modeling source parameters, including any temporal variations in emissions. The identification of this information is described in greater detail in the following sections.

#### 3.3.1.5.1 Aircraft Engines

The dispersion of emissions from aircraft operations at the airport will be modeled as the area source types generated in AEDT 3e (or later version). Actively used taxiways, runways, and approach/ departure paths will be entered into AEDT. AEDT models all aircraft sources as series of area sources. While on the ground the release height is set to 12 meters, based on LIDAR studies conducted to assess plume rise from aircraft prior to takeoff. Takeoff, climb out and approach sources are modeled at higher elevations above ground, based on AEDT aircraft operating parameters for each aircraft.

Each aircraft operation (arrival or departure) will be grouped into combinations that represent the (i) aircraft type, (ii) starting or ending terminal (or gate or other aircraft parking area), and (iii) runway used for each scenario. The hour-of-day temporal profile for each of the aircraft/terminal/runway combinations will also be developed for each scenario. The day-of-

<sup>17</sup> Bay Area Air Quality Management District, *BAAQMD Health Risk Assessment Modeling Protocol*, December 2020. Available at: [https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd\\_hra\\_modeling\\_protocol-pdf.pdf](https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol-pdf.pdf).

<sup>18</sup> Bay Area Air Quality Management District, *BAAQMD Health Risk Assessment Modeling Protocol*, December 2020. Available at: [https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd\\_hra\\_modeling\\_protocol-pdf.pdf](https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol-pdf.pdf).

week, and month-of-year temporal profiles will be developed from aircraft operational data for the existing conditions. These two temporal profiles will be applied to all scenarios.

#### *3.3.1.5.2 Ground Support Equipment/Auxiliary Power Units (GSE/APU)*

Pollutant emissions from GSE/APU operations will be modeled using the area source inputs generated by AEDT. GSE will be modeled as ground-based sources, and APU exhausts are modeled as elevated source since these units are located in the tail of the aircraft. The locations of GSE/APU sources are at the terminals and other aircraft parking areas. Pollutant emissions from GSE/APU sources vary throughout the day. The same temporal pattern for aircraft (noted above) will be applied to SE/APU sources at the terminals and other aircraft parking areas.

#### *3.3.1.5.3 Ground Access Vehicles*

The locations of ground access sources (traffic and parking) will be determined from the airport layout plan, Proposed Project drawings and plans, and recent aerial photos. Roadways will be modeled as line volume sources in AERMOD. Parking lots used by airport passengers, employees, and tenants both within the Airport and outside of the Airport that would be affected by the Proposed Project will be modeled as area sources. The release heights for light duty vehicle travel on roadways and in parking lots will be 1.295 meters with a 2.6-meter initial vertical dimension. For trucks, the release height will be 3.4 meters with a 6.8-meter initial vertical dimension.

Temporal patterns (by hour-of-day) for traffic will be estimated from the traffic analysis. Day-of-week and month-of-year temporal profiles will be based on the aircraft profiles noted above in Section 3.3.1.5.1.

#### *3.3.1.5.4 Building Space and Water Heating, and Emergency Generators*

Heaters used to supply hot water and comfort space heating in new concourse or terminal areas are assumed to exhaust above the new facility rooflines. These heaters will be modeled as point sources (with rain caps) approximately 6 feet above the proposed roof elevation for each building. Emergency generator engines are assumed to exhaust from stacks discharging through the outside walls of these facilities. These engines will be modeled as point sources (with rain caps) at 10 feet above ground level.

#### *3.3.1.5.5 Construction Equipment and Activity*

Construction source dispersion will be modeled following the general methodologies presented in BAAQMD's Air Quality CEQA Guidelines. Area sources will be used to model construction areas and line volume sources will be used to model construction vehicle roadway travel. Modeled roadway widths will be based on 12 ft land widths and the number of lanes for each segment. Construction dust emissions will be modeled as a ground source with a zero (0) meter release height. Construction equipment exhaust emissions will be modeled as polygon area sources, based on the approximate size, shape and location of the construction element being modeled with a release height of 5.0 meters and initial vertical plume dimension of 1.4 meters. Construction truck exhaust emissions on roadways will be modeled with an approximate 3.4-meter release height with a plume height of 6.8 meters.

### 3.3.1.6 Receptor Locations

Locations of receptors will be determined such that peak ambient air pollutant impacts associated with the Proposed Project will be identified. OAK property line receptors and community receptors around OAK will be included in the analysis. Initial dispersion analyses will be conducted using coarse grids and receptor spacing. Receptor spacing along property lines will be 100 meters or less. Initial offsite receptors in within 2.5 kilometers of the Airport center will also have 100-meter spacings, and receptors from 2.5 to 5.0 kilometers will have 250-meter spacings. The initial coarse-grid receptors are shown in **Figure 3-1**. Refined receptors will be placed immediately around those coarse grid receptor(s) with the peak impact(s), using 20-meter spacing to verify that ultimate peaks have been identified. The receptor locations will be used to determine the type of receptor – resident, school child, or worker.

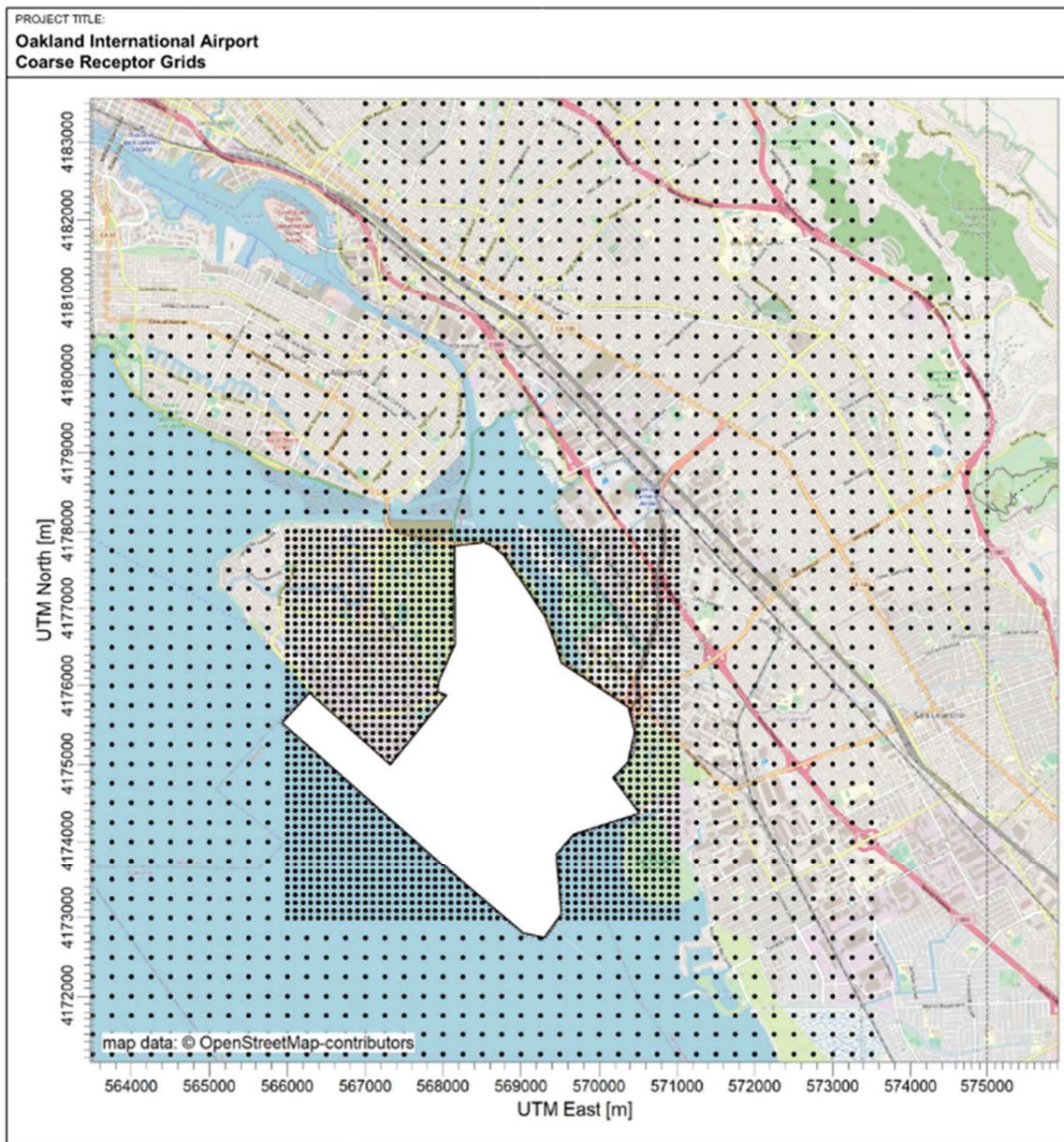


Figure 3-1 Coarse Receptor Grid

### 3.3.1.7 Dispersion Analysis Averaging Periods

The air dispersion analysis will need to provide both short-term and long-term ground level TAC concentrations to determine potential impacts to acute, chronic non-cancer, and cancer health risks. Acute reference exposure levels have been developed for 1-hour average exposure concentrations, and chronic non-cancer reference exposure levels have been developed for 8-hour and annual average exposure concentrations. Annual average concentrations or longer (potentially up to 5-year average concentrations if five years of meteorological data are used) are typically used to estimate cancer risks.

### 3.3.1.8 Deposition Rates

To assess non-inhalation pathway risks, deposition of TACs onto soil must be estimated. Initially, the deposition rates will be estimated using suggested default deposition velocities in meters per second, m/s from OE A A and BAAQMD multiplied by the modeled pollutant concentration (in  $\mu\text{g}/\text{m}^3$  at each receptor point to obtain the TAC deposition rate as a flux in micrograms per square meter per second [ $\mu\text{g}/\text{m}^2 \text{ s}$ ]). OEHHA suggests using 0.02 m/s as the deposition velocity for internal combustion engines and other sources where the bulk of the deposited mass is less than 2.5 microns in diameter.<sup>19</sup> This would include diesel and gasoline-powered motor vehicles and equipment; and turbine and piston-powered aircraft. Other sources such as construction dust, tire wear, and brake wear would be modeled using 0.05 m/s per BAAQMD guidance.<sup>20</sup>

### 3.3.1.9 Averaging Periods

Analyses of both cancer and non-cancer chronic as well as acute exposures will be included in the exposure assessment for the receptors identified in Section 3.1. Chronic and acute exposure to TACs from Proposed Project-specific construction and airport-related operations will be estimated by:

- Estimation of construction and incremental operational source emissions for peak annual (for annual cancer and non-cancer chronic exposure) and for peak day (for 1-hour acute and 8-hour chronic exposure).
- Dispersion modeling of construction emissions over an area that consists of the Airport property and urban areas to the north, east, south, and west.
- Dispersion modeling of Proposed Project incremental operational concentrations over the same receptors as for the construction sources. Note that the Proposed Project incremental operational concentrations are the differences in concentrations between the Proposed Project for a given year and the Existing Condition concentrations for each TAC.<sup>21</sup>

<sup>19</sup> California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments*, February 2015.

<sup>20</sup> Bay Area Air Quality Management District, *BAAQMD Health Risk Assessment Modeling Protocol*, December 2020. Available at: [https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd\\_hra\\_modeling\\_protocol-pdf.pdf](https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol-pdf.pdf).

<sup>21</sup> The Existing Condition sources include the operational sources at the Airport in 2019. The Proposed Project sources include the operational sources at the Airport in the year of Project build-out 2028, and in the last year that forecasts for passenger enplanements and aircraft operations were developed 2038), as well as construction.

- Estimation of deposition of TACs onto soil for evaluation of the non-inhalation pathways.

The highest modeled incremental TAC concentrations for each receptor type (e.g., residential) will be used to estimate project-related non-cancer chronic and acute human health hazards. These estimates will serve as the basis for significance determinations for the Proposed Project.

### 3.3.2 Exposure Concentrations (Dose)

To estimate cancer risks TAC exposure via inhalation for each receptor will be estimated. In February 2015, CalEPA released the Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments.<sup>22</sup> Exposure equations and parameter values presented in this protocol come from that guidance, unless otherwise noted. The guidance recommends the use of a software program, Hot Spots Analysis and Reporting Program Version 2 (HARP2) developed by the California Air Resources Board (CARB), for calculating and presenting Health Risk Assessment (RA) results for the Hot Spots Program. For this RA, the HARP2 equations and calculations were built into an Excel spreadsheet to allow for customization of the calculations to address project-specific criteria and for the ease of conducting multiple iterations of calculations.

The OE A and HARP2 equations for inhalation exposure recommend that the concentration of the chemical in air be used as the exposure metric resulting in the following formula for an exposure concentration:

$$EC_{inh} = CA \times (BR/BW \times A \times EF \times 10^{-6})$$

Where:	$EC_{inh}$	=	inhalation exposure concentration (mg/kg-day)
	CA	=	chemical concentration in air ( $\mu\text{g}/\text{m}^3$ )
	BR/BW	=	daily breathing rate normalized to body weight (L/kg body weight – day)
	A	=	inhalation absorption factor (unitless)
	EF	=	exposure frequency (unitless), days/365 days
	$10^{-6}$	=	micrograms to milligrams conversion and liters to cubic meters conversion

Soil dermal exposure will be a function of the soil or dust loading of the exposed skin surface. As presented in the 2015 OE A guidance, the equations for dermal exposure concentration will be calculated using the following formulas:

$$EC_{derm} = ADL \times CS \times ABS \times 365 \times 10^{-9} \text{ (for cancer)}$$

$$EC_{derm} = ADL \times CS \times ABS \times 10^{-9} \times ED/AT \times (1/350) \text{ (for noncancer)}$$

Where:	$EC_{derm}$	=	dermal exposure concentration (mg/kg-day)
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<sup>22</sup> California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments*, February 2015.

ADL	=	annual dermal load (mg soil/kg BW-yr), based on Table 5.11 and Table 5.12 a-d of the CalEPA Air Toxics Hot Spots Program Guidance.
CS	=	chemical concentration in soil ( $\mu\text{g}/\text{kg}$ ), calculated from CA and deposition velocity
ABS	=	fraction absorbed across skin (unitless), provided in Table 5.13 of the CalEPA Air Toxics Hot Spots Program Guidance.
1/365	=	conversion for ADL from years to days
1/350	=	conversion factor for ADL from yrs to days (Note: this conversion is needed to remove EF, expressed as 350 days/365 days, from the ADLs in Table 5.12a-d)
ED	=	exposure duration for specified age group (years : 2 yrs for 0<2, 14 yrs for 2<16, 54 yrs for 16-70)
AT	=	averaging time for lifetime exposure, 70 yrs
$10^{-9}$	=	unit conversions: micrograms to milligrams and milligrams to kilograms

Soil ingestion exposure will be dependent on the annual average air concentration total deposition onto the soil. As presented in the 2015 OEHHA guidance, the equations for inadvertent soil ingestion exposure concentration will be calculated using the following formulas:

$$EC_{\text{soil}} = CS \times \text{GRAF} \times S R \times EF \times 10^{-9} \text{ (for cancer)}$$

$$EC_{\text{soil}} = CS \times \text{GRAF} \times S R \times (ED/AT) \times 10^{-9} \text{ (for noncancer)}$$

Where:	$EC_{\text{soil}}$	=	soil ingestion exposure concentration (mg/kg BW-day)
	RAF	=	gastrointestinal relative absorption fraction, chemical-specific (unitless , provided in Table 5.2 of the CalEPA Air Toxics Hot Spots Program Guidance.
	CS	=	chemical concentration in soil ( $\mu\text{g}/\text{kg}$ ), calculated from CA and deposition velocity
	S R	=	soil ingestion rate (mg/kg BW-day , provided in Table 5.14 of the CalEPA Air Toxics Hot Spots Program Guidance.
	EF	=	exposure frequency (unitless), days/365 days
	ED	=	exposure duration for specified age group (years : 2 yrs for 0<2, 14 yrs for 2<16, 54 yrs for 16-70)
	AT	=	averaging time for lifetime exposure, 70 yrs
	$10^{-9}$	=	unit conversions: micrograms to milligrams and milligrams to kilograms

Exposure concentrations from ingestion of mother's milk will be calculated using the following formulas:

$$EC_{\text{milk}} = C_m \times BMI_{\text{bw}} \times EF \times 10^{-3} \text{ (for cancer)}$$

$$EC_{\text{milk}} = C_m \times BMI_{\text{bw}} \times 10^{-3} \text{ (for noncancer)}$$

Where:	$EC_{\text{milk}}$	=	dose through ingestion of mother's milk (mg/kg BW-day)
	$BMI_{\text{bw}}$	=	daily breast-milk ingestion rate (g/kg BW-day)
	$C_m$	=	chemical concentration mother's milk mg/kg milk .
	$EF$	=	exposure frequency (unitless), days/365 days
	$10^{-3}$	=	unit conversions: kilograms to grams

Assessment of potential human health impacts due to release of carcinogenic TACs associated with the Proposed Project assumes that receptors are exposed to concentrations of TACs over a 92<sup>3</sup>- and 30-year period for off-site residential receptors; a 12-year period for off-site school children, and a 25-year period for off-site workers. Because the construction period is shorter than the suggested averaging periods for estimating cancer risk, the risk analysis will include the combination of Proposed Project-related construction and operational impacts.

For the construction phase, the focus of construction activities is assumed to move as different portions of the Proposed Project are constructed throughout the approximate 4-year construction period (potentially 2024 to early 2028). To incorporate this variability into the model, construction emissions will be modeled separately for each year of construction. TAC concentrations for each receptor type will be calculated by grid point for each year of construction. For the portion of the receptors' exposure periods that are longer than the construction period, construction emissions will be set to zero; however, cancer risks for the years following construction were calculated using the TAC incremental concentrations from Proposed Project operations. Operational TAC incremental concentrations will be added to the construction TAC concentrations for all years after the start of construction, through the 2028 horizon year when Proposed Project operations are assumed to commence. Operational concentrations only will be estimated beyond the completion of construction. For receptor types whose exposure periods extend beyond the 2038 horizon year, the 2038 Proposed Project incremental TAC concentrations will be used for the remainder of their exposure period.

In addition to the receptor grids discussed above, discrete receptor locations will be selected to be representative of where construction impacts would likely to be greatest, including the nearest residential and/or offsite worker location in each wind direction from the Proposed Project construction sites. This approach typically overestimates risks for most people living, working, or attending school near OAK. This conservatism (protection) is built into the risk assessment

<sup>23</sup> California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments*, February 2015. Nine (9 years of exposure represents the central tendency (or average) exposure duration roughly the average time a person lives in one place). This value is provided as supplemental information.

developed for the Proposed Project to help provide a buffer for any future changes in project construction that cannot now be anticipated quantitatively.

Exposure parameters used to calculate the risks and hazards for all receptors for the inhalation pathway are summarized in **Table 3-2**. Exposure parameters are based on CalEPA Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments<sup>24</sup> and USEPA Exposure Factors Handbook.<sup>25</sup>

**Table 3-2. Exposure Parameters**

Exposure Pathway Parameters for Inhalation of Particulates and Gases	Off-Airport Receptors			
	Off-Site Adult Resident	Off-Site Child Resident	Off-Site School Child	Off-Site Worker
Exposure Frequency (Fraction of Year) (unitless)	0.96 (350 days/365 days) <sup>a</sup>	0.96 <sup>a</sup>	0.49 (180 days/365 days) <sup>h</sup>	0.685 (250days/365 days) <sup>a</sup>
Exposure Duration (years)	30 <sup>a,b,f,g</sup>	9 <sup>a,f</sup>	12 <sup>c</sup>	25 <sup>a</sup>
Absorption Fraction	1 <sup>a</sup>	1 <sup>a</sup>	1 <sup>a</sup>	1 <sup>a</sup>
Fraction of Time at Home	0.73 <sup>a</sup>	1 <sup>a,e</sup>	1 <sup>a,e</sup>	0.73 <sup>a</sup>
Averaging Time - Cancer (days)	25,550 <sup>a,d</sup>	25,550 <sup>a,d</sup>	25,550 <sup>a,d</sup>	25,550 <sup>a,d</sup>

Sources:

<sup>a</sup> California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments*, February 2015.

<sup>b</sup> 30-year exposure duration will be used as basis for determining significance to the MEI resident.

<sup>c</sup> Professional judgment.

<sup>d</sup> U.S. Environmental Protection Agency, Office of Emergency and Remedial Response, *Risk Assessment Guidance for Superfund, Volume 1, Human Health Evaluation Manual (Part A)*, USEPA/540/1-89/002, 1989.

<sup>e</sup> It was assumed that children attended school within the study area; thus the FAH = 1.

<sup>f</sup> Evaluation of 9-year and 30-year cancer risks will begin with exposure during the third trimester and will sum individual age group risks from that point forward.

<sup>g</sup> 30-year residential cancer risks will be calculated at residential locations, sensitive receptor locations (such as daycare), and school sites.

<sup>h</sup> BAAQMD, *Air Toxics NSR Program – Health Risk Assessment Guideline*, December 2016.

In addition to the exposure parameters presented in **Table 3-2**, some of the exposure parameters vary according to age groups to address the methodology, also detailed in the CalEPA Air Toxics Hot Spots Program Guidance. These exposure parameters are presented in **Table 3-3**.

<sup>24</sup> California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments*, February 2015.

<sup>25</sup> U.S. Environmental Protection Agency, *Exposure Factors Handbook*, EPA/600/R-09/052F, September 2011.

**Table 3-3. Exposure Parameters by Age Group**

Exposure Pathway Parameters for Inhalation of Particulates and Gases	Age Group					
	3rd Trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
Residential Daily Breathing Rate (L/kg-d)	361	1,090	631 <sup>a</sup>	572 <sup>a</sup>	261 <sup>a</sup>	233 <sup>a</sup>
Worker 8-hr Daily Breathing Rate (L/kg-d)	NA	NA	NA	NA	230 <sup>a</sup>	230
School Child 8-hr Daily Breathing Rate (L/kg-d)	NA	NA	640	520	240	NA
Age-adjustment Sensitivity Factor (unitless)	10	10	3	3	1	1
Fraction of Averaging Time (unitless)	0.25/70= 0.0036	2/70= 0.0286	7/70= 0.1	14/70= 0.2	14/70= 0.2	54/70= 0.7714

Source: California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments*, February 2015, unless otherwise noted.

Notes:

a. Value obtained from the BAAQMD, *Air Toxics NSR Program – Health Risk Assessment Guideline*, December 2016. NA = not applicable

In addition, the following CalEPA Air Toxics Hot Spots Program guidance tables will be used in the assessment of the non-inhalation pathways:

- Table 5.2a-b Substance-Specific Default Values for Multipathway Substances
- Table 5.11 Recommended Annual Dermal Load Point Estimates for Dermal Exposure
- Table 5.12 a-d Annual Dermal Load Distributions by Age Group and Climate for Stochastic Analysis
- Table 5.13 Dermal Absorption Fraction Factors (ABS) as Percent from Soil for Semi-Volatile and Solid Chemicals under the OEHHA “Hot Spots” Program
- Table 5.14 Recommended Soil Ingestion Rate (SIR) Estimates for Adults and Children
- Table 5.22 Default Point Estimates for Breast Milk Intake (BMI<sub>bw</sub>) for Breastfed Infants
- Table 5.23 Recommended Distribution of Breast Milk Intake Rates Among Breastfed Infants for Stochastic Assessment Averaged Over an Individual’s First Year of Life)

## Section 4

# Toxicity Assessment

Risks from exposure to TACs will be calculated by combining estimates of potential exposure with chemical-specific toxicity criteria developed by CalEPA, USEPA, or both. The toxicity assessment will initially examine quantitative toxicity criteria for TACs as required under 22 Cal. Code Regs. Sections (§)69021(a), (b), and (c), as described in the *Toxicity Criteria for Human Health Risk Assessments, Screening Levels, and Remediation Goals* rule.<sup>26</sup>

Inhalation cancer unit risk factors, oral cancer slope factors, and inhalation and oral chronic RELs developed by the State of California will be used to characterize cancer risks and chronic non-cancer health hazards associated with longer-term inhalation of emissions from construction and operational activities and exposure through non-inhalation pathways (e.g., soil ingestion and dermal contact) from deposition of emissions from construction and operational activities. Both types of toxicity criteria are based on studies of chronic exposure in animals or, in some cases, to people.

Inhalation and oral acute RELs, developed by the State of California, will be used to characterize potential acute non-cancer health hazards associated with short-term exposure (usually from exposures on the order of 1-hour) associated with the Proposed Project. RELs are based on the most sensitive, relevant, adverse health effect reported in the medical and toxicological literature. Since margins of safety<sup>27</sup> are incorporated to address data gaps and uncertainties, exceeding an REL does not automatically indicate an adverse health impact. One acute REL is developed for each TAC and that REL value is applicable to all receptors, residents and workers, children, and adults.

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<sup>26</sup> California Department of Toxic Substances Control (DTSC) Human and Ecological Risk Office (HERO). *Human Health Risk Assessment (RA) Note Number 10, Toxicity Criteria*, February 25, 2019. Available at: <https://dtsc.ca.gov/wp-content/uploads/sites/31/2019/02/RA-Note-10-2019-02-25.pdf>.

<sup>27</sup> Margin of safety is a ratio of the no-observed-effect level to the estimated exposure dose. Margins of safety are incorporated in the development of toxicity values to account for differences in dose-response among individuals. For example, the same dose of alcohol may have a greater effect on a woman than a man, not only because a woman is smaller in body size but also because men and women metabolize alcohol at different rates.

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## Section 5

### Risk Characterization

Risk characterization combines information developed for exposure and for toxicity to produce quantitative estimates of health impacts to the receptors (residents, students, and offsite workers).

#### 5.1 Methodology for Determining Project-Related Risks

The estimate of incremental Proposed Project health risks will be based in the difference in risks (cancer, chronic non-cancer, and acute) between the Future with Proposed Project risks and the Existing Conditions risks at each receptor. The Existing Conditions risks will be subtracted from the Future with Proposed Project risks to determine the Proposed Project-related risk values at each receptor. The maximum incremental results for each receptor type and risk type will be compared to the significance thresholds presented in **Section 6**.

The chronic non-cancer and acute risks will be based on the maximum incremental hazards calculated at each receptor for exposure periods of one year (chronic non-cancer risks) and 1-hour (acute risks). The incremental risks will be reported for the year or hour that produces the maximum incremental impacts.

Details on the methodologies used to calculate cancer, chronic non-cancer and acute risks are provided in the remaining portions of this section.

#### 5.2 Methodology for Evaluating Cancer Risk and Non-Cancer Health Hazards

Concentrations of TAC of concern in air, locations of potentially exposed populations, including locations for MEI exposure scenarios (worker, resident, student), and toxicity criteria will be used to calculate incremental human health risks associated with the Proposed Project. Risks for people recreating near the Airport would be lower than those for workers, residents, and students at any given location because of much shorter times spent in recreational activities. No risks will be calculated for recreational receptors. Where risks are not significant for other receptor groups, risks for recreational visitors near OAK will also be considered insignificant.

Cancer risks will be estimated by multiplying exposure estimates for carcinogenic chemicals by corresponding cancer slope factors. Cancer risk results will be expressed as the odds of developing cancer over a lifetime for a given period of exposure. Cancer risks will be based on the exposure durations listed in **Table 3-2** relative to a 70-year lifetime<sup>28</sup>. The inhalation cancer risks will be estimated using cancer potency factor in the following equation:

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<sup>28</sup> California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments, February 2015.

$$\text{RISK}_{\text{inh}} = \text{EC}_{\text{inh}} \times \text{CPF}_{\text{inh}} \times \text{AS} \times \text{ED}/\text{AT} \times \text{FAH}$$

Where:

- $\text{RISK}_{\text{inh}}$  = inhalation cancer risk
- $\text{EC}_{\text{inh}}$  = inhalation exposure concentration (mg/kg-day)
- $\text{CPF}_{\text{inh}}$  = inhalation cancer potency factor (mg/kg-day)<sup>-1</sup>
- $\text{AS}$  = age sensitivity factor for a specified age group (unitless)
- $\text{ED}$  = exposure duration (in years for a specified age group)
- $\text{AT}$  = averaging time for lifetime cancer risk (years)
- $\text{FAH}$  = fraction of time spent at home/school/work (unitless)

The non-inhalation cancer risks (i.e., soil ingestion and dermal contact) will be estimated using cancer potency factor in the following equation:

$$\text{RISK}_{\text{non-inh}} = \text{EC} \times \text{CP}_{\text{oral}} \times \text{AS} \times \text{ED}/\text{AT}$$

Where:

- $\text{RISK}_{\text{non-inh}}$  = non-inhalation cancer risk
- $\text{EC}$  = exposure concentration mg/kg-day – non-inhalation pathway
- $\text{CP}_{\text{oral}}$  = oral cancer potency factor (mg/kg-day)<sup>-1</sup>
- $\text{AS}$  = age sensitivity factor for a specified age group (unitless)
- $\text{ED}$  = exposure duration (in years for a specified age group)
- $\text{AT}$  = averaging time for lifetime cancer risk (years)

To calculate a total risk, the cancer risks from the non-inhalation pathways will be summed along with the inhalation cancer risks to provide a total cancer risk for a single multipathway substance:

$$\text{Total Risk} = \text{Risk}_{\text{inh}} + \text{Risk}_{\text{non-inh}}$$

Chronic non-cancer health hazard estimates were calculated by dividing exposure estimates by RELs. RELs are estimates of highest exposure levels that would not cause adverse health effects even if exposures continue over a lifetime. The ratio of exposure concentration to reference concentration is termed the HQ. Risks or odds of adverse effects cannot be estimated using reference doses.

Impacts of exposure to multiple chemicals will be accounted for by adding cancer risk estimates for exposure to all carcinogenic chemicals, and by adding estimated HQs for non-carcinogenic chemicals that affect the same target organ or tissue in the body. Addition of HQs for TAC that produce effects in similar organs and tissues results in a Hazard Index (HI) that reflects possible total hazards.

### 5.3 Maximally Exposed Individuals (MEI)

For the Proposed Project, grid points will be analyzed along the Airport fence-line and within the study area. In addition, several on-airport grid points that are not within the project construction sites will also be modeled (for on-airport/off-site workers). Concentrations of each TAC at these grid points will be used in calculating cancer risk, and chronic and acute non-cancer health hazard estimates. These calculations will be used to identify locations with maximum cancer risks and maximum non-cancer health hazards and serve as the basis for significance determinations.

MEI estimates will be based on the land use for each receptor location. On-Airport locations will be identified as commercial and on-Airport worker locations for the operational scenario. For off-airport locations, land uses will be designated as either residential, school (including day-care and preschool), hospital (including elder care), and commercial/industrial based on internet web searches and reviews of receptor locations in Google Earth Pro. These land use identifications will be used to determine appropriate receptors (workers at commercial/industrial locations; adult and child residents and school children at residential locations; etc.). Locations of schools, hospitals, nursing homes, daycares, etc. will be identified as sensitive receptor locations and designated as residential/commercial so that these grid points will be evaluated for both worker (teachers and staff) and residential receptors (school children).

### 5.4 Methodology for Evaluating Acute Impacts

Acute non-cancer health risk estimates will be calculated by dividing estimated maximum 1-hour TAC concentrations in air by acute RELs. An acute REL is a concentration in air below which adverse effects are unlikely for people, including sensitive subgroups, exposed for a short time on an intermittent basis. RELs for acute non-cancer health hazards do not distinguish between adults and children. Since margins of safety are incorporated to address data gaps and uncertainties, exceeding the REL does not automatically indicate an adverse health impact. Most RELs have been developed for a 1-hour exposure duration. CalEPA's OEHHA has developed acute RELs for several of the TACs of concern identified for the Proposed Project.

Short-term concentrations for each TAC associated with the Proposed Project will be divided by acute RELs to determine an acute HQ. Impacts of exposure to multiple chemicals will be accounted for by adding estimated HQs for TACs that affect the same target organ or tissue in the body, generating an acute HI for each receptor. The resulting acute HIs will be compared to the BAAQMD CEQA TAC acute HI significance threshold of 1. HIs less than 1 suggests that adverse acute non-cancer health hazard impacts are not expected.

In accordance with CalEPA Air Toxics Hot Spots Program Guidance, non-inhalation routes of exposure are not assessed for acute exposure. It is anticipated that health effects from a single exposure via the oral route at concentrations resulting from deposition of air emissions would be insignificant relative to the inhalation route.

### 5.5 Methodology for Estimating Cumulative Risks

Impacts to health risk from past, present, or foreseeable future sources located within 1,000 feet of OAK fence lines will be added to the project incremental health risks to determine total

cumulative risks near the Airport. These results will be compared to the cumulative risk thresholds presented in **Section 6**.

The risks from these other sources located on or within 1,000 feet of the Airport will be obtained from existing risk assessment/analyses conducted for those sources. The reference documentation may be from previous CEQA documents, AB2588 reports, BAAQMD permit applications, or other appropriate documentation.

## Section 6

# HHRA Significance Thresholds

The BAAQMD has developed health risk and hazard significance thresholds for CEQA impact analyses. These thresholds are provided in **Table 6-1** and indicate impacts that are cumulatively considerable. Note that Project incremental health risk impacts for comparison to these thresholds will be determined by using the incremental risks estimated as described in **Section 5.1** (project incremental) and **Section 5.5** (cumulative).

**Table 6-1. Health Risk and Health Hazard Significance Thresholds**

Health Risk or Hazard	Project Incremental Significance Threshold	Cumulative Threshold <sup>a</sup>
Cancer Risk (MEI Resident or MEI Worker)	Maximum Incremental Cancer Risk > 10 in 1 million	Maximum Cumulative Cancer Risk >= 100 in 1 million
Chronic Non-Cancer Hazards	Chronic Hazard Index (HIC) > 1.0	Chronic Hazard Index (HIC) > 10.0
Acute Non-Cancer Hazards	Acute Hazard Index (HIA) > 1.0	N/A <sup>b</sup>
PM <sub>2.5</sub>	Annual Avg Conc. > 0.3 µg/m <sup>3</sup>	Annual Avg Conc. > 0.8 µg/m <sup>3</sup>

Source: Bay Area Air Quality Management District, *California Environmental Quality Act – Air Quality Guidelines*, May 2017.

Notes:

- a. Cumulative includes the total impacts from all past, present, and foreseeable future sources within a 1,000 foot radius from the fence line of a source plus contribution from the project.
- b. N/A = Not applicable.

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## Attachment 2

### Cancer Risk and Chronic Non-Cancer Hazard Calculation Summaries

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Oakland International Airport Terminal Modernization & Development Project

Table 2-1. 30-Year Resident Cancer Risk at Location of Maximum Combined Construction and Operations Impact  
Contribution from Inhalation Pathway

Inhalation Exposure Parameters	3rd Trimester		Ages 0 thru 2 yrs		Ages 3 thru 16 yrs		Ages 17 thru 30 yrs	
	3rd Trimester	Ages 0 thru 2 yrs	Ages 3 thru 16 yrs	Ages 17 thru 30 yrs	3rd Trimester	Ages 0 thru 2 yrs	Ages 3 thru 16 yrs	Ages 17 thru 30 yrs
Daily Breathing Rate (DBR)	361 L/kg-d	1090 L/kg-d	745 L/kg-d	335 L/kg-d				
Fraction of Year (EF)	0.96 unitless	0.96 unitless	0.95890411 unitless	0.95890411 unitless				
Absorption Fraction (A)	1 unitless	1 unitless	1 unitless	1 unitless				
Conversion Factor (CF)	0.000001 m <sup>3</sup> /L	0.000001 m <sup>3</sup> /L	0.000001 m <sup>3</sup> /L	0.000001 m <sup>3</sup> /L				
Age-adjustment (ASF)	10 unitless	10 unitless	3 unitless	1 unitless				
Fraction of Averaging Time (ED)	0.00357 unitless	0.01429 unitless	0.01429 unitless	0.20 unitless				
Fraction of Time at Home (FAH)	1.00 unitless	1.00 unitless	1 unitless	0.73 unitless				
Calendar(s) Year for Each Age Group	2025	2025 - 2026	2027 - 2040	2041 - 2054				
Cancer Risk (per million) by Age Grp	8.17E-04	1.69E-02	2.79E-03	-1.21E-01	-1.44E-02	-0.115 30-Year Exposure Cancer Risk per million		
	RecID	UTM X (m)	UTM Y (m)					
Maximum Impact Location:	3177	572750	4184000					
				0.021 Construction -0.136 Operations				

TAC	Project-Related Incremental Concentrations (ug/m <sup>3</sup> ) at Location with Maximum Risk																Inhalation Cancer Slope Factor (mg/kg-day) <sup>-1</sup>	
	Construction						Incremental Operation											
	2025	2026	2027	2028	2029	2030	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037		2038
DPM	6.00E-05	4.00E-05	3.00E-05	3.00E-05	1.00E-05	1.00E-05	-3.00E-04	-3.05E-04	-3.10E-04	-3.15E-04	-3.20E-04	-3.25E-04	-3.30E-04	-3.35E-04	-3.40E-04	-3.45E-04	-3.50E-04	1.1
ammonia	0.00E+00	2.15E-08	3.16E-09	1.74E-08	1.58E-09	1.58E-09	-2.54E-08	-2.45E-08	-2.35E-08	-2.25E-08	-2.16E-08	-2.06E-08	-1.97E-08	-1.87E-08	-1.78E-08	-1.68E-08	-1.59E-08	NA
arsenic	0.00E+00	3.18E-09	4.80E-10	2.64E-09	2.40E-10	2.40E-10	2.95E-10	3.54E-10	4.13E-10	4.72E-10	5.31E-10	5.90E-10	6.49E-10	7.08E-10	7.67E-10	8.26E-10	8.85E-10	12
cadmium	0.00E+00	5.07E-09	7.80E-10	4.29E-09	3.90E-10	3.90E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	15
chlorine	0.00E+00	5.93E-07	8.50E-08	4.68E-07	4.25E-08	4.25E-08	9.04E-07	1.01E-06	1.13E-06	1.24E-06	1.35E-06	1.46E-06	1.57E-06	1.68E-06	1.79E-06	1.90E-06	2.01E-06	NA
chromium total	0.00E+00	4.13E-08	5.24E-09	2.88E-08	2.62E-09	2.62E-09	6.17E-08	7.32E-08	8.48E-08	9.64E-08	1.08E-07	1.20E-07	1.31E-07	1.43E-07	1.54E-07	1.66E-07	1.77E-07	51*
cobalt	0.00E+00	1.76E-08	2.70E-09	1.49E-08	1.35E-09	1.35E-09	5.00E-09	5.50E-09	6.00E-09	6.50E-09	7.00E-09	7.50E-09	8.00E-09	8.50E-09	9.00E-09	9.50E-09	1.00E-08	31.5
copper	0.00E+00	8.77E-08	2.76E-09	1.52E-08	1.38E-09	1.38E-09	3.55E-07	4.26E-07	4.97E-07	5.68E-07	6.39E-07	7.10E-07	7.81E-07	8.52E-07	9.23E-07	9.94E-07	1.07E-06	NA
lead	0.00E+00	9.21E-08	1.40E-08	7.71E-08	7.01E-09	7.01E-09	-8.48E-07	-8.45E-07	-8.43E-07	-8.40E-07	-8.38E-07	-8.35E-07	-8.32E-07	-8.30E-07	-8.27E-07	-8.25E-07	-8.22E-07	0.042
manganese	0.00E+00	1.60E-07	2.30E-08	1.15E-08	1.27E-07	6.13E-08	7.31E-08	8.49E-08	9.68E-08	1.09E-07	1.20E-07	1.32E-07	1.44E-07	1.56E-07	1.68E-07	1.80E-07	1.80E-07	NA
mercury	0.00E+00	2.60E-09	4.00E-10	2.20E-09	2.00E-10	2.00E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
nickel	0.00E+00	1.40E-08	1.52E-09	8.36E-09	7.60E-10	7.60E-10	1.58E-08	2.04E-08	2.50E-08	2.96E-08	3.42E-08	3.88E-08	4.34E-08	4.80E-08	5.26E-08	5.72E-08	6.18E-08	0.91
selenium	0.00E+00	5.90E-10	6.00E-11	3.30E-10	3.00E-11	3.00E-11	1.00E-09	1.20E-09	1.40E-09	1.60E-09	1.80E-09	2.00E-09	2.20E-09	2.40E-09	2.60E-09	2.80E-09	3.00E-09	NA
silica, crystalline (respirable)	0.00E+00	3.21E-05	4.88E-06	2.68E-05	2.44E-06	2.44E-06	1.90E-06	2.30E-06	2.71E-06	3.11E-06	3.52E-06	3.92E-06	4.33E-06	4.73E-06	5.14E-06	5.54E-06	5.95E-06	NA
sulfates	0.00E+00	9.74E-07	1.18E-07	6.48E-07	5.90E-08	5.90E-08	5.50E-06	6.16E-06	6.81E-06	7.47E-06	8.13E-06	8.78E-06	9.44E-06	1.01E-05	1.08E-05	1.14E-05	1.21E-05	NA
vanadium (fume or dust)	0.00E+00	4.69E-08	6.62E-09	3.64E-08	3.31E-09	3.31E-09	1.95E-08	2.34E-08	2.73E-08	3.12E-08	3.50E-08	3.89E-08	4.28E-08	4.67E-08	5.06E-08	5.45E-08	5.84E-08	NA
1,3-butadiene	4.41E-08	6.62E-08	4.41E-08	4.41E-08	0.00E+00	0.00E+00	3.35E-05	3.86E-05	4.36E-05	4.87E-05	5.38E-05	5.88E-05	6.39E-05	6.90E-05	7.41E-05	7.91E-05	8.42E-05	0.6
acetaldehyde	2.54E-07	3.81E-07	2.54E-07	2.54E-07	0.00E+00	0.00E+00	7.60E-05	8.81E-05	1.00E-04	1.12E-04	1.24E-04	1.36E-04	1.49E-04	1.61E-04	1.73E-04	1.85E-04	1.97E-04	0.01
acrolein	6.98E-10	1.05E-09	6.98E-10	6.98E-10	0.00E+00	0.00E+00	5.26E-05	6.03E-05	6.80E-05	7.57E-05	8.34E-05	9.10E-05	9.87E-05	1.06E-04	1.14E-04	1.22E-04	1.29E-04	NA
benzene	7.51E-07	1.82E-06	9.01E-07	9.01E-07	3.00E-07	0.00E+00	-1.08E-05	-9.39E-06	-8.02E-06	-6.64E-06	-5.27E-06	-3.89E-06	-2.52E-06	-1.14E-06	2.35E-07	1.61E-06	2.99E-06	0.1
ethyl benzene	1.92E-07	1.45E-06	1.35E-06	1.12E-06	2.32E-07	0.00E+00	-8.27E-06	-8.72E-06	-9.18E-06	-9.63E-06	-1.01E-05	-1.05E-05	-1.10E-05	-1.14E-05	-1.19E-05	-1.23E-05	-1.28E-05	0.0087
ethyl chloride (chloroethane)	0.00E+00	1.40E-06	3.05E-07	3.05E-07	6.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
ethylene glycol	0.00E+00	1.17E-06	2.55E-07	2.55E-07	5.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
formaldehyde	4.31E-07	6.47E-07	4.31E-07	4.31E-07	0.00E+00	0.00E+00	2.38E-04	2.74E-04	3.11E-04	3.47E-04	3.83E-04	4.20E-04	4.56E-04	4.93E-04	5.29E-04	5.65E-04	6.02E-04	0.021
hexane	1.54E-07	2.31E-07	1.54E-07	1.54E-07	0.00E+00	0.00E+00	-9.61E-06	-1.04E-05	-1.12E-05	-1.20E-05	-1.28E-05	-1.36E-05	-1.44E-05	-1.52E-05	-1.60E-05	-1.68E-05	-1.76E-05	NA
methanol	8.38E-09	1.26E-08	8.38E-09	8.38E-09	0.00E+00	0.00E+00	3.83E-05	4.39E-05	4.95E-05	5.52E-05	6.08E-05	6.64E-05	7.20E-05	7.77E-05	8.33E-05	8.89E-05	9.45E-05	NA
methyl chloride (chloromethane)	0.00E+00	1.17E-06	2.55E-07	2.55E-07	5.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
methyl ethyl ketone (2-butanone)	2.57E-08	3.86E-08	2.57E-08	2.57E-08	0.00E+00	0.00E+00	-1.61E-06	-1.74E-06	-1.88E-06	-2.01E-06	-2.14E-06	-2.28E-06	-2.41E-06	-2.55E-06	-2.68E-06	-2.81E-06	-2.95E-06	NA
methyl tert-butyl ether	4.72E-08	7.08E-08	4.72E-08	4.72E-08	0.00E+00	0.00E+00	-2.95E-06	-3.20E-06	-3.44E-06	-3.69E-06	-3.93E-06	-4.18E-06	-4.42E-06	-4.67E-06	-4.91E-06	-5.16E-06	-5.41E-06	0.0018
naphthalene	5.05E-08	7.58E-08	5.05E-08	5.05E-08	0.00E+00	0.00E+00	8.48E-06	9.91E-06	1.13E-05	1.28E-05	1.42E-05	1.57E-05	1.71E-05	1.85E-05	2.00E-05	2.14E-05	2.28E-05	0.12
phenol	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.56E-05	1.79E-05	2.02E-05	2.24E-05	2.47E-05	2.70E-05	2.93E-05	3.16E-05	3.38E-05	3.61E-05	3.84E-05	NA
propylene	4.30E-07	6.44E-07	4.30E-07	4.30E-07	0.00E+00	0.00E+00	7.06E-05	8.26E-05	9.46E-05	1.07E-04	1.19E-04	1.31E-04	1.43E-04	1.55E-04	1.67E-04	1.79E-04	1.91E-04	NA
styrene	3.13E-08	4.69E-08	3.13E-08	3.13E-08	0.00E+00	0.00E+00	4.69E-06	5.50E-06	6.30E-06	7.11E-06	7.92E-06	8.73E-06	9.53E-06	1.03E-05	1.11E-05	1.20E-05	1.28E-05	NA
toluene	8.68E-07	4.53E-06	4.09E-06	3.45E-06	6.45E-07	0.00E+00	-4.04E-05	-4.29E-05	-4.54E-05	-4.79E-05	-5.04E-05	-5.29E-05	-5.54E-05	-5.79E-05	-6.04E-05	-6.29E-05	-6.54E-05	NA
xylene (mixed)	0.00E+00	4.28E-06	4.28E-06	3.42E-06	8.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA

\* The Chromium VI cancer slope factor is 510 (mg/kg-day)<sup>-1</sup>, however the concentrations are presented in values of Total Chromium. The cancer slope factor is divided by 10 assuming the Cr6+ concentration is 10% of Total Cr.

Oakland International Airport Terminal Modernization & Development Project

Table 2-2. 9-Year Child Resident Cancer Risk at Location of Maximum Combined Construction and Operations Impact  
Contribution from Inhalation Pathway

Inhalation Exposure Parameters	3rd Trimester	Ages 0 thru 2 yrs		Ages 3 thru 16 yrs		Ages 17 thru 30 yrs		
Daily Breathing Rate (DBR)	361 L/kg-d	1090 L/kg-d		745 L/kg-d		335 L/kg-d		
Fraction of Year (EF)	0.96 unitless	0.96 unitless		0.95890411 unitless		0.95890411 unitless		
Absorption Fraction (A)	1 unitless	1 unitless		1 unitless		1 unitless		
Conversion Factor (CF)	0.000001 m <sup>3</sup> /L	0.000001 m <sup>3</sup> /L		0.000001 m <sup>3</sup> /L		0.000001 m <sup>3</sup> /L		
Age-adjustment (ASF)	10 unitless	10 unitless		3 unitless		1 unitless		
Fraction of Averaging Time (ED)	0.00357 unitless	0.01429 unitless		0.01429 unitless		0.20 unitless		
Fraction of Time at Home (FAH)	1.00 unitless	1.00 unitless		1 unitless		0.73 unitless		
Calendar(s) Year for Each Age Group	2025	2025 - 2026		2027 - 2033		Not Applicable		
Cancer Risk (per million) by Age Grp	9.53E-04	1.86E-02		2.79E-03		-5.54E-02		
	ReclD	UTM X (m)	UTM Y (m)	<b>-0.0331 9-Year Child Exposure Cancer Risk per million</b>				
Maximum Impact Location:	3179	573250	4184000	0.022 Construction -0.055 Operations				

TAC	Project-Related Incremental Concentrations (ug/m <sup>3</sup> ) at Location with Maximum Risk																Inhalation Cancer Slope Factor (mg/kg-day) <sup>-1</sup>	
	Construction						Incremental Operation											
	2025	2026	2027	2028	2029	2030	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037		2038
DPM	7.00E-05	4.00E-05	3.00E-05	3.00E-05	1.00E-05	1.00E-05	-3.00E-04	-3.06E-04	-3.12E-04	-3.18E-04	-3.24E-04	-3.30E-04	-3.36E-04	-3.42E-04	-3.48E-04	-3.54E-04	-3.60E-04	1.1
ammonia	0.00E+00	2.15E-08	3.16E-09	1.74E-08	1.58E-09	1.58E-09	-2.64E-08	-2.56E-08	-2.48E-08	-2.41E-08	-2.33E-08	-2.25E-08	-2.18E-08	-2.10E-08	-2.02E-08	-1.95E-08	-1.87E-08	NA
arsenic	0.00E+00	3.18E-09	4.80E-10	2.64E-09	2.40E-10	2.40E-10	2.36E-10	2.83E-10	3.30E-10	3.78E-10	4.25E-10	4.72E-10	5.19E-10	5.66E-10	6.14E-10	6.61E-10	7.08E-10	12
cadmium	0.00E+00	5.07E-09	7.80E-10	4.29E-09	3.90E-10	3.90E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	15
chlorine	0.00E+00	1.29E-06	8.50E-08	4.68E-07	4.25E-08	4.25E-08	8.63E-07	9.66E-07	1.07E-06	1.17E-06	1.27E-06	1.38E-06	1.48E-06	1.58E-06	1.68E-06	1.79E-06	1.89E-06	NA
chromium total	0.00E+00	4.63E-08	5.24E-09	2.88E-08	2.62E-09	2.62E-09	5.60E-08	6.55E-08	7.51E-08	8.46E-08	9.42E-08	1.04E-07	1.13E-07	1.23E-07	1.32E-07	1.42E-07	1.52E-07	51*
cobalt	0.00E+00	2.26E-08	2.70E-09	1.49E-08	1.35E-09	1.35E-09	5.00E-09	5.50E-09	6.00E-09	6.50E-09	7.00E-09	7.50E-09	8.00E-09	8.50E-09	9.00E-09	9.50E-09	1.00E-08	31.5
copper	0.00E+00	9.27E-08	2.76E-09	1.52E-08	1.38E-09	1.38E-09	2.86E-07	3.43E-07	4.00E-07	4.57E-07	5.13E-07	5.70E-07	6.27E-07	6.84E-07	7.41E-07	7.98E-07	8.55E-07	NA
lead	0.00E+00	9.21E-08	1.40E-08	7.71E-08	7.01E-09	7.01E-09	-8.48E-07	-8.46E-07	-8.44E-07	-8.42E-07	-8.40E-07	-8.38E-07	-8.35E-07	-8.33E-07	-8.31E-07	-8.29E-07	-8.27E-07	0.042
manganese	0.00E+00	1.65E-07	2.30E-08	1.27E-07	1.15E-08	1.15E-08	5.12E-08	6.08E-08	7.04E-08	8.00E-08	8.96E-08	9.93E-08	1.09E-07	1.18E-07	1.28E-07	1.38E-07	1.47E-07	NA
mercury	0.00E+00	2.60E-09	4.00E-10	2.20E-09	2.00E-10	2.00E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
nickel	0.00E+00	1.90E-08	1.52E-09	8.36E-09	7.60E-10	7.60E-10	1.17E-08	1.55E-08	1.93E-08	2.31E-08	2.68E-08	3.06E-08	3.44E-08	3.82E-08	4.19E-08	4.57E-08	4.95E-08	0.91
selenium	0.00E+00	5.90E-10	6.00E-11	3.30E-10	3.00E-11	3.00E-11	8.00E-10	9.60E-10	1.12E-09	1.28E-09	1.44E-09	1.60E-09	1.76E-09	1.92E-09	2.08E-09	2.24E-09	2.40E-09	NA
silica, crystalline (respirable)	0.00E+00	3.21E-05	4.88E-06	2.68E-05	2.44E-06	2.44E-06	1.49E-06	1.81E-06	2.14E-06	2.46E-06	2.79E-06	3.11E-06	3.44E-06	3.76E-06	4.08E-06	4.41E-06	4.73E-06	NA
sulfates	0.00E+00	5.47E-06	1.18E-07	6.48E-07	5.90E-08	5.90E-08	5.29E-06	5.91E-06	6.52E-06	7.14E-06	7.75E-06	8.37E-06	8.99E-06	9.60E-06	1.02E-05	1.08E-05	1.14E-05	NA
vanadium (fume or dust)	0.00E+00	4.69E-08	6.62E-09	3.64E-08	3.31E-09	3.31E-09	1.56E-08	1.87E-08	2.18E-08	2.49E-08	2.80E-08	3.12E-08	3.43E-08	3.74E-08	4.05E-08	4.36E-08	4.67E-08	NA
1,3-butadiene	4.41E-08	6.62E-08	4.41E-08	4.41E-08	0.00E+00	0.00E+00	4.39E-05	4.63E-05	4.88E-05	5.13E-05	5.38E-05	5.63E-05	5.88E-05	6.13E-05	6.38E-05	6.63E-05	6.88E-05	0.6
acetaldehyde	2.54E-07	3.81E-07	2.54E-07	2.54E-07	0.00E+00	0.00E+00	1.03E-04	1.09E-04	1.14E-04	1.20E-04	1.25E-04	1.31E-04	1.37E-04	1.42E-04	1.48E-04	1.54E-04	1.59E-04	0.01
acrolein	6.98E-10	1.05E-09	6.98E-10	6.98E-10	0.00E+00	0.00E+00	6.73E-05	7.12E-05	7.51E-05	7.91E-05	8.30E-05	8.69E-05	9.08E-05	9.47E-05	9.86E-05	1.03E-04	1.06E-04	NA
benzene	7.51E-07	1.82E-06	9.01E-07	9.01E-07	3.00E-07	0.00E+00	3.07E-06	2.27E-06	1.47E-06	6.69E-07	-1.32E-07	-9.32E-07	-1.73E-06	-2.53E-06	-3.33E-06	-4.13E-06	-4.93E-06	0.1
ethyl benzene	1.92E-07	1.45E-06	1.35E-06	1.12E-06	2.32E-07	0.00E+00	-6.27E-06	-6.88E-06	-7.50E-06	-8.11E-06	-8.73E-06	-9.34E-06	-9.96E-06	-1.06E-05	-1.12E-05	-1.18E-05	-1.24E-05	0.0087
ethyl chloride (chloroethane)	0.00E+00	1.40E-06	3.05E-07	3.05E-07	6.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
ethylene glycol	0.00E+00	1.17E-06	2.55E-07	2.55E-07	5.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
formaldehyde	4.31E-07	6.47E-07	4.31E-07	4.31E-07	0.00E+00	0.00E+00	3.14E-04	3.31E-04	3.49E-04	3.67E-04	3.84E-04	4.02E-04	4.20E-04	4.38E-04	4.55E-04	4.73E-04	4.91E-04	0.021
hexane	1.54E-07	2.31E-07	1.54E-07	1.54E-07	0.00E+00	0.00E+00	-8.84E-06	-9.55E-06	-1.03E-05	-1.10E-05	-1.17E-05	-1.24E-05	-1.31E-05	-1.38E-05	-1.46E-05	-1.53E-05	-1.60E-05	NA
methanol	8.38E-09	1.26E-08	8.38E-09	8.38E-09	0.00E+00	0.00E+00	4.92E-05	5.20E-05	5.49E-05	5.77E-05	6.06E-05	6.34E-05	6.63E-05	6.91E-05	7.19E-05	7.48E-05	7.76E-05	NA
methyl chloride (chloromethane)	0.00E+00	1.17E-06	2.55E-07	2.55E-07	5.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
methyl ethyl ketone (2-butanone)	2.57E-08	3.86E-08	2.57E-08	2.57E-08	0.00E+00	0.00E+00	-1.48E-06	-1.60E-06	-1.72E-06	-1.84E-06	-1.96E-06	-2.08E-06	-2.20E-06	-2.32E-06	-2.44E-06	-2.56E-06	-2.68E-06	NA
methyl tert-butyl ether	4.72E-08	7.08E-08	4.72E-08	4.72E-08	0.00E+00	0.00E+00	-2.71E-06	-2.93E-06	-3.15E-06	-3.37E-06	-3.59E-06	-3.81E-06	-4.03E-06	-4.25E-06	-4.47E-06	-4.69E-06	-4.91E-06	0.0018
naphthalene	5.05E-08	7.58E-08	5.05E-08	5.05E-08	0.00E+00	0.00E+00	1.20E-05	1.26E-05	1.32E-05	1.39E-05	1.45E-05	1.51E-05	1.58E-05	1.64E-05	1.70E-05	1.77E-05	1.83E-05	0.12
phenol	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.00E-05	2.11E-05	2.23E-05	2.34E-05	2.46E-05	2.58E-05	2.69E-05	2.81E-05	2.93E-05	3.04E-05	3.16E-05	NA
propylene	4.30E-07	6.44E-07	4.30E-07	4.30E-07	0.00E+00	0.00E+00	1.00E-04	1.05E-04	1.10E-04	1.16E-04	1.21E-04	1.26E-04	1.32E-04	1.37E-04	1.42E-04	1.47E-04	1.53E-04	NA
styrene	3.13E-08	4.69E-08	3.13E-08	3.13E-08	0.00E+00	0.00E+00	6.70E-06	7.05E-06	7.40E-06	7.75E-06	8.09E-06	8.44E-06	8.79E-06	9.14E-06	9.49E-06	9.84E-06	1.02E-05	NA
toluene	8.68E-07	4.53E-06	4.09E-06	3.45E-06	6.45E-07	0.00E+00	-3.22E-05	-3.52E-05	-3.82E-05	-4.13E-05	-4.43E-05	-4.73E-05	-5.03E-05	-5.33E-05	-5.63E-05	-5.93E-05	-6.23E-05	NA
xylene (mixed)	0.00E+00	4.28E-06	4.28E-06	3.42E-06	8.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA

\* The Chromium VI cancer slope factor is 510 (mg/kg-day)<sup>-1</sup>, however the concentrations are presented in values of Total Chromium. The cancer slope factor is divided by 10 assuming the Cr6+ concentration is 10% of Total Cr.

Oakland International Airport Terminal Modernization & Development Project

Table 2-3. 12-Year School Child Cancer Risk at Location of Maximum Combined Construction and Operations Impact  
Contribution from Inhalation Pathway

Inhalation Exposure Parameters	3rd Trimester	Ages 0 thru 2 yrs		Ages 3 thru 16 yrs		Ages 17 thru 30 yrs							
Daily Breathing Rate (DBR)	361 L/kg-d	1090 L/kg-d		745 L/kg-d		335 L/kg-d							
Fraction of Year (EF)	0.96 unitless	0.96 unitless		0.96 unitless		0.96 unitless							
Absorption Fraction (A)	1 unitless	1 unitless		1 unitless		1 unitless							
Conversion Factor (CF)	0.000001 m <sup>3</sup> /L	0.000001 m <sup>3</sup> /L		0.000001 m <sup>3</sup> /L		0.000001 m <sup>3</sup> /L							
Age-adjustment (ASF)	10 unitless	10 unitless		3 unitless		1 unitless							
Fraction of Averaging Time (ED)	0.00357 unitless	0.01429 unitless		0.01429 unitless		0.20 unitless							
Fraction of Time at Home (FAH)	1.00 unitless	1.00 unitless		1 unitless		0.73 unitless							
Calendar(s) Year for Each Age Group	Not Applicable	Not Applicable		2025 - 2036		Not Applicable							
Cancer Risk (per million) by Age Grp				1.47E-02	-1.88E-01	-0.174 12-Year School Child Exposure Cancer Risk per million							
	RecID	UTM X (m)	UTM Y (m)					0.015 Construction					-0.188 Operations
Maximum Impact Location:	2965	567000	4182250										

TAC	Project-Related Incremental Concentrations (ug/m <sup>3</sup> ) at Location with Maximum Risk																Inhalation Cancer Slope Factor (mg/kg-day) <sup>-1</sup>	
	Construction						Incremental Operation											
	2025	2026	2027	2028	2029	2030	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037		2038
DPM	1.40E-04	1.00E-04	6.00E-05	7.00E-05	3.00E-05	2.00E-05	-6.60E-04	-6.73E-04	-6.86E-04	-6.99E-04	-7.12E-04	-7.25E-04	-7.38E-04	-7.51E-04	-7.64E-04	-7.77E-04	-7.90E-04	1.1
ammonia	9.56E-10	4.62E-08	8.86E-09	3.73E-08	4.12E-09	1.58E-09	1.63E-08	1.89E-08	2.16E-08	2.43E-08	2.70E-08	2.96E-08	3.23E-08	3.50E-08	3.77E-08	4.03E-08	4.30E-08	NA
arsenic	5.90E-11	6.84E-09	1.26E-09	5.58E-09	5.39E-10	2.40E-10	1.00E-09	1.17E-09	1.33E-09	1.50E-09	1.66E-09	1.83E-09	1.99E-09	2.16E-09	2.32E-09	2.49E-09	2.66E-09	12
cadmium	0.00E+00	1.09E-08	1.95E-09	8.97E-09	7.80E-10	3.90E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	15
chlorine	7.41E-07	2.67E-06	9.53E-07	1.72E-06	1.26E-07	4.25E-08	2.79E-06	3.26E-06	3.72E-06	4.19E-06	4.65E-06	5.12E-06	5.58E-06	6.04E-06	6.51E-06	6.97E-06	7.44E-06	NA
chromium total	1.22E-08	9.78E-08	2.53E-08	7.25E-08	1.24E-08	2.62E-09	1.87E-07	2.19E-07	2.51E-07	2.83E-07	3.15E-07	3.47E-07	3.79E-07	4.11E-07	4.43E-07	4.75E-07	5.07E-07	51*
cobalt	5.00E-09	4.78E-08	1.18E-08	3.61E-08	2.70E-09	1.35E-09	1.50E-08	1.75E-08	2.00E-08	2.25E-08	2.50E-08	2.75E-08	3.00E-08	3.25E-08	3.50E-08	3.75E-08	4.00E-08	31.5
copper	7.48E-08	1.88E-07	8.17E-08	1.07E-07	7.25E-08	1.38E-09	1.21E-06	1.41E-06	1.61E-06	1.81E-06	2.01E-06	2.21E-06	2.41E-06	2.61E-06	2.81E-06	3.01E-06	3.21E-06	NA
lead	9.51E-10	1.98E-07	3.60E-08	1.62E-07	1.50E-08	7.01E-09	3.73E-08	4.38E-08	5.04E-08	5.70E-08	6.36E-08	7.02E-08	7.68E-08	8.34E-08	8.99E-08	9.65E-08	1.03E-07	0.042
manganese	1.54E-08	3.53E-07	7.29E-08	2.80E-07	3.34E-08	1.15E-08	2.04E-07	2.38E-07	2.72E-07	3.06E-07	3.39E-07	3.73E-07	4.07E-07	4.41E-07	4.75E-07	5.09E-07	5.43E-07	NA
mercury	0.00E+00	5.60E-09	1.00E-09	4.60E-09	4.00E-10	2.00E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
nickel	9.10E-09	3.95E-08	1.29E-08	2.66E-08	5.62E-09	7.60E-10	8.47E-08	9.87E-08	1.13E-07	1.27E-07	1.41E-07	1.55E-07	1.69E-07	1.83E-07	1.97E-07	2.10E-07	2.24E-07	0.91
selenium	2.00E-10	1.24E-09	3.50E-10	8.90E-10	2.60E-10	3.00E-11	3.40E-09	3.96E-09	4.52E-09	5.08E-09	5.64E-09	6.20E-09	6.76E-09	7.32E-09	7.88E-09	8.44E-09	9.00E-09	NA
silica, crystalline (respirable)	4.05E-07	6.91E-05	1.26E-05	5.65E-05	5.29E-06	2.44E-06	6.89E-06	8.03E-06	9.16E-06	1.03E-05	1.14E-05	1.26E-05	1.37E-05	1.48E-05	1.60E-05	1.71E-05	1.82E-05	NA
sulfates	4.71E-06	1.11E-05	5.00E-06	6.06E-06	3.25E-07	5.90E-08	1.70E-05	1.99E-05	2.27E-05	2.55E-05	2.83E-05	3.12E-05	3.40E-05	3.68E-05	3.97E-05	4.25E-05	4.53E-05	NA
vanadium (fume or dust)	3.89E-09	1.00E-07	2.04E-08	8.00E-08	1.05E-08	3.31E-09	6.62E-08	7.71E-08	8.80E-08	9.89E-08	1.10E-07	1.21E-07	1.32E-07	1.43E-07	1.53E-07	1.64E-07	1.75E-07	NA
1,3-butadiene	1.77E-07	2.21E-07	1.77E-07	1.77E-07	2.21E-08	0.00E+00	6.23E-05	7.36E-05	8.48E-05	9.60E-05	1.07E-04	1.18E-04	1.30E-04	1.41E-04	1.52E-04	1.63E-04	1.75E-04	0.6
acetaldehyde	1.02E-06	1.27E-06	1.02E-06	1.02E-06	1.27E-07	0.00E+00	1.38E-04	1.65E-04	1.91E-04	2.18E-04	2.44E-04	2.71E-04	2.98E-04	3.24E-04	3.51E-04	3.77E-04	4.04E-04	0.01
acrolein	2.79E-09	3.49E-09	2.79E-09	2.79E-09	3.49E-10	0.00E+00	9.93E-05	1.16E-04	1.34E-04	1.51E-04	1.68E-04	1.85E-04	2.02E-04	2.19E-04	2.36E-04	2.54E-04	2.71E-04	NA
benzene	3.00E-06	5.22E-06	3.30E-06	3.30E-06	1.01E-06	0.00E+00	-3.65E-05	-3.45E-05	-3.25E-05	-3.05E-05	-2.86E-05	-2.66E-05	-2.46E-05	-2.26E-05	-2.07E-05	-1.87E-05	-1.67E-05	0.1
ethyl benzene	7.69E-07	3.28E-06	3.09E-06	2.86E-06	3.28E-07	0.00E+00	-1.97E-05	-2.10E-05	-2.23E-05	-2.36E-05	-2.49E-05	-2.62E-05	-2.75E-05	-2.88E-05	-3.01E-05	-3.14E-05	-3.26E-05	0.0087
ethyl chloride (chloroethane)	0.00E+00	2.99E-06	6.10E-07	6.10E-07	1.28E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
ethylene glycol	0.00E+00	2.50E-06	5.10E-07	5.10E-07	1.07E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
formaldehyde	1.72E-06	2.16E-06	1.72E-06	1.72E-06	2.16E-07	0.00E+00	4.40E-04	5.20E-04	6.01E-04	6.81E-04	7.62E-04	8.42E-04	9.23E-04	1.00E-03	1.08E-03	1.16E-03	1.25E-03	0.021
hexane	6.15E-07	7.69E-07	6.15E-07	6.15E-07	7.69E-08	0.00E+00	-2.14E-05	-2.34E-05	-2.55E-05	-2.75E-05	-2.95E-05	-3.15E-05	-3.35E-05	-3.55E-05	-3.75E-05	-3.95E-05	-4.15E-05	NA
methanol	3.35E-08	4.19E-08	3.35E-08	3.35E-08	4.19E-09	0.00E+00	7.21E-05	8.46E-05	9.72E-05	1.10E-04	1.22E-04	1.35E-04	1.47E-04	1.60E-04	1.72E-04	1.85E-04	1.97E-04	NA
methyl chloride (chloromethane)	0.00E+00	2.50E-06	5.10E-07	5.10E-07	1.07E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
methyl ethyl ketone (2-butanone)	1.03E-07	1.29E-07	1.03E-07	1.03E-07	1.29E-08	0.00E+00	-3.59E-06	-3.93E-06	-4.26E-06	-4.60E-06	-4.93E-06	-5.27E-06	-5.60E-06	-5.94E-06	-6.28E-06	-6.61E-06	-6.95E-06	NA
methyl tert-butyl ether	1.89E-07	2.36E-07	1.89E-07	1.89E-07	2.36E-08	0.00E+00	-6.59E-06	-7.20E-06	-7.82E-06	-8.43E-06	-9.05E-06	-9.67E-06	-1.03E-05	-1.09E-05	-1.15E-05	-1.21E-05	-1.27E-05	0.0018
naphthalene	2.02E-07	2.53E-07	2.02E-07	2.02E-07	2.53E-08	0.00E+00	1.49E-05	1.80E-05	2.12E-05	2.43E-05	2.74E-05	3.06E-05	3.37E-05	3.68E-05	3.99E-05	4.31E-05	4.62E-05	0.12
phenol	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-05	3.46E-05	3.96E-05	4.47E-05	4.98E-05	5.49E-05	6.00E-05	6.50E-05	7.01E-05	7.52E-05	8.03E-05	NA
propylene	1.72E-06	2.15E-06	1.72E-06	1.72E-06	2.15E-07	0.00E+00	1.24E-04	1.50E-04	1.76E-04	2.02E-04	2.29E-04	2.55E-04	2.81E-04	3.07E-04	3.33E-04	3.59E-04	3.85E-04	NA
styrene	1.25E-07	1.56E-07	1.25E-07	1.25E-07	1.56E-08	0.00E+00	8.18E-06	9.94E-06	1.17E-05	1.34E-05	1.52E-05	1.70E-05	1.87E-05	2.05E-05	2.22E-05	2.40E-05	2.57E-05	NA
toluene	3.47E-06	1.08E-05	9.92E-06	9.28E-06	1.08E-06	0.00E+00	-9.50E-05	-1.02E-04	-1.09E-04	-1.15E-04	-1.22E-04	-1.29E-04	-1.36E-04	-1.43E-04	-1.50E-04	-1.56E-04	-1.63E-04	NA
xylene (mixed)	0.00E+00	8.56E-06	8.56E-06	7.70E-06	8.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA

\* The Chromium VI cancer slope factor is 510 (mg/kg-day)<sup>-1</sup>, however the concentrations are presented in values of Total Chromium. The cancer slope factor is divided by 10 assuming the Cr6+ concentration is 10% of Total Cr.

Oakland International Airport Terminal Modernization & Development Project

Table 2-4. 25-Year Offsite Worker Cancer Risk at Location of Maximum Combined Construction and Operations Impact  
Contribution from Inhalation Pathway

Inhalation Exposure Parameters				Ages 16 thru 40 yrs	
Daily Breathing Rate (DBR)	230 L/kg-d				
Fraction of Year (EF)	0.685 unitless				
Absorption Fraction (A)	1 unitless				
Conversion Factor (CF)	0.000001 m <sup>3</sup> /L				
Age-adjustment (ASF)	1 unitless				
Fraction of Averaging Time (ED)	0.01429 unitless				
Worker Air Concentration Adj (WAF)	1 unitless				
Calendar(s) Year for Each Age Group	2025-2049				
Cancer Risk (per million) by Age Grp	1.08E-03	-3.44E-02	-0.033 25-Year Exposure Cancer Risk per million		
	ReclD	UTM X (m)	UTM Y (m)	0.001 Construction	
Maximum Impact Location:	2965	567000	4182250	-0.034 Operations	

TAC	Project-Related Incremental Concentrations (ug/m <sup>3</sup> ) at Location with Maximum Risk																Inhalation Cancer Slope Factor (mg/kg-day) <sup>-1</sup>	
	Construction						Incremental Operation											
	2025	2026	2027	2028	2029	2030	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037		2038
DPM	1.40E-04	1.00E-04	6.00E-05	7.00E-05	3.00E-05	2.00E-05	-6.60E-04	-6.73E-04	-6.86E-04	-6.99E-04	-7.12E-04	-7.25E-04	-7.38E-04	-7.51E-04	-7.64E-04	-7.77E-04	-7.90E-04	1.1
ammonia	9.56E-10	4.62E-08	8.86E-09	3.73E-08	4.12E-09	1.58E-09	1.63E-08	1.89E-08	2.16E-08	2.43E-08	2.70E-08	2.96E-08	3.23E-08	3.50E-08	3.77E-08	4.03E-08	4.30E-08	NA
arsenic	5.90E-11	6.84E-09	1.26E-09	5.58E-09	5.39E-10	2.40E-10	1.00E-09	1.17E-09	1.33E-09	1.50E-09	1.66E-09	1.83E-09	1.99E-09	2.16E-09	2.32E-09	2.49E-09	2.66E-09	12
cadmium	0.00E+00	1.09E-08	1.95E-09	8.97E-09	7.80E-10	3.90E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	15
chlorine	7.41E-07	2.67E-06	9.53E-07	1.72E-06	1.26E-07	4.25E-08	2.79E-06	3.26E-06	3.72E-06	4.19E-06	4.65E-06	5.12E-06	5.58E-06	6.04E-06	6.51E-06	6.97E-06	7.44E-06	NA
chromium	1.22E-08	9.78E-08	2.53E-08	7.25E-08	1.24E-08	2.62E-09	1.87E-07	2.19E-07	2.51E-07	2.83E-07	3.15E-07	3.47E-07	3.79E-07	4.11E-07	4.43E-07	4.75E-07	5.07E-07	51*
cobalt	5.00E-09	4.78E-08	1.18E-08	3.61E-08	2.70E-09	1.35E-09	1.50E-08	1.75E-08	2.00E-08	2.25E-08	2.50E-08	2.75E-08	3.00E-08	3.25E-08	3.50E-08	3.75E-08	4.00E-08	31.5
copper	7.48E-08	1.88E-07	8.17E-08	1.07E-07	7.25E-08	1.38E-09	1.21E-06	1.41E-06	1.61E-06	1.81E-06	2.01E-06	2.21E-06	2.41E-06	2.61E-06	2.81E-06	3.01E-06	3.21E-06	NA
lead	9.51E-10	1.98E-07	3.60E-08	1.62E-07	1.50E-08	7.01E-09	3.73E-08	4.38E-08	5.04E-08	5.70E-08	6.36E-08	7.02E-08	7.68E-08	8.34E-08	8.99E-08	9.65E-08	1.03E-07	0.042
manganese	1.54E-08	3.53E-07	7.29E-08	2.80E-07	3.34E-08	1.15E-08	2.04E-07	2.38E-07	2.72E-07	3.06E-07	3.39E-07	3.73E-07	4.07E-07	4.41E-07	4.75E-07	5.09E-07	5.43E-07	NA
mercury	0.00E+00	5.60E-09	1.00E-09	4.60E-09	4.00E-10	2.00E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
nickel	9.10E-09	3.95E-08	1.29E-08	2.66E-08	5.62E-09	7.60E-10	8.47E-08	9.87E-08	1.13E-07	1.27E-07	1.41E-07	1.55E-07	1.69E-07	1.83E-07	1.97E-07	2.10E-07	2.24E-07	0.91
selenium	2.00E-10	1.24E-09	3.50E-10	8.90E-10	2.60E-10	3.00E-11	3.40E-09	3.96E-09	4.52E-09	5.08E-09	5.64E-09	6.20E-09	6.76E-09	7.32E-09	7.88E-09	8.44E-09	9.00E-09	NA
silica, crystalline (respirable)	4.05E-07	6.91E-05	1.26E-05	5.65E-05	5.29E-06	2.44E-06	6.89E-06	8.03E-06	9.16E-06	1.03E-05	1.14E-05	1.26E-05	1.37E-05	1.48E-05	1.60E-05	1.71E-05	1.82E-05	NA
sulfates	4.71E-06	1.11E-05	5.00E-06	6.06E-06	3.25E-07	5.90E-08	1.70E-05	1.99E-05	2.27E-05	2.55E-05	2.83E-05	3.12E-05	3.40E-05	3.68E-05	3.97E-05	4.25E-05	4.53E-05	NA
vanadium (fume or dust)	3.89E-09	1.00E-07	2.04E-08	8.00E-08	1.05E-08	3.31E-09	6.62E-08	7.71E-08	8.80E-08	9.89E-08	1.10E-07	1.21E-07	1.32E-07	1.43E-07	1.53E-07	1.64E-07	1.75E-07	NA
1,3-butadiene	1.77E-07	2.21E-07	1.77E-07	1.77E-07	2.21E-08	0.00E+00	6.23E-05	7.36E-05	8.48E-05	9.60E-05	1.07E-04	1.18E-04	1.30E-04	1.41E-04	1.52E-04	1.63E-04	1.75E-04	0.6
acetaldehyde	1.02E-06	1.27E-06	1.02E-06	1.02E-06	1.27E-07	0.00E+00	1.38E-04	1.65E-04	1.91E-04	2.18E-04	2.44E-04	2.71E-04	2.98E-04	3.24E-04	3.51E-04	3.77E-04	4.04E-04	0.01
acrolein	2.79E-09	3.49E-09	2.79E-09	2.79E-09	3.49E-10	0.00E+00	9.93E-05	1.16E-04	1.34E-04	1.51E-04	1.68E-04	1.85E-04	2.02E-04	2.19E-04	2.36E-04	2.54E-04	2.71E-04	NA
benzene	3.00E-06	5.22E-06	3.30E-06	3.30E-06	1.01E-06	0.00E+00	-3.65E-05	-3.45E-05	-3.25E-05	-3.05E-05	-2.86E-05	-2.66E-05	-2.46E-05	-2.26E-05	-2.07E-05	-1.87E-05	-1.67E-05	0.1
ethyl benzene	7.69E-07	3.28E-06	3.09E-06	2.86E-06	3.28E-07	0.00E+00	-1.97E-05	-2.10E-05	-2.23E-05	-2.36E-05	-2.49E-05	-2.62E-05	-2.75E-05	-2.88E-05	-3.01E-05	-3.14E-05	-3.26E-05	0.0087
ethyl chloride (chloroethane)	0.00E+00	2.99E-06	6.10E-07	6.10E-07	1.28E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
ethylene glycol	0.00E+00	2.50E-06	5.10E-07	5.10E-07	1.07E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
formaldehyde	1.72E-06	2.16E-06	1.72E-06	1.72E-06	2.16E-07	0.00E+00	4.40E-04	5.20E-04	6.01E-04	6.81E-04	7.62E-04	8.42E-04	9.23E-04	1.00E-03	1.08E-03	1.16E-03	1.25E-03	0.021
hexane	6.15E-07	7.69E-07	6.15E-07	6.15E-07	7.69E-08	0.00E+00	-2.14E-05	-2.34E-05	-2.55E-05	-2.75E-05	-2.95E-05	-3.15E-05	-3.35E-05	-3.55E-05	-3.75E-05	-3.95E-05	-4.15E-05	NA
methanol	3.35E-08	4.19E-08	3.35E-08	3.35E-08	4.19E-09	0.00E+00	7.21E-05	8.46E-05	9.72E-05	1.10E-04	1.22E-04	1.35E-04	1.47E-04	1.60E-04	1.72E-04	1.85E-04	1.97E-04	NA
methyl chloride (chloromethane)	0.00E+00	2.50E-06	5.10E-07	5.10E-07	1.07E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
methyl ethyl ketone [2-butanone]	1.03E-07	1.29E-07	1.03E-07	1.03E-07	1.29E-08	0.00E+00	-3.59E-06	-3.93E-06	-4.26E-06	-4.60E-06	-4.93E-06	-5.27E-06	-5.60E-06	-5.94E-06	-6.28E-06	-6.61E-06	-6.95E-06	NA
methyl tert-butyl ether	1.89E-07	2.36E-07	1.89E-07	1.89E-07	2.36E-08	0.00E+00	-6.59E-06	-7.20E-06	-7.82E-06	-8.43E-06	-9.05E-06	-9.67E-06	-1.03E-05	-1.09E-05	-1.15E-05	-1.21E-05	-1.27E-05	0.0018
naphthalene	2.02E-07	2.53E-07	2.02E-07	2.02E-07	2.53E-08	0.00E+00	1.49E-05	1.80E-05	2.12E-05	2.43E-05	2.74E-05	3.06E-05	3.37E-05	3.68E-05	3.99E-05	4.31E-05	4.62E-05	0.12
phenol	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-05	3.46E-05	3.96E-05	4.47E-05	4.98E-05	5.49E-05	6.00E-05	6.50E-05	7.01E-05	7.52E-05	8.03E-05	NA
propylene	1.72E-06	2.15E-06	1.72E-06	1.72E-06	2.15E-07	0.00E+00	1.24E-04	1.50E-04	1.76E-04	2.03E-04	2.29E-04	2.55E-04	2.81E-04	3.07E-04	3.33E-04	3.59E-04	3.85E-04	NA
styrene	1.25E-07	1.56E-07	1.25E-07	1.25E-07	1.56E-08	0.00E+00	8.18E-06	9.94E-06	1.17E-05	1.34E-05	1.52E-05	1.70E-05	1.87E-05	2.05E-05	2.22E-05	2.40E-05	2.57E-05	NA
toluene	3.47E-06	1.08E-05	9.92E-06	9.28E-06	1.08E-06	0.00E+00	-9.50E-05	-1.02E-04	-1.09E-04	-1.15E-04	-1.22E-04	-1.29E-04	-1.36E-04	-1.43E-04	-1.50E-04	-1.56E-04	-1.63E-04	NA
xylenes (mixed)	0.00E+00	8.56E-06	8.56E-06	7.70E-06	8.56E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA

\* The Chromium VI cancer slope factor is 510 (mg/kg-day)<sup>-1</sup>, however the concentrations are presented in values of Total Chromium. The cancer slope factor is divided by 10 assuming the Cr6+ concentration is 10% of Total Cr.

Oakland International Airport Terminal Modernization & Development Project

Table 2-5. 25-Year Offsite Worker Cancer Risk at Location of Maximum Combined Construction and Operations Impact  
Contribution from Non-Inhalation Pathways

Soil Concentration Parameters	Value	Exposure Parameters (Non-Inhalation)	Units	Ages 16-70
Soil half-life for metals, t1/2	1.00E+08 days	Soil ingestion rate (SIR)	mg/(kg-day)	3
Soil elimination constant, Ks	6.93E-09 1/days	GI relative absorption factor, (GRAF)	unitless	1
Total soil deposition time, Tf	25,550 days	Annual dermal load (ADL)	mg/(kg-day)	2400
Soil accumulation integral, X	2.26E+00 days	Age Sensitivity Factor (ASF)	unitless	1
Deposition rate, Dep-rate	0.02 m/s	Fraction of Year (EF)	unitless	0.685
Conversion, sec/day	86,400 sec/day	Fraction of Averaging Time (ED)	unitless	0.01429
Soil mixing depth, SD	0.01 m			
Soil bulk density, BD	1,333 kg/m3			

**0.0948 25-Year Exposure Cancer Risk per million**

0.0007 Construction

0.0942 Operations

	RecID	UTM X (m)	UTM Y (m)
Maximum Impact Location:	1544	571028	4176085

Project-Related Incremental Concentrations (ug/m<sup>3</sup>) at Location with Maximum Risk

TAC	Project-Related Incremental Concentrations (ug/m <sup>3</sup> ) at Location with Maximum Risk																Oral Cancer Potency Slope Factor (mg/kg-day) <sup>-1</sup>	Absorption Fraction Factors (unitless)	
	Construction						Incremental Operation												
	2025	2026	2027	2028	2029	2030	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037			2038
arsenic	9.32E-09	1.40E-07	2.58E-08	9.19E-08	1.05E-08	4.91E-09	4.98E-07	5.86E-07	6.74E-07	7.61E-07	8.49E-07	9.37E-07	1.02E-06	1.11E-06	1.20E-06	1.29E-06	1.37E-06	1.5	6
chromium	1.86E-06	4.52E-06	2.08E-06	2.76E-06	7.41E-07	1.80E-07	5.93E-05	7.02E-05	8.11E-05	9.20E-05	1.03E-04	1.14E-04	1.25E-04	1.36E-04	1.47E-04	1.58E-04	1.69E-04	0.05*	2
lead	1.50E-07	3.88E-06	6.32E-07	2.56E-06	2.54E-07	1.32E-07	-3.63E-07	8.19E-07	2.00E-06	3.18E-06	4.37E-06	5.55E-06	6.73E-06	7.91E-06	9.10E-06	1.03E-05	1.15E-05	0.0085	3

Non-Inhalation Cancer Risk per million by year	2025	2026	2027	2028	2029	2030	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038**	Totals
arsenic	1.37E-05	2.07E-04	3.79E-05	1.35E-04	1.55E-05	7.23E-06	7.34E-04	8.63E-04	9.92E-04	1.12E-03	1.25E-03	1.38E-03	1.51E-03	1.64E-03	1.77E-03	1.90E-03	2.43E-02	3.79E-02
chromium	3.34E-05	8.13E-05	3.74E-05	4.96E-05	1.33E-05	3.24E-06	1.07E-03	1.26E-03	1.46E-03	1.66E-03	1.85E-03	2.05E-03	2.25E-03	2.44E-03	2.64E-03	2.84E-03	3.64E-02	5.61E-02
lead	6.58E-07	1.70E-05	2.77E-06	1.12E-05	1.11E-06	5.80E-07	-1.59E-06	3.59E-06	8.77E-06	1.39E-05	1.91E-05	2.43E-05	2.95E-05	3.47E-05	3.98E-05	4.50E-05	6.02E-04	8.53E-04
<b>Totals</b>	<b>4.78E-05</b>	<b>3.05E-04</b>	<b>7.81E-05</b>	<b>1.96E-04</b>	<b>2.99E-05</b>	<b>1.11E-05</b>	<b>1.80E-03</b>	<b>2.13E-03</b>	<b>2.46E-03</b>	<b>2.79E-03</b>	<b>3.12E-03</b>	<b>3.45E-03</b>	<b>3.78E-03</b>	<b>4.11E-03</b>	<b>4.45E-03</b>	<b>4.78E-03</b>	<b>6.13E-02</b>	<b>9.48E-02</b>

\* The Chromium VI oral cancer slope factor is 0.5 (mg/kg-day)<sup>-1</sup>, however the concentrations are presented in values of Total Chromium. The cancer slope factor is divided by 10 assuming the Cr6+ concentration is 10% of Total Cr.

\*\* Cancer Risk in 2038 is multiplied by 12 to obtain total cancer risk over the 25-year exposure period, assuming that the annual risk beyond 2038 is equal to the 2038 risk.

Oakland International Airport Terminal Modernization & Development Project

Table 2-6. 25-Year On-Airport Worker Cancer Risk at Location of Maximum Combined Construction and Operations Impact  
Inhalation Pathway

Inhalation Exposure Parameters		Ages 17 thru 70 yrs	
Daily Breathing Rate (DBR)		230 L/kg-d	
Fraction of Year (EF)		0.685 unitless	
Absorption Fraction (A)		1 unitless	
Conversion Factor (CF)		0.000001 m <sup>3</sup> /L	
Age-adjustment (ASF)		1 unitless	
Fraction of Averaging Time (ED)		0.01429 unitless	
Worker Air Concentration Adj (WAF)		1 unitless	
Calendar(s) Year for Each Age Group		2025-2049	
Cancer Risk (per million) by Age Grp		2.24E-02	-1.34E+00
			-1.316 25-Year Exposure Cancer Risk per million
	ReclID	UTM X (m)	UTM Y (m)
Maximum Impact Location:	6	569168	4176928
			0.022 Construction
			-1.339 Operations

TAC	Project-Related Incremental Concentrations (ug/m <sup>3</sup> ) at Location with Maximum Risk																Inhalation Cancer Slope Factor (mg/kg-day) <sup>-1</sup>	
	Construction						Incremental Operation											
	2025	2026	2027	2028	2029	2030	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037		2038
DPM	2.08E-03	2.66E-03	1.57E-03	1.37E-03	4.19E-04	1.13E-04	-3.79E-02	-3.48E-02	-3.17E-02	-2.86E-02	-2.55E-02	-2.24E-02	-1.93E-02	-1.62E-02	-1.31E-02	-1.00E-02	-6.95E-03	1.1
ammonia	1.37E-07	7.73E-07	1.86E-07	3.72E-07	7.89E-08	2.51E-08	7.11E-06	8.05E-06	8.98E-06	9.91E-06	1.08E-05	1.18E-05	1.27E-05	1.36E-05	1.46E-05	1.55E-05	1.64E-05	NA
arsenic	8.44E-09	9.62E-08	1.62E-08	4.42E-08	6.72E-09	2.69E-09	4.56E-07	5.14E-07	5.73E-07	6.31E-07	6.89E-07	7.48E-07	8.06E-07	8.64E-07	9.23E-07	9.81E-07	1.04E-06	12
cadmium	0.00E+00	1.33E-07	1.29E-08	5.81E-08	5.07E-09	3.12E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	15
chlorine	9.68E-05	1.75E-04	1.05E-04	1.03E-04	2.54E-05	5.07E-06	-3.04E-04	-6.00E-04	-8.96E-04	-1.19E-03	-1.49E-03	-1.78E-03	-2.08E-03	-2.38E-03	-2.67E-03	-2.97E-03	-3.27E-03	NA
chromium	1.68E-06	3.74E-06	1.79E-06	2.07E-06	6.33E-07	1.45E-07	5.16E-05	5.64E-05	6.12E-05	6.60E-05	7.07E-05	7.55E-05	8.03E-05	8.51E-05	8.99E-05	9.46E-05	9.94E-05	51*
cobalt	6.50E-07	1.53E-06	7.45E-07	8.51E-07	1.78E-07	4.08E-08	-4.43E-06	-6.83E-06	-9.23E-06	-1.16E-05	-1.40E-05	-1.64E-05	-1.88E-05	-2.12E-05	-2.37E-05	-2.61E-05	-2.85E-05	31.5
copper	1.06E-05	1.88E-05	1.05E-05	1.08E-05	4.43E-06	9.48E-07	5.35E-04	6.01E-04	6.68E-04	7.34E-04	8.01E-04	8.68E-04	9.34E-04	1.00E-03	1.07E-03	1.13E-03	1.20E-03	NA
lead	1.36E-07	2.62E-06	3.64E-07	1.18E-06	1.49E-07	6.84E-08	-2.32E-07	3.88E-07	1.01E-06	1.63E-06	2.25E-06	2.87E-06	3.49E-06	4.11E-06	4.73E-06	5.35E-06	5.97E-06	0.042
manganese	2.14E-06	7.56E-06	2.54E-06	3.86E-06	9.46E-07	2.58E-07	7.63E-05	8.42E-05	9.22E-05	1.00E-04	1.08E-04	1.16E-04	1.24E-04	1.32E-04	1.40E-04	1.48E-04	1.56E-04	NA
mercury	0.00E+00	6.80E-08	6.60E-09	2.98E-08	2.60E-09	1.60E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
nickel	1.24E-06	2.35E-06	1.30E-06	1.35E-06	4.20E-07	8.94E-08	2.72E-05	2.88E-05	3.04E-05	3.21E-05	3.37E-05	3.54E-05	3.70E-05	3.87E-05	4.03E-05	4.20E-05	4.36E-05	0.91
selenium	2.86E-08	5.96E-08	2.90E-08	3.31E-08	1.26E-08	2.84E-09	1.55E-06	1.74E-06	1.94E-06	2.14E-06	2.34E-06	2.53E-06	2.73E-06	2.93E-06	3.13E-06	3.33E-06	3.52E-06	NA
silica, crystalline (respirable)	5.80E-05	9.30E-04	1.37E-04	4.22E-04	5.64E-05	2.48E-05	3.13E-03	3.53E-03	3.93E-03	4.33E-03	4.73E-03	5.13E-03	5.54E-03	5.94E-03	6.34E-03	6.74E-03	7.14E-03	NA
sulfates	6.15E-04	1.04E-03	6.61E-04	6.23E-04	1.57E-04	3.02E-05	-2.38E-03	-4.34E-03	-6.30E-03	-8.26E-03	-1.02E-02	-1.22E-02	-1.41E-02	-1.61E-02	-1.80E-02	-2.00E-02	-2.20E-02	NA
vanadium (fume or dust)	5.57E-07	2.09E-06	6.54E-07	1.05E-06	2.81E-07	7.71E-08	3.01E-05	3.39E-05	3.78E-05	4.16E-05	4.55E-05	4.93E-05	5.32E-05	5.70E-05	6.09E-05	6.47E-05	6.86E-05	NA
1,3-butadiene	2.00E-05	2.50E-05	2.20E-05	2.00E-05	3.55E-06	1.17E-06	-9.56E-04	-1.32E-03	-1.68E-03	-2.04E-03	-2.39E-03	-2.75E-03	-3.11E-03	-3.47E-03	-3.83E-03	-4.19E-03	-4.55E-03	0.6
acetaldehyde	1.15E-04	1.44E-04	1.26E-04	1.15E-04	2.04E-05	6.73E-06	-1.04E-02	-1.29E-02	-1.54E-02	-1.79E-02	-2.04E-02	-2.30E-02	-2.55E-02	-2.80E-02	-3.05E-02	-3.30E-02	-3.56E-02	0.01
acrolein	3.16E-07	3.95E-07	3.47E-07	3.16E-07	5.62E-08	1.85E-08	2.18E-03	2.38E-03	2.57E-03	2.77E-03	2.97E-03	3.16E-03	3.36E-03	3.56E-03	3.75E-03	3.95E-03	4.14E-03	NA
benzene	3.40E-04	4.37E-04	3.76E-04	3.42E-04	6.38E-05	1.99E-05	-4.06E-02	-4.90E-02	-5.73E-02	-6.57E-02	-7.40E-02	-8.24E-02	-9.08E-02	-9.91E-02	-1.07E-01	-1.16E-01	-1.24E-01	0.1
ethyl benzene	8.72E-05	1.29E-04	1.11E-04	1.00E-04	1.76E-05	5.09E-06	-1.06E-02	-1.28E-02	-1.50E-02	-1.71E-02	-1.93E-02	-2.15E-02	-2.36E-02	-2.58E-02	-2.79E-02	-3.01E-02	-3.23E-02	0.0087
ethyl chloride (chloroethane)	0.00E+00	2.48E-05	3.97E-06	4.09E-06	6.89E-06	1.22E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
ethylene glycol	0.00E+00	2.07E-05	3.32E-06	3.42E-06	5.76E-06	1.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
formaldehyde	1.96E-04	2.44E-04	2.15E-04	1.96E-04	3.47E-05	1.14E-05	-1.30E-02	-1.68E-02	-2.07E-02	-2.46E-02	-2.84E-02	-3.23E-02	-3.61E-02	-4.00E-02	-4.38E-02	-4.77E-02	-5.16E-02	0.021
hexane	6.97E-05	8.69E-05	7.65E-05	6.97E-05	1.24E-05	4.07E-06	-8.63E-03	-1.04E-02	-1.21E-02	-1.39E-02	-1.56E-02	-1.73E-02	-1.91E-02	-2.08E-02	-2.26E-02	-2.43E-02	-2.60E-02	NA
methanol	3.80E-06	4.74E-06	4.17E-06	3.80E-06	6.74E-07	2.22E-07	1.17E-03	1.23E-03	1.28E-03	1.34E-03	1.39E-03	1.45E-03	1.50E-03	1.56E-03	1.61E-03	1.67E-03	1.73E-03	NA
methyl chloride (chloromethane)	0.00E+00	2.07E-05	3.32E-06	3.42E-06	5.76E-06	1.02E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
methyl ethyl ketone (2-butanone)	1.17E-05	1.46E-05	1.28E-05	1.17E-05	2.07E-06	6.82E-07	-1.44E-03	-1.73E-03	-2.03E-03	-2.32E-03	-2.61E-03	-2.90E-03	-3.19E-03	-3.48E-03	-3.77E-03	-4.07E-03	-4.36E-03	NA
methyl tert-butyl ether	2.14E-05	2.67E-05	2.35E-05	2.14E-05	3.80E-06	1.25E-06	-2.65E-03	-3.18E-03	-3.72E-03	-4.25E-03	-4.79E-03	-5.32E-03	-5.86E-03	-6.39E-03	-6.93E-03	-7.46E-03	-8.00E-03	0.0018
naphthalene	2.29E-05	2.86E-05	2.51E-05	2.29E-05	4.07E-06	1.34E-06	-2.34E-03	-2.87E-03	-3.39E-03	-3.92E-03	-4.45E-03	-4.97E-03	-5.50E-03	-6.03E-03	-6.55E-03	-7.08E-03	-7.61E-03	0.12
phenol	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.59E-04	7.20E-04	7.80E-04	8.41E-04	9.01E-04	9.62E-04	1.02E-03	1.08E-03	1.14E-03	1.20E-03	1.26E-03	NA
propylene	1.95E-04	2.43E-04	2.14E-04	1.95E-04	3.46E-05	1.14E-05	-2.00E-02	-2.45E-02	-2.90E-02	-3.35E-02	-3.80E-02	-4.25E-02	-4.70E-02	-5.15E-02	-5.60E-02	-6.04E-02	-6.49E-02	NA
styrene	1.42E-05	1.77E-05	1.56E-05	1.42E-05	2.52E-06	8.29E-07	-1.48E-03	-1.81E-03	-2.14E-03	-2.46E-03	-2.79E-03	-3.12E-03	-3.45E-03	-3.78E-03	-4.11E-03	-4.44E-03	-4.76E-03	NA
toluene	3.93E-04	5.47E-04	4.74E-04	4.30E-04	7.56E-05	2.30E-05	-4.82E-02	-5.79E-02	-6.77E-02	-7.75E-02	-8.73E-02	-9.70E-02	-1.07E-01	-1.17E-01	-1.26E-01	-1.36E-01	-1.46E-01	NA
xylenes (mixed)	0.00E+00	7.53E-05	5.56E-05	4.88E-05	7.70E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA

\* The Chromium VI cancer slope factor is 510 (mg/kg-day)<sup>-1</sup>, however the concentrations are presented in values of Total Chromium. The cancer slope factor is divided by 10 assuming the Cr6+ concentration is 10% of Total Cr.

Oakland International Airport Terminal Modernization & Development Project

Table 2-7. 25-Year On-Airport Worker Cancer Risk at Location of Maximum Combined Construction and Operations Impact  
Contribution from Non-Inhalation Pathways

Soil Concentration Parameters	Value	Exposure Parameters (Non-Inhalation)	Units	Ages 16-70
Soil half-life for metals, t1/2	1.00E+08 days	Soil ingestion rate (SIR)	mg/(kg-day)	3
Soil elimination constant, Ks	6.93E-09 1/days	GI relative absorption factor, (GRAF)	unitless	1
Total soil deposition time, Tf	25,550 days	Annual dermal load (ADL)	mg/(kg-day)	2400
Soil accumulation integral, X	2.26E+00 days	Age Sensitivity Factor (ASF)	unitless	1
Deposition rate, Dep-rate	0.02 m/s	Fraction of Year (EF)	unitless	0.685
Conversion, sec/day	86,400 sec/day	Fraction of Averaging Time (ED)	unitless	0.01429
Soil mixing depth, SD	0.01 m			
Soil bulk density, BD	1,333 kg/m3			

**0.1124 25-Year Exposure Cancer Risk per million**

0.0359 Construction

0.0765 Operations

ReclD	UTM X (m)	UTM Y (m)
Maximum Impact Location:	3	569283.43 4174257.59

Project-Related Incremental Concentrations (ug/m<sup>3</sup>) at Location with Maximum Risk

TAC	Project-Related Incremental Concentrations (ug/m <sup>3</sup> ) at Location with Maximum Risk																	Oral Cancer Potency Slope Factor (mg/kg-day) <sup>-1</sup>	Absorption Fraction (unitless)
	Construction						Incremental Operation											Slope Factor (mg/kg-day) <sup>-1</sup>	Factors (unitless)
	2025	2026	2027	2028	2029	2030	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038		
arsenic	4.72E-09	2.69E-06	4.04E-06	1.23E-05	8.56E-07	3.47E-08	5.65E-07	5.85E-07	6.05E-07	6.25E-07	6.45E-07	6.65E-07	6.85E-07	7.05E-07	7.25E-07	7.46E-07	7.66E-07	1.5	6
chromium	9.41E-07	3.09E-05	4.51E-05	1.35E-04	9.66E-06	4.45E-07	9.75E-05	1.02E-04	1.07E-04	1.11E-04	1.16E-04	1.20E-04	1.25E-04	1.29E-04	1.34E-04	1.38E-04	1.43E-04	0.05*	2
lead	7.61E-08	7.84E-05	1.18E-04	3.59E-04	2.50E-05	1.01E-06	8.26E-06	8.97E-06	9.67E-06	1.04E-05	1.11E-05	1.18E-05	1.25E-05	1.32E-05	1.39E-05	1.46E-05	1.53E-05	0.0085	3

Non-Inhalation Cancer Risk per million by year	2025	2026	2027	2028	2029	2030	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038**	Totals
arsenic	6.95E-06	3.96E-03	5.96E-03	1.81E-02	1.26E-03	5.12E-05	8.32E-04	8.61E-04	8.91E-04	9.21E-04	9.50E-04	9.80E-04	1.01E-03	1.04E-03	1.07E-03	1.10E-03	1.35E-02	5.25E-02
chromium	1.69E-05	5.55E-04	8.10E-04	2.43E-03	1.74E-04	8.00E-06	1.75E-03	1.83E-03	1.92E-03	2.00E-03	2.08E-03	2.16E-03	2.24E-03	2.32E-03	2.40E-03	2.49E-03	3.08E-02	5.60E-02
lead	3.33E-07	3.43E-04	5.17E-04	1.57E-03	1.09E-04	4.42E-06	3.62E-05	3.93E-05	4.23E-05	4.54E-05	4.85E-05	5.16E-05	5.46E-05	5.77E-05	6.08E-05	6.39E-05	8.03E-04	3.85E-03
<b>Totals</b>	2.42E-05	4.86E-03	7.28E-03	2.21E-02	1.54E-03	6.36E-05	2.62E-03	2.74E-03	2.85E-03	2.96E-03	3.08E-03	3.19E-03	3.31E-03	3.42E-03	3.53E-03	3.65E-03	4.52E-02	<b>1.12E-01</b>

\* The Chromium VI oral cancer slope factor is 0.5 (mg/kg-day)<sup>-1</sup>, however the concentrations are presented in values of Total Chromium. The cancer slope factor is divided by 10 assuming the Cr6+ concentration is 10% of Total Cr.

\*\* Cancer Risk in 2038 is multiplied by 12 to obtain total cancer risk over the 25-year exposure period, assuming that the annual risk beyond 2038 is equal to the 2038 risk.

Oakland International Airport Terminal Modernization & Development Project

Table 2-8. Chronic (Annual) Non-Cancer Hazard Index - Adult Resident & Child Resident

TAC	0.023 Maximum Chronic Non-Cancer Hazard Index																	Chronic Non-Cancer REL (µg/m <sup>3</sup> )
	Construction			Incremental Operation														
	2025	2026	2027	2028	2029	2030	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	
Maximum Impact Location:	1923	571500	4173250	0.002 Construction 0.023 Operations														
Project-Related Incremental Concentrations (ug/m <sup>3</sup> ) at Location with Maximum Risk																		
DPM	4.41E-03	2.55E-03	1.66E-03	2.29E-03	1.05E-03	1.00E-03	-2.00E-02	-2.04E-02	-2.07E-02	-2.11E-02	-2.15E-02	-2.18E-02	-2.22E-02	-2.26E-02	-2.29E-02	-2.33E-02	-2.37E-02	5
ammonia	1.15E-08	1.41E-06	2.77E-07	1.42E-06	1.20E-07	1.38E-07	9.49E-08	1.23E-07	1.51E-07	1.79E-07	2.07E-07	2.35E-07	2.63E-07	2.91E-07	3.19E-07	3.47E-07	3.75E-07	200
arsenic	7.08E-10	2.13E-07	4.10E-08	2.14E-07	1.78E-08	2.09E-08	1.14E-08	1.35E-08	1.56E-08	1.77E-08	1.98E-08	2.19E-08	2.40E-08	2.61E-08	2.82E-08	3.03E-08	3.25E-08	0.015
cadmium	0.00E+00	3.44E-07	6.55E-08	3.47E-07	2.85E-08	3.39E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.02
chlorine	8.19E-06	5.09E-05	1.60E-05	4.60E-05	5.41E-06	4.44E-06	5.34E-05	6.49E-05	7.63E-05	8.78E-05	9.93E-05	1.11E-04	1.22E-04	1.34E-04	1.45E-04	1.57E-04	1.68E-04	0.2
chromium	1.41E-07	2.55E-06	5.87E-07	2.47E-06	2.42E-07	2.40E-07	2.75E-06	3.28E-06	3.82E-06	4.36E-06	4.89E-06	5.43E-06	5.97E-06	6.50E-06	7.04E-06	7.58E-06	8.11E-06	0*
cobalt	5.50E-08	1.28E-06	2.87E-07	1.26E-06	1.14E-07	1.22E-07	3.25E-07	3.97E-07	4.68E-07	5.40E-07	6.11E-07	6.83E-07	7.54E-07	8.26E-07	8.97E-07	9.69E-07	1.04E-06	NA
copper	8.92E-07	2.77E-06	1.13E-06	2.12E-06	4.65E-07	1.95E-07	1.40E-05	1.66E-05	1.92E-05	2.18E-05	2.44E-05	2.70E-05	2.96E-05	3.22E-05	3.48E-05	3.74E-05	4.00E-05	NA
lead	1.14E-08	6.20E-06	1.19E-06	6.25E-06	5.16E-07	6.11E-07	-1.97E-06	-2.02E-06	-2.07E-06	-2.12E-06	-2.17E-06	-2.22E-06	-2.27E-06	-2.32E-06	-2.37E-06	-2.42E-06	-2.47E-06	NA
manganese	1.80E-07	1.05E-05	2.12E-06	1.04E-05	9.07E-07	1.02E-06	2.58E-06	3.08E-06	3.57E-06	4.06E-06	4.55E-06	5.04E-06	5.53E-06	6.02E-06	6.51E-06	7.01E-06	7.50E-06	0.09
mercury	0.00E+00	1.76E-07	3.36E-08	1.78E-07	1.46E-08	1.74E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.03
nickel	1.04E-07	8.46E-07	2.37E-07	7.81E-07	9.10E-08	7.52E-08	1.09E-06	1.31E-06	1.52E-06	1.74E-06	1.95E-06	2.17E-06	2.38E-06	2.60E-06	2.82E-06	3.03E-06	3.25E-06	0.014
selenium	2.40E-09	3.07E-08	7.44E-09	2.91E-08	3.19E-09	2.81E-09	3.88E-08	4.59E-08	5.30E-08	6.02E-08	6.73E-08	7.44E-08	8.15E-08	8.86E-08	9.58E-08	1.03E-07	1.10E-07	20
silica, crystalline (respirable)	4.86E-06	2.16E-03	4.15E-04	2.18E-03	1.80E-04	2.13E-04	7.82E-05	9.26E-05	1.07E-04	1.21E-04	1.36E-04	1.50E-04	1.65E-04	1.79E-04	1.93E-04	2.08E-04	2.22E-04	3
sulfates	5.20E-05	1.37E-04	6.64E-05	1.04E-04	1.88E-05	9.84E-06	3.33E-04	4.04E-04	4.76E-04	5.48E-04	6.19E-04	6.91E-04	7.63E-04	8.35E-04	9.06E-04	9.78E-04	1.05E-03	NA
vanadium (fume or dust)	4.67E-08	3.00E-06	6.03E-07	2.99E-06	2.61E-07	2.92E-07	7.55E-07	8.94E-07	1.03E-06	1.17E-06	1.31E-06	1.45E-06	1.59E-06	1.73E-06	1.86E-06	2.00E-06	2.14E-06	NA
1,3-butadiene	1.68E-06	2.07E-06	1.83E-06	1.68E-06	2.87E-07	8.83E-08	9.75E-04	1.33E-03	1.69E-03	2.05E-03	2.40E-03	2.76E-03	3.12E-03	3.47E-03	3.83E-03	4.18E-03	4.54E-03	2
acetaldehyde	9.65E-06	1.19E-05	1.05E-05	9.65E-06	1.65E-06	5.08E-07	2.02E-03	2.90E-03	3.78E-03	4.66E-03	5.54E-03	6.42E-03	7.30E-03	8.18E-03	9.06E-03	9.94E-03	1.08E-02	140
acrolein	2.65E-08	3.28E-08	2.90E-08	2.65E-08	4.54E-09	1.40E-09	1.62E-03	2.15E-03	2.67E-03	3.20E-03	3.73E-03	4.26E-03	4.79E-03	5.31E-03	5.84E-03	6.37E-03	6.90E-03	0.35
benzene	2.85E-05	8.35E-05	4.07E-05	3.91E-05	2.97E-05	2.10E-06	-1.27E-03	-1.03E-03	-7.93E-04	-5.52E-04	-3.12E-04	-7.08E-05	1.70E-04	4.11E-04	6.51E-04	8.92E-04	1.13E-03	3
ethyl benzene	7.30E-06	7.12E-05	8.08E-05	7.53E-05	1.26E-05	1.31E-06	-4.96E-04	-4.90E-04	-4.83E-04	-4.77E-04	-4.71E-04	-4.64E-04	-4.58E-04	-4.52E-04	-4.45E-04	-4.39E-04	-4.33E-04	2000
ethyl chloride (chloroethane)	0.00E+00	9.80E-05	1.94E-05	2.15E-05	5.06E-05	1.22E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	30000
ethylene glycol	0.00E+00	8.20E-05	1.62E-05	1.80E-05	4.23E-05	1.02E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	400
formaldehyde	1.64E-05	2.03E-05	1.79E-05	1.64E-05	2.80E-06	8.62E-07	6.77E-03	9.35E-03	1.19E-02	1.45E-02	1.71E-02	1.97E-02	2.23E-02	2.49E-02	2.74E-02	3.00E-02	3.26E-02	9
hexane	5.84E-06	7.22E-06	6.38E-06	5.84E-06	9.99E-07	3.07E-07	-4.89E-04	-5.14E-04	-5.39E-04	-5.63E-04	-5.88E-04	-6.13E-04	-6.38E-04	-6.63E-04	-6.88E-04	-7.13E-04	-7.38E-04	7000
methanol	3.18E-07	3.94E-07	3.48E-07	3.18E-07	5.45E-08	1.68E-08	1.17E-03	1.55E-03	1.94E-03	2.33E-03	2.72E-03	3.11E-03	3.49E-03	3.88E-03	4.27E-03	4.66E-03	5.05E-03	4000
methyl chloride (chloromethane)	0.00E+00	8.20E-05	1.62E-05	1.80E-05	4.23E-05	1.02E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
methyl ethyl ketone (2-butanone)	9.78E-07	1.21E-06	1.07E-06	9.78E-07	1.67E-07	5.15E-08	-8.18E-05	-8.60E-05	-9.02E-05	-9.43E-05	-9.85E-05	-1.03E-04	-1.07E-04	-1.11E-04	-1.15E-04	-1.19E-04	-1.24E-04	NA
methyl tert-butyl ether	1.79E-06	2.22E-06	1.96E-06	1.79E-06	3.07E-07	9.44E-08	-1.50E-04	-1.58E-04	-1.65E-04	-1.73E-04	-1.81E-04	-1.88E-04	-1.96E-04	-2.04E-04	-2.11E-04	-2.19E-04	-2.27E-04	8000
naphthalene	1.92E-06	2.37E-06	2.10E-06	1.92E-06	3.28E-07	1.01E-07	1.97E-04	3.06E-04	4.14E-04	5.23E-04	6.31E-04	7.40E-04	8.48E-04	9.56E-04	1.06E-03	1.17E-03	1.28E-03	9
phenol	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.80E-04	6.37E-04	7.93E-04	9.50E-04	1.11E-03	1.26E-03	1.42E-03	1.58E-03	1.73E-03	1.89E-03	2.05E-03	200
propylene	1.63E-05	2.02E-05	1.78E-05	1.63E-05	2.79E-06	8.59E-07	1.63E-03	2.54E-03	3.45E-03	4.36E-03	5.26E-03	6.17E-03	7.08E-03	7.99E-03	8.90E-03	9.80E-03	1.07E-02	3000
styrene	1.19E-06	1.47E-06	1.30E-06	1.19E-06	2.03E-07	6.26E-08	1.05E-04	1.66E-04	2.28E-04	2.90E-04	3.51E-04	4.13E-04	4.74E-04	5.36E-04	5.97E-04	6.59E-04	7.20E-04	900
toluene	3.30E-05	2.14E-04	2.39E-04	2.22E-04	3.72E-05	4.32E-06	-2.33E-03	-2.34E-03	-2.34E-03	-2.34E-03	-2.35E-03	-2.35E-03	-2.35E-03	-2.35E-03	-2.35E-03	-2.35E-03	-2.36E-03	420
xylenes (mixed)	0.00E+00	2.29E-04	2.69E-04	2.51E-04	4.19E-05	3.42E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	700
<b>Total Chronic Hazard Index by Year</b>	<b>9.47E-04</b>	<b>1.74E-03</b>	<b>6.19E-04</b>	<b>1.65E-03</b>	<b>3.29E-04</b>	<b>3.15E-04</b>	<b>1.89E-03</b>	<b>3.97E-03</b>	<b>6.06E-03</b>	<b>8.14E-03</b>	<b>1.02E-02</b>	<b>1.23E-02</b>	<b>1.44E-02</b>	<b>1.65E-02</b>	<b>1.86E-02</b>	<b>2.07E-02</b>	<b>2.27E-02</b>	

Oakland International Airport Terminal Modernization & Development Project  
 Table 2-9. Chronic (Annual) Non-Cancer Hazard Index - School Child

TAC	0.011 Maximum Chronic Non-Cancer Hazard Index																	Chronic Non-Cancer REL (µg/m <sup>3</sup> )
	Construction			Incremental Operation														
	2025	2026	2027	2028	2029	2030	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	
Maximum Impact Location:	ReclD 2104	UTM X (m) 573000	UTM Y (m) 4174500	0.001 Construction 0.011 Operations														
Project-Related Incremental Concentrations (ug/m <sup>3</sup> ) at Location with Maximum Risk																		
DPM	2.20E-03	1.42E-03	8.40E-04	1.12E-03	4.90E-04	4.30E-04	-1.03E-02	-1.05E-02	-1.07E-02	-1.09E-02	-1.11E-02	-1.13E-02	-1.15E-02	-1.17E-02	-1.19E-02	-1.21E-02	-1.23E-02	5
ammonia	1.34E-08	7.64E-07	1.40E-07	6.74E-07	5.95E-08	5.94E-08	2.25E-08	5.43E-08	8.61E-08	1.18E-07	1.50E-07	1.82E-07	2.13E-07	2.45E-07	2.77E-07	3.09E-07	3.41E-07	200
arsenic	8.26E-10	1.14E-07	2.00E-08	1.01E-07	8.51E-09	8.94E-09	1.26E-08	1.49E-08	1.72E-08	1.96E-08	2.19E-08	2.42E-08	2.66E-08	2.89E-08	3.13E-08	3.36E-08	3.59E-08	0.015
cadmium	0.00E+00	1.83E-07	3.12E-08	1.63E-07	1.33E-08	1.44E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.02
chlorine	9.67E-06	3.56E-05	1.38E-05	2.74E-05	3.79E-06	2.31E-06	3.32E-05	4.02E-05	4.72E-05	5.42E-05	6.12E-05	6.82E-05	7.52E-05	8.22E-05	8.93E-05	9.63E-05	1.03E-04	0.2
chromium	1.66E-07	1.51E-06	3.80E-07	1.26E-06	1.47E-07	1.09E-07	2.29E-06	2.68E-06	3.07E-06	3.45E-06	3.84E-06	4.23E-06	4.61E-06	5.00E-06	5.39E-06	5.77E-06	6.16E-06	0*
cobalt	6.50E-08	7.38E-07	1.78E-07	6.29E-07	6.09E-08	5.50E-08	1.75E-07	2.14E-07	2.52E-07	2.91E-07	3.29E-07	3.68E-07	4.06E-07	4.45E-07	4.83E-07	5.22E-07	5.60E-07	NA
copper	1.04E-06	2.43E-06	1.16E-06	1.62E-06	4.81E-07	1.26E-07	1.51E-05	1.79E-05	2.08E-05	2.36E-05	2.64E-05	2.92E-05	3.20E-05	3.48E-05	3.76E-05	4.04E-05	4.33E-05	NA
lead	1.33E-08	3.31E-06	5.74E-07	2.94E-06	2.44E-07	2.60E-07	-4.72E-06	-4.83E-06	-4.93E-06	-5.04E-06	-5.15E-06	-5.26E-06	-5.37E-06	-5.48E-06	-5.58E-06	-5.69E-06	-5.80E-06	NA
manganese	2.11E-07	5.75E-06	1.14E-06	5.02E-06	4.69E-07	4.41E-07	2.53E-06	3.00E-06	3.46E-06	3.93E-06	4.39E-06	4.86E-06	5.33E-06	5.79E-06	6.26E-06	6.73E-06	7.19E-06	0.09
mercury	0.00E+00	9.38E-08	1.60E-08	8.36E-08	6.80E-09	7.40E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.03
nickel	1.22E-07	5.60E-07	1.88E-07	4.40E-07	6.54E-08	3.72E-08	9.90E-07	1.19E-06	1.39E-06	1.59E-06	1.79E-06	1.98E-06	2.18E-06	2.38E-06	2.58E-06	2.78E-06	2.98E-06	0.014
selenium	2.80E-09	1.89E-08	5.20E-09	1.53E-08	2.22E-09	1.31E-09	4.26E-08	5.05E-08	5.84E-08	6.64E-08	7.43E-08	8.22E-08	9.01E-08	9.80E-08	1.06E-07	1.14E-07	1.22E-07	20
silica, crystalline (respirable)	5.67E-06	1.15E-03	2.01E-04	1.03E-03	8.54E-05	9.07E-05	8.55E-05	1.02E-04	1.18E-04	1.34E-04	1.50E-04	1.66E-04	1.82E-04	1.98E-04	2.14E-04	2.30E-04	2.46E-04	3
sulfates	6.14E-05	1.27E-04	7.06E-05	8.60E-05	1.67E-05	6.89E-06	2.01E-04	2.44E-04	2.87E-04	3.30E-04	3.73E-04	4.16E-04	4.59E-04	5.01E-04	5.44E-04	5.87E-04	6.30E-04	NA
vanadium (fume or dust)	5.45E-08	1.65E-06	3.19E-07	1.44E-06	1.36E-07	1.26E-07	8.29E-07	9.84E-07	1.14E-06	1.29E-06	1.45E-06	1.60E-06	1.75E-06	1.91E-06	2.06E-06	2.22E-06	2.37E-06	NA
1,3-butadiene	1.96E-06	2.45E-06	2.14E-06	1.96E-06	3.53E-07	1.10E-07	9.79E-04	1.10E-03	1.22E-03	1.35E-03	1.47E-03	1.59E-03	1.72E-03	1.84E-03	1.96E-03	2.08E-03	2.21E-03	2
acetaldehyde	1.13E-05	1.41E-05	1.23E-05	1.13E-05	2.03E-06	6.35E-07	2.18E-03	2.46E-03	2.74E-03	3.02E-03	3.31E-03	3.59E-03	3.87E-03	4.15E-03	4.44E-03	4.72E-03	5.00E-03	140
acrolein	3.10E-08	3.87E-08	3.38E-08	3.10E-08	5.58E-09	1.74E-09	1.56E-03	1.75E-03	1.94E-03	2.13E-03	2.32E-03	2.51E-03	2.70E-03	2.89E-03	3.08E-03	3.27E-03	3.46E-03	0.35
benzene	3.34E-05	6.67E-05	4.10E-05	3.84E-05	1.71E-05	2.12E-06	-5.29E-04	-5.47E-04	-5.65E-04	-5.82E-04	-6.00E-04	-6.17E-04	-6.35E-04	-6.53E-04	-6.70E-04	-6.88E-04	-7.06E-04	3
ethyl benzene	8.55E-06	4.57E-05	4.46E-05	4.10E-05	6.87E-06	9.44E-07	-2.99E-04	-3.23E-04	-3.48E-04	-3.72E-04	-3.97E-04	-4.21E-04	-4.46E-04	-4.70E-04	-4.95E-04	-5.19E-04	-5.44E-04	2000
ethyl chloride (chloroethane)	0.00E+00	5.09E-05	9.33E-06	1.02E-05	2.25E-05	4.88E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	30000
ethylene glycol	0.00E+00	4.26E-05	7.80E-06	8.57E-06	1.88E-05	4.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	400
formaldehyde	1.92E-05	2.39E-05	2.09E-05	1.92E-05	3.45E-06	1.08E-06	6.91E-03	7.79E-03	8.66E-03	9.53E-03	1.04E-02	1.13E-02	1.22E-02	1.30E-02	1.39E-02	1.48E-02	1.56E-02	9
hexane	6.84E-06	8.53E-06	7.46E-06	6.84E-06	1.23E-06	3.84E-07	-3.27E-04	-3.58E-04	-3.88E-04	-4.19E-04	-4.49E-04	-4.80E-04	-5.10E-04	-5.40E-04	-5.71E-04	-6.01E-04	-6.32E-04	7000
methanol	3.73E-07	4.65E-07	4.06E-07	3.73E-07	6.70E-08	2.09E-08	1.13E-03	1.27E-03	1.41E-03	1.55E-03	1.69E-03	1.83E-03	1.96E-03	2.10E-03	2.24E-03	2.38E-03	2.52E-03	4000
methyl chloride (chloromethane)	0.00E+00	4.26E-05	7.80E-06	8.57E-06	1.88E-05	4.08E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
methyl ethyl ketone (2-butanone)	1.15E-06	1.43E-06	1.25E-06	1.15E-06	2.06E-07	6.43E-08	-5.48E-05	-5.99E-05	-6.50E-05	-7.01E-05	-7.52E-05	-8.03E-05	-8.54E-05	-9.05E-05	-9.56E-05	-1.01E-04	-1.06E-04	NA
methyl tert-butyl ether	2.10E-06	2.62E-06	2.29E-06	2.10E-06	3.78E-07	1.18E-07	-1.01E-04	-1.10E-04	-1.19E-04	-1.29E-04	-1.38E-04	-1.47E-04	-1.57E-04	-1.66E-04	-1.75E-04	-1.85E-04	-1.94E-04	8000
naphthalene	2.25E-06	2.80E-06	2.45E-06	2.25E-06	4.04E-07	1.26E-07	2.37E-04	2.69E-04	3.01E-04	3.33E-04	3.65E-04	3.97E-04	4.29E-04	4.62E-04	4.94E-04	5.26E-04	5.58E-04	9
phenol	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.62E-04	5.18E-04	5.75E-04	6.32E-04	6.88E-04	7.45E-04	8.01E-04	8.58E-04	9.14E-04	9.71E-04	1.03E-03	200
propylene	1.91E-05	2.38E-05	2.08E-05	1.91E-05	3.44E-06	1.07E-06	1.97E-03	2.24E-03	2.51E-03	2.77E-03	3.04E-03	3.31E-03	3.58E-03	3.85E-03	4.11E-03	4.38E-03	4.65E-03	3000
styrene	1.39E-06	1.74E-06	1.52E-06	1.39E-06	2.50E-07	7.82E-08	1.30E-04	1.48E-04	1.66E-04	1.84E-04	2.01E-04	2.19E-04	2.37E-04	2.55E-04	2.73E-04	2.91E-04	3.09E-04	900
toluene	3.86E-05	1.46E-04	1.40E-04	1.29E-04	2.18E-05	3.46E-06	-1.44E-03	-1.56E-03	-1.68E-03	-1.80E-03	-1.93E-03	-2.05E-03	-2.17E-03	-2.29E-03	-2.41E-03	-2.54E-03	-2.66E-03	420
xylenes (mixed)	0.00E+00	1.29E-04	1.30E-04	1.20E-04	1.97E-05	1.71E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	700
<b>Total Chronic Hazard Index by Year</b>	<b>5.17E-04</b>	<b>1.01E-03</b>	<b>3.53E-04</b>	<b>8.31E-04</b>	<b>1.64E-04</b>	<b>1.38E-04</b>	<b>3.82E-03</b>	<b>4.54E-03</b>	<b>5.27E-03</b>	<b>5.99E-03</b>	<b>6.72E-03</b>	<b>7.44E-03</b>	<b>8.17E-03</b>	<b>8.89E-03</b>	<b>9.62E-03</b>	<b>1.03E-02</b>	<b>1.11E-02</b>	

Oakland International Airport Terminal Modernization & Development Project  
 Table 2-10. Chronic (Annual) Non-Cancer Hazard Index - Offsite Worker

TAC	0.081 Maximum Chronic Non-Cancer Hazard Index																		Chronic Non-Cancer REL ( $\mu\text{g}/\text{m}^3$ )			
	ReclD			UTM X (m)			UTM Y (m)			0.022 Construction										0.081 Operations		
	Maximum Impact Location:			3296 570275 4174825																		
Project-Related Incremental Concentrations ( $\mu\text{g}/\text{m}^3$ ) at Location with Maximum Risk																						
	Construction						Incremental Operation															
	2025	2026	2027	2028	2029	2030	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038					
DPM	3.85E-02	2.87E-02	7.43E-03	9.44E-03	2.74E-03	1.61E-03	-5.21E-02	-5.39E-02	-5.56E-02	-5.74E-02	-5.91E-02	-6.09E-02	-6.26E-02	-6.44E-02	-6.61E-02	-6.79E-02	-6.96E-02	5				
ammonia	1.85E-07	1.88E-05	1.18E-06	7.57E-06	3.72E-07	2.45E-07	4.56E-06	5.35E-06	6.13E-06	6.91E-06	7.70E-06	8.48E-06	9.26E-06	1.00E-05	1.08E-05	1.16E-05	1.24E-05	200				
arsenic	1.14E-08	2.83E-06	1.63E-07	1.13E-06	4.93E-08	3.58E-08	3.02E-07	3.51E-07	4.00E-07	4.49E-07	4.99E-07	5.48E-07	5.97E-07	6.46E-07	6.95E-07	7.44E-07	7.93E-07	0.015				
cadmium	0.00E+00	4.56E-06	2.46E-07	1.82E-06	7.22E-08	5.66E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.02				
chlorine	1.30E-04	7.14E-04	1.67E-04	3.29E-04	4.21E-05	1.25E-05	7.59E-04	8.75E-04	9.91E-04	1.11E-03	1.22E-03	1.34E-03	1.46E-03	1.57E-03	1.69E-03	1.80E-03	1.92E-03	0.2				
chromium	2.27E-06	3.45E-05	3.97E-06	1.45E-05	1.30E-06	5.42E-07	4.39E-05	5.07E-05	5.74E-05	6.41E-05	7.08E-05	7.75E-05	8.42E-05	9.10E-05	9.77E-05	1.04E-04	1.11E-04	0*				
cobalt	8.75E-07	1.73E-05	1.80E-06	7.18E-06	4.70E-07	2.36E-07	3.93E-06	4.52E-06	5.10E-06	5.69E-06	6.27E-06	6.86E-06	7.45E-06	8.03E-06	8.62E-06	9.20E-06	9.79E-06	NA				
copper	1.43E-05	4.09E-05	1.51E-05	2.08E-05	6.27E-06	1.43E-06	3.62E-04	4.20E-04	4.79E-04	5.38E-04	5.96E-04	6.55E-04	7.14E-04	7.72E-04	8.31E-04	8.90E-04	9.48E-04	NA				
lead	1.84E-07	8.24E-05	4.61E-06	3.29E-05	1.38E-06	1.03E-06	-3.29E-06	-2.78E-06	-2.28E-06	-1.77E-06	-1.26E-06	-7.58E-07	-2.53E-07	2.53E-07	7.58E-07	1.26E-06	1.77E-06	NA				
manganese	2.89E-06	1.40E-04	1.02E-05	5.66E-05	3.21E-06	1.88E-06	5.81E-05	6.74E-05	7.67E-05	8.60E-05	9.53E-05	1.05E-04	1.14E-04	1.23E-04	1.33E-04	1.42E-04	1.51E-04	0.09				
mercury	0.00E+00	2.34E-06	1.26E-07	9.35E-07	3.70E-08	2.90E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.03				
nickel	1.67E-06	1.17E-05	2.20E-06	5.22E-06	7.01E-07	2.20E-07	2.48E-05	2.88E-05	3.28E-05	3.68E-05	4.08E-05	4.48E-05	4.88E-05	5.28E-05	5.68E-05	6.08E-05	6.47E-05	0.014				
selenium	3.86E-08	4.18E-07	5.70E-08	1.79E-07	2.22E-08	7.75E-09	1.02E-06	1.19E-06	1.36E-06	1.52E-06	1.69E-06	1.86E-06	2.02E-06	2.19E-06	2.36E-06	2.52E-06	2.69E-06	20				
silica, crystalline (respirable)	7.82E-05	2.87E-02	1.62E-03	1.15E-02	4.85E-04	3.61E-04	2.07E-03	2.41E-03	2.75E-03	3.09E-03	3.42E-03	3.76E-03	4.10E-03	4.43E-03	4.77E-03	5.11E-03	5.45E-03	3				
sulfates	8.28E-04	2.06E-03	9.27E-04	1.10E-03	2.26E-04	4.81E-05	4.60E-03	5.30E-03	6.00E-03	6.70E-03	7.40E-03	8.10E-03	8.80E-03	9.50E-03	1.02E-02	1.09E-02	1.16E-02	NA				
vanadium (fume or dust)	7.52E-07	4.00E-05	2.83E-06	1.62E-05	9.36E-07	5.46E-07	1.99E-05	2.32E-05	2.64E-05	2.97E-05	3.29E-05	3.61E-05	3.94E-05	4.26E-05	4.59E-05	4.91E-05	5.23E-05	NA				
1,3-butadiene	2.71E-05	3.38E-05	2.97E-05	2.71E-05	4.81E-06	1.59E-06	9.94E-03	1.03E-02	1.07E-02	1.11E-02	1.15E-02	1.19E-02	1.23E-02	1.27E-02	1.30E-02	1.34E-02	1.38E-02	2				
acetaldehyde	1.56E-04	1.94E-04	1.71E-04	1.56E-04	2.77E-05	9.14E-06	2.24E-02	2.29E-02	2.34E-02	2.39E-02	2.44E-02	2.49E-02	2.54E-02	2.59E-02	2.64E-02	2.69E-02	2.74E-02	140				
acrolein	4.28E-07	5.34E-07	4.70E-07	4.28E-07	7.60E-08	2.51E-08	1.57E-02	1.64E-02	1.72E-02	1.80E-02	1.88E-02	1.96E-02	2.03E-02	2.11E-02	2.19E-02	2.27E-02	2.35E-02	0.35				
benzene	4.60E-04	1.20E-03	5.44E-04	4.86E-04	1.15E-04	2.80E-05	-3.80E-03	-5.82E-03	-7.85E-03	-9.87E-03	-1.19E-02	-1.39E-02	-1.59E-02	-1.80E-02	-2.00E-02	-2.20E-02	-2.40E-02	3				
ethyl benzene	1.18E-04	9.15E-04	4.25E-04	2.87E-04	4.97E-05	8.54E-06	-2.61E-03	-3.21E-03	-3.81E-03	-4.41E-03	-5.01E-03	-5.61E-03	-6.21E-03	-6.81E-03	-7.41E-03	-8.01E-03	-8.61E-03	2000				
ethyl chloride (chloroethane)	0.00E+00	1.28E-03	7.85E-05	5.18E-05	6.75E-05	2.01E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	30000				
ethylene glycol	0.00E+00	1.07E-03	6.56E-05	4.33E-05	5.64E-05	1.68E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	400				
formaldehyde	2.64E-04	3.30E-04	2.90E-04	2.64E-04	4.70E-05	1.55E-05	7.04E-02	7.29E-02	7.53E-02	7.78E-02	8.02E-02	8.27E-02	8.52E-02	8.76E-02	9.01E-02	9.26E-02	9.50E-02	9				
hexane	9.42E-05	1.18E-04	1.04E-04	9.42E-05	1.68E-05	5.53E-06	-2.98E-03	-3.51E-03	-4.03E-03	-4.55E-03	-5.08E-03	-5.60E-03	-6.13E-03	-6.65E-03	-7.18E-03	-7.70E-03	-8.22E-03	7000				
methanol	5.14E-06	6.41E-06	5.64E-06	5.14E-06	9.13E-07	3.02E-07	1.14E-02	1.19E-02	1.25E-02	1.30E-02	1.36E-02	1.41E-02	1.47E-02	1.52E-02	1.58E-02	1.63E-02	1.69E-02	4000				
methyl chloride (chloromethane)	0.00E+00	1.07E-03	6.56E-05	4.33E-05	5.64E-05	1.68E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA				
methyl ethyl ketone (2-butanone)	1.58E-05	1.97E-05	1.73E-05	1.58E-05	2.80E-06	9.26E-07	-4.99E-04	-5.87E-04	-6.75E-04	-7.62E-04	-8.50E-04	-9.38E-04	-1.03E-03	-1.11E-03	-1.20E-03	-1.29E-03	-1.38E-03	NA				
methyl tert-butyl ether	2.89E-05	3.61E-05	3.18E-05	2.89E-05	5.15E-06	1.70E-06	-9.15E-04	-1.08E-03	-1.24E-03	-1.40E-03	-1.56E-03	-1.72E-03	-1.88E-03	-2.04E-03	-2.20E-03	-2.36E-03	-2.53E-03	8000				
naphthalene	3.10E-05	3.86E-05	3.40E-05	3.10E-05	5.50E-06	1.82E-06	2.48E-03	2.48E-03	2.48E-03	2.48E-03	2.48E-03	2.48E-03	2.49E-03	2.49E-03	2.49E-03	2.49E-03	2.49E-03	9				
phenol	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.64E-03	4.88E-03	5.11E-03	5.34E-03	5.57E-03	5.80E-03	6.04E-03	6.27E-03	6.50E-03	6.73E-03	6.96E-03	200				
propylene	2.63E-04	3.29E-04	2.89E-04	2.63E-04	4.68E-05	1.55E-05	2.07E-02	2.07E-02	2.06E-02	2.06E-02	2.06E-02	2.06E-02	2.06E-02	2.06E-02	2.05E-02	2.05E-02	2.05E-02	3000				
styrene	1.92E-05	2.39E-05	2.11E-05	1.92E-05	3.41E-06	1.13E-06	1.37E-03	1.36E-03	1.35E-03	1.35E-03	1.34E-03	1.33E-03	1.32E-03	1.31E-03	1.31E-03	1.30E-03	1.29E-03	900				
toluene	5.32E-04	2.80E-03	1.41E-03	1.00E-03	1.75E-04	3.57E-05	-1.27E-02	-1.55E-02	-1.82E-02	-2.10E-02	-2.37E-02	-2.65E-02	-2.92E-02	-3.20E-02	-3.48E-02	-3.75E-02	-4.03E-02	420				
xylenes (mixed)	0.00E+00	2.83E-03	1.09E-03	6.26E-04	1.06E-04	5.99E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	700				
<b>Total Chronic Hazard Index by Year</b>	<b>8.74E-03</b>	<b>2.24E-02</b>	<b>3.42E-03</b>	<b>8.85E-03</b>	<b>1.07E-03</b>	<b>5.62E-04</b>	<b>5.34E-02</b>	<b>5.62E-02</b>	<b>5.90E-02</b>	<b>6.18E-02</b>	<b>6.46E-02</b>	<b>6.73E-02</b>	<b>7.01E-02</b>	<b>7.29E-02</b>	<b>7.57E-02</b>	<b>7.85E-02</b>	<b>8.13E-02</b>					

Oakland International Airport Terminal Modernization & Development Project  
 Table 2-11. Chronic (Annual) Non-Cancer Hazard Index - On-Airport Worker

TAC	0.889 Maximum Chronic Non-Cancer Hazard Index																	Chronic Non-Cancer REL (µg/m <sup>3</sup> )		
	ReclD			UTM X (m)		UTM Y (m)		0.020 Construction											0.889 Operations	
	Maximum Impact Location: 4 569075 4174010																			
Project-Related Incremental Concentrations (ug/m <sup>3</sup> ) at Location with Maximum Risk																				
	Construction						Incremental Operation													
	2025	2026	2027	2028	2029	2030	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038			
DPM	2.47E-02	1.22E-02	3.09E-02	4.11E-02	3.89E-02	3.07E-02	-2.74E+00	-2.78E+00	-2.81E+00	-2.84E+00	-2.88E+00	-2.91E+00	-2.94E+00	-2.98E+00	-3.01E+00	-3.04E+00	-3.08E+00	5		
ammonia	2.20E-08	4.82E-06	5.10E-06	1.47E-05	3.15E-06	1.84E-07	1.67E-06	1.74E-06	1.80E-06	1.86E-06	1.92E-06	1.99E-06	2.05E-06	2.11E-06	2.17E-06	2.24E-06	2.30E-06	200		
arsenic	1.36E-09	7.29E-07	7.72E-07	2.24E-06	4.78E-07	2.77E-08	1.11E-07	1.15E-07	1.19E-07	1.22E-07	1.26E-07	1.30E-07	1.34E-07	1.38E-07	1.42E-07	1.45E-07	1.49E-07	0.015		
cadmium	0.00E+00	1.18E-06	1.25E-06	3.63E-06	7.75E-07	4.49E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.02		
chlorine	1.56E-05	1.54E-04	1.53E-04	4.11E-04	8.84E-05	5.67E-06	-1.48E-02	-1.40E-02	-1.32E-02	-1.24E-02	-1.16E-02	-1.08E-02	-9.97E-03	-9.17E-03	-8.36E-03	-7.55E-03	-6.74E-03	0.2		
chromium	2.71E-07	8.38E-06	8.69E-06	2.47E-05	5.31E-06	3.21E-07	-7.99E-05	-7.05E-05	-6.10E-05	-5.15E-05	-4.20E-05	-3.26E-05	-2.31E-05	-1.36E-05	-4.16E-06	5.31E-06	1.48E-05	0*		
cobalt	1.05E-07	4.26E-06	4.45E-06	1.27E-05	2.71E-06	1.60E-07	-1.06E-04	-1.01E-04	-9.50E-05	-8.92E-05	-8.34E-05	-7.77E-05	-7.19E-05	-6.61E-05	-6.04E-05	-5.46E-05	-4.89E-05	NA		
copper	1.71E-06	7.07E-06	6.08E-06	1.46E-05	3.47E-06	3.03E-07	2.70E-05	3.80E-05	4.89E-05	5.99E-05	7.08E-05	8.17E-05	9.27E-05	1.04E-04	1.15E-04	1.26E-04	1.36E-04	NA		
lead	2.19E-08	2.13E-05	2.25E-05	6.53E-05	1.39E-05	8.08E-07	3.85E-06	5.28E-06	6.72E-06	8.15E-06	9.58E-06	1.10E-05	1.24E-05	1.39E-05	1.53E-05	1.67E-05	1.82E-05	NA		
manganese	3.45E-07	3.54E-05	3.73E-05	1.07E-04	2.30E-05	1.35E-06	-8.39E-05	-7.67E-05	-6.95E-05	-6.23E-05	-5.51E-05	-4.79E-05	-4.07E-05	-3.35E-05	-2.63E-05	-1.92E-05	-1.20E-05	0.09		
mercury	0.00E+00	6.06E-07	6.43E-07	1.86E-06	3.98E-07	2.30E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.03		
nickel	1.99E-07	2.63E-06	2.64E-06	7.28E-06	1.58E-06	1.01E-07	-9.88E-05	-9.28E-05	-8.68E-05	-8.07E-05	-7.47E-05	-6.87E-05	-6.26E-05	-5.66E-05	-5.06E-05	-4.46E-05	-3.85E-05	0.014		
selenium	4.60E-09	9.86E-08	1.01E-07	2.84E-07	6.16E-08	3.85E-09	3.76E-07	3.89E-07	4.02E-07	4.15E-07	4.28E-07	4.41E-07	4.54E-07	4.67E-07	4.80E-07	4.93E-07	5.06E-07	20		
silica, crystalline (respirable)	9.32E-06	7.40E-03	7.85E-03	2.27E-02	4.85E-03	2.81E-04	7.61E-04	7.87E-04	8.14E-04	8.40E-04	8.67E-04	8.93E-04	9.19E-04	9.46E-04	9.72E-04	9.99E-04	1.03E-03	3		
sulfates	9.93E-05	3.40E-04	2.93E-04	6.48E-04	1.42E-04	1.17E-05	-9.54E-02	-9.02E-02	-8.50E-02	-7.98E-02	-7.46E-02	-6.94E-02	-6.42E-02	-5.90E-02	-5.38E-02	-4.86E-02	-4.34E-02	NA		
vanadium (fume or dust)	8.96E-08	1.02E-05	1.07E-05	3.09E-05	6.62E-06	3.88E-07	7.31E-06	7.57E-06	7.82E-06	8.08E-06	8.33E-06	8.58E-06	8.84E-06	9.09E-06	9.35E-06	9.60E-06	9.86E-06	NA		
1,3-butadiene	3.20E-06	4.00E-06	3.51E-06	3.20E-06	5.74E-07	1.77E-07	5.95E-02	8.04E-02	1.01E-01	1.22E-01	1.43E-01	1.64E-01	1.85E-01	2.05E-01	2.26E-01	2.47E-01	2.68E-01	2		
acetaldehyde	1.84E-05	2.30E-05	2.02E-05	1.84E-05	3.30E-06	1.02E-06	9.77E-02	1.50E-01	2.03E-01	2.56E-01	3.09E-01	3.61E-01	4.14E-01	4.67E-01	5.19E-01	5.72E-01	6.25E-01	140		
acrolein	5.06E-08	6.31E-08	5.55E-08	5.06E-08	9.07E-09	2.79E-09	1.10E-01	1.40E-01	1.71E-01	2.01E-01	2.31E-01	2.62E-01	2.92E-01	3.22E-01	3.53E-01	3.83E-01	4.13E-01	0.35		
benzene	5.44E-05	2.50E-04	2.62E-04	3.60E-04	2.76E-03	3.78E-06	-2.04E-01	-1.84E-01	-1.64E-01	-1.43E-01	-1.23E-01	-1.03E-01	-8.24E-02	-6.20E-02	-4.17E-02	-2.14E-02	-1.03E-03	3		
ethyl benzene	1.39E-05	1.89E-04	1.57E-03	2.15E-03	3.10E-04	1.93E-06	-6.39E-02	-6.19E-02	-5.98E-02	-5.78E-02	-5.58E-02	-5.37E-02	-5.17E-02	-4.97E-02	-4.76E-02	-4.56E-02	-4.36E-02	2000		
ethyl chloride (chloroethane)	0.00E+00	3.69E-04	4.11E-04	6.22E-04	5.59E-03	1.59E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	30000		
ethylene glycol	0.00E+00	3.09E-04	3.44E-04	5.20E-04	4.68E-03	1.33E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	400		
formaldehyde	3.13E-05	3.90E-05	3.43E-05	3.13E-05	5.61E-06	1.72E-06	3.94E-01	5.46E-01	6.98E-01	8.50E-01	1.00E+00	1.15E+00	1.31E+00	1.46E+00	1.61E+00	1.76E+00	1.91E+00	9		
hexane	1.11E-05	1.39E-05	1.22E-05	1.11E-05	2.00E-06	6.15E-07	-5.74E-02	-5.75E-02	-5.76E-02	-5.77E-02	-5.78E-02	-5.79E-02	-5.80E-02	-5.81E-02	-5.82E-02	-5.83E-02	-5.84E-02	7000		
methanol	6.07E-07	7.58E-07	6.66E-07	6.07E-07	1.09E-07	3.35E-08	7.82E-02	1.01E-01	1.23E-01	1.45E-01	1.68E-01	1.90E-01	2.12E-01	2.35E-01	2.57E-01	2.79E-01	3.02E-01	4000		
methyl chloride (chloromethane)	0.00E+00	3.09E-04	3.44E-04	5.20E-04	4.68E-03	1.33E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA		
methyl ethyl ketone (2-butanone)	1.87E-06	2.33E-06	2.05E-06	1.87E-06	3.35E-07	1.03E-07	-9.60E-03	-9.62E-03	-9.63E-03	-9.65E-03	-9.67E-03	-9.68E-03	-9.70E-03	-9.72E-03	-9.73E-03	-9.75E-03	-9.76E-03	NA		
methyl tert-butyl ether	3.42E-06	4.27E-06	3.75E-06	3.42E-06	6.14E-07	1.89E-07	-1.76E-02	-1.76E-02	-1.77E-02	-1.77E-02	-1.78E-02	-1.78E-02	-1.78E-02	-1.78E-02	-1.79E-02	-1.79E-02	-1.79E-02	8000		
naphthalene	3.66E-06	4.57E-06	4.01E-06	3.66E-06	6.57E-07	2.02E-07	5.53E-03	1.22E-02	1.89E-02	2.55E-02	3.22E-02	3.88E-02	4.55E-02	5.22E-02	5.88E-02	6.55E-02	7.22E-02	9		
phenol	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-02	4.17E-02	5.07E-02	5.97E-02	6.86E-02	7.76E-02	8.66E-02	9.56E-02	1.05E-01	1.14E-01	1.23E-01	200		
propylene	3.11E-05	3.89E-05	3.42E-05	3.11E-05	5.58E-06	1.72E-06	4.39E-02	9.98E-02	1.56E-01	2.11E-01	2.67E-01	3.23E-01	3.79E-01	4.35E-01	4.91E-01	5.47E-01	6.02E-01	3000		
styrene	2.27E-06	2.83E-06	2.49E-06	2.27E-06	4.07E-07	1.25E-07	2.24E-03	6.05E-03	9.85E-03	1.37E-02	1.75E-02	2.13E-02	2.51E-02	2.89E-02	3.27E-02	3.65E-02	4.03E-02	900		
toluene	6.29E-05	5.56E-04	4.38E-03	6.00E-03	8.66E-04	6.70E-06	-2.95E-01	-2.87E-01	-2.80E-01	-2.73E-01	-2.65E-01	-2.58E-01	-2.50E-01	-2.43E-01	-2.36E-01	-2.28E-01	-2.21E-01	420		
xylenes (mixed)	0.00E+00	6.34E-04	5.72E-03	7.88E-03	1.13E-03	4.28E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	700		
<b>Total Chronic Hazard Index by Year</b>	<b>5.07E-03</b>	<b>6.52E-03</b>	<b>1.04E-02</b>	<b>2.02E-02</b>	<b>1.13E-02</b>	<b>6.29E-03</b>	<b>-3.11E-01</b>	<b>-1.91E-01</b>	<b>-7.08E-02</b>	<b>4.91E-02</b>	<b>1.69E-01</b>	<b>2.89E-01</b>	<b>4.09E-01</b>	<b>5.29E-01</b>	<b>6.49E-01</b>	<b>7.69E-01</b>	<b>8.89E-01</b>			

Oakland International Airport Terminal Modernization & Development Project  
 Table 2-12. 8-Hour Hazard Index - Adult Resident & Child Resident

TAC	0.547 Maximum 8-Hour Hazard Index																	8-Hour Non-Cancer REL ( $\mu\text{g}/\text{m}^3$ )	
	Construction			Incremental Operation															
	2025	2026	2027	2028	2029	2030	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038		
Maximum Impact Location:	ReclD 1924	UTM X (m) 571500	UTM Y (m) 4173000	0.003 Construction 0.547 Operations															
Project-Related Incremental Concentrations ( $\mu\text{g}/\text{m}^3$ ) at Location with Maximum Risk																			
DPM	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
ammonia	1.51E-04	9.87E-05	6.05E-05	9.80E-05	4.33E-05	3.55E-05	-1.16E-03	-1.18E-03	-1.21E-03	-1.23E-03	-1.25E-03	-1.27E-03	-1.30E-03	-1.32E-03	-1.34E-03	-1.36E-03	-1.39E-03	-1.39E-03	NA
arsenic	2.27E-07	2.30E-06	9.20E-07	2.59E-06	3.08E-07	2.65E-07	-1.63E-06	-1.65E-06	-1.67E-06	-1.69E-06	-1.71E-06	-1.73E-06	-1.75E-06	-1.77E-06	-1.78E-06	-1.80E-06	-1.82E-06	-1.82E-06	0.015
cadmium	1.79E-06	4.52E-06	1.49E-06	4.98E-06	8.93E-07	7.52E-07	-1.37E-05	-1.40E-05	-1.43E-05	-1.46E-05	-1.48E-05	-1.51E-05	-1.54E-05	-1.57E-05	-1.59E-05	-1.62E-05	-1.65E-05	-1.65E-05	NA
chlorine	5.79E-05	4.63E-04	1.41E-04	4.88E-04	5.86E-05	4.37E-05	1.77E-03	1.95E-03	2.13E-03	2.30E-03	2.48E-03	2.66E-03	2.84E-03	3.01E-03	3.19E-03	3.37E-03	3.55E-03	3.55E-03	NA
chromium	1.28E-06	2.52E-05	6.44E-06	2.80E-05	3.09E-06	2.51E-06	3.71E-05	4.07E-05	4.43E-05	4.79E-05	5.15E-05	5.52E-05	5.88E-05	6.24E-05	6.60E-05	6.96E-05	7.32E-05	7.32E-05	0.12
cobalt	7.77E-07	1.29E-05	3.32E-06	1.44E-05	1.58E-06	1.33E-06	9.30E-06	1.04E-05	1.16E-05	1.27E-05	1.38E-05	1.50E-05	1.61E-05	1.72E-05	1.84E-05	1.95E-05	2.06E-05	2.06E-05	NA
copper	5.80E-06	2.12E-05	7.94E-06	1.95E-05	3.67E-06	1.92E-06	1.07E-04	1.26E-04	1.45E-04	1.65E-04	1.84E-04	2.04E-04	2.23E-04	2.42E-04	2.62E-04	2.81E-04	3.01E-04	3.01E-04	NA
lead	1.94E-06	6.44E-05	1.54E-05	7.32E-05	7.70E-06	6.68E-06	-1.10E-04	-1.07E-04	-1.04E-04	-1.01E-04	-9.85E-05	-9.57E-05	-9.29E-05	-9.01E-05	-8.73E-05	-8.45E-05	-8.17E-05	-8.17E-05	NA
manganese	2.73E-06	1.06E-04	2.57E-05	1.20E-04	1.26E-05	1.07E-05	1.82E-05	2.20E-05	2.58E-05	2.96E-05	3.34E-05	3.72E-05	4.10E-05	4.48E-05	4.87E-05	5.25E-05	5.63E-05	5.63E-05	0.17
mercury	1.34E-06	2.56E-06	9.27E-07	2.78E-06	5.75E-07	4.82E-07	-1.03E-05	-1.05E-05	-1.07E-05	-1.09E-05	-1.11E-05	-1.13E-05	-1.15E-05	-1.17E-05	-1.19E-05	-1.22E-05	-1.24E-05	-1.24E-05	0.06
nickel	1.39E-06	8.26E-06	2.47E-06	8.82E-06	1.19E-06	9.09E-07	1.12E-05	1.34E-05	1.56E-05	1.77E-05	1.99E-05	2.21E-05	2.43E-05	2.65E-05	2.86E-05	3.08E-05	3.30E-05	3.30E-05	0.06
selenium	4.60E-07	5.43E-07	2.45E-07	5.64E-07	1.60E-07	1.29E-07	-3.15E-06	-3.17E-06	-3.18E-06	-3.20E-06	-3.22E-06	-3.23E-06	-3.25E-06	-3.26E-06	-3.28E-06	-3.30E-06	-3.31E-06	-3.31E-06	NA
silica, crystalline (respirable)	1.37E-04	2.21E-02	5.17E-03	2.52E-02	2.53E-03	2.20E-03	-2.96E-04	-2.07E-04	-1.17E-04	-2.77E-05	6.17E-05	1.51E-04	2.41E-04	3.30E-04	4.19E-04	5.09E-04	5.98E-04	5.98E-04	NA
sulfates	1.05E-03	1.42E-03	7.11E-04	1.30E-03	3.44E-04	2.43E-04	6.07E-03	7.10E-03	8.12E-03	9.14E-03	1.02E-02	1.12E-02	1.22E-02	1.32E-02	1.43E-02	1.53E-02	1.63E-02	1.63E-02	NA
vanadium (fume or dust)	1.54E-06	3.10E-05	7.65E-06	3.50E-05	3.84E-06	3.27E-06	-4.44E-06	-3.62E-06	-2.80E-06	-1.98E-06	-1.16E-06	-3.40E-07	4.80E-07	1.30E-06	2.12E-06	2.94E-06	3.76E-06	3.76E-06	NA
1,3-butadiene	2.43E-04	1.39E-04	9.73E-05	1.44E-04	3.29E-05	6.78E-05	6.01E-02	7.43E-02	8.85E-02	1.03E-01	1.17E-01	1.31E-01	1.45E-01	1.60E-01	1.74E-01	1.88E-01	2.02E-01	2.02E-01	9
acetaldehyde	9.11E-03	5.01E-03	3.44E-03	5.28E-03	1.22E-03	2.61E-03	1.12E-01	1.30E-01	1.48E-01	1.67E-01	1.85E-01	2.03E-01	2.21E-01	2.39E-01	2.58E-01	2.76E-01	2.94E-01	2.94E-01	300
acrolein	1.40E-07	1.75E-07	1.54E-07	1.40E-07	2.51E-08	8.37E-09	9.15E-02	9.87E-02	1.06E-01	1.13E-01	1.20E-01	1.27E-01	1.35E-01	1.42E-01	1.49E-01	1.56E-01	1.63E-01	1.63E-01	0.7
benzene	2.61E-03	2.03E-03	1.20E-03	1.72E-03	6.77E-04	7.24E-04	1.94E-02	7.78E-02	1.36E-01	1.94E-01	2.53E-01	3.11E-01	3.70E-01	4.28E-01	4.86E-01	5.45E-01	6.03E-01	6.03E-01	3
ethyl benzene	4.21E-04	9.67E-04	1.06E-03	1.16E-03	2.16E-04	1.22E-04	-3.71E-03	1.81E-02	4.00E-02	6.18E-02	8.37E-02	1.06E-01	1.27E-01	1.49E-01	1.71E-01	1.93E-01	2.15E-01	2.15E-01	NA
ethyl chloride (chloroethane)	0.00E+00	1.00E-03	2.33E-04	2.92E-04	6.51E-04	1.24E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
ethylene glycol	0.00E+00	8.39E-04	1.94E-04	2.44E-04	5.45E-04	1.04E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
formaldehyde	1.82E-02	1.00E-02	6.87E-03	1.05E-02	2.44E-03	5.22E-03	3.68E-01	4.10E-01	4.51E-01	4.93E-01	5.35E-01	5.76E-01	6.18E-01	6.60E-01	7.01E-01	7.43E-01	7.85E-01	7.85E-01	9
hexane	2.28E-04	1.46E-04	1.08E-04	1.45E-04	3.19E-05	5.85E-05	-7.69E-03	5.55E-03	1.88E-02	3.20E-02	4.53E-02	5.85E-02	7.18E-02	8.50E-02	9.83E-02	1.11E-01	1.25E-01	1.25E-01	NA
methanol	3.86E-05	2.23E-05	1.57E-05	2.30E-05	5.25E-06	1.07E-05	6.70E-02	7.09E-02	7.47E-02	7.86E-02	8.25E-02	8.63E-02	9.02E-02	9.41E-02	9.79E-02	1.02E-01	1.06E-01	1.06E-01	NA
methyl chloride (chloromethane)	0.00E+00	8.39E-04	1.94E-04	2.44E-04	5.45E-04	1.04E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
methyl ethyl ketone (2-butanone)	1.83E-03	1.00E-03	6.88E-04	1.06E-03	2.45E-04	5.25E-04	-8.50E-03	-7.28E-03	-6.06E-03	-4.84E-03	-3.62E-03	-2.40E-03	-1.18E-03	4.45E-05	1.27E-03	2.49E-03	3.71E-03	3.71E-03	NA
methyl tert-butyl ether	9.49E-06	1.18E-05	1.04E-05	9.49E-06	1.70E-06	5.66E-07	-2.11E-03	1.66E-03	5.43E-03	9.20E-03	1.30E-02	1.67E-02	2.05E-02	2.43E-02	2.81E-02	3.18E-02	3.56E-02	3.56E-02	NA
naphthalene	1.21E-04	7.33E-05	5.26E-05	7.41E-05	1.67E-05	3.25E-05	1.76E-02	2.04E-02	2.33E-02	2.62E-02	2.91E-02	3.19E-02	3.48E-02	3.77E-02	4.06E-02	4.34E-02	4.63E-02	4.63E-02	NA
phenol	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.71E-02	2.87E-02	3.03E-02	3.18E-02	3.34E-02	3.49E-02	3.65E-02	3.81E-02	3.96E-02	4.12E-02	4.27E-02	4.27E-02	NA
propylene	3.29E-03	1.86E-03	1.29E-03	1.94E-03	4.44E-04	9.26E-04	1.37E-01	2.13E-01	2.88E-01	3.64E-01	4.39E-01	5.15E-01	5.90E-01	6.66E-01	7.41E-01	8.17E-01	8.92E-01	8.92E-01	NA
styrene	8.02E-05	4.82E-05	3.46E-05	4.90E-05	1.10E-05	2.16E-05	9.84E-03	1.46E-02	1.94E-02	2.41E-02	2.89E-02	3.36E-02	3.84E-02	4.32E-02	4.79E-02	5.27E-02	5.75E-02	5.75E-02	NA
toluene	1.99E-03	3.18E-03	3.29E-03	3.73E-03	7.13E-04	5.58E-04	-2.26E-02	8.66E-02	1.96E-01	3.05E-01	4.14E-01	5.23E-01	6.32E-01	7.42E-01	8.51E-01	9.60E-01	1.07E+00	1.07E+00	830
xylene (mixed)	0.00E+00	2.62E-03	3.22E-03	3.33E-03	5.83E-04	3.51E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
<b>Total 8-Hour Hazard Index by Year</b>	<b>3.04E-03</b>	<b>2.99E-03</b>	<b>1.49E-03</b>	<b>3.09E-03</b>	<b>6.55E-04</b>	<b>9.63E-04</b>	<b>1.85E-01</b>	<b>2.22E-01</b>	<b>2.58E-01</b>	<b>2.94E-01</b>	<b>3.30E-01</b>	<b>3.66E-01</b>	<b>4.03E-01</b>	<b>4.39E-01</b>	<b>4.75E-01</b>	<b>5.11E-01</b>	<b>5.47E-01</b>	<b>5.47E-01</b>	

Oakland International Airport Terminal Modernization & Development Project  
 Table 2-13. 8-Hour Hazard Index - School Child

0.296 Maximum 8-Hour Hazard Index

ReclD UTM X (m) UTM Y (m)  
 Maximum Impact Location: 582 567200 4177800

0.002 Construction  
 0.296 Operations

TAC	Project-Related Incremental Concentrations (ug/m <sup>3</sup> ) at Location with Maximum Risk																	8-Hour Non-Cancer REL (ug/m <sup>3</sup> )	
	Construction						Incremental Operation												
	2025	2026	2027	2028	2029	2030	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038		
DPM	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
ammonia	7.43E-05	4.50E-05	3.80E-05	5.63E-05	2.41E-05	1.72E-05	-7.83E-04	-7.98E-04	-8.12E-04	-8.27E-04	-8.41E-04	-8.56E-04	-8.70E-04	-8.85E-04	-8.99E-04	-9.14E-04	-9.28E-04	NA	
arsenic	1.13E-07	1.17E-06	3.58E-07	1.40E-06	1.71E-07	6.86E-08	-1.14E-06	-1.15E-06	-1.16E-06	-1.17E-06	-1.19E-06	-1.20E-06	-1.21E-06	-1.22E-06	-1.23E-06	-1.25E-06	-1.26E-06	0.015	
cadmium	8.81E-07	2.24E-06	9.17E-07	2.71E-06	4.96E-07	2.71E-07	-9.34E-06	-9.51E-06	-9.67E-06	-9.84E-06	-1.00E-05	-1.02E-05	-1.03E-05	-1.05E-05	-1.07E-05	-1.08E-05	-1.10E-05	NA	
chlorine	4.62E-05	2.64E-04	9.84E-05	2.78E-04	3.64E-05	1.10E-05	8.98E-04	9.92E-04	1.09E-03	1.18E-03	1.27E-03	1.37E-03	1.46E-03	1.56E-03	1.65E-03	1.74E-03	1.84E-03	NA	
chromium	9.21E-07	1.33E-05	4.09E-06	1.53E-05	1.79E-06	5.78E-07	3.26E-05	3.51E-05	3.76E-05	4.01E-05	4.27E-05	4.52E-05	4.77E-05	5.02E-05	5.27E-05	5.53E-05	5.78E-05	0.12	
cobalt	5.02E-07	6.78E-06	2.09E-06	7.85E-06	9.03E-07	3.08E-07	4.28E-06	4.87E-06	5.46E-06	6.05E-06	6.64E-06	7.23E-06	7.82E-06	8.41E-06	9.00E-06	9.59E-06	1.02E-05	NA	
copper	4.65E-06	1.36E-05	6.05E-06	1.21E-05	2.62E-06	7.33E-07	4.06E-05	5.18E-05	6.31E-05	7.43E-05	8.56E-05	9.68E-05	1.08E-04	1.19E-04	1.31E-04	1.42E-04	1.53E-04	NA	
lead	9.78E-07	3.29E-05	9.30E-06	3.93E-05	4.27E-06	1.48E-06	8.22E-05	6.79E-05	5.36E-05	3.92E-05	2.49E-05	1.06E-05	-3.72E-06	-1.80E-05	-3.24E-05	-4.67E-05	-6.10E-05	NA	
manganese	1.72E-06	5.49E-05	1.57E-05	6.48E-05	7.08E-06	2.33E-06	8.50E-06	1.07E-05	1.30E-05	1.52E-05	1.74E-05	1.97E-05	2.19E-05	2.42E-05	2.64E-05	2.86E-05	3.09E-05	0.17	
mercury	6.61E-07	1.26E-06	5.71E-07	1.53E-06	3.19E-07	1.87E-07	-7.00E-06	-7.13E-06	-7.25E-06	-7.38E-06	-7.51E-06	-7.63E-06	-7.76E-06	-7.88E-06	-8.01E-06	-8.13E-06	-8.26E-06	0.06	
nickel	9.04E-07	4.53E-06	1.66E-06	4.94E-06	7.19E-07	2.63E-07	5.35E-06	6.36E-06	7.38E-06	8.39E-06	9.41E-06	1.04E-05	1.14E-05	1.25E-05	1.35E-05	1.45E-05	1.55E-05	0.06	
selenium	2.31E-07	2.69E-07	1.55E-07	3.17E-07	9.04E-08	5.67E-08	-2.24E-06	-2.25E-06	-2.26E-06	-2.27E-06	-2.28E-06	-2.29E-06	-2.30E-06	-2.32E-06	-2.33E-06	-2.34E-06	-2.35E-06	NA	
silica, crystalline (respirable)	7.71E-05	1.13E-02	3.11E-03	1.35E-02	1.41E-03	4.54E-04	-3.68E-04	-3.19E-04	-2.70E-04	-2.21E-04	-1.72E-04	-1.23E-04	-7.46E-05	-2.57E-05	2.31E-05	7.20E-05	1.21E-04	NA	
sulfates	6.29E-04	8.73E-04	5.23E-04	8.16E-04	2.16E-04	1.08E-04	2.20E-03	2.73E-03	3.26E-03	3.79E-03	4.32E-03	4.85E-03	5.38E-03	5.91E-03	6.44E-03	6.97E-03	7.50E-03	NA	
vanadium (fume or dust)	8.53E-07	1.59E-05	4.67E-06	1.89E-05	2.16E-06	7.61E-07	-4.84E-06	-4.37E-06	-3.90E-06	-3.43E-06	-2.96E-06	-2.49E-06	-2.02E-06	-1.56E-06	-1.09E-06	-6.16E-07	-1.47E-07	NA	
1,3-butadiene	1.34E-04	7.19E-05	6.48E-05	8.72E-05	1.90E-05	3.40E-05	4.06E-02	4.75E-02	5.44E-02	6.13E-02	6.81E-02	7.50E-02	8.19E-02	8.88E-02	9.56E-02	1.03E-01	1.09E-01	9	
acetaldehyde	4.92E-03	2.47E-03	2.23E-03	3.12E-03	6.90E-04	1.30E-03	7.31E-02	8.16E-02	9.00E-02	9.84E-02	1.07E-01	1.15E-01	1.24E-01	1.32E-01	1.41E-01	1.49E-01	1.58E-01	300	
acrolein	1.21E-07	1.51E-07	1.33E-07	1.21E-07	2.16E-08	6.98E-09	6.19E-02	6.50E-02	6.81E-02	7.12E-02	7.43E-02	7.74E-02	8.05E-02	8.37E-02	8.68E-02	8.99E-02	9.30E-02	0.7	
benzene	1.46E-03	1.06E-03	8.09E-04	1.05E-03	3.72E-04	3.62E-04	1.23E-02	4.15E-02	7.08E-02	1.00E-01	1.29E-01	1.59E-01	1.88E-01	2.17E-01	2.46E-01	2.76E-01	3.05E-01	3	
ethyl benzene	2.39E-04	5.14E-04	6.84E-04	7.14E-04	1.22E-04	5.86E-05	-2.53E-03	8.54E-03	1.96E-02	3.07E-02	4.18E-02	5.28E-02	6.39E-02	7.50E-02	8.60E-02	9.71E-02	1.08E-01	NA	
ethyl chloride (chloroethane)	0.00E+00	4.93E-04	1.48E-04	1.73E-04	3.33E-04	2.50E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA	
ethylene glycol	0.00E+00	4.12E-04	1.23E-04	1.44E-04	2.78E-04	2.09E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA	
formaldehyde	9.83E-03	4.92E-03	4.45E-03	6.24E-03	1.38E-03	2.61E-03	2.44E-01	2.62E-01	2.81E-01	3.00E-01	3.19E-01	3.37E-01	3.56E-01	3.75E-01	3.94E-01	4.12E-01	4.31E-01	9	
hexane	1.33E-04	8.58E-05	7.68E-05	9.37E-05	1.96E-05	2.98E-05	-5.25E-03	1.47E-03	8.19E-03	1.49E-02	2.16E-02	2.84E-02	3.51E-02	4.18E-02	4.85E-02	5.52E-02	6.20E-02	NA	
methanol	2.13E-05	1.17E-05	1.05E-05	1.40E-05	3.04E-06	5.39E-06	4.52E-02	4.68E-02	4.84E-02	4.99E-02	5.15E-02	5.31E-02	5.46E-02	5.62E-02	5.78E-02	5.93E-02	6.09E-02	NA	
methyl chloride (chloromethane)	0.00E+00	4.12E-04	1.23E-04	1.44E-04	2.78E-04	2.09E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA	
methyl ethyl ketone (2-butanone)	9.86E-04	4.91E-04	4.44E-04	6.24E-04	1.38E-04	2.62E-04	-6.22E-03	-5.57E-03	-4.92E-03	-4.26E-03	-3.61E-03	-2.95E-03	-2.30E-03	-1.65E-03	-9.93E-04	-3.39E-04	3.15E-04	NA	
methyl tert-butyl ether	8.19E-06	1.02E-05	8.99E-06	8.19E-06	1.46E-06	4.72E-07	-1.43E-03	4.78E-04	2.39E-03	4.30E-03	6.21E-03	8.13E-03	1.00E-02	1.20E-02	1.39E-02	1.58E-02	1.77E-02	NA	
naphthalene	6.84E-05	4.05E-05	3.63E-05	4.65E-05	9.92E-06	1.64E-05	1.18E-02	1.31E-02	1.44E-02	1.58E-02	1.71E-02	1.85E-02	1.98E-02	2.11E-02	2.25E-02	2.38E-02	2.51E-02	NA	
phenol	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E-02	1.90E-02	1.96E-02	2.02E-02	2.09E-02	2.15E-02	2.21E-02	2.28E-02	2.34E-02	2.40E-02	2.47E-02	NA	
propylene	1.80E-03	9.46E-04	8.54E-04	1.16E-03	2.55E-04	4.64E-04	9.22E-02	1.30E-01	1.67E-01	2.05E-01	2.42E-01	2.80E-01	3.17E-01	3.55E-01	3.92E-01	4.30E-01	4.67E-01	NA	
styrene	4.52E-05	2.65E-05	2.38E-05	3.06E-05	6.54E-06	1.09E-05	6.65E-03	9.00E-03	1.14E-02	1.37E-02	1.61E-02	1.84E-02	2.08E-02	2.31E-02	2.55E-02	2.78E-02	3.02E-02	NA	
toluene	1.12E-03	1.70E-03	2.14E-03	2.30E-03	4.06E-04	2.74E-04	-1.52E-02	4.02E-02	9.56E-02	1.51E-01	2.06E-01	2.62E-01	3.17E-01	3.73E-01	4.28E-01	4.83E-01	5.39E-01	830	
xylenes (mixed)	0.00E+00	1.37E-03	2.05E-03	2.03E-03	3.23E-04	6.85E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA	
<b>Total 8-Hour Hazard Index by Year</b>	<b>1.66E-03</b>	<b>1.53E-03</b>	<b>9.69E-04</b>	<b>1.78E-03</b>	<b>3.68E-04</b>	<b>4.49E-04</b>	<b>1.24E-01</b>	<b>1.42E-01</b>	<b>1.59E-01</b>	<b>1.76E-01</b>	<b>1.93E-01</b>	<b>2.10E-01</b>	<b>2.28E-01</b>	<b>2.45E-01</b>	<b>2.62E-01</b>	<b>2.79E-01</b>	<b>2.96E-01</b>		

Oakland International Airport Terminal Modernization & Development Project  
 Table 2-14. 8-Hour Hazard Index - Offsite Worker

0.958 Maximum 8-Hour Hazard Index

ReclD UTM X (m) UTM Y (m)  
 Maximum Impact Location: 1281 570400 4173500

0.008 Construction  
 0.958 Operations

TAC	Project-Related Incremental Concentrations (ug/m <sup>3</sup> ) at Location with Maximum Risk																	8-Hour
	Construction						Incremental Operation											REL
	2025	2026	2027	2028	2029	2030	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	(ug/m <sup>3</sup> )
DPM	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
ammonia	3.22E-04	2.49E-04	1.16E-04	1.90E-04	8.72E-05	9.64E-05	-3.55E-03	-3.60E-03	-3.65E-03	-3.71E-03	-3.76E-03	-3.81E-03	-3.86E-03	-3.91E-03	-3.97E-03	-4.02E-03	-4.07E-03	NA
arsenic	4.84E-07	6.25E-06	1.13E-06	4.85E-06	5.98E-07	1.14E-06	-5.10E-06	-5.15E-06	-5.21E-06	-5.26E-06	-5.31E-06	-5.36E-06	-5.41E-06	-5.46E-06	-5.51E-06	-5.57E-06	-5.62E-06	0.015
cadmium	3.82E-06	1.21E-05	2.86E-06	9.37E-06	1.76E-06	2.70E-06	-4.20E-05	-4.26E-05	-4.33E-05	-4.39E-05	-4.45E-05	-4.52E-05	-4.58E-05	-4.64E-05	-4.70E-05	-4.77E-05	-4.83E-05	NA
chlorine	1.10E-04	1.20E-03	2.65E-04	9.09E-04	1.12E-04	1.91E-04	-1.97E-03	-1.57E-03	-1.17E-03	-7.66E-04	-3.67E-04	3.30E-05	4.33E-04	8.32E-04	1.23E-03	1.63E-03	2.03E-03	NA
chromium	2.49E-06	6.78E-05	1.23E-05	5.22E-05	5.92E-06	1.14E-05	4.57E-05	5.23E-05	5.88E-05	6.53E-05	7.19E-05	7.84E-05	8.49E-05	9.14E-05	9.80E-05	1.05E-04	1.11E-04	0.12
cobalt	1.57E-06	3.49E-05	6.34E-06	2.69E-05	3.05E-06	5.97E-06	2.38E-05	-2.12E-05	-1.86E-05	-1.60E-05	-1.34E-05	-1.08E-05	-8.22E-06	-5.63E-06	-3.05E-06	-4.56E-07	2.13E-06	NA
copper	1.09E-05	5.04E-05	1.48E-05	3.62E-05	6.88E-06	7.16E-06	1.48E-04	1.82E-04	2.16E-04	2.50E-04	2.85E-04	3.19E-04	3.53E-04	3.88E-04	4.22E-04	4.56E-04	4.90E-04	NA
lead	4.12E-06	1.76E-04	2.96E-05	1.37E-04	1.48E-05	3.05E-05	-4.02E-04	-3.97E-04	-3.91E-04	-3.86E-04	-3.80E-04	-3.75E-04	-3.69E-04	-3.64E-04	-3.58E-04	-3.53E-04	-3.47E-04	NA
manganese	5.54E-06	2.90E-04	4.92E-05	2.24E-04	2.42E-05	4.93E-05	-1.60E-05	-8.90E-06	-1.86E-06	5.19E-06	1.22E-05	1.93E-05	2.63E-05	3.34E-05	4.04E-05	4.75E-05	5.45E-05	0.17
mercury	2.87E-06	6.81E-06	1.77E-06	5.25E-06	1.14E-06	1.64E-06	-3.15E-05	-3.20E-05	-3.25E-05	-3.29E-05	-3.34E-05	-3.39E-05	-3.43E-05	-3.48E-05	-3.53E-05	-3.57E-05	-3.62E-05	0.06
nickel	2.81E-06	2.16E-05	4.69E-06	1.65E-05	2.30E-06	3.75E-06	-2.60E-05	-2.17E-05	-1.73E-05	-1.29E-05	-8.49E-06	-4.10E-06	2.94E-07	4.68E-06	9.07E-06	1.35E-05	1.79E-05	0.06
selenium	9.78E-07	1.40E-06	4.67E-07	1.07E-06	3.18E-07	3.94E-07	-1.00E-05	-1.01E-05	-1.01E-05	-1.02E-05	-1.03E-05	-1.03E-05	-1.04E-05	-1.05E-05	-1.05E-05	-1.06E-05	-1.07E-05	NA
silica, crystalline (respirable)	2.84E-04	6.05E-02	9.92E-03	4.70E-02	4.87E-03	1.03E-02	-1.64E-03	-1.50E-03	-1.35E-03	-1.20E-03	-1.06E-03	-9.11E-04	-7.65E-04	-6.18E-04	-4.72E-04	-3.25E-04	-1.79E-04	NA
sulfates	2.16E-03	3.36E-03	1.33E-03	2.45E-03	6.78E-04	7.36E-04	-2.88E-02	-2.65E-02	-2.42E-02	-2.19E-02	-1.96E-02	-1.72E-02	-1.49E-02	-1.26E-02	-1.03E-02	-8.02E-03	-5.71E-03	NA
vanadium (fume or dust)	3.22E-06	8.44E-05	1.47E-05	6.53E-05	7.41E-06	1.47E-05	-2.06E-05	-1.93E-05	-1.79E-05	-1.66E-05	-1.53E-05	-1.40E-05	-1.27E-05	-1.13E-05	-1.00E-05	-8.71E-06	-7.39E-06	NA
1,3-butadiene	5.88E-04	3.62E-04	1.86E-04	2.79E-04	7.94E-05	1.79E-04	4.97E-02	8.21E-02	1.15E-01	1.47E-01	1.79E-01	2.12E-01	2.44E-01	2.77E-01	3.09E-01	3.41E-01	3.74E-01	9
acetaldehyde	2.22E-02	1.33E-02	6.60E-03	1.03E-02	2.98E-03	6.88E-03	-2.89E-02	1.60E-02	6.09E-02	1.06E-01	1.51E-01	1.96E-01	2.41E-01	2.85E-01	3.30E-01	3.75E-01	4.20E-01	300
acrolein	2.55E-07	3.18E-07	2.80E-07	2.55E-07	4.54E-08	1.50E-08	8.77E-02	1.07E-01	1.26E-01	1.45E-01	1.65E-01	1.84E-01	2.03E-01	2.22E-01	2.42E-01	2.61E-01	2.80E-01	0.7
benzene	6.29E-03	5.28E-03	2.28E-03	3.34E-03	1.68E-03	1.91E-03	-9.15E-02	3.23E-02	1.56E-01	2.80E-01	4.04E-01	5.28E-01	6.51E-01	7.75E-01	8.99E-01	1.02E+00	1.15E+00	3
ethyl benzene	1.00E-03	2.41E-03	2.00E-03	2.28E-03	4.41E-04	3.38E-04	-2.91E-02	1.64E-02	6.19E-02	1.07E-01	1.53E-01	1.98E-01	2.44E-01	2.89E-01	3.35E-01	3.80E-01	4.26E-01	NA
ethyl chloride (chloroethane)	0.00E+00	2.72E-03	4.41E-04	5.95E-04	1.67E-03	5.80E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
ethylene glycol	0.00E+00	2.27E-03	3.69E-04	4.98E-04	1.40E-03	4.85E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
formaldehyde	4.44E-02	2.67E-02	1.32E-02	2.05E-02	5.95E-03	1.38E-02	8.85E-02	1.96E-01	3.03E-01	4.11E-01	5.18E-01	6.26E-01	7.33E-01	8.40E-01	9.48E-01	1.06E+00	1.16E+00	9
hexane	5.38E-04	3.58E-04	2.03E-04	2.78E-04	7.44E-05	1.53E-04	-2.63E-02	1.10E-03	2.85E-02	5.59E-02	8.33E-02	1.11E-01	1.38E-01	1.66E-01	1.93E-01	2.20E-01	2.48E-01	NA
methanol	9.34E-05	5.78E-05	2.99E-05	4.46E-05	1.26E-05	2.82E-05	6.30E-02	7.43E-02	8.55E-02	9.68E-02	1.08E-01	1.19E-01	1.30E-01	1.42E-01	1.53E-01	1.64E-01	1.75E-01	NA
methyl chloride (chloromethane)	0.00E+00	2.27E-03	3.69E-04	4.98E-04	1.40E-03	4.85E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
methyl ethyl ketone (2-butanone)	4.46E-03	2.68E-03	1.32E-03	2.06E-03	5.98E-04	1.38E-03	-3.30E-02	-3.06E-02	-2.81E-02	-2.57E-02	-2.33E-02	-2.08E-02	-1.84E-02	-1.59E-02	-1.35E-02	-1.11E-02	-8.64E-03	NA
methyl tert-butyl ether	1.73E-05	2.15E-05	1.89E-05	1.73E-05	3.07E-06	1.01E-06	-7.09E-03	7.21E-04	8.53E-03	1.63E-02	2.42E-02	3.20E-02	3.98E-02	4.76E-02	5.54E-02	6.32E-02	7.10E-02	NA
naphthalene	2.89E-04	1.85E-04	9.98E-05	1.43E-04	3.95E-05	8.52E-05	1.02E-02	1.72E-02	2.41E-02	3.10E-02	3.80E-02	4.49E-02	5.18E-02	5.88E-02	6.57E-02	7.26E-02	7.96E-02	NA
phenol	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.61E-02	3.06E-02	3.51E-02	3.97E-02	4.42E-02	4.87E-02	5.32E-02	5.78E-02	6.23E-02	6.68E-02	7.14E-02	NA
propylene	7.98E-03	4.88E-03	2.47E-03	3.76E-03	1.07E-03	2.44E-03	4.49E-02	2.09E-01	3.73E-01	5.37E-01	7.01E-01	8.66E-01	1.03E+00	1.19E+00	1.36E+00	1.52E+00	1.69E+00	NA
styrene	1.92E-04	1.22E-04	6.56E-05	9.46E-05	2.62E-05	5.68E-05	5.11E-03	1.55E-02	2.59E-02	3.63E-02	4.67E-02	5.71E-02	6.75E-02	7.79E-02	8.83E-02	9.87E-02	1.09E-01	NA
toluene	4.74E-03	7.96E-03	6.24E-03	7.31E-03	1.49E-03	1.52E-03	-1.39E-01	8.81E-02	3.15E-01	5.42E-01	7.69E-01	9.96E-01	1.22E+00	1.45E+00	1.68E+00	1.90E+00	2.13E+00	830
xylenes (mixed)	0.00E+00	6.52E-03	6.10E-03	6.58E-03	1.12E-03	1.63E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
<b>Total 8-Hour Hazard Index by Year</b>	<b>7.36E-03</b>	<b>7.98E-03</b>	<b>2.85E-03</b>	<b>5.91E-03</b>	<b>1.53E-03</b>	<b>2.76E-03</b>	<b>1.09E-01</b>	<b>1.94E-01</b>	<b>2.79E-01</b>	<b>3.64E-01</b>	<b>4.48E-01</b>	<b>5.33E-01</b>	<b>6.18E-01</b>	<b>7.03E-01</b>	<b>7.88E-01</b>	<b>8.73E-01</b>	<b>9.58E-01</b>	

Oakland International Airport Terminal Modernization & Development Project  
Table 2-15. 8-Hour Hazard Index - On-Airport Worker

TAC	RecID	UTM X (m)	UTM Y (m)	1.993 Maximum Acute Hazard Index														REL (µg/m³)	1/REL (µg/m³) <sup>-1</sup>		
				0.034 Construction 1.993 Operations																	
				Project-Related Incremental Concentrations (ug/m³) at Location with Maximum Risk																	
Construction						Incremental Operation								8-Hour Non-Cancer							
2025	2026	2027	2028	2029	2030	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	REL	1/REL			
DPM	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA	NA
ammonia	7.17E-04	4.67E-04	5.11E-04	1.04E-03	1.17E-03	1.50E-03	-4.25E-02	-4.31E-02	-4.36E-02	-4.41E-02	-4.47E-02	-4.52E-02	-4.57E-02	-4.63E-02	-4.68E-02	-4.73E-02	-4.78E-02	0.015	66.66667	NA	NA
arsenic	1.07E-06	1.24E-05	4.94E-06	2.43E-05	5.80E-06	2.75E-06	-6.23E-05	-6.31E-05	-6.38E-05	-6.46E-05	-6.54E-05	-6.61E-05	-6.69E-05	-6.76E-05	-6.84E-05	-6.91E-05	-6.99E-05	0.015	66.66667	NA	NA
cadmium	8.51E-06	2.38E-05	1.26E-05	4.78E-05	2.03E-05	1.87E-05	-5.05E-04	-5.12E-04	-5.18E-04	-5.24E-04	-5.31E-04	-5.37E-04	-5.43E-04	-5.49E-04	-5.56E-04	-5.62E-04	-5.68E-04	0.12	8.333333	NA	NA
chlorine	1.68E-04	2.29E-03	8.97E-04	4.25E-03	8.67E-04	2.51E-04	-6.49E-02	-6.11E-02	-5.73E-02	-5.35E-02	-4.96E-02	-4.58E-02	-4.20E-02	-3.82E-02	-3.44E-02	-3.06E-02	-2.68E-02	0.12	8.333333	NA	NA
chromium	4.20E-06	1.33E-04	4.94E-05	2.55E-04	4.93E-05	1.12E-05	-3.93E-04	-3.55E-04	-3.17E-04	-2.79E-04	-2.41E-04	-2.03E-04	-1.65E-04	-1.27E-04	-8.85E-05	-5.04E-05	-1.24E-05	0.12	8.333333	NA	NA
cobalt	2.98E-06	6.88E-05	2.60E-05	1.33E-04	2.69E-05	7.88E-06	-5.76E-04	-5.50E-04	-5.24E-04	-4.98E-04	-4.73E-04	-4.47E-04	-4.21E-04	-3.96E-04	-3.70E-04	-3.44E-04	-3.18E-04	0.06	16.66667	NA	NA
copper	1.57E-05	8.88E-05	3.81E-05	1.49E-04	3.64E-05	1.50E-05	2.36E-04	3.03E-04	3.70E-04	4.36E-04	5.03E-04	5.70E-04	6.36E-04	7.03E-04	7.70E-04	8.36E-04	9.03E-04	0.06	16.66667	NA	NA
lead	9.07E-06	3.50E-04	1.29E-04	6.81E-04	1.34E-04	3.40E-05	-5.08E-04	-5.02E-04	-4.96E-04	-4.90E-04	-4.84E-04	-4.78E-04	-4.72E-04	-4.67E-04	-4.61E-04	-4.55E-04	-4.49E-04	0.17	5.882353	NA	NA
manganese	1.06E-05	5.74E-04	2.10E-04	1.11E-03	2.10E-04	4.31E-05	-7.75E-04	-7.45E-04	-7.16E-04	-6.87E-04	-6.58E-04	-6.28E-04	-5.99E-04	-5.70E-04	-5.41E-04	-5.11E-04	-4.82E-04	0.06	16.66667	NA	NA
mercury	6.39E-06	1.33E-05	7.81E-06	2.70E-05	1.36E-05	1.38E-05	-3.79E-04	-3.84E-04	-3.88E-04	-3.93E-04	-3.98E-04	-4.03E-04	-4.07E-04	-4.12E-04	-4.17E-04	-4.22E-04	-4.26E-04	0.06	16.66667	NA	NA
nickel	5.25E-06	4.16E-05	1.73E-05	7.88E-05	1.98E-05	1.02E-05	-6.20E-04	-5.93E-04	-5.66E-04	-5.39E-04	-5.12E-04	-4.85E-04	-4.58E-04	-4.31E-04	-4.04E-04	-3.77E-04	-3.50E-04	0.06	16.66667	NA	NA
selenium	2.16E-06	2.68E-06	1.99E-06	5.54E-06	3.93E-06	4.52E-06	-1.24E-04	-1.25E-04	-1.26E-04	-1.28E-04	-1.29E-04	-1.31E-04	-1.32E-04	-1.34E-04	-1.35E-04	-1.37E-04	-1.38E-04	0.06	16.66667	NA	NA
silica, crystalline (respirable)	5.86E-04	1.21E-01	4.32E-02	2.34E-01	4.25E-02	6.44E-03	-2.58E-02	-2.59E-02	-2.61E-02	-2.62E-02	-2.64E-02	-2.65E-02	-2.67E-02	-2.68E-02	-2.70E-02	-2.71E-02	-2.73E-02	0.06	16.66667	NA	NA
sulfates	4.31E-03	5.91E-03	4.18E-03	1.08E-02	7.10E-03	7.93E-03	-6.10E-01	-5.88E-01	-5.66E-01	-5.44E-01	-5.22E-01	-5.00E-01	-4.78E-01	-4.56E-01	-4.34E-01	-4.11E-01	-3.89E-01	0.06	16.66667	NA	NA
vanadium (fume or dust)	6.72E-06	1.67E-04	6.28E-05	3.24E-04	6.65E-05	2.02E-05	-3.12E-04	-3.14E-04	-3.17E-04	-3.19E-04	-3.21E-04	-3.23E-04	-3.26E-04	-3.28E-04	-3.30E-04	-3.32E-04	-3.35E-04	0.06	16.66667	NA	NA
1,3-butadiene	1.28E-03	6.88E-04	6.70E-04	1.31E-03	1.51E-03	2.68E-03	4.96E-01	5.29E-01	5.62E-01	5.95E-01	6.28E-01	6.61E-01	6.94E-01	7.27E-01	7.60E-01	7.93E-01	8.26E-01	9	0.111111	9	0.111111
acetaldehyde	4.87E-02	2.58E-02	2.52E-02	5.02E-02	5.83E-02	1.04E-01	-8.01E-01	-7.23E-01	-6.45E-01	-5.66E-01	-4.88E-01	-4.09E-01	-3.31E-01	-2.52E-01	-1.74E-01	-9.56E-02	-1.72E-02	300	0.003333	300	0.003333
acrolein	3.10E-07	3.87E-07	3.40E-07	3.10E-07	5.51E-08	1.81E-08	9.00E-01	9.49E-01	9.97E-01	1.05E+00	1.09E+00	1.14E+00	1.19E+00	1.24E+00	1.29E+00	1.34E+00	1.39E+00	0.7	1.428571	0.7	1.428571
benzene	1.36E-02	1.05E-02	8.27E-03	1.61E-02	4.00E-02	2.83E-02	-1.19E+00	-1.16E+00	-1.14E+00	-1.11E+00	-1.08E+00	-1.05E+00	-1.02E+00	-9.95E-01	-9.67E-01	-9.38E-01	-9.10E-01	3	0.333333	3	0.333333
ethyl benzene	2.14E-03	3.90E-03	9.54E-03	1.78E-02	5.11E-03	4.40E-03	-3.46E-01	-3.44E-01	-3.42E-01	-3.39E-01	-3.37E-01	-3.35E-01	-3.33E-01	-3.30E-01	-3.28E-01	-3.26E-01	-3.24E-01	0.06	16.66667	NA	NA
ethyl chloride (chloroethane)	0.00E+00	6.21E-03	2.21E-03	4.44E-03	4.90E-02	3.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.06	16.66667	NA	NA
ethylene glycol	0.00E+00	5.19E-03	1.84E-03	3.71E-03	4.10E-02	2.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.06	16.66667	NA	NA
formaldehyde	9.75E-02	5.16E-02	5.04E-02	1.00E-01	1.17E-01	2.08E-01	-8.77E-02	1.44E-01	3.76E-01	6.08E-01	8.40E-01	1.07E+00	1.30E+00	1.54E+00	1.77E+00	2.00E+00	2.23E+00	9	0.111111	9	0.111111
hexane	1.13E-03	6.44E-04	6.21E-04	1.16E-03	1.28E-03	2.26E-03	-3.05E-01	-3.06E-01	-3.07E-01	-3.08E-01	-3.09E-01	-3.09E-01	-3.10E-01	-3.11E-01	-3.12E-01	-3.13E-01	-3.14E-01	0.06	16.66667	NA	NA
methanol	2.02E-04	1.09E-04	1.06E-04	2.08E-04	2.39E-04	4.24E-04	6.42E-01	6.78E-01	7.14E-01	7.49E-01	7.85E-01	8.21E-01	8.56E-01	8.92E-01	9.28E-01	9.64E-01	9.99E-01	0.06	16.66667	NA	NA
methyl chloride (chloromethane)	0.00E+00	5.19E-03	1.84E-03	3.71E-03	4.10E-02	2.53E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.06	16.66667	NA	NA
methyl ethyl ketone (2-butanone)	9.80E-03	5.19E-03	5.06E-03	1.01E-02	1.17E-02	2.09E-02	-4.35E-01	-4.36E-01	-4.37E-01	-4.38E-01	-4.39E-01	-4.40E-01	-4.41E-01	-4.42E-01	-4.44E-01	-4.45E-01	-4.46E-01	0.06	16.66667	NA	NA
methyl tert-butyl ether	2.10E-05	2.62E-05	2.30E-05	2.10E-05	3.73E-06	1.23E-06	-8.07E-02	-8.10E-02	-8.12E-02	-8.14E-02	-8.17E-02	-8.19E-02	-8.21E-02	-8.24E-02	-8.26E-02	-8.28E-02	-8.31E-02	0.06	16.66667	NA	NA
naphthalene	6.18E-04	3.42E-04	3.32E-04	6.35E-04	7.18E-04	1.27E-03	8.90E-02	9.94E-02	1.10E-01	1.20E-01	1.31E-01	1.41E-01	1.51E-01	1.62E-01	1.72E-01	1.83E-01	1.93E-01	0.06	16.66667	NA	NA
phenol	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.67E-01	2.82E-01	2.96E-01	3.10E-01	3.25E-01	3.39E-01	3.54E-01	3.68E-01	3.82E-01	3.97E-01	4.11E-01	0.06	16.66667	NA	NA
propylene	1.74E-02	9.32E-03	9.08E-03	1.79E-02	2.06E-02	3.67E-02	2.49E-01	3.35E-01	4.21E-01	5.07E-01	5.93E-01	6.78E-01	7.64E-01	8.50E-01	9.36E-01	1.02E+00	1.11E+00	0.06	16.66667	NA	NA
styrene	4.11E-04	2.27E-04	2.20E-04	4.23E-04	4.78E-04	8.48E-04	4.44E-02	5.04E-02	5.63E-02	6.22E-02	6.81E-02	7.41E-02	8.00E-02	8.59E-02	9.18E-02	9.78E-02	1.04E-01	0.06	16.66667	NA	NA
toluene	1.01E-02	1.32E-02	2.87E-02	5.38E-02	1.91E-02	2.08E-02	-1.63E+00	-1.63E+00	-1.62E+00	-1.61E+00	-1.61E+00	-1.60E+00	-1.59E+00	-1.58E+00	-1.58E+00	-1.57E+00	-1.56E+00	830	0.001205	830	0.001205
xylenes (mixed)	0.00E+00	1.00E-02	3.09E-02	5.76E-02	9.73E-03	8.47E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.06	16.66667	NA	NA
<b>Total Acute Hazard Index by Year</b>	<b>1.60E-02</b>	<b>1.56E-02</b>	<b>1.09E-02</b>	<b>2.90E-02</b>	<b>2.93E-02</b>	<b>3.41E-02</b>	<b>9.01E-01</b>	<b>1.01E+00</b>	<b>1.12E+00</b>	<b>1.23E+00</b>	<b>1.34E+00</b>	<b>1.45E+00</b>	<b>1.56E+00</b>	<b>1.67E+00</b>	<b>1.77E+00</b>	<b>1.88E+00</b>	<b>1.99E+00</b>				

OAK Terminal Modernization & Development

Table 2-16. Residential Cancer Risks (Inhalation)

Combined Construction & Operations

Combined Construction + Operations

Inhalation Residential Cancer Risk

Operations Only

Inhalation Residential Cancer Risk

Construction Only

Inhalation Residential Cancer Risk

RecID	UTM X	UTM Y	Receptor Type	Maximum->			Minimum->			Max RecID->		
				-1.15E-07	-3.31E-08	-1.74E-07	-3.00E-05	-2.07E-05	-4.04E-06	4.93E-08	1.48E-06	2.27E-07
				-1.61E-05	-5.66E-06	-2.77E-06	3177	3179	2965	1923	1953	2104
				2025-2054	2025-2033	2025-2036	2028-2057	2028-2036	2028-2039	2025-2030	2025-2030	2025-2030
			30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	6 Yrs	6 Yrs	6 Yrs	
			Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	
36	566000.00	4176600.00	RESIDENTIAL	-1.62E-06	-4.78E-07	-	-3.31E-06	-2.30E-06	-	9.34E-09	2.84E-07	-
37	566000.00	4176700.00	RESIDENTIAL	-1.56E-06	-4.59E-07	-	-3.20E-06	-2.22E-06	-	9.01E-09	2.75E-07	-
38	566000.00	4176800.00	RESIDENTIAL	-1.51E-06	-4.40E-07	-	-3.09E-06	-2.14E-06	-	8.82E-09	2.69E-07	-
39	566000.00	4176900.00	RESIDENTIAL	-1.45E-06	-4.21E-07	-	-2.97E-06	-2.06E-06	-	8.48E-09	2.61E-07	-
41	566000.00	4177100.00	RESIDENTIAL	-1.33E-06	-3.80E-07	-	-2.73E-06	-1.89E-06	-	7.91E-09	2.46E-07	-
42	566000.00	4177200.00	RESIDENTIAL	-1.26E-06	-3.59E-07	-	-2.60E-06	-1.80E-06	-	7.65E-09	2.37E-07	-
43	566000.00	4177300.00	RESIDENTIAL	-1.20E-06	-3.39E-07	-	-2.48E-06	-1.71E-06	-	7.34E-09	2.29E-07	-
44	566000.00	4177400.00	RESIDENTIAL	-1.14E-06	-3.21E-07	-	-2.37E-06	-1.64E-06	-	7.11E-09	2.22E-07	-
46	566000.00	4177600.00	SCHOOL	-1.03E-06	-2.90E-07	-6.89E-07	-2.15E-06	-1.49E-06	-1.01E-06	6.51E-09	2.05E-07	5.95E-08
47	566000.00	4177700.00	SCHOOL	-9.97E-07	-2.82E-07	-6.65E-07	-2.08E-06	-1.45E-06	-9.76E-07	6.28E-09	1.97E-07	5.74E-08
48	566000.00	4177800.00	RESIDENTIAL	-9.66E-07	-2.76E-07	-	-2.01E-06	-1.40E-06	-	6.01E-09	1.89E-07	-
49	566000.00	4177900.00	RESIDENTIAL	-9.40E-07	-2.72E-07	-	-1.96E-06	-1.37E-06	-	5.78E-09	1.81E-07	-
50	566000.00	4178000.00	RESIDENTIAL	-9.10E-07	-2.65E-07	-	-1.90E-06	-1.33E-06	-	5.62E-09	1.75E-07	-
83	566100.00	4176600.00	RESIDENTIAL	-1.66E-06	-4.90E-07	-	-3.41E-06	-2.36E-06	-	9.61E-09	2.94E-07	-
84	566100.00	4176700.00	RESIDENTIAL	-1.60E-06	-4.67E-07	-	-3.28E-06	-2.27E-06	-	9.35E-09	2.87E-07	-
85	566100.00	4176800.00	RESIDENTIAL	-1.54E-06	-4.49E-07	-	-3.16E-06	-2.19E-06	-	9.01E-09	2.77E-07	-
86	566100.00	4176900.00	RESIDENTIAL	-1.48E-06	-4.26E-07	-	-3.04E-06	-2.10E-06	-	8.71E-09	2.69E-07	-
87	566100.00	4177000.00	RESIDENTIAL	-1.41E-06	-4.04E-07	-	-2.90E-06	-2.00E-06	-	8.40E-09	2.61E-07	-
88	566100.00	4177100.00	RESIDENTIAL	-1.34E-06	-3.82E-07	-	-2.77E-06	-1.91E-06	-	8.07E-09	2.51E-07	-
89	566100.00	4177200.00	RESIDENTIAL	-1.27E-06	-3.60E-07	-	-2.63E-06	-1.82E-06	-	7.80E-09	2.43E-07	-
90	566100.00	4177300.00	RESIDENTIAL	-1.21E-06	-3.44E-07	-	-2.51E-06	-1.74E-06	-	7.42E-09	2.32E-07	-
91	566100.00	4177400.00	RESIDENTIAL	-1.16E-06	-3.26E-07	-	-2.40E-06	-1.67E-06	-	7.19E-09	2.26E-07	-
92	566100.00	4177500.00	RESIDENTIAL	-1.10E-06	-3.10E-07	-	-2.29E-06	-1.59E-06	-	6.89E-09	2.16E-07	-
93	566100.00	4177600.00	RESIDENTIAL	-1.05E-06	-2.98E-07	-	-2.19E-06	-1.53E-06	-	6.59E-09	2.07E-07	-
94	566100.00	4177700.00	RESIDENTIAL	-1.01E-06	-2.89E-07	-	-2.11E-06	-1.47E-06	-	6.36E-09	1.99E-07	-
95	566100.00	4177800.00	RESIDENTIAL	-9.93E-07	-2.87E-07	-	-2.07E-06	-1.44E-06	-	6.05E-09	1.91E-07	-
96	566100.00	4177900.00	RESIDENTIAL	-9.66E-07	-2.82E-07	-	-2.01E-06	-1.41E-06	-	5.90E-09	1.83E-07	-
97	566100.00	4178000.00	RESIDENTIAL	-9.39E-07	-2.76E-07	-	-1.95E-06	-1.36E-06	-	5.67E-09	1.75E-07	-
127	566200.00	4176500.00	RESIDENTIAL	-1.78E-06	-5.24E-07	-	-3.64E-06	-2.53E-06	-	1.03E-08	3.13E-07	-
128	566200.00	4176600.00	RESIDENTIAL	-1.71E-06	-4.99E-07	-	-3.49E-06	-2.42E-06	-	9.93E-09	3.04E-07	-
129	566200.00	4176700.00	RESIDENTIAL	-1.64E-06	-4.76E-07	-	-3.36E-06	-2.33E-06	-	9.62E-09	2.95E-07	-
130	566200.00	4176800.00	RESIDENTIAL	-1.57E-06	-4.52E-07	-	-3.22E-06	-2.23E-06	-	9.25E-09	2.86E-07	-
131	566200.00	4176900.00	RESIDENTIAL	-1.50E-06	-4.30E-07	-	-3.09E-06	-2.13E-06	-	8.94E-09	2.77E-07	-
132	566200.00	4177000.00	RESIDENTIAL	-1.43E-06	-4.07E-07	-	-2.94E-06	-2.03E-06	-	8.56E-09	2.66E-07	-
133	566200.00	4177100.00	RESIDENTIAL	-1.37E-06	-3.87E-07	-	-2.82E-06	-1.95E-06	-	8.26E-09	2.58E-07	-
134	566200.00	4177200.00	RESIDENTIAL	-1.30E-06	-3.69E-07	-	-2.69E-06	-1.86E-06	-	7.92E-09	2.47E-07	-
135	566200.00	4177300.00	RESIDENTIAL	-1.23E-06	-3.48E-07	-	-2.55E-06	-1.77E-06	-	7.58E-09	2.38E-07	-
136	566200.00	4177400.00	RESIDENTIAL	-1.17E-06	-3.31E-07	-	-2.44E-06	-1.69E-06	-	7.27E-09	2.29E-07	-
137	566200.00	4177500.00	RESIDENTIAL	-1.12E-06	-3.20E-07	-	-2.34E-06	-1.63E-06	-	6.97E-09	2.19E-07	-
138	566200.00	4177600.00	RESIDENTIAL	-1.07E-06	-3.07E-07	-	-2.24E-06	-1.56E-06	-	6.67E-09	2.09E-07	-
139	566200.00	4177700.00	RESIDENTIAL	-1.05E-06	-3.03E-07	-	-2.18E-06	-1.52E-06	-	6.44E-09	2.02E-07	-
140	566200.00	4177800.00	RESIDENTIAL	-1.02E-06	-2.99E-07	-	-2.12E-06	-1.49E-06	-	6.20E-09	1.93E-07	-
141	566200.00	4177900.00	RESIDENTIAL	-9.92E-07	-2.93E-07	-	-2.06E-06	-1.44E-06	-	5.94E-09	1.85E-07	-
142	566200.00	4178000.00	RESIDENTIAL	-9.70E-07	-2.88E-07	-	-2.00E-06	-1.40E-06	-	5.67E-09	1.76E-07	-
170	566300.00	4176400.00	RESIDENTIAL	-1.90E-06	-5.61E-07	-	-3.89E-06	-2.70E-06	-	1.10E-08	3.34E-07	-
171	566300.00	4176500.00	RESIDENTIAL	-1.82E-06	-5.34E-07	-	-3.74E-06	-2.59E-06	-	1.06E-08	3.25E-07	-
172	566300.00	4176600.00	RESIDENTIAL	-1.75E-06	-5.07E-07	-	-3.59E-06	-2.48E-06	-	1.02E-08	3.16E-07	-
173	566300.00	4176700.00	RESIDENTIAL	-1.67E-06	-4.82E-07	-	-3.43E-06	-2.38E-06	-	9.86E-09	3.05E-07	-
174	566300.00	4176800.00	RESIDENTIAL	-1.60E-06	-4.59E-07	-	-3.29E-06	-2.27E-06	-	9.48E-09	2.94E-07	-
175	566300.00	4176900.00	RESIDENTIAL	-1.53E-06	-4.36E-07	-	-3.14E-06	-2.17E-06	-	9.10E-09	2.84E-07	-
176	566300.00	4177000.00	RESIDENTIAL	-1.46E-06	-4.14E-07	-	-3.01E-06	-2.08E-06	-	8.80E-09	2.74E-07	-
177	566300.00	4177100.00	RESIDENTIAL	-1.39E-06	-3.93E-07	-	-2.87E-06	-1.98E-06	-	8.42E-09	2.63E-07	-
178	566300.00	4177200.00	RESIDENTIAL	-1.32E-06	-3.74E-07	-	-2.73E-06	-1.89E-06	-	8.08E-09	2.53E-07	-
179	566300.00	4177300.00	RESIDENTIAL	-1.25E-06	-3.53E-07	-	-2.60E-06	-1.80E-06	-	7.73E-09	2.44E-07	-
180	566300.00	4177400.00	RESIDENTIAL	-1.20E-06	-3.39E-07	-	-2.49E-06	-1.73E-06	-	7.46E-09	2.34E-07	-
181	566300.00	4177500.00	RESIDENTIAL	-1.14E-06	-3.26E-07	-	-2.38E-06	-1.66E-06	-	7.12E-09	2.24E-07	-
182	566300.00	4177600.00	RESIDENTIAL	-1.11E-06	-3.21E-07	-	-2.31E-06	-1.61E-06	-	6.82E-09	2.14E-07	-
183	566300.00	4177700.00	RESIDENTIAL	-1.08E-06	-3.17E-07	-	-2.24E-06	-1.57E-06	-	6.51E-09	2.04E-07	-
184	566300.00	4177800.00	RESIDENTIAL	-1.05E-06	-3.10E-07	-	-2.18E-06	-1.53E-06	-	6.28E-09	1.96E-07	-
185	566300.00	4177900.00	RESIDENTIAL	-1.02E-06	-3.01E-07	-	-2.11E-06	-1.48E-06	-	6.02E-09	1.87E-07	-
186	566300.00	4178000.00	RESIDENTIAL	-9.88E-07	-2.93E-07	-	-2.04E-06	-1.43E-06	-	5.82E-09	1.80E-07	-
214	566400.00	4176300.00	RESIDENTIAL	-2.04E-06	-6.05E-07	-	-4.18E-06	-2.90E-06	-	1.17E-08	3.57E-07	-
215	566400.00	4176400.00	RESIDENTIAL	-1.96E-06	-5.77E-07	-	-4.02E-06	-2.78E-06	-	1.13E-08	3.46E-07	-

OAK Terminal Modernization & Development

Table 2-16. Residential Cancer Risks (Inhalation)

Combined Construction & Operations

Combined Construction + Operations

Inhalation Residential Cancer Risk

Operations Only

Inhalation Residential Cancer Risk

Construction Only

Inhalation Residential Cancer Risk

RecID	UTM X	UTM Y	Receptor Type	Combined Construction + Operations			Operations Only			Construction Only			
				Maximum->	-1.15E-07	-3.31E-08	-1.74E-07	-2.39E-07	-1.69E-07	-2.53E-07	4.93E-08	1.48E-06	2.27E-07
				Minimum->	-1.61E-05	-5.66E-06	-2.77E-06	-3.00E-05	-2.07E-05	-4.04E-06	6.84E-10	2.09E-08	1.47E-08
				Max RecID->	3177	3179	2965	3177	3179	2965	1923	1953	2104
				2025-2054	2025-2033	2025-2036	2028-2057	2028-2036	2028-2039	2025-2030	2025-2030	2025-2030	
				30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	6 Yrs	6 Yrs	6 Yrs	
				Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	
216	566400.00	4176500.00	RESIDENTIAL	-1.88E-06	-5.50E-07	-	-3.85E-06	-2.67E-06	-	1.09E-08	3.35E-07	-	
217	566400.00	4176600.00	RESIDENTIAL	-1.79E-06	-5.17E-07	-	-3.68E-06	-2.54E-06	-	1.06E-08	3.26E-07	-	
218	566400.00	4176700.00	RESIDENTIAL	-1.71E-06	-4.91E-07	-	-3.52E-06	-2.43E-06	-	1.02E-08	3.15E-07	-	
219	566400.00	4176800.00	RESIDENTIAL	-1.63E-06	-4.65E-07	-	-3.36E-06	-2.32E-06	-	9.75E-09	3.04E-07	-	
220	566400.00	4176900.00	RESIDENTIAL	-1.56E-06	-4.41E-07	-	-3.20E-06	-2.21E-06	-	9.37E-09	2.93E-07	-	
221	566400.00	4177000.00	RESIDENTIAL	-1.49E-06	-4.21E-07	-	-3.06E-06	-2.12E-06	-	8.95E-09	2.80E-07	-	
222	566400.00	4177100.00	RESIDENTIAL	-1.42E-06	-4.02E-07	-	-2.93E-06	-2.03E-06	-	8.57E-09	2.69E-07	-	
223	566400.00	4177200.00	RESIDENTIAL	-1.35E-06	-3.82E-07	-	-2.79E-06	-1.93E-06	-	8.19E-09	2.58E-07	-	
224	566400.00	4177300.00	RESIDENTIAL	-1.28E-06	-3.64E-07	-	-2.66E-06	-1.85E-06	-	7.85E-09	2.48E-07	-	
225	566400.00	4177400.00	RESIDENTIAL	-1.23E-06	-3.51E-07	-	-2.55E-06	-1.78E-06	-	7.55E-09	2.38E-07	-	
226	566400.00	4177500.00	RESIDENTIAL	-1.18E-06	-3.42E-07	-	-2.46E-06	-1.71E-06	-	7.20E-09	2.26E-07	-	
227	566400.00	4177600.00	RESIDENTIAL	-1.15E-06	-3.38E-07	-	-2.39E-06	-1.67E-06	-	6.90E-09	2.16E-07	-	
228	566400.00	4177700.00	RESIDENTIAL	-1.12E-06	-3.29E-07	-	-2.31E-06	-1.62E-06	-	6.63E-09	2.08E-07	-	
229	566400.00	4177800.00	RESIDENTIAL	-1.08E-06	-3.19E-07	-	-2.23E-06	-1.56E-06	-	6.40E-09	1.98E-07	-	
230	566400.00	4177900.00	RESIDENTIAL	-1.05E-06	-3.12E-07	-	-2.17E-06	-1.52E-06	-	6.13E-09	1.90E-07	-	
231	566400.00	4178000.00	RESIDENTIAL	-1.01E-06	-3.01E-07	-	-2.08E-06	-1.46E-06	-	5.86E-09	1.82E-07	-	
260	566500.00	4176400.00	RESIDENTIAL	-2.02E-06	-5.90E-07	-	-4.14E-06	-2.87E-06	-	1.17E-08	3.60E-07	-	
261	566500.00	4176500.00	RESIDENTIAL	-1.93E-06	-5.58E-07	-	-3.96E-06	-2.74E-06	-	1.13E-08	3.49E-07	-	
262	566500.00	4176600.00	RESIDENTIAL	-1.84E-06	-5.28E-07	-	-3.77E-06	-2.61E-06	-	1.09E-08	3.36E-07	-	
263	566500.00	4176700.00	RESIDENTIAL	-1.75E-06	-4.98E-07	-	-3.60E-06	-2.48E-06	-	1.04E-08	3.25E-07	-	
264	566500.00	4176800.00	RESIDENTIAL	-1.66E-06	-4.71E-07	-	-3.43E-06	-2.37E-06	-	1.00E-08	3.13E-07	-	
265	566500.00	4176900.00	RESIDENTIAL	-1.59E-06	-4.49E-07	-	-3.28E-06	-2.26E-06	-	9.56E-09	3.00E-07	-	
266	566500.00	4177000.00	RESIDENTIAL	-1.51E-06	-4.28E-07	-	-3.12E-06	-2.16E-06	-	9.15E-09	2.88E-07	-	
267	566500.00	4177100.00	RESIDENTIAL	-1.45E-06	-4.13E-07	-	-3.00E-06	-2.08E-06	-	8.69E-09	2.75E-07	-	
268	566500.00	4177200.00	RESIDENTIAL	-1.37E-06	-3.90E-07	-	-2.85E-06	-1.98E-06	-	8.39E-09	2.65E-07	-	
269	566500.00	4177300.00	RESIDENTIAL	-1.31E-06	-3.76E-07	-	-2.73E-06	-1.90E-06	-	8.05E-09	2.53E-07	-	
270	566500.00	4177400.00	RESIDENTIAL	-1.26E-06	-3.64E-07	-	-2.62E-06	-1.83E-06	-	7.66E-09	2.40E-07	-	
271	566500.00	4177500.00	RESIDENTIAL	-1.22E-06	-3.57E-07	-	-2.54E-06	-1.77E-06	-	7.39E-09	2.31E-07	-	
272	566500.00	4177600.00	RESIDENTIAL	-1.19E-06	-3.49E-07	-	-2.45E-06	-1.71E-06	-	7.01E-09	2.19E-07	-	
273	566500.00	4177700.00	RESIDENTIAL	-1.15E-06	-3.42E-07	-	-2.38E-06	-1.66E-06	-	6.71E-09	2.09E-07	-	
274	566500.00	4177800.00	RESIDENTIAL	-1.12E-06	-3.33E-07	-	-2.30E-06	-1.61E-06	-	6.44E-09	2.00E-07	-	
275	566500.00	4177900.00	RESIDENTIAL	-1.08E-06	-3.24E-07	-	-2.22E-06	-1.55E-06	-	6.13E-09	1.90E-07	-	
276	566500.00	4178000.00	RESIDENTIAL	-1.04E-06	-3.09E-07	-	-2.13E-06	-1.49E-06	-	5.90E-09	1.84E-07	-	
303	566600.00	4176300.00	RESIDENTIAL	-2.19E-06	-6.39E-07	-	-4.47E-06	-3.10E-06	-	1.26E-08	3.88E-07	-	
304	566600.00	4176400.00	RESIDENTIAL	-2.08E-06	-6.02E-07	-	-4.27E-06	-2.95E-06	-	1.22E-08	3.76E-07	-	
305	566600.00	4176500.00	RESIDENTIAL	-1.99E-06	-5.70E-07	-	-4.07E-06	-2.81E-06	-	1.17E-08	3.63E-07	-	
306	566600.00	4176600.00	RESIDENTIAL	-1.89E-06	-5.40E-07	-	-3.88E-06	-2.68E-06	-	1.12E-08	3.48E-07	-	
307	566600.00	4176700.00	RESIDENTIAL	-1.78E-06	-5.04E-07	-	-3.68E-06	-2.54E-06	-	1.08E-08	3.36E-07	-	
308	566600.00	4176800.00	RESIDENTIAL	-1.71E-06	-4.85E-07	-	-3.52E-06	-2.43E-06	-	1.02E-08	3.21E-07	-	
309	566600.00	4176900.00	RESIDENTIAL	-1.63E-06	-4.63E-07	-	-3.37E-06	-2.33E-06	-	9.80E-09	3.08E-07	-	
310	566600.00	4177000.00	RESIDENTIAL	-1.55E-06	-4.40E-07	-	-3.21E-06	-2.22E-06	-	9.35E-09	2.96E-07	-	
311	566600.00	4177100.00	RESIDENTIAL	-1.49E-06	-4.24E-07	-	-3.08E-06	-2.13E-06	-	8.96E-09	2.83E-07	-	
312	566600.00	4177200.00	RESIDENTIAL	-1.42E-06	-4.07E-07	-	-2.94E-06	-2.04E-06	-	8.58E-09	2.69E-07	-	
313	566600.00	4177300.00	RESIDENTIAL	-1.36E-06	-3.94E-07	-	-2.82E-06	-1.96E-06	-	8.16E-09	2.57E-07	-	
314	566600.00	4177400.00	RESIDENTIAL	-1.31E-06	-3.84E-07	-	-2.72E-06	-1.90E-06	-	7.78E-09	2.45E-07	-	
315	566600.00	4177500.00	RESIDENTIAL	-1.26E-06	-3.72E-07	-	-2.62E-06	-1.83E-06	-	7.48E-09	2.35E-07	-	
316	566600.00	4177600.00	RESIDENTIAL	-1.23E-06	-3.67E-07	-	-2.54E-06	-1.77E-06	-	7.09E-09	2.21E-07	-	
317	566600.00	4177700.00	RESIDENTIAL	-1.19E-06	-3.53E-07	-	-2.44E-06	-1.71E-06	-	6.82E-09	2.13E-07	-	
318	566600.00	4177800.00	RESIDENTIAL	-1.15E-06	-3.43E-07	-	-2.36E-06	-1.65E-06	-	6.52E-09	2.03E-07	-	
319	566600.00	4177900.00	RESIDENTIAL	-1.11E-06	-3.31E-07	-	-2.27E-06	-1.59E-06	-	6.28E-09	1.95E-07	-	
320	566600.00	4178000.00	RESIDENTIAL	-1.06E-06	-3.17E-07	-	-2.18E-06	-1.52E-06	-	6.06E-09	1.88E-07	-	
347	566700.00	4176300.00	RESIDENTIAL	-2.26E-06	-6.56E-07	-	-4.62E-06	-3.20E-06	-	1.31E-08	4.03E-07	-	
348	566700.00	4176400.00	RESIDENTIAL	-2.15E-06	-6.16E-07	-	-4.40E-06	-3.04E-06	-	1.26E-08	3.90E-07	-	
349	566700.00	4176500.00	RESIDENTIAL	-2.04E-06	-5.82E-07	-	-4.18E-06	-2.89E-06	-	1.20E-08	3.75E-07	-	
350	566700.00	4176600.00	RESIDENTIAL	-1.94E-06	-5.52E-07	-	-3.98E-06	-2.75E-06	-	1.15E-08	3.59E-07	-	
351	566700.00	4176700.00	RESIDENTIAL	-1.85E-06	-5.23E-07	-	-3.80E-06	-2.62E-06	-	1.10E-08	3.46E-07	-	
352	566700.00	4176800.00	RESIDENTIAL	-1.75E-06	-4.96E-07	-	-3.61E-06	-2.50E-06	-	1.05E-08	3.30E-07	-	
353	566700.00	4176900.00	RESIDENTIAL	-1.68E-06	-4.78E-07	-	-3.46E-06	-2.40E-06	-	1.00E-08	3.16E-07	-	
354	566700.00	4177000.00	RESIDENTIAL	-1.60E-06	-4.59E-07	-	-3.31E-06	-2.30E-06	-	9.54E-09	3.02E-07	-	
355	566700.00	4177100.00	RESIDENTIAL	-1.54E-06	-4.43E-07	-	-3.17E-06	-2.21E-06	-	9.16E-09	2.88E-07	-	
356	566700.00	4177200.00	RESIDENTIAL	-1.47E-06	-4.27E-07	-	-3.04E-06	-2.12E-06	-	8.67E-09	2.73E-07	-	
357	566700.00	4177300.00	RESIDENTIAL	-1.42E-06	-4.16E-07	-	-2.93E-06	-2.04E-06	-	8.32E-09	2.61E-07	-	
358	566700.00	4177400.00	RESIDENTIAL	-1.36E-06	-4.02E-07	-	-2.81E-06	-1.96E-06	-	7.93E-09	2.49E-07	-	

OAK Terminal Modernization & Development

Table 2-16. Residential Cancer Risks (Inhalation)

Combined Construction & Operations

Combined Construction + Operations

Inhalation Residential Cancer Risk

Operations Only

Inhalation Residential Cancer Risk

Construction Only

Inhalation Residential Cancer Risk

RecID	UTM X	UTM Y	Receptor Type	Maximum->			Minimum->			Max RecID->		
				2025-2054	2025-2033	2025-2036	2028-2057	2028-2036	2028-2039	2025-2030	2025-2030	2025-2030
				30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	6 Yrs	6 Yrs	6 Yrs
				Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child
359	566700.00	4177500.00	RESIDENTIAL	-1.32E-06	-3.93E-07	-	-2.72E-06	-1.90E-06	-	7.55E-09	2.35E-07	-
360	566700.00	4177600.00	RESIDENTIAL	-1.27E-06	-3.78E-07	-	-2.61E-06	-1.82E-06	-	7.28E-09	2.26E-07	-
361	566700.00	4177700.00	RESIDENTIAL	-1.23E-06	-3.65E-07	-	-2.52E-06	-1.76E-06	-	6.98E-09	2.17E-07	-
362	566700.00	4177800.00	RESIDENTIAL	-1.18E-06	-3.54E-07	-	-2.43E-06	-1.69E-06	-	6.67E-09	2.07E-07	-
363	566700.00	4177900.00	RESIDENTIAL	-1.13E-06	-3.38E-07	-	-2.32E-06	-1.62E-06	-	6.40E-09	1.99E-07	-
364	566700.00	4178000.00	RESIDENTIAL	-1.08E-06	-3.21E-07	-	-2.22E-06	-1.54E-06	-	6.14E-09	1.90E-07	-
390	566800.00	4176200.00	RESIDENTIAL	-2.43E-06	-7.05E-07	-	-4.98E-06	-3.45E-06	-	1.41E-08	4.37E-07	-
391	566800.00	4176300.00	RESIDENTIAL	-2.32E-06	-6.69E-07	-	-4.76E-06	-3.29E-06	-	1.35E-08	4.21E-07	-
392	566800.00	4176400.00	RESIDENTIAL	-2.21E-06	-6.34E-07	-	-4.54E-06	-3.13E-06	-	1.30E-08	4.04E-07	-
393	566800.00	4176500.00	RESIDENTIAL	-2.10E-06	-5.95E-07	-	-4.31E-06	-2.97E-06	-	1.24E-08	3.90E-07	-
394	566800.00	4176600.00	RESIDENTIAL	-2.00E-06	-5.66E-07	-	-4.11E-06	-2.83E-06	-	1.18E-08	3.73E-07	-
395	566800.00	4176700.00	RESIDENTIAL	-1.90E-06	-5.39E-07	-	-3.91E-06	-2.70E-06	-	1.13E-08	3.56E-07	-
396	566800.00	4176800.00	RESIDENTIAL	-1.81E-06	-5.16E-07	-	-3.74E-06	-2.59E-06	-	1.08E-08	3.41E-07	-
397	566800.00	4176900.00	RESIDENTIAL	-1.74E-06	-5.00E-07	-	-3.59E-06	-2.49E-06	-	1.03E-08	3.25E-07	-
398	566800.00	4177000.00	RESIDENTIAL	-1.67E-06	-4.80E-07	-	-3.44E-06	-2.39E-06	-	9.85E-09	3.10E-07	-
399	566800.00	4177100.00	RESIDENTIAL	-1.59E-06	-4.63E-07	-	-3.29E-06	-2.29E-06	-	9.35E-09	2.96E-07	-
400	566800.00	4177200.00	RESIDENTIAL	-1.54E-06	-4.52E-07	-	-3.17E-06	-2.21E-06	-	8.90E-09	2.80E-07	-
401	566800.00	4177300.00	RESIDENTIAL	-1.47E-06	-4.36E-07	-	-3.03E-06	-2.12E-06	-	8.51E-09	2.66E-07	-
402	566800.00	4177400.00	RESIDENTIAL	-1.42E-06	-4.22E-07	-	-2.92E-06	-2.03E-06	-	8.09E-09	2.52E-07	-
403	566800.00	4177500.00	RESIDENTIAL	-1.36E-06	-4.07E-07	-	-2.80E-06	-1.95E-06	-	7.67E-09	2.40E-07	-
404	566800.00	4177600.00	RESIDENTIAL	-1.31E-06	-3.93E-07	-	-2.69E-06	-1.88E-06	-	7.36E-09	2.29E-07	-
405	566800.00	4177700.00	RESIDENTIAL	-1.26E-06	-3.78E-07	-	-2.59E-06	-1.81E-06	-	7.06E-09	2.21E-07	-
406	566800.00	4177800.00	RESIDENTIAL	-1.21E-06	-3.61E-07	-	-2.48E-06	-1.73E-06	-	6.79E-09	2.11E-07	-
407	566800.00	4177900.00	RESIDENTIAL	-1.16E-06	-3.47E-07	-	-2.38E-06	-1.66E-06	-	6.48E-09	2.02E-07	-
408	566800.00	4178000.00	RESIDENTIAL	-1.11E-06	-3.30E-07	-	-2.27E-06	-1.58E-06	-	6.21E-09	1.94E-07	-
434	566900.00	4176200.00	RESIDENTIAL	-2.50E-06	-7.19E-07	-	-5.13E-06	-3.55E-06	-	1.47E-08	4.57E-07	-
435	566900.00	4176300.00	RESIDENTIAL	-2.40E-06	-6.85E-07	-	-4.91E-06	-3.39E-06	-	1.41E-08	4.39E-07	-
436	566900.00	4176400.00	RESIDENTIAL	-2.28E-06	-6.48E-07	-	-4.68E-06	-3.23E-06	-	1.34E-08	4.21E-07	-
437	566900.00	4176500.00	RESIDENTIAL	-2.17E-06	-6.16E-07	-	-4.46E-06	-3.07E-06	-	1.28E-08	4.02E-07	-
438	566900.00	4176600.00	RESIDENTIAL	-2.07E-06	-5.87E-07	-	-4.26E-06	-2.94E-06	-	1.22E-08	3.86E-07	-
439	566900.00	4176700.00	RESIDENTIAL	-1.97E-06	-5.61E-07	-	-4.06E-06	-2.80E-06	-	1.16E-08	3.68E-07	-
440	566900.00	4176800.00	RESIDENTIAL	-1.89E-06	-5.41E-07	-	-3.89E-06	-2.69E-06	-	1.11E-08	3.51E-07	-
441	566900.00	4176900.00	RESIDENTIAL	-1.81E-06	-5.24E-07	-	-3.73E-06	-2.59E-06	-	1.05E-08	3.33E-07	-
442	566900.00	4177000.00	RESIDENTIAL	-1.74E-06	-5.07E-07	-	-3.58E-06	-2.49E-06	-	1.00E-08	3.17E-07	-
443	566900.00	4177100.00	RESIDENTIAL	-1.67E-06	-4.93E-07	-	-3.44E-06	-2.40E-06	-	9.55E-09	3.02E-07	-
444	566900.00	4177200.00	RESIDENTIAL	-1.61E-06	-4.81E-07	-	-3.31E-06	-2.31E-06	-	9.09E-09	2.85E-07	-
445	566900.00	4177300.00	RESIDENTIAL	-1.53E-06	-4.57E-07	-	-3.14E-06	-2.19E-06	-	8.60E-09	2.70E-07	-
446	566900.00	4177400.00	RESIDENTIAL	-1.47E-06	-4.38E-07	-	-3.01E-06	-2.10E-06	-	8.25E-09	2.58E-07	-
447	566900.00	4177500.00	RESIDENTIAL	-1.42E-06	-4.25E-07	-	-2.89E-06	-2.02E-06	-	7.83E-09	2.44E-07	-
448	566900.00	4177600.00	RESIDENTIAL	-1.35E-06	-4.04E-07	-	-2.77E-06	-1.93E-06	-	7.56E-09	2.36E-07	-
449	566900.00	4177700.00	RESIDENTIAL	-1.30E-06	-3.91E-07	-	-2.66E-06	-1.86E-06	-	7.14E-09	2.24E-07	-
450	566900.00	4177800.00	RESIDENTIAL	-1.24E-06	-3.72E-07	-	-2.54E-06	-1.77E-06	-	6.86E-09	2.14E-07	-
451	566900.00	4177900.00	RESIDENTIAL	-1.19E-06	-3.53E-07	-	-2.42E-06	-1.69E-06	-	6.60E-09	2.06E-07	-
452	566900.00	4178000.00	RESIDENTIAL	-1.13E-06	-3.34E-07	-	-2.31E-06	-1.60E-06	-	6.33E-09	1.98E-07	-
477	567000.00	4176100.00	RESIDENTIAL	-2.69E-06	-7.71E-07	-	-5.53E-06	-3.83E-06	-	1.60E-08	4.96E-07	-
478	567000.00	4176200.00	RESIDENTIAL	-2.58E-06	-7.34E-07	-	-5.30E-06	-3.66E-06	-	1.53E-08	4.78E-07	-
479	567000.00	4176300.00	RESIDENTIAL	-2.46E-06	-6.98E-07	-	-5.06E-06	-3.49E-06	-	1.46E-08	4.58E-07	-
480	567000.00	4176400.00	RESIDENTIAL	-2.36E-06	-6.68E-07	-	-4.84E-06	-3.33E-06	-	1.38E-08	4.36E-07	-
481	567000.00	4176500.00	RESIDENTIAL	-2.25E-06	-6.39E-07	-	-4.63E-06	-3.19E-06	-	1.32E-08	4.17E-07	-
482	567000.00	4176600.00	RESIDENTIAL	-2.16E-06	-6.14E-07	-	-4.43E-06	-3.05E-06	-	1.26E-08	3.98E-07	-
483	567000.00	4176700.00	RESIDENTIAL	-2.06E-06	-5.93E-07	-	-4.24E-06	-2.93E-06	-	1.20E-08	3.78E-07	-
484	567000.00	4176800.00	RESIDENTIAL	-1.98E-06	-5.73E-07	-	-4.06E-06	-2.81E-06	-	1.13E-08	3.59E-07	-
485	567000.00	4176900.00	RESIDENTIAL	-1.90E-06	-5.55E-07	-	-3.90E-06	-2.71E-06	-	1.09E-08	3.43E-07	-
486	567000.00	4177000.00	RESIDENTIAL	-1.83E-06	-5.39E-07	-	-3.75E-06	-2.61E-06	-	1.03E-08	3.25E-07	-
487	567000.00	4177100.00	RESIDENTIAL	-1.76E-06	-5.25E-07	-	-3.60E-06	-2.51E-06	-	9.75E-09	3.07E-07	-
488	567000.00	4177200.00	RESIDENTIAL	-1.68E-06	-5.03E-07	-	-3.44E-06	-2.40E-06	-	9.29E-09	2.91E-07	-
489	567000.00	4177300.00	RESIDENTIAL	-1.60E-06	-4.80E-07	-	-3.27E-06	-2.28E-06	-	8.79E-09	2.76E-07	-
490	567000.00	4177400.00	RESIDENTIAL	-1.53E-06	-4.59E-07	-	-3.13E-06	-2.18E-06	-	8.41E-09	2.64E-07	-
491	567000.00	4177500.00	RESIDENTIAL	-1.47E-06	-4.41E-07	-	-3.00E-06	-2.09E-06	-	8.02E-09	2.52E-07	-
492	567000.00	4177600.00	RESIDENTIAL	-1.41E-06	-4.22E-07	-	-2.87E-06	-2.00E-06	-	7.64E-09	2.39E-07	-
493	567000.00	4177700.00	RESIDENTIAL	-1.35E-06	-4.04E-07	-	-2.74E-06	-1.91E-06	-	7.29E-09	2.29E-07	-
494	567000.00	4177800.00	RESIDENTIAL	-1.27E-06	-3.80E-07	-	-2.60E-06	-1.81E-06	-	6.99E-09	2.19E-07	-
495	567000.00	4177900.00	RESIDENTIAL	-1.21E-06	-3.60E-07	-	-2.48E-06	-1.72E-06	-	6.72E-09	2.10E-07	-

**OAK Terminal Modernization & Development**

**Table 2-16. Residential Cancer Risks (Inhalation)**

**Combined Construction & Operations**

**Combined Construction + Operations**

**Inhalation Residential Cancer Risk**

**Operations Only**

**Inhalation Residential Cancer Risk**

**Construction Only**

**Inhalation Residential Cancer Risk**

RecID	UTM X	UTM Y	Receptor Type	Maximum->			Minimum->			Max RecID->					
				-1.15E-07	-3.31E-08	-1.74E-07	-1.61E-05	-5.66E-06	-2.77E-06	3177	3179	2965	1923	1953	2104
				2025-2054	2025-2033	2025-2036	2028-2057	2028-2036	2028-2039	2025-2030	2025-2030	2025-2030			
				30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	6 Yrs	6 Yrs	6 Yrs			
			Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child				
496	567000.00	4178000.00	RESIDENTIAL	-1.15E-06	-3.42E-07	-	-2.35E-06	-1.64E-06	-	6.37E-09	2.00E-07	-			
520	567100.00	4176000.00	RESIDENTIAL	-2.89E-06	-8.22E-07	-	-5.96E-06	-4.12E-06	-	1.75E-08	5.44E-07	-			
521	567100.00	4176100.00	RESIDENTIAL	-2.76E-06	-7.81E-07	-	-5.70E-06	-3.93E-06	-	1.67E-08	5.22E-07	-			
522	567100.00	4176200.00	RESIDENTIAL	-2.65E-06	-7.49E-07	-	-5.46E-06	-3.76E-06	-	1.59E-08	4.98E-07	-			
523	567100.00	4176300.00	RESIDENTIAL	-2.54E-06	-7.15E-07	-	-5.23E-06	-3.60E-06	-	1.52E-08	4.78E-07	-			
524	567100.00	4176400.00	RESIDENTIAL	-2.45E-06	-6.94E-07	-	-5.03E-06	-3.47E-06	-	1.44E-08	4.55E-07	-			
525	567100.00	4176500.00	RESIDENTIAL	-2.36E-06	-6.70E-07	-	-4.83E-06	-3.33E-06	-	1.37E-08	4.34E-07	-			
526	567100.00	4176600.00	RESIDENTIAL	-2.26E-06	-6.50E-07	-	-4.64E-06	-3.20E-06	-	1.30E-08	4.11E-07	-			
527	567100.00	4176700.00	RESIDENTIAL	-2.18E-06	-6.33E-07	-	-4.46E-06	-3.09E-06	-	1.23E-08	3.90E-07	-			
528	567100.00	4176800.00	RESIDENTIAL	-2.08E-06	-6.12E-07	-	-4.27E-06	-2.96E-06	-	1.17E-08	3.70E-07	-			
529	567100.00	4176900.00	RESIDENTIAL	-2.01E-06	-5.94E-07	-	-4.10E-06	-2.85E-06	-	1.11E-08	3.51E-07	-			
530	567100.00	4177000.00	RESIDENTIAL	-1.94E-06	-5.82E-07	-	-3.96E-06	-2.76E-06	-	1.05E-08	3.31E-07	-			
531	567100.00	4177100.00	RESIDENTIAL	-1.85E-06	-5.57E-07	-	-3.77E-06	-2.63E-06	-	9.98E-09	3.14E-07	-			
532	567100.00	4177200.00	RESIDENTIAL	-1.76E-06	-5.31E-07	-	-3.59E-06	-2.50E-06	-	9.48E-09	2.99E-07	-			
533	567100.00	4177300.00	RESIDENTIAL	-1.68E-06	-5.08E-07	-	-3.43E-06	-2.39E-06	-	8.99E-09	2.82E-07	-			
534	567100.00	4177400.00	RESIDENTIAL	-1.60E-06	-4.81E-07	-	-3.25E-06	-2.26E-06	-	8.56E-09	2.68E-07	-			
535	567100.00	4177500.00	RESIDENTIAL	-1.52E-06	-4.60E-07	-	-3.10E-06	-2.16E-06	-	8.15E-09	2.56E-07	-			
536	567100.00	4177600.00	RESIDENTIAL	-1.45E-06	-4.37E-07	-	-2.96E-06	-2.06E-06	-	7.80E-09	2.45E-07	-			
537	567100.00	4177700.00	RESIDENTIAL	-1.38E-06	-4.15E-07	-	-2.81E-06	-1.95E-06	-	7.38E-09	2.32E-07	-			
538	567100.00	4177800.00	RESIDENTIAL	-1.32E-06	-3.94E-07	-	-2.68E-06	-1.86E-06	-	7.11E-09	2.23E-07	-			
539	567100.00	4177900.00	RESIDENTIAL	-1.24E-06	-3.68E-07	-	-2.53E-06	-1.75E-06	-	6.76E-09	2.13E-07	-			
540	567100.00	4178000.00	RESIDENTIAL	-1.19E-06	-3.51E-07	-	-2.41E-06	-1.67E-06	-	6.46E-09	2.03E-07	-			
564	567200.00	4176000.00	RESIDENTIAL	-2.96E-06	-8.29E-07	-	-6.13E-06	-4.23E-06	-	1.84E-08	5.74E-07	-			
565	567200.00	4176100.00	RESIDENTIAL	-2.84E-06	-7.93E-07	-	-5.87E-06	-4.05E-06	-	1.74E-08	5.49E-07	-			
566	567200.00	4176200.00	RESIDENTIAL	-2.73E-06	-7.62E-07	-	-5.63E-06	-3.88E-06	-	1.66E-08	5.23E-07	-			
567	567200.00	4176300.00	RESIDENTIAL	-2.63E-06	-7.40E-07	-	-5.42E-06	-3.73E-06	-	1.56E-08	4.95E-07	-			
568	567200.00	4176400.00	RESIDENTIAL	-2.54E-06	-7.20E-07	-	-5.22E-06	-3.60E-06	-	1.49E-08	4.73E-07	-			
569	567200.00	4176500.00	RESIDENTIAL	-2.47E-06	-7.08E-07	-	-5.05E-06	-3.49E-06	-	1.41E-08	4.48E-07	-			
570	567200.00	4176600.00	RESIDENTIAL	-2.39E-06	-6.95E-07	-	-4.89E-06	-3.38E-06	-	1.34E-08	4.25E-07	-			
571	567200.00	4176700.00	RESIDENTIAL	-2.31E-06	-6.82E-07	-	-4.71E-06	-3.27E-06	-	1.27E-08	4.01E-07	-			
572	567200.00	4176800.00	RESIDENTIAL	-2.23E-06	-6.63E-07	-	-4.54E-06	-3.15E-06	-	1.20E-08	3.80E-07	-			
573	567200.00	4176900.00	RESIDENTIAL	-2.14E-06	-6.44E-07	-	-4.35E-06	-3.03E-06	-	1.13E-08	3.58E-07	-			
574	567200.00	4177000.00	RESIDENTIAL	-2.05E-06	-6.23E-07	-	-4.16E-06	-2.90E-06	-	1.07E-08	3.38E-07	-			
582	567200.00	4177800.00	SCHOOL	-1.35E-06	-4.04E-07	-8.89E-07	-2.75E-06	-1.91E-06	-1.29E-06	7.23E-09	2.28E-07	6.61E-08			
583	567200.00	4177900.00	RESIDENTIAL	-1.29E-06	-3.88E-07	-	-2.62E-06	-1.82E-06	-	6.81E-09	2.15E-07	-			
584	567200.00	4178000.00	RESIDENTIAL	-1.22E-06	-3.64E-07	-	-2.49E-06	-1.72E-06	-	6.57E-09	2.07E-07	-			
608	567300.00	4176000.00	RESIDENTIAL	-3.03E-06	-8.37E-07	-	-6.32E-06	-4.36E-06	-	1.93E-08	6.09E-07	-			
610	567300.00	4176200.00	RESIDENTIAL	-2.81E-06	-7.80E-07	-	-5.82E-06	-4.01E-06	-	1.73E-08	5.48E-07	-			
611	567300.00	4176300.00	RESIDENTIAL	-2.73E-06	-7.64E-07	-	-5.62E-06	-3.87E-06	-	1.63E-08	5.19E-07	-			
612	567300.00	4176400.00	RESIDENTIAL	-2.66E-06	-7.58E-07	-	-5.46E-06	-3.77E-06	-	1.54E-08	4.91E-07	-			
613	567300.00	4176500.00	RESIDENTIAL	-2.61E-06	-7.54E-07	-	-5.32E-06	-3.68E-06	-	1.46E-08	4.64E-07	-			
614	567300.00	4176600.00	RESIDENTIAL	-2.54E-06	-7.46E-07	-	-5.17E-06	-3.58E-06	-	1.38E-08	4.39E-07	-			
615	567300.00	4176700.00	RESIDENTIAL	-2.47E-06	-7.35E-07	-	-5.01E-06	-3.47E-06	-	1.31E-08	4.15E-07	-			
616	567300.00	4176800.00	RESIDENTIAL	-2.39E-06	-7.22E-07	-	-4.84E-06	-3.36E-06	-	1.23E-08	3.91E-07	-			
617	567300.00	4176900.00	RESIDENTIAL	-2.29E-06	-6.99E-07	-	-4.63E-06	-3.22E-06	-	1.16E-08	3.68E-07	-			
1546	571000.00	4176300.00	RESIDENTIAL	-7.76E-06	-3.10E-06	-	-1.60E-05	-1.22E-05	-	2.87E-08	9.21E-07	-			
1547	571000.00	4176400.00	RESIDENTIAL	-7.09E-06	-2.33E-06	-	-1.38E-05	-9.55E-06	-	2.58E-08	8.25E-07	-			
1548	571000.00	4176500.00	RESIDENTIAL	-6.51E-06	-2.11E-06	-	-1.26E-05	-8.66E-06	-	2.36E-08	7.52E-07	-			
1549	571000.00	4176600.00	RESIDENTIAL	-6.13E-06	-1.98E-06	-	-1.18E-05	-8.10E-06	-	2.18E-08	6.91E-07	-			
1550	571000.00	4176700.00	RESIDENTIAL	-5.84E-06	-1.90E-06	-	-1.12E-05	-7.68E-06	-	2.03E-08	6.43E-07	-			
1567	566000.00	4179000.00	RESIDENTIAL	-6.86E-07	-2.02E-07	-	-1.41E-06	-9.84E-07	-	4.02E-09	1.24E-07	-			
1568	566000.00	4179250.00	RESIDENTIAL	-6.27E-07	-1.83E-07	-	-1.30E-06	-9.04E-07	-	3.75E-09	1.17E-07	-			
1569	566000.00	4179500.00	RESIDENTIAL	-5.72E-07	-1.65E-07	-	-1.18E-06	-8.21E-07	-	3.44E-09	1.07E-07	-			
1570	566000.00	4179750.00	RESIDENTIAL	-5.26E-07	-1.52E-07	-	-1.09E-06	-7.63E-07	-	3.21E-09	1.01E-07	-			
1571	566000.00	4180000.00	RESIDENTIAL	-4.73E-07	-1.35E-07	-	-9.87E-07	-6.88E-07	-	2.98E-09	9.34E-08	-			
1572	566000.00	4180250.00	RESIDENTIAL	-4.33E-07	-1.23E-07	-	-9.07E-07	-6.33E-07	-	2.75E-09	8.68E-08	-			
1573	566000.00	4180500.00	RESIDENTIAL	-3.96E-07	-1.11E-07	-	-8.31E-07	-5.80E-07	-	2.60E-09	8.10E-08	-			
1576	566250.00	4178750.00	RESIDENTIAL	-7.61E-07	-2.23E-07	-	-1.56E-06	-1.09E-06	-	4.48E-09	1.38E-07	-			
1577	566250.00	4179000.00	RESIDENTIAL	-6.91E-07	-2.02E-07	-	-1.43E-06	-9.94E-07	-	4.13E-09	1.28E-07	-			
1578	566250.00	4179250.00	RESIDENTIAL	-6.45E-07	-1.89E-07	-	-1.33E-06	-9.22E-07	-	3.75E-09	1.17E-07	-			
1579	566250.00	4179500.00	RESIDENTIAL	-5.77E-07	-1.67E-07	-	-1.20E-06	-8.35E-07	-	3.48E-09	1.10E-07	-			
1580	566250.00	4179750.00	RESIDENTIAL	-5.16E-07	-1.48E-07	-	-1.08E-06	-7.51E-07	-	3.21E-09	1.01E-07	-			
1581	566250.00	4180000.00	RESIDENTIAL	-4.64E-07	-1.32E-07	-	-9.68E-07	-6.74E-07	-	2.94E-09	9.16E-08	-			

OAK Terminal Modernization & Development

Table 2-16. Residential Cancer Risks (Inhalation)

Combined Construction & Operations

Combined Construction + Operations

Inhalation Residential Cancer Risk

Operations Only

Inhalation Residential Cancer Risk

Construction Only

Inhalation Residential Cancer Risk

RecID	UTM X	UTM Y	Receptor Type	Maximum->			Minimum->			Max RecID->					
				-1.15E-07	-3.31E-08	-1.74E-07	-1.61E-05	-5.66E-06	-2.77E-06	3177	3179	2965	1923	1953	2104
				2025-2054	2025-2033	2025-2036	2028-2057	2028-2036	2028-2039	2025-2030	2025-2030	2025-2030			
				30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	6 Yrs	6 Yrs	6 Yrs			
			Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child				
1582	566250.00	4180250.00	RESIDENTIAL	-4.28E-07	-1.21E-07	-	-8.94E-07	-6.22E-07	-	2.72E-09	8.51E-08	-			
1583	566250.00	4180500.00	RESIDENTIAL	-4.02E-07	-1.16E-07	-	-8.38E-07	-5.85E-07	-	2.53E-09	7.77E-08	-			
1586	566500.00	4178750.00	RESIDENTIAL	-7.78E-07	-2.27E-07	-	-1.60E-06	-1.11E-06	-	4.52E-09	1.41E-07	-			
1587	566500.00	4179000.00	RESIDENTIAL	-7.15E-07	-2.08E-07	-	-1.47E-06	-1.02E-06	-	4.17E-09	1.31E-07	-			
1588	566500.00	4179250.00	RESIDENTIAL	-6.45E-07	-1.87E-07	-	-1.33E-06	-9.27E-07	-	3.80E-09	1.20E-07	-			
1589	566500.00	4179500.00	RESIDENTIAL	-5.67E-07	-1.63E-07	-	-1.18E-06	-8.22E-07	-	3.48E-09	1.10E-07	-			
1590	566500.00	4179750.00	RESIDENTIAL	-5.05E-07	-1.42E-07	-	-1.05E-06	-7.30E-07	-	3.18E-09	9.95E-08	-			
1591	566500.00	4180000.00	SCHOOL	-4.67E-07	-1.35E-07	-3.12E-07	-9.72E-07	-6.79E-07	-4.56E-07	2.91E-09	8.98E-08	2.66E-08			
1592	566500.00	4180250.00	RESIDENTIAL	-4.35E-07	-1.28E-07	-	-9.05E-07	-6.34E-07	-	2.68E-09	8.21E-08	-			
1593	566500.00	4180500.00	RESIDENTIAL	-4.12E-07	-1.22E-07	-	-8.59E-07	-6.04E-07	-	2.53E-09	7.77E-08	-			
1596	566750.00	4178750.00	RESIDENTIAL	-8.04E-07	-2.36E-07	-	-1.65E-06	-1.15E-06	-	4.60E-09	1.45E-07	-			
1597	566750.00	4179000.00	RESIDENTIAL	-7.13E-07	-2.07E-07	-	-1.47E-06	-1.03E-06	-	4.25E-09	1.33E-07	-			
1598	566750.00	4179250.00	RESIDENTIAL	-6.34E-07	-1.85E-07	-	-1.31E-06	-9.14E-07	-	3.76E-09	1.18E-07	-			
1599	566750.00	4179500.00	RESIDENTIAL	-5.63E-07	-1.62E-07	-	-1.17E-06	-8.17E-07	-	3.48E-09	1.08E-07	-			
1600	566750.00	4179750.00	RESIDENTIAL	-5.09E-07	-1.49E-07	-	-1.06E-06	-7.41E-07	-	3.10E-09	9.61E-08	-			
1603	566750.00	4180500.00	RESIDENTIAL	-4.07E-07	-1.19E-07	-	-8.48E-07	-5.95E-07	-	2.53E-09	7.78E-08	-			
1605	567000.00	4178500.00	RESIDENTIAL	-9.18E-07	-2.71E-07	-	-1.88E-06	-1.31E-06	-	5.18E-09	1.64E-07	-			
1607	567000.00	4179000.00	RESIDENTIAL	-7.08E-07	-2.07E-07	-	-1.46E-06	-1.02E-06	-	4.22E-09	1.31E-07	-			
1608	567000.00	4179250.00	RESIDENTIAL	-6.37E-07	-1.89E-07	-	-1.32E-06	-9.22E-07	-	3.76E-09	1.17E-07	-			
1609	567000.00	4179500.00	RESIDENTIAL	-5.61E-07	-1.65E-07	-	-1.17E-06	-8.18E-07	-	3.45E-09	1.07E-07	-			
1610	567000.00	4179750.00	RESIDENTIAL	-5.16E-07	-1.53E-07	-	-1.07E-06	-7.51E-07	-	3.10E-09	9.61E-08	-			
1611	567000.00	4180000.00	RESIDENTIAL	-4.68E-07	-1.38E-07	-	-9.78E-07	-6.87E-07	-	2.91E-09	8.99E-08	-			
1612	567000.00	4180250.00	RESIDENTIAL	-4.37E-07	-1.28E-07	-	-9.16E-07	-6.45E-07	-	2.76E-09	8.55E-08	-			
1613	567000.00	4180500.00	RESIDENTIAL	-4.04E-07	-1.17E-07	-	-8.45E-07	-5.93E-07	-	2.57E-09	7.94E-08	-			
1615	567250.00	4178500.00	RESIDENTIAL	-9.27E-07	-2.73E-07	-	-1.90E-06	-1.33E-06	-	5.23E-09	1.66E-07	-			
1616	567250.00	4178750.00	RESIDENTIAL	-8.07E-07	-2.37E-07	-	-1.67E-06	-1.16E-06	-	4.73E-09	1.48E-07	-			
1617	567250.00	4179000.00	RESIDENTIAL	-7.19E-07	-2.12E-07	-	-1.48E-06	-1.04E-06	-	4.23E-09	1.32E-07	-			
1618	567250.00	4179250.00	RESIDENTIAL	-6.39E-07	-1.87E-07	-	-1.32E-06	-9.24E-07	-	3.84E-09	1.19E-07	-			
1619	567250.00	4179500.00	RESIDENTIAL	-5.70E-07	-1.68E-07	-	-1.18E-06	-8.29E-07	-	3.42E-09	1.06E-07	-			
1620	567250.00	4179750.00	RESIDENTIAL	-5.19E-07	-1.53E-07	-	-1.08E-06	-7.61E-07	-	3.18E-09	9.96E-08	-			
1621	567250.00	4180000.00	RESIDENTIAL	-4.63E-07	-1.34E-07	-	-9.70E-07	-6.81E-07	-	2.91E-09	9.13E-08	-			
1622	567250.00	4180250.00	RESIDENTIAL	-4.32E-07	-1.25E-07	-	-9.06E-07	-6.35E-07	-	2.76E-09	8.56E-08	-			
1623	567250.00	4180500.00	RESIDENTIAL	-4.03E-07	-1.16E-07	-	-8.43E-07	-5.90E-07	-	2.53E-09	7.90E-08	-			
1625	567500.00	4178500.00	RESIDENTIAL	-9.41E-07	-2.78E-07	-	-1.93E-06	-1.34E-06	-	5.35E-09	1.67E-07	-			
1626	567500.00	4178750.00	RESIDENTIAL	-8.14E-07	-2.41E-07	-	-1.68E-06	-1.17E-06	-	4.77E-09	1.48E-07	-			
1627	567500.00	4179000.00	RESIDENTIAL	-7.16E-07	-2.12E-07	-	-1.48E-06	-1.04E-06	-	4.19E-09	1.31E-07	-			
1628	567500.00	4179250.00	RESIDENTIAL	-6.36E-07	-1.87E-07	-	-1.32E-06	-9.24E-07	-	3.84E-09	1.19E-07	-			
1629	567500.00	4179500.00	RESIDENTIAL	-5.64E-07	-1.64E-07	-	-1.17E-06	-8.23E-07	-	3.46E-09	1.08E-07	-			
1630	567500.00	4179750.00	RESIDENTIAL	-5.06E-07	-1.46E-07	-	-1.06E-06	-7.43E-07	-	3.18E-09	9.98E-08	-			
1631	567500.00	4180000.00	RESIDENTIAL	-4.72E-07	-1.38E-07	-	-9.85E-07	-6.91E-07	-	2.91E-09	9.14E-08	-			
1632	567500.00	4180250.00	RESIDENTIAL	-4.35E-07	-1.25E-07	-	-9.09E-07	-6.36E-07	-	2.76E-09	8.56E-08	-			
1633	567500.00	4180500.00	RESIDENTIAL	-4.02E-07	-1.16E-07	-	-8.40E-07	-5.88E-07	-	2.53E-09	7.90E-08	-			
1636	567750.00	4178750.00	RESIDENTIAL	-8.15E-07	-2.40E-07	-	-1.69E-06	-1.18E-06	-	4.81E-09	1.52E-07	-			
1637	567750.00	4179000.00	RESIDENTIAL	-7.13E-07	-2.07E-07	-	-1.48E-06	-1.03E-06	-	4.27E-09	1.35E-07	-			
1638	567750.00	4179250.00	RESIDENTIAL	-6.37E-07	-1.86E-07	-	-1.32E-06	-9.26E-07	-	3.88E-09	1.21E-07	-			
1639	567750.00	4179500.00	RESIDENTIAL	-5.78E-07	-1.68E-07	-	-1.20E-06	-8.34E-07	-	3.46E-09	1.08E-07	-			
1640	567750.00	4179750.00	RESIDENTIAL	-5.25E-07	-1.53E-07	-	-1.09E-06	-7.64E-07	-	3.19E-09	9.99E-08	-			
1641	567750.00	4180000.00	RESIDENTIAL	-4.89E-07	-1.43E-07	-	-1.01E-06	-7.04E-07	-	2.92E-09	9.02E-08	-			
1642	567750.00	4180250.00	RESIDENTIAL	-4.53E-07	-1.32E-07	-	-9.35E-07	-6.51E-07	-	2.72E-09	8.38E-08	-			
1646	568000.00	4178750.00	RESIDENTIAL	-8.27E-07	-2.41E-07	-	-1.70E-06	-1.19E-06	-	4.81E-09	1.52E-07	-			
1647	568000.00	4179000.00	RESIDENTIAL	-7.26E-07	-2.12E-07	-	-1.50E-06	-1.05E-06	-	4.27E-09	1.35E-07	-			
1648	568000.00	4179250.00	RESIDENTIAL	-6.61E-07	-1.93E-07	-	-1.36E-06	-9.48E-07	-	3.89E-09	1.21E-07	-			
1649	568000.00	4179500.00	RESIDENTIAL	-5.98E-07	-1.75E-07	-	-1.23E-06	-8.57E-07	-	3.49E-09	1.09E-07	-			
1650	568000.00	4179750.00	RESIDENTIAL	-5.51E-07	-1.62E-07	-	-1.13E-06	-7.87E-07	-	3.19E-09	9.85E-08	-			
1651	568000.00	4180000.00	RESIDENTIAL	-5.12E-07	-1.52E-07	-	-1.05E-06	-7.33E-07	-	2.96E-09	9.05E-08	-			
1652	568000.00	4180250.00	RESIDENTIAL	-4.76E-07	-1.40E-07	-	-9.73E-07	-6.76E-07	-	2.72E-09	8.38E-08	-			
1658	568250.00	4179250.00	RESIDENTIAL	-6.85E-07	-2.02E-07	-	-1.40E-06	-9.68E-07	-	3.85E-09	1.19E-07	-			
1659	568250.00	4179500.00	RESIDENTIAL	-6.21E-07	-1.84E-07	-	-1.27E-06	-8.79E-07	-	3.66E-09	1.07E-07	-			
1660	568250.00	4179750.00	RESIDENTIAL	-5.68E-07	-1.68E-07	-	-1.16E-06	-8.03E-07	-	3.19E-09	9.85E-08	-			
1711	569500.00	4180000.00	RESIDENTIAL	-5.97E-07	-1.82E-07	-	-1.20E-06	-8.32E-07	-	3.08E-09	9.33E-08	-			
1722	569750.00	4180250.00	SCHOOL	-5.44E-07	-1.63E-07	-3.56E-07	-1.10E-06	-7.65E-07	-5.18E-07	2.95E-09	9.04E-08	2.70E-08			
1723	569750.00	4180500.00	RESIDENTIAL	-4.91E-07	-1.48E-07	-	-9.99E-07	-6.96E-07	-	2.68E-09	8.20E-08	-			
1732	570000.00	4180250.00	RESIDENTIAL	-5.59E-07	-1.67E-07	-	-1.13E-06	-7.83E-07	-	3.00E-09	9.24E-08	-			

OAK Terminal Modernization & Development Table 2-16. Residential Cancer Risks (Inhalation)				Combined Construction + Operations			Operations Only			Construction Only		
Combined Construction & Operations				Inhalation Residential Cancer Risk			Inhalation Residential Cancer Risk			Inhalation Residential Cancer Risk		
Maximum->				-1.15E-07	-3.31E-08	-1.74E-07	-2.39E-07	-1.69E-07	-2.53E-07	4.93E-08	1.48E-06	2.27E-07
Minimum->				-1.61E-05	-5.66E-06	-2.77E-06	-3.00E-05	-2.07E-05	-4.04E-06	6.84E-10	2.09E-08	1.47E-08
Max RecID->				3177	3179	2965	3177	3179	2965	1923	1953	2104
				2025-2054	2025-2033	2025-2036	2028-2057	2028-2036	2028-2039	2025-2030	2025-2030	2025-2030
				30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	6 Yrs	6 Yrs	6 Yrs
RecID	UTM X	UTM Y	Receptor Type	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child
1733	570000.00	4180500.00	RESIDENTIAL	-4.94E-07	-1.46E-07	-	-1.01E-06	-6.98E-07	-	2.76E-09	8.55E-08	-
1740	570250.00	4179750.00	RESIDENTIAL	-6.65E-07	-2.01E-07	-	-1.35E-06	-9.37E-07	-	3.58E-09	1.10E-07	-
1742	570250.00	4180250.00	RESIDENTIAL	-5.61E-07	-1.69E-07	-	-1.14E-06	-7.90E-07	-	3.03E-09	9.27E-08	-
1743	570250.00	4180500.00	RESIDENTIAL	-4.98E-07	-1.50E-07	-	-1.01E-06	-7.05E-07	-	2.72E-09	8.39E-08	-
1748	570500.00	4179250.00	RESIDENTIAL	-7.84E-07	-2.38E-07	-	-1.60E-06	-1.12E-06	-	4.31E-09	1.34E-07	-
1749	570500.00	4179500.00	SCHOOL	-7.06E-07	-2.14E-07	-4.68E-07	-1.45E-06	-1.01E-06	-6.78E-07	3.89E-09	1.21E-07	3.56E-08
1750	570500.00	4179750.00	RESIDENTIAL	-6.41E-07	-1.93E-07	-	-1.31E-06	-9.18E-07	-	3.61E-09	1.11E-07	-
1751	570500.00	4180000.00	RESIDENTIAL	-5.89E-07	-1.79E-07	-	-1.21E-06	-8.45E-07	-	3.30E-09	1.01E-07	-
1752	570500.00	4180250.00	RESIDENTIAL	-5.36E-07	-1.63E-07	-	-1.10E-06	-7.72E-07	-	3.03E-09	9.26E-08	-
1753	570500.00	4180500.00	RESIDENTIAL	-4.87E-07	-1.48E-07	-	-1.00E-06	-7.01E-07	-	2.80E-09	8.48E-08	-
1757	570750.00	4179000.00	RESIDENTIAL	-8.83E-07	-2.66E-07	-	-1.78E-06	-1.23E-06	-	4.55E-09	1.42E-07	-
1758	570750.00	4179250.00	RESIDENTIAL	-7.86E-07	-2.37E-07	-	-1.60E-06	-1.11E-06	-	4.20E-09	1.31E-07	-
1759	570750.00	4179500.00	RESIDENTIAL	-7.05E-07	-2.13E-07	-	-1.44E-06	-1.01E-06	-	3.85E-09	1.19E-07	-
1760	570750.00	4179750.00	RESIDENTIAL	-6.40E-07	-1.94E-07	-	-1.31E-06	-9.18E-07	-	3.54E-09	1.11E-07	-
1761	570750.00	4180000.00	RESIDENTIAL	-5.66E-07	-1.69E-07	-	-1.17E-06	-8.19E-07	-	3.26E-09	1.02E-07	-
1762	570750.00	4180250.00	RESIDENTIAL	-5.07E-07	-1.51E-07	-	-1.06E-06	-7.43E-07	-	3.03E-09	9.53E-08	-
1763	570750.00	4180500.00	RESIDENTIAL	-4.69E-07	-1.40E-07	-	-9.75E-07	-6.87E-07	-	2.80E-09	8.74E-08	-
1767	571000.00	4179000.00	RESIDENTIAL	-8.88E-07	-2.63E-07	-	-1.78E-06	-1.22E-06	-	4.55E-09	1.41E-07	-
1768	571000.00	4179250.00	RESIDENTIAL	-7.95E-07	-2.36E-07	-	-1.60E-06	-1.10E-06	-	4.12E-09	1.28E-07	-
1769	571000.00	4179500.00	RESIDENTIAL	-7.16E-07	-2.14E-07	-	-1.45E-06	-1.00E-06	-	3.81E-09	1.18E-07	-
1770	571000.00	4179750.00	RESIDENTIAL	-6.39E-07	-1.91E-07	-	-1.30E-06	-9.04E-07	-	3.46E-09	1.08E-07	-
1771	571000.00	4180000.00	RESIDENTIAL	-5.66E-07	-1.70E-07	-	-1.16E-06	-8.08E-07	-	3.15E-09	9.79E-08	-
1772	571000.00	4180250.00	RESIDENTIAL	-5.11E-07	-1.52E-07	-	-1.05E-06	-7.35E-07	-	2.91E-09	9.14E-08	-
1773	571000.00	4180500.00	RESIDENTIAL	-4.72E-07	-1.41E-07	-	-9.76E-07	-6.84E-07	-	2.72E-09	8.52E-08	-
1776	571250.00	4178750.00	RESIDENTIAL	-9.77E-07	-2.84E-07	-	-1.97E-06	-1.34E-06	-	5.23E-09	1.62E-07	-
1777	571250.00	4179000.00	RESIDENTIAL	-8.77E-07	-2.55E-07	-	-1.76E-06	-1.20E-06	-	4.65E-09	1.43E-07	-
1778	571250.00	4179250.00	RESIDENTIAL	-7.92E-07	-2.31E-07	-	-1.59E-06	-1.08E-06	-	4.16E-09	1.28E-07	-
1779	571250.00	4179500.00	RESIDENTIAL	-7.14E-07	-2.08E-07	-	-1.43E-06	-9.83E-07	-	3.80E-09	1.17E-07	-
1780	571250.00	4179750.00	RESIDENTIAL	-6.40E-07	-1.88E-07	-	-1.29E-06	-8.83E-07	-	3.38E-09	1.05E-07	-
1781	571250.00	4180000.00	RESIDENTIAL	-5.66E-07	-1.68E-07	-	-1.15E-06	-7.93E-07	-	3.07E-09	9.44E-08	-
1782	571250.00	4180250.00	RESIDENTIAL	-5.22E-07	-1.58E-07	-	-1.06E-06	-7.37E-07	-	2.80E-09	8.62E-08	-
1783	571250.00	4180500.00	RESIDENTIAL	-4.79E-07	-1.45E-07	-	-9.78E-07	-6.83E-07	-	2.65E-09	8.17E-08	-
1786	571500.00	4178750.00	SCHOOL	-9.59E-07	-2.74E-07	-6.23E-07	-1.94E-06	-1.33E-06	-9.16E-07	5.41E-09	1.67E-07	4.94E-08
1787	571500.00	4179000.00	RESIDENTIAL	-8.65E-07	-2.48E-07	-	-1.75E-06	-1.20E-06	-	4.76E-09	1.48E-07	-
1788	571500.00	4179250.00	RESIDENTIAL	-7.83E-07	-2.26E-07	-	-1.58E-06	-1.08E-06	-	4.30E-09	1.32E-07	-
1789	571500.00	4179500.00	RESIDENTIAL	-7.08E-07	-2.05E-07	-	-1.42E-06	-9.72E-07	-	3.80E-09	1.17E-07	-
1790	571500.00	4179750.00	RESIDENTIAL	-6.21E-07	-1.80E-07	-	-1.25E-06	-8.58E-07	-	3.38E-09	1.05E-07	-
1791	571500.00	4180000.00	RESIDENTIAL	-5.61E-07	-1.62E-07	-	-1.14E-06	-7.79E-07	-	3.10E-09	9.61E-08	-
1792	571500.00	4180250.00	RESIDENTIAL	-5.11E-07	-1.48E-07	-	-1.04E-06	-7.12E-07	-	2.87E-09	8.82E-08	-
1793	571500.00	4180500.00	RESIDENTIAL	-4.71E-07	-1.37E-07	-	-9.58E-07	-6.61E-07	-	2.65E-09	8.17E-08	-
1794	571750.00	4178250.00	RESIDENTIAL	-1.20E-06	-3.40E-07	-	-2.44E-06	-1.68E-06	-	6.87E-09	2.16E-07	-
1795	571750.00	4178500.00	RESIDENTIAL	-1.06E-06	-3.00E-07	-	-2.16E-06	-1.48E-06	-	6.13E-09	1.91E-07	-
1796	571750.00	4178750.00	SCHOOL	-9.47E-07	-2.69E-07	-6.18E-07	-1.93E-06	-1.32E-06	-9.08E-07	5.45E-09	1.69E-07	4.98E-08
1797	571750.00	4179000.00	RESIDENTIAL	-8.55E-07	-2.43E-07	-	-1.73E-06	-1.19E-06	-	4.87E-09	1.51E-07	-
1798	571750.00	4179250.00	RESIDENTIAL	-7.76E-07	-2.21E-07	-	-1.57E-06	-1.08E-06	-	4.41E-09	1.36E-07	-
1799	571750.00	4179500.00	RESIDENTIAL	-7.03E-07	-2.03E-07	-	-1.42E-06	-9.71E-07	-	3.84E-09	1.19E-07	-
1800	571750.00	4179750.00	RESIDENTIAL	-6.23E-07	-1.78E-07	-	-1.26E-06	-8.60E-07	-	3.52E-09	1.07E-07	-
1801	571750.00	4180000.00	RESIDENTIAL	-5.61E-07	-1.60E-07	-	-1.13E-06	-7.73E-07	-	3.10E-09	9.61E-08	-
1802	571750.00	4180250.00	RESIDENTIAL	-5.10E-07	-1.46E-07	-	-1.03E-06	-7.04E-07	-	2.84E-09	8.78E-08	-
1803	571750.00	4180500.00	RESIDENTIAL	-4.71E-07	-1.35E-07	-	-9.54E-07	-6.55E-07	-	2.65E-09	8.17E-08	-
1804	572000.00	4178250.00	RESIDENTIAL	-1.21E-06	-3.50E-07	-	-2.46E-06	-1.70E-06	-	6.83E-09	2.14E-07	-
1805	572000.00	4178500.00	RESIDENTIAL	-1.05E-06	-2.98E-07	-	-2.15E-06	-1.48E-06	-	6.13E-09	1.91E-07	-
1806	572000.00	4178750.00	RESIDENTIAL	-9.31E-07	-2.63E-07	-	-1.91E-06	-1.31E-06	-	5.48E-09	1.71E-07	-
1807	572000.00	4179000.00	RESIDENTIAL	-8.33E-07	-2.34E-07	-	-1.71E-06	-1.17E-06	-	4.98E-09	1.54E-07	-
1808	572000.00	4179250.00	RESIDENTIAL	-7.59E-07	-2.15E-07	-	-1.55E-06	-1.07E-06	-	4.47E-09	1.38E-07	-
1809	572000.00	4179500.00	RESIDENTIAL	-6.88E-07	-1.95E-07	-	-1.40E-06	-9.62E-07	-	4.02E-09	1.24E-07	-
1810	572000.00	4179750.00	RESIDENTIAL	-6.29E-07	-1.79E-07	-	-1.28E-06	-8.75E-07	-	3.60E-09	1.11E-07	-
1811	572000.00	4180000.00	RESIDENTIAL	-5.74E-07	-1.64E-07	-	-1.16E-06	-7.97E-07	-	3.25E-09	1.00E-07	-
1812	572000.00	4180250.00	RESIDENTIAL	-5.19E-07	-1.47E-07	-	-1.05E-06	-7.17E-07	-	2.95E-09	9.03E-08	-
1813	572000.00	4180500.00	RESIDENTIAL	-4.73E-07	-1.35E-07	-	-9.57E-07	-6.54E-07	-	2.68E-09	8.21E-08	-
1814	572250.00	4178250.00	RESIDENTIAL	-1.20E-06	-3.51E-07	-	-2.45E-06	-1.70E-06	-	6.74E-09	2.11E-07	-
1815	572250.00	4178500.00	RESIDENTIAL	-1.07E-06	-3.12E-07	-	-2.19E-06	-1.51E-06	-	6.02E-09	1.89E-07	-
1816	572250.00	4178750.00	RESIDENTIAL	-9.15E-07	-2.59E-07	-	-1.88E-06	-1.30E-06	-	5.44E-09	1.70E-07	-

OAK Terminal Modernization & Development

Table 2-16. Residential Cancer Risks (Inhalation)

Combined Construction & Operations

				Combined Construction + Operations			Operations Only			Construction Only			
				Inhalation Residential Cancer Risk			Inhalation Residential Cancer Risk			Inhalation Residential Cancer Risk			
				Maximum->	-1.15E-07	-3.31E-08	-1.74E-07	-2.39E-07	-1.69E-07	-2.53E-07	4.93E-08	1.48E-06	2.27E-07
				Minimum->	-1.61E-05	-5.66E-06	-2.77E-06	-3.00E-05	-2.07E-05	-4.04E-06	6.84E-10	2.09E-08	1.47E-08
				Max ReclD->	3177	3179	2965	3177	3179	2965	1923	1953	2104
				2025-2054	2025-2033	2025-2036	2028-2057	2028-2036	2028-2039	2025-2030	2025-2030	2025-2030	
				30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	6 Yrs	6 Yrs	6 Yrs	
RecID	UTM X	UTM Y	Receptor Type	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	
1817	572250.00	4179000.00	RESIDENTIAL	-8.06E-07	-2.27E-07	-	-1.66E-06	-1.14E-06	-	4.89E-09	1.52E-07	-	
1818	572250.00	4179250.00	RESIDENTIAL	-7.27E-07	-2.02E-07	-	-1.50E-06	-1.03E-06	-	4.55E-09	1.41E-07	-	
1819	572250.00	4179500.00	RESIDENTIAL	-6.69E-07	-1.86E-07	-	-1.38E-06	-9.45E-07	-	4.13E-09	1.28E-07	-	
1820	572250.00	4179750.00	RESIDENTIAL	-6.21E-07	-1.73E-07	-	-1.27E-06	-8.73E-07	-	3.74E-09	1.16E-07	-	
1821	572250.00	4180000.00	RESIDENTIAL	-5.72E-07	-1.61E-07	-	-1.17E-06	-8.03E-07	-	3.40E-09	1.05E-07	-	
1822	572250.00	4180250.00	RESIDENTIAL	-5.29E-07	-1.49E-07	-	-1.07E-06	-7.34E-07	-	3.06E-09	9.43E-08	-	
1823	572250.00	4180500.00	RESIDENTIAL	-4.87E-07	-1.37E-07	-	-9.87E-07	-6.74E-07	-	2.80E-09	8.59E-08	-	
1824	572500.00	4178250.00	RESIDENTIAL	-1.16E-06	-3.40E-07	-	-2.39E-06	-1.66E-06	-	6.70E-09	2.10E-07	-	
1825	572500.00	4178500.00	RESIDENTIAL	-1.04E-06	-3.04E-07	-	-2.13E-06	-1.47E-06	-	5.93E-09	1.85E-07	-	
1826	572500.00	4178750.00	RESIDENTIAL	-9.35E-07	-2.73E-07	-	-1.91E-06	-1.33E-06	-	5.32E-09	1.66E-07	-	
1827	572500.00	4179000.00	RESIDENTIAL	-8.25E-07	-2.36E-07	-	-1.69E-06	-1.17E-06	-	4.86E-09	1.52E-07	-	
1828	572500.00	4179250.00	RESIDENTIAL	-7.35E-07	-2.08E-07	-	-1.51E-06	-1.04E-06	-	4.44E-09	1.38E-07	-	
1829	572500.00	4179500.00	RESIDENTIAL	-6.53E-07	-1.82E-07	-	-1.35E-06	-9.32E-07	-	4.09E-09	1.27E-07	-	
1830	572500.00	4179750.00	RESIDENTIAL	-6.03E-07	-1.67E-07	-	-1.25E-06	-8.60E-07	-	3.78E-09	1.18E-07	-	
1831	572500.00	4180000.00	RESIDENTIAL	-5.60E-07	-1.55E-07	-	-1.16E-06	-7.95E-07	-	3.51E-09	1.09E-07	-	
1832	572500.00	4180250.00	RESIDENTIAL	-5.31E-07	-1.49E-07	-	-1.09E-06	-7.46E-07	-	3.21E-09	9.85E-08	-	
1833	572500.00	4180500.00	RESIDENTIAL	-4.91E-07	-1.39E-07	-	-1.00E-06	-6.86E-07	-	2.91E-09	8.85E-08	-	
1834	572750.00	4178250.00	RESIDENTIAL	-1.08E-06	-3.12E-07	-	-2.25E-06	-1.57E-06	-	6.61E-09	2.07E-07	-	
1835	572750.00	4178500.00	RESIDENTIAL	-9.97E-07	-2.91E-07	-	-2.06E-06	-1.43E-06	-	5.89E-09	1.83E-07	-	
1836	572750.00	4178750.00	RESIDENTIAL	-9.16E-07	-2.67E-07	-	-1.88E-06	-1.31E-06	-	5.31E-09	1.66E-07	-	
1837	572750.00	4179000.00	RESIDENTIAL	-8.43E-07	-2.47E-07	-	-1.72E-06	-1.19E-06	-	4.78E-09	1.48E-07	-	
1838	572750.00	4179250.00	RESIDENTIAL	-7.49E-07	-2.16E-07	-	-1.54E-06	-1.06E-06	-	4.36E-09	1.37E-07	-	
1839	572750.00	4179500.00	RESIDENTIAL	-6.68E-07	-1.89E-07	-	-1.38E-06	-9.54E-07	-	4.09E-09	1.27E-07	-	
1840	572750.00	4179750.00	RESIDENTIAL	-6.00E-07	-1.68E-07	-	-1.24E-06	-8.57E-07	-	3.74E-09	1.16E-07	-	
1841	572750.00	4180000.00	RESIDENTIAL	-5.47E-07	-1.51E-07	-	-1.14E-06	-7.84E-07	-	3.51E-09	1.09E-07	-	
1842	572750.00	4180250.00	RESIDENTIAL	-5.08E-07	-1.40E-07	-	-1.05E-06	-7.24E-07	-	3.24E-09	1.00E-07	-	
1843	572750.00	4180500.00	RESIDENTIAL	-4.75E-07	-1.30E-07	-	-9.83E-07	-6.74E-07	-	3.05E-09	9.41E-08	-	
1844	573000.00	4178250.00	RESIDENTIAL	-1.00E-06	-2.84E-07	-	-2.10E-06	-1.47E-06	-	6.49E-09	2.03E-07	-	
1845	573000.00	4178500.00	RESIDENTIAL	-9.46E-07	-2.71E-07	-	-1.97E-06	-1.37E-06	-	5.92E-09	1.85E-07	-	
1846	573000.00	4178750.00	RESIDENTIAL	-8.83E-07	-2.57E-07	-	-1.82E-06	-1.27E-06	-	5.27E-09	1.64E-07	-	
1847	573000.00	4179000.00	RESIDENTIAL	-8.19E-07	-2.40E-07	-	-1.68E-06	-1.17E-06	-	4.78E-09	1.48E-07	-	
1848	573000.00	4179250.00	RESIDENTIAL	-7.66E-07	-2.27E-07	-	-1.56E-06	-1.09E-06	-	4.29E-09	1.33E-07	-	
1849	573000.00	4179500.00	RESIDENTIAL	-6.97E-07	-2.04E-07	-	-1.43E-06	-9.87E-07	-	4.01E-09	1.23E-07	-	
1850	573000.00	4179750.00	RESIDENTIAL	-6.20E-07	-1.79E-07	-	-1.28E-06	-8.84E-07	-	3.67E-09	1.14E-07	-	
1851	573000.00	4180000.00	RESIDENTIAL	-5.48E-07	-1.54E-07	-	-1.14E-06	-7.85E-07	-	3.40E-09	1.06E-07	-	
1852	573000.00	4180250.00	RESIDENTIAL	-5.02E-07	-1.40E-07	-	-1.04E-06	-7.23E-07	-	3.21E-09	9.99E-08	-	
1853	573000.00	4180500.00	RESIDENTIAL	-4.58E-07	-1.25E-07	-	-9.55E-07	-6.58E-07	-	2.98E-09	9.33E-08	-	
1854	573250.00	4178250.00	RESIDENTIAL	-9.48E-07	-2.65E-07	-	-2.00E-06	-1.40E-06	-	6.37E-09	1.99E-07	-	
1855	573250.00	4178500.00	RESIDENTIAL	-8.81E-07	-2.47E-07	-	-1.85E-06	-1.29E-06	-	5.80E-09	1.82E-07	-	
1856	573250.00	4178750.00	RESIDENTIAL	-8.27E-07	-2.36E-07	-	-1.73E-06	-1.21E-06	-	5.23E-09	1.64E-07	-	
1857	573250.00	4179000.00	RESIDENTIAL	-7.81E-07	-2.26E-07	-	-1.62E-06	-1.13E-06	-	4.81E-09	1.50E-07	-	
1858	573250.00	4179250.00	RESIDENTIAL	-7.40E-07	-2.16E-07	-	-1.52E-06	-1.06E-06	-	4.32E-09	1.35E-07	-	
1859	573250.00	4179500.00	RESIDENTIAL	-6.93E-07	-2.04E-07	-	-1.42E-06	-9.87E-07	-	4.01E-09	1.23E-07	-	
1860	573250.00	4179750.00	RESIDENTIAL	-6.45E-07	-1.89E-07	-	-1.32E-06	-9.10E-07	-	3.63E-09	1.13E-07	-	
1861	573250.00	4180000.00	RESIDENTIAL	-5.67E-07	-1.65E-07	-	-1.16E-06	-8.08E-07	-	3.33E-09	1.02E-07	-	
1862	573250.00	4180250.00	RESIDENTIAL	-5.06E-07	-1.43E-07	-	-1.05E-06	-7.27E-07	-	3.17E-09	9.81E-08	-	
1863	573250.00	4180500.00	RESIDENTIAL	-4.46E-07	-1.26E-07	-	-9.29E-07	-6.46E-07	-	2.86E-09	8.79E-08	-	
1864	573500.00	4178250.00	RESIDENTIAL	-9.18E-07	-2.55E-07	-	-1.94E-06	-1.36E-06	-	6.26E-09	1.95E-07	-	
1865	573500.00	4178500.00	RESIDENTIAL	-8.40E-07	-2.34E-07	-	-1.78E-06	-1.24E-06	-	5.71E-09	1.78E-07	-	
1866	573500.00	4178750.00	RESIDENTIAL	-7.81E-07	-2.18E-07	-	-1.65E-06	-1.15E-06	-	5.22E-09	1.63E-07	-	
1867	573500.00	4179000.00	RESIDENTIAL	-7.38E-07	-2.09E-07	-	-1.55E-06	-1.08E-06	-	4.81E-09	1.50E-07	-	
1868	573500.00	4179250.00	RESIDENTIAL	-6.99E-07	-2.02E-07	-	-1.45E-06	-1.02E-06	-	4.31E-09	1.35E-07	-	
1869	573500.00	4179500.00	RESIDENTIAL	-6.65E-07	-1.94E-07	-	-1.37E-06	-9.58E-07	-	4.01E-09	1.23E-07	-	
1870	573500.00	4179750.00	RESIDENTIAL	-6.33E-07	-1.87E-07	-	-1.30E-06	-9.04E-07	-	3.63E-09	1.13E-07	-	
1871	573500.00	4180000.00	RESIDENTIAL	-5.83E-07	-1.72E-07	-	-1.19E-06	-8.23E-07	-	3.29E-09	1.01E-07	-	
1872	573500.00	4180250.00	RESIDENTIAL	-5.10E-07	-1.50E-07	-	-1.04E-06	-7.19E-07	-	2.87E-09	8.80E-08	-	
1873	573500.00	4180500.00	RESIDENTIAL	-3.86E-07	-1.12E-07	-	-7.96E-07	-5.54E-07	-	2.33E-09	7.14E-08	-	
1878	571250.00	4177000.00	RESIDENTIAL	-3.21E-06	-9.94E-07	-	-6.38E-06	-4.40E-06	-	1.68E-08	4.62E-07	-	
1879	571250.00	4176750.00	SCHOOL	-4.15E-06	-1.30E-06	-2.67E-06	-8.17E-06	-5.63E-06	-3.84E-06	1.78E-08	5.65E-07	1.62E-07	
1880	571250.00	4176500.00	RESIDENTIAL	-5.34E-06	-1.69E-06	-	-1.05E-05	-7.23E-06	-	2.20E-08	7.03E-07	-	
1881	571250.00	4176250.00	RESIDENTIAL	-1.61E-05	-5.66E-06	-	-3.00E-05	-2.07E-05	-	3.66E-08	1.15E-06	-	
1908	571500.00	4177000.00	SCHOOL	-2.84E-06	-8.62E-07	-1.85E-06	-5.71E-06	-3.95E-06	-2.69E-06	1.41E-08	4.46E-07	1.28E-07	
1909	571500.00	4176750.00	RESIDENTIAL	-3.41E-06	-1.03E-06	-	-6.86E-06	-4.74E-06	-	1.68E-08	5.37E-07	-	

OAK Terminal Modernization & Development

Table 2-16. Residential Cancer Risks (Inhalation)

Combined Construction & Operations

RecID	UTM X	UTM Y	Receptor Type	Combined Construction + Operations			Operations Only			Construction Only			
				Inhalation Residential Cancer Risk			Inhalation Residential Cancer Risk			Inhalation Residential Cancer Risk			
				Maximum->	-1.15E-07	-3.31E-08	-1.74E-07	-2.39E-07	-1.69E-07	-2.53E-07	4.93E-08	1.48E-06	2.27E-07
				Minimum->	-1.61E-05	-5.66E-06	-2.77E-06	-3.00E-05	-2.07E-05	-4.04E-06	6.84E-10	2.09E-08	1.47E-08
Max RecID->	3177	3179	2965	3177	3179	2965	1923	1953	2104				
		2025-2054	2025-2033	2025-2036	2028-2057	2028-2036	2028-2039	2025-2030	2025-2030	2025-2030			
		30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	6 Yrs	6 Yrs	6 Yrs			
		Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child			
1910	571500.00	4176500.00	RESIDENTIAL	-4.33E-06	-1.32E-06	-	-8.66E-06	-5.98E-06	-	2.05E-08	6.57E-07	-	
1911	571500.00	4176250.00	RESIDENTIAL	-8.38E-06	-2.76E-06	-	-1.60E-05	-1.10E-05	-	2.72E-08	8.68E-07	-	
1912	571500.00	4176000.00	RESIDENTIAL	-6.52E-06	-2.02E-06	-	-1.30E-05	-8.95E-06	-	2.90E-08	9.40E-07	-	
1923	571500.00	4173250.00	RESIDENTIAL	-8.16E-06	-2.48E-06	-	-1.69E-05	-1.19E-05	-	4.93E-08	1.47E-06	-	
1924	571500.00	4173000.00	RESIDENTIAL	-8.30E-06	-2.64E-06	-	-1.68E-05	-1.19E-05	-	4.38E-08	1.29E-06	-	
1938	571750.00	4177250.00	RESIDENTIAL	-2.19E-06	-6.55E-07	-	-4.46E-06	-3.09E-06	-	1.16E-08	3.68E-07	-	
1939	571750.00	4177000.00	RESIDENTIAL	-2.53E-06	-7.50E-07	-	-5.14E-06	-3.57E-06	-	1.35E-08	4.31E-07	-	
1940	571750.00	4176750.00	RESIDENTIAL	-2.90E-06	-8.52E-07	-	-5.93E-06	-4.11E-06	-	1.59E-08	5.10E-07	-	
1941	571750.00	4176500.00	RESIDENTIAL	-3.49E-06	-1.03E-06	-	-7.11E-06	-4.92E-06	-	1.87E-08	6.01E-07	-	
1942	571750.00	4176250.00	RESIDENTIAL	-4.58E-06	-1.39E-06	-	-9.20E-06	-6.36E-06	-	2.23E-08	7.16E-07	-	
1943	571750.00	4176000.00	RESIDENTIAL	-4.83E-06	-1.45E-06	-	-9.79E-06	-6.78E-06	-	2.46E-08	7.99E-07	-	
1953	571750.00	4173500.00	RESIDENTIAL	-6.56E-06	-1.81E-06	-	-1.41E-05	-9.92E-06	-	4.74E-08	1.48E-06	-	
1954	571750.00	4173250.00	RESIDENTIAL	-6.76E-06	-1.99E-06	-	-1.42E-05	-1.00E-05	-	4.39E-08	1.33E-06	-	
1955	571750.00	4173000.00	RESIDENTIAL	-6.93E-06	-2.15E-06	-	-1.42E-05	-1.00E-05	-	3.97E-08	1.18E-06	-	
1956	571750.00	4172750.00	RESIDENTIAL	-6.91E-06	-2.21E-06	-	-1.39E-05	-9.82E-06	-	3.54E-08	1.04E-06	-	
1970	572000.00	4177000.00	RESIDENTIAL	-2.23E-06	-6.46E-07	-	-4.61E-06	-3.20E-06	-	1.31E-08	4.16E-07	-	
1971	572000.00	4176750.00	RESIDENTIAL	-2.52E-06	-7.19E-07	-	-5.21E-06	-3.62E-06	-	1.50E-08	4.79E-07	-	
1972	572000.00	4176500.00	RESIDENTIAL	-3.01E-06	-8.68E-07	-	-6.20E-06	-4.29E-06	-	1.73E-08	5.54E-07	-	
1973	572000.00	4176250.00	RESIDENTIAL	-3.65E-06	-1.08E-06	-	-7.46E-06	-5.17E-06	-	1.98E-08	6.38E-07	-	
1974	572000.00	4176000.00	RESIDENTIAL	-3.98E-06	-1.15E-06	-	-8.20E-06	-5.69E-06	-	2.26E-08	7.33E-07	-	
1975	572000.00	4175750.00	RESIDENTIAL	-4.12E-06	-1.12E-06	-	-8.70E-06	-6.03E-06	-	2.68E-08	8.81E-07	-	
1976	572000.00	4175500.00	RESIDENTIAL	-4.41E-06	-1.11E-06	-	-9.54E-06	-6.60E-06	-	3.25E-08	1.08E-06	-	
1977	572000.00	4175250.00	RESIDENTIAL	-4.86E-06	-1.17E-06	-	-1.06E-05	-7.36E-06	-	3.87E-08	1.28E-06	-	
1984	572000.00	4173500.00	RESIDENTIAL	-5.57E-06	-1.51E-06	-	-1.21E-05	-8.48E-06	-	4.14E-08	1.31E-06	-	
1985	572000.00	4173250.00	RESIDENTIAL	-5.71E-06	-1.63E-06	-	-1.21E-05	-8.55E-06	-	3.91E-08	1.20E-06	-	
1986	572000.00	4173000.00	RESIDENTIAL	-5.86E-06	-1.77E-06	-	-1.22E-05	-8.61E-06	-	3.60E-08	1.08E-06	-	
1987	572000.00	4172750.00	RESIDENTIAL	-5.94E-06	-1.87E-06	-	-1.21E-05	-8.55E-06	-	3.26E-08	9.62E-07	-	
1997	572250.00	4178000.00	RESIDENTIAL	-1.34E-06	-3.92E-07	-	-2.74E-06	-1.90E-06	-	7.62E-09	2.39E-07	-	
1998	572250.00	4177750.00	RESIDENTIAL	-1.48E-06	-4.35E-07	-	-3.05E-06	-2.12E-06	-	8.54E-09	2.69E-07	-	
1999	572250.00	4177500.00	RESIDENTIAL	-1.64E-06	-4.78E-07	-	-3.39E-06	-2.36E-06	-	9.60E-09	3.03E-07	-	
2003	572250.00	4176500.00	RESIDENTIAL	-2.70E-06	-7.77E-07	-	-5.57E-06	-3.87E-06	-	1.58E-08	5.06E-07	-	
2004	572250.00	4176250.00	RESIDENTIAL	-3.13E-06	-9.08E-07	-	-6.46E-06	-4.48E-06	-	1.80E-08	5.77E-07	-	
2005	572250.00	4176000.00	RESIDENTIAL	-3.37E-06	-9.46E-07	-	-7.02E-06	-4.87E-06	-	2.06E-08	6.67E-07	-	
2006	572250.00	4175750.00	SCHOOL	-3.62E-06	-9.65E-07	-2.45E-06	-7.69E-06	-5.34E-06	-3.61E-06	2.44E-08	8.02E-07	2.23E-07	
2007	572250.00	4175500.00	RESIDENTIAL	-4.00E-06	-1.01E-06	-	-8.61E-06	-5.96E-06	-	2.92E-08	9.65E-07	-	
2008	572250.00	4175250.00	RESIDENTIAL	-4.43E-06	-1.10E-06	-	-9.60E-06	-6.65E-06	-	3.39E-08	1.11E-06	-	
2009	572250.00	4175000.00	RESIDENTIAL	-5.08E-06	-1.25E-06	-	-1.10E-05	-7.59E-06	-	3.95E-08	1.27E-06	-	
2016	572250.00	4173250.00	RESIDENTIAL	-4.92E-06	-1.38E-06	-	-1.05E-05	-7.42E-06	-	3.49E-08	1.08E-06	-	
2017	572250.00	4173000.00	RESIDENTIAL	-5.03E-06	-1.48E-06	-	-1.06E-05	-7.47E-06	-	3.28E-08	9.94E-07	-	
2018	572250.00	4172750.00	RESIDENTIAL	-5.12E-06	-1.58E-06	-	-1.06E-05	-7.47E-06	-	3.01E-08	8.95E-07	-	
2019	572250.00	4172500.00	RESIDENTIAL	-5.11E-06	-1.62E-06	-	-1.04E-05	-7.33E-06	-	2.73E-08	8.03E-07	-	
2020	572250.00	4172250.00	RESIDENTIAL	-4.85E-06	-1.56E-06	-	-9.79E-06	-6.90E-06	-	2.46E-08	7.24E-07	-	
2021	572250.00	4172000.00	RESIDENTIAL	-4.39E-06	-1.41E-06	-	-8.85E-06	-6.24E-06	-	2.23E-08	6.56E-07	-	
2028	572500.00	4178000.00	RESIDENTIAL	-1.26E-06	-3.67E-07	-	-2.61E-06	-1.81E-06	-	7.45E-09	2.34E-07	-	
2029	572500.00	4177750.00	RESIDENTIAL	-1.35E-06	-3.88E-07	-	-2.81E-06	-1.96E-06	-	8.33E-09	2.62E-07	-	
2030	572500.00	4177500.00	RESIDENTIAL	-1.50E-06	-4.29E-07	-	-3.13E-06	-2.18E-06	-	9.33E-09	2.95E-07	-	
2033	572500.00	4176750.00	RESIDENTIAL	-2.11E-06	-5.99E-07	-	-4.40E-06	-3.06E-06	-	1.31E-08	4.16E-07	-	
2035	572500.00	4176250.00	RESIDENTIAL	-2.73E-06	-7.81E-07	-	-5.66E-06	-3.93E-06	-	1.63E-08	5.23E-07	-	
2036	572500.00	4176000.00	RESIDENTIAL	-2.96E-06	-8.18E-07	-	-6.22E-06	-4.32E-06	-	1.89E-08	6.13E-07	-	
2037	572500.00	4175750.00	SCHOOL	-3.26E-06	-8.63E-07	-2.21E-06	-6.94E-06	-4.81E-06	-3.26E-06	2.23E-08	7.32E-07	2.04E-07	
2038	572500.00	4175500.00	RESIDENTIAL	-3.63E-06	-9.27E-07	-	-7.80E-06	-5.40E-06	-	2.64E-08	8.65E-07	-	
2039	572500.00	4175250.00	RESIDENTIAL	-4.03E-06	-1.02E-06	-	-8.68E-06	-6.01E-06	-	3.00E-08	9.69E-07	-	
2041	572500.00	4174750.00	RESIDENTIAL	-5.00E-06	-1.32E-06	-	-1.06E-05	-7.29E-06	-	3.52E-08	1.10E-06	-	
2046	572500.00	4173500.00	RESIDENTIAL	-4.31E-06	-1.16E-06	-	-9.31E-06	-6.55E-06	-	3.16E-08	1.01E-06	-	
2047	572500.00	4173250.00	RESIDENTIAL	-4.29E-06	-1.18E-06	-	-9.23E-06	-6.51E-06	-	3.11E-08	9.73E-07	-	
2048	572500.00	4173000.00	RESIDENTIAL	-4.37E-06	-1.26E-06	-	-9.29E-06	-6.56E-06	-	2.98E-08	9.13E-07	-	
2049	572500.00	4172750.00	RESIDENTIAL	-4.46E-06	-1.35E-06	-	-9.31E-06	-6.58E-06	-	2.78E-08	8.34E-07	-	
2050	572500.00	4172500.00	RESIDENTIAL	-4.50E-06	-1.41E-06	-	-9.24E-06	-6.53E-06	-	2.55E-08	7.54E-07	-	
2051	572500.00	4172250.00	RESIDENTIAL	-4.41E-06	-1.41E-06	-	-8.94E-06	-6.31E-06	-	2.32E-08	6.82E-07	-	
2052	572500.00	4172000.00	RESIDENTIAL	-4.12E-06	-1.32E-06	-	-8.32E-06	-5.86E-06	-	2.11E-08	6.21E-07	-	
2059	572750.00	4178000.00	RESIDENTIAL	-1.18E-06	-3.36E-07	-	-2.46E-06	-1.71E-06	-	7.41E-09	2.32E-07	-	
2060	572750.00	4177750.00	RESIDENTIAL	-1.25E-06	-3.52E-07	-	-2.63E-06	-1.83E-06	-	8.13E-09	2.56E-07	-	
2061	572750.00	4177500.00	RESIDENTIAL	-1.39E-06	-3.91E-07	-	-2.91E-06	-2.03E-06	-	8.98E-09	2.83E-07	-	

**OAK Terminal Modernization & Development**

**Table 2-16. Residential Cancer Risks (Inhalation)**

**Combined Construction & Operations**

**Combined Construction + Operations**

**Inhalation Residential Cancer Risk**

**Operations Only**

**Inhalation Residential Cancer Risk**

**Construction Only**

**Inhalation Residential Cancer Risk**

RecID	UTM X	UTM Y	Receptor Type	Maximum->			Minimum->			Max RecID->								
				-1.15E-07	-3.31E-08	-1.74E-07	-1.61E-05	-5.66E-06	-2.77E-06	3177	3179	2965	2028-2057	2028-2036	2028-2039	4.93E-08	1.48E-06	2.27E-07
				2025-2054	2025-2033	2025-2036	2025-2054	2025-2033	2025-2036	2025-2054	2025-2033	2025-2036	2025-2054	2025-2033	2025-2036	2025-2030	2025-2030	2025-2030
				30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	6 Yrs	6 Yrs	6 Yrs			
				Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child			
2062	572750.00	4177250.00	RESIDENTIAL	-1.56E-06	-4.37E-07	-	-3.26E-06	-2.27E-06	-	1.00E-08	3.17E-07	-						
2063	572750.00	4177000.00	SCHOOL	-1.73E-06	-4.89E-07	-1.16E-06	-3.64E-06	-2.54E-06	-1.71E-06	1.11E-08	3.53E-07	1.02E-07						
2064	572750.00	4176750.00	RESIDENTIAL	-1.97E-06	-5.61E-07	-	-4.11E-06	-2.86E-06	-	1.22E-08	3.87E-07	-						
2065	572750.00	4176500.00	RESIDENTIAL	-2.22E-06	-6.37E-07	-	-4.60E-06	-3.20E-06	-	1.33E-08	4.24E-07	-						
2066	572750.00	4176250.00	RESIDENTIAL	-2.44E-06	-6.88E-07	-	-5.09E-06	-3.54E-06	-	1.51E-08	4.86E-07	-						
2067	572750.00	4176000.00	RESIDENTIAL	-2.68E-06	-7.33E-07	-	-5.65E-06	-3.93E-06	-	1.75E-08	5.69E-07	-						
2068	572750.00	4175750.00	RESIDENTIAL	-2.98E-06	-7.89E-07	-	-6.36E-06	-4.42E-06	-	2.07E-08	6.74E-07	-						
2069	572750.00	4175500.00	RESIDENTIAL	-3.31E-06	-8.51E-07	-	-7.10E-06	-4.92E-06	-	2.39E-08	7.79E-07	-						
2070	572750.00	4175250.00	RESIDENTIAL	-3.66E-06	-9.51E-07	-	-7.84E-06	-5.43E-06	-	2.65E-08	8.51E-07	-						
2071	572750.00	4175000.00	RESIDENTIAL	-4.01E-06	-1.03E-06	-	-8.56E-06	-5.91E-06	-	2.90E-08	9.26E-07	-						
2072	572750.00	4174750.00	RESIDENTIAL	-4.35E-06	-1.17E-06	-	-9.13E-06	-6.31E-06	-	2.95E-08	9.21E-07	-						
2079	572750.00	4173000.00	RESIDENTIAL	-3.86E-06	-1.10E-06	-	-8.25E-06	-5.82E-06	-	2.70E-08	8.34E-07	-						
2081	572750.00	4172500.00	RESIDENTIAL	-3.97E-06	-1.22E-06	-	-8.23E-06	-5.83E-06	-	2.39E-08	7.12E-07	-						
2082	572750.00	4172250.00	RESIDENTIAL	-3.97E-06	-1.25E-06	-	-8.11E-06	-5.73E-06	-	2.19E-08	6.46E-07	-						
2083	572750.00	4172000.00	RESIDENTIAL	-3.82E-06	-1.22E-06	-	-7.74E-06	-5.46E-06	-	2.00E-08	5.87E-07	-						
2090	573000.00	4178000.00	RESIDENTIAL	-1.09E-06	-3.06E-07	-	-2.29E-06	-1.60E-06	-	7.17E-09	2.25E-07	-						
2091	573000.00	4177750.00	RESIDENTIAL	-1.19E-06	-3.34E-07	-	-2.51E-06	-1.76E-06	-	7.86E-09	2.48E-07	-						
2092	573000.00	4177500.00	RESIDENTIAL	-1.33E-06	-3.72E-07	-	-2.79E-06	-1.95E-06	-	8.67E-09	2.73E-07	-						
2093	573000.00	4177250.00	RESIDENTIAL	-1.48E-06	-4.17E-07	-	-3.11E-06	-2.17E-06	-	9.55E-09	3.02E-07	-						
2094	573000.00	4177000.00	RESIDENTIAL	-1.66E-06	-4.71E-07	-	-3.47E-06	-2.42E-06	-	1.05E-08	3.31E-07	-						
2095	573000.00	4176750.00	RESIDENTIAL	-1.84E-06	-5.28E-07	-	-3.83E-06	-2.67E-06	-	1.13E-08	3.57E-07	-						
2096	573000.00	4176500.00	RESIDENTIAL	-2.03E-06	-5.79E-07	-	-4.23E-06	-2.94E-06	-	1.24E-08	3.96E-07	-						
2097	573000.00	4176250.00	RESIDENTIAL	-2.23E-06	-6.23E-07	-	-4.67E-06	-3.25E-06	-	1.41E-08	4.54E-07	-						
2098	573000.00	4176000.00	RESIDENTIAL	-2.50E-06	-6.83E-07	-	-5.27E-06	-3.67E-06	-	1.64E-08	5.32E-07	-						
2099	573000.00	4175750.00	RESIDENTIAL	-2.75E-06	-7.27E-07	-	-5.86E-06	-4.07E-06	-	1.91E-08	6.21E-07	-						
2100	573000.00	4175500.00	RESIDENTIAL	-3.03E-06	-7.90E-07	-	-6.49E-06	-4.51E-06	-	2.18E-08	7.04E-07	-						
2101	573000.00	4175250.00	RESIDENTIAL	-3.36E-06	-8.88E-07	-	-7.15E-06	-4.96E-06	-	2.38E-08	7.57E-07	-						
2102	573000.00	4175000.00	RESIDENTIAL	-3.63E-06	-9.50E-07	-	-7.69E-06	-5.31E-06	-	2.55E-08	8.11E-07	-						
2103	573000.00	4174750.00	RESIDENTIAL	-3.88E-06	-1.06E-06	-	-8.11E-06	-5.61E-06	-	2.57E-08	8.00E-07	-						
2104	573000.00	4174500.00	SCHOOL	-4.19E-06	-1.22E-06	-2.77E-06	-8.61E-06	-5.99E-06	-4.04E-06	2.49E-08	7.61E-07	2.27E-07						
2121	573250.00	4178000.00	RESIDENTIAL	-1.04E-06	-2.89E-07	-	-2.20E-06	-1.53E-06	-	6.98E-09	2.19E-07	-						
2122	573250.00	4177750.00	RESIDENTIAL	-1.16E-06	-3.24E-07	-	-2.44E-06	-1.70E-06	-	7.63E-09	2.40E-07	-						
2123	573250.00	4177500.00	RESIDENTIAL	-1.27E-06	-3.57E-07	-	-2.68E-06	-1.87E-06	-	8.36E-09	2.64E-07	-						
2124	573250.00	4177250.00	RESIDENTIAL	-1.41E-06	-3.99E-07	-	-2.96E-06	-2.07E-06	-	9.13E-09	2.87E-07	-						
2125	573250.00	4177000.00	RESIDENTIAL	-1.56E-06	-4.46E-07	-	-3.27E-06	-2.28E-06	-	9.82E-09	3.10E-07	-						
2126	573250.00	4176750.00	RESIDENTIAL	-1.73E-06	-4.95E-07	-	-3.60E-06	-2.50E-06	-	1.06E-08	3.35E-07	-						
2127	573250.00	4176500.00	RESIDENTIAL	-1.88E-06	-5.34E-07	-	-3.93E-06	-2.74E-06	-	1.17E-08	3.73E-07	-						
2128	573250.00	4176250.00	RESIDENTIAL	-2.11E-06	-5.93E-07	-	-4.43E-06	-3.09E-06	-	1.34E-08	4.30E-07	-						
2129	573250.00	4176000.00	RESIDENTIAL	-2.34E-06	-6.42E-07	-	-4.94E-06	-3.44E-06	-	1.54E-08	4.98E-07	-						
2130	573250.00	4175750.00	RESIDENTIAL	-2.55E-06	-6.74E-07	-	-5.43E-06	-3.77E-06	-	1.78E-08	5.75E-07	-						
2131	573250.00	4175500.00	RESIDENTIAL	-2.80E-06	-7.40E-07	-	-5.98E-06	-4.15E-06	-	1.99E-08	6.37E-07	-						
2132	573250.00	4175250.00	RESIDENTIAL	-3.09E-06	-8.26E-07	-	-6.54E-06	-4.54E-06	-	2.14E-08	6.79E-07	-						
2133	573250.00	4175000.00	RESIDENTIAL	-3.30E-06	-8.74E-07	-	-6.97E-06	-4.81E-06	-	2.27E-08	7.21E-07	-						
2134	573250.00	4174750.00	RESIDENTIAL	-3.51E-06	-9.71E-07	-	-7.32E-06	-5.06E-06	-	2.28E-08	7.08E-07	-						
2135	573250.00	4174500.00	SCHOOL	-3.77E-06	-1.11E-06	-2.49E-06	-7.73E-06	-5.38E-06	-3.63E-06	2.21E-08	6.71E-07	2.01E-07						
2136	573250.00	4174250.00	RESIDENTIAL	-3.99E-06	-1.22E-06	-	-8.11E-06	-5.66E-06	-	2.13E-08	6.55E-07	-						
2152	573500.00	4178000.00	RESIDENTIAL	-1.02E-06	-2.84E-07	-	-2.15E-06	-1.50E-06	-	6.76E-09	2.13E-07	-						
2153	573500.00	4177750.00	RESIDENTIAL	-1.13E-06	-3.17E-07	-	-2.37E-06	-1.66E-06	-	7.37E-09	2.32E-07	-						
2154	573500.00	4177500.00	RESIDENTIAL	-1.24E-06	-3.50E-07	-	-2.60E-06	-1.82E-06	-	8.02E-09	2.52E-07	-						
2155	573500.00	4177250.00	RESIDENTIAL	-1.36E-06	-3.89E-07	-	-2.85E-06	-1.99E-06	-	8.60E-09	2.71E-07	-						
2156	573500.00	4177000.00	RESIDENTIAL	-1.48E-06	-4.26E-07	-	-3.10E-06	-2.16E-06	-	9.22E-09	2.90E-07	-						
2157	573500.00	4176750.00	RESIDENTIAL	-1.61E-06	-4.61E-07	-	-3.35E-06	-2.34E-06	-	9.91E-09	3.14E-07	-						
2158	573500.00	4176500.00	RESIDENTIAL	-1.78E-06	-5.03E-07	-	-3.72E-06	-2.59E-06	-	1.12E-08	3.56E-07	-						
2161	573500.00	4175750.00	RESIDENTIAL	-2.36E-06	-6.27E-07	-	-5.04E-06	-3.50E-06	-	1.66E-08	5.33E-07	-						
2162	573500.00	4175500.00	RESIDENTIAL	-2.60E-06	-6.96E-07	-	-5.55E-06	-3.86E-06	-	1.83E-08	5.83E-07	-						
2163	573500.00	4175250.00	RESIDENTIAL	-2.85E-06	-7.68E-07	-	-6.02E-06	-4.17E-06	-	1.95E-08	6.15E-07	-						
2164	573500.00	4175000.00	RESIDENTIAL	-3.01E-06	-8.04E-07	-	-6.34E-06	-4.38E-06	-	2.05E-08	6.48E-07	-						
2165	573500.00	4174750.00	RESIDENTIAL	-3.19E-06	-8.88E-07	-	-6.63E-06	-4.59E-06	-	2.05E-08	6.33E-07	-						
2166	573500.00	4174500.00	RESIDENTIAL	-3.45E-06	-1.02E-06	-	-7.06E-06	-4.91E-06	-	1.99E-08	6.04E-07	-						
2167	573500.00	4174250.00	RESIDENTIAL	-3.63E-06	-1.12E-06	-	-7.36E-06	-5.14E-06	-	1.91E-08	5.86E-07	-						
2177	573500.00	4171750.00	RESIDENTIAL	-2.87E-06	-9.04E-07	-	-5.87E-06	-4.15E-06	-	1.60E-08	4.71E-07	-						
2508	565750.00	4176750.00	RESIDENTIAL	-1.44E-06	-4.26E-07	-	-2.94E-06	-2.05E-06	-	8.28E-09	2.52E-07	-						
2509	565750.00	4177000.00	RESIDENTIAL	-1.34E-06	-3.91E-07	-	-2.73E-06	-1.89E-06	-	7.71E-09	2.37E-07	-						

OAK Terminal Modernization & Development

Table 2-16. Residential Cancer Risks (Inhalation)

Combined Construction & Operations

Combined Construction + Operations

Inhalation Residential Cancer Risk

Operations Only

Inhalation Residential Cancer Risk

Construction Only

Inhalation Residential Cancer Risk

RecID	UTM X	UTM Y	Receptor Type	Maximum->			Minimum->			Max RecID->					
				-1.15E-07	-3.31E-08	-1.74E-07	-1.61E-05	-5.66E-06	-2.77E-06	-2.39E-07	-1.69E-07	-2.53E-07	4.93E-08	1.48E-06	2.27E-07
				3177	3179	2965	3177	3179	2965	2028-2057	2028-2036	2028-2039	1923	1953	2104
				2025-2054	2025-2033	2025-2036	2025-2054	2025-2033	2025-2036	30 Yrs	9 Yrs	12 Yrs	6 Yrs	6 Yrs	6 Yrs
				Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child			
2510	565750.00	4177250.00	RESIDENTIAL	-1.20E-06	-3.43E-07	-	-2.46E-06	-1.70E-06	-	7.14E-09	2.21E-07	-			
2511	565750.00	4177500.00	RESIDENTIAL	-1.07E-06	-3.02E-07	-	-2.20E-06	-1.52E-06	-	6.53E-09	2.04E-07	-			
2512	565750.00	4177750.00	RESIDENTIAL	-9.48E-07	-2.67E-07	-	-1.97E-06	-1.37E-06	-	5.97E-09	1.87E-07	-			
2513	565750.00	4178000.00	RESIDENTIAL	-8.57E-07	-2.44E-07	-	-1.79E-06	-1.24E-06	-	5.36E-09	1.68E-07	-			
2520	565750.00	4179750.00	HOSPITAL	-5.28E-07	-1.53E-07	-	-1.09E-06	-7.59E-07	-	3.17E-09	9.82E-08	-			
2521	565750.00	4180000.00	RESIDENTIAL	-4.79E-07	-1.37E-07	-	-9.98E-07	-6.96E-07	-	6.79E-09	9.34E-08	-			
2522	565750.00	4180250.00	RESIDENTIAL	-4.35E-07	-1.25E-07	-	-9.13E-07	-6.40E-07	-	2.76E-09	8.68E-08	-			
2523	565750.00	4180500.00	RESIDENTIAL	-4.00E-07	-1.14E-07	-	-8.40E-07	-5.87E-07	-	2.60E-09	8.10E-08	-			
2540	565500.00	4177000.00	RESIDENTIAL	-1.26E-06	-3.74E-07	-	-2.58E-06	-1.79E-06	-	7.24E-09	2.21E-07	-			
2541	565500.00	4177250.00	RESIDENTIAL	-1.17E-06	-3.40E-07	-	-2.39E-06	-1.65E-06	-	6.79E-09	2.08E-07	-			
2542	565500.00	4177500.00	RESIDENTIAL	-1.05E-06	-3.02E-07	-	-2.15E-06	-1.49E-06	-	6.23E-09	1.92E-07	-			
2543	565500.00	4177750.00	RESIDENTIAL	-9.39E-07	-2.66E-07	-	-1.94E-06	-1.34E-06	-	5.73E-09	1.79E-07	-			
2549	565500.00	4179250.00	RESIDENTIAL	-5.96E-07	-1.76E-07	-	-1.23E-06	-8.60E-07	-	3.56E-09	1.09E-07	-			
2550	565500.00	4179500.00	RESIDENTIAL	-5.63E-07	-1.66E-07	-	-1.16E-06	-8.12E-07	-	3.36E-09	1.03E-07	-			
2551	565500.00	4179750.00	RESIDENTIAL	-5.23E-07	-1.53E-07	-	-1.08E-06	-7.52E-07	-	3.14E-09	9.64E-08	-			
2552	565500.00	4180000.00	RESIDENTIAL	-4.85E-07	-1.41E-07	-	-1.01E-06	-7.02E-07	-	2.94E-09	9.16E-08	-			
2553	565500.00	4180250.00	RESIDENTIAL	-4.39E-07	-1.25E-07	-	-9.17E-07	-6.39E-07	-	2.79E-09	8.70E-08	-			
2554	565500.00	4180500.00	RESIDENTIAL	-4.07E-07	-1.16E-07	-	-8.51E-07	-5.95E-07	-	2.59E-09	8.08E-08	-			
2572	565250.00	4177250.00	RESIDENTIAL	-1.11E-06	-3.28E-07	-	-2.27E-06	-1.58E-06	-	6.41E-09	1.95E-07	-			
2573	565250.00	4177500.00	RESIDENTIAL	-1.02E-06	-2.99E-07	-	-2.09E-06	-1.45E-06	-	5.96E-09	1.82E-07	-			
2580	565250.00	4179250.00	RESIDENTIAL	-5.77E-07	-1.72E-07	-	-1.19E-06	-8.37E-07	-	3.48E-09	1.06E-07	-			
2581	565250.00	4179500.00	RESIDENTIAL	-5.46E-07	-1.61E-07	-	-1.13E-06	-7.86E-07	-	3.25E-09	9.91E-08	-			
2582	565250.00	4179750.00	RESIDENTIAL	-5.18E-07	-1.53E-07	-	-1.07E-06	-7.48E-07	-	3.10E-09	9.47E-08	-			
2583	565250.00	4180000.00	RESIDENTIAL	-4.82E-07	-1.42E-07	-	-9.94E-07	-6.94E-07	-	2.87E-09	8.81E-08	-			
2584	565250.00	4180250.00	RESIDENTIAL	-4.44E-07	-1.29E-07	-	-9.19E-07	-6.40E-07	-	2.71E-09	8.36E-08	-			
2585	565250.00	4180500.00	RESIDENTIAL	-4.11E-07	-1.18E-07	-	-8.55E-07	-5.96E-07	-	2.59E-09	7.96E-08	-			
2612	565000.00	4179500.00	SCHOOL	-5.25E-07	-1.57E-07	-3.50E-07	-1.08E-06	-7.61E-07	-5.08E-07	3.10E-09	9.48E-08	2.84E-08			
2613	565000.00	4179750.00	RESIDENTIAL	-5.03E-07	-1.49E-07	-	-1.04E-06	-7.23E-07	-	2.99E-09	9.08E-08	-			
2614	565000.00	4180000.00	RESIDENTIAL	-4.77E-07	-1.41E-07	-	-9.78E-07	-6.82E-07	-	2.80E-09	8.47E-08	-			
2615	565000.00	4180250.00	RESIDENTIAL	-4.46E-07	-1.32E-07	-	-9.17E-07	-6.39E-07	-	2.64E-09	8.02E-08	-			
2616	565000.00	4180500.00	RESIDENTIAL	-4.16E-07	-1.22E-07	-	-8.61E-07	-6.01E-07	-	2.55E-09	7.77E-08	-			
2643	564750.00	4179500.00	RESIDENTIAL	-4.97E-07	-1.45E-07	-	-1.03E-06	-7.23E-07	-	3.10E-09	9.48E-08	-			
2644	564750.00	4179750.00	RESIDENTIAL	-4.83E-07	-1.43E-07	-	-9.98E-07	-6.99E-07	-	2.91E-09	8.87E-08	-			
2645	564750.00	4180000.00	RESIDENTIAL	-4.59E-07	-1.36E-07	-	-9.49E-07	-6.64E-07	-	2.79E-09	8.46E-08	-			
2646	564750.00	4180250.00	RESIDENTIAL	-4.42E-07	-1.32E-07	-	-9.09E-07	-6.36E-07	-	2.60E-09	7.83E-08	-			
2647	564750.00	4180500.00	RESIDENTIAL	-4.21E-07	-1.25E-07	-	-8.67E-07	-6.05E-07	-	2.51E-09	7.61E-08	-			
2675	564500.00	4179750.00	RESIDENTIAL	-4.58E-07	-1.34E-07	-	-9.56E-07	-6.70E-07	-	2.87E-09	8.81E-08	-			
2676	564500.00	4180000.00	RESIDENTIAL	-4.46E-07	-1.32E-07	-	-9.23E-07	-6.47E-07	-	2.68E-09	8.20E-08	-			
2677	564500.00	4180250.00	RESIDENTIAL	-4.22E-07	-1.25E-07	-	-8.73E-07	-6.12E-07	-	2.56E-09	7.80E-08	-			
2678	564500.00	4180500.00	RESIDENTIAL	-4.08E-07	-1.21E-07	-	-8.42E-07	-5.89E-07	-	2.44E-09	7.39E-08	-			
2703	564250.00	4179000.00	RESIDENTIAL	-5.59E-07	-1.58E-07	-	-1.15E-06	-7.98E-07	-	3.44E-09	1.07E-07	-			
2704	564250.00	4179250.00	RESIDENTIAL	-5.09E-07	-1.43E-07	-	-1.06E-06	-7.34E-07	-	3.22E-09	1.00E-07	-			
2705	564250.00	4179500.00	RESIDENTIAL	-4.65E-07	-1.31E-07	-	-9.72E-07	-6.77E-07	-	2.98E-09	9.34E-08	-			
2706	564250.00	4179750.00	RESIDENTIAL	-4.41E-07	-1.27E-07	-	-9.22E-07	-6.45E-07	-	2.79E-09	8.73E-08	-			
2707	564250.00	4180000.00	RESIDENTIAL	-4.29E-07	-1.27E-07	-	-8.90E-07	-6.25E-07	-	2.60E-09	7.99E-08	-			
2708	564250.00	4180250.00	RESIDENTIAL	-4.14E-07	-1.24E-07	-	-8.52E-07	-5.96E-07	-	2.45E-09	7.41E-08	-			
2709	564250.00	4180500.00	RESIDENTIAL	-3.99E-07	-1.20E-07	-	-8.20E-07	-5.74E-07	-	2.37E-09	7.04E-08	-			
2734	564000.00	4179000.00	RESIDENTIAL	-5.61E-07	-1.61E-07	-	-1.16E-06	-8.01E-07	-	3.40E-09	1.05E-07	-			
2735	564000.00	4179250.00	RESIDENTIAL	-5.13E-07	-1.45E-07	-	-1.06E-06	-7.34E-07	-	3.17E-09	9.81E-08	-			
2736	564000.00	4179500.00	RESIDENTIAL	-4.71E-07	-1.33E-07	-	-9.77E-07	-6.78E-07	-	2.95E-09	9.16E-08	-			
2737	564000.00	4179750.00	RESIDENTIAL	-4.34E-07	-1.23E-07	-	-9.03E-07	-6.28E-07	-	2.75E-09	8.55E-08	-			
2738	564000.00	4180000.00	RESIDENTIAL	-4.16E-07	-1.21E-07	-	-8.64E-07	-6.05E-07	-	2.56E-09	7.93E-08	-			
2739	564000.00	4180250.00	RESIDENTIAL	-3.94E-07	-1.16E-07	-	-8.18E-07	-5.73E-07	-	2.44E-09	7.40E-08	-			
2740	564000.00	4180500.00	RESIDENTIAL	-3.79E-07	-1.13E-07	-	-7.84E-07	-5.49E-07	-	2.26E-09	6.93E-08	-			
2765	563750.00	4179000.00	RESIDENTIAL	-5.58E-07	-1.62E-07	-	-1.14E-06	-7.93E-07	-	3.32E-09	1.01E-07	-			
2766	563750.00	4179250.00	RESIDENTIAL	-5.13E-07	-1.46E-07	-	-1.06E-06	-7.32E-07	-	3.13E-09	9.63E-08	-			
2767	563750.00	4179500.00	RESIDENTIAL	-4.76E-07	-1.36E-07	-	-9.83E-07	-6.81E-07	-	2.90E-09	8.98E-08	-			
2768	563750.00	4179750.00	RESIDENTIAL	-4.34E-07	-1.22E-07	-	-9.03E-07	-6.26E-07	-	2.75E-09	8.54E-08	-			
2769	563750.00	4180000.00	RESIDENTIAL	-4.02E-07	-1.14E-07	-	-8.37E-07	-5.82E-07	-	2.56E-09	7.93E-08	-			
2770	563750.00	4180250.00	RESIDENTIAL	-3.80E-07	-1.09E-07	-	-7.90E-07	-5.51E-07	-	2.37E-09	7.32E-08	-			
2771	563750.00	4180500.00	RESIDENTIAL	-3.69E-07	-1.10E-07	-	-7.66E-07	-5.38E-07	-	2.22E-09	6.89E-08	-			
2796	563500.00	4179000.00	RESIDENTIAL	-5.59E-07	-1.66E-07	-	-1.14E-06	-7.93E-07	-	3.20E-09	9.71E-08	-			
2797	563500.00	4179250.00	RESIDENTIAL	-5.14E-07	-1.49E-07	-	-1.06E-06	-7.34E-07	-	3.09E-09	9.43E-08	-			

**OAK Terminal Modernization & Development**

**Table 2-16. Residential Cancer Risks (Inhalation)**

**Combined Construction & Operations**

**Combined Construction + Operations**

**Inhalation Residential Cancer Risk**

**Operations Only**

**Inhalation Residential Cancer Risk**

**Construction Only**

**Inhalation Residential Cancer Risk**

RecID	UTM X	UTM Y	Receptor Type	Combined Construction + Operations			Operations Only			Construction Only			
				Maximum->	-1.15E-07	-3.31E-08	-1.74E-07	-2.39E-07	-1.69E-07	-2.53E-07	4.93E-08	1.48E-06	2.27E-07
				Minimum->	-1.61E-05	-5.66E-06	-2.77E-06	-3.00E-05	-2.07E-05	-4.04E-06	6.84E-10	2.09E-08	1.47E-08
Max RecID->	3177	3179	2965	3177	3179	2965	1923	1953	2104				
				2025-2054	2025-2033	2025-2036	2028-2057	2028-2036	2028-2039	2025-2030	2025-2030	2025-2030	
				30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	6 Yrs	6 Yrs	6 Yrs	
				Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	
2798	563500.00	4179500.00	RESIDENTIAL	-4.73E-07	-1.35E-07	-	-9.78E-07	-6.78E-07	-	2.90E-09	8.97E-08	-	
2799	563500.00	4179750.00	RESIDENTIAL	-4.37E-07	-1.24E-07	-	-9.03E-07	-6.25E-07	-	2.67E-09	8.32E-08	-	
2800	563500.00	4180000.00	RESIDENTIAL	-4.02E-07	-1.13E-07	-	-8.36E-07	-5.80E-07	-	2.56E-09	7.92E-08	-	
2801	563500.00	4180250.00	RESIDENTIAL	-3.71E-07	-1.06E-07	-	-7.75E-07	-5.40E-07	-	2.33E-09	7.28E-08	-	
2802	563500.00	4180500.00	RESIDENTIAL	-3.53E-07	-1.01E-07	-	-7.35E-07	-5.12E-07	-	2.22E-09	6.89E-08	-	
2813	569500.00	4180750.00	RESIDENTIAL	-4.59E-07	-1.42E-07	-	-9.26E-07	-6.46E-07	-	2.51E-09	7.24E-08	-	
2814	569750.00	4180750.00	RESIDENTIAL	-4.43E-07	-1.31E-07	-	-9.06E-07	-6.31E-07	-	2.53E-09	7.76E-08	-	
2815	570000.00	4180750.00	RESIDENTIAL	-4.53E-07	-1.35E-07	-	-9.23E-07	-6.42E-07	-	2.53E-09	7.77E-08	-	
2816	570250.00	4180750.00	RESIDENTIAL	-4.63E-07	-1.39E-07	-	-9.40E-07	-6.53E-07	-	2.53E-09	7.77E-08	-	
2817	570500.00	4180750.00	RESIDENTIAL	-4.50E-07	-1.37E-07	-	-9.24E-07	-6.48E-07	-	2.57E-09	7.82E-08	-	
2818	570750.00	4180750.00	RESIDENTIAL	-4.25E-07	-1.26E-07	-	-8.89E-07	-6.25E-07	-	2.64E-09	8.16E-08	-	
2819	571000.00	4180750.00	RESIDENTIAL	-4.27E-07	-1.25E-07	-	-8.89E-07	-6.24E-07	-	2.61E-09	8.12E-08	-	
2820	571250.00	4180750.00	RESIDENTIAL	-4.40E-07	-1.32E-07	-	-9.03E-07	-6.31E-07	-	2.49E-09	7.72E-08	-	
2821	571500.00	4180750.00	RESIDENTIAL	-4.38E-07	-1.29E-07	-	-8.92E-07	-6.18E-07	-	2.49E-09	7.54E-08	-	
2822	571750.00	4180750.00	RESIDENTIAL	-4.31E-07	-1.23E-07	-	-8.75E-07	-5.99E-07	-	2.49E-09	7.54E-08	-	
2823	572000.00	4180750.00	RESIDENTIAL	-4.34E-07	-1.23E-07	-	-8.83E-07	-6.04E-07	-	2.52E-09	7.72E-08	-	
2824	572250.00	4180750.00	RESIDENTIAL	-4.31E-07	-1.23E-07	-	-8.75E-07	-5.98E-07	-	2.48E-09	7.54E-08	-	
2825	572500.00	4180750.00	RESIDENTIAL	-4.51E-07	-1.28E-07	-	-9.16E-07	-6.27E-07	-	2.64E-09	8.02E-08	-	
2826	572750.00	4180750.00	RESIDENTIAL	-4.21E-07	-1.17E-07	-	-8.64E-07	-5.93E-07	-	2.59E-09	7.95E-08	-	
2827	573000.00	4180750.00	RESIDENTIAL	-4.15E-07	-1.14E-07	-	-8.64E-07	-5.96E-07	-	2.70E-09	8.34E-08	-	
2828	573250.00	4180750.00	RESIDENTIAL	-3.26E-07	-9.10E-08	-	-6.84E-07	-4.76E-07	-	2.17E-09	6.69E-08	-	
2829	573500.00	4180750.00	RESIDENTIAL	-2.93E-07	-8.44E-08	-	-6.09E-07	-4.25E-07	-	1.83E-09	5.64E-08	-	
2837	568750.00	4181000.00	RESIDENTIAL	-3.56E-07	-1.02E-07	-	-7.33E-07	-5.09E-07	-	2.11E-09	6.63E-08	-	
2839	569250.00	4181000.00	RESIDENTIAL	-4.21E-07	-1.32E-07	-	-8.40E-07	-5.84E-07	-	2.07E-09	6.19E-08	-	
2840	569500.00	4181000.00	RESIDENTIAL	-4.20E-07	-1.29E-07	-	-8.51E-07	-5.93E-07	-	2.26E-09	6.79E-08	-	
2841	569750.00	4181000.00	RESIDENTIAL	-4.03E-07	-1.20E-07	-	-8.25E-07	-5.75E-07	-	2.29E-09	7.08E-08	-	
2842	570000.00	4181000.00	RESIDENTIAL	-4.04E-07	-1.19E-07	-	-8.31E-07	-5.77E-07	-	2.33E-09	7.27E-08	-	
2843	570250.00	4181000.00	RESIDENTIAL	-4.24E-07	-1.26E-07	-	-8.59E-07	-5.95E-07	-	2.29E-09	7.09E-08	-	
2844	570500.00	4181000.00	RESIDENTIAL	-4.06E-07	-1.21E-07	-	-8.40E-07	-5.89E-07	-	2.44E-09	7.39E-08	-	
2845	570750.00	4181000.00	RESIDENTIAL	-4.02E-07	-1.20E-07	-	-8.33E-07	-5.86E-07	-	2.44E-09	7.40E-08	-	
2846	571000.00	4181000.00	RESIDENTIAL	-3.86E-07	-1.13E-07	-	-8.13E-07	-5.73E-07	-	2.48E-09	7.70E-08	-	
2847	571250.00	4181000.00	RESIDENTIAL	-4.03E-07	-1.20E-07	-	-8.31E-07	-5.82E-07	-	2.29E-09	7.24E-08	-	
2848	571500.00	4181000.00	RESIDENTIAL	-4.10E-07	-1.24E-07	-	-8.35E-07	-5.81E-07	-	2.22E-09	6.88E-08	-	
2849	571750.00	4181000.00	RESIDENTIAL	-4.00E-07	-1.17E-07	-	-8.13E-07	-5.61E-07	-	2.25E-09	6.93E-08	-	
2850	572000.00	4181000.00	RESIDENTIAL	-3.90E-07	-1.11E-07	-	-7.97E-07	-5.48E-07	-	2.29E-09	7.09E-08	-	
2851	572250.00	4181000.00	RESIDENTIAL	-3.97E-07	-1.12E-07	-	-8.05E-07	-5.50E-07	-	2.26E-09	7.05E-08	-	
2852	572500.00	4181000.00	RESIDENTIAL	-4.09E-07	-1.16E-07	-	-8.28E-07	-5.66E-07	-	2.37E-09	7.17E-08	-	
2853	572750.00	4181000.00	RESIDENTIAL	-3.82E-07	-1.08E-07	-	-7.79E-07	-5.33E-07	-	2.25E-09	6.91E-08	-	
2854	573000.00	4181000.00	RESIDENTIAL	-2.96E-07	-8.48E-08	-	-6.08E-07	-4.20E-07	-	1.79E-09	5.46E-08	-	
2855	573250.00	4181000.00	RESIDENTIAL	-2.87E-07	-7.94E-08	-	-6.00E-07	-4.16E-07	-	1.91E-09	5.86E-08	-	
2856	573500.00	4181000.00	RESIDENTIAL	-2.75E-07	-7.64E-08	-	-5.76E-07	-4.00E-07	-	1.83E-09	5.64E-08	-	
2859	567500.00	4181250.00	RESIDENTIAL	-3.36E-07	-9.93E-08	-	-6.92E-07	-4.84E-07	-	1.99E-09	6.10E-08	-	
2864	568750.00	4181250.00	RESIDENTIAL	-3.33E-07	-9.67E-08	-	-6.84E-07	-4.74E-07	-	1.95E-09	6.05E-08	-	
2865	569000.00	4181250.00	RESIDENTIAL	-3.59E-07	-1.07E-07	-	-7.31E-07	-5.07E-07	-	1.99E-09	6.09E-08	-	
2866	569250.00	4181250.00	RESIDENTIAL	-3.86E-07	-1.20E-07	-	-7.76E-07	-5.41E-07	-	1.99E-09	5.94E-08	-	
2867	569500.00	4181250.00	RESIDENTIAL	-3.94E-07	-1.22E-07	-	-7.99E-07	-5.58E-07	-	2.10E-09	6.34E-08	-	
2868	569750.00	4181250.00	RESIDENTIAL	-3.67E-07	-1.08E-07	-	-7.57E-07	-5.27E-07	-	2.17E-09	6.68E-08	-	
2869	570000.00	4181250.00	RESIDENTIAL	-3.53E-07	-1.04E-07	-	-7.28E-07	-5.09E-07	-	2.06E-09	6.44E-08	-	
2870	570250.00	4181250.00	RESIDENTIAL	-3.86E-07	-1.14E-07	-	-7.88E-07	-5.47E-07	-	2.18E-09	6.70E-08	-	
2871	570500.00	4181250.00	RESIDENTIAL	-3.63E-07	-1.07E-07	-	-7.47E-07	-5.21E-07	-	2.14E-09	6.53E-08	-	
2872	570750.00	4181250.00	RESIDENTIAL	-3.67E-07	-1.09E-07	-	-7.64E-07	-5.38E-07	-	2.25E-09	6.92E-08	-	
2873	571000.00	4181250.00	RESIDENTIAL	-3.42E-07	-1.00E-07	-	-7.22E-07	-5.10E-07	-	2.21E-09	6.88E-08	-	
2874	571250.00	4181250.00	RESIDENTIAL	-3.64E-07	-1.07E-07	-	-7.56E-07	-5.29E-07	-	2.14E-09	6.80E-08	-	
2875	571500.00	4181250.00	RESIDENTIAL	-3.83E-07	-1.15E-07	-	-7.80E-07	-5.44E-07	-	2.10E-09	6.48E-08	-	
2876	571750.00	4181250.00	RESIDENTIAL	-3.77E-07	-1.12E-07	-	-7.66E-07	-5.31E-07	-	2.10E-09	6.35E-08	-	
2877	572000.00	4181250.00	RESIDENTIAL	-3.65E-07	-1.03E-07	-	-7.46E-07	-5.11E-07	-	2.18E-09	6.70E-08	-	
2878	572250.00	4181250.00	RESIDENTIAL	-3.58E-07	-9.94E-08	-	-7.31E-07	-4.99E-07	-	2.10E-09	6.61E-08	-	
2879	572500.00	4181250.00	RESIDENTIAL	-3.46E-07	-9.74E-08	-	-7.00E-07	-4.77E-07	-	1.99E-09	6.08E-08	-	
2880	572750.00	4181250.00	RESIDENTIAL	-2.83E-07	-8.27E-08	-	-5.69E-07	-3.90E-07	-	1.53E-09	4.64E-08	-	
2881	573000.00	4181250.00	RESIDENTIAL	-2.95E-07	-8.47E-08	-	-6.02E-07	-4.15E-07	-	1.75E-09	5.28E-08	-	
2882	573250.00	4181250.00	RESIDENTIAL	-2.98E-07	-8.27E-08	-	-6.19E-07	-4.27E-07	-	1.94E-09	5.90E-08	-	
2883	573500.00	4181250.00	RESIDENTIAL	-2.81E-07	-7.75E-08	-	-5.89E-07	-4.09E-07	-	1.87E-09	5.81E-08	-	
2890	568500.00	4181500.00	RESIDENTIAL	-3.12E-07	-8.88E-08	-	-6.47E-07	-4.49E-07	-	1.91E-09	6.00E-08	-	

OAK Terminal Modernization & Development

Table 2-16. Residential Cancer Risks (Inhalation)

Combined Construction & Operations

Combined Construction + Operations

Inhalation Residential Cancer Risk

Operations Only

Inhalation Residential Cancer Risk

Construction Only

Inhalation Residential Cancer Risk

RecID	UTM X	UTM Y	Receptor Type	Maximum->			Minimum->			Max RecID->		
				Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child
				2025-2054	2025-2033	2025-2036	2028-2057	2028-2036	2028-2039	2025-2030	2025-2030	2025-2030
				30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	6 Yrs	6 Yrs	6 Yrs
2891	568750.00	4181500.00	RESIDENTIAL	-3.06E-07	-3.31E-08	-1.74E-07	-2.39E-07	-1.69E-07	-2.53E-07	4.93E-08	1.48E-06	2.27E-07
2892	569000.00	4181500.00	RESIDENTIAL	-3.29E-07	-9.73E-08	-	-6.71E-07	-4.65E-07	-	1.87E-09	5.69E-08	-
2893	569250.00	4181500.00	RESIDENTIAL	-3.60E-07	-1.14E-07	-	-7.22E-07	-5.05E-07	-	1.83E-09	5.38E-08	-
2894	569500.00	4181500.00	RESIDENTIAL	-3.53E-07	-1.10E-07	-	-7.15E-07	-5.01E-07	-	1.87E-09	5.56E-08	-
2895	569750.00	4181500.00	RESIDENTIAL	-3.44E-07	-1.02E-07	-	-7.11E-07	-4.97E-07	-	2.02E-09	6.26E-08	-
2896	570000.00	4181500.00	RESIDENTIAL	-3.36E-07	-9.77E-08	-	-6.94E-07	-4.83E-07	-	2.02E-09	6.25E-08	-
2897	570250.00	4181500.00	RESIDENTIAL	-3.49E-07	-1.05E-07	-	-7.10E-07	-4.94E-07	-	1.95E-09	5.91E-08	-
2898	570500.00	4181500.00	RESIDENTIAL	-3.34E-07	-9.98E-08	-	-6.86E-07	-4.79E-07	-	1.95E-09	5.91E-08	-
2899	570750.00	4181500.00	RESIDENTIAL	-3.27E-07	-9.93E-08	-	-6.78E-07	-4.78E-07	-	1.95E-09	5.92E-08	-
2900	571000.00	4181500.00	RESIDENTIAL	-3.07E-07	-8.86E-08	-	-6.47E-07	-4.56E-07	-	2.02E-09	6.26E-08	-
2901	571250.00	4181500.00	RESIDENTIAL	-3.23E-07	-9.44E-08	-	-6.75E-07	-4.74E-07	-	2.02E-09	6.26E-08	-
2902	571500.00	4181500.00	RESIDENTIAL	-3.48E-07	-1.04E-07	-	-7.13E-07	-4.98E-07	-	1.99E-09	6.08E-08	-
2903	571750.00	4181500.00	RESIDENTIAL	-3.35E-07	-1.00E-07	-	-6.82E-07	-4.74E-07	-	1.87E-09	5.69E-08	-
2904	572000.00	4181500.00	RESIDENTIAL	-3.37E-07	-9.71E-08	-	-6.90E-07	-4.77E-07	-	1.99E-09	6.08E-08	-
2905	572250.00	4181500.00	RESIDENTIAL	-2.89E-07	-7.98E-08	-	-5.92E-07	-4.05E-07	-	1.76E-09	5.39E-08	-
2906	572500.00	4181500.00	RESIDENTIAL	-2.76E-07	-7.87E-08	-	-5.58E-07	-3.82E-07	-	1.53E-09	4.78E-08	-
2907	572750.00	4181500.00	RESIDENTIAL	-2.88E-07	-8.43E-08	-	-5.82E-07	-4.00E-07	-	1.57E-09	4.82E-08	-
2908	573000.00	4181500.00	RESIDENTIAL	-3.00E-07	-8.62E-08	-	-6.10E-07	-4.19E-07	-	1.75E-09	5.28E-08	-
2909	573250.00	4181500.00	RESIDENTIAL	-2.91E-07	-8.33E-08	-	-5.96E-07	-4.10E-07	-	1.75E-09	5.28E-08	-
2910	573500.00	4181500.00	RESIDENTIAL	-2.67E-07	-7.37E-08	-	-5.52E-07	-3.80E-07	-	1.71E-09	5.24E-08	-
2914	567750.00	4181750.00	RESIDENTIAL	-3.12E-07	-9.38E-08	-	-6.41E-07	-4.49E-07	-	1.83E-09	5.52E-08	-
2915	568000.00	4181750.00	RESIDENTIAL	-3.18E-07	-9.54E-08	-	-6.54E-07	-4.58E-07	-	1.83E-09	5.64E-08	-
2916	568250.00	4181750.00	RESIDENTIAL	-3.11E-07	-9.21E-08	-	-6.42E-07	-4.48E-07	-	1.83E-09	5.65E-08	-
2917	568500.00	4181750.00	RESIDENTIAL	-2.90E-07	-8.40E-08	-	-6.05E-07	-4.23E-07	-	1.79E-09	5.61E-08	-
2918	568750.00	4181750.00	RESIDENTIAL	-2.88E-07	-8.25E-08	-	-5.93E-07	-4.10E-07	-	1.68E-09	5.35E-08	-
2919	569000.00	4181750.00	RESIDENTIAL	-3.12E-07	-9.37E-08	-	-6.34E-07	-4.41E-07	-	1.68E-09	5.22E-08	-
2920	569250.00	4181750.00	RESIDENTIAL	-3.30E-07	-1.02E-07	-	-6.60E-07	-4.59E-07	-	1.72E-09	4.99E-08	-
2921	569500.00	4181750.00	RESIDENTIAL	-3.42E-07	-1.07E-07	-	-6.92E-07	-4.84E-07	-	1.83E-09	5.37E-08	-
2922	569750.00	4181750.00	RESIDENTIAL	-3.10E-07	-9.18E-08	-	-6.41E-07	-4.48E-07	-	1.87E-09	5.68E-08	-
2923	570000.00	4181750.00	RESIDENTIAL	-3.27E-07	-9.59E-08	-	-6.71E-07	-4.66E-07	-	1.91E-09	5.87E-08	-
2924	570250.00	4181750.00	RESIDENTIAL	-3.00E-07	-9.02E-08	-	-6.16E-07	-4.31E-07	-	1.75E-09	5.29E-08	-
2925	570500.00	4181750.00	RESIDENTIAL	-3.04E-07	-9.13E-08	-	-6.22E-07	-4.34E-07	-	1.72E-09	5.25E-08	-
2926	570750.00	4181750.00	RESIDENTIAL	-2.91E-07	-8.70E-08	-	-6.01E-07	-4.22E-07	-	1.76E-09	5.29E-08	-
2927	571000.00	4181750.00	RESIDENTIAL	-2.73E-07	-8.04E-08	-	-5.76E-07	-4.07E-07	-	1.79E-09	5.47E-08	-
2928	571250.00	4181750.00	RESIDENTIAL	-2.73E-07	-7.97E-08	-	-5.74E-07	-4.04E-07	-	1.76E-09	5.43E-08	-
2929	571500.00	4181750.00	RESIDENTIAL	-3.01E-07	-8.95E-08	-	-6.19E-07	-4.33E-07	-	1.72E-09	5.38E-08	-
2930	571750.00	4181750.00	RESIDENTIAL	-2.84E-07	-8.57E-08	-	-5.80E-07	-4.04E-07	-	1.57E-09	4.83E-08	-
2931	572000.00	4181750.00	RESIDENTIAL	-3.14E-07	-9.07E-08	-	-6.43E-07	-4.45E-07	-	1.87E-09	5.69E-08	-
2932	572250.00	4181750.00	RESIDENTIAL	-3.07E-07	-8.69E-08	-	-6.30E-07	-4.34E-07	-	1.87E-09	5.69E-08	-
2933	572500.00	4181750.00	RESIDENTIAL	-2.73E-07	-7.54E-08	-	-5.62E-07	-3.84E-07	-	1.68E-09	5.16E-08	-
2934	572750.00	4181750.00	RESIDENTIAL	-2.78E-07	-7.95E-08	-	-5.62E-07	-3.84E-07	-	1.53E-09	4.78E-08	-
2935	573000.00	4181750.00	RESIDENTIAL	-2.54E-07	-7.33E-08	-	-5.11E-07	-3.49E-07	-	1.42E-09	4.25E-08	-
2936	573250.00	4181750.00	RESIDENTIAL	-2.27E-07	-6.43E-08	-	-4.65E-07	-3.20E-07	-	1.37E-09	4.20E-08	-
2937	573500.00	4181750.00	RESIDENTIAL	-2.36E-07	-6.68E-08	-	-4.85E-07	-3.35E-07	-	1.45E-09	4.42E-08	-
2940	567500.00	4182000.00	RESIDENTIAL	-2.83E-07	-8.54E-08	-	-5.85E-07	-4.11E-07	-	1.68E-09	5.03E-08	-
2941	567750.00	4182000.00	RESIDENTIAL	-2.98E-07	-8.91E-08	-	-6.13E-07	-4.28E-07	-	1.75E-09	5.25E-08	-
2942	568000.00	4182000.00	RESIDENTIAL	-3.02E-07	-8.91E-08	-	-6.21E-07	-4.33E-07	-	1.75E-09	5.43E-08	-
2943	568250.00	4182000.00	RESIDENTIAL	-2.94E-07	-8.68E-08	-	-6.04E-07	-4.21E-07	-	1.72E-09	5.26E-08	-
2944	568500.00	4182000.00	RESIDENTIAL	-2.71E-07	-7.75E-08	-	-5.62E-07	-3.90E-07	-	1.64E-09	5.18E-08	-
2945	568750.00	4182000.00	RESIDENTIAL	-2.65E-07	-7.47E-08	-	-5.50E-07	-3.81E-07	-	1.61E-09	5.14E-08	-
2946	569000.00	4182000.00	RESIDENTIAL	-2.83E-07	-8.53E-08	-	-5.73E-07	-3.98E-07	-	1.53E-09	4.65E-08	-
2947	569250.00	4182000.00	RESIDENTIAL	-3.16E-07	-9.86E-08	-	-6.33E-07	-4.40E-07	-	1.60E-09	4.72E-08	-
2948	569500.00	4182000.00	RESIDENTIAL	-3.00E-07	-9.25E-08	-	-6.10E-07	-4.28E-07	-	1.67E-09	4.93E-08	-
2949	569750.00	4182000.00	RESIDENTIAL	-2.69E-07	-7.90E-08	-	-5.63E-07	-3.96E-07	-	1.71E-09	5.24E-08	-
2950	570000.00	4182000.00	RESIDENTIAL	-2.93E-07	-8.42E-08	-	-6.08E-07	-4.24E-07	-	1.83E-09	5.64E-08	-
2951	570250.00	4182000.00	RESIDENTIAL	-3.13E-07	-9.33E-08	-	-6.40E-07	-4.47E-07	-	1.79E-09	5.48E-08	-
2952	570500.00	4182000.00	RESIDENTIAL	-3.20E-07	-9.59E-08	-	-6.53E-07	-4.55E-07	-	1.80E-09	5.48E-08	-
2953	570750.00	4182000.00	RESIDENTIAL	-2.53E-07	-7.49E-08	-	-5.22E-07	-3.65E-07	-	1.49E-09	4.60E-08	-
2954	571000.00	4182000.00	RESIDENTIAL	-2.37E-07	-6.83E-08	-	-4.98E-07	-3.50E-07	-	1.53E-09	4.77E-08	-
2955	571250.00	4182000.00	RESIDENTIAL	-2.32E-07	-6.57E-08	-	-4.88E-07	-3.42E-07	-	1.53E-09	4.77E-08	-
2956	571500.00	4182000.00	RESIDENTIAL	-2.92E-07	-8.70E-08	-	-6.01E-07	-4.20E-07	-	1.68E-09	5.22E-08	-
2957	571750.00	4182000.00	RESIDENTIAL	-3.12E-07	-9.44E-08	-	-6.35E-07	-4.42E-07	-	1.68E-09	5.22E-08	-
2958	572000.00	4182000.00	RESIDENTIAL	-3.00E-07	-8.89E-08	-	-6.14E-07	-4.27E-07	-	1.72E-09	5.26E-08	-

**OAK Terminal Modernization & Development**

**Table 2-16. Residential Cancer Risks (Inhalation)**

**Combined Construction & Operations**

				Combined Construction + Operations			Operations Only			Construction Only			
				Inhalation Residential Cancer Risk			Inhalation Residential Cancer Risk			Inhalation Residential Cancer Risk			
				Maximum->	-1.15E-07	-3.31E-08	-1.74E-07	-2.39E-07	-1.69E-07	-2.53E-07	4.93E-08	1.48E-06	2.27E-07
				Minimum->	-1.61E-05	-5.66E-06	-2.77E-06	-3.00E-05	-2.07E-05	-4.04E-06	6.84E-10	2.09E-08	1.47E-08
				Max RecID->	3177	3179	2965	3177	3179	2965	1923	1953	2104
				2025-2054	2025-2033	2025-2036	2028-2057	2028-2036	2028-2039	2025-2030	2025-2030	2025-2030	
				30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	6 Yrs	6 Yrs	6 Yrs	
RecID	UTM X	UTM Y	Receptor Type	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	
2959	572250.00	4182000.00	RESIDENTIAL	-2.83E-07	-8.06E-08	-	-5.82E-07	-4.02E-07	-	1.72E-09	5.22E-08	-	
2960	572500.00	4182000.00	RESIDENTIAL	-2.38E-07	-6.45E-08	-	-4.89E-07	-3.33E-07	-	1.49E-09	4.59E-08	-	
2961	572750.00	4182000.00	RESIDENTIAL	-2.42E-07	-6.92E-08	-	-4.90E-07	-3.36E-07	-	1.38E-09	4.21E-08	-	
2962	573000.00	4182000.00	RESIDENTIAL	-2.24E-07	-6.50E-08	-	-4.51E-07	-3.09E-07	-	1.19E-09	3.74E-08	-	
2963	573250.00	4182000.00	RESIDENTIAL	-2.14E-07	-6.02E-08	-	-4.35E-07	-2.98E-07	-	1.30E-09	3.85E-08	-	
2964	573500.00	4182000.00	RESIDENTIAL	-2.22E-07	-6.33E-08	-	-4.54E-07	-3.12E-07	-	1.34E-09	4.03E-08	-	
2965	567000.00	4182250.00	SCHOOL	-2.58E-07	-7.56E-08	-1.74E-07	-5.40E-07	-3.79E-07	-2.53E-07	1.61E-09	5.00E-08	1.47E-08	
2966	567250.00	4182250.00	RESIDENTIAL	-2.63E-07	-7.98E-08	-	-5.42E-07	-3.81E-07	-	1.53E-09	4.65E-08	-	
2967	567500.00	4182250.00	RESIDENTIAL	-2.75E-07	-8.34E-08	-	-5.68E-07	-3.99E-07	-	1.64E-09	4.87E-08	-	
2968	567750.00	4182250.00	RESIDENTIAL	-2.88E-07	-8.76E-08	-	-5.89E-07	-4.12E-07	-	1.64E-09	4.86E-08	-	
2969	568000.00	4182250.00	RESIDENTIAL	-2.90E-07	-8.58E-08	-	-5.95E-07	-4.15E-07	-	1.64E-09	5.16E-08	-	
2970	568250.00	4182250.00	RESIDENTIAL	-2.75E-07	-7.97E-08	-	-5.69E-07	-3.97E-07	-	1.64E-09	5.17E-08	-	
2971	568500.00	4182250.00	RESIDENTIAL	-2.59E-07	-7.41E-08	-	-5.37E-07	-3.73E-07	-	1.57E-09	4.95E-08	-	
2972	568750.00	4182250.00	RESIDENTIAL	-2.51E-07	-7.24E-08	-	-5.20E-07	-3.62E-07	-	1.49E-09	4.74E-08	-	
2973	569000.00	4182250.00	RESIDENTIAL	-2.75E-07	-8.21E-08	-	-5.58E-07	-3.87E-07	-	1.49E-09	4.60E-08	-	
2974	569250.00	4182250.00	RESIDENTIAL	-2.99E-07	-9.40E-08	-	-6.00E-07	-4.19E-07	-	1.49E-09	4.47E-08	-	
2975	569500.00	4182250.00	RESIDENTIAL	-2.89E-07	-9.19E-08	-	-5.87E-07	-4.13E-07	-	1.53E-09	4.50E-08	-	
2976	569750.00	4182250.00	RESIDENTIAL	-2.68E-07	-7.87E-08	-	-5.60E-07	-3.94E-07	-	1.67E-09	5.19E-08	-	
2977	570000.00	4182250.00	RESIDENTIAL	-2.74E-07	-8.04E-08	-	-5.69E-07	-3.99E-07	-	1.64E-09	5.16E-08	-	
2978	570250.00	4182250.00	RESIDENTIAL	-2.95E-07	-8.76E-08	-	-6.07E-07	-4.24E-07	-	1.75E-09	5.29E-08	-	
2979	570500.00	4182250.00	RESIDENTIAL	-3.07E-07	-9.12E-08	-	-6.25E-07	-4.34E-07	-	1.72E-09	5.25E-08	-	
2980	570750.00	4182250.00	RESIDENTIAL	-2.88E-07	-8.62E-08	-	-5.96E-07	-4.18E-07	-	1.72E-09	5.25E-08	-	
2981	571000.00	4182250.00	RESIDENTIAL	-2.40E-07	-7.16E-08	-	-4.97E-07	-3.50E-07	-	1.45E-09	4.43E-08	-	
2982	571250.00	4182250.00	RESIDENTIAL	-2.48E-07	-7.07E-08	-	-5.26E-07	-3.70E-07	-	1.68E-09	5.20E-08	-	
2983	571500.00	4182250.00	RESIDENTIAL	-2.72E-07	-7.89E-08	-	-5.66E-07	-3.95E-07	-	1.68E-09	5.21E-08	-	
2984	571750.00	4182250.00	RESIDENTIAL	-2.82E-07	-8.56E-08	-	-5.76E-07	-4.03E-07	-	1.53E-09	4.78E-08	-	
2985	572000.00	4182250.00	RESIDENTIAL	-2.48E-07	-7.46E-08	-	-5.06E-07	-3.52E-07	-	1.38E-09	4.21E-08	-	
2986	572250.00	4182250.00	RESIDENTIAL	-2.49E-07	-7.25E-08	-	-5.09E-07	-3.52E-07	-	1.45E-09	4.43E-08	-	
2987	572500.00	4182250.00	RESIDENTIAL	-2.13E-07	-5.88E-08	-	-4.41E-07	-3.04E-07	-	1.37E-09	4.20E-08	-	
2988	572750.00	4182250.00	RESIDENTIAL	-2.11E-07	-5.94E-08	-	-4.29E-07	-2.94E-07	-	1.26E-09	3.81E-08	-	
2989	573000.00	4182250.00	RESIDENTIAL	-1.96E-07	-5.52E-08	-	-4.00E-07	-2.74E-07	-	1.15E-09	3.55E-08	-	
2990	573250.00	4182250.00	RESIDENTIAL	-2.04E-07	-5.92E-08	-	-4.10E-07	-2.81E-07	-	1.11E-09	3.38E-08	-	
2991	573500.00	4182250.00	RESIDENTIAL	-2.04E-07	-5.73E-08	-	-4.17E-07	-2.87E-07	-	1.22E-09	3.77E-08	-	
2992	567000.00	4182500.00	RESIDENTIAL	-2.32E-07	-6.73E-08	-	-4.86E-07	-3.42E-07	-	1.49E-09	4.60E-08	-	
2993	567250.00	4182500.00	RESIDENTIAL	-2.40E-07	-7.31E-08	-	-4.96E-07	-3.50E-07	-	1.45E-09	4.28E-08	-	
2994	567500.00	4182500.00	RESIDENTIAL	-2.58E-07	-7.84E-08	-	-5.29E-07	-3.71E-07	-	1.49E-09	4.47E-08	-	
2995	567750.00	4182500.00	RESIDENTIAL	-2.71E-07	-8.11E-08	-	-5.57E-07	-3.90E-07	-	1.56E-09	4.81E-08	-	
2996	568000.00	4182500.00	RESIDENTIAL	-2.67E-07	-7.96E-08	-	-5.49E-07	-3.84E-07	-	1.53E-09	4.77E-08	-	
2997	568250.00	4182500.00	RESIDENTIAL	-2.53E-07	-7.24E-08	-	-5.22E-07	-3.63E-07	-	1.53E-09	4.77E-08	-	
2998	568500.00	4182500.00	RESIDENTIAL	-2.41E-07	-6.83E-08	-	-5.02E-07	-3.49E-07	-	1.49E-09	4.73E-08	-	
2999	568750.00	4182500.00	RESIDENTIAL	-2.29E-07	-6.49E-08	-	-4.78E-07	-3.32E-07	-	1.41E-09	4.51E-08	-	
3000	569000.00	4182500.00	RESIDENTIAL	-2.56E-07	-7.62E-08	-	-5.17E-07	-3.57E-07	-	1.38E-09	4.21E-08	-	
3001	569250.00	4182500.00	RESIDENTIAL	-2.84E-07	-8.95E-08	-	-5.71E-07	-3.99E-07	-	1.45E-09	4.28E-08	-	
3002	569500.00	4182500.00	RESIDENTIAL	-2.84E-07	-8.91E-08	-	-5.75E-07	-4.04E-07	-	1.49E-09	4.46E-08	-	
3003	569750.00	4182500.00	RESIDENTIAL	-2.57E-07	-7.57E-08	-	-5.34E-07	-3.73E-07	-	1.56E-09	4.81E-08	-	
3004	570000.00	4182500.00	RESIDENTIAL	-2.56E-07	-7.49E-08	-	-5.30E-07	-3.70E-07	-	1.53E-09	4.77E-08	-	
3005	570250.00	4182500.00	RESIDENTIAL	-2.73E-07	-8.26E-08	-	-5.57E-07	-3.89E-07	-	1.53E-09	4.63E-08	-	
3006	570500.00	4182500.00	RESIDENTIAL	-2.83E-07	-8.54E-08	-	-5.78E-07	-4.03E-07	-	1.57E-09	4.82E-08	-	
3007	570750.00	4182500.00	RESIDENTIAL	-2.73E-07	-8.17E-08	-	-5.61E-07	-3.92E-07	-	1.57E-09	4.82E-08	-	
3008	571000.00	4182500.00	RESIDENTIAL	-2.51E-07	-7.40E-08	-	-5.24E-07	-3.68E-07	-	1.57E-09	4.82E-08	-	
3009	571250.00	4182500.00	RESIDENTIAL	-2.22E-07	-6.45E-08	-	-4.66E-07	-3.28E-07	-	1.45E-09	4.43E-08	-	
3010	571500.00	4182500.00	RESIDENTIAL	-2.43E-07	-7.04E-08	-	-5.08E-07	-3.57E-07	-	1.53E-09	4.77E-08	-	
3011	571750.00	4182500.00	RESIDENTIAL	-2.45E-07	-7.37E-08	-	-5.00E-07	-3.49E-07	-	1.38E-09	4.21E-08	-	
3012	572000.00	4182500.00	RESIDENTIAL	-1.97E-07	-5.86E-08	-	-4.01E-07	-2.79E-07	-	1.11E-09	3.39E-08	-	
3013	572250.00	4182500.00	RESIDENTIAL	-2.28E-07	-6.65E-08	-	-4.70E-07	-3.27E-07	-	1.38E-09	4.20E-08	-	
3014	572500.00	4182500.00	RESIDENTIAL	-2.11E-07	-5.95E-08	-	-4.40E-07	-3.06E-07	-	1.37E-09	4.20E-08	-	
3015	572750.00	4182500.00	RESIDENTIAL	-1.85E-07	-5.20E-08	-	-3.82E-07	-2.64E-07	-	1.15E-09	3.54E-08	-	
3016	573000.00	4182500.00	RESIDENTIAL	-1.93E-07	-5.55E-08	-	-3.92E-07	-2.69E-07	-	1.11E-09	3.37E-08	-	
3017	573250.00	4182500.00	RESIDENTIAL	-1.98E-07	-5.77E-08	-	-3.96E-07	-2.70E-07	-	1.07E-09	3.20E-08	-	
3018	573500.00	4182500.00	RESIDENTIAL	-1.95E-07	-5.55E-08	-	-3.94E-07	-2.69E-07	-	1.11E-09	3.37E-08	-	
3019	567000.00	4182750.00	RESIDENTIAL	-2.14E-07	-6.31E-08	-	-4.50E-07	-3.17E-07	-	1.37E-09	4.20E-08	-	
3020	567250.00	4182750.00	RESIDENTIAL	-2.23E-07	-6.61E-08	-	-4.65E-07	-3.27E-07	-	1.41E-09	4.24E-08	-	
3021	567500.00	4182750.00	RESIDENTIAL	-2.52E-07	-7.62E-08	-	-5.18E-07	-3.63E-07	-	1.45E-09	4.42E-08	-	

**OAK Terminal Modernization & Development**

**Table 2-16. Residential Cancer Risks (Inhalation)**

**Combined Construction & Operations**

**Combined Construction + Operations**

**Inhalation Residential Cancer Risk**

**Operations Only**

**Inhalation Residential Cancer Risk**

**Construction Only**

**Inhalation Residential Cancer Risk**

RecID	UTM X	UTM Y	Receptor Type	Maximum->			Minimum->			Max RecID->					
				-1.15E-07	-3.31E-08	-1.74E-07	-1.61E-05	-5.66E-06	-2.77E-06	-2.39E-07	-1.69E-07	-2.53E-07	4.93E-08	1.48E-06	2.27E-07
				3177	3179	2965	3177	3179	2965	2028-2057	2028-2036	2028-2039	1923	1953	2104
				2025-2054	2025-2033	2025-2036	2028-2057	2028-2036	2028-2039	2025-2030	2025-2030	2025-2030			
				30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	6 Yrs	6 Yrs	6 Yrs			
				Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child			
3022	567750.00	4182750.00	RESIDENTIAL	-2.63E-07	-7.97E-08	-	-5.40E-07	-3.79E-07	-	1.49E-09	4.58E-08	-			
3023	568000.00	4182750.00	RESIDENTIAL	-2.48E-07	-7.23E-08	-	-5.12E-07	-3.56E-07	-	1.49E-09	4.59E-08	-			
3024	568250.00	4182750.00	RESIDENTIAL	-2.36E-07	-6.82E-08	-	-4.92E-07	-3.43E-07	-	1.45E-09	4.55E-08	-			
3025	568500.00	4182750.00	RESIDENTIAL	-2.26E-07	-6.28E-08	-	-4.71E-07	-3.27E-07	-	1.45E-09	4.55E-08	-			
3026	568750.00	4182750.00	RESIDENTIAL	-2.21E-07	-6.34E-08	-	-4.55E-07	-3.16E-07	-	1.30E-09	4.13E-08	-			
3027	569000.00	4182750.00	RESIDENTIAL	-2.36E-07	-7.07E-08	-	-4.76E-07	-3.30E-07	-	1.30E-09	3.86E-08	-			
3028	569250.00	4182750.00	RESIDENTIAL	-2.74E-07	-8.74E-08	-	-5.46E-07	-3.82E-07	-	1.34E-09	3.90E-08	-			
3029	569500.00	4182750.00	RESIDENTIAL	-2.73E-07	-8.55E-08	-	-5.52E-07	-3.86E-07	-	1.41E-09	4.24E-08	-			
3030	569750.00	4182750.00	RESIDENTIAL	-2.40E-07	-7.02E-08	-	-4.99E-07	-3.50E-07	-	1.49E-09	4.59E-08	-			
3031	570000.00	4182750.00	RESIDENTIAL	-2.32E-07	-6.70E-08	-	-4.85E-07	-3.39E-07	-	1.45E-09	4.55E-08	-			
3032	570250.00	4182750.00	RESIDENTIAL	-2.49E-07	-7.45E-08	-	-5.12E-07	-3.58E-07	-	1.45E-09	4.43E-08	-			
3033	570500.00	4182750.00	RESIDENTIAL	-2.56E-07	-7.60E-08	-	-5.22E-07	-3.63E-07	-	1.45E-09	4.43E-08	-			
3034	570750.00	4182750.00	RESIDENTIAL	-2.57E-07	-7.64E-08	-	-5.29E-07	-3.69E-07	-	1.49E-09	4.59E-08	-			
3035	571000.00	4182750.00	RESIDENTIAL	-2.41E-07	-7.21E-08	-	-4.99E-07	-3.51E-07	-	1.45E-09	4.43E-08	-			
3036	571250.00	4182750.00	RESIDENTIAL	-2.09E-07	-6.07E-08	-	-4.40E-07	-3.10E-07	-	1.37E-09	4.20E-08	-			
3037	571500.00	4182750.00	RESIDENTIAL	-2.17E-07	-6.32E-08	-	-4.53E-07	-3.17E-07	-	1.37E-09	4.20E-08	-			
3038	571750.00	4182750.00	RESIDENTIAL	-2.01E-07	-5.93E-08	-	-4.17E-07	-2.92E-07	-	1.19E-09	3.73E-08	-			
3039	572000.00	4182750.00	RESIDENTIAL	-2.00E-07	-6.01E-08	-	-4.08E-07	-2.84E-07	-	1.11E-09	3.39E-08	-			
3040	572250.00	4182750.00	RESIDENTIAL	-1.87E-07	-5.54E-08	-	-3.85E-07	-2.69E-07	-	1.11E-09	3.38E-08	-			
3041	572500.00	4182750.00	RESIDENTIAL	-1.77E-07	-5.18E-08	-	-3.68E-07	-2.58E-07	-	1.11E-09	3.37E-08	-			
3042	572750.00	4182750.00	RESIDENTIAL	-1.69E-07	-4.90E-08	-	-3.50E-07	-2.44E-07	-	1.06E-09	3.18E-08	-			
3043	573000.00	4182750.00	RESIDENTIAL	-1.77E-07	-5.09E-08	-	-3.61E-07	-2.49E-07	-	1.06E-09	3.14E-08	-			
3044	573250.00	4182750.00	RESIDENTIAL	-1.85E-07	-5.36E-08	-	-3.75E-07	-2.57E-07	-	1.11E-09	3.14E-08	-			
3045	573500.00	4182750.00	RESIDENTIAL	-1.84E-07	-5.20E-08	-	-3.71E-07	-2.53E-07	-	1.06E-09	3.18E-08	-			
3046	567000.00	4183000.00	RESIDENTIAL	-1.97E-07	-5.85E-08	-	-4.13E-07	-2.92E-07	-	1.30E-09	3.85E-08	-			
3047	567250.00	4183000.00	RESIDENTIAL	-2.18E-07	-6.60E-08	-	-4.54E-07	-3.21E-07	-	1.34E-09	4.03E-08	-			
3048	567500.00	4183000.00	RESIDENTIAL	-2.41E-07	-7.31E-08	-	-4.96E-07	-3.48E-07	-	1.41E-09	4.23E-08	-			
3049	567750.00	4183000.00	RESIDENTIAL	-2.44E-07	-7.26E-08	-	-5.04E-07	-3.52E-07	-	1.45E-09	4.42E-08	-			
3050	568000.00	4183000.00	RESIDENTIAL	-2.34E-07	-6.82E-08	-	-4.84E-07	-3.38E-07	-	1.41E-09	4.38E-08	-			
3051	568250.00	4183000.00	RESIDENTIAL	-2.15E-07	-6.08E-08	-	-4.46E-07	-3.10E-07	-	1.37E-09	4.20E-08	-			
3052	568500.00	4183000.00	RESIDENTIAL	-2.15E-07	-6.12E-08	-	-4.45E-07	-3.09E-07	-	1.30E-09	4.12E-08	-			
3053	568750.00	4183000.00	RESIDENTIAL	-2.12E-07	-6.14E-08	-	-4.36E-07	-3.03E-07	-	1.23E-09	3.91E-08	-			
3054	569000.00	4183000.00	RESIDENTIAL	-2.17E-07	-6.50E-08	-	-4.38E-07	-3.04E-07	-	1.15E-09	3.55E-08	-			
3055	569250.00	4183000.00	RESIDENTIAL	-2.53E-07	-7.95E-08	-	-5.04E-07	-3.51E-07	-	1.26E-09	3.67E-08	-			
3056	569500.00	4183000.00	RESIDENTIAL	-2.54E-07	-7.90E-08	-	-5.15E-07	-3.61E-07	-	1.37E-09	4.07E-08	-			
3057	569750.00	4183000.00	RESIDENTIAL	-2.31E-07	-6.84E-08	-	-4.82E-07	-3.39E-07	-	1.41E-09	4.38E-08	-			
3058	570000.00	4183000.00	RESIDENTIAL	-2.25E-07	-6.59E-08	-	-4.70E-07	-3.31E-07	-	1.41E-09	4.38E-08	-			
3059	570250.00	4183000.00	RESIDENTIAL	-2.31E-07	-6.85E-08	-	-4.77E-07	-3.33E-07	-	1.38E-09	4.20E-08	-			
3060	570500.00	4183000.00	RESIDENTIAL	-2.39E-07	-7.19E-08	-	-4.91E-07	-3.44E-07	-	1.38E-09	4.20E-08	-			
3061	570750.00	4183000.00	RESIDENTIAL	-2.47E-07	-7.33E-08	-	-5.07E-07	-3.53E-07	-	1.41E-09	4.38E-08	-			
3062	571000.00	4183000.00	RESIDENTIAL	-2.33E-07	-7.05E-08	-	-4.82E-07	-3.40E-07	-	1.38E-09	4.21E-08	-			
3063	571250.00	4183000.00	RESIDENTIAL	-2.10E-07	-6.07E-08	-	-4.41E-07	-3.10E-07	-	1.38E-09	4.20E-08	-			
3064	571500.00	4183000.00	RESIDENTIAL	-1.87E-07	-5.32E-08	-	-3.91E-07	-2.73E-07	-	1.19E-09	3.73E-08	-			
3065	571750.00	4183000.00	RESIDENTIAL	-1.79E-07	-5.26E-08	-	-3.72E-07	-2.60E-07	-	1.10E-09	3.37E-08	-			
3066	572000.00	4183000.00	RESIDENTIAL	-1.88E-07	-5.68E-08	-	-3.84E-07	-2.68E-07	-	1.07E-09	3.20E-08	-			
3067	572250.00	4183000.00	RESIDENTIAL	-1.83E-07	-5.53E-08	-	-3.75E-07	-2.63E-07	-	1.07E-09	3.19E-08	-			
3068	572500.00	4183000.00	RESIDENTIAL	-1.61E-07	-4.63E-08	-	-3.36E-07	-2.35E-07	-	1.06E-09	3.14E-08	-			
3069	572750.00	4183000.00	RESIDENTIAL	-1.55E-07	-4.32E-08	-	-3.25E-07	-2.26E-07	-	1.06E-09	3.14E-08	-			
3070	573000.00	4183000.00	RESIDENTIAL	-1.61E-07	-4.51E-08	-	-3.35E-07	-2.31E-07	-	1.06E-09	3.14E-08	-			
3071	573250.00	4183000.00	RESIDENTIAL	-1.74E-07	-4.89E-08	-	-3.53E-07	-2.41E-07	-	9.88E-10	3.06E-08	-			
3072	573500.00	4183000.00	RESIDENTIAL	-1.78E-07	-5.05E-08	-	-3.61E-07	-2.47E-07	-	1.03E-09	3.10E-08	-			
3073	567000.00	4183250.00	RESIDENTIAL	-2.00E-07	-5.89E-08	-	-4.18E-07	-2.94E-07	-	1.30E-09	3.85E-08	-			
3074	567250.00	4183250.00	RESIDENTIAL	-2.15E-07	-6.60E-08	-	-4.45E-07	-3.15E-07	-	1.30E-09	3.85E-08	-			
3075	567500.00	4183250.00	RESIDENTIAL	-2.32E-07	-7.16E-08	-	-4.78E-07	-3.37E-07	-	1.33E-09	4.03E-08	-			
3076	567750.00	4183250.00	RESIDENTIAL	-2.28E-07	-6.75E-08	-	-4.72E-07	-3.30E-07	-	1.37E-09	4.19E-08	-			
3077	568000.00	4183250.00	RESIDENTIAL	-2.05E-07	-5.85E-08	-	-4.31E-07	-3.02E-07	-	1.33E-09	4.15E-08	-			
3078	568250.00	4183250.00	RESIDENTIAL	-1.99E-07	-5.74E-08	-	-4.11E-07	-2.86E-07	-	1.19E-09	3.73E-08	-			
3079	568500.00	4183250.00	RESIDENTIAL	-1.92E-07	-5.52E-08	-	-4.00E-07	-2.79E-07	-	1.19E-09	3.73E-08	-			
3080	568750.00	4183250.00	RESIDENTIAL	-1.99E-07	-5.61E-08	-	-4.09E-07	-2.82E-07	-	1.19E-09	3.73E-08	-			
3081	569000.00	4183250.00	RESIDENTIAL	-2.12E-07	-6.32E-08	-	-4.31E-07	-2.98E-07	-	1.15E-09	3.55E-08	-			
3082	569250.00	4183250.00	RESIDENTIAL	-2.29E-07	-7.20E-08	-	-4.61E-07	-3.23E-07	-	1.22E-09	3.50E-08	-			
3083	569500.00	4183250.00	RESIDENTIAL	-2.44E-07	-7.68E-08	-	-4.95E-07	-3.48E-07	-	1.30E-09	3.85E-08	-			
3084	569750.00	4183250.00	RESIDENTIAL	-2.17E-07	-6.43E-08	-	-4.55E-07	-3.21E-07	-	1.37E-09	4.19E-08	-			

OAK Terminal Modernization & Development

Table 2-16. Residential Cancer Risks (Inhalation)

Combined Construction & Operations

Combined Construction + Operations

Inhalation Residential Cancer Risk

Operations Only

Inhalation Residential Cancer Risk

Construction Only

Inhalation Residential Cancer Risk

RecID	UTM X	UTM Y	Receptor Type	Maximum->			Minimum->			Max RecID->								
				-1.15E-07	-3.31E-08	-1.74E-07	-1.61E-05	-5.66E-06	-2.77E-06	3177	3179	2965	2028-2057	2028-2036	2028-2039	4.93E-08	1.48E-06	2.27E-07
				2025-2054	2025-2033	2025-2036	2025-2054	2025-2033	2025-2036	2028-2057	2028-2036	2028-2039	2025-2030	2025-2030	2025-2030	1923	1953	2104
				30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	6 Yrs	6 Yrs	6 Yrs	Adult Resident	Child Resident	School Child
				Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child						
3085	570000.00	4183250.00	RESIDENTIAL	-2.09E-07	-6.01E-08	-	-4.39E-07	-3.08E-07	-	1.37E-09	4.20E-08	-						
3086	570250.00	4183250.00	RESIDENTIAL	-2.14E-07	-6.38E-08	-	-4.41E-07	-3.08E-07	-	1.30E-09	3.85E-08	-						
3087	570500.00	4183250.00	RESIDENTIAL	-2.18E-07	-6.57E-08	-	-4.49E-07	-3.14E-07	-	1.30E-09	3.85E-08	-						
3088	570750.00	4183250.00	RESIDENTIAL	-2.21E-07	-6.50E-08	-	-4.56E-07	-3.18E-07	-	1.34E-09	4.03E-08	-						
3089	571000.00	4183250.00	RESIDENTIAL	-2.10E-07	-6.29E-08	-	-4.35E-07	-3.06E-07	-	1.30E-09	3.85E-08	-						
3090	571250.00	4183250.00	RESIDENTIAL	-1.86E-07	-5.54E-08	-	-3.84E-07	-2.69E-07	-	1.11E-09	3.38E-08	-						
3091	571500.00	4183250.00	RESIDENTIAL	-1.55E-07	-4.39E-08	-	-3.24E-07	-2.26E-07	-	9.89E-10	3.10E-08	-						
3092	571750.00	4183250.00	RESIDENTIAL	-1.64E-07	-4.73E-08	-	-3.39E-07	-2.36E-07	-	9.89E-10	3.10E-08	-						
3093	572000.00	4183250.00	RESIDENTIAL	-1.87E-07	-5.69E-08	-	-3.82E-07	-2.68E-07	-	1.07E-09	3.20E-08	-						
3094	572250.00	4183250.00	RESIDENTIAL	-1.73E-07	-5.36E-08	-	-3.49E-07	-2.44E-07	-	8.77E-10	2.72E-08	-						
3095	572500.00	4183250.00	RESIDENTIAL	-1.52E-07	-4.50E-08	-	-3.12E-07	-2.18E-07	-	8.76E-10	2.71E-08	-						
3096	572750.00	4183250.00	RESIDENTIAL	-1.47E-07	-4.17E-08	-	-3.07E-07	-2.13E-07	-	9.13E-10	2.89E-08	-						
3097	573000.00	4183250.00	RESIDENTIAL	-1.54E-07	-4.30E-08	-	-3.21E-07	-2.22E-07	-	9.51E-10	3.06E-08	-						
3098	573250.00	4183250.00	RESIDENTIAL	-1.61E-07	-4.51E-08	-	-3.32E-07	-2.29E-07	-	9.51E-10	3.06E-08	-						
3099	573500.00	4183250.00	RESIDENTIAL	-1.70E-07	-4.92E-08	-	-3.44E-07	-2.36E-07	-	9.14E-10	2.88E-08	-						
3100	567000.00	4183500.00	RESIDENTIAL	-1.87E-07	-5.62E-08	-	-3.94E-07	-2.80E-07	-	1.26E-09	3.67E-08	-						
3101	567250.00	4183500.00	RESIDENTIAL	-2.12E-07	-6.46E-08	-	-4.40E-07	-3.11E-07	-	1.30E-09	3.84E-08	-						
3102	567500.00	4183500.00	RESIDENTIAL	-2.25E-07	-6.78E-08	-	-4.64E-07	-3.26E-07	-	1.33E-09	4.03E-08	-						
3103	567750.00	4183500.00	RESIDENTIAL	-2.14E-07	-6.33E-08	-	-4.44E-07	-3.11E-07	-	1.30E-09	3.99E-08	-						
3104	568000.00	4183500.00	RESIDENTIAL	-1.92E-07	-5.52E-08	-	-4.00E-07	-2.79E-07	-	1.19E-09	3.73E-08	-						
3105	568250.00	4183500.00	RESIDENTIAL	-1.84E-07	-5.17E-08	-	-3.85E-07	-2.68E-07	-	1.18E-09	3.73E-08	-						
3106	568500.00	4183500.00	RESIDENTIAL	-1.81E-07	-5.14E-08	-	-3.77E-07	-2.62E-07	-	1.15E-09	3.55E-08	-						
3107	568750.00	4183500.00	RESIDENTIAL	-1.92E-07	-5.55E-08	-	-3.95E-07	-2.75E-07	-	1.15E-09	3.55E-08	-						
3108	569000.00	4183500.00	RESIDENTIAL	-2.14E-07	-6.67E-08	-	-4.29E-07	-2.98E-07	-	1.07E-09	3.21E-08	-						
3109	569250.00	4183500.00	RESIDENTIAL	-2.22E-07	-7.06E-08	-	-4.44E-07	-3.10E-07	-	1.07E-09	3.20E-08	-						
3110	569500.00	4183500.00	RESIDENTIAL	-2.24E-07	-7.02E-08	-	-4.53E-07	-3.17E-07	-	1.22E-09	3.50E-08	-						
3111	569750.00	4183500.00	RESIDENTIAL	-2.04E-07	-6.05E-08	-	-4.23E-07	-2.97E-07	-	1.26E-09	3.81E-08	-						
3112	570000.00	4183500.00	RESIDENTIAL	-1.92E-07	-5.64E-08	-	-4.02E-07	-2.83E-07	-	1.19E-09	3.73E-08	-						
3113	570250.00	4183500.00	RESIDENTIAL	-2.08E-07	-6.04E-08	-	-4.29E-07	-2.98E-07	-	1.30E-09	3.85E-08	-						
3114	570500.00	4183500.00	RESIDENTIAL	-2.13E-07	-6.32E-08	-	-4.38E-07	-3.06E-07	-	1.26E-09	3.81E-08	-						
3115	570750.00	4183500.00	RESIDENTIAL	-2.05E-07	-5.93E-08	-	-4.21E-07	-2.91E-07	-	1.18E-09	3.72E-08	-						
3116	571000.00	4183500.00	RESIDENTIAL	-1.91E-07	-5.66E-08	-	-3.96E-07	-2.78E-07	-	1.14E-09	3.54E-08	-						
3117	571250.00	4183500.00	RESIDENTIAL	-1.61E-07	-4.62E-08	-	-3.36E-07	-2.35E-07	-	1.06E-09	3.18E-08	-						
3118	571500.00	4183500.00	RESIDENTIAL	-1.49E-07	-4.32E-08	-	-3.13E-07	-2.19E-07	-	9.51E-10	2.93E-08	-						
3119	571750.00	4183500.00	RESIDENTIAL	-1.53E-07	-4.30E-08	-	-3.21E-07	-2.23E-07	-	9.88E-10	3.10E-08	-						
3120	572000.00	4183500.00	RESIDENTIAL	-1.60E-07	-4.80E-08	-	-3.26E-07	-2.27E-07	-	8.77E-10	2.72E-08	-						
3121	572250.00	4183500.00	RESIDENTIAL	-1.56E-07	-4.70E-08	-	-3.20E-07	-2.24E-07	-	8.76E-10	2.71E-08	-						
3122	572500.00	4183500.00	RESIDENTIAL	-1.51E-07	-4.51E-08	-	-3.11E-07	-2.18E-07	-	8.75E-10	2.71E-08	-						
3123	572750.00	4183500.00	RESIDENTIAL	-1.41E-07	-4.10E-08	-	-2.94E-07	-2.06E-07	-	8.76E-10	2.71E-08	-						
3124	573000.00	4183500.00	RESIDENTIAL	-1.45E-07	-4.19E-08	-	-2.99E-07	-2.08E-07	-	8.76E-10	2.71E-08	-						
3125	573250.00	4183500.00	RESIDENTIAL	-1.56E-07	-4.61E-08	-	-3.19E-07	-2.21E-07	-	8.76E-10	2.71E-08	-						
3126	573500.00	4183500.00	RESIDENTIAL	-1.43E-07	-4.09E-08	-	-2.91E-07	-2.00E-07	-	8.36E-10	2.53E-08	-						
3127	567000.00	4183750.00	RESIDENTIAL	-1.84E-07	-5.52E-08	-	-3.83E-07	-2.70E-07	-	1.18E-09	3.46E-08	-						
3128	567250.00	4183750.00	RESIDENTIAL	-2.00E-07	-6.15E-08	-	-4.12E-07	-2.91E-07	-	1.22E-09	3.50E-08	-						
3129	567500.00	4183750.00	RESIDENTIAL	-2.14E-07	-6.48E-08	-	-4.43E-07	-3.11E-07	-	1.30E-09	3.84E-08	-						
3130	567750.00	4183750.00	RESIDENTIAL	-2.09E-07	-6.27E-08	-	-4.33E-07	-3.04E-07	-	1.26E-09	3.80E-08	-						
3131	568000.00	4183750.00	RESIDENTIAL	-2.01E-07	-5.91E-08	-	-4.16E-07	-2.91E-07	-	1.19E-09	3.73E-08	-						
3132	568250.00	4183750.00	RESIDENTIAL	-1.77E-07	-5.01E-08	-	-3.70E-07	-2.58E-07	-	1.14E-09	3.54E-08	-						
3133	568500.00	4183750.00	RESIDENTIAL	-1.76E-07	-4.85E-08	-	-3.65E-07	-2.52E-07	-	1.11E-09	3.50E-08	-						
3134	568750.00	4183750.00	RESIDENTIAL	-1.75E-07	-5.14E-08	-	-3.60E-07	-2.50E-07	-	1.04E-09	3.17E-08	-						
3135	569000.00	4183750.00	RESIDENTIAL	-1.97E-07	-6.01E-08	-	-3.99E-07	-2.78E-07	-	1.07E-09	3.20E-08	-						
3136	569250.00	4183750.00	RESIDENTIAL	-2.02E-07	-6.22E-08	-	-4.08E-07	-2.84E-07	-	1.07E-09	3.19E-08	-						
3137	569500.00	4183750.00	RESIDENTIAL	-2.05E-07	-6.27E-08	-	-4.18E-07	-2.92E-07	-	1.14E-09	3.41E-08	-						
3138	569750.00	4183750.00	RESIDENTIAL	-1.86E-07	-5.60E-08	-	-3.90E-07	-2.76E-07	-	1.14E-09	3.54E-08	-						
3139	570000.00	4183750.00	RESIDENTIAL	-1.81E-07	-5.27E-08	-	-3.79E-07	-2.66E-07	-	1.14E-09	3.54E-08	-						
3140	570250.00	4183750.00	RESIDENTIAL	-1.82E-07	-5.42E-08	-	-3.72E-07	-2.59E-07	-	1.06E-09	3.18E-08	-						
3141	570500.00	4183750.00	RESIDENTIAL	-1.91E-07	-5.72E-08	-	-3.92E-07	-2.74E-07	-	1.10E-09	3.36E-08	-						
3142	570750.00	4183750.00	RESIDENTIAL	-1.90E-07	-5.65E-08	-	-3.90E-07	-2.72E-07	-	1.10E-09	3.36E-08	-						
3143	571000.00	4183750.00	RESIDENTIAL	-1.65E-07	-4.80E-08	-	-3.42E-07	-2.38E-07	-	9.88E-10	3.10E-08	-						
3144	571250.00	4183750.00	RESIDENTIAL	-1.62E-07	-4.90E-08	-	-3.30E-07	-2.30E-07	-	8.78E-10	2.72E-08	-						
3145	571500.00	4183750.00	RESIDENTIAL	-1.47E-07	-4.34E-08	-	-3.04E-07	-2.13E-07	-	8.76E-10	2.71E-08	-						
3146	571750.00	4183750.00	RESIDENTIAL	-1.45E-07	-4.23E-08	-	-3.00E-07	-2.09E-07	-	8.76E-10	2.71E-08	-						
3147	572000.00	4183750.00	RESIDENTIAL	-1.48E-07	-4.38E-08	-	-3.06E-07	-2.14E-07	-	8.75E-10	2.71E-08	-						

OAK Terminal Modernization & Development

Table 2-16. Residential Cancer Risks (Inhalation)

Combined Construction & Operations

Combined Construction + Operations

Inhalation Residential Cancer Risk

Operations Only

Inhalation Residential Cancer Risk

Construction Only

Inhalation Residential Cancer Risk

RecID	UTM X	UTM Y	Receptor Type	Maximum->			Minimum->			Max RecID->					
				-1.15E-07	-3.31E-08	-1.74E-07	-1.61E-05	-5.66E-06	-2.77E-06	-2.39E-07	-1.69E-07	-2.53E-07	4.93E-08	1.48E-06	2.27E-07
				3177	3179	2965	3177	3179	2965	2028-2057	2028-2036	2028-2039	1923	1953	2104
				30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	6 Yrs	6 Yrs	6 Yrs			
			Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child				
3148	572250.00	4183750.00	RESIDENTIAL	-1.46E-07	-4.39E-08	-	-2.99E-07	-2.09E-07	-	8.38E-10	2.53E-08	-			
3149	572500.00	4183750.00	RESIDENTIAL	-1.39E-07	-4.13E-08	-	-2.87E-07	-2.01E-07	-	8.37E-10	2.53E-08	-			
3150	572750.00	4183750.00	RESIDENTIAL	-1.37E-07	-3.93E-08	-	-2.86E-07	-2.00E-07	-	8.75E-10	2.71E-08	-			
3151	573000.00	4183750.00	RESIDENTIAL	-1.35E-07	-3.79E-08	-	-2.82E-07	-1.96E-07	-	8.75E-10	2.71E-08	-			
3152	573250.00	4183750.00	RESIDENTIAL	-1.25E-07	-3.58E-08	-	-2.58E-07	-1.79E-07	-	7.98E-10	2.36E-08	-			
3153	573500.00	4183750.00	RESIDENTIAL	-1.33E-07	-3.87E-08	-	-2.70E-07	-1.87E-07	-	7.62E-10	2.32E-08	-			
3154	567000.00	4184000.00	RESIDENTIAL	-1.74E-07	-5.21E-08	-	-3.60E-07	-2.54E-07	-	1.07E-09	3.20E-08	-			
3155	567250.00	4184000.00	RESIDENTIAL	-1.94E-07	-6.08E-08	-	-3.96E-07	-2.80E-07	-	1.06E-09	3.18E-08	-			
3156	567500.00	4184000.00	RESIDENTIAL	-2.05E-07	-6.16E-08	-	-4.19E-07	-2.92E-07	-	1.14E-09	3.53E-08	-			
3157	567750.00	4184000.00	RESIDENTIAL	-1.93E-07	-5.59E-08	-	-4.01E-07	-2.81E-07	-	1.18E-09	3.71E-08	-			
3158	568000.00	4184000.00	RESIDENTIAL	-1.86E-07	-5.36E-08	-	-3.85E-07	-2.68E-07	-	1.14E-09	3.54E-08	-			
3159	568250.00	4184000.00	RESIDENTIAL	-1.73E-07	-4.82E-08	-	-3.63E-07	-2.52E-07	-	1.14E-09	3.54E-08	-			
3160	568500.00	4184000.00	RESIDENTIAL	-1.64E-07	-4.64E-08	-	-3.37E-07	-2.33E-07	-	9.54E-10	3.07E-08	-			
3161	568750.00	4184000.00	RESIDENTIAL	-1.76E-07	-5.11E-08	-	-3.58E-07	-2.47E-07	-	9.56E-10	3.07E-08	-			
3162	569000.00	4184000.00	RESIDENTIAL	-1.85E-07	-5.59E-08	-	-3.74E-07	-2.60E-07	-	1.03E-09	2.98E-08	-			
3163	569250.00	4184000.00	RESIDENTIAL	-1.93E-07	-6.09E-08	-	-3.86E-07	-2.69E-07	-	9.87E-10	2.83E-08	-			
3164	569500.00	4184000.00	RESIDENTIAL	-1.94E-07	-5.99E-08	-	-3.95E-07	-2.77E-07	-	1.06E-09	3.18E-08	-			
3165	569750.00	4184000.00	RESIDENTIAL	-1.72E-07	-5.17E-08	-	-3.57E-07	-2.52E-07	-	1.06E-09	3.18E-08	-			
3166	570000.00	4184000.00	RESIDENTIAL	-1.60E-07	-4.61E-08	-	-3.35E-07	-2.35E-07	-	1.06E-09	3.18E-08	-			
3167	570250.00	4184000.00	RESIDENTIAL	-1.70E-07	-5.00E-08	-	-3.53E-07	-2.47E-07	-	1.06E-09	3.18E-08	-			
3168	570500.00	4184000.00	RESIDENTIAL	-1.73E-07	-5.11E-08	-	-3.57E-07	-2.50E-07	-	1.06E-09	3.18E-08	-			
3169	570750.00	4184000.00	RESIDENTIAL	-1.74E-07	-5.06E-08	-	-3.63E-07	-2.54E-07	-	1.10E-09	3.36E-08	-			
3170	571000.00	4184000.00	RESIDENTIAL	-1.65E-07	-4.98E-08	-	-3.38E-07	-2.35E-07	-	4.94E-10	2.89E-08	-			
3171	571250.00	4184000.00	RESIDENTIAL	-1.58E-07	-4.73E-08	-	-3.22E-07	-2.25E-07	-	8.77E-10	2.72E-08	-			
3172	571500.00	4184000.00	RESIDENTIAL	-1.42E-07	-4.14E-08	-	-2.96E-07	-2.07E-07	-	8.76E-10	2.71E-08	-			
3173	571750.00	4184000.00	RESIDENTIAL	-1.27E-07	-3.48E-08	-	-2.68E-07	-1.86E-07	-	8.74E-10	2.71E-08	-			
3174	572000.00	4184000.00	RESIDENTIAL	-1.37E-07	-3.99E-08	-	-2.82E-07	-1.96E-07	-	8.37E-10	2.53E-08	-			
3175	572250.00	4184000.00	RESIDENTIAL	-1.38E-07	-4.06E-08	-	-2.84E-07	-1.98E-07	-	8.00E-10	2.49E-08	-			
3176	572500.00	4184000.00	RESIDENTIAL	-1.44E-07	-4.40E-08	-	-2.92E-07	-2.04E-07	-	8.00E-10	2.36E-08	-			
3177	572750.00	4184000.00	RESIDENTIAL	-1.15E-07	-3.51E-08	-	-2.39E-07	-1.69E-07	-	6.84E-10	2.09E-08	-			
3178	573000.00	4184000.00	RESIDENTIAL	-1.31E-07	-3.74E-08	-	-2.77E-07	-1.95E-07	-	8.73E-10	2.71E-08	-			
3179	573250.00	4184000.00	RESIDENTIAL	-1.19E-07	-3.31E-08	-	-2.45E-07	-1.69E-07	-	7.23E-10	2.28E-08	-			
3180	573500.00	4184000.00	RESIDENTIAL	-1.23E-07	-3.54E-08	-	-2.48E-07	-1.70E-07	-	6.86E-10	2.10E-08	-			
3181	573750.00	4176750.00	RESIDENTIAL	-1.53E-06	-4.38E-07	-	-3.20E-06	-2.23E-06	-	9.49E-09	3.01E-07	-			
3182	574000.00	4176750.00	RESIDENTIAL	-1.48E-06	-4.25E-07	-	-3.09E-06	-2.16E-06	-	9.14E-09	2.90E-07	-			
3183	574250.00	4176750.00	RESIDENTIAL	-1.45E-06	-4.17E-07	-	-3.01E-06	-2.10E-06	-	8.80E-09	2.79E-07	-			
3184	574500.00	4176750.00	RESIDENTIAL	-1.41E-06	-4.08E-07	-	-2.93E-06	-2.04E-06	-	8.49E-09	2.68E-07	-			
3185	574750.00	4176750.00	RESIDENTIAL	-1.37E-06	-3.98E-07	-	-2.85E-06	-1.98E-06	-	8.21E-09	2.60E-07	-			
3186	575000.00	4176750.00	RESIDENTIAL	-1.33E-06	-3.85E-07	-	-2.75E-06	-1.92E-06	-	7.91E-09	2.50E-07	-			
3187	573750.00	4177000.00	RESIDENTIAL	-1.41E-06	-4.04E-07	-	-2.93E-06	-2.04E-06	-	8.68E-09	2.73E-07	-			
3188	574000.00	4177000.00	RESIDENTIAL	-1.34E-06	-3.84E-07	-	-2.79E-06	-1.95E-06	-	8.26E-09	2.61E-07	-			
3189	574250.00	4177000.00	RESIDENTIAL	-1.29E-06	-3.72E-07	-	-2.70E-06	-1.88E-06	-	7.96E-09	2.52E-07	-			
3190	574500.00	4177000.00	RESIDENTIAL	-1.26E-06	-3.65E-07	-	-2.62E-06	-1.83E-06	-	7.69E-09	2.42E-07	-			
3191	574750.00	4177000.00	RESIDENTIAL	-1.24E-06	-3.63E-07	-	-2.57E-06	-1.80E-06	-	7.42E-09	2.34E-07	-			
3192	575000.00	4177000.00	RESIDENTIAL	-1.22E-06	-3.57E-07	-	-2.53E-06	-1.76E-06	-	7.18E-09	2.27E-07	-			
3193	573750.00	4177250.00	RESIDENTIAL	-1.30E-06	-3.75E-07	-	-2.72E-06	-1.90E-06	-	8.14E-09	2.55E-07	-			
3194	574000.00	4177250.00	RESIDENTIAL	-1.24E-06	-3.58E-07	-	-2.59E-06	-1.81E-06	-	7.65E-09	2.40E-07	-			
3195	574250.00	4177250.00	RESIDENTIAL	-1.19E-06	-3.43E-07	-	-2.47E-06	-1.73E-06	-	7.34E-09	2.30E-07	-			
3196	574500.00	4177250.00	RESIDENTIAL	-1.14E-06	-3.30E-07	-	-2.38E-06	-1.66E-06	-	7.04E-09	2.21E-07	-			
3197	574750.00	4177250.00	RESIDENTIAL	-1.10E-06	-3.20E-07	-	-2.30E-06	-1.61E-06	-	6.77E-09	2.13E-07	-			
3198	575000.00	4177250.00	RESIDENTIAL	-1.09E-06	-3.21E-07	-	-2.27E-06	-1.59E-06	-	6.50E-09	2.05E-07	-			
3199	573750.00	4177500.00	RESIDENTIAL	-1.19E-06	-3.41E-07	-	-2.50E-06	-1.75E-06	-	7.64E-09	2.40E-07	-			
3200	574000.00	4177500.00	RESIDENTIAL	-1.15E-06	-3.27E-07	-	-2.40E-06	-1.68E-06	-	7.33E-09	2.29E-07	-			
3201	574250.00	4177500.00	RESIDENTIAL	-1.10E-06	-3.14E-07	-	-2.29E-06	-1.60E-06	-	6.92E-09	2.16E-07	-			
3202	574500.00	4177500.00	RESIDENTIAL	-1.06E-06	-3.07E-07	-	-2.21E-06	-1.54E-06	-	6.54E-09	2.04E-07	-			
3203	574750.00	4177500.00	RESIDENTIAL	-1.02E-06	-2.96E-07	-	-2.12E-06	-1.48E-06	-	6.23E-09	1.95E-07	-			
3204	575000.00	4177500.00	RESIDENTIAL	-9.85E-07	-2.87E-07	-	-2.05E-06	-1.44E-06	-	6.04E-09	1.89E-07	-			
3205	573750.00	4177750.00	RESIDENTIAL	-1.09E-06	-3.11E-07	-	-2.29E-06	-1.61E-06	-	7.06E-09	2.22E-07	-			
3206	574000.00	4177750.00	RESIDENTIAL	-1.05E-06	-2.95E-07	-	-2.20E-06	-1.54E-06	-	6.91E-09	2.16E-07	-			
3207	574250.00	4177750.00	RESIDENTIAL	-1.01E-06	-2.86E-07	-	-2.12E-06	-1.48E-06	-	6.60E-09	2.06E-07	-			
3208	574500.00	4177750.00	RESIDENTIAL	-9.69E-07	-2.77E-07	-	-2.03E-06	-1.42E-06	-	6.19E-09	1.93E-07	-			
3209	574750.00	4177750.00	RESIDENTIAL	-9.44E-07	-2.72E-07	-	-1.97E-06	-1.37E-06	-	5.88E-09	1.83E-07	-			
3210	575000.00	4177750.00	RESIDENTIAL	-9.07E-07	-2.64E-07	-	-1.89E-06	-1.32E-06	-	5.58E-09	1.73E-07	-			

OAK Terminal Modernization & Development

Table 2-16. Residential Cancer Risks (Inhalation)

Combined Construction & Operations

Combined Construction + Operations

Inhalation Residential Cancer Risk

Operations Only

Inhalation Residential Cancer Risk

Construction Only

Inhalation Residential Cancer Risk

RecID	UTM X	UTM Y	Receptor Type	Maximum->			Minimum->			Max RecID->					
				-1.15E-07	-3.31E-08	-1.74E-07	-1.61E-05	-5.66E-06	-2.77E-06	3177	3179	2965	1923	1953	2104
				2025-2054	2025-2033	2025-2036	2028-2057	2028-2036	2028-2039	2025-2030	2025-2030	2025-2030			
				30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	6 Yrs	6 Yrs	6 Yrs			
			Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child				
3211	573750.00	4178000.00	RESIDENTIAL	-9.98E-07	-2.82E-07	-	-2.10E-06	-1.47E-06	-	6.57E-09	2.05E-07	-			
3212	574000.00	4178000.00	RESIDENTIAL	-9.68E-07	-2.73E-07	-	-2.04E-06	-1.43E-06	-	6.41E-09	2.01E-07	-			
3213	574250.00	4178000.00	RESIDENTIAL	-9.28E-07	-2.62E-07	-	-1.96E-06	-1.37E-06	-	6.18E-09	1.93E-07	-			
3214	574500.00	4178000.00	RESIDENTIAL	-8.36E-07	-2.35E-07	-	-1.77E-06	-1.24E-06	-	5.65E-09	1.76E-07	-			
3215	574750.00	4178000.00	RESIDENTIAL	-8.48E-07	-2.41E-07	-	-1.78E-06	-1.25E-06	-	5.57E-09	1.73E-07	-			
3216	575000.00	4178000.00	RESIDENTIAL	-7.84E-07	-2.26E-07	-	-1.64E-06	-1.14E-06	-	4.96E-09	1.53E-07	-			
3217	573750.00	4178250.00	RESIDENTIAL	-8.97E-07	-2.50E-07	-	-1.90E-06	-1.33E-06	-	6.07E-09	1.90E-07	-			
3218	574000.00	4178250.00	RESIDENTIAL	-8.86E-07	-2.50E-07	-	-1.87E-06	-1.31E-06	-	5.87E-09	1.84E-07	-			
3219	574250.00	4178250.00	RESIDENTIAL	-8.47E-07	-2.41E-07	-	-1.79E-06	-1.25E-06	-	5.53E-09	1.74E-07	-			
3220	574500.00	4178250.00	RESIDENTIAL	-7.19E-07	-2.06E-07	-	-1.52E-06	-1.07E-06	-	4.73E-09	1.47E-07	-			
3221	574750.00	4178250.00	RESIDENTIAL	-7.56E-07	-2.13E-07	-	-1.60E-06	-1.13E-06	-	5.15E-09	1.60E-07	-			
3222	575000.00	4178250.00	RESIDENTIAL	-6.17E-07	-1.74E-07	-	-1.31E-06	-9.19E-07	-	4.23E-09	1.31E-07	-			
3223	573750.00	4178500.00	RESIDENTIAL	-8.09E-07	-2.23E-07	-	-1.72E-06	-1.20E-06	-	5.60E-09	1.74E-07	-			
3224	574000.00	4178500.00	RESIDENTIAL	-7.81E-07	-2.18E-07	-	-1.65E-06	-1.16E-06	-	5.30E-09	1.66E-07	-			
3225	574250.00	4178500.00	RESIDENTIAL	-7.26E-07	-2.08E-07	-	-1.52E-06	-1.07E-06	-	4.69E-09	1.46E-07	-			
3226	574500.00	4178500.00	RESIDENTIAL	-5.91E-07	-1.73E-07	-	-1.23E-06	-8.68E-07	-	3.67E-09	1.14E-07	-			
3227	574750.00	4178500.00	RESIDENTIAL	-6.73E-07	-1.94E-07	-	-1.42E-06	-9.97E-07	-	4.35E-09	1.37E-07	-			
3228	575000.00	4178500.00	RESIDENTIAL	-5.93E-07	-1.69E-07	-	-1.26E-06	-8.86E-07	-	4.04E-09	1.25E-07	-			
3229	573750.00	4178750.00	RESIDENTIAL	-7.42E-07	-2.05E-07	-	-1.57E-06	-1.10E-06	-	5.14E-09	1.60E-07	-			
3230	574000.00	4178750.00	RESIDENTIAL	-6.86E-07	-1.89E-07	-	-1.46E-06	-1.03E-06	-	4.84E-09	1.51E-07	-			
3231	574250.00	4178750.00	RESIDENTIAL	-6.18E-07	-1.75E-07	-	-1.31E-06	-9.15E-07	-	4.12E-09	1.29E-07	-			
3232	574500.00	4178750.00	RESIDENTIAL	-5.78E-07	-1.68E-07	-	-1.21E-06	-8.51E-07	-	3.70E-09	1.15E-07	-			
3233	574750.00	4178750.00	RESIDENTIAL	-6.34E-07	-1.84E-07	-	-1.33E-06	-9.33E-07	-	4.04E-09	1.25E-07	-			
3234	575000.00	4178750.00	RESIDENTIAL	-6.12E-07	-1.78E-07	-	-1.28E-06	-9.02E-07	-	3.93E-09	1.21E-07	-			
3235	573750.00	4179000.00	RESIDENTIAL	-6.97E-07	-1.93E-07	-	-1.48E-06	-1.03E-06	-	4.80E-09	1.49E-07	-			
3236	574000.00	4179000.00	RESIDENTIAL	-6.51E-07	-1.80E-07	-	-1.38E-06	-9.69E-07	-	4.57E-09	1.41E-07	-			
3237	574250.00	4179000.00	RESIDENTIAL	-4.74E-07	-1.33E-07	-	-1.00E-06	-7.04E-07	-	3.24E-09	1.00E-07	-			
3238	574500.00	4179000.00	RESIDENTIAL	-5.72E-07	-1.60E-07	-	-1.21E-06	-8.46E-07	-	3.85E-09	1.20E-07	-			
3239	574750.00	4179000.00	RESIDENTIAL	-5.63E-07	-1.62E-07	-	-1.19E-06	-8.33E-07	-	3.70E-09	1.15E-07	-			
3240	575000.00	4179000.00	RESIDENTIAL	-5.20E-07	-1.53E-07	-	-1.09E-06	-7.62E-07	-	3.21E-09	9.98E-08	-			
3241	573750.00	4179250.00	RESIDENTIAL	-6.66E-07	-1.89E-07	-	-1.40E-06	-9.75E-07	-	4.31E-09	1.35E-07	-			
3242	574000.00	4179250.00	RESIDENTIAL	-5.20E-07	-1.47E-07	-	-1.10E-06	-7.71E-07	-	3.50E-09	1.08E-07	-			
3243	574250.00	4179250.00	RESIDENTIAL	-4.82E-07	-1.33E-07	-	-1.02E-06	-7.17E-07	-	3.39E-09	1.04E-07	-			
3244	574500.00	4179250.00	RESIDENTIAL	-5.17E-07	-1.42E-07	-	-1.10E-06	-7.72E-07	-	3.66E-09	1.14E-07	-			
3245	574750.00	4179250.00	RESIDENTIAL	-4.35E-07	-1.24E-07	-	-9.17E-07	-6.44E-07	-	2.89E-09	8.95E-08	-			
3246	575000.00	4179250.00	RESIDENTIAL	-4.56E-07	-1.33E-07	-	-9.55E-07	-6.71E-07	-	2.90E-09	8.96E-08	-			
3247	573750.00	4179500.00	RESIDENTIAL	-6.30E-07	-1.82E-07	-	-1.31E-06	-9.19E-07	-	4.00E-09	1.23E-07	-			
3248	574000.00	4179500.00	RESIDENTIAL	-4.96E-07	-1.43E-07	-	-1.04E-06	-7.27E-07	-	3.16E-09	9.78E-08	-			
3249	574250.00	4179500.00	RESIDENTIAL	-5.60E-07	-1.56E-07	-	-1.19E-06	-8.31E-07	-	3.84E-09	1.20E-07	-			
3250	574500.00	4179500.00	RESIDENTIAL	-4.46E-07	-1.23E-07	-	-9.45E-07	-6.60E-07	-	3.12E-09	9.60E-08	-			
3251	574750.00	4179500.00	RESIDENTIAL	-3.79E-07	-1.08E-07	-	-8.03E-07	-5.65E-07	-	2.59E-09	7.94E-08	-			
3252	575000.00	4179500.00	RESIDENTIAL	-4.19E-07	-1.20E-07	-	-8.84E-07	-6.21E-07	-	2.82E-09	8.60E-08	-			
3253	573750.00	4179750.00	RESIDENTIAL	-5.86E-07	-1.71E-07	-	-1.22E-06	-8.49E-07	-	3.59E-09	1.11E-07	-			
3254	574000.00	4179750.00	RESIDENTIAL	-5.39E-07	-1.56E-07	-	-1.12E-06	-7.84E-07	-	3.39E-09	1.05E-07	-			
3255	574250.00	4179750.00	RESIDENTIAL	-4.67E-07	-1.34E-07	-	-9.79E-07	-6.85E-07	-	3.01E-09	9.34E-08	-			
3256	574500.00	4179750.00	RESIDENTIAL	-3.63E-07	-1.02E-07	-	-7.65E-07	-5.35E-07	-	2.47E-09	7.55E-08	-			
3257	574750.00	4179750.00	RESIDENTIAL	-3.45E-07	-9.70E-08	-	-7.29E-07	-5.11E-07	-	2.32E-09	7.25E-08	-			
3258	575000.00	4179750.00	RESIDENTIAL	-4.13E-07	-1.15E-07	-	-8.78E-07	-6.15E-07	-	2.89E-09	8.94E-08	-			
3259	573750.00	4180000.00	RESIDENTIAL	-5.05E-07	-1.50E-07	-	-1.04E-06	-7.25E-07	-	2.90E-09	8.98E-08	-			
3260	574000.00	4180000.00	RESIDENTIAL	-4.22E-07	-1.24E-07	-	-8.75E-07	-6.12E-07	-	2.55E-09	7.91E-08	-			
3261	574250.00	4180000.00	RESIDENTIAL	-3.71E-07	-1.10E-07	-	-7.69E-07	-5.39E-07	-	2.21E-09	6.87E-08	-			
3262	574500.00	4180000.00	RESIDENTIAL	-3.41E-07	-9.89E-08	-	-7.13E-07	-5.00E-07	-	2.17E-09	6.68E-08	-			
3263	574750.00	4180000.00	RESIDENTIAL	-3.51E-07	-9.97E-08	-	-7.42E-07	-5.21E-07	-	2.40E-09	7.33E-08	-			
3264	575000.00	4180000.00	RESIDENTIAL	-3.70E-07	-1.03E-07	-	-7.85E-07	-5.49E-07	-	2.59E-09	7.94E-08	-			
3265	573750.00	4180250.00	RESIDENTIAL	-4.11E-07	-1.22E-07	-	-8.45E-07	-5.89E-07	-	2.40E-09	7.34E-08	-			
3266	574000.00	4180250.00	RESIDENTIAL	-3.47E-07	-1.03E-07	-	-7.19E-07	-5.04E-07	-	2.06E-09	6.45E-08	-			
3267	574250.00	4180250.00	RESIDENTIAL	-3.32E-07	-9.85E-08	-	-6.91E-07	-4.86E-07	-	2.02E-09	6.25E-08	-			
3268	574500.00	4180250.00	RESIDENTIAL	-3.49E-07	-1.01E-07	-	-7.30E-07	-5.10E-07	-	2.21E-09	6.86E-08	-			
3269	574750.00	4180250.00	RESIDENTIAL	-3.35E-07	-9.73E-08	-	-6.97E-07	-4.88E-07	-	2.06E-09	6.43E-08	-			
3270	575000.00	4180250.00	RESIDENTIAL	-3.20E-07	-8.90E-08	-	-6.79E-07	-4.75E-07	-	2.21E-09	6.86E-08	-			
3271	573750.00	4180500.00	RESIDENTIAL	-3.34E-07	-9.81E-08	-	-6.88E-07	-4.80E-07	-	1.98E-09	6.09E-08	-			
3272	574000.00	4180500.00	RESIDENTIAL	-3.16E-07	-9.07E-08	-	-6.57E-07	-4.57E-07	-	1.98E-09	6.08E-08	-			
3273	574250.00	4180500.00	RESIDENTIAL	-3.33E-07	-9.87E-08	-	-6.88E-07	-4.82E-07	-	1.98E-09	6.09E-08	-			

OAK Terminal Modernization & Development  
 Table 2-16. Residential Cancer Risks (Inhalation)  
 Combined Construction & Operations

				Combined Construction + Operations			Operations Only			Construction Only			
				Inhalation Residential Cancer Risk			Inhalation Residential Cancer Risk			Inhalation Residential Cancer Risk			
				Maximum->	-1.15E-07	-3.31E-08	-1.74E-07	-2.39E-07	-1.69E-07	-2.53E-07	4.93E-08	1.48E-06	2.27E-07
				Minimum->	-1.61E-05	-5.66E-06	-2.77E-06	-3.00E-05	-2.07E-05	-4.04E-06	6.84E-10	2.09E-08	1.47E-08
				Max ReclD->	3177	3179	2965	3177	3179	2965	1923	1953	2104
				2025-2054	2025-2033	2025-2036	2028-2057	2028-2036	2028-2039	2025-2030	2025-2030	2025-2030	
				30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	6 Yrs	6 Yrs	6 Yrs	
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	
3274	574500.00	4180500.00	RESIDENTIAL	-3.54E-07	-1.03E-07	-	-7.39E-07	-5.17E-07	-	2.21E-09	6.87E-08	-	
3275	574750.00	4180500.00	RESIDENTIAL	-3.10E-07	-9.06E-08	-	-6.45E-07	-4.51E-07	-	1.94E-09	5.90E-08	-	
3276	575000.00	4180500.00	RESIDENTIAL	-3.20E-07	-9.29E-08	-	-6.69E-07	-4.69E-07	-	2.02E-09	6.25E-08	-	
3277	573750.00	4180750.00	RESIDENTIAL	-3.03E-07	-8.93E-08	-	-6.24E-07	-4.35E-07	-	1.79E-09	5.48E-08	-	
3278	574000.00	4180750.00	RESIDENTIAL	-3.13E-07	-9.02E-08	-	-6.47E-07	-4.50E-07	-	1.94E-09	5.90E-08	-	
3279	574250.00	4180750.00	RESIDENTIAL	-3.24E-07	-9.42E-08	-	-6.70E-07	-4.68E-07	-	1.98E-09	6.09E-08	-	
3280	574500.00	4180750.00	RESIDENTIAL	-3.38E-07	-9.96E-08	-	-6.99E-07	-4.89E-07	-	2.02E-09	6.25E-08	-	
3281	574750.00	4180750.00	RESIDENTIAL	-2.92E-07	-8.72E-08	-	-6.08E-07	-4.28E-07	-	1.79E-09	5.47E-08	-	
3282	575000.00	4180750.00	RESIDENTIAL	-2.97E-07	-8.51E-08	-	-6.20E-07	-4.33E-07	-	1.90E-09	5.86E-08	-	
3283	573750.00	4181000.00	RESIDENTIAL	-2.84E-07	-8.34E-08	-	-5.93E-07	-4.16E-07	-	1.79E-09	5.47E-08	-	
3284	574000.00	4181000.00	RESIDENTIAL	-2.98E-07	-8.86E-08	-	-6.12E-07	-4.27E-07	-	1.75E-09	5.29E-08	-	
3285	574250.00	4181000.00	RESIDENTIAL	-3.21E-07	-9.45E-08	-	-6.63E-07	-4.63E-07	-	1.94E-09	5.90E-08	-	
3286	574500.00	4181000.00	RESIDENTIAL	-2.97E-07	-8.66E-08	-	-6.22E-07	-4.37E-07	-	1.87E-09	5.81E-08	-	
3287	574750.00	4181000.00	RESIDENTIAL	-2.74E-07	-8.10E-08	-	-5.66E-07	-3.96E-07	-	1.64E-09	5.04E-08	-	
3288	575000.00	4181000.00	RESIDENTIAL	-2.75E-07	-8.18E-08	-	-5.74E-07	-4.05E-07	-	1.72E-09	5.24E-08	-	
3289	573750.00	4181250.00	RESIDENTIAL	-2.75E-07	-7.83E-08	-	-5.75E-07	-4.01E-07	-	1.79E-09	5.46E-08	-	
3290	574000.00	4181250.00	RESIDENTIAL	-2.74E-07	-8.07E-08	-	-5.66E-07	-3.95E-07	-	1.64E-09	5.04E-08	-	
3291	574250.00	4181250.00	RESIDENTIAL	-2.62E-07	-7.70E-08	-	-5.41E-07	-3.78E-07	-	1.57E-09	4.82E-08	-	
3292	574500.00	4181250.00	RESIDENTIAL	-2.63E-07	-7.56E-08	-	-5.47E-07	-3.81E-07	-	1.68E-09	5.07E-08	-	
3293	574750.00	4181250.00	RESIDENTIAL	-2.60E-07	-7.49E-08	-	-5.41E-07	-3.78E-07	-	1.64E-09	5.03E-08	-	
3294	575000.00	4181250.00	RESIDENTIAL	-2.55E-07	-7.48E-08	-	-5.31E-07	-3.72E-07	-	1.60E-09	4.86E-08	-	

OAK Terminal Modernization & Development

Table 2-17. Combined Construction + Incr. Operation Risks

Residential Cancer Risks Combined Construction & Operations				Non-Inhalation Residential Cancer Risk									Inhalation Residential Cancer Risk			Multipathway Residential Cancer Risk			
				Maximum->	2.30E-07	8.46E-08	2.19E-08	-1.15E-07	-3.31E-08	-1.74E-07	-1.15E-07	-3.30E-08	-1.72E-07	Minimum->	9.72E-11	1.12E-10	1.28E-09	-1.61E-05	-5.66E-06
				Max Rec No.->	1881	1881	1879	3177	3179	2965	3177	3179	2965						
				Exposure Years->	2025-2054	2025-2033	2025-2036	2025-2054	2025-2033	2025-2036	2025-2054	2025-2033	2025-2036						
				Exposure Duration->	30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs						
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child				
36	566000.00	4176600.00	RESIDENTIAL	6.50E-09	4.16E-09	-	-1.62E-06	-4.78E-07	-	-1.61E-06	-4.74E-07	-	-	-	-				
37	566000.00	4176700.00	RESIDENTIAL	6.35E-09	4.06E-09	-	-1.56E-06	-4.59E-07	-	-1.56E-06	-4.55E-07	-	-	-	-				
38	566000.00	4176800.00	RESIDENTIAL	6.24E-09	3.99E-09	-	-1.51E-06	-4.40E-07	-	-1.50E-06	-4.36E-07	-	-	-	-				
39	566000.00	4176900.00	RESIDENTIAL	6.38E-09	3.95E-09	-	-1.45E-06	-4.21E-07	-	-1.44E-06	-4.17E-07	-	-	-	-				
41	566000.00	4177100.00	RESIDENTIAL	6.05E-09	3.73E-09	-	-1.33E-06	-3.80E-07	-	-1.32E-06	-3.76E-07	-	-	-	-				
42	566000.00	4177200.00	RESIDENTIAL	5.88E-09	3.63E-09	-	-1.26E-06	-3.59E-07	-	-1.26E-06	-3.55E-07	-	-	-	-				
43	566000.00	4177300.00	RESIDENTIAL	5.76E-09	3.54E-09	-	-1.20E-06	-3.39E-07	-	-1.19E-06	-3.36E-07	-	-	-	-				
44	566000.00	4177400.00	RESIDENTIAL	5.65E-09	3.45E-09	-	-1.14E-06	-3.21E-07	-	-1.13E-06	-3.18E-07	-	-	-	-				
46	566000.00	4177600.00	SCHOOL	5.37E-09	3.25E-09	4.13E-09	-1.03E-06	-2.90E-07	-6.89E-07	-1.03E-06	-2.87E-07	-6.85E-07	-	-	-				
47	566000.00	4177700.00	SCHOOL	5.19E-09	3.13E-09	3.98E-09	-9.97E-07	-2.82E-07	-6.65E-07	-9.92E-07	-2.79E-07	-6.61E-07	-	-	-				
48	566000.00	4177800.00	RESIDENTIAL	5.06E-09	3.03E-09	-	-9.66E-07	-2.76E-07	-	-9.61E-07	-2.73E-07	-	-	-	-				
49	566000.00	4177900.00	RESIDENTIAL	4.58E-09	2.83E-09	-	-9.40E-07	-2.72E-07	-	-9.35E-07	-2.69E-07	-	-	-	-				
50	566000.00	4178000.00	RESIDENTIAL	4.46E-09	2.74E-09	-	-9.10E-07	-2.65E-07	-	-9.06E-07	-2.63E-07	-	-	-	-				
83	566100.00	4176600.00	RESIDENTIAL	6.57E-09	4.17E-09	-	-1.66E-06	-4.90E-07	-	-1.66E-06	-4.86E-07	-	-	-	-				
84	566100.00	4176700.00	RESIDENTIAL	6.43E-09	4.07E-09	-	-1.60E-06	-4.67E-07	-	-1.59E-06	-4.63E-07	-	-	-	-				
85	566100.00	4176800.00	RESIDENTIAL	6.27E-09	3.96E-09	-	-1.54E-06	-4.49E-07	-	-1.54E-06	-4.45E-07	-	-	-	-				
86	566100.00	4176900.00	RESIDENTIAL	6.10E-09	3.85E-09	-	-1.48E-06	-4.26E-07	-	-1.47E-06	-4.22E-07	-	-	-	-				
87	566100.00	4177000.00	RESIDENTIAL	5.91E-09	3.73E-09	-	-1.41E-06	-4.04E-07	-	-1.41E-06	-4.00E-07	-	-	-	-				
88	566100.00	4177100.00	RESIDENTIAL	5.73E-09	3.61E-09	-	-1.34E-06	-3.82E-07	-	-1.34E-06	-3.79E-07	-	-	-	-				
89	566100.00	4177200.00	RESIDENTIAL	5.79E-09	3.68E-09	-	-1.27E-06	-3.60E-07	-	-1.27E-06	-3.56E-07	-	-	-	-				
90	566100.00	4177300.00	RESIDENTIAL	6.19E-09	3.83E-09	-	-1.21E-06	-3.44E-07	-	-1.21E-06	-3.40E-07	-	-	-	-				
91	566100.00	4177400.00	RESIDENTIAL	6.03E-09	3.72E-09	-	-1.16E-06	-3.26E-07	-	-1.15E-06	-3.23E-07	-	-	-	-				
92	566100.00	4177500.00	RESIDENTIAL	5.87E-09	3.61E-09	-	-1.10E-06	-3.10E-07	-	-1.09E-06	-3.07E-07	-	-	-	-				
93	566100.00	4177600.00	RESIDENTIAL	5.71E-09	3.50E-09	-	-1.05E-06	-2.98E-07	-	-1.05E-06	-2.95E-07	-	-	-	-				
94	566100.00	4177700.00	RESIDENTIAL	5.54E-09	3.38E-09	-	-1.01E-06	-2.89E-07	-	-1.01E-06	-2.86E-07	-	-	-	-				
95	566100.00	4177800.00	RESIDENTIAL	5.37E-09	3.26E-09	-	-9.93E-07	-2.87E-07	-	-9.88E-07	-2.84E-07	-	-	-	-				
96	566100.00	4177900.00	RESIDENTIAL	5.19E-09	3.15E-09	-	-9.66E-07	-2.82E-07	-	-9.61E-07	-2.79E-07	-	-	-	-				
97	566100.00	4178000.00	RESIDENTIAL	4.78E-09	2.98E-09	-	-9.39E-07	-2.76E-07	-	-9.34E-07	-2.73E-07	-	-	-	-				
127	566200.00	4176500.00	RESIDENTIAL	7.26E-09	4.66E-09	-	-1.78E-06	-5.24E-07	-	-1.77E-06	-5.20E-07	-	-	-	-				
128	566200.00	4176600.00	RESIDENTIAL	6.85E-09	4.36E-09	-	-1.71E-06	-4.99E-07	-	-1.70E-06	-4.95E-07	-	-	-	-				
129	566200.00	4176700.00	RESIDENTIAL	6.68E-09	4.24E-09	-	-1.64E-06	-4.76E-07	-	-1.63E-06	-4.72E-07	-	-	-	-				
130	566200.00	4176800.00	RESIDENTIAL	6.52E-09	4.12E-09	-	-1.57E-06	-4.52E-07	-	-1.56E-06	-4.48E-07	-	-	-	-				
131	566200.00	4176900.00	RESIDENTIAL	6.58E-09	4.19E-09	-	-1.50E-06	-4.30E-07	-	-1.50E-06	-4.26E-07	-	-	-	-				
132	566200.00	4177000.00	RESIDENTIAL	6.37E-09	4.06E-09	-	-1.43E-06	-4.07E-07	-	-1.42E-06	-4.03E-07	-	-	-	-				
133	566200.00	4177100.00	RESIDENTIAL	6.16E-09	3.91E-09	-	-1.37E-06	-3.87E-07	-	-1.36E-06	-3.83E-07	-	-	-	-				
134	566200.00	4177200.00	RESIDENTIAL	5.98E-09	3.80E-09	-	-1.30E-06	-3.69E-07	-	-1.30E-06	-3.66E-07	-	-	-	-				
135	566200.00	4177300.00	RESIDENTIAL	5.85E-09	3.69E-09	-	-1.23E-06	-3.48E-07	-	-1.23E-06	-3.45E-07	-	-	-	-				
136	566200.00	4177400.00	RESIDENTIAL	5.70E-09	3.58E-09	-	-1.17E-06	-3.31E-07	-	-1.17E-06	-3.28E-07	-	-	-	-				
137	566200.00	4177500.00	RESIDENTIAL	5.51E-09	3.44E-09	-	-1.12E-06	-3.20E-07	-	-1.12E-06	-3.16E-07	-	-	-	-				
138	566200.00	4177600.00	RESIDENTIAL	5.31E-09	3.31E-09	-	-1.07E-06	-3.07E-07	-	-1.07E-06	-3.03E-07	-	-	-	-				
139	566200.00	4177700.00	RESIDENTIAL	5.14E-09	3.19E-09	-	-1.05E-06	-3.03E-07	-	-1.04E-06	-2.99E-07	-	-	-	-				
140	566200.00	4177800.00	RESIDENTIAL	4.98E-09	3.08E-09	-	-1.02E-06	-2.99E-07	-	-1.02E-06	-2.96E-07	-	-	-	-				
141	566200.00	4177900.00	RESIDENTIAL	4.79E-09	2.95E-09	-	-9.92E-07	-2.93E-07	-	-9.88E-07	-2.90E-07	-	-	-	-				
142	566200.00	4178000.00	RESIDENTIAL	4.63E-09	2.85E-09	-	-9.70E-07	-2.88E-07	-	-9.65E-07	-2.85E-07	-	-	-	-				
170	566300.00	4176400.00	RESIDENTIAL	7.77E-09	5.01E-09	-	-1.90E-06	-5.61E-07	-	-1.89E-06	-5.56E-07	-	-	-	-				
171	566300.00	4176500.00	RESIDENTIAL	7.57E-09	4.86E-09	-	-1.82E-06	-5.34E-07	-	-1.82E-06	-5.29E-07	-	-	-	-				
172	566300.00	4176600.00	RESIDENTIAL	7.39E-09	4.75E-09	-	-1.75E-06	-5.07E-07	-	-1.74E-06	-5.03E-07	-	-	-	-				
173	566300.00	4176700.00	RESIDENTIAL	7.19E-09	4.61E-09	-	-1.67E-06	-4.82E-07	-	-1.67E-06	-4.78E-07	-	-	-	-				
174	566300.00	4176800.00	RESIDENTIAL	6.98E-09	4.46E-09	-	-1.60E-06	-4.59E-07	-	-1.59E-06	-4.54E-07	-	-	-	-				
175	566300.00	4176900.00	RESIDENTIAL	6.81E-09	4.34E-09	-	-1.53E-06	-4.36E-07	-	-1.52E-06	-4.32E-07	-	-	-	-				
176	566300.00	4177000.00	RESIDENTIAL	6.58E-09	4.19E-09	-	-1.46E-06	-4.14E-07	-	-1.45E-06	-4.10E-07	-	-	-	-				
177	566300.00	4177100.00	RESIDENTIAL	6.36E-09	4.05E-09	-	-1.39E-06	-3.93E-07	-	-1.38E-06	-3.89E-07	-	-	-	-				
178	566300.00	4177200.00	RESIDENTIAL	6.19E-09	3.92E-09	-	-1.32E-06	-3.74E-07	-	-1.31E-06	-3.70E-07	-	-	-	-				
179	566300.00	4177300.00	RESIDENTIAL	6.00E-09	3.78E-09	-	-1.25E-06	-3.53E-07	-	-1.24E-06	-3.49E-07	-	-	-	-				
180	566300.00	4177400.00	RESIDENTIAL	5.82E-09	3.65E-09	-	-1.20E-06	-3.39E-07	-	-1.19E-06	-3.36E-07	-	-	-	-				
181	566300.00	4177500.00	RESIDENTIAL	5.63E-09	3.51E-09	-	-1.14E-06	-3.26E-07	-	-1.14E-06	-3.23E-07	-	-	-	-				
182	566300.00	4177600.00	RESIDENTIAL	5.44E-09	3.38E-09	-	-1.11E-06	-3.21E-07	-	-1.11E-06	-3.18E-07	-	-	-	-				
183	566300.00	4177700.00	RESIDENTIAL	5.21E-09	3.23E-09	-	-1.08E-06	-3.17E-07	-	-1.07E-06	-3.14E-07	-	-	-	-				
184	566300.00	4177800.00	RESIDENTIAL	5.06E-09	3.12E-09	-	-1.05E-06	-3.10E-07	-	-1.05E-06	-3.07E-07	-	-	-	-				
185	566300.00	4177900.00	RESIDENTIAL	4.89E-09	3.01E-09	-	-1.02E-06	-3.01E-07	-	-1.02E-06	-2.98E-07	-	-	-	-				
186	566300.00	4178000.00	RESIDENTIAL	4.69E-09	2.87E-09	-	-9.88E-07	-2.93E-07	-	-9.83E-07	-2.90E-07	-	-	-	-				
214	566400.00	4176300.00	RESIDENTIAL	8.33E-09	5.38E-09	-	-2.04E-06	-6.05E-07	-	-2.03E-06	-6.00E-07	-	-	-	-				
215	566400.00	4176400.00	RESIDENTIAL	8.12E-09	5.24E-09	-	-1.96E-06	-5.77E-07	-	-1.96E-06	-5.71E-07	-	-	-	-				
216	566400.00	4176500.00	RESIDENTIAL	7.91E-09	5.09E-09	-	-1.88E-06	-5.50E-07	-	-1.88E-06	-5.45E-07	-	-	-	-				
217	566400.00	4176600.00	RESIDENTIAL	7.70E-09	4.94E-09	-	-1.79E-06	-5.17E-07	-	-1.79E-06	-5.12E-07	-	-	-	-				
218	566400.00	4176700.00	RESIDENTIAL	7.51E-09	4.81E-09	-	-1.71E-06	-4.91E-07	-	-1.71E-06	-4.86E-07	-	-	-	-				
219	566400.00	4176800.00	RESIDENTIAL	7.28E-09	4.66E-09	-	-1.63E-06	-4.65E-07	-	-1.63E-06	-4.60E-07	-	-	-	-				
220	566400.00	4176900.00	RESIDENTIAL	7.35E-09	4.57E-09	-	-1.56E-06	-4.41E-07	-	-1.55E-06	-4.36E-07	-	-	-	-				

OAK Terminal Modernization & Development

Table 2-17. Combined Construction + Incr. Operation Risks

Residential Cancer Risks

Combined Construction & Operations

ReclD	UTM X	UTM Y	Receptor Type	Non-Inhalation Residential Cancer Risk			Inhalation Residential Cancer Risk			Multipathway Residential Cancer Risk			
				Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	
				Maximum->	2.30E-07	8.46E-08	2.19E-08	-1.15E-07	-3.31E-08	-1.74E-07	-1.15E-07	-3.30E-08	-1.72E-07
				Minimum->	9.72E-11	1.12E-10	1.28E-09	-1.61E-05	-5.66E-06	-2.77E-06	-1.59E-05	-5.58E-06	-2.75E-06
				Max Rec No.->	1881	1881	1879	3177	3179	2965	3177	3179	2965
				Exposure Years->	2025-2054	2025-2033	2025-2036	2025-2054	2025-2033	2025-2036	2025-2054	2025-2033	2025-2036
				Exposure Duration->	30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs
221	566400.00	4177000.00	RESIDENTIAL		7.09E-09	4.40E-09	-	-1.49E-06	-4.21E-07	-	-1.48E-06	-4.16E-07	-
222	566400.00	4177100.00	RESIDENTIAL		6.82E-09	4.21E-09	-	-1.42E-06	-4.02E-07	-	-1.41E-06	-3.98E-07	-
223	566400.00	4177200.00	RESIDENTIAL		6.61E-09	4.06E-09	-	-1.35E-06	-3.82E-07	-	-1.34E-06	-3.77E-07	-
224	566400.00	4177300.00	RESIDENTIAL		6.45E-09	3.95E-09	-	-1.28E-06	-3.64E-07	-	-1.27E-06	-3.60E-07	-
225	566400.00	4177400.00	RESIDENTIAL		6.25E-09	3.80E-09	-	-1.23E-06	-3.51E-07	-	-1.22E-06	-3.47E-07	-
226	566400.00	4177500.00	RESIDENTIAL		6.04E-09	3.65E-09	-	-1.18E-06	-3.42E-07	-	-1.18E-06	-3.38E-07	-
227	566400.00	4177600.00	RESIDENTIAL		5.57E-09	3.46E-09	-	-1.15E-06	-3.38E-07	-	-1.15E-06	-3.35E-07	-
228	566400.00	4177700.00	RESIDENTIAL		5.35E-09	3.30E-09	-	-1.12E-06	-3.29E-07	-	-1.11E-06	-3.25E-07	-
229	566400.00	4177800.00	RESIDENTIAL		5.16E-09	3.17E-09	-	-1.08E-06	-3.19E-07	-	-1.08E-06	-3.16E-07	-
230	566400.00	4177900.00	RESIDENTIAL		4.95E-09	3.03E-09	-	-1.05E-06	-3.12E-07	-	-1.05E-06	-3.09E-07	-
231	566400.00	4178000.00	RESIDENTIAL		4.77E-09	2.91E-09	-	-1.01E-06	-3.01E-07	-	-1.01E-06	-2.98E-07	-
260	566500.00	4176400.00	RESIDENTIAL		7.98E-09	5.25E-09	-	-2.02E-06	-5.90E-07	-	-2.01E-06	-5.84E-07	-
261	566500.00	4176500.00	RESIDENTIAL		8.04E-09	5.15E-09	-	-1.93E-06	-5.58E-07	-	-1.92E-06	-5.53E-07	-
262	566500.00	4176600.00	RESIDENTIAL		7.80E-09	4.98E-09	-	-1.84E-06	-5.28E-07	-	-1.83E-06	-5.23E-07	-
263	566500.00	4176700.00	RESIDENTIAL		7.57E-09	4.82E-09	-	-1.75E-06	-4.98E-07	-	-1.74E-06	-4.94E-07	-
264	566500.00	4176800.00	RESIDENTIAL		7.34E-09	4.65E-09	-	-1.66E-06	-4.71E-07	-	-1.66E-06	-4.66E-07	-
265	566500.00	4176900.00	RESIDENTIAL		7.09E-09	4.48E-09	-	-1.59E-06	-4.49E-07	-	-1.58E-06	-4.45E-07	-
266	566500.00	4177000.00	RESIDENTIAL		7.01E-09	4.46E-09	-	-1.51E-06	-4.28E-07	-	-1.51E-06	-4.23E-07	-
267	566500.00	4177100.00	RESIDENTIAL		6.76E-09	4.28E-09	-	-1.45E-06	-4.13E-07	-	-1.44E-06	-4.09E-07	-
268	566500.00	4177200.00	RESIDENTIAL		6.51E-09	4.11E-09	-	-1.37E-06	-3.90E-07	-	-1.37E-06	-3.86E-07	-
269	566500.00	4177300.00	RESIDENTIAL		6.32E-09	3.98E-09	-	-1.31E-06	-3.76E-07	-	-1.31E-06	-3.72E-07	-
270	566500.00	4177400.00	RESIDENTIAL		6.11E-09	3.82E-09	-	-1.26E-06	-3.64E-07	-	-1.25E-06	-3.61E-07	-
271	566500.00	4177500.00	RESIDENTIAL		5.89E-09	3.66E-09	-	-1.22E-06	-3.57E-07	-	-1.22E-06	-3.53E-07	-
272	566500.00	4177600.00	RESIDENTIAL		5.69E-09	3.52E-09	-	-1.19E-06	-3.49E-07	-	-1.18E-06	-3.46E-07	-
273	566500.00	4177700.00	RESIDENTIAL		5.44E-09	3.36E-09	-	-1.15E-06	-3.42E-07	-	-1.15E-06	-3.39E-07	-
274	566500.00	4177800.00	RESIDENTIAL		4.97E-09	3.16E-09	-	-1.12E-06	-3.33E-07	-	-1.11E-06	-3.30E-07	-
275	566500.00	4177900.00	RESIDENTIAL		5.06E-09	3.08E-09	-	-1.08E-06	-3.24E-07	-	-1.08E-06	-3.21E-07	-
276	566500.00	4178000.00	RESIDENTIAL		4.89E-09	2.96E-09	-	-1.04E-06	-3.09E-07	-	-1.03E-06	-3.06E-07	-
303	566600.00	4176300.00	RESIDENTIAL		9.16E-09	5.95E-09	-	-2.19E-06	-6.39E-07	-	-2.18E-06	-6.33E-07	-
304	566600.00	4176400.00	RESIDENTIAL		8.90E-09	5.77E-09	-	-2.08E-06	-6.02E-07	-	-2.07E-06	-5.97E-07	-
305	566600.00	4176500.00	RESIDENTIAL		8.61E-09	5.57E-09	-	-1.99E-06	-5.70E-07	-	-1.98E-06	-5.64E-07	-
306	566600.00	4176600.00	RESIDENTIAL		8.35E-09	5.38E-09	-	-1.89E-06	-5.40E-07	-	-1.88E-06	-5.35E-07	-
307	566600.00	4176700.00	RESIDENTIAL		8.09E-09	5.19E-09	-	-1.78E-06	-5.04E-07	-	-1.78E-06	-4.99E-07	-
308	566600.00	4176800.00	RESIDENTIAL		7.82E-09	5.01E-09	-	-1.71E-06	-4.85E-07	-	-1.70E-06	-4.80E-07	-
309	566600.00	4176900.00	RESIDENTIAL		7.56E-09	4.82E-09	-	-1.63E-06	-4.63E-07	-	-1.62E-06	-4.58E-07	-
310	566600.00	4177000.00	RESIDENTIAL		7.25E-09	4.61E-09	-	-1.55E-06	-4.40E-07	-	-1.55E-06	-4.36E-07	-
311	566600.00	4177100.00	RESIDENTIAL		6.96E-09	4.41E-09	-	-1.49E-06	-4.24E-07	-	-1.48E-06	-4.20E-07	-
312	566600.00	4177200.00	RESIDENTIAL		6.68E-09	4.21E-09	-	-1.42E-06	-4.07E-07	-	-1.41E-06	-4.03E-07	-
313	566600.00	4177300.00	RESIDENTIAL		6.49E-09	4.07E-09	-	-1.36E-06	-3.94E-07	-	-1.35E-06	-3.90E-07	-
314	566600.00	4177400.00	RESIDENTIAL		6.24E-09	3.89E-09	-	-1.31E-06	-3.84E-07	-	-1.31E-06	-3.80E-07	-
315	566600.00	4177500.00	RESIDENTIAL		6.03E-09	3.74E-09	-	-1.26E-06	-3.72E-07	-	-1.26E-06	-3.68E-07	-
316	566600.00	4177600.00	RESIDENTIAL		5.81E-09	3.58E-09	-	-1.23E-06	-3.67E-07	-	-1.23E-06	-3.63E-07	-
317	566600.00	4177700.00	RESIDENTIAL		5.57E-09	3.41E-09	-	-1.19E-06	-3.53E-07	-	-1.18E-06	-3.49E-07	-
318	566600.00	4177800.00	RESIDENTIAL		5.37E-09	3.28E-09	-	-1.15E-06	-3.43E-07	-	-1.14E-06	-3.39E-07	-
319	566600.00	4177900.00	RESIDENTIAL		5.16E-09	3.12E-09	-	-1.11E-06	-3.31E-07	-	-1.10E-06	-3.28E-07	-
320	566600.00	4178000.00	RESIDENTIAL		4.96E-09	2.99E-09	-	-1.06E-06	-3.17E-07	-	-1.06E-06	-3.14E-07	-
347	566700.00	4176300.00	RESIDENTIAL		9.07E-09	6.00E-09	-	-2.26E-06	-6.56E-07	-	-2.25E-06	-6.50E-07	-
348	566700.00	4176400.00	RESIDENTIAL		8.78E-09	5.78E-09	-	-2.15E-06	-6.16E-07	-	-2.14E-06	-6.10E-07	-
349	566700.00	4176500.00	RESIDENTIAL		8.50E-09	5.58E-09	-	-2.04E-06	-5.82E-07	-	-2.03E-06	-5.76E-07	-
350	566700.00	4176600.00	RESIDENTIAL		8.19E-09	5.36E-09	-	-1.94E-06	-5.52E-07	-	-1.93E-06	-5.46E-07	-
351	566700.00	4176700.00	RESIDENTIAL		7.90E-09	5.16E-09	-	-1.85E-06	-5.23E-07	-	-1.84E-06	-5.18E-07	-
352	566700.00	4176800.00	RESIDENTIAL		7.88E-09	5.00E-09	-	-1.75E-06	-4.96E-07	-	-1.75E-06	-4.91E-07	-
353	566700.00	4176900.00	RESIDENTIAL		8.06E-09	5.02E-09	-	-1.68E-06	-4.78E-07	-	-1.67E-06	-4.73E-07	-
354	566700.00	4177000.00	RESIDENTIAL		7.74E-09	4.80E-09	-	-1.60E-06	-4.59E-07	-	-1.60E-06	-4.54E-07	-
355	566700.00	4177100.00	RESIDENTIAL		7.40E-09	4.57E-09	-	-1.54E-06	-4.43E-07	-	-1.53E-06	-4.38E-07	-
356	566700.00	4177200.00	RESIDENTIAL		7.16E-09	4.39E-09	-	-1.47E-06	-4.27E-07	-	-1.46E-06	-4.23E-07	-
357	566700.00	4177300.00	RESIDENTIAL		6.95E-09	4.23E-09	-	-1.42E-06	-4.16E-07	-	-1.41E-06	-4.12E-07	-
358	566700.00	4177400.00	RESIDENTIAL		6.43E-09	3.98E-09	-	-1.36E-06	-4.02E-07	-	-1.35E-06	-3.98E-07	-
359	566700.00	4177500.00	RESIDENTIAL		6.16E-09	3.80E-09	-	-1.32E-06	-3.93E-07	-	-1.31E-06	-3.90E-07	-
360	566700.00	4177600.00	RESIDENTIAL		5.94E-09	3.64E-09	-	-1.27E-06	-3.78E-07	-	-1.27E-06	-3.75E-07	-
361	566700.00	4177700.00	RESIDENTIAL		5.70E-09	3.48E-09	-	-1.23E-06	-3.65E-07	-	-1.22E-06	-3.62E-07	-
362	566700.00	4177800.00	RESIDENTIAL		5.48E-09	3.32E-09	-	-1.18E-06	-3.54E-07	-	-1.18E-06	-3.51E-07	-
363	566700.00	4177900.00	RESIDENTIAL		5.27E-09	3.17E-09	-	-1.13E-06	-3.38E-07	-	-1.13E-06	-3.35E-07	-
364	566700.00	4178000.00	RESIDENTIAL		5.09E-09	3.05E-09	-	-1.08E-06	-3.21E-07	-	-1.08E-06	-3.18E-07	-
390	566800.00	4176200.00	RESIDENTIAL		1.01E-08	6.75E-09	-	-2.43E-06	-7.05E-07	-	-2.42E-06	-6.98E-07	-
391	566800.00	4176300.00	RESIDENTIAL		9.77E-09	6.51E-09	-	-2.32E-06	-6.69E-07	-	-2.31E-06	-6.62E-07	-
392	566800.00	4176400.00	RESIDENTIAL		9.49E-09	6.14E-09	-	-2.21E-06	-6.34E-07	-	-2.20E-06	-6.28E-07	-
393	566800.00	4176500.00	RESIDENTIAL		9.16E-09	5.90E-09	-	-2.10E-06	-5.95E-07	-	-2.09E-06	-5.89E-07	-

OAK Terminal Modernization & Development

Table 2-17. Combined Construction + Incr. Operation Risks

Residential Cancer Risks

Combined Construction & Operations

ReclD	UTM X	UTM Y	Receptor Type	Non-Inhalation Residential Cancer Risk			Inhalation Residential Cancer Risk			Multipathway Residential Cancer Risk			
				Maximum->	2.30E-07	8.46E-08	2.19E-08	-1.15E-07	-3.31E-08	-1.74E-07	-1.15E-07	-3.30E-08	-1.72E-07
				Minimum->	9.72E-11	1.12E-10	1.28E-09	-1.61E-05	-5.66E-06	-2.77E-06	-1.59E-05	-5.58E-06	-2.75E-06
				Max Rec No.->	1881	1881	1879	3177	3179	2965	3177	3179	2965
Exposure Years->	2025-2054	2025-2033	2025-2036	2025-2054	2025-2033	2025-2036	2025-2054	2025-2033	2025-2036				
Exposure Duration->	30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs				
				Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	
394	566800.00	4176600.00	RESIDENTIAL	8.79E-09	5.65E-09	-	-2.00E-06	-5.66E-07	-	-1.99E-06	-5.60E-07	-	
395	566800.00	4176700.00	RESIDENTIAL	8.48E-09	5.41E-09	-	-1.90E-06	-5.39E-07	-	-1.89E-06	-5.34E-07	-	
396	566800.00	4176800.00	RESIDENTIAL	8.38E-09	5.36E-09	-	-1.81E-06	-5.16E-07	-	-1.81E-06	-5.10E-07	-	
397	566800.00	4176900.00	RESIDENTIAL	8.04E-09	5.12E-09	-	-1.74E-06	-5.00E-07	-	-1.73E-06	-4.95E-07	-	
398	566800.00	4177000.00	RESIDENTIAL	7.67E-09	4.86E-09	-	-1.67E-06	-4.80E-07	-	-1.66E-06	-4.76E-07	-	
399	566800.00	4177100.00	RESIDENTIAL	7.34E-09	4.63E-09	-	-1.59E-06	-4.63E-07	-	-1.59E-06	-4.58E-07	-	
400	566800.00	4177200.00	RESIDENTIAL	7.08E-09	4.45E-09	-	-1.54E-06	-4.52E-07	-	-1.53E-06	-4.47E-07	-	
401	566800.00	4177300.00	RESIDENTIAL	6.87E-09	4.27E-09	-	-1.47E-06	-4.36E-07	-	-1.47E-06	-4.32E-07	-	
402	566800.00	4177400.00	RESIDENTIAL	6.61E-09	4.08E-09	-	-1.42E-06	-4.22E-07	-	-1.41E-06	-4.18E-07	-	
403	566800.00	4177500.00	RESIDENTIAL	6.35E-09	3.90E-09	-	-1.36E-06	-4.07E-07	-	-1.36E-06	-4.03E-07	-	
404	566800.00	4177600.00	RESIDENTIAL	6.07E-09	3.69E-09	-	-1.31E-06	-3.93E-07	-	-1.31E-06	-3.89E-07	-	
405	566800.00	4177700.00	RESIDENTIAL	5.58E-09	3.48E-09	-	-1.26E-06	-3.78E-07	-	-1.26E-06	-3.74E-07	-	
406	566800.00	4177800.00	RESIDENTIAL	5.12E-09	3.13E-09	-	-1.21E-06	-3.61E-07	-	-1.20E-06	-3.58E-07	-	
407	566800.00	4177900.00	RESIDENTIAL	4.90E-09	2.98E-09	-	-1.16E-06	-3.47E-07	-	-1.16E-06	-3.44E-07	-	
408	566800.00	4178000.00	RESIDENTIAL	5.21E-09	3.09E-09	-	-1.11E-06	-3.30E-07	-	-1.10E-06	-3.27E-07	-	
434	566900.00	4176200.00	RESIDENTIAL	1.04E-08	6.94E-09	-	-2.50E-06	-7.19E-07	-	-2.49E-06	-7.12E-07	-	
435	566900.00	4176300.00	RESIDENTIAL	1.00E-08	6.67E-09	-	-2.40E-06	-6.85E-07	-	-2.39E-06	-6.78E-07	-	
436	566900.00	4176400.00	RESIDENTIAL	1.02E-08	6.63E-09	-	-2.28E-06	-6.48E-07	-	-2.27E-06	-6.41E-07	-	
437	566900.00	4176500.00	RESIDENTIAL	9.74E-09	6.33E-09	-	-2.17E-06	-6.16E-07	-	-2.16E-06	-6.10E-07	-	
438	566900.00	4176600.00	RESIDENTIAL	9.38E-09	6.06E-09	-	-2.07E-06	-5.87E-07	-	-2.06E-06	-5.81E-07	-	
439	566900.00	4176700.00	RESIDENTIAL	8.99E-09	5.78E-09	-	-1.97E-06	-5.61E-07	-	-1.96E-06	-5.56E-07	-	
440	566900.00	4176800.00	RESIDENTIAL	8.64E-09	5.52E-09	-	-1.89E-06	-5.41E-07	-	-1.88E-06	-5.35E-07	-	
441	566900.00	4176900.00	RESIDENTIAL	8.28E-09	5.26E-09	-	-1.81E-06	-5.24E-07	-	-1.80E-06	-5.19E-07	-	
442	566900.00	4177000.00	RESIDENTIAL	7.92E-09	5.01E-09	-	-1.74E-06	-5.07E-07	-	-1.73E-06	-5.02E-07	-	
443	566900.00	4177100.00	RESIDENTIAL	7.56E-09	4.77E-09	-	-1.67E-06	-4.93E-07	-	-1.67E-06	-4.88E-07	-	
444	566900.00	4177200.00	RESIDENTIAL	7.30E-09	4.56E-09	-	-1.61E-06	-4.81E-07	-	-1.60E-06	-4.76E-07	-	
445	566900.00	4177300.00	RESIDENTIAL	7.07E-09	4.37E-09	-	-1.53E-06	-4.57E-07	-	-1.53E-06	-4.52E-07	-	
446	566900.00	4177400.00	RESIDENTIAL	6.78E-09	4.16E-09	-	-1.47E-06	-4.38E-07	-	-1.46E-06	-4.34E-07	-	
447	566900.00	4177500.00	RESIDENTIAL	6.52E-09	3.97E-09	-	-1.42E-06	-4.25E-07	-	-1.41E-06	-4.21E-07	-	
448	566900.00	4177600.00	RESIDENTIAL	6.26E-09	3.79E-09	-	-1.35E-06	-4.04E-07	-	-1.35E-06	-4.00E-07	-	
449	566900.00	4177700.00	RESIDENTIAL	5.98E-09	3.60E-09	-	-1.30E-06	-3.91E-07	-	-1.30E-06	-3.87E-07	-	
450	566900.00	4177800.00	RESIDENTIAL	5.73E-09	3.41E-09	-	-1.24E-06	-3.72E-07	-	-1.24E-06	-3.68E-07	-	
451	566900.00	4177900.00	RESIDENTIAL	5.51E-09	3.27E-09	-	-1.19E-06	-3.53E-07	-	-1.18E-06	-3.50E-07	-	
452	566900.00	4178000.00	RESIDENTIAL	5.01E-09	3.06E-09	-	-1.13E-06	-3.34E-07	-	-1.12E-06	-3.31E-07	-	
477	567000.00	4176100.00	RESIDENTIAL	1.16E-08	7.80E-09	-	-2.69E-06	-7.71E-07	-	-2.68E-06	-7.64E-07	-	
478	567000.00	4176200.00	RESIDENTIAL	1.11E-08	7.49E-09	-	-2.58E-06	-7.34E-07	-	-2.57E-06	-7.26E-07	-	
479	567000.00	4176300.00	RESIDENTIAL	1.07E-08	7.18E-09	-	-2.46E-06	-6.98E-07	-	-2.45E-06	-6.90E-07	-	
480	567000.00	4176400.00	RESIDENTIAL	1.03E-08	6.74E-09	-	-2.36E-06	-6.68E-07	-	-2.35E-06	-6.61E-07	-	
481	567000.00	4176500.00	RESIDENTIAL	9.91E-09	6.42E-09	-	-2.25E-06	-6.39E-07	-	-2.24E-06	-6.33E-07	-	
482	567000.00	4176600.00	RESIDENTIAL	9.50E-09	6.11E-09	-	-2.16E-06	-6.14E-07	-	-2.15E-06	-6.08E-07	-	
483	567000.00	4176700.00	RESIDENTIAL	9.11E-09	5.81E-09	-	-2.06E-06	-5.93E-07	-	-2.05E-06	-5.87E-07	-	
484	567000.00	4176800.00	RESIDENTIAL	8.94E-09	5.71E-09	-	-1.98E-06	-5.73E-07	-	-1.97E-06	-5.67E-07	-	
485	567000.00	4176900.00	RESIDENTIAL	8.56E-09	5.42E-09	-	-1.90E-06	-5.55E-07	-	-1.89E-06	-5.49E-07	-	
486	567000.00	4177000.00	RESIDENTIAL	8.16E-09	5.14E-09	-	-1.83E-06	-5.39E-07	-	-1.82E-06	-5.34E-07	-	
487	567000.00	4177100.00	RESIDENTIAL	7.83E-09	4.89E-09	-	-1.76E-06	-5.25E-07	-	-1.75E-06	-5.20E-07	-	
488	567000.00	4177200.00	RESIDENTIAL	7.55E-09	4.68E-09	-	-1.68E-06	-5.03E-07	-	-1.67E-06	-4.98E-07	-	
489	567000.00	4177300.00	RESIDENTIAL	7.30E-09	4.49E-09	-	-1.60E-06	-4.80E-07	-	-1.59E-06	-4.75E-07	-	
490	567000.00	4177400.00	RESIDENTIAL	6.99E-09	4.27E-09	-	-1.53E-06	-4.59E-07	-	-1.52E-06	-4.55E-07	-	
491	567000.00	4177500.00	RESIDENTIAL	6.19E-09	3.81E-09	-	-1.47E-06	-4.41E-07	-	-1.46E-06	-4.37E-07	-	
492	567000.00	4177600.00	RESIDENTIAL	5.94E-09	3.63E-09	-	-1.41E-06	-4.22E-07	-	-1.40E-06	-4.18E-07	-	
493	567000.00	4177700.00	RESIDENTIAL	5.64E-09	3.43E-09	-	-1.35E-06	-4.04E-07	-	-1.34E-06	-4.00E-07	-	
494	567000.00	4177800.00	RESIDENTIAL	5.90E-09	3.50E-09	-	-1.27E-06	-3.80E-07	-	-1.27E-06	-3.77E-07	-	
495	567000.00	4177900.00	RESIDENTIAL	5.64E-09	3.34E-09	-	-1.21E-06	-3.60E-07	-	-1.21E-06	-3.57E-07	-	
496	567000.00	4178000.00	RESIDENTIAL	5.39E-09	3.16E-09	-	-1.15E-06	-3.42E-07	-	-1.15E-06	-3.39E-07	-	
520	567100.00	4176000.00	RESIDENTIAL	1.25E-08	8.52E-09	-	-2.89E-06	-8.22E-07	-	-2.87E-06	-8.13E-07	-	
521	567100.00	4176100.00	RESIDENTIAL	1.20E-08	8.12E-09	-	-2.76E-06	-7.81E-07	-	-2.75E-06	-7.73E-07	-	
522	567100.00	4176200.00	RESIDENTIAL	1.15E-08	7.74E-09	-	-2.65E-06	-7.49E-07	-	-2.64E-06	-7.41E-07	-	
523	567100.00	4176300.00	RESIDENTIAL	1.10E-08	7.34E-09	-	-2.54E-06	-7.15E-07	-	-2.53E-06	-7.08E-07	-	
524	567100.00	4176400.00	RESIDENTIAL	1.05E-08	6.98E-09	-	-2.45E-06	-6.94E-07	-	-2.44E-06	-6.87E-07	-	
525	567100.00	4176500.00	RESIDENTIAL	1.00E-08	6.63E-09	-	-2.36E-06	-6.70E-07	-	-2.35E-06	-6.64E-07	-	
526	567100.00	4176600.00	RESIDENTIAL	9.55E-09	6.26E-09	-	-2.26E-06	-6.50E-07	-	-2.25E-06	-6.43E-07	-	
527	567100.00	4176700.00	RESIDENTIAL	9.15E-09	5.95E-09	-	-2.18E-06	-6.33E-07	-	-2.17E-06	-6.27E-07	-	
528	567100.00	4176800.00	RESIDENTIAL	8.75E-09	5.64E-09	-	-2.08E-06	-6.12E-07	-	-2.08E-06	-6.07E-07	-	
529	567100.00	4176900.00	RESIDENTIAL	8.37E-09	5.35E-09	-	-2.01E-06	-5.94E-07	-	-2.00E-06	-5.89E-07	-	
530	567100.00	4177000.00	RESIDENTIAL	7.95E-09	5.06E-09	-	-1.94E-06	-5.82E-07	-	-1.93E-06	-5.77E-07	-	
531	567100.00	4177100.00	RESIDENTIAL	8.10E-09	5.04E-09	-	-1.85E-06	-5.57E-07	-	-1.84E-06	-5.52E-07	-	
532	567100.00	4177200.00	RESIDENTIAL	7.79E-09	4.80E-09	-	-1.76E-06	-5.31E-07	-	-1.76E-06	-5.26E-07	-	
533	567100.00	4177300.00	RESIDENTIAL	7.52E-09	4.59E-09	-	-1.68E-06	-5.08E-07	-	-1.68E-06	-5.03E-07	-	



OAK Terminal Modernization & Development

Table 2-17. Combined Construction + Incr. Operation Risks

Residential Cancer Risks Combined Construction & Operations				Non-Inhalation Residential Cancer Risk									Inhalation Residential Cancer Risk			Multipathway Residential Cancer Risk		
				Maximum->	2.30E-07	8.46E-08	2.19E-08	-1.15E-07	-3.31E-08	-1.74E-07	-1.15E-07	-3.30E-08	-1.72E-07					
				Minimum->	9.72E-11	1.12E-10	1.28E-09	-1.61E-05	-5.66E-06	-2.77E-06	-1.59E-05	-5.58E-06	-2.75E-06	2965				
				Max Rec No.->	1881	1881	1879	3177	3179	2965	3177	3179						
				Exposure Years->	2025-2054	2025-2033	2025-2036	2025-2054	2025-2033	2025-2036	2025-2054	2025-2033	2025-2036					
				Exposure Duration->	30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs					
RecID	UTM X	UTM Y	Receptor Type	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child						
1610	567000.00	4179750.00	RESIDENTIAL	3.12E-09	1.73E-09	-	-5.16E-07	-1.53E-07	-	-5.13E-07	-1.51E-07	-						
1611	567000.00	4180000.00	RESIDENTIAL	2.65E-09	1.56E-09	-	-4.68E-07	-1.38E-07	-	-4.66E-07	-1.36E-07	-						
1612	567000.00	4180250.00	RESIDENTIAL	2.28E-09	1.28E-09	-	-4.37E-07	-1.28E-07	-	-4.34E-07	-1.27E-07	-						
1613	567000.00	4180500.00	RESIDENTIAL	2.64E-09	1.45E-09	-	-4.04E-07	-1.17E-07	-	-4.01E-07	-1.16E-07	-						
1615	567250.00	4178500.00	RESIDENTIAL	4.97E-09	2.87E-09	-	-9.27E-07	-2.73E-07	-	-9.23E-07	-2.71E-07	-						
1616	567250.00	4178750.00	RESIDENTIAL	4.31E-09	2.43E-09	-	-8.07E-07	-2.37E-07	-	-8.03E-07	-2.35E-07	-						
1617	567250.00	4179000.00	RESIDENTIAL	4.09E-09	2.35E-09	-	-7.19E-07	-2.12E-07	-	-7.15E-07	-2.09E-07	-						
1618	567250.00	4179250.00	RESIDENTIAL	3.46E-09	1.94E-09	-	-6.39E-07	-1.87E-07	-	-6.35E-07	-1.85E-07	-						
1619	567250.00	4179500.00	RESIDENTIAL	3.27E-09	1.89E-09	-	-5.70E-07	-1.68E-07	-	-5.67E-07	-1.66E-07	-						
1620	567250.00	4179750.00	RESIDENTIAL	2.74E-09	1.54E-09	-	-5.19E-07	-1.53E-07	-	-5.16E-07	-1.51E-07	-						
1621	567250.00	4180000.00	RESIDENTIAL	2.77E-09	1.60E-09	-	-4.63E-07	-1.34E-07	-	-4.60E-07	-1.33E-07	-						
1622	567250.00	4180250.00	RESIDENTIAL	2.35E-09	1.31E-09	-	-4.32E-07	-1.25E-07	-	-4.30E-07	-1.24E-07	-						
1623	567250.00	4180500.00	RESIDENTIAL	2.65E-09	1.45E-09	-	-4.03E-07	-1.16E-07	-	-4.01E-07	-1.15E-07	-						
1625	567500.00	4178500.00	RESIDENTIAL	5.11E-09	2.85E-09	-	-9.41E-07	-2.78E-07	-	-9.35E-07	-2.75E-07	-						
1626	567500.00	4178750.00	RESIDENTIAL	4.51E-09	2.50E-09	-	-8.14E-07	-2.41E-07	-	-8.10E-07	-2.38E-07	-						
1627	567500.00	4179000.00	RESIDENTIAL	4.21E-09	2.40E-09	-	-7.16E-07	-2.12E-07	-	-7.12E-07	-2.09E-07	-						
1628	567500.00	4179250.00	RESIDENTIAL	3.56E-09	1.97E-09	-	-6.36E-07	-1.87E-07	-	-6.33E-07	-1.85E-07	-						
1629	567500.00	4179500.00	RESIDENTIAL	3.42E-09	1.95E-09	-	-5.64E-07	-1.64E-07	-	-5.60E-07	-1.63E-07	-						
1630	567500.00	4179750.00	RESIDENTIAL	2.87E-09	1.59E-09	-	-5.06E-07	-1.46E-07	-	-5.03E-07	-1.45E-07	-						
1631	567500.00	4180000.00	RESIDENTIAL	3.10E-09	1.67E-09	-	-4.72E-07	-1.38E-07	-	-4.69E-07	-1.36E-07	-						
1632	567500.00	4180250.00	RESIDENTIAL	2.62E-09	1.50E-09	-	-4.35E-07	-1.25E-07	-	-4.32E-07	-1.24E-07	-						
1633	567500.00	4180500.00	RESIDENTIAL	2.19E-09	1.20E-09	-	-4.02E-07	-1.16E-07	-	-4.00E-07	-1.15E-07	-						
1636	567750.00	4178750.00	RESIDENTIAL	4.95E-09	2.77E-09	-	-8.15E-07	-2.40E-07	-	-8.10E-07	-2.37E-07	-						
1637	567750.00	4179000.00	RESIDENTIAL	4.34E-09	2.43E-09	-	-7.13E-07	-2.07E-07	-	-7.08E-07	-2.05E-07	-						
1638	567750.00	4179250.00	RESIDENTIAL	3.65E-09	2.00E-09	-	-6.37E-07	-1.86E-07	-	-6.33E-07	-1.84E-07	-						
1639	567750.00	4179500.00	RESIDENTIAL	3.48E-09	1.97E-09	-	-5.78E-07	-1.68E-07	-	-5.74E-07	-1.66E-07	-						
1640	567750.00	4179750.00	RESIDENTIAL	2.97E-09	1.62E-09	-	-5.25E-07	-1.53E-07	-	-5.22E-07	-1.52E-07	-						
1641	567750.00	4180000.00	RESIDENTIAL	2.69E-09	1.47E-09	-	-4.89E-07	-1.43E-07	-	-4.86E-07	-1.42E-07	-						
1642	567750.00	4180250.00	RESIDENTIAL	2.96E-09	1.58E-09	-	-4.53E-07	-1.32E-07	-	-4.50E-07	-1.31E-07	-						
1646	568000.00	4178750.00	RESIDENTIAL	4.92E-09	2.66E-09	-	-8.27E-07	-2.41E-07	-	-8.22E-07	-2.38E-07	-						
1647	568000.00	4179000.00	RESIDENTIAL	4.24E-09	2.31E-09	-	-7.26E-07	-2.12E-07	-	-7.22E-07	-2.09E-07	-						
1648	568000.00	4179250.00	RESIDENTIAL	3.98E-09	2.22E-09	-	-6.61E-07	-1.93E-07	-	-6.57E-07	-1.91E-07	-						
1649	568000.00	4179500.00	RESIDENTIAL	3.36E-09	1.82E-09	-	-5.98E-07	-1.75E-07	-	-5.95E-07	-1.74E-07	-						
1650	568000.00	4179750.00	RESIDENTIAL	3.52E-09	1.88E-09	-	-5.51E-07	-1.62E-07	-	-5.47E-07	-1.60E-07	-						
1651	568000.00	4180000.00	RESIDENTIAL	2.75E-09	1.48E-09	-	-5.12E-07	-1.52E-07	-	-5.10E-07	-1.51E-07	-						
1652	568000.00	4180250.00	RESIDENTIAL	2.52E-09	1.36E-09	-	-4.76E-07	-1.40E-07	-	-4.73E-07	-1.39E-07	-						
1658	568250.00	4179250.00	RESIDENTIAL	3.86E-09	2.08E-09	-	-6.85E-07	-2.02E-07	-	-6.81E-07	-1.99E-07	-						
1659	568250.00	4179500.00	RESIDENTIAL	3.42E-09	1.85E-09	-	-6.21E-07	-1.84E-07	-	-6.18E-07	-1.82E-07	-						
1660	568250.00	4179750.00	RESIDENTIAL	3.07E-09	1.65E-09	-	-5.68E-07	-1.68E-07	-	-5.65E-07	-1.66E-07	-						
1711	569500.00	4180000.00	RESIDENTIAL	3.00E-09	1.60E-09	-	-5.97E-07	-1.82E-07	-	-5.94E-07	-1.81E-07	-						
1722	569750.00	4180250.00	SCHOOL	2.74E-09	1.47E-09	2.00E-09	-5.44E-07	-1.63E-07	-3.56E-07	-5.41E-07	-1.61E-07	-3.54E-07						
1723	569750.00	4180500.00	RESIDENTIAL	2.39E-09	1.30E-09	-	-4.91E-07	-1.48E-07	-	-4.89E-07	-1.47E-07	-						
1732	570000.00	4180250.00	RESIDENTIAL	2.85E-09	1.56E-09	-	-5.59E-07	-1.67E-07	-	-5.57E-07	-1.65E-07	-						
1733	570000.00	4180500.00	RESIDENTIAL	2.37E-09	1.32E-09	-	-4.94E-07	-1.46E-07	-	-4.91E-07	-1.44E-07	-						
1740	570250.00	4179750.00	RESIDENTIAL	3.07E-09	1.71E-09	-	-6.65E-07	-2.01E-07	-	-6.61E-07	-1.99E-07	-						
1742	570250.00	4180250.00	RESIDENTIAL	2.83E-09	1.56E-09	-	-5.61E-07	-1.69E-07	-	-5.58E-07	-1.67E-07	-						
1743	570250.00	4180500.00	RESIDENTIAL	1.80E-09	1.08E-09	-	-4.98E-07	-1.50E-07	-	-4.97E-07	-1.49E-07	-						
1748	570500.00	4179250.00	RESIDENTIAL	4.56E-09	2.46E-09	-	-7.84E-07	-2.38E-07	-	-7.79E-07	-2.35E-07	-						
1749	570500.00	4179500.00	SCHOOL	4.08E-09	2.22E-09	2.99E-09	-7.06E-07	-2.14E-07	-4.68E-07	-7.02E-07	-2.11E-07	-4.65E-07						
1750	570500.00	4179750.00	RESIDENTIAL	3.12E-09	1.74E-09	-	-6.41E-07	-1.93E-07	-	-6.38E-07	-1.91E-07	-						
1751	570500.00	4180000.00	RESIDENTIAL	2.97E-09	1.71E-09	-	-5.89E-07	-1.79E-07	-	-5.86E-07	-1.77E-07	-						
1752	570500.00	4180250.00	RESIDENTIAL	2.73E-09	1.53E-09	-	-5.36E-07	-1.63E-07	-	-5.33E-07	-1.62E-07	-						
1753	570500.00	4180500.00	RESIDENTIAL	2.10E-09	1.30E-09	-	-4.87E-07	-1.48E-07	-	-4.85E-07	-1.46E-07	-						
1757	570750.00	4179000.00	RESIDENTIAL	4.89E-09	2.69E-09	-	-8.83E-07	-2.66E-07	-	-8.78E-07	-2.63E-07	-						
1758	570750.00	4179250.00	RESIDENTIAL	4.31E-09	2.39E-09	-	-7.86E-07	-2.37E-07	-	-7.82E-07	-2.35E-07	-						
1759	570750.00	4179500.00	RESIDENTIAL	4.08E-09	2.20E-09	-	-7.05E-07	-2.13E-07	-	-7.00E-07	-2.11E-07	-						
1760	570750.00	4179750.00	RESIDENTIAL	3.16E-09	1.74E-09	-	-6.40E-07	-1.94E-07	-	-6.37E-07	-1.92E-07	-						
1761	570750.00	4180000.00	RESIDENTIAL	2.91E-09	1.70E-09	-	-5.66E-07	-1.69E-07	-	-5.63E-07	-1.68E-07	-						
1762	570750.00	4180250.00	RESIDENTIAL	2.68E-09	1.52E-09	-	-5.07E-07	-1.51E-07	-	-5.04E-07	-1.49E-07	-						
1763	570750.00	4180500.00	RESIDENTIAL	2.07E-09	1.30E-09	-	-4.69E-07	-1.40E-07	-	-4.67E-07	-1.39E-07	-						
1767	571000.00	4179000.00	RESIDENTIAL	4.89E-09	2.69E-09	-	-8.88E-07	-2.63E-07	-	-8.83E-07	-2.60E-07	-						
1768	571000.00	4179250.00	RESIDENTIAL	4.27E-09	2.36E-09	-	-7.95E-07	-2.36E-07	-	-7.91E-07	-2.34E-07	-						
1769	571000.00	4179500.00	RESIDENTIAL	4.07E-09	2.18E-09	-	-7.16E-07	-2.14E-07	-	-7.12E-07	-2.12E-07	-						
1770	571000.00	4179750.00	RESIDENTIAL	3.12E-09	1.71E-09	-	-6.39E-07	-1.91E-07	-	-6.36E-07	-1.89E-07	-						
1771	571000.00	4180000.00	RESIDENTIAL	2.75E-09	1.62E-09	-	-5.66E-07	-1.70E-07	-	-5.63E-07	-1.68E-07	-						
1772	571000.00	4180250.00	RESIDENTIAL	2.66E-09	1.50E-09	-	-5.11E-07	-1.52E-07	-	-5.08E-07	-1.50E-07	-						
1773	571000.00	4180500.00	RESIDENTIAL	2.34E-09	1.34E-09	-	-4.72E-07	-1.41E-07	-	-4.70E-07	-1.40E-07	-						
1776	571250.00	4178750.00	RESIDENTIAL	5.48E-09	2.99E-09	-	-9.77E-07	-2.84E-07	-	-9.72E-07	-2.81E-07	-						

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Table 2-17. Combined Construction + Incr. Operation Risks

Residential Cancer Risks Combined Construction & Operations				Non-Inhalation Residential Cancer Risk			Inhalation Residential Cancer Risk			Multipathway Residential Cancer Risk		
				Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child
Maximum->	2.30E-07	8.46E-08	2.19E-08	-1.15E-07	-3.31E-08	-1.74E-07	-1.15E-07	-3.30E-08	-1.72E-07	-	-	
Minimum->	9.72E-11	1.12E-10	1.28E-09	-1.61E-05	-5.66E-06	-2.77E-06	-1.59E-05	-5.58E-06	-2.75E-06	-	-	
Max Rec No.->	1881	1881	1879	3177	3179	2965	3177	3179	2965	-	-	
Exposure Years->	2025-2054	2025-2033	2025-2036	2025-2054	2025-2033	2025-2036	2025-2054	2025-2033	2025-2036	-	-	
Exposure Duration->	30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	-	-	
RecID	UTM X	UTM Y	Receptor Type	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child
1777	571250.00	4179000.00	RESIDENTIAL	4.78E-09	2.63E-09	-	-8.77E-07	-2.55E-07	-	-8.72E-07	-2.52E-07	-
1778	571250.00	4179250.00	RESIDENTIAL	4.20E-09	2.34E-09	-	-7.92E-07	-2.31E-07	-	-7.88E-07	-2.29E-07	-
1779	571250.00	4179500.00	RESIDENTIAL	4.00E-09	2.14E-09	-	-7.14E-07	-2.08E-07	-	-7.10E-07	-2.06E-07	-
1780	571250.00	4179750.00	RESIDENTIAL	2.91E-09	1.62E-09	-	-6.40E-07	-1.88E-07	-	-6.37E-07	-1.86E-07	-
1781	571250.00	4180000.00	RESIDENTIAL	2.92E-09	1.62E-09	-	-5.66E-07	-1.68E-07	-	-5.63E-07	-1.67E-07	-
1782	571250.00	4180250.00	RESIDENTIAL	2.55E-09	1.45E-09	-	-5.22E-07	-1.58E-07	-	-5.20E-07	-1.57E-07	-
1783	571250.00	4180500.00	RESIDENTIAL	2.30E-09	1.32E-09	-	-4.79E-07	-1.45E-07	-	-4.76E-07	-1.43E-07	-
1786	571500.00	4178750.00	SCHOOL	5.36E-09	2.94E-09	3.96E-09	-9.59E-07	-2.74E-07	-6.23E-07	-9.53E-07	-2.71E-07	-6.19E-07
1787	571500.00	4179000.00	RESIDENTIAL	4.68E-09	2.59E-09	-	-8.65E-07	-2.48E-07	-	-8.60E-07	-2.46E-07	-
1788	571500.00	4179250.00	RESIDENTIAL	4.16E-09	2.33E-09	-	-7.83E-07	-2.26E-07	-	-7.80E-07	-2.24E-07	-
1789	571500.00	4179500.00	RESIDENTIAL	3.92E-09	2.12E-09	-	-7.08E-07	-2.05E-07	-	-7.04E-07	-2.03E-07	-
1790	571500.00	4179750.00	RESIDENTIAL	2.96E-09	1.74E-09	-	-6.21E-07	-1.80E-07	-	-6.18E-07	-1.78E-07	-
1791	571500.00	4180000.00	RESIDENTIAL	2.83E-09	1.59E-09	-	-5.61E-07	-1.62E-07	-	-5.58E-07	-1.61E-07	-
1792	571500.00	4180250.00	RESIDENTIAL	2.47E-09	1.40E-09	-	-5.11E-07	-1.48E-07	-	-5.09E-07	-1.46E-07	-
1793	571500.00	4180500.00	RESIDENTIAL	2.25E-09	1.30E-09	-	-4.71E-07	-1.37E-07	-	-4.69E-07	-1.36E-07	-
1794	571750.00	4178250.00	RESIDENTIAL	6.59E-09	3.61E-09	-	-1.20E-06	-3.40E-07	-	-1.19E-06	-3.37E-07	-
1795	571750.00	4178500.00	RESIDENTIAL	6.13E-09	3.36E-09	-	-1.06E-06	-3.00E-07	-	-1.05E-06	-2.96E-07	-
1796	571750.00	4178750.00	SCHOOL	5.37E-09	2.97E-09	3.98E-09	-9.47E-07	-2.69E-07	-6.18E-07	-9.41E-07	-2.66E-07	-6.14E-07
1797	571750.00	4179000.00	RESIDENTIAL	4.69E-09	2.61E-09	-	-8.55E-07	-2.43E-07	-	-8.50E-07	-2.40E-07	-
1798	571750.00	4179250.00	RESIDENTIAL	4.11E-09	2.30E-09	-	-7.76E-07	-2.21E-07	-	-7.72E-07	-2.19E-07	-
1799	571750.00	4179500.00	RESIDENTIAL	3.82E-09	2.08E-09	-	-7.03E-07	-2.03E-07	-	-6.99E-07	-2.01E-07	-
1800	571750.00	4179750.00	RESIDENTIAL	2.95E-09	1.74E-09	-	-6.23E-07	-1.78E-07	-	-6.20E-07	-1.76E-07	-
1801	571750.00	4180000.00	RESIDENTIAL	2.79E-09	1.58E-09	-	-5.61E-07	-1.60E-07	-	-5.58E-07	-1.59E-07	-
1802	571750.00	4180250.00	RESIDENTIAL	2.68E-09	1.59E-09	-	-5.10E-07	-1.46E-07	-	-5.07E-07	-1.44E-07	-
1803	571750.00	4180500.00	RESIDENTIAL	2.23E-09	1.29E-09	-	-4.71E-07	-1.35E-07	-	-4.68E-07	-1.34E-07	-
1804	572000.00	4178250.00	RESIDENTIAL	6.09E-09	3.34E-09	-	-1.21E-06	-3.50E-07	-	-1.20E-06	-3.46E-07	-
1805	572000.00	4178500.00	RESIDENTIAL	5.75E-09	3.13E-09	-	-1.05E-06	-2.98E-07	-	-1.04E-06	-2.94E-07	-
1806	572000.00	4178750.00	RESIDENTIAL	5.03E-09	2.74E-09	-	-9.31E-07	-2.63E-07	-	-9.26E-07	-2.61E-07	-
1807	572000.00	4179000.00	RESIDENTIAL	4.63E-09	2.60E-09	-	-8.33E-07	-2.34E-07	-	-8.29E-07	-2.32E-07	-
1808	572000.00	4179250.00	RESIDENTIAL	3.99E-09	2.27E-09	-	-7.59E-07	-2.15E-07	-	-7.55E-07	-2.13E-07	-
1809	572000.00	4179500.00	RESIDENTIAL	3.72E-09	2.06E-09	-	-6.88E-07	-1.95E-07	-	-6.84E-07	-1.93E-07	-
1810	572000.00	4179750.00	RESIDENTIAL	2.99E-09	1.77E-09	-	-6.29E-07	-1.79E-07	-	-6.26E-07	-1.77E-07	-
1811	572000.00	4180000.00	RESIDENTIAL	2.85E-09	1.61E-09	-	-5.74E-07	-1.64E-07	-	-5.71E-07	-1.62E-07	-
1812	572000.00	4180250.00	RESIDENTIAL	2.73E-09	1.62E-09	-	-5.19E-07	-1.47E-07	-	-5.16E-07	-1.46E-07	-
1813	572000.00	4180500.00	RESIDENTIAL	2.20E-09	1.28E-09	-	-4.73E-07	-1.35E-07	-	-4.71E-07	-1.33E-07	-
1814	572250.00	4178250.00	RESIDENTIAL	6.23E-09	3.41E-09	-	-1.20E-06	-3.51E-07	-	-1.19E-06	-3.48E-07	-
1815	572250.00	4178500.00	RESIDENTIAL	5.51E-09	3.04E-09	-	-1.07E-06	-3.12E-07	-	-1.06E-06	-3.09E-07	-
1816	572250.00	4178750.00	RESIDENTIAL	4.67E-09	2.63E-09	-	-9.15E-07	-2.59E-07	-	-9.10E-07	-2.57E-07	-
1817	572250.00	4179000.00	RESIDENTIAL	4.24E-09	2.45E-09	-	-8.06E-07	-2.27E-07	-	-8.02E-07	-2.24E-07	-
1818	572250.00	4179250.00	RESIDENTIAL	3.78E-09	2.20E-09	-	-7.27E-07	-2.02E-07	-	-7.24E-07	-1.99E-07	-
1819	572250.00	4179500.00	RESIDENTIAL	3.66E-09	2.04E-09	-	-6.69E-07	-1.86E-07	-	-6.65E-07	-1.84E-07	-
1820	572250.00	4179750.00	RESIDENTIAL	2.96E-09	1.76E-09	-	-6.21E-07	-1.73E-07	-	-6.18E-07	-1.71E-07	-
1821	572250.00	4180000.00	RESIDENTIAL	2.88E-09	1.63E-09	-	-5.72E-07	-1.61E-07	-	-5.69E-07	-1.60E-07	-
1822	572250.00	4180250.00	RESIDENTIAL	2.30E-09	1.41E-09	-	-5.29E-07	-1.49E-07	-	-5.27E-07	-1.48E-07	-
1823	572250.00	4180500.00	RESIDENTIAL	2.30E-09	1.33E-09	-	-4.87E-07	-1.37E-07	-	-4.85E-07	-1.36E-07	-
1824	572500.00	4178250.00	RESIDENTIAL	5.95E-09	3.28E-09	-	-1.16E-06	-3.40E-07	-	-1.16E-06	-3.37E-07	-
1825	572500.00	4178500.00	RESIDENTIAL	4.98E-09	2.81E-09	-	-1.04E-06	-3.04E-07	-	-1.04E-06	-3.01E-07	-
1826	572500.00	4178750.00	RESIDENTIAL	4.36E-09	2.50E-09	-	-9.35E-07	-2.73E-07	-	-9.31E-07	-2.71E-07	-
1827	572500.00	4179000.00	RESIDENTIAL	3.85E-09	2.22E-09	-	-8.25E-07	-2.36E-07	-	-8.21E-07	-2.34E-07	-
1828	572500.00	4179250.00	RESIDENTIAL	3.59E-09	2.14E-09	-	-7.35E-07	-2.08E-07	-	-7.31E-07	-2.06E-07	-
1829	572500.00	4179500.00	RESIDENTIAL	3.50E-09	1.99E-09	-	-6.53E-07	-1.82E-07	-	-6.49E-07	-1.80E-07	-
1830	572500.00	4179750.00	RESIDENTIAL	2.88E-09	1.74E-09	-	-6.03E-07	-1.67E-07	-	-6.00E-07	-1.65E-07	-
1831	572500.00	4180000.00	RESIDENTIAL	2.82E-09	1.61E-09	-	-5.60E-07	-1.55E-07	-	-5.58E-07	-1.53E-07	-
1832	572500.00	4180250.00	RESIDENTIAL	2.28E-09	1.40E-09	-	-5.31E-07	-1.49E-07	-	-5.29E-07	-1.47E-07	-
1833	572500.00	4180500.00	RESIDENTIAL	2.32E-09	1.34E-09	-	-4.91E-07	-1.39E-07	-	-4.89E-07	-1.38E-07	-
1834	572750.00	4178250.00	RESIDENTIAL	5.52E-09	3.07E-09	-	-1.08E-06	-3.12E-07	-	-1.08E-06	-3.09E-07	-
1835	572750.00	4178500.00	RESIDENTIAL	4.73E-09	2.70E-09	-	-9.97E-07	-2.91E-07	-	-9.92E-07	-2.88E-07	-
1836	572750.00	4178750.00	RESIDENTIAL	4.11E-09	2.38E-09	-	-9.16E-07	-2.67E-07	-	-9.12E-07	-2.65E-07	-
1837	572750.00	4179000.00	RESIDENTIAL	3.64E-09	2.13E-09	-	-8.43E-07	-2.47E-07	-	-8.39E-07	-2.45E-07	-
1838	572750.00	4179250.00	RESIDENTIAL	3.47E-09	2.10E-09	-	-7.49E-07	-2.16E-07	-	-7.45E-07	-2.14E-07	-
1839	572750.00	4179500.00	RESIDENTIAL	3.40E-09	1.96E-09	-	-6.68E-07	-1.89E-07	-	-6.64E-07	-1.87E-07	-
1840	572750.00	4179750.00	RESIDENTIAL	2.76E-09	1.70E-09	-	-6.00E-07	-1.68E-07	-	-5.97E-07	-1.66E-07	-
1841	572750.00	4180000.00	RESIDENTIAL	2.77E-09	1.61E-09	-	-5.47E-07	-1.51E-07	-	-5.44E-07	-1.50E-07	-
1842	572750.00	4180250.00	RESIDENTIAL	2.18E-09	1.38E-09	-	-5.08E-07	-1.40E-07	-	-5.06E-07	-1.38E-07	-
1843	572750.00	4180500.00	RESIDENTIAL	2.24E-09	1.32E-09	-	-4.75E-07	-1.30E-07	-	-4.73E-07	-1.28E-07	-
1844	573000.00	4178250.00	RESIDENTIAL	4.89E-09	2.83E-09	-	-1.00E-06	-2.84E-07	-	-9.99E-07	-2.81E-07	-
1845	573000.00	4178500.00	RESIDENTIAL	4.54E-09	2.58E-09	-	-9.46E-07	-2.71E-07	-	-9.42E-07	-2.68E-07	-
1846	573000.00	4178750.00	RESIDENTIAL	3.96E-09	2.30E-09	-	-8.83E-07	-2.57E-07	-	-8.79E-07	-2.55E-07	-





OAK Terminal Modernization & Development

Table 2-17. Combined Construction + Incr. Operation Risks

Residential Cancer Risks Combined Construction & Operations				Non-Inhalation Residential Cancer Risk			Inhalation Residential Cancer Risk			Multipathway Residential Cancer Risk		
				Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child
Maximum->	2.30E-07	8.46E-08	2.19E-08	-1.15E-07	-3.31E-08	-1.74E-07	-1.15E-07	-3.30E-08	-1.72E-07			
Minimum->	9.72E-11	1.12E-10	1.28E-09	-1.61E-05	-5.66E-06	-2.77E-06	-1.59E-05	-5.58E-06	-2.75E-06			
Max Rec No.->	1881	1881	1879	3177	3179	2965	3177	3179	2965			
Exposure Years->	2025-2054	2025-2033	2025-2036	2025-2054	2025-2033	2025-2036	2025-2054	2025-2033	2025-2036			
Exposure Duration->	30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs			
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child
2131	573250.00	4175500.00	RESIDENTIAL	1.66E-08	9.72E-09	-	-2.80E-06	-7.40E-07	-	-2.78E-06	-7.30E-07	-
2132	573250.00	4175250.00	RESIDENTIAL	1.77E-08	1.06E-08	-	-3.09E-06	-8.26E-07	-	-3.07E-06	-8.15E-07	-
2133	573250.00	4175000.00	RESIDENTIAL	1.87E-08	1.13E-08	-	-3.30E-06	-8.74E-07	-	-3.28E-06	-8.63E-07	-
2134	573250.00	4174750.00	RESIDENTIAL	1.82E-08	1.10E-08	-	-3.51E-06	-9.71E-07	-	-3.49E-06	-9.60E-07	-
2135	573250.00	4174500.00	SCHOOL	1.71E-08	1.04E-08	1.32E-08	-3.77E-06	-1.11E-06	-2.49E-06	-3.75E-06	-1.10E-06	-2.48E-06
2136	573250.00	4174250.00	RESIDENTIAL	1.69E-08	1.02E-08	-	-3.99E-06	-1.22E-06	-	-3.97E-06	-1.21E-06	-
2152	573500.00	4178000.00	RESIDENTIAL	5.16E-09	3.02E-09	-	-1.02E-06	-2.84E-07	-	-1.01E-06	-2.81E-07	-
2153	573500.00	4177750.00	RESIDENTIAL	5.83E-09	3.40E-09	-	-1.13E-06	-3.17E-07	-	-1.12E-06	-3.14E-07	-
2154	573500.00	4177500.00	RESIDENTIAL	5.97E-09	3.51E-09	-	-1.24E-06	-3.50E-07	-	-1.23E-06	-3.46E-07	-
2155	573500.00	4177250.00	RESIDENTIAL	7.30E-09	4.19E-09	-	-1.36E-06	-3.89E-07	-	-1.36E-06	-3.85E-07	-
2156	573500.00	4177000.00	RESIDENTIAL	8.05E-09	4.51E-09	-	-1.48E-06	-4.26E-07	-	-1.48E-06	-4.22E-07	-
2157	573500.00	4176750.00	RESIDENTIAL	8.79E-09	5.00E-09	-	-1.61E-06	-4.61E-07	-	-1.60E-06	-4.56E-07	-
2158	573500.00	4176500.00	RESIDENTIAL	9.94E-09	5.58E-09	-	-1.78E-06	-5.03E-07	-	-1.77E-06	-4.97E-07	-
2161	573500.00	4175750.00	RESIDENTIAL	1.34E-08	7.99E-09	-	-2.36E-06	-6.27E-07	-	-2.35E-06	-6.19E-07	-
2162	573500.00	4175500.00	RESIDENTIAL	1.47E-08	8.81E-09	-	-2.60E-06	-6.96E-07	-	-2.59E-06	-6.87E-07	-
2163	573500.00	4175250.00	RESIDENTIAL	1.57E-08	9.43E-09	-	-2.85E-06	-7.68E-07	-	-2.83E-06	-7.59E-07	-
2164	573500.00	4175000.00	RESIDENTIAL	1.66E-08	1.00E-08	-	-3.01E-06	-8.04E-07	-	-2.99E-06	-7.94E-07	-
2165	573500.00	4174750.00	RESIDENTIAL	1.63E-08	9.87E-09	-	-3.19E-06	-8.88E-07	-	-3.17E-06	-8.78E-07	-
2166	573500.00	4174500.00	RESIDENTIAL	1.54E-08	9.35E-09	-	-3.45E-06	-1.02E-06	-	-3.43E-06	-1.01E-06	-
2167	573500.00	4174250.00	RESIDENTIAL	1.51E-08	9.09E-09	-	-3.63E-06	-1.12E-06	-	-3.61E-06	-1.11E-06	-
2177	573500.00	4171750.00	RESIDENTIAL	1.10E-08	6.84E-09	-	-2.87E-06	-9.04E-07	-	-2.86E-06	-8.97E-07	-
2508	565750.00	4176750.00	RESIDENTIAL	5.69E-09	3.65E-09	-	-1.44E-06	-4.26E-07	-	-1.43E-06	-4.23E-07	-
2509	565750.00	4177000.00	RESIDENTIAL	5.39E-09	3.44E-09	-	-1.34E-06	-3.91E-07	-	-1.33E-06	-3.88E-07	-
2510	565750.00	4177250.00	RESIDENTIAL	5.11E-09	3.24E-09	-	-1.20E-06	-3.43E-07	-	-1.19E-06	-3.40E-07	-
2511	565750.00	4177500.00	RESIDENTIAL	4.86E-09	3.06E-09	-	-1.07E-06	-3.02E-07	-	-1.06E-06	-2.99E-07	-
2512	565750.00	4177750.00	RESIDENTIAL	4.57E-09	2.86E-09	-	-9.48E-07	-2.67E-07	-	-9.43E-07	-2.64E-07	-
2513	565750.00	4178000.00	RESIDENTIAL	4.26E-09	2.64E-09	-	-8.57E-07	-2.44E-07	-	-8.53E-07	-2.41E-07	-
2520	565750.00	4179750.00	HOSPITAL	2.47E-09	1.44E-09	-	-5.28E-07	-1.53E-07	-	-5.25E-07	-1.52E-07	-
2521	565750.00	4180000.00	RESIDENTIAL	2.70E-09	1.53E-09	-	-4.79E-07	-1.37E-07	-	-4.76E-07	-1.36E-07	-
2522	565750.00	4180250.00	RESIDENTIAL	2.48E-09	1.42E-09	-	-4.35E-07	-1.25E-07	-	-4.33E-07	-1.24E-07	-
2523	565750.00	4180500.00	RESIDENTIAL	2.34E-09	1.33E-09	-	-4.00E-07	-1.14E-07	-	-3.98E-07	-1.12E-07	-
2540	565500.00	4177000.00	RESIDENTIAL	5.20E-09	3.22E-09	-	-1.26E-06	-3.74E-07	-	-1.26E-06	-3.71E-07	-
2541	565500.00	4177250.00	RESIDENTIAL	4.96E-09	3.05E-09	-	-1.17E-06	-3.40E-07	-	-1.16E-06	-3.37E-07	-
2542	565500.00	4177500.00	RESIDENTIAL	4.82E-09	2.93E-09	-	-1.05E-06	-3.02E-07	-	-1.04E-06	-2.99E-07	-
2543	565500.00	4177750.00	RESIDENTIAL	4.55E-09	2.74E-09	-	-9.39E-07	-2.66E-07	-	-9.34E-07	-2.63E-07	-
2549	565500.00	4179250.00	RESIDENTIAL	2.79E-09	1.67E-09	-	-5.96E-07	-1.76E-07	-	-5.93E-07	-1.74E-07	-
2550	565500.00	4179500.00	RESIDENTIAL	2.60E-09	1.54E-09	-	-5.63E-07	-1.66E-07	-	-5.61E-07	-1.65E-07	-
2551	565500.00	4179750.00	RESIDENTIAL	2.91E-09	1.66E-09	-	-5.23E-07	-1.53E-07	-	-5.20E-07	-1.51E-07	-
2552	565500.00	4180000.00	RESIDENTIAL	2.68E-09	1.52E-09	-	-4.85E-07	-1.41E-07	-	-4.83E-07	-1.40E-07	-
2553	565500.00	4180250.00	RESIDENTIAL	2.19E-09	1.34E-09	-	-4.39E-07	-1.25E-07	-	-4.37E-07	-1.24E-07	-
2554	565500.00	4180500.00	RESIDENTIAL	1.76E-09	1.04E-09	-	-4.07E-07	-1.16E-07	-	-4.05E-07	-1.15E-07	-
2572	565250.00	4177250.00	RESIDENTIAL	4.29E-09	2.75E-09	-	-1.11E-06	-3.28E-07	-	-1.11E-06	-3.25E-07	-
2573	565250.00	4177500.00	RESIDENTIAL	4.17E-09	2.65E-09	-	-1.02E-06	-2.99E-07	-	-1.02E-06	-2.96E-07	-
2580	565250.00	4179250.00	RESIDENTIAL	3.23E-09	1.89E-09	-	-5.77E-07	-1.72E-07	-	-5.74E-07	-1.70E-07	-
2581	565250.00	4179500.00	RESIDENTIAL	3.02E-09	1.75E-09	-	-5.46E-07	-1.61E-07	-	-5.43E-07	-1.60E-07	-
2582	565250.00	4179750.00	RESIDENTIAL	2.85E-09	1.64E-09	-	-5.18E-07	-1.53E-07	-	-5.15E-07	-1.52E-07	-
2583	565250.00	4180000.00	RESIDENTIAL	2.41E-09	1.48E-09	-	-4.82E-07	-1.42E-07	-	-4.79E-07	-1.40E-07	-
2584	565250.00	4180250.00	RESIDENTIAL	1.95E-09	1.16E-09	-	-4.44E-07	-1.29E-07	-	-4.42E-07	-1.27E-07	-
2585	565250.00	4180500.00	RESIDENTIAL	1.77E-09	1.05E-09	-	-4.11E-07	-1.18E-07	-	-4.09E-07	-1.17E-07	-
2612	565000.00	4179500.00	SCHOOL	2.69E-09	1.67E-09	2.11E-09	-5.25E-07	-1.57E-07	-3.50E-07	-5.22E-07	-1.56E-07	-3.48E-07
2613	565000.00	4179750.00	RESIDENTIAL	2.29E-09	1.38E-09	-	-5.03E-07	-1.49E-07	-	-5.01E-07	-1.47E-07	-
2614	565000.00	4180000.00	RESIDENTIAL	2.15E-09	1.29E-09	-	-4.77E-07	-1.41E-07	-	-4.75E-07	-1.40E-07	-
2615	565000.00	4180250.00	RESIDENTIAL	1.92E-09	1.14E-09	-	-4.46E-07	-1.32E-07	-	-4.44E-07	-1.31E-07	-
2616	565000.00	4180500.00	RESIDENTIAL	1.75E-09	1.04E-09	-	-4.16E-07	-1.22E-07	-	-4.14E-07	-1.20E-07	-
2643	564750.00	4179500.00	RESIDENTIAL	2.37E-09	1.45E-09	-	-4.97E-07	-1.45E-07	-	-4.94E-07	-1.44E-07	-
2644	564750.00	4179750.00	RESIDENTIAL	2.23E-09	1.36E-09	-	-4.83E-07	-1.43E-07	-	-4.80E-07	-1.42E-07	-
2645	564750.00	4180000.00	RESIDENTIAL	2.09E-09	1.26E-09	-	-4.59E-07	-1.36E-07	-	-4.57E-07	-1.34E-07	-
2646	564750.00	4180250.00	RESIDENTIAL	1.92E-09	1.15E-09	-	-4.42E-07	-1.32E-07	-	-4.40E-07	-1.31E-07	-
2647	564750.00	4180500.00	RESIDENTIAL	2.25E-09	1.29E-09	-	-4.21E-07	-1.25E-07	-	-4.18E-07	-1.23E-07	-
2675	564500.00	4179750.00	RESIDENTIAL	2.13E-09	1.30E-09	-	-4.58E-07	-1.34E-07	-	-4.56E-07	-1.33E-07	-
2676	564500.00	4180000.00	RESIDENTIAL	2.54E-09	1.48E-09	-	-4.46E-07	-1.32E-07	-	-4.43E-07	-1.31E-07	-
2677	564500.00	4180250.00	RESIDENTIAL	2.39E-09	1.38E-09	-	-4.22E-07	-1.25E-07	-	-4.19E-07	-1.23E-07	-
2678	564500.00	4180500.00	RESIDENTIAL	2.24E-09	1.29E-09	-	-4.08E-07	-1.21E-07	-	-4.06E-07	-1.20E-07	-
2703	564250.00	4179000.00	RESIDENTIAL	2.97E-09	1.80E-09	-	-5.59E-07	-1.58E-07	-	-5.56E-07	-1.56E-07	-
2704	564250.00	4179250.00	RESIDENTIAL	2.85E-09	1.71E-09	-	-5.09E-07	-1.43E-07	-	-5.06E-07	-1.42E-07	-
2705	564250.00	4179500.00	RESIDENTIAL	2.71E-09	1.61E-09	-	-4.65E-07	-1.31E-07	-	-4.62E-07	-1.29E-07	-
2706	564250.00	4179750.00	RESIDENTIAL	2.59E-09	1.53E-09	-	-4.41E-07	-1.27E-07	-	-4.38E-07	-1.25E-07	-
2707	564250.00	4180000.00	RESIDENTIAL	2.44E-09	1.43E-09	-	-4.29E-07	-1.27E-07	-	-4.26E-07	-1.26E-07	-

OAK Terminal Modernization & Development

Table 2-17. Combined Construction + Incr. Operation Risks

Residential Cancer Risks Combined Construction & Operations				Table 2-17. Combined Construction + Incr. Operation Risks								
				Non-Inhalation Residential Cancer Risk			Inhalation Residential Cancer Risk			Multipathway Residential Cancer Risk		
Maximum->				2.30E-07	8.46E-08	2.19E-08	-1.15E-07	-3.31E-08	-1.74E-07	-1.15E-07	-3.30E-08	-1.72E-07
Minimum->				9.72E-11	1.12E-10	1.28E-09	-1.61E-05	-5.66E-06	-2.77E-06	-1.59E-05	-5.58E-06	-2.75E-06
Max Rec No.->				1881	1881	1879	3177	3179	2965	3177	3179	2965
Exposure Years->				2025-2054	2025-2033	2025-2036	2025-2054	2025-2033	2025-2036	2025-2054	2025-2033	2025-2036
Exposure Duration->				30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs
RecID	UTM X	UTM Y	Receptor Type	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child
2708	564250.00	4180250.00	RESIDENTIAL	2.33E-09	1.35E-09	-	-4.14E-07	-1.24E-07	-	-4.11E-07	-1.22E-07	-
2709	564250.00	4180500.00	RESIDENTIAL	2.20E-09	1.27E-09	-	-3.99E-07	-1.20E-07	-	-3.97E-07	-1.19E-07	-
2734	564000.00	4179000.00	RESIDENTIAL	2.84E-09	1.73E-09	-	-5.61E-07	-1.61E-07	-	-5.58E-07	-1.59E-07	-
2735	564000.00	4179250.00	RESIDENTIAL	2.70E-09	1.63E-09	-	-5.13E-07	-1.45E-07	-	-5.11E-07	-1.44E-07	-
2736	564000.00	4179500.00	RESIDENTIAL	2.61E-09	1.57E-09	-	-4.71E-07	-1.33E-07	-	-4.68E-07	-1.31E-07	-
2737	564000.00	4179750.00	RESIDENTIAL	2.49E-09	1.47E-09	-	-4.34E-07	-1.23E-07	-	-4.31E-07	-1.21E-07	-
2738	564000.00	4180000.00	RESIDENTIAL	2.37E-09	1.40E-09	-	-4.16E-07	-1.21E-07	-	-4.13E-07	-1.20E-07	-
2739	564000.00	4180250.00	RESIDENTIAL	2.27E-09	1.32E-09	-	-3.94E-07	-1.16E-07	-	-3.91E-07	-1.15E-07	-
2740	564000.00	4180500.00	RESIDENTIAL	2.19E-09	1.27E-09	-	-3.79E-07	-1.13E-07	-	-3.77E-07	-1.12E-07	-
2765	563750.00	4179000.00	RESIDENTIAL	2.70E-09	1.65E-09	-	-5.58E-07	-1.62E-07	-	-5.56E-07	-1.60E-07	-
2766	563750.00	4179250.00	RESIDENTIAL	2.62E-09	1.58E-09	-	-5.13E-07	-1.46E-07	-	-5.10E-07	-1.45E-07	-
2767	563750.00	4179500.00	RESIDENTIAL	2.52E-09	1.52E-09	-	-4.76E-07	-1.36E-07	-	-4.73E-07	-1.35E-07	-
2768	563750.00	4179750.00	RESIDENTIAL	2.41E-09	1.43E-09	-	-4.34E-07	-1.22E-07	-	-4.32E-07	-1.21E-07	-
2769	563750.00	4180000.00	RESIDENTIAL	2.34E-09	1.38E-09	-	-4.02E-07	-1.14E-07	-	-3.99E-07	-1.12E-07	-
2770	563750.00	4180250.00	RESIDENTIAL	2.21E-09	1.30E-09	-	-3.80E-07	-1.09E-07	-	-3.78E-07	-1.08E-07	-
2771	563750.00	4180500.00	RESIDENTIAL	1.84E-09	1.17E-09	-	-3.69E-07	-1.10E-07	-	-3.67E-07	-1.08E-07	-
2796	563500.00	4179000.00	RESIDENTIAL	2.38E-09	1.41E-09	-	-5.59E-07	-1.66E-07	-	-5.57E-07	-1.64E-07	-
2797	563500.00	4179250.00	RESIDENTIAL	2.28E-09	1.33E-09	-	-5.14E-07	-1.49E-07	-	-5.12E-07	-1.48E-07	-
2798	563500.00	4179500.00	RESIDENTIAL	2.21E-09	1.28E-09	-	-4.73E-07	-1.35E-07	-	-4.71E-07	-1.34E-07	-
2799	563500.00	4179750.00	RESIDENTIAL	1.83E-09	1.16E-09	-	-4.37E-07	-1.24E-07	-	-4.35E-07	-1.23E-07	-
2800	563500.00	4180000.00	RESIDENTIAL	1.76E-09	1.09E-09	-	-4.02E-07	-1.13E-07	-	-4.00E-07	-1.12E-07	-
2801	563500.00	4180250.00	RESIDENTIAL	1.64E-09	1.02E-09	-	-3.71E-07	-1.06E-07	-	-3.70E-07	-1.05E-07	-
2802	563500.00	4180500.00	RESIDENTIAL	1.56E-09	9.71E-10	-	-3.53E-07	-1.01E-07	-	-3.51E-07	-9.98E-08	-
2813	569500.00	4180750.00	RESIDENTIAL	1.75E-09	1.05E-09	-	-4.59E-07	-1.42E-07	-	-4.57E-07	-1.41E-07	-
2814	569750.00	4180750.00	RESIDENTIAL	2.07E-09	1.14E-09	-	-4.43E-07	-1.31E-07	-	-4.41E-07	-1.30E-07	-
2815	570000.00	4180750.00	RESIDENTIAL	2.07E-09	1.17E-09	-	-4.53E-07	-1.35E-07	-	-4.51E-07	-1.34E-07	-
2816	570250.00	4180750.00	RESIDENTIAL	2.01E-09	1.18E-09	-	-4.63E-07	-1.39E-07	-	-4.61E-07	-1.37E-07	-
2817	570500.00	4180750.00	RESIDENTIAL	2.04E-09	1.20E-09	-	-4.50E-07	-1.37E-07	-	-4.48E-07	-1.35E-07	-
2818	570750.00	4180750.00	RESIDENTIAL	2.08E-09	1.22E-09	-	-4.25E-07	-1.26E-07	-	-4.23E-07	-1.24E-07	-
2819	571000.00	4180750.00	RESIDENTIAL	2.10E-09	1.23E-09	-	-4.27E-07	-1.25E-07	-	-4.25E-07	-1.24E-07	-
2820	571250.00	4180750.00	RESIDENTIAL	2.09E-09	1.21E-09	-	-4.40E-07	-1.32E-07	-	-4.38E-07	-1.31E-07	-
2821	571500.00	4180750.00	RESIDENTIAL	2.00E-09	1.16E-09	-	-4.38E-07	-1.29E-07	-	-4.36E-07	-1.28E-07	-
2822	571750.00	4180750.00	RESIDENTIAL	2.20E-09	1.33E-09	-	-4.31E-07	-1.23E-07	-	-4.29E-07	-1.22E-07	-
2823	572000.00	4180750.00	RESIDENTIAL	2.19E-09	1.34E-09	-	-4.34E-07	-1.23E-07	-	-4.32E-07	-1.21E-07	-
2824	572250.00	4180750.00	RESIDENTIAL	1.62E-09	1.07E-09	-	-4.31E-07	-1.23E-07	-	-4.30E-07	-1.21E-07	-
2825	572500.00	4180750.00	RESIDENTIAL	1.69E-09	1.11E-09	-	-4.51E-07	-1.28E-07	-	-4.49E-07	-1.27E-07	-
2826	572750.00	4180750.00	RESIDENTIAL	1.50E-09	1.00E-09	-	-4.21E-07	-1.17E-07	-	-4.19E-07	-1.16E-07	-
2827	573000.00	4180750.00	RESIDENTIAL	1.57E-09	1.05E-09	-	-4.15E-07	-1.14E-07	-	-4.14E-07	-1.13E-07	-
2828	573250.00	4180750.00	RESIDENTIAL	1.18E-09	8.18E-10	-	-3.26E-07	-9.10E-08	-	-3.25E-07	-9.02E-08	-
2829	573500.00	4180750.00	RESIDENTIAL	1.38E-09	8.98E-10	-	-2.93E-07	-8.44E-08	-	-2.92E-07	-8.35E-08	-
2837	568750.00	4181000.00	RESIDENTIAL	2.33E-09	1.26E-09	-	-3.56E-07	-1.02E-07	-	-3.53E-07	-1.01E-07	-
2839	569250.00	4181000.00	RESIDENTIAL	1.77E-09	9.92E-10	-	-4.21E-07	-1.32E-07	-	-4.19E-07	-1.31E-07	-
2840	569500.00	4181000.00	RESIDENTIAL	1.80E-09	1.00E-09	-	-4.20E-07	-1.29E-07	-	-4.18E-07	-1.28E-07	-
2841	569750.00	4181000.00	RESIDENTIAL	1.73E-09	9.83E-10	-	-4.03E-07	-1.20E-07	-	-4.01E-07	-1.19E-07	-
2842	570000.00	4181000.00	RESIDENTIAL	1.74E-09	1.01E-09	-	-4.04E-07	-1.19E-07	-	-4.03E-07	-1.18E-07	-
2843	570250.00	4181000.00	RESIDENTIAL	1.47E-09	9.72E-10	-	-4.24E-07	-1.26E-07	-	-4.22E-07	-1.25E-07	-
2844	570500.00	4181000.00	RESIDENTIAL	1.73E-09	1.04E-09	-	-4.06E-07	-1.21E-07	-	-4.04E-07	-1.20E-07	-
2845	570750.00	4181000.00	RESIDENTIAL	1.79E-09	1.07E-09	-	-4.02E-07	-1.20E-07	-	-4.00E-07	-1.19E-07	-
2846	571000.00	4181000.00	RESIDENTIAL	1.83E-09	1.08E-09	-	-3.86E-07	-1.13E-07	-	-3.84E-07	-1.12E-07	-
2847	571250.00	4181000.00	RESIDENTIAL	1.87E-09	1.08E-09	-	-4.03E-07	-1.20E-07	-	-4.01E-07	-1.19E-07	-
2848	571500.00	4181000.00	RESIDENTIAL	1.80E-09	1.05E-09	-	-4.10E-07	-1.24E-07	-	-4.09E-07	-1.22E-07	-
2849	571750.00	4181000.00	RESIDENTIAL	1.76E-09	1.02E-09	-	-4.00E-07	-1.17E-07	-	-3.98E-07	-1.16E-07	-
2850	572000.00	4181000.00	RESIDENTIAL	1.70E-09	1.00E-09	-	-3.90E-07	-1.11E-07	-	-3.89E-07	-1.10E-07	-
2851	572250.00	4181000.00	RESIDENTIAL	1.67E-09	1.00E-09	-	-3.97E-07	-1.12E-07	-	-3.95E-07	-1.11E-07	-
2852	572500.00	4181000.00	RESIDENTIAL	1.73E-09	1.03E-09	-	-4.09E-07	-1.16E-07	-	-4.07E-07	-1.15E-07	-
2853	572750.00	4181000.00	RESIDENTIAL	1.55E-09	9.36E-10	-	-3.82E-07	-1.08E-07	-	-3.80E-07	-1.07E-07	-
2854	573000.00	4181000.00	RESIDENTIAL	1.10E-09	6.70E-10	-	-2.96E-07	-8.48E-08	-	-2.95E-07	-8.41E-08	-
2855	573250.00	4181000.00	RESIDENTIAL	1.17E-09	7.18E-10	-	-2.87E-07	-7.94E-08	-	-2.86E-07	-7.87E-08	-
2856	573500.00	4181000.00	RESIDENTIAL	1.19E-09	7.27E-10	-	-2.75E-07	-7.64E-08	-	-2.74E-07	-7.57E-08	-
2859	567500.00	4181250.00	RESIDENTIAL	2.21E-09	1.19E-09	-	-3.36E-07	-9.93E-08	-	-3.34E-07	-9.81E-08	-
2864	568750.00	4181250.00	RESIDENTIAL	1.81E-09	1.07E-09	-	-3.33E-07	-9.67E-08	-	-3.31E-07	-9.56E-08	-
2865	569000.00	4181250.00	RESIDENTIAL	2.09E-09	1.13E-09	-	-3.59E-07	-1.07E-07	-	-3.57E-07	-1.06E-07	-
2866	569250.00	4181250.00	RESIDENTIAL	2.05E-09	1.11E-09	-	-3.86E-07	-1.20E-07	-	-3.84E-07	-1.19E-07	-
2867	569500.00	4181250.00	RESIDENTIAL	1.52E-09	8.63E-10	-	-3.94E-07	-1.22E-07	-	-3.92E-07	-1.21E-07	-
2868	569750.00	4181250.00	RESIDENTIAL	1.53E-09	8.73E-10	-	-3.67E-07	-1.08E-07	-	-3.66E-07	-1.07E-07	-
2869	570000.00	4181250.00	RESIDENTIAL	1.41E-09	8.34E-10	-	-3.53E-07	-1.04E-07	-	-3.51E-07	-1.04E-07	-
2870	570250.00	4181250.00	RESIDENTIAL	1.52E-09	9.12E-10	-	-3.86E-07	-1.14E-07	-	-3.85E-07	-1.13E-07	-
2871	570500.00	4181250.00	RESIDENTIAL	1.42E-09	8.69E-10	-	-3.63E-07	-1.07E-07	-	-3.61E-07	-1.07E-07	-

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Table 2-17. Combined Construction + Incr. Operation Risks

Residential Cancer Risks Combined Construction & Operations				Non-Inhalation Residential Cancer Risk			Inhalation Residential Cancer Risk			Multipathway Residential Cancer Risk		
				Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child
	Maximum->	2.30E-07	8.46E-08	2.19E-08	-1.15E-07	-3.31E-08	-1.74E-07	-1.15E-07	-3.30E-08	-1.72E-07		
	Minimum->	9.72E-11	1.12E-10	1.28E-09	-1.61E-05	-5.66E-06	-2.77E-06	-1.59E-05	-5.58E-06	-2.75E-06		
	Max Rec No.->	1881	1881	1879	3177	3179	2965	3177	3179	2965		
	Exposure Years->	2025-2054	2025-2033	2025-2036	2025-2054	2025-2033	2025-2036	2025-2054	2025-2033	2025-2036		
	Exposure Duration->	30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs		
RecID	UTM X	UTM Y	Receptor Type	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child
2872	570750.00	4181250.00	RESIDENTIAL	1.81E-09	1.14E-09	-	-3.67E-07	-1.09E-07	-	-3.65E-07	-1.08E-07	-
2873	571000.00	4181250.00	RESIDENTIAL	1.28E-09	8.80E-10	-	-3.42E-07	-1.00E-07	-	-3.41E-07	-9.93E-08	-
2874	571250.00	4181250.00	RESIDENTIAL	1.35E-09	9.00E-10	-	-3.64E-07	-1.07E-07	-	-3.63E-07	-1.06E-07	-
2875	571500.00	4181250.00	RESIDENTIAL	1.62E-09	9.58E-10	-	-3.83E-07	-1.15E-07	-	-3.81E-07	-1.14E-07	-
2876	571750.00	4181250.00	RESIDENTIAL	1.60E-09	9.44E-10	-	-3.77E-07	-1.12E-07	-	-3.75E-07	-1.12E-07	-
2877	572000.00	4181250.00	RESIDENTIAL	1.56E-09	9.29E-10	-	-3.65E-07	-1.03E-07	-	-3.64E-07	-1.02E-07	-
2878	572250.00	4181250.00	RESIDENTIAL	1.46E-09	8.83E-10	-	-3.58E-07	-9.94E-08	-	-3.56E-07	-9.85E-08	-
2879	572500.00	4181250.00	RESIDENTIAL	1.39E-09	8.55E-10	-	-3.46E-07	-9.74E-08	-	-3.45E-07	-9.65E-08	-
2880	572750.00	4181250.00	RESIDENTIAL	1.04E-09	6.34E-10	-	-2.83E-07	-8.27E-08	-	-2.82E-07	-8.21E-08	-
2881	573000.00	4181250.00	RESIDENTIAL	1.08E-09	6.63E-10	-	-2.95E-07	-8.47E-08	-	-2.94E-07	-8.40E-08	-
2882	573250.00	4181250.00	RESIDENTIAL	1.14E-09	7.09E-10	-	-2.98E-07	-8.27E-08	-	-2.97E-07	-8.20E-08	-
2883	573500.00	4181250.00	RESIDENTIAL	1.14E-09	6.97E-10	-	-2.81E-07	-7.75E-08	-	-2.80E-07	-7.68E-08	-
2890	568500.00	4181500.00	RESIDENTIAL	1.43E-09	8.11E-10	-	-3.12E-07	-8.88E-08	-	-3.10E-07	-8.80E-08	-
2891	568750.00	4181500.00	RESIDENTIAL	1.43E-09	8.15E-10	-	-3.06E-07	-8.89E-08	-	-3.04E-07	-8.81E-08	-
2892	569000.00	4181500.00	RESIDENTIAL	1.42E-09	8.08E-10	-	-3.29E-07	-9.73E-08	-	-3.28E-07	-9.65E-08	-
2893	569250.00	4181500.00	RESIDENTIAL	1.27E-09	7.32E-10	-	-3.60E-07	-1.14E-07	-	-3.58E-07	-1.13E-07	-
2894	569500.00	4181500.00	RESIDENTIAL	1.49E-09	9.15E-10	-	-3.53E-07	-1.10E-07	-	-3.52E-07	-1.09E-07	-
2895	569750.00	4181500.00	RESIDENTIAL	1.88E-09	1.04E-09	-	-3.44E-07	-1.02E-07	-	-3.43E-07	-1.01E-07	-
2896	570000.00	4181500.00	RESIDENTIAL	1.27E-09	7.62E-10	-	-3.36E-07	-9.77E-08	-	-3.35E-07	-9.69E-08	-
2897	570250.00	4181500.00	RESIDENTIAL	1.27E-09	7.74E-10	-	-3.49E-07	-1.05E-07	-	-3.48E-07	-1.04E-07	-
2898	570500.00	4181500.00	RESIDENTIAL	1.24E-09	7.77E-10	-	-3.34E-07	-9.98E-08	-	-3.33E-07	-9.91E-08	-
2899	570750.00	4181500.00	RESIDENTIAL	1.35E-09	8.31E-10	-	-3.27E-07	-9.93E-08	-	-3.26E-07	-9.85E-08	-
2900	571000.00	4181500.00	RESIDENTIAL	1.31E-09	8.06E-10	-	-3.07E-07	-8.86E-08	-	-3.05E-07	-8.78E-08	-
2901	571250.00	4181500.00	RESIDENTIAL	1.37E-09	8.25E-10	-	-3.23E-07	-9.44E-08	-	-3.22E-07	-9.36E-08	-
2902	571500.00	4181500.00	RESIDENTIAL	1.42E-09	8.48E-10	-	-3.48E-07	-1.04E-07	-	-3.46E-07	-1.03E-07	-
2903	571750.00	4181500.00	RESIDENTIAL	1.52E-09	9.69E-10	-	-3.35E-07	-1.00E-07	-	-3.34E-07	-9.91E-08	-
2904	572000.00	4181500.00	RESIDENTIAL	1.64E-09	1.03E-09	-	-3.37E-07	-9.71E-08	-	-3.35E-07	-9.61E-08	-
2905	572250.00	4181500.00	RESIDENTIAL	1.31E-09	8.57E-10	-	-2.89E-07	-7.98E-08	-	-2.87E-07	-7.90E-08	-
2906	572500.00	4181500.00	RESIDENTIAL	1.16E-09	7.71E-10	-	-2.76E-07	-7.87E-08	-	-2.75E-07	-7.79E-08	-
2907	572750.00	4181500.00	RESIDENTIAL	1.27E-09	8.27E-10	-	-2.88E-07	-8.43E-08	-	-2.87E-07	-8.34E-08	-
2908	573000.00	4181500.00	RESIDENTIAL	1.31E-09	8.52E-10	-	-3.00E-07	-8.62E-08	-	-2.99E-07	-8.53E-08	-
2909	573250.00	4181500.00	RESIDENTIAL	7.85E-10	6.00E-10	-	-2.91E-07	-8.33E-08	-	-2.91E-07	-8.27E-08	-
2910	573500.00	4181500.00	RESIDENTIAL	7.33E-10	5.64E-10	-	-2.67E-07	-7.37E-08	-	-2.66E-07	-7.32E-08	-
2914	567750.00	4181750.00	RESIDENTIAL	1.32E-09	7.42E-10	-	-3.12E-07	-9.38E-08	-	-3.10E-07	-9.31E-08	-
2915	568000.00	4181750.00	RESIDENTIAL	1.80E-09	9.82E-10	-	-3.18E-07	-9.54E-08	-	-3.16E-07	-9.45E-08	-
2916	568250.00	4181750.00	RESIDENTIAL	1.81E-09	9.94E-10	-	-3.11E-07	-9.21E-08	-	-3.10E-07	-9.11E-08	-
2917	568500.00	4181750.00	RESIDENTIAL	1.79E-09	9.81E-10	-	-2.90E-07	-8.40E-08	-	-2.88E-07	-8.30E-08	-
2918	568750.00	4181750.00	RESIDENTIAL	1.26E-09	7.29E-10	-	-2.88E-07	-8.25E-08	-	-2.86E-07	-8.17E-08	-
2919	569000.00	4181750.00	RESIDENTIAL	1.24E-09	7.14E-10	-	-3.12E-07	-9.37E-08	-	-3.11E-07	-9.30E-08	-
2920	569250.00	4181750.00	RESIDENTIAL	1.18E-09	6.87E-10	-	-3.30E-07	-1.02E-07	-	-3.28E-07	-1.01E-07	-
2921	569500.00	4181750.00	RESIDENTIAL	1.16E-09	6.76E-10	-	-3.42E-07	-1.07E-07	-	-3.41E-07	-1.06E-07	-
2922	569750.00	4181750.00	RESIDENTIAL	1.40E-09	8.74E-10	-	-3.10E-07	-9.18E-08	-	-3.09E-07	-9.09E-08	-
2923	570000.00	4181750.00	RESIDENTIAL	1.47E-09	9.30E-10	-	-3.27E-07	-9.59E-08	-	-3.25E-07	-9.49E-08	-
2924	570250.00	4181750.00	RESIDENTIAL	1.28E-09	8.43E-10	-	-3.00E-07	-9.02E-08	-	-2.98E-07	-8.93E-08	-
2925	570500.00	4181750.00	RESIDENTIAL	1.55E-09	8.98E-10	-	-3.04E-07	-9.13E-08	-	-3.03E-07	-9.04E-08	-
2926	570750.00	4181750.00	RESIDENTIAL	1.10E-09	6.88E-10	-	-2.91E-07	-8.70E-08	-	-2.90E-07	-8.63E-08	-
2927	571000.00	4181750.00	RESIDENTIAL	1.09E-09	6.85E-10	-	-2.73E-07	-8.04E-08	-	-2.72E-07	-7.97E-08	-
2928	571250.00	4181750.00	RESIDENTIAL	1.10E-09	6.78E-10	-	-2.73E-07	-7.97E-08	-	-2.72E-07	-7.91E-08	-
2929	571500.00	4181750.00	RESIDENTIAL	1.18E-09	7.25E-10	-	-3.01E-07	-8.95E-08	-	-3.00E-07	-8.88E-08	-
2930	571750.00	4181750.00	RESIDENTIAL	1.06E-09	6.58E-10	-	-2.84E-07	-8.57E-08	-	-2.83E-07	-8.50E-08	-
2931	572000.00	4181750.00	RESIDENTIAL	1.29E-09	7.84E-10	-	-3.14E-07	-9.07E-08	-	-3.12E-07	-8.99E-08	-
2932	572250.00	4181750.00	RESIDENTIAL	1.22E-09	7.53E-10	-	-3.07E-07	-8.69E-08	-	-3.06E-07	-8.61E-08	-
2933	572500.00	4181750.00	RESIDENTIAL	9.72E-10	6.06E-10	-	-2.73E-07	-7.54E-08	-	-2.73E-07	-7.48E-08	-
2934	572750.00	4181750.00	RESIDENTIAL	9.57E-10	5.99E-10	-	-2.78E-07	-7.95E-08	-	-2.77E-07	-7.89E-08	-
2935	573000.00	4181750.00	RESIDENTIAL	8.92E-10	5.63E-10	-	-2.54E-07	-7.33E-08	-	-2.53E-07	-7.27E-08	-
2936	573250.00	4181750.00	RESIDENTIAL	7.66E-10	4.81E-10	-	-2.27E-07	-6.43E-08	-	-2.26E-07	-6.38E-08	-
2937	573500.00	4181750.00	RESIDENTIAL	7.86E-10	4.97E-10	-	-2.36E-07	-6.68E-08	-	-2.35E-07	-6.63E-08	-
2940	567500.00	4182000.00	RESIDENTIAL	1.23E-09	6.89E-10	-	-2.83E-07	-8.54E-08	-	-2.82E-07	-8.47E-08	-
2941	567750.00	4182000.00	RESIDENTIAL	1.20E-09	6.72E-10	-	-2.98E-07	-8.91E-08	-	-2.97E-07	-8.84E-08	-
2942	568000.00	4182000.00	RESIDENTIAL	1.16E-09	6.68E-10	-	-3.02E-07	-8.91E-08	-	-3.01E-07	-8.84E-08	-
2943	568250.00	4182000.00	RESIDENTIAL	1.66E-09	9.13E-10	-	-2.94E-07	-8.68E-08	-	-2.92E-07	-8.59E-08	-
2944	568500.00	4182000.00	RESIDENTIAL	1.65E-09	9.16E-10	-	-2.71E-07	-7.75E-08	-	-2.70E-07	-7.66E-08	-
2945	568750.00	4182000.00	RESIDENTIAL	1.65E-09	9.14E-10	-	-2.65E-07	-7.47E-08	-	-2.64E-07	-7.38E-08	-
2946	569000.00	4182000.00	RESIDENTIAL	1.54E-09	8.55E-10	-	-2.83E-07	-8.53E-08	-	-2.82E-07	-8.45E-08	-
2947	569250.00	4182000.00	RESIDENTIAL	1.05E-09	6.08E-10	-	-3.16E-07	-9.86E-08	-	-3.15E-07	-9.80E-08	-
2948	569500.00	4182000.00	RESIDENTIAL	9.60E-10	5.65E-10	-	-3.00E-07	-9.25E-08	-	-2.99E-07	-9.20E-08	-
2949	569750.00	4182000.00	RESIDENTIAL	9.88E-10	5.92E-10	-	-2.69E-07	-7.90E-08	-	-2.68E-07	-7.84E-08	-
2950	570000.00	4182000.00	RESIDENTIAL	1.08E-09	6.61E-10	-	-2.93E-07	-8.42E-08	-	-2.91E-07	-8.35E-08	-

OAK Terminal Modernization & Development

Table 2-17. Combined Construction + Incr. Operation Risks

Residential Cancer Risks Combined Construction & Operations				Non-Inhalation Residential Cancer Risk									Inhalation Residential Cancer Risk			Multipathway Residential Cancer Risk			
				Maximum->	2.30E-07	8.46E-08	2.19E-08	-1.15E-07	-3.31E-08	-1.74E-07	-1.15E-07	-3.30E-08	-1.72E-07	Minimum->	9.72E-11	1.12E-10	1.28E-09	-1.61E-05	-5.66E-06
				Max Rec No.->	1881	1881	1879	3177	3179	2965	3177	3179	2965						
				Exposure Years->	2025-2054	2025-2033	2025-2036	2025-2054	2025-2033	2025-2036	2025-2054	2025-2033	2025-2036						
				Exposure Duration->	30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs						
RecID	UTM X	UTM Y	Receptor Type	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child				
2951	570250.00	4182000.00	RESIDENTIAL	1.36E-09	8.82E-10	-	-3.13E-07	-9.33E-08	-	-3.11E-07	-9.24E-08	-	-	-	-				
2952	570500.00	4182000.00	RESIDENTIAL	1.66E-09	9.59E-10	-	-3.20E-07	-9.59E-08	-	-3.19E-07	-9.50E-08	-	-	-	-				
2953	570750.00	4182000.00	RESIDENTIAL	1.10E-09	7.42E-10	-	-2.53E-07	-7.49E-08	-	-2.52E-07	-7.42E-08	-	-	-	-				
2954	571000.00	4182000.00	RESIDENTIAL	1.34E-09	7.82E-10	-	-2.37E-07	-6.83E-08	-	-2.35E-07	-6.75E-08	-	-	-	-				
2955	571250.00	4182000.00	RESIDENTIAL	1.38E-09	8.02E-10	-	-2.32E-07	-6.57E-08	-	-2.30E-07	-6.49E-08	-	-	-	-				
2956	571500.00	4182000.00	RESIDENTIAL	1.13E-09	6.94E-10	-	-2.92E-07	-8.70E-08	-	-2.91E-07	-8.63E-08	-	-	-	-				
2957	571750.00	4182000.00	RESIDENTIAL	1.17E-09	7.12E-10	-	-3.12E-07	-9.44E-08	-	-3.11E-07	-9.37E-08	-	-	-	-				
2958	572000.00	4182000.00	RESIDENTIAL	1.18E-09	7.15E-10	-	-3.00E-07	-8.89E-08	-	-2.99E-07	-8.82E-08	-	-	-	-				
2959	572250.00	4182000.00	RESIDENTIAL	1.10E-09	6.82E-10	-	-2.83E-07	-8.06E-08	-	-2.82E-07	-7.99E-08	-	-	-	-				
2960	572500.00	4182000.00	RESIDENTIAL	8.07E-10	5.23E-10	-	-2.38E-07	-6.45E-08	-	-2.38E-07	-6.40E-08	-	-	-	-				
2961	572750.00	4182000.00	RESIDENTIAL	7.95E-10	5.13E-10	-	-2.42E-07	-6.92E-08	-	-2.41E-07	-6.87E-08	-	-	-	-				
2962	573000.00	4182000.00	RESIDENTIAL	6.86E-10	4.42E-10	-	-2.24E-07	-6.50E-08	-	-2.23E-07	-6.45E-08	-	-	-	-				
2963	573250.00	4182000.00	RESIDENTIAL	6.79E-10	4.41E-10	-	-2.14E-07	-6.02E-08	-	-2.13E-07	-5.98E-08	-	-	-	-				
2964	573500.00	4182000.00	RESIDENTIAL	6.74E-10	4.38E-10	-	-2.22E-07	-6.33E-08	-	-2.22E-07	-6.28E-08	-	-	-	-				
2965	567000.00	4182250.00	SCHOOL	1.76E-09	9.38E-10	1.28E-09	-2.58E-07	-7.56E-08	-1.74E-07	-2.56E-07	-7.47E-08	-1.72E-07	-	-	-				
2966	567250.00	4182250.00	RESIDENTIAL	1.66E-09	8.88E-10	-	-2.63E-07	-7.98E-08	-	-2.62E-07	-7.90E-08	-	-	-	-				
2967	567500.00	4182250.00	RESIDENTIAL	1.62E-09	8.71E-10	-	-2.75E-07	-8.34E-08	-	-2.73E-07	-8.25E-08	-	-	-	-				
2968	567750.00	4182250.00	RESIDENTIAL	1.09E-09	6.21E-10	-	-2.88E-07	-8.76E-08	-	-2.87E-07	-8.70E-08	-	-	-	-				
2969	568000.00	4182250.00	RESIDENTIAL	1.11E-09	6.40E-10	-	-2.90E-07	-8.58E-08	-	-2.89E-07	-8.51E-08	-	-	-	-				
2970	568250.00	4182250.00	RESIDENTIAL	1.11E-09	6.47E-10	-	-2.75E-07	-7.97E-08	-	-2.74E-07	-7.91E-08	-	-	-	-				
2971	568500.00	4182250.00	RESIDENTIAL	1.29E-09	8.12E-10	-	-2.59E-07	-7.41E-08	-	-2.57E-07	-7.33E-08	-	-	-	-				
2972	568750.00	4182250.00	RESIDENTIAL	1.54E-09	8.54E-10	-	-2.51E-07	-7.24E-08	-	-2.50E-07	-7.15E-08	-	-	-	-				
2973	569000.00	4182250.00	RESIDENTIAL	1.51E-09	8.35E-10	-	-2.75E-07	-8.21E-08	-	-2.74E-07	-8.13E-08	-	-	-	-				
2974	569250.00	4182250.00	RESIDENTIAL	1.48E-09	8.20E-10	-	-2.99E-07	-9.40E-08	-	-2.97E-07	-9.32E-08	-	-	-	-				
2975	569500.00	4182250.00	RESIDENTIAL	1.42E-09	7.92E-10	-	-2.89E-07	-9.19E-08	-	-2.88E-07	-9.11E-08	-	-	-	-				
2976	569750.00	4182250.00	RESIDENTIAL	9.75E-10	5.80E-10	-	-2.68E-07	-7.87E-08	-	-2.67E-07	-7.81E-08	-	-	-	-				
2977	570000.00	4182250.00	RESIDENTIAL	9.95E-10	6.04E-10	-	-2.74E-07	-8.04E-08	-	-2.73E-07	-7.98E-08	-	-	-	-				
2978	570250.00	4182250.00	RESIDENTIAL	1.03E-09	6.34E-10	-	-2.95E-07	-8.76E-08	-	-2.94E-07	-8.70E-08	-	-	-	-				
2979	570500.00	4182250.00	RESIDENTIAL	1.06E-09	6.64E-10	-	-3.07E-07	-9.12E-08	-	-3.06E-07	-9.06E-08	-	-	-	-				
2980	570750.00	4182250.00	RESIDENTIAL	1.26E-09	8.27E-10	-	-2.88E-07	-8.62E-08	-	-2.87E-07	-8.53E-08	-	-	-	-				
2981	571000.00	4182250.00	RESIDENTIAL	1.08E-09	7.31E-10	-	-2.40E-07	-7.16E-08	-	-2.39E-07	-7.09E-08	-	-	-	-				
2982	571250.00	4182250.00	RESIDENTIAL	1.52E-09	8.67E-10	-	-2.48E-07	-7.07E-08	-	-2.47E-07	-6.98E-08	-	-	-	-				
2983	571500.00	4182250.00	RESIDENTIAL	1.07E-09	6.65E-10	-	-2.72E-07	-7.89E-08	-	-2.71E-07	-7.82E-08	-	-	-	-				
2984	571750.00	4182250.00	RESIDENTIAL	1.48E-09	8.47E-10	-	-2.82E-07	-8.56E-08	-	-2.80E-07	-8.47E-08	-	-	-	-				
2985	572000.00	4182250.00	RESIDENTIAL	1.37E-09	7.85E-10	-	-2.48E-07	-7.46E-08	-	-2.47E-07	-7.38E-08	-	-	-	-				
2986	572250.00	4182250.00	RESIDENTIAL	1.38E-09	7.92E-10	-	-2.49E-07	-7.25E-08	-	-2.48E-07	-7.17E-08	-	-	-	-				
2987	572500.00	4182250.00	RESIDENTIAL	7.01E-10	4.53E-10	-	-2.13E-07	-5.88E-08	-	-2.12E-07	-5.84E-08	-	-	-	-				
2988	572750.00	4182250.00	RESIDENTIAL	6.25E-10	4.12E-10	-	-2.11E-07	-5.94E-08	-	-2.10E-07	-5.90E-08	-	-	-	-				
2989	573000.00	4182250.00	RESIDENTIAL	5.89E-10	3.90E-10	-	-1.96E-07	-5.52E-08	-	-1.96E-07	-5.48E-08	-	-	-	-				
2990	573250.00	4182250.00	RESIDENTIAL	5.78E-10	3.80E-10	-	-2.04E-07	-5.92E-08	-	-2.03E-07	-5.89E-08	-	-	-	-				
2991	573500.00	4182250.00	RESIDENTIAL	6.06E-10	4.03E-10	-	-2.04E-07	-5.73E-08	-	-2.03E-07	-5.69E-08	-	-	-	-				
2992	567000.00	4182500.00	RESIDENTIAL	1.50E-09	8.25E-10	-	-2.32E-07	-6.73E-08	-	-2.30E-07	-6.65E-08	-	-	-	-				
2993	567250.00	4182500.00	RESIDENTIAL	1.44E-09	7.89E-10	-	-2.40E-07	-7.31E-08	-	-2.38E-07	-7.23E-08	-	-	-	-				
2994	567500.00	4182500.00	RESIDENTIAL	1.49E-09	8.13E-10	-	-2.58E-07	-7.84E-08	-	-2.56E-07	-7.76E-08	-	-	-	-				
2995	567750.00	4182500.00	RESIDENTIAL	1.46E-09	8.04E-10	-	-2.71E-07	-8.11E-08	-	-2.69E-07	-8.03E-08	-	-	-	-				
2996	568000.00	4182500.00	RESIDENTIAL	9.61E-10	5.65E-10	-	-2.67E-07	-7.96E-08	-	-2.66E-07	-7.91E-08	-	-	-	-				
2997	568250.00	4182500.00	RESIDENTIAL	9.66E-10	5.78E-10	-	-2.53E-07	-7.24E-08	-	-2.52E-07	-7.19E-08	-	-	-	-				
2998	568500.00	4182500.00	RESIDENTIAL	9.56E-10	5.70E-10	-	-2.41E-07	-6.83E-08	-	-2.40E-07	-6.78E-08	-	-	-	-				
2999	568750.00	4182500.00	RESIDENTIAL	9.07E-10	5.44E-10	-	-2.29E-07	-6.49E-08	-	-2.28E-07	-6.44E-08	-	-	-	-				
3000	569000.00	4182500.00	RESIDENTIAL	1.14E-09	7.24E-10	-	-2.56E-07	-7.62E-08	-	-2.55E-07	-7.55E-08	-	-	-	-				
3001	569250.00	4182500.00	RESIDENTIAL	1.40E-09	7.71E-10	-	-2.84E-07	-8.95E-08	-	-2.83E-07	-8.87E-08	-	-	-	-				
3002	569500.00	4182500.00	RESIDENTIAL	1.37E-09	7.61E-10	-	-2.84E-07	-8.91E-08	-	-2.83E-07	-8.84E-08	-	-	-	-				
3003	569750.00	4182500.00	RESIDENTIAL	1.41E-09	7.87E-10	-	-2.57E-07	-7.57E-08	-	-2.56E-07	-7.49E-08	-	-	-	-				
3004	570000.00	4182500.00	RESIDENTIAL	8.77E-10	5.42E-10	-	-2.56E-07	-7.49E-08	-	-2.55E-07	-7.44E-08	-	-	-	-				
3005	570250.00	4182500.00	RESIDENTIAL	8.48E-10	5.30E-10	-	-2.73E-07	-8.26E-08	-	-2.72E-07	-8.21E-08	-	-	-	-				
3006	570500.00	4182500.00	RESIDENTIAL	9.54E-10	5.99E-10	-	-2.83E-07	-8.54E-08	-	-2.82E-07	-8.48E-08	-	-	-	-				
3007	570750.00	4182500.00	RESIDENTIAL	9.29E-10	5.86E-10	-	-2.73E-07	-8.17E-08	-	-2.72E-07	-8.11E-08	-	-	-	-				
3008	571000.00	4182500.00	RESIDENTIAL	8.99E-10	5.74E-10	-	-2.51E-07	-7.40E-08	-	-2.50E-07	-7.34E-08	-	-	-	-				
3009	571250.00	4182500.00	RESIDENTIAL	8.40E-10	5.33E-10	-	-2.22E-07	-6.45E-08	-	-2.21E-07	-6.40E-08	-	-	-	-				
3010	571500.00	4182500.00	RESIDENTIAL	1.12E-09	7.43E-10	-	-2.43E-07	-7.04E-08	-	-2.42E-07	-6.97E-08	-	-	-	-				
3011	571750.00	4182500.00	RESIDENTIAL	1.01E-09	6.87E-10	-	-2.45E-07	-7.37E-08	-	-2.44E-07	-7.30E-08	-	-	-	-				
3012	572000.00	4182500.00	RESIDENTIAL	8.07E-10	5.62E-10	-	-1.97E-07	-5.86E-08	-	-1.96E-07	-5.81E-08	-	-	-	-				
3013	572250.00	4182500.00	RESIDENTIAL	9.94E-10	6.67E-10	-	-2.28E-07	-6.65E-08	-	-2.27E-07	-6.59E-08	-	-	-	-				
3014	572500.00	4182500.00	RESIDENTIAL	9.21E-10	6.33E-10	-	-2.11E-07	-5.95E-08	-	-2.10E-07	-5.88E-08	-	-	-	-				
3015	572750.00	4182500.00	RESIDENTIAL	7.40E-10	5.32E-10	-	-1.85E-07	-5.20E-08	-	-1.84E-07	-5.15E-08	-	-	-	-				
3016	573000.00	4182500.00	RESIDENTIAL	7.30E-10	5.24E-10	-	-1.93E-07	-5.55E-08	-	-1.92E-07	-5.49E-08	-	-	-	-				
3017	573250.00	4182500.00	RESIDENTIAL	1.04E-09	5.98E-10	-	-1.98E-07	-5.77E-08	-	-1.97E-07	-5.71E-08	-	-	-	-				
3018	573500.00	4182500.00	RESIDENTIAL	1.06E-09	6.10E-10	-	-1.95E-07	-5.55E-08	-	-1.93E-07	-5.49E-08	-	-	-	-				



OAK Terminal Modernization & Development

Table 2-17. Combined Construction + Incr. Operation Risks

Residential Cancer Risks Combined Construction & Operations				Non-Inhalation Residential Cancer Risk			Inhalation Residential Cancer Risk			Multipathway Residential Cancer Risk		
				Maximum->	2.30E-07	8.46E-08	2.19E-08	-1.15E-07	-3.31E-08	-1.74E-07	-1.15E-07	-3.30E-08
Minimum->				9.72E-11	1.12E-10	1.28E-09	-1.61E-05	-5.66E-06	-2.77E-06	-1.59E-05	-5.58E-06	-2.75E-06
Max Rec No.->				1881	1881	1879	3177	3179	2965	3177	3179	2965
Exposure Years->				2025-2054	2025-2033	2025-2036	2025-2054	2025-2033	2025-2036	2025-2054	2025-2033	2025-2036
Exposure Duration->				30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs
RecID	UTM X	UTM Y	Receptor Type	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child
3087	570500.00	4183250.00	RESIDENTIAL	1.17E-09	6.79E-10	-	-2.18E-07	-6.57E-08	-	-2.17E-07	-6.50E-08	-
3088	570750.00	4183250.00	RESIDENTIAL	1.16E-09	6.77E-10	-	-2.21E-07	-6.50E-08	-	-2.20E-07	-6.44E-08	-
3089	571000.00	4183250.00	RESIDENTIAL	1.13E-09	6.69E-10	-	-2.10E-07	-6.29E-08	-	-2.09E-07	-6.22E-08	-
3090	571250.00	4183250.00	RESIDENTIAL	1.05E-09	6.12E-10	-	-1.86E-07	-5.54E-08	-	-1.85E-07	-5.48E-08	-
3091	571500.00	4183250.00	RESIDENTIAL	9.27E-10	5.34E-10	-	-1.55E-07	-4.39E-08	-	-1.54E-07	-4.34E-08	-
3092	571750.00	4183250.00	RESIDENTIAL	9.15E-10	5.19E-10	-	-1.64E-07	-4.73E-08	-	-1.63E-07	-4.68E-08	-
3093	572000.00	4183250.00	RESIDENTIAL	5.31E-10	3.49E-10	-	-1.87E-07	-5.69E-08	-	-1.86E-07	-5.65E-08	-
3094	572250.00	4183250.00	RESIDENTIAL	4.36E-10	2.84E-10	-	-1.73E-07	-5.36E-08	-	-1.72E-07	-5.33E-08	-
3095	572500.00	4183250.00	RESIDENTIAL	3.69E-10	2.48E-10	-	-1.52E-07	-4.50E-08	-	-1.51E-07	-4.48E-08	-
3096	572750.00	4183250.00	RESIDENTIAL	3.63E-10	2.54E-10	-	-1.47E-07	-4.17E-08	-	-1.47E-07	-4.14E-08	-
3097	573000.00	4183250.00	RESIDENTIAL	3.58E-10	2.54E-10	-	-1.54E-07	-4.30E-08	-	-1.54E-07	-4.27E-08	-
3098	573250.00	4183250.00	RESIDENTIAL	3.48E-10	2.49E-10	-	-1.61E-07	-4.51E-08	-	-1.61E-07	-4.49E-08	-
3099	573500.00	4183250.00	RESIDENTIAL	3.56E-10	2.50E-10	-	-1.70E-07	-4.92E-08	-	-2.23E-07	-6.99E-08	-
3100	567000.00	4183500.00	RESIDENTIAL	7.01E-10	4.14E-10	-	-1.87E-07	-5.62E-08	-	-1.87E-07	-5.57E-08	-
3101	567250.00	4183500.00	RESIDENTIAL	9.22E-10	5.96E-10	-	-2.12E-07	-6.46E-08	-	-2.11E-07	-6.40E-08	-
3102	567500.00	4183500.00	RESIDENTIAL	1.21E-09	6.64E-10	-	-2.25E-07	-6.78E-08	-	-2.24E-07	-6.71E-08	-
3103	567750.00	4183500.00	RESIDENTIAL	1.13E-09	6.38E-10	-	-2.14E-07	-6.33E-08	-	-2.13E-07	-6.26E-08	-
3104	568000.00	4183500.00	RESIDENTIAL	1.05E-09	6.03E-10	-	-1.92E-07	-5.52E-08	-	-1.91E-07	-5.46E-08	-
3105	568250.00	4183500.00	RESIDENTIAL	1.08E-09	6.16E-10	-	-1.84E-07	-5.17E-08	-	-1.83E-07	-5.11E-08	-
3106	568500.00	4183500.00	RESIDENTIAL	1.09E-09	6.17E-10	-	-1.81E-07	-5.14E-08	-	-1.80E-07	-5.08E-08	-
3107	568750.00	4183500.00	RESIDENTIAL	1.15E-09	6.40E-10	-	-1.92E-07	-5.55E-08	-	-1.91E-07	-5.49E-08	-
3108	569000.00	4183500.00	RESIDENTIAL	1.13E-09	6.25E-10	-	-2.14E-07	-6.67E-08	-	-2.13E-07	-6.61E-08	-
3109	569250.00	4183500.00	RESIDENTIAL	5.60E-10	3.49E-10	-	-2.22E-07	-7.06E-08	-	-2.22E-07	-7.03E-08	-
3110	569500.00	4183500.00	RESIDENTIAL	5.79E-10	3.65E-10	-	-2.24E-07	-7.02E-08	-	-2.23E-07	-6.99E-08	-
3111	569750.00	4183500.00	RESIDENTIAL	6.15E-10	3.90E-10	-	-2.04E-07	-6.05E-08	-	-2.03E-07	-6.01E-08	-
3112	570000.00	4183500.00	RESIDENTIAL	7.92E-10	5.54E-10	-	-1.92E-07	-5.64E-08	-	-1.91E-07	-5.58E-08	-
3113	570250.00	4183500.00	RESIDENTIAL	8.24E-10	5.73E-10	-	-2.08E-07	-6.04E-08	-	-2.07E-07	-5.99E-08	-
3114	570500.00	4183500.00	RESIDENTIAL	1.13E-09	6.54E-10	-	-2.13E-07	-6.32E-08	-	-2.12E-07	-6.25E-08	-
3115	570750.00	4183500.00	RESIDENTIAL	1.09E-09	6.26E-10	-	-2.05E-07	-5.93E-08	-	-2.04E-07	-5.86E-08	-
3116	571000.00	4183500.00	RESIDENTIAL	1.03E-09	6.07E-10	-	-1.91E-07	-5.66E-08	-	-1.90E-07	-5.60E-08	-
3117	571250.00	4183500.00	RESIDENTIAL	9.25E-10	5.33E-10	-	-1.61E-07	-4.62E-08	-	-1.60E-07	-4.56E-08	-
3118	571500.00	4183500.00	RESIDENTIAL	8.78E-10	5.07E-10	-	-1.49E-07	-4.32E-08	-	-1.49E-07	-4.27E-08	-
3119	571750.00	4183500.00	RESIDENTIAL	9.10E-10	5.17E-10	-	-1.53E-07	-4.30E-08	-	-1.52E-07	-4.24E-08	-
3120	572000.00	4183500.00	RESIDENTIAL	8.83E-10	5.02E-10	-	-1.60E-07	-4.80E-08	-	-1.59E-07	-4.75E-08	-
3121	572250.00	4183500.00	RESIDENTIAL	8.38E-10	4.76E-10	-	-1.56E-07	-4.70E-08	-	-1.55E-07	-4.65E-08	-
3122	572500.00	4183500.00	RESIDENTIAL	8.46E-10	4.76E-10	-	-1.51E-07	-4.51E-08	-	-1.50E-07	-4.47E-08	-
3123	572750.00	4183500.00	RESIDENTIAL	8.40E-10	4.79E-10	-	-1.41E-07	-4.10E-08	-	-1.40E-07	-4.06E-08	-
3124	573000.00	4183500.00	RESIDENTIAL	3.33E-10	2.39E-10	-	-1.45E-07	-4.19E-08	-	-1.44E-07	-4.17E-08	-
3125	573250.00	4183500.00	RESIDENTIAL	3.10E-10	2.28E-10	-	-1.56E-07	-4.61E-08	-	-1.56E-07	-4.59E-08	-
3126	573500.00	4183500.00	RESIDENTIAL	4.73E-10	3.71E-10	-	-1.43E-07	-4.09E-08	-	-1.43E-07	-4.05E-08	-
3127	567000.00	4183750.00	RESIDENTIAL	6.03E-10	3.69E-10	-	-1.84E-07	-5.52E-08	-	-1.83E-07	-5.48E-08	-
3128	567250.00	4183750.00	RESIDENTIAL	6.29E-10	3.77E-10	-	-2.00E-07	-6.15E-08	-	-1.99E-07	-6.11E-08	-
3129	567500.00	4183750.00	RESIDENTIAL	8.18E-10	5.48E-10	-	-2.14E-07	-6.48E-08	-	-2.13E-07	-6.42E-08	-
3130	567750.00	4183750.00	RESIDENTIAL	1.10E-09	6.19E-10	-	-2.09E-07	-6.27E-08	-	-2.08E-07	-6.21E-08	-
3131	568000.00	4183750.00	RESIDENTIAL	1.13E-09	6.36E-10	-	-2.01E-07	-5.91E-08	-	-2.00E-07	-5.84E-08	-
3132	568250.00	4183750.00	RESIDENTIAL	1.02E-09	5.81E-10	-	-1.77E-07	-5.01E-08	-	-1.76E-07	-4.95E-08	-
3133	568500.00	4183750.00	RESIDENTIAL	1.05E-09	5.92E-10	-	-1.76E-07	-4.85E-08	-	-1.75E-07	-4.79E-08	-
3134	568750.00	4183750.00	RESIDENTIAL	1.08E-09	6.00E-10	-	-1.75E-07	-5.14E-08	-	-1.74E-07	-5.08E-08	-
3135	569000.00	4183750.00	RESIDENTIAL	1.06E-09	5.86E-10	-	-1.97E-07	-6.01E-08	-	-1.96E-07	-5.95E-08	-
3136	569250.00	4183750.00	RESIDENTIAL	1.01E-09	5.61E-10	-	-2.02E-07	-6.22E-08	-	-2.01E-07	-6.16E-08	-
3137	569500.00	4183750.00	RESIDENTIAL	4.93E-10	3.19E-10	-	-2.05E-07	-6.27E-08	-	-2.05E-07	-6.24E-08	-
3138	569750.00	4183750.00	RESIDENTIAL	5.18E-10	3.33E-10	-	-1.86E-07	-5.60E-08	-	-1.86E-07	-5.57E-08	-
3139	570000.00	4183750.00	RESIDENTIAL	5.01E-10	3.30E-10	-	-1.81E-07	-5.27E-08	-	-1.81E-07	-5.23E-08	-
3140	570250.00	4183750.00	RESIDENTIAL	4.80E-10	3.15E-10	-	-1.82E-07	-5.42E-08	-	-1.81E-07	-5.38E-08	-
3141	570500.00	4183750.00	RESIDENTIAL	6.85E-10	4.90E-10	-	-1.91E-07	-5.72E-08	-	-1.90E-07	-5.67E-08	-
3142	570750.00	4183750.00	RESIDENTIAL	6.99E-10	4.95E-10	-	-1.90E-07	-5.65E-08	-	-1.89E-07	-5.60E-08	-
3143	571000.00	4183750.00	RESIDENTIAL	6.23E-10	4.57E-10	-	-1.65E-07	-4.80E-08	-	-1.65E-07	-4.76E-08	-
3144	571250.00	4183750.00	RESIDENTIAL	6.03E-10	4.50E-10	-	-1.62E-07	-4.90E-08	-	-1.61E-07	-4.86E-08	-
3145	571500.00	4183750.00	RESIDENTIAL	5.57E-10	4.20E-10	-	-1.47E-07	-4.34E-08	-	-1.46E-07	-4.29E-08	-
3146	571750.00	4183750.00	RESIDENTIAL	8.56E-10	4.93E-10	-	-1.45E-07	-4.23E-08	-	-1.44E-07	-4.18E-08	-
3147	572000.00	4183750.00	RESIDENTIAL	8.44E-10	4.80E-10	-	-1.48E-07	-4.38E-08	-	-1.47E-07	-4.33E-08	-
3148	572250.00	4183750.00	RESIDENTIAL	7.96E-10	4.57E-10	-	-1.46E-07	-4.39E-08	-	-1.45E-07	-4.34E-08	-
3149	572500.00	4183750.00	RESIDENTIAL	8.32E-10	4.72E-10	-	-1.39E-07	-4.13E-08	-	-1.38E-07	-4.08E-08	-
3150	572750.00	4183750.00	RESIDENTIAL	7.80E-10	4.49E-10	-	-1.37E-07	-3.93E-08	-	-1.36E-07	-3.89E-08	-
3151	573000.00	4183750.00	RESIDENTIAL	7.90E-10	4.59E-10	-	-1.35E-07	-3.79E-08	-	-1.34E-07	-3.75E-08	-
3152	573250.00	4183750.00	RESIDENTIAL	1.75E-10	1.53E-10	-	-1.25E-07	-3.58E-08	-	-1.24E-07	-3.56E-08	-
3153	573500.00	4183750.00	RESIDENTIAL	1.79E-10	1.55E-10	-	-1.33E-07	-3.87E-08	-	-1.32E-07	-3.85E-08	-
3154	567000.00	4184000.00	RESIDENTIAL	5.24E-10	3.27E-10	-	-1.74E-07	-5.21E-08	-	-1.73E-07	-5.18E-08	-

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Table 2-17. Combined Construction + Incr. Operation Risks

Residential Cancer Risks Combined Construction & Operations				Table 2-17. Combined Construction + Incr. Operation Risks								
				Non-Inhalation Residential Cancer Risk			Inhalation Residential Cancer Risk			Multipathway Residential Cancer Risk		
Maximum->				2.30E-07	8.46E-08	2.19E-08	-1.15E-07	-3.31E-08	-1.74E-07	-1.15E-07	-3.30E-08	-1.72E-07
Minimum->				9.72E-11	1.12E-10	1.28E-09	-1.61E-05	-5.66E-06	-2.77E-06	-1.59E-05	-5.58E-06	-2.75E-06
Max Rec No.->				1881	1881	1879	3177	3179	2965	3177	3179	2965
Exposure Years->				2025-2054	2025-2033	2025-2036	2025-2054	2025-2033	2025-2036	2025-2054	2025-2033	2025-2036
Exposure Duration->				30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs
RecID	UTM X	UTM Y	Receptor Type	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child
3155	567250.00	4184000.00	RESIDENTIAL	4.65E-10	2.88E-10	-	-1.94E-07	-6.08E-08	-	-1.93E-07	-6.05E-08	-
3156	567500.00	4184000.00	RESIDENTIAL	5.10E-10	3.23E-10	-	-2.05E-07	-6.16E-08	-	-2.05E-07	-6.12E-08	-
3157	567750.00	4184000.00	RESIDENTIAL	7.60E-10	5.28E-10	-	-1.93E-07	-5.59E-08	-	-1.92E-07	-5.54E-08	-
3158	568000.00	4184000.00	RESIDENTIAL	1.03E-09	5.88E-10	-	-1.86E-07	-5.36E-08	-	-1.85E-07	-5.30E-08	-
3159	568250.00	4184000.00	RESIDENTIAL	1.03E-09	5.80E-10	-	-1.73E-07	-4.82E-08	-	-1.72E-07	-4.77E-08	-
3160	568500.00	4184000.00	RESIDENTIAL	9.94E-10	5.57E-10	-	-1.64E-07	-4.64E-08	-	-1.63E-07	-4.59E-08	-
3161	568750.00	4184000.00	RESIDENTIAL	1.02E-09	5.60E-10	-	-1.76E-07	-5.11E-08	-	-1.75E-07	-5.06E-08	-
3162	569000.00	4184000.00	RESIDENTIAL	1.02E-09	5.61E-10	-	-1.85E-07	-5.59E-08	-	-1.84E-07	-5.53E-08	-
3163	569250.00	4184000.00	RESIDENTIAL	9.05E-10	4.96E-10	-	-1.93E-07	-6.09E-08	-	-1.92E-07	-6.04E-08	-
3164	569500.00	4184000.00	RESIDENTIAL	9.40E-10	5.23E-10	-	-1.94E-07	-5.99E-08	-	-1.93E-07	-5.94E-08	-
3165	569750.00	4184000.00	RESIDENTIAL	4.11E-10	2.69E-10	-	-1.72E-07	-5.17E-08	-	-1.71E-07	-5.14E-08	-
3166	570000.00	4184000.00	RESIDENTIAL	3.98E-10	2.69E-10	-	-1.60E-07	-4.61E-08	-	-1.59E-07	-4.59E-08	-
3167	570250.00	4184000.00	RESIDENTIAL	4.02E-10	2.74E-10	-	-1.70E-07	-5.00E-08	-	-1.70E-07	-4.98E-08	-
3168	570500.00	4184000.00	RESIDENTIAL	4.00E-10	2.75E-10	-	-1.73E-07	-5.11E-08	-	-1.73E-07	-5.08E-08	-
3169	570750.00	4184000.00	RESIDENTIAL	4.33E-10	2.91E-10	-	-1.74E-07	-5.06E-08	-	-1.74E-07	-5.03E-08	-
3170	571000.00	4184000.00	RESIDENTIAL	3.41E-10	2.45E-10	-	-1.65E-07	-4.89E-08	-	-1.65E-07	-4.86E-08	-
3171	571250.00	4184000.00	RESIDENTIAL	3.70E-10	2.65E-10	-	-1.58E-07	-4.73E-08	-	-1.57E-07	-4.70E-08	-
3172	571500.00	4184000.00	RESIDENTIAL	3.45E-10	2.40E-10	-	-1.42E-07	-4.14E-08	-	-1.42E-07	-4.11E-08	-
3173	571750.00	4184000.00	RESIDENTIAL	5.24E-10	3.99E-10	-	-1.27E-07	-3.48E-08	-	-1.26E-07	-3.44E-08	-
3174	572000.00	4184000.00	RESIDENTIAL	5.09E-10	3.90E-10	-	-1.37E-07	-3.99E-08	-	-1.37E-07	-3.95E-08	-
3175	572250.00	4184000.00	RESIDENTIAL	4.82E-10	3.72E-10	-	-1.38E-07	-4.06E-08	-	-1.37E-07	-4.02E-08	-
3176	572500.00	4184000.00	RESIDENTIAL	5.09E-10	3.84E-10	-	-1.44E-07	-4.40E-08	-	-1.44E-07	-4.36E-08	-
3177	572750.00	4184000.00	RESIDENTIAL	1.59E-10	1.30E-10	-	-1.15E-07	-3.51E-08	-	-1.15E-07	-3.50E-08	-
3178	573000.00	4184000.00	RESIDENTIAL	7.71E-10	4.42E-10	-	-1.31E-07	-3.74E-08	-	-1.31E-07	-3.70E-08	-
3179	573250.00	4184000.00	RESIDENTIAL	9.72E-11	1.12E-10	-	-1.19E-07	-3.31E-08	-	-1.19E-07	-3.30E-08	-
3180	573500.00	4184000.00	RESIDENTIAL	1.34E-10	1.28E-10	-	-1.23E-07	-3.54E-08	-	-1.23E-07	-3.53E-08	-
3181	573750.00	4176750.00	RESIDENTIAL	8.16E-09	4.71E-09	-	-1.53E-06	-4.38E-07	-	-1.53E-06	-4.33E-07	-
3182	574000.00	4176750.00	RESIDENTIAL	7.63E-09	4.44E-09	-	-1.48E-06	-4.25E-07	-	-1.48E-06	-4.21E-07	-
3183	574250.00	4176750.00	RESIDENTIAL	7.07E-09	4.18E-09	-	-1.45E-06	-4.17E-07	-	-1.44E-06	-4.13E-07	-
3184	574500.00	4176750.00	RESIDENTIAL	7.10E-09	4.19E-09	-	-1.41E-06	-4.08E-07	-	-1.40E-06	-4.04E-07	-
3185	574750.00	4176750.00	RESIDENTIAL	6.14E-09	3.72E-09	-	-1.37E-06	-3.98E-07	-	-1.37E-06	-3.94E-07	-
3186	575000.00	4176750.00	RESIDENTIAL	6.21E-09	3.74E-09	-	-1.33E-06	-3.85E-07	-	-1.32E-06	-3.81E-07	-
3187	573750.00	4177000.00	RESIDENTIAL	7.23E-09	4.17E-09	-	-1.41E-06	-4.04E-07	-	-1.40E-06	-4.00E-07	-
3188	574000.00	4177000.00	RESIDENTIAL	6.99E-09	3.99E-09	-	-1.34E-06	-3.84E-07	-	-1.33E-06	-3.80E-07	-
3189	574250.00	4177000.00	RESIDENTIAL	6.73E-09	3.94E-09	-	-1.29E-06	-3.72E-07	-	-1.29E-06	-3.68E-07	-
3190	574500.00	4177000.00	RESIDENTIAL	6.13E-09	3.57E-09	-	-1.26E-06	-3.65E-07	-	-1.25E-06	-3.62E-07	-
3191	574750.00	4177000.00	RESIDENTIAL	5.97E-09	3.56E-09	-	-1.24E-06	-3.63E-07	-	-1.23E-06	-3.59E-07	-
3192	575000.00	4177000.00	RESIDENTIAL	5.41E-09	3.21E-09	-	-1.22E-06	-3.57E-07	-	-1.21E-06	-3.54E-07	-
3193	573750.00	4177250.00	RESIDENTIAL	6.27E-09	3.68E-09	-	-1.30E-06	-3.75E-07	-	-1.30E-06	-3.71E-07	-
3194	574000.00	4177250.00	RESIDENTIAL	6.41E-09	3.74E-09	-	-1.24E-06	-3.58E-07	-	-1.24E-06	-3.54E-07	-
3195	574250.00	4177250.00	RESIDENTIAL	5.82E-09	3.36E-09	-	-1.19E-06	-3.43E-07	-	-1.18E-06	-3.39E-07	-
3196	574500.00	4177250.00	RESIDENTIAL	5.71E-09	3.37E-09	-	-1.14E-06	-3.30E-07	-	-1.13E-06	-3.26E-07	-
3197	574750.00	4177250.00	RESIDENTIAL	5.39E-09	3.22E-09	-	-1.10E-06	-3.20E-07	-	-1.10E-06	-3.17E-07	-
3198	575000.00	4177250.00	RESIDENTIAL	4.85E-09	2.88E-09	-	-1.09E-06	-3.21E-07	-	-1.09E-06	-3.19E-07	-
3199	573750.00	4177500.00	RESIDENTIAL	6.03E-09	3.54E-09	-	-1.19E-06	-3.41E-07	-	-1.19E-06	-3.37E-07	-
3200	574000.00	4177500.00	RESIDENTIAL	5.46E-09	3.18E-09	-	-1.15E-06	-3.27E-07	-	-1.14E-06	-3.24E-07	-
3201	574250.00	4177500.00	RESIDENTIAL	4.84E-09	2.93E-09	-	-1.10E-06	-3.14E-07	-	-1.09E-06	-3.11E-07	-
3202	574500.00	4177500.00	RESIDENTIAL	5.05E-09	3.03E-09	-	-1.06E-06	-3.07E-07	-	-1.06E-06	-3.04E-07	-
3203	574750.00	4177500.00	RESIDENTIAL	4.77E-09	2.87E-09	-	-1.02E-06	-2.96E-07	-	-1.02E-06	-2.94E-07	-
3204	575000.00	4177500.00	RESIDENTIAL	4.83E-09	2.82E-09	-	-9.85E-07	-2.87E-07	-	-9.80E-07	-2.84E-07	-
3205	573750.00	4177750.00	RESIDENTIAL	5.45E-09	3.22E-09	-	-1.09E-06	-3.11E-07	-	-1.09E-06	-3.08E-07	-
3206	574000.00	4177750.00	RESIDENTIAL	4.86E-09	2.86E-09	-	-1.05E-06	-2.95E-07	-	-1.04E-06	-2.92E-07	-
3207	574250.00	4177750.00	RESIDENTIAL	4.78E-09	2.88E-09	-	-1.01E-06	-2.86E-07	-	-1.00E-06	-2.83E-07	-
3208	574500.00	4177750.00	RESIDENTIAL	4.49E-09	2.73E-09	-	-9.69E-07	-2.77E-07	-	-9.65E-07	-2.74E-07	-
3209	574750.00	4177750.00	RESIDENTIAL	4.22E-09	2.58E-09	-	-9.44E-07	-2.72E-07	-	-9.40E-07	-2.70E-07	-
3210	575000.00	4177750.00	RESIDENTIAL	4.26E-09	2.51E-09	-	-9.07E-07	-2.64E-07	-	-9.03E-07	-2.61E-07	-
3211	573750.00	4178000.00	RESIDENTIAL	4.72E-09	2.74E-09	-	-9.98E-07	-2.82E-07	-	-9.93E-07	-2.79E-07	-
3212	574000.00	4178000.00	RESIDENTIAL	4.63E-09	2.79E-09	-	-9.68E-07	-2.73E-07	-	-9.63E-07	-2.71E-07	-
3213	574250.00	4178000.00	RESIDENTIAL	4.26E-09	2.60E-09	-	-9.28E-07	-2.62E-07	-	-9.23E-07	-2.59E-07	-
3214	574500.00	4178000.00	RESIDENTIAL	3.64E-09	2.29E-09	-	-8.36E-07	-2.35E-07	-	-8.33E-07	-2.33E-07	-
3215	574750.00	4178000.00	RESIDENTIAL	3.68E-09	2.30E-09	-	-8.48E-07	-2.41E-07	-	-8.45E-07	-2.39E-07	-
3216	575000.00	4178000.00	RESIDENTIAL	3.45E-09	2.07E-09	-	-7.84E-07	-2.26E-07	-	-7.81E-07	-2.24E-07	-
3217	573750.00	4178250.00	RESIDENTIAL	4.62E-09	2.66E-09	-	-8.97E-07	-2.50E-07	-	-8.92E-07	-2.47E-07	-
3218	574000.00	4178250.00	RESIDENTIAL	4.36E-09	2.53E-09	-	-8.86E-07	-2.50E-07	-	-8.82E-07	-2.47E-07	-
3219	574250.00	4178250.00	RESIDENTIAL	3.71E-09	2.31E-09	-	-8.47E-07	-2.41E-07	-	-8.44E-07	-2.39E-07	-
3220	574500.00	4178250.00	RESIDENTIAL	3.36E-09	2.08E-09	-	-7.19E-07	-2.06E-07	-	-7.15E-07	-2.04E-07	-
3221	574750.00	4178250.00	RESIDENTIAL	3.15E-09	2.01E-09	-	-7.56E-07	-2.13E-07	-	-7.53E-07	-2.11E-07	-
3222	575000.00	4178250.00	RESIDENTIAL	2.62E-09	1.61E-09	-	-6.17E-07	-1.74E-07	-	-6.14E-07	-1.72E-07	-



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Table 2-17. Combined Construction + Incr. Operation Risks

Residential Cancer Risks				Non-Inhalation Residential Cancer Risk			Inhalation Residential Cancer Risk			Multipathway Residential Cancer Risk			
Combined Construction & Operations				Maximum->	2.30E-07	8.46E-08	2.19E-08	-1.15E-07	-3.31E-08	-1.74E-07	-1.15E-07	-3.30E-08	-1.72E-07
				Minimum->	9.72E-11	1.12E-10	1.28E-09	-1.61E-05	-5.66E-06	-2.77E-06	-1.59E-05	-5.58E-06	-2.75E-06
				Max Rec No.->	1881	1881	1879	3177	3179	2965	3177	3179	2965
				Exposure Years->	2025-2054	2025-2033	2025-2036	2025-2054	2025-2033	2025-2036	2025-2054	2025-2033	2025-2036
				Exposure Duration->	30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs
RecID	UTM X	UTM Y	Receptor Type	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	
3291	574250.00	4181250.00	RESIDENTIAL	9.06E-10	5.76E-10	-	-2.62E-07	-7.70E-08	-	-2.61E-07	-7.64E-08	-	
3292	574500.00	4181250.00	RESIDENTIAL	9.19E-10	5.79E-10	-	-2.63E-07	-7.56E-08	-	-2.62E-07	-7.50E-08	-	
3293	574750.00	4181250.00	RESIDENTIAL	9.13E-10	5.77E-10	-	-2.60E-07	-7.49E-08	-	-2.59E-07	-7.44E-08	-	
3294	575000.00	4181250.00	RESIDENTIAL	9.58E-10	5.96E-10	-	-2.55E-07	-7.48E-08	-	-2.54E-07	-7.42E-08	-	

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Table 2-18. Incr. Operation Risks Only

Residential Cancer Risks Combined Construction & Operations				Non-Inhalation Residential Cancer Risk			Inhalation Residential Cancer Risk			Multipathway Residential Cancer Risk		
				Maximum->	7.70E-08	1.08E-07	2.75E-08	-2.39E-07	-1.69E-07	-1.88E-07	-2.39E-07	-1.69E-07
Minimum->				-7.66E-12	-1.57E-10	1.30E-09	-3.00E-05	-2.07E-05	-2.99E-06	-2.99E-05	-2.05E-05	-2.97E-06
Max Rec No.->				1881	1881	1879	3177	3179	2965	3177	3179	2965
Exposure Years->				2028-2057	2028-2036	2028-2039	2028-2057	2028-2036	2028-2039	2028-2057	2028-2036	2028-2039
Exposure Duration->				30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs
RecID	UTM X	UTM Y	Receptor Type	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child
36	566000.00	4176600.00	RESIDENTIAL	1.2589E-09	4.2914E-09	-	-3.31E-06	-2.30E-06	-	-3.3104E-06	-2.2959E-06	-
37	566000.00	4176700.00	RESIDENTIAL	1.2359E-09	4.195E-09	-	-3.20E-06	-2.22E-06	-	-3.1938E-06	-2.2113E-06	-
38	566000.00	4176800.00	RESIDENTIAL	1.2147E-09	4.1204E-09	-	-3.09E-06	-2.14E-06	-	-3.0844E-06	-2.1334E-06	-
39	566000.00	4176900.00	RESIDENTIAL	1.3059E-09	4.1169E-09	-	-2.97E-06	-2.06E-06	-	-2.9713E-06	-2.0547E-06	-
41	566000.00	4177100.00	RESIDENTIAL	1.2463E-09	3.8757E-09	-	-2.73E-06	-1.89E-06	-	-2.7283E-06	-1.8841E-06	-
42	566000.00	4177200.00	RESIDENTIAL	1.212E-09	3.7452E-09	-	-2.60E-06	-1.80E-06	-	-2.6013E-06	-1.7952E-06	-
43	566000.00	4177300.00	RESIDENTIAL	1.1949E-09	3.671E-09	-	-2.48E-06	-1.71E-06	-	-2.4788E-06	-1.7108E-06	-
44	566000.00	4177400.00	RESIDENTIAL	1.1812E-09	3.5914E-09	-	-2.37E-06	-1.64E-06	-	-2.3655E-06	-1.6356E-06	-
46	566000.00	4177600.00	SCHOOL	1.1407E-09	3.3881E-09	3.2394E-09	-2.15E-06	-1.49E-06	-7.46E-07	-2.1522E-06	-1.4909E-06	-7.4295E-07
47	566000.00	4177700.00	SCHOOL	1.1046E-09	3.2595E-09	3.1328E-09	-2.08E-06	-1.45E-06	-7.21E-07	-2.0777E-06	-1.4422E-06	-7.1771E-07
48	566000.00	4177800.00	RESIDENTIAL	1.0876E-09	3.1783E-09	-	-2.01E-06	-1.40E-06	-	-2.0121E-06	-1.4001E-06	-
49	566000.00	4177900.00	RESIDENTIAL	9.4092E-10	2.9137E-09	-	-1.96E-06	-1.37E-06	-	-1.9545E-06	-1.3632E-06	-
50	566000.00	4178000.00	RESIDENTIAL	9.209E-10	2.824E-09	-	-1.90E-06	-1.33E-06	-	-1.8961E-06	-1.3257E-06	-
83	566100.00	4176600.00	RESIDENTIAL	1.2905E-09	4.0454E-09	-	-3.41E-06	-2.36E-06	-	-3.4053E-06	-2.3606E-06	-
84	566100.00	4176700.00	RESIDENTIAL	1.2675E-09	3.952E-09	-	-3.28E-06	-2.27E-06	-	-3.2786E-06	-2.2699E-06	-
85	566100.00	4176800.00	RESIDENTIAL	1.2424E-09	3.8226E-09	-	-3.16E-06	-2.19E-06	-	-3.1585E-06	-2.1857E-06	-
86	566100.00	4176900.00	RESIDENTIAL	1.2101E-09	3.717E-09	-	-3.04E-06	-2.10E-06	-	-3.0339E-06	-2.0945E-06	-
87	566100.00	4177000.00	RESIDENTIAL	1.1727E-09	3.5826E-09	-	-2.90E-06	-2.00E-06	-	-2.8988E-06	-2E-06	-
88	566100.00	4177100.00	RESIDENTIAL	1.1406E-09	3.4479E-09	-	-2.77E-06	-1.91E-06	-	-2.7645E-06	-1.909E-06	-
89	566100.00	4177200.00	RESIDENTIAL	1.1393E-09	3.7862E-09	-	-2.63E-06	-1.82E-06	-	-2.6304E-06	-1.8146E-06	-
90	566100.00	4177300.00	RESIDENTIAL	1.2686E-09	4.2803E-09	-	-2.51E-06	-1.74E-06	-	-2.5102E-06	-1.7337E-06	-
91	566100.00	4177400.00	RESIDENTIAL	1.2418E-09	4.1548E-09	-	-2.40E-06	-1.67E-06	-	-2.4034E-06	-1.6619E-06	-
92	566100.00	4177500.00	RESIDENTIAL	1.2167E-09	4.0435E-09	-	-2.29E-06	-1.59E-06	-	-2.2865E-06	-1.5833E-06	-
93	566100.00	4177600.00	RESIDENTIAL	1.1877E-09	3.9341E-09	-	-2.19E-06	-1.53E-06	-	-2.191E-06	-1.5215E-06	-
94	566100.00	4177700.00	RESIDENTIAL	1.1641E-09	3.7973E-09	-	-2.11E-06	-1.47E-06	-	-2.1107E-06	-1.4702E-06	-
95	566100.00	4177800.00	RESIDENTIAL	1.1331E-09	3.6798E-09	-	-2.07E-06	-1.44E-06	-	-2.0643E-06	-1.4386E-06	-
96	566100.00	4177900.00	RESIDENTIAL	1.1008E-09	3.5492E-09	-	-2.01E-06	-1.41E-06	-	-2.007E-06	-1.4017E-06	-
97	566100.00	4178000.00	RESIDENTIAL	9.6981E-10	3.3489E-09	-	-1.95E-06	-1.36E-06	-	-1.9456E-06	-1.3582E-06	-
127	566200.00	4176500.00	RESIDENTIAL	1.3997E-09	4.8391E-09	-	-3.64E-06	-2.53E-06	-	-3.6358E-06	-2.5213E-06	-
128	566200.00	4176600.00	RESIDENTIAL	1.3414E-09	4.2524E-09	-	-3.49E-06	-2.42E-06	-	-3.4926E-06	-2.4191E-06	-
129	566200.00	4176700.00	RESIDENTIAL	1.3102E-09	4.1301E-09	-	-3.36E-06	-2.33E-06	-	-3.3601E-06	-2.3239E-06	-
130	566200.00	4176800.00	RESIDENTIAL	1.2866E-09	4.0013E-09	-	-3.22E-06	-2.23E-06	-	-3.2195E-06	-2.2237E-06	-
131	566200.00	4176900.00	RESIDENTIAL	1.2854E-09	4.3529E-09	-	-3.09E-06	-2.13E-06	-	-3.0883E-06	-2.13E-06	-
132	566200.00	4177000.00	RESIDENTIAL	1.2453E-09	4.2063E-09	-	-2.94E-06	-2.03E-06	-	-2.9379E-06	-2.0276E-06	-
133	566200.00	4177100.00	RESIDENTIAL	1.2107E-09	4.0395E-09	-	-2.82E-06	-1.95E-06	-	-2.8143E-06	-1.9415E-06	-
134	566200.00	4177200.00	RESIDENTIAL	1.1763E-09	3.9187E-09	-	-2.69E-06	-1.86E-06	-	-2.6891E-06	-1.857E-06	-
135	566200.00	4177300.00	RESIDENTIAL	1.1653E-09	3.8417E-09	-	-2.55E-06	-1.77E-06	-	-2.5525E-06	-1.7654E-06	-
136	566200.00	4177400.00	RESIDENTIAL	1.1422E-09	3.713E-09	-	-2.44E-06	-1.69E-06	-	-2.4372E-06	-1.6882E-06	-
137	566200.00	4177500.00	RESIDENTIAL	1.1114E-09	3.576E-09	-	-2.34E-06	-1.63E-06	-	-2.3381E-06	-1.6226E-06	-
138	566200.00	4177600.00	RESIDENTIAL	1.0767E-09	3.4182E-09	-	-2.24E-06	-1.56E-06	-	-2.2343E-06	-1.5533E-06	-
139	566200.00	4177700.00	RESIDENTIAL	1.0473E-09	3.3042E-09	-	-2.18E-06	-1.52E-06	-	-2.1766E-06	-1.518E-06	-
140	566200.00	4177800.00	RESIDENTIAL	1.0223E-09	3.1904E-09	-	-2.12E-06	-1.49E-06	-	-2.1217E-06	-1.4829E-06	-
141	566200.00	4177900.00	RESIDENTIAL	9.8939E-10	3.0568E-09	-	-2.06E-06	-1.44E-06	-	-2.0576E-06	-1.4389E-06	-
142	566200.00	4178000.00	RESIDENTIAL	9.6189E-10	2.9329E-09	-	-2.00E-06	-1.40E-06	-	-1.9987E-06	-1.395E-06	-
170	566300.00	4176400.00	RESIDENTIAL	1.4899E-09	5.2058E-09	-	-3.89E-06	-2.70E-06	-	-3.8856E-06	-2.6953E-06	-
171	566300.00	4176500.00	RESIDENTIAL	1.4576E-09	5.0559E-09	-	-3.74E-06	-2.59E-06	-	-3.7336E-06	-2.586E-06	-
172	566300.00	4176600.00	RESIDENTIAL	1.4272E-09	4.9352E-09	-	-3.59E-06	-2.48E-06	-	-3.5841E-06	-2.4781E-06	-
173	566300.00	4176700.00	RESIDENTIAL	1.3914E-09	4.8085E-09	-	-3.43E-06	-2.38E-06	-	-3.4319E-06	-2.3703E-06	-
174	566300.00	4176800.00	RESIDENTIAL	1.3577E-09	4.6424E-09	-	-3.29E-06	-2.27E-06	-	-3.2842E-06	-2.2654E-06	-
175	566300.00	4176900.00	RESIDENTIAL	1.3315E-09	4.5149E-09	-	-3.14E-06	-2.17E-06	-	-3.1433E-06	-2.1695E-06	-
176	566300.00	4177000.00	RESIDENTIAL	1.2888E-09	4.3312E-09	-	-3.01E-06	-2.08E-06	-	-3.004E-06	-2.0723E-06	-
177	566300.00	4177100.00	RESIDENTIAL	1.2488E-09	4.1921E-09	-	-2.87E-06	-1.98E-06	-	-2.8638E-06	-1.9771E-06	-
178	566300.00	4177200.00	RESIDENTIAL	1.221E-09	4.0602E-09	-	-2.73E-06	-1.89E-06	-	-2.7304E-06	-1.8879E-06	-
179	566300.00	4177300.00	RESIDENTIAL	1.1945E-09	3.9135E-09	-	-2.60E-06	-1.80E-06	-	-2.5942E-06	-1.7963E-06	-
180	566300.00	4177400.00	RESIDENTIAL	1.1675E-09	3.7971E-09	-	-2.49E-06	-1.73E-06	-	-2.4881E-06	-1.7264E-06	-
181	566300.00	4177500.00	RESIDENTIAL	1.1417E-09	3.6471E-09	-	-2.38E-06	-1.66E-06	-	-2.3816E-06	-1.6557E-06	-
182	566300.00	4177600.00	RESIDENTIAL	1.1091E-09	3.5221E-09	-	-2.31E-06	-1.61E-06	-	-2.3128E-06	-1.6113E-06	-
183	566300.00	4177700.00	RESIDENTIAL	1.0666E-09	3.3411E-09	-	-2.24E-06	-1.57E-06	-	-2.2433E-06	-1.5688E-06	-
184	566300.00	4177800.00	RESIDENTIAL	1.0439E-09	3.2191E-09	-	-2.18E-06	-1.53E-06	-	-2.1808E-06	-1.5231E-06	-
185	566300.00	4177900.00	RESIDENTIAL	1.0115E-09	3.0977E-09	-	-2.11E-06	-1.48E-06	-	-2.1105E-06	-1.4723E-06	-
186	566300.00	4178000.00	RESIDENTIAL	9.7546E-10	2.9508E-09	-	-2.04E-06	-1.43E-06	-	-2.0385E-06	-1.4234E-06	-
214	566400.00	4176300.00	RESIDENTIAL	1.5874E-09	5.6259E-09	-	-4.18E-06	-2.90E-06	-	-4.1755E-06	-2.898E-06	-
215	566400.00	4176400.00	RESIDENTIAL	1.5535E-09	5.472E-09	-	-4.02E-06	-2.78E-06	-	-4.0145E-06	-2.7789E-06	-
216	566400.00	4176500.00	RESIDENTIAL	1.5227E-09	5.3182E-09	-	-3.85E-06	-2.67E-06	-	-3.8531E-06	-2.6637E-06	-
217	566400.00	4176600.00	RESIDENTIAL	1.4892E-09	5.1622E-09	-	-3.68E-06	-2.54E-06	-	-3.676E-06	-2.5377E-06	-
218	566400.00	4176700.00	RESIDENTIAL	1.4557E-09	5.0262E-09	-	-3.52E-06	-2.43E-06	-	-3.5164E-06	-2.425E-06	-
219	566400.00	4176800.00	RESIDENTIAL	1.4142E-09	4.8458E-09	-	-3.36E-06	-2.32E-06	-	-3.3558E-06	-2.3133E-06	-
220	566400.00	4176900.00	RESIDENTIAL	1.4935E-09	4.8009E-09	-	-3.20E-06	-2.21E-06	-	-3.2029E-06	-2.2077E-06	-

OAK Terminal Modernization & Development

Table 2-18. Incr. Operation Risks Only

Residential Cancer Risks				Non-Inhalation Residential Cancer Risk			Inhalation Residential Cancer Risk			Multipathway Residential Cancer Risk			
Combined Construction & Operations				Maximum->	7.70E-08	1.08E-07	2.75E-08	-2.39E-07	-1.69E-07	-1.88E-07	-2.39E-07	-1.69E-07	-1.86E-07
				Minimum->	-7.66E-12	-1.57E-10	1.30E-09	-3.00E-05	-2.07E-05	-2.99E-06	-2.99E-05	-2.05E-05	-2.97E-06
				Max Rec No.->	1881	1881	1879	3177	3179	2965	3177	3179	2965
				Exposure Years->	2028-2057	2028-2036	2028-2039	2028-2057	2028-2036	2028-2039	2028-2057	2028-2036	2028-2039
				Exposure Duration->	30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs
RecID	UTM X	UTM Y	Receptor Type	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	
221	566400.00	4177000.00	RESIDENTIAL	1.4471E-09	4.5966E-09	-	-3.06E-06	-2.12E-06	-	-3.0608E-06	-2.1105E-06	-	
222	566400.00	4177100.00	RESIDENTIAL	1.3988E-09	4.3986E-09	-	-2.93E-06	-2.03E-06	-	-2.926E-06	-2.0213E-06	-	
223	566400.00	4177200.00	RESIDENTIAL	1.3683E-09	4.2422E-09	-	-2.79E-06	-1.93E-06	-	-2.7873E-06	-1.9268E-06	-	
224	566400.00	4177300.00	RESIDENTIAL	1.3437E-09	4.1266E-09	-	-2.66E-06	-1.85E-06	-	-2.6571E-06	-1.8426E-06	-	
225	566400.00	4177400.00	RESIDENTIAL	1.3145E-09	3.9754E-09	-	-2.55E-06	-1.78E-06	-	-2.5482E-06	-1.7717E-06	-	
226	566400.00	4177500.00	RESIDENTIAL	1.2814E-09	3.8195E-09	-	-2.46E-06	-1.71E-06	-	-2.4551E-06	-1.709E-06	-	
227	566400.00	4177600.00	RESIDENTIAL	1.1384E-09	3.5922E-09	-	-2.39E-06	-1.67E-06	-	-2.392E-06	-1.6697E-06	-	
228	566400.00	4177700.00	RESIDENTIAL	1.1033E-09	3.4207E-09	-	-2.31E-06	-1.62E-06	-	-2.3114E-06	-1.6155E-06	-	
229	566400.00	4177800.00	RESIDENTIAL	1.0693E-09	3.2775E-09	-	-2.23E-06	-1.56E-06	-	-2.2337E-06	-1.5593E-06	-	
230	566400.00	4177900.00	RESIDENTIAL	1.0302E-09	3.1239E-09	-	-2.17E-06	-1.52E-06	-	-2.1678E-06	-1.513E-06	-	
231	566400.00	4178000.00	RESIDENTIAL	1.001E-09	2.9762E-09	-	-2.08E-06	-1.46E-06	-	-2.0825E-06	-1.4531E-06	-	
260	566500.00	4176400.00	RESIDENTIAL	1.4734E-09	5.1847E-09	-	-4.14E-06	-2.87E-06	-	-4.1365E-06	-2.8603E-06	-	
261	566500.00	4176500.00	RESIDENTIAL	1.5569E-09	5.1147E-09	-	-3.96E-06	-2.74E-06	-	-3.9564E-06	-2.733E-06	-	
262	566500.00	4176600.00	RESIDENTIAL	1.5153E-09	4.9401E-09	-	-3.77E-06	-2.61E-06	-	-3.7724E-06	-2.6023E-06	-	
263	566500.00	4176700.00	RESIDENTIAL	1.4782E-09	4.7501E-09	-	-3.60E-06	-2.48E-06	-	-3.5963E-06	-2.4789E-06	-	
264	566500.00	4176800.00	RESIDENTIAL	1.4442E-09	4.5823E-09	-	-3.43E-06	-2.37E-06	-	-3.4261E-06	-2.3614E-06	-	
265	566500.00	4176900.00	RESIDENTIAL	1.4042E-09	4.396E-09	-	-3.28E-06	-2.26E-06	-	-3.2749E-06	-2.2576E-06	-	
266	566500.00	4177000.00	RESIDENTIAL	1.3749E-09	4.2637E-09	-	-3.12E-06	-2.16E-06	-	-3.1222E-06	-2.1542E-06	-	
267	566500.00	4177100.00	RESIDENTIAL	1.3321E-09	4.1437E-09	-	-3.00E-06	-2.08E-06	-	-2.9965E-06	-2.0724E-06	-	
268	566500.00	4177200.00	RESIDENTIAL	1.2929E-09	4.2463E-09	-	-2.85E-06	-1.98E-06	-	-2.8455E-06	-1.971E-06	-	
269	566500.00	4177300.00	RESIDENTIAL	1.2616E-09	4.1245E-09	-	-2.73E-06	-1.90E-06	-	-2.7258E-06	-1.8944E-06	-	
270	566500.00	4177400.00	RESIDENTIAL	1.2343E-09	3.9756E-09	-	-2.62E-06	-1.83E-06	-	-2.6161E-06	-1.8214E-06	-	
271	566500.00	4177500.00	RESIDENTIAL	1.1956E-09	3.8066E-09	-	-2.54E-06	-1.77E-06	-	-2.5386E-06	-1.769E-06	-	
272	566500.00	4177600.00	RESIDENTIAL	1.1635E-09	3.6579E-09	-	-2.45E-06	-1.71E-06	-	-2.4519E-06	-1.7106E-06	-	
273	566500.00	4177700.00	RESIDENTIAL	1.1215E-09	3.4601E-09	-	-2.38E-06	-1.66E-06	-	-2.377E-06	-1.6593E-06	-	
274	566500.00	4177800.00	RESIDENTIAL	9.7927E-10	3.2242E-09	-	-2.30E-06	-1.61E-06	-	-2.3033E-06	-1.6073E-06	-	
275	566500.00	4177900.00	RESIDENTIAL	1.0639E-09	3.1682E-09	-	-2.22E-06	-1.55E-06	-	-2.2189E-06	-1.5478E-06	-	
276	566500.00	4178000.00	RESIDENTIAL	1.0353E-09	3.0458E-09	-	-2.13E-06	-1.49E-06	-	-2.1286E-06	-1.4826E-06	-	
303	566600.00	4176300.00	RESIDENTIAL	1.7326E-09	6.2423E-09	-	-4.47E-06	-3.10E-06	-	-4.4717E-06	-3.0923E-06	-	
304	566600.00	4176400.00	RESIDENTIAL	1.6913E-09	6.0512E-09	-	-4.27E-06	-2.95E-06	-	-4.2668E-06	-2.9463E-06	-	
305	566600.00	4176500.00	RESIDENTIAL	1.64E-09	5.8332E-09	-	-4.07E-06	-2.81E-06	-	-4.0724E-06	-2.8087E-06	-	
306	566600.00	4176600.00	RESIDENTIAL	1.5987E-09	5.6085E-09	-	-3.88E-06	-2.68E-06	-	-3.8768E-06	-2.6722E-06	-	
307	566600.00	4176700.00	RESIDENTIAL	1.5639E-09	5.4145E-09	-	-3.68E-06	-2.54E-06	-	-3.6739E-06	-2.5309E-06	-	
308	566600.00	4176800.00	RESIDENTIAL	1.5154E-09	5.2058E-09	-	-3.52E-06	-2.43E-06	-	-3.5209E-06	-2.427E-06	-	
309	566600.00	4176900.00	RESIDENTIAL	1.4745E-09	5.0032E-09	-	-3.37E-06	-2.33E-06	-	-3.3653E-06	-2.323E-06	-	
310	566600.00	4177000.00	RESIDENTIAL	1.4181E-09	4.7787E-09	-	-3.21E-06	-2.22E-06	-	-3.2081E-06	-2.216E-06	-	
311	566600.00	4177100.00	RESIDENTIAL	1.3726E-09	4.5665E-09	-	-3.08E-06	-2.13E-06	-	-3.0752E-06	-2.1298E-06	-	
312	566600.00	4177200.00	RESIDENTIAL	1.329E-09	4.3744E-09	-	-2.94E-06	-2.04E-06	-	-2.9351E-06	-2.0369E-06	-	
313	566600.00	4177300.00	RESIDENTIAL	1.3011E-09	4.2167E-09	-	-2.82E-06	-1.96E-06	-	-2.8178E-06	-1.96E-06	-	
314	566600.00	4177400.00	RESIDENTIAL	1.2663E-09	4.0218E-09	-	-2.72E-06	-1.90E-06	-	-2.717E-06	-1.8944E-06	-	
315	566600.00	4177500.00	RESIDENTIAL	1.2314E-09	3.8732E-09	-	-2.62E-06	-1.83E-06	-	-2.6168E-06	-1.8266E-06	-	
316	566600.00	4177600.00	RESIDENTIAL	1.2015E-09	3.7159E-09	-	-2.54E-06	-1.77E-06	-	-2.5383E-06	-1.7709E-06	-	
317	566600.00	4177700.00	RESIDENTIAL	1.16E-09	3.5218E-09	-	-2.44E-06	-1.71E-06	-	-2.4413E-06	-1.7022E-06	-	
318	566600.00	4177800.00	RESIDENTIAL	1.1255E-09	3.3763E-09	-	-2.36E-06	-1.65E-06	-	-2.354E-06	-1.6418E-06	-	
319	566600.00	4177900.00	RESIDENTIAL	1.0916E-09	3.2064E-09	-	-2.27E-06	-1.59E-06	-	-2.2697E-06	-1.5822E-06	-	
320	566600.00	4178000.00	RESIDENTIAL	1.0589E-09	3.0479E-09	-	-2.18E-06	-1.52E-06	-	-2.1832E-06	-1.5211E-06	-	
347	566700.00	4176300.00	RESIDENTIAL	1.6593E-09	5.9958E-09	-	-4.62E-06	-3.20E-06	-	-4.6222E-06	-3.1918E-06	-	
348	566700.00	4176400.00	RESIDENTIAL	1.6179E-09	5.7519E-09	-	-4.40E-06	-3.04E-06	-	-4.3944E-06	-3.0295E-06	-	
349	566700.00	4176500.00	RESIDENTIAL	1.5716E-09	5.5381E-09	-	-4.18E-06	-2.89E-06	-	-4.1828E-06	-2.8804E-06	-	
350	566700.00	4176600.00	RESIDENTIAL	1.523E-09	5.296E-09	-	-3.98E-06	-2.75E-06	-	-3.9828E-06	-2.7433E-06	-	
351	566700.00	4176700.00	RESIDENTIAL	1.4795E-09	5.0537E-09	-	-3.80E-06	-2.62E-06	-	-3.7974E-06	-2.6161E-06	-	
352	566700.00	4176800.00	RESIDENTIAL	1.5485E-09	4.9226E-09	-	-3.61E-06	-2.50E-06	-	-3.6133E-06	-2.4903E-06	-	
353	566700.00	4176900.00	RESIDENTIAL	1.6327E-09	5.2438E-09	-	-3.46E-06	-2.40E-06	-	-3.4628E-06	-2.392E-06	-	
354	566700.00	4177000.00	RESIDENTIAL	1.5786E-09	5.0149E-09	-	-3.31E-06	-2.30E-06	-	-3.3114E-06	-2.2914E-06	-	
355	566700.00	4177100.00	RESIDENTIAL	1.5182E-09	4.7544E-09	-	-3.17E-06	-2.21E-06	-	-3.172E-06	-2.2007E-06	-	
356	566700.00	4177200.00	RESIDENTIAL	1.4844E-09	4.5796E-09	-	-3.04E-06	-2.12E-06	-	-3.038E-06	-2.1106E-06	-	
357	566700.00	4177300.00	RESIDENTIAL	1.459E-09	4.4171E-09	-	-2.93E-06	-2.04E-06	-	-2.9268E-06	-2.039E-06	-	
358	566700.00	4177400.00	RESIDENTIAL	1.3146E-09	4.1449E-09	-	-2.81E-06	-1.96E-06	-	-2.8091E-06	-1.9607E-06	-	
359	566700.00	4177500.00	RESIDENTIAL	1.265E-09	3.9407E-09	-	-2.72E-06	-1.90E-06	-	-2.7156E-06	-1.8941E-06	-	
360	566700.00	4177600.00	RESIDENTIAL	1.2337E-09	3.7611E-09	-	-2.61E-06	-1.82E-06	-	-2.6113E-06	-1.82E-06	-	
361	566700.00	4177700.00	RESIDENTIAL	1.1943E-09	3.5764E-09	-	-2.52E-06	-1.76E-06	-	-2.5173E-06	-1.7548E-06	-	
362	566700.00	4177800.00	RESIDENTIAL	1.1626E-09	3.4076E-09	-	-2.43E-06	-1.69E-06	-	-2.4254E-06	-1.6896E-06	-	
363	566700.00	4177900.00	RESIDENTIAL	1.1244E-09	3.2402E-09	-	-2.32E-06	-1.62E-06	-	-2.3187E-06	-1.6154E-06	-	
364	566700.00	4178000.00	RESIDENTIAL	1.0958E-09	3.1021E-09	-	-2.22E-06	-1.54E-06	-	-2.2146E-06	-1.5415E-06	-	
390	566800.00	4176200.00	RESIDENTIAL	1.8165E-09	7.0469E-09	-	-4.98E-06	-3.45E-06	-	-4.9768E-06	-3.4386E-06	-	
391	566800.00	4176300.00	RESIDENTIAL	1.7684E-09	6.7816E-09	-	-4.76E-06	-3.29E-06	-	-4.7547E-06	-3.2804E-06	-	
392	566800.00	4176400.00	RESIDENTIAL	1.8E-09	6.1601E-09	-	-4.54E-06	-3.13E-06	-	-4.5362E-06	-3.1255E-06	-	
393	566800.00	4176500.00	RESIDENTIAL	1.7491E-09	5.8929E-09	-	-4.31E-06	-2.97E-06	-	-4.3118E-06	-2.9671E-06	-	



OAK Terminal Modernization & Development

Table 2-18. Incr. Operation Risks Only

Residential Cancer Risks				Non-Inhalation Residential Cancer Risk			Inhalation Residential Cancer Risk			Multipathway Residential Cancer Risk		
RecID	UTM X	UTM Y	Receptor Type	Maximum->	1881	1879	3177	3179	2965	3177	3179	2965
				Minimum->	1881	1879	3177	3179	2965	3177	3179	2965
Combined Construction & Operations				2028-2057	2028-2036	2028-2039	2028-2057	2028-2036	2028-2039	2028-2057	2028-2036	2028-2039
				30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs	30 Yrs	9 Yrs	12 Yrs
				Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child
534	567100.00	4177400.00	RESIDENTIAL	1.5186E-09	4.4777E-09	-	-3.25E-06	-2.26E-06	-	-3.2495E-06	-2.258E-06	-
535	567100.00	4177500.00	RESIDENTIAL	1.4721E-09	4.2506E-09	-	-3.10E-06	-2.16E-06	-	-3.1006E-06	-2.1556E-06	-
536	567100.00	4177600.00	RESIDENTIAL	1.4234E-09	4.0294E-09	-	-2.96E-06	-2.06E-06	-	-2.9573E-06	-2.0543E-06	-
537	567100.00	4177700.00	RESIDENTIAL	1.3803E-09	3.8089E-09	-	-2.81E-06	-1.95E-06	-	-2.8105E-06	-1.9506E-06	-
538	567100.00	4177800.00	RESIDENTIAL	1.1911E-09	3.052E-09	-	-2.68E-06	-1.86E-06	-	-2.676E-06	-1.8573E-06	-
539	567100.00	4177900.00	RESIDENTIAL	1.1477E-09	2.8817E-09	-	-2.53E-06	-1.75E-06	-	-2.527E-06	-1.752E-06	-
540	567100.00	4178000.00	RESIDENTIAL	1.2419E-09	3.2811E-09	-	-2.41E-06	-1.67E-06	-	-2.4134E-06	-1.6716E-06	-
564	567200.00	4176000.00	RESIDENTIAL	2.2958E-09	9.5439E-09	-	-6.13E-06	-4.23E-06	-	-6.1227E-06	-4.224E-06	-
565	567200.00	4176100.00	RESIDENTIAL	2.2136E-09	9.0459E-09	-	-5.87E-06	-4.05E-06	-	-5.8703E-06	-4.0413E-06	-
566	567200.00	4176200.00	RESIDENTIAL	2.254E-09	8.6491E-09	-	-5.63E-06	-3.88E-06	-	-5.625E-06	-3.8691E-06	-
567	567200.00	4176300.00	RESIDENTIAL	2.1822E-09	8.1715E-09	-	-5.42E-06	-3.73E-06	-	-5.4136E-06	-3.722E-06	-
568	567200.00	4176400.00	RESIDENTIAL	2.1062E-09	7.7067E-09	-	-5.22E-06	-3.60E-06	-	-5.2224E-06	-3.5927E-06	-
569	567200.00	4176500.00	RESIDENTIAL	2.0424E-09	7.2808E-09	-	-5.05E-06	-3.49E-06	-	-5.0528E-06	-3.4817E-06	-
570	567200.00	4176600.00	RESIDENTIAL	1.9705E-09	6.4446E-09	-	-4.89E-06	-3.38E-06	-	-4.889E-06	-3.3759E-06	-
571	567200.00	4176700.00	RESIDENTIAL	1.9459E-09	6.5785E-09	-	-4.71E-06	-3.27E-06	-	-4.7129E-06	-3.2622E-06	-
572	567200.00	4176800.00	RESIDENTIAL	1.8977E-09	6.2604E-09	-	-4.54E-06	-3.15E-06	-	-4.5335E-06	-3.145E-06	-
573	567200.00	4176900.00	RESIDENTIAL	1.8353E-09	5.9416E-09	-	-4.35E-06	-3.03E-06	-	-4.3485E-06	-3.022E-06	-
574	567200.00	4177000.00	RESIDENTIAL	1.7667E-09	5.601E-09	-	-4.16E-06	-2.90E-06	-	-4.1606E-06	-2.8959E-06	-
582	567200.00	4177800.00	SCHOOL	1.3793E-09	3.6982E-09	3.9502E-09	-2.75E-06	-1.91E-06	-9.53E-07	-2.7483E-06	-1.9035E-06	-9.4875E-07
583	567200.00	4177900.00	RESIDENTIAL	1.3289E-09	3.4753E-09	-	-2.62E-06	-1.82E-06	-	-2.6219E-06	-1.8177E-06	-
584	567200.00	4178000.00	RESIDENTIAL	1.1696E-09	3.2475E-09	-	-2.49E-06	-1.72E-06	-	-2.4867E-06	-1.7211E-06	-
608	567300.00	4176000.00	RESIDENTIAL	2.4017E-09	1.0173E-08	-	-6.32E-06	-4.36E-06	-	-6.3141E-06	-4.3513E-06	-
610	567300.00	4176200.00	RESIDENTIAL	2.2339E-09	8.9493E-09	-	-5.82E-06	-4.01E-06	-	-5.8135E-06	-3.9981E-06	-
611	567300.00	4176300.00	RESIDENTIAL	2.151E-09	8.4047E-09	-	-5.62E-06	-3.87E-06	-	-5.6207E-06	-3.8662E-06	-
612	567300.00	4176400.00	RESIDENTIAL	2.0621E-09	7.4321E-09	-	-5.46E-06	-3.77E-06	-	-5.4601E-06	-3.7611E-06	-
613	567300.00	4176500.00	RESIDENTIAL	2.1184E-09	7.073E-09	-	-5.32E-06	-3.68E-06	-	-5.3223E-06	-3.6708E-06	-
614	567300.00	4176600.00	RESIDENTIAL	2.0672E-09	6.6967E-09	-	-5.17E-06	-3.58E-06	-	-5.1694E-06	-3.5737E-06	-
615	567300.00	4176700.00	RESIDENTIAL	2.0139E-09	6.3424E-09	-	-5.01E-06	-3.47E-06	-	-5.0067E-06	-3.4665E-06	-
616	567300.00	4176800.00	RESIDENTIAL	1.9842E-09	6.4834E-09	-	-4.84E-06	-3.36E-06	-	-4.8359E-06	-3.3552E-06	-
617	567300.00	4176900.00	RESIDENTIAL	1.9232E-09	6.143E-09	-	-4.63E-06	-3.22E-06	-	-4.629E-06	-3.2178E-06	-
1546	571000.00	4176300.00	RESIDENTIAL	2.5696E-08	6.7509E-09	-	-1.6E-05	-1.22E-05	-	-1.5974E-05	-1.2193E-05	-
1547	571000.00	4176400.00	RESIDENTIAL	1.9914E-08	2.9163E-08	-	-1.378E-05	-9.552E-06	-	-1.3759E-05	-9.5226E-06	-
1548	571000.00	4176500.00	RESIDENTIAL	1.7701E-08	2.7627E-08	-	-1.258E-05	-8.658E-06	-	-1.2567E-05	-8.6301E-06	-
1549	571000.00	4176600.00	RESIDENTIAL	1.6723E-08	2.6731E-08	-	-1.18E-05	-8.099E-06	-	-1.1788E-05	-8.0726E-06	-
1550	571000.00	4176700.00	RESIDENTIAL	1.6056E-08	2.561E-08	-	-1.121E-05	-7.681E-06	-	-1.1189E-05	-7.6556E-06	-
1567	566000.00	4179000.00	RESIDENTIAL	7.0405E-10	1.8623E-09	-	-1.411E-06	-9.841E-07	-	-1.4106E-06	-9.822E-07	-
1568	566000.00	4179250.00	RESIDENTIAL	7.9539E-10	2.2101E-09	-	-1.297E-06	-9.042E-07	-	-1.2963E-06	-9.02E-07	-
1569	566000.00	4179500.00	RESIDENTIAL	6.4391E-10	1.9654E-09	-	-1.181E-06	-8.206E-07	-	-1.1805E-06	-8.1866E-07	-
1570	566000.00	4179750.00	RESIDENTIAL	5.6242E-10	1.2985E-09	-	-1.094E-06	-7.629E-07	-	-1.093E-06	-7.616E-07	-
1571	566000.00	4180000.00	RESIDENTIAL	6.1651E-10	1.6582E-09	-	-9.871E-07	-6.884E-07	-	-9.8647E-07	-6.8679E-07	-
1572	566000.00	4180250.00	RESIDENTIAL	5.8493E-10	1.5852E-09	-	-9.069E-07	-6.328E-07	-	-9.0631E-07	-6.3122E-07	-
1573	566000.00	4180500.00	RESIDENTIAL	5.4796E-10	1.4818E-09	-	-8.312E-07	-5.795E-07	-	-8.306E-07	-5.7806E-07	-
1576	566250.00	4178750.00	RESIDENTIAL	7.9184E-10	2.0894E-09	-	-1.565E-06	-1.089E-06	-	-1.564E-06	-1.0865E-06	-
1577	566250.00	4179000.00	RESIDENTIAL	7.4276E-10	1.8749E-09	-	-1.427E-06	-9.94E-07	-	-1.426E-06	-9.9216E-07	-
1578	566250.00	4179250.00	RESIDENTIAL	6.8867E-10	1.6924E-09	-	-1.326E-06	-9.219E-07	-	-1.3253E-06	-9.2023E-07	-
1579	566250.00	4179500.00	RESIDENTIAL	7.6735E-10	2.0334E-09	-	-1.197E-06	-8.353E-07	-	-1.1964E-06	-8.3325E-07	-
1580	566250.00	4179750.00	RESIDENTIAL	5.5492E-10	1.2972E-09	-	-1.077E-06	-7.511E-07	-	-1.0763E-06	-7.4984E-07	-
1581	566250.00	4180000.00	RESIDENTIAL	5.0316E-10	1.1547E-09	-	-9.683E-07	-6.74E-07	-	-9.6782E-07	-6.7289E-07	-
1582	566250.00	4180250.00	RESIDENTIAL	6.0287E-10	1.6243E-09	-	-8.939E-07	-6.224E-07	-	-8.933E-07	-6.2073E-07	-
1583	566250.00	4180500.00	RESIDENTIAL	5.6738E-10	1.5184E-09	-	-8.376E-07	-5.85E-07	-	-8.3708E-07	-5.8345E-07	-
1586	566500.00	4178750.00	RESIDENTIAL	8.3944E-10	2.1186E-09	-	-1.6E-06	-1.111E-06	-	-1.5989E-06	-1.1093E-06	-
1587	566500.00	4179000.00	RESIDENTIAL	8.0766E-10	2.3583E-09	-	-1.472E-06	-1.023E-06	-	-1.471E-06	-1.021E-06	-
1588	566500.00	4179250.00	RESIDENTIAL	7.113E-10	1.6926E-09	-	-1.332E-06	-9.27E-07	-	-1.3317E-06	-9.2535E-07	-
1589	566500.00	4179500.00	RESIDENTIAL	7.8226E-10	2.0785E-09	-	-1.179E-06	-8.22E-07	-	-1.1783E-06	-8.1989E-07	-
1590	566500.00	4179750.00	RESIDENTIAL	7.0307E-10	1.8817E-09	-	-1.051E-06	-7.299E-07	-	-1.0504E-06	-7.2806E-07	-
1591	566500.00	4180000.00	SCHOOL	5.1364E-10	1.1642E-09	1.386E-09	-9.717E-07	-6.785E-07	-3.373E-07	-9.7114E-07	-6.7735E-07	-3.3587E-07
1592	566500.00	4180250.00	RESIDENTIAL	4.7539E-10	1.0652E-09	-	-9.049E-07	-6.344E-07	-	-9.0447E-07	-6.3338E-07	-
1593	566500.00	4180500.00	RESIDENTIAL	5.973E-10	1.5664E-09	-	-8.586E-07	-6.039E-07	-	-8.5801E-07	-6.023E-07	-
1596	566750.00	4178750.00	RESIDENTIAL	8.9532E-10	2.2038E-09	-	-1.654E-06	-1.152E-06	-	-1.6527E-06	-1.1494E-06	-
1597	566750.00	4179000.00	RESIDENTIAL	9.5987E-10	2.5404E-09	-	-1.474E-06	-1.027E-06	-	-1.4732E-06	-1.0244E-06	-
1598	566750.00	4179250.00	RESIDENTIAL	7.5139E-10	1.7765E-09	-	-1.311E-06	-9.143E-07	-	-1.3106E-06	-9.1255E-07	-
1599	566750.00	4179500.00	RESIDENTIAL	6.5434E-10	1.5353E-09	-	-1.17E-06	-8.168E-07	-	-1.1698E-06	-8.1524E-07	-
1600	566750.00	4179750.00	RESIDENTIAL	7.1621E-10	1.9137E-09	-	-1.058E-06	-7.409E-07	-	-1.0571E-06	-7.39E-07	-
1603	566750.00	4180500.00	RESIDENTIAL	6.1846E-10	1.622E-09	-	-8.477E-07	-5.948E-07	-	-8.4711E-07	-5.9318E-07	-
1605	567000.00	4178500.00	RESIDENTIAL	1.0269E-09	2.5464E-09	-	-1.883E-06	-1.311E-06	-	-1.8823E-06	-1.3081E-06	-
1607	567000.00	4179000.00	RESIDENTIAL	8.5476E-10	2.0319E-09	-	-1.465E-06	-1.022E-06	-	-1.464E-06	-1.0201E-06	-
1608	567000.00	4179250.00	RESIDENTIAL	9.1596E-10	2.3761E-09	-	-1.317E-06	-9.218E-07	-	-1.3161E-06	-9.1947E-07	-
1609	567000.00	4179500.00	RESIDENTIAL	6.6899E-10	1.5788E-09	-	-1.167E-06	-8.182E-07	-	-1.1665E-06	-8.1666E-07	-

























OAK Terminal Modernization & Development

Table 2-18. Incr. Operation Risks Only

Residential Cancer Risks				Non-Inhalation Residential Cancer Risk			Inhalation Residential Cancer Risk			Multipathway Residential Cancer Risk		
RecID	UTM X	UTM Y	Receptor Type	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child
3291	574250.00	4181250.00	RESIDENTIAL	1.7781E-10	3.8407E-10	-	-5.411E-07	-3.776E-07	-	-5.4094E-07	-3.7726E-07	-
3292	574500.00	4181250.00	RESIDENTIAL	1.8342E-10	3.8474E-10	-	-5.467E-07	-3.807E-07	-	-5.4654E-07	-3.8029E-07	-
3293	574750.00	4181250.00	RESIDENTIAL	1.8116E-10	3.8056E-10	-	-5.412E-07	-3.778E-07	-	-5.4101E-07	-3.7741E-07	-
3294	575000.00	4181250.00	RESIDENTIAL	1.9457E-10	4.1156E-10	-	-5.309E-07	-3.721E-07	-	-5.3075E-07	-3.7166E-07	-

































OAK Terminal Modernization & Development

Table 2-19. Construction Risks Only

Residential Cancer Risks				Non-Inhalation Residential Cancer Risk			Inhalation Residential Cancer Risk			Multipathway Residential Cancer Risk		
RecID	UTM X	UTM Y	Receptor Type	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child	Adult Resident	Child Resident	School Child
Combined Construction & Operations				1.05E-09	1.67E-08	1.12E-08	4.93E-08	1.48E-06	2.27E-07	5.04E-08	1.50E-06	2.38E-07
Maximum->				1.39E-11	2.30E-10	6.52E-10	6.84E-10	2.09E-08	1.47E-08	6.98E-10	2.12E-08	1.53E-08
Minimum->				1923	1953	2104	1923	1953	2104	1923	1953	2104
Max Rec No.->				2025-2030	2025-2030	2025-2030	2025-2030	2025-2030	2025-2030	2025-2030	2025-2030	2025-2030
Exposure Years->				6 Yrs	6 Yrs	6 Yrs	6 Yrs	6 Yrs	6 Yrs	6 Yrs	6 Yrs	6 Yrs
Exposure Duration->												
3291	574250.00	4181250.00	RESIDENTIAL	3.17E-11	5.33E-10	-	1.5656E-09	4.8168E-08	-	1.5973E-09	4.8701E-08	-
3292	574500.00	4181250.00	RESIDENTIAL	3.17E-11	5.33E-10	-	1.6762E-09	5.0725E-08	-	1.7079E-09	5.1258E-08	-
3293	574750.00	4181250.00	RESIDENTIAL	3.17E-11	5.33E-10	-	1.6389E-09	5.0324E-08	-	1.6706E-09	5.0857E-08	-
3294	575000.00	4181250.00	RESIDENTIAL	3.17E-11	5.33E-10	-	1.6025E-09	4.8557E-08	-	1.6342E-09	4.909E-08	-

**OAK Terminal Modernization**

**Table 2-20. Offsite Worker Cancer Risk Combined Construction & Operations**

Maximum-> **-3.33E-08**    **2.29E-07**    **-3.92E-08**  
 Minimum-> **-3.89E-06**    **1.08E-09**    **-4.51E-06**  
 Max ReclD->    **2965**    **3296**    **2965**  
 Exposure Years-> **2025-2049**    **2025-2030**    **2028-2052**  
 Exposure Duration->    **25 Yrs**    **6 Yrs**    **25 Yrs**

ReclD	UTM X	UTM Y	Receptor Type	Adult Worker During Construction and Operations	Adult Worker During Construction	Adult Worker During Operations
33	566000.00	4176300.00	ROAD	-2.25E-07	6.84E-09	-2.64E-07
34	566000.00	4176400.00	WORKER	-2.19E-07	6.63E-09	-2.57E-07
35	566000.00	4176500.00	WORKER	-2.13E-07	6.43E-09	-2.50E-07
40	566000.00	4177000.00	ROAD	-1.80E-07	5.52E-09	-2.11E-07
45	566000.00	4177500.00	RECREATIONAL	-1.41E-07	4.53E-09	-1.66E-07
46	566000.00	4177600.00	SCHOOL	-1.35E-07	4.37E-09	-1.59E-07
47	566000.00	4177700.00	SCHOOL	-1.30E-07	4.22E-09	-1.53E-07
79	566100.00	4176200.00	RECREATIONAL	-2.40E-07	7.23E-09	-2.81E-07
80	566100.00	4176300.00	RECREATIONAL	-2.34E-07	7.07E-09	-2.75E-07
81	566100.00	4176400.00	RECREATIONAL	-2.27E-07	6.87E-09	-2.67E-07
123	566200.00	4176100.00	ROAD	-2.57E-07	7.74E-09	-3.01E-07
124	566200.00	4176200.00	WORKER	-2.51E-07	7.51E-09	-2.94E-07
125	566200.00	4176300.00	WORKER	-2.43E-07	7.30E-09	-2.86E-07
166	566300.00	4176000.00	WORKER	-2.74E-07	8.25E-09	-3.22E-07
167	566300.00	4176100.00	WORKER	-2.68E-07	8.05E-09	-3.15E-07
168	566300.00	4176200.00	WORKER	-2.61E-07	7.82E-09	-3.06E-07
169	566300.00	4176300.00	WORKER	-2.53E-07	7.61E-09	-2.97E-07
210	566400.00	4175900.00	WORKER	-2.93E-07	8.84E-09	-3.44E-07
211	566400.00	4176000.00	WORKER	-2.87E-07	8.63E-09	-3.37E-07
212	566400.00	4176100.00	WORKER	-2.79E-07	8.36E-09	-3.28E-07
213	566400.00	4176200.00	WORKER	-2.72E-07	8.15E-09	-3.19E-07
254	566500.00	4175800.00	WORKER	-3.12E-07	9.56E-09	-3.66E-07
255	566500.00	4175900.00	WORKER	-3.07E-07	9.26E-09	-3.60E-07
256	566500.00	4176000.00	WORKER	-3.00E-07	9.02E-09	-3.52E-07
257	566500.00	4176100.00	WORKER	-2.91E-07	8.74E-09	-3.42E-07
258	566500.00	4176200.00	WORKER	-2.82E-07	8.41E-09	-3.30E-07
259	566500.00	4176300.00	WORKER	-2.72E-07	8.13E-09	-3.19E-07
297	566600.00	4175700.00	WORKER	-3.32E-07	1.03E-08	-3.89E-07
298	566600.00	4175800.00	WORKER	-3.27E-07	1.00E-08	-3.84E-07
299	566600.00	4175900.00	WORKER	-3.21E-07	9.74E-09	-3.77E-07
300	566600.00	4176000.00	WORKER	-3.13E-07	9.39E-09	-3.67E-07
301	566600.00	4176100.00	WORKER	-3.03E-07	9.08E-09	-3.56E-07
302	566600.00	4176200.00	WORKER	-2.92E-07	8.78E-09	-3.43E-07
340	566700.00	4175600.00	ROAD	-3.54E-07	1.12E-08	-4.16E-07
341	566700.00	4175700.00	WORKER	-3.49E-07	1.08E-08	-4.10E-07
342	566700.00	4175800.00	WORKER	-3.42E-07	1.05E-08	-4.02E-07
343	566700.00	4175900.00	WORKER	-3.36E-07	1.01E-08	-3.94E-07

OAK Terminal Modernization

Table 2-20. Offsite Worker Cancer Risk Combined Construction & Operations

Maximum-> -3.33E-08 2.29E-07 -3.92E-08  
 Minimum-> -3.89E-06 1.08E-09 -4.51E-06  
 Max ReclD-> 2965 3296 2965  
 Exposure Years-> 2025-2049 2025-2030 2028-2052  
 Exposure Duration-> 25 Yrs 6 Yrs 25 Yrs

ReclD	UTM X	UTM Y	Receptor Type	Adult Worker During Construction and Operations	Adult Worker During Construction	Adult Worker During Operations
344	566700.00	4176000.00	WORKER	-3.26E-07	9.83E-09	-3.82E-07
345	566700.00	4176100.00	WORKER	-3.15E-07	9.49E-09	-3.70E-07
346	566700.00	4176200.00	WORKER	-3.02E-07	9.11E-09	-3.55E-07
383	566800.00	4175500.00	WORKER	-3.77E-07	1.22E-08	-4.43E-07
384	566800.00	4175600.00	ROAD	-3.72E-07	1.18E-08	-4.37E-07
385	566800.00	4175700.00	WORKER	-3.66E-07	1.14E-08	-4.30E-07
386	566800.00	4175800.00	WORKER	-3.59E-07	1.10E-08	-4.21E-07
387	566800.00	4175900.00	WORKER	-3.49E-07	1.06E-08	-4.10E-07
388	566800.00	4176000.00	WORKER	-3.39E-07	1.02E-08	-3.98E-07
389	566800.00	4176100.00	WORKER	-3.26E-07	9.86E-09	-3.82E-07
426	566900.00	4175400.00	WORKER	-4.05E-07	1.33E-08	-4.76E-07
427	566900.00	4175500.00	WORKER	-3.98E-07	1.29E-08	-4.68E-07
428	566900.00	4175600.00	ROAD	-3.91E-07	1.24E-08	-4.60E-07
429	566900.00	4175700.00	WORKER	-3.84E-07	1.20E-08	-4.51E-07
430	566900.00	4175800.00	WORKER	-3.74E-07	1.16E-08	-4.39E-07
431	566900.00	4175900.00	WORKER	-3.63E-07	1.11E-08	-4.26E-07
432	566900.00	4176000.00	WORKER	-3.51E-07	1.07E-08	-4.12E-07
433	566900.00	4176100.00	WORKER	-3.37E-07	1.03E-08	-3.96E-07
469	567000.00	4175300.00	WORKER	-4.37E-07	1.47E-08	-5.14E-07
470	567000.00	4175400.00	WORKER	-4.29E-07	1.42E-08	-5.05E-07
471	567000.00	4175500.00	ROAD	-4.21E-07	1.37E-08	-4.95E-07
472	567000.00	4175600.00	ROAD	-4.12E-07	1.32E-08	-4.85E-07
473	567000.00	4175700.00	WORKER	-4.01E-07	1.27E-08	-4.71E-07
474	567000.00	4175800.00	WORKER	-3.89E-07	1.22E-08	-4.57E-07
475	567000.00	4175900.00	RECREATIONAL	-3.76E-07	1.17E-08	-4.42E-07
476	567000.00	4176000.00	WORKER	-3.63E-07	1.13E-08	-4.26E-07
512	567100.00	4175200.00	WORKER	-4.77E-07	1.63E-08	-5.62E-07
513	567100.00	4175300.00	WORKER	-4.64E-07	1.57E-08	-5.47E-07
514	567100.00	4175400.00	WORKER	-4.54E-07	1.51E-08	-5.35E-07
515	567100.00	4175500.00	WORKER	-4.45E-07	1.45E-08	-5.23E-07
516	567100.00	4175600.00	WORKER	-4.33E-07	1.40E-08	-5.09E-07
517	567100.00	4175700.00	WORKER	-4.19E-07	1.34E-08	-4.93E-07
518	567100.00	4175800.00	WORKER	-4.05E-07	1.29E-08	-4.76E-07
519	567100.00	4175900.00	WORKER	-3.90E-07	1.23E-08	-4.58E-07
556	567200.00	4175200.00	WORKER	-5.06E-07	1.74E-08	-5.96E-07
557	567200.00	4175300.00	WORKER	-4.93E-07	1.68E-08	-5.81E-07
558	567200.00	4175400.00	WORKER	-4.81E-07	1.62E-08	-5.67E-07

**OAK Terminal Modernization**

**Table 2-20. Offsite Worker Cancer Risk Combined Construction & Operations**

Maximum-> **-3.33E-08**    **2.29E-07**    **-3.92E-08**  
 Minimum-> **-3.89E-06**    **1.08E-09**    **-4.51E-06**  
 Max RecID->    **2965**    **3296**    **2965**  
 Exposure Years-> **2025-2049**    **2025-2030**    **2028-2052**  
 Exposure Duration->    **25 Yrs**    **6 Yrs**    **25 Yrs**

RecID	UTM X	UTM Y	Receptor Type	Adult Worker During Construction and Operations	Adult Worker During Construction	Adult Worker During Operations
559	567200.00	4175500.00	WORKER	-4.69E-07	1.55E-08	-5.51E-07
560	567200.00	4175600.00	WORKER	-4.53E-07	1.48E-08	-5.33E-07
561	567200.00	4175700.00	WORKER	-4.37E-07	1.43E-08	-5.14E-07
562	567200.00	4175800.00	WORKER	-4.19E-07	1.36E-08	-4.93E-07
563	567200.00	4175900.00	WORKER	-4.02E-07	1.29E-08	-4.73E-07
575	567200.00	4177100.00	RECREATIONAL	-2.48E-07	6.87E-09	-2.90E-07
576	567200.00	4177200.00	RECREATIONAL	-2.36E-07	6.51E-09	-2.77E-07
577	567200.00	4177300.00	RECREATIONAL	-2.24E-07	6.17E-09	-2.62E-07
578	567200.00	4177400.00	RECREATIONAL	-2.13E-07	5.91E-09	-2.49E-07
579	567200.00	4177500.00	RECREATIONAL	-2.02E-07	5.58E-09	-2.37E-07
580	567200.00	4177600.00	RECREATIONAL	-1.93E-07	5.32E-09	-2.26E-07
581	567200.00	4177700.00	ROAD	-1.82E-07	5.04E-09	-2.14E-07
582	567200.00	4177800.00	SCHOOL	-1.73E-07	4.86E-09	-2.03E-07
599	567300.00	4175100.00	WORKER	-5.50E-07	1.94E-08	-6.49E-07
600	567300.00	4175200.00	WORKER	-5.39E-07	1.88E-08	-6.35E-07
601	567300.00	4175300.00	WORKER	-5.25E-07	1.81E-08	-6.18E-07
602	567300.00	4175400.00	WORKER	-5.10E-07	1.74E-08	-6.00E-07
603	567300.00	4175500.00	WORKER	-4.93E-07	1.66E-08	-5.80E-07
604	567300.00	4175600.00	WORKER	-4.73E-07	1.59E-08	-5.57E-07
605	567300.00	4175700.00	WORKER	-4.54E-07	1.52E-08	-5.34E-07
606	567300.00	4175800.00	WORKER	-4.34E-07	1.44E-08	-5.11E-07
607	567300.00	4175900.00	WORKER	-4.15E-07	1.37E-08	-4.89E-07
609	567300.00	4176100.00	RECREATIONAL	-3.81E-07	1.22E-08	-4.49E-07
618	567300.00	4177000.00	RECREATIONAL	-2.77E-07	7.44E-09	-3.24E-07
619	567300.00	4177100.00	RECREATIONAL	-2.63E-07	7.05E-09	-3.08E-07
620	567300.00	4177200.00	RECREATIONAL	-2.49E-07	6.64E-09	-2.91E-07
621	567300.00	4177300.00	RECREATIONAL	-2.35E-07	6.31E-09	-2.75E-07
622	567300.00	4177400.00	RECREATIONAL	-2.23E-07	6.00E-09	-2.61E-07
623	567300.00	4177500.00	RECREATIONAL	-2.12E-07	5.71E-09	-2.48E-07
624	567300.00	4177600.00	RECREATIONAL	-2.00E-07	5.40E-09	-2.34E-07
625	567300.00	4177700.00	RECREATIONAL	-1.89E-07	5.17E-09	-2.22E-07
626	567300.00	4177800.00	RECREATIONAL	-1.79E-07	4.91E-09	-2.10E-07
627	567300.00	4177900.00	WORKER	-1.69E-07	4.65E-09	-1.98E-07
628	567300.00	4178000.00	RECREATIONAL	-1.60E-07	4.47E-09	-1.88E-07
642	567400.00	4175200.00	WORKER	-5.76E-07	2.03E-08	-6.79E-07
643	567400.00	4175300.00	WORKER	-5.59E-07	1.96E-08	-6.59E-07
644	567400.00	4175400.00	WORKER	-5.40E-07	1.88E-08	-6.36E-07

**OAK Terminal Modernization**

**Table 2-20. Offsite Worker Cancer Risk Combined Construction & Operations**

Maximum-> -3.33E-08 2.29E-07 -3.92E-08  
 Minimum-> -3.89E-06 1.08E-09 -4.51E-06  
 Max ReclD-> 2965 3296 2965  
 Exposure Years-> 2025-2049 2025-2030 2028-2052  
 Exposure Duration-> 25 Yrs 6 Yrs 25 Yrs

ReclD	UTM X	UTM Y	Receptor Type	Adult Worker During Construction and Operations	Adult Worker During Construction	Adult Worker During Operations
645	567400.00	4175500.00	WORKER	-5.17E-07	1.80E-08	-6.09E-07
646	567400.00	4175600.00	WORKER	-4.94E-07	1.71E-08	-5.82E-07
647	567400.00	4175700.00	WORKER	-4.70E-07	1.62E-08	-5.54E-07
648	567400.00	4175800.00	WORKER	-4.47E-07	1.53E-08	-5.28E-07
649	567400.00	4175900.00	WORKER	-4.28E-07	1.45E-08	-5.04E-07
650	567400.00	4176000.00	RECREATIONAL	-4.10E-07	1.37E-08	-4.83E-07
651	567400.00	4176100.00	RECREATIONAL	-3.93E-07	1.29E-08	-4.63E-07
652	567400.00	4176200.00	RECREATIONAL	-3.80E-07	1.21E-08	-4.47E-07
653	567400.00	4176300.00	RECREATIONAL	-3.69E-07	1.14E-08	-4.33E-07
654	567400.00	4176400.00	RECREATIONAL	-3.60E-07	1.07E-08	-4.23E-07
655	567400.00	4176500.00	RECREATIONAL	-3.53E-07	1.01E-08	-4.14E-07
656	567400.00	4176600.00	RECREATIONAL	-3.45E-07	9.58E-09	-4.04E-07
657	567400.00	4176700.00	RECREATIONAL	-3.37E-07	8.99E-09	-3.95E-07
658	567400.00	4176800.00	RECREATIONAL	-3.26E-07	8.48E-09	-3.81E-07
659	567400.00	4176900.00	RECREATIONAL	-3.12E-07	8.04E-09	-3.64E-07
660	567400.00	4177000.00	RECREATIONAL	-2.96E-07	7.60E-09	-3.46E-07
661	567400.00	4177100.00	RECREATIONAL	-2.81E-07	7.19E-09	-3.28E-07
662	567400.00	4177200.00	RECREATIONAL	-2.65E-07	6.83E-09	-3.10E-07
663	567400.00	4177300.00	RECREATIONAL	-2.49E-07	6.47E-09	-2.92E-07
664	567400.00	4177400.00	RECREATIONAL	-2.35E-07	6.16E-09	-2.75E-07
665	567400.00	4177500.00	RECREATIONAL	-2.22E-07	5.82E-09	-2.60E-07
666	567400.00	4177600.00	RECREATIONAL	-2.09E-07	5.54E-09	-2.44E-07
667	567400.00	4177700.00	RECREATIONAL	-1.97E-07	5.25E-09	-2.31E-07
668	567400.00	4177800.00	RECREATIONAL	-1.86E-07	5.02E-09	-2.17E-07
669	567400.00	4177900.00	RECREATIONAL	-1.75E-07	4.76E-09	-2.04E-07
670	567400.00	4178000.00	ROAD	-1.65E-07	4.53E-09	-1.93E-07
683	567500.00	4175300.00	WORKER	-5.94E-07	2.14E-08	-7.01E-07
684	567500.00	4175400.00	WORKER	-5.68E-07	2.05E-08	-6.71E-07
685	567500.00	4175500.00	WORKER	-5.40E-07	1.95E-08	-6.37E-07
686	567500.00	4175600.00	WORKER	-5.12E-07	1.84E-08	-6.05E-07
687	567500.00	4175700.00	WORKER	-4.87E-07	1.74E-08	-5.75E-07
688	567500.00	4175800.00	WORKER	-4.62E-07	1.64E-08	-5.45E-07
689	567500.00	4175900.00	WORKER	-4.41E-07	1.54E-08	-5.21E-07
690	567500.00	4176000.00	RECREATIONAL	-4.23E-07	1.44E-08	-4.99E-07
691	567500.00	4176100.00	RECREATIONAL	-4.07E-07	1.35E-08	-4.80E-07
692	567500.00	4176200.00	RECREATIONAL	-3.95E-07	1.27E-08	-4.65E-07
693	567500.00	4176300.00	RECREATIONAL	-3.84E-07	1.19E-08	-4.51E-07

**OAK Terminal Modernization**

**Table 2-20. Offsite Worker Cancer Risk Combined Construction & Operations**

Maximum-> **-3.33E-08**    **2.29E-07**    **-3.92E-08**  
 Minimum-> **-3.89E-06**    **1.08E-09**    **-4.51E-06**  
 Max ReclD->    **2965**    **3296**    **2965**  
 Exposure Years-> **2025-2049**    **2025-2030**    **2028-2052**  
 Exposure Duration->    **25 Yrs**    **6 Yrs**    **25 Yrs**

ReclD	UTM X	UTM Y	Receptor Type	Adult Worker During Construction and Operations	Adult Worker During Construction	Adult Worker During Operations
694	567500.00	4176400.00	RECREATIONAL	-3.76E-07	1.11E-08	-4.42E-07
695	567500.00	4176500.00	RECREATIONAL	-3.71E-07	1.05E-08	-4.35E-07
696	567500.00	4176600.00	RECREATIONAL	-3.67E-07	9.85E-09	-4.29E-07
697	567500.00	4176700.00	RECREATIONAL	-3.62E-07	9.25E-09	-4.23E-07
698	567500.00	4176800.00	RECREATIONAL	-3.53E-07	8.74E-09	-4.12E-07
699	567500.00	4176900.00	RECREATIONAL	-3.38E-07	8.25E-09	-3.95E-07
700	567500.00	4177000.00	RECREATIONAL	-3.21E-07	7.82E-09	-3.75E-07
701	567500.00	4177100.00	RECREATIONAL	-3.04E-07	7.35E-09	-3.54E-07
702	567500.00	4177200.00	RECREATIONAL	-2.85E-07	6.99E-09	-3.33E-07
703	567500.00	4177300.00	RECREATIONAL	-2.68E-07	6.66E-09	-3.13E-07
704	567500.00	4177400.00	RECREATIONAL	-2.50E-07	6.30E-09	-2.92E-07
705	567500.00	4177500.00	RECREATIONAL	-2.34E-07	5.98E-09	-2.74E-07
706	567500.00	4177600.00	RECREATIONAL	-2.20E-07	5.68E-09	-2.58E-07
707	567500.00	4177700.00	RECREATIONAL	-2.07E-07	5.39E-09	-2.42E-07
708	567500.00	4177800.00	RECREATIONAL	-1.93E-07	5.16E-09	-2.26E-07
709	567500.00	4177900.00	RECREATIONAL	-1.80E-07	4.87E-09	-2.11E-07
710	567500.00	4178000.00	WORKER	-1.68E-07	4.61E-09	-1.97E-07
722	567600.00	4175400.00	WORKER	-5.95E-07	2.26E-08	-7.04E-07
723	567600.00	4175500.00	WORKER	-5.62E-07	2.15E-08	-6.66E-07
724	567600.00	4175600.00	WORKER	-5.32E-07	2.02E-08	-6.29E-07
725	567600.00	4175700.00	WORKER	-5.03E-07	1.90E-08	-5.95E-07
726	567600.00	4175800.00	WORKER	-4.78E-07	1.77E-08	-5.65E-07
727	567600.00	4175900.00	WORKER	-4.56E-07	1.65E-08	-5.38E-07
728	567600.00	4176000.00	RECREATIONAL	-4.38E-07	1.54E-08	-5.17E-07
729	567600.00	4176100.00	RECREATIONAL	-4.23E-07	1.43E-08	-4.99E-07
730	567600.00	4176200.00	RECREATIONAL	-4.11E-07	1.33E-08	-4.84E-07
731	567600.00	4176300.00	RECREATIONAL	-4.02E-07	1.24E-08	-4.72E-07
732	567600.00	4176400.00	RECREATIONAL	-3.95E-07	1.16E-08	-4.64E-07
733	567600.00	4176500.00	RECREATIONAL	-3.91E-07	1.09E-08	-4.58E-07
734	567600.00	4176600.00	RECREATIONAL	-3.90E-07	1.01E-08	-4.56E-07
735	567600.00	4176700.00	RECREATIONAL	-3.89E-07	9.52E-09	-4.54E-07
736	567600.00	4176800.00	RECREATIONAL	-3.84E-07	8.98E-09	-4.48E-07
737	567600.00	4176900.00	RECREATIONAL	-3.73E-07	8.47E-09	-4.34E-07
738	567600.00	4177000.00	RECREATIONAL	-3.55E-07	8.01E-09	-4.14E-07
739	567600.00	4177100.00	RECREATIONAL	-3.35E-07	7.60E-09	-3.90E-07
740	567600.00	4177200.00	RECREATIONAL	-3.13E-07	7.24E-09	-3.65E-07
741	567600.00	4177300.00	RECREATIONAL	-2.90E-07	6.85E-09	-3.39E-07

**OAK Terminal Modernization**

**Table 2-20. Offsite Worker Cancer Risk Combined Construction & Operations**

Maximum-> **-3.33E-08**    **2.29E-07**    **-3.92E-08**  
 Minimum-> **-3.89E-06**    **1.08E-09**    **-4.51E-06**  
 Max RecID->    **2965**    **3296**    **2965**  
 Exposure Years-> **2025-2049**    **2025-2030**    **2028-2052**  
 Exposure Duration->    **25 Yrs**    **6 Yrs**    **25 Yrs**

RecID	UTM X	UTM Y	Receptor Type	Adult Worker During Construction and Operations	Adult Worker During Construction	Adult Worker During Operations
742	567600.00	4177400.00	RECREATIONAL	-2.69E-07	6.52E-09	-3.15E-07
743	567600.00	4177500.00	RECREATIONAL	-2.52E-07	6.15E-09	-2.94E-07
744	567600.00	4177600.00	RECREATIONAL	-2.33E-07	5.89E-09	-2.73E-07
745	567600.00	4177700.00	RECREATIONAL	-2.18E-07	5.53E-09	-2.54E-07
746	567600.00	4177800.00	RECREATIONAL	-2.01E-07	5.24E-09	-2.35E-07
747	567600.00	4177900.00	RECREATIONAL	-1.87E-07	5.01E-09	-2.19E-07
748	567600.00	4178000.00	WORKER	-1.69E-07	4.64E-09	-1.97E-07
759	567700.00	4175500.00	WORKER	-5.84E-07	2.44E-08	-6.93E-07
760	567700.00	4175600.00	WORKER	-5.50E-07	2.27E-08	-6.53E-07
761	567700.00	4175700.00	WORKER	-5.21E-07	2.09E-08	-6.17E-07
762	567700.00	4175800.00	WORKER	-4.95E-07	1.94E-08	-5.86E-07
763	567700.00	4175900.00	WORKER	-4.74E-07	1.79E-08	-5.60E-07
764	567700.00	4176000.00	RECREATIONAL	-4.56E-07	1.65E-08	-5.39E-07
765	567700.00	4176100.00	RECREATIONAL	-4.42E-07	1.53E-08	-5.21E-07
766	567700.00	4176200.00	RECREATIONAL	-4.30E-07	1.41E-08	-5.06E-07
767	567700.00	4176300.00	RECREATIONAL	-4.22E-07	1.30E-08	-4.96E-07
768	567700.00	4176400.00	RECREATIONAL	-4.16E-07	1.20E-08	-4.88E-07
769	567700.00	4176500.00	RECREATIONAL	-4.13E-07	1.12E-08	-4.84E-07
770	567700.00	4176600.00	RECREATIONAL	-4.14E-07	1.05E-08	-4.84E-07
771	567700.00	4176700.00	RECREATIONAL	-4.17E-07	9.82E-09	-4.86E-07
772	567700.00	4176800.00	RECREATIONAL	-4.20E-07	9.26E-09	-4.89E-07
773	567700.00	4176900.00	RECREATIONAL	-4.16E-07	8.74E-09	-4.84E-07
774	567700.00	4177000.00	RECREATIONAL	-4.01E-07	8.28E-09	-4.67E-07
775	567700.00	4177100.00	RECREATIONAL	-3.77E-07	7.89E-09	-4.39E-07
776	567700.00	4177200.00	RECREATIONAL	-3.50E-07	7.46E-09	-4.08E-07
777	567700.00	4177300.00	RECREATIONAL	-3.22E-07	7.12E-09	-3.75E-07
778	567700.00	4177400.00	RECREATIONAL	-2.95E-07	6.81E-09	-3.45E-07
779	567700.00	4177500.00	RECREATIONAL	-2.72E-07	6.48E-09	-3.18E-07
780	567700.00	4177600.00	RECREATIONAL	-2.50E-07	6.12E-09	-2.92E-07
781	567700.00	4177700.00	RECREATIONAL	-2.29E-07	5.78E-09	-2.68E-07
782	567700.00	4177800.00	RECREATIONAL	-2.10E-07	5.46E-09	-2.46E-07
783	567700.00	4177900.00	RECREATIONAL	-1.91E-07	5.12E-09	-2.24E-07
784	567700.00	4178000.00	WORKER	-1.71E-07	4.64E-09	-2.00E-07
794	567800.00	4175700.00	WORKER	-5.39E-07	2.42E-08	-6.42E-07
795	567800.00	4175800.00	WORKER	-5.17E-07	2.19E-08	-6.14E-07
796	567800.00	4175900.00	WORKER	-4.99E-07	2.03E-08	-5.92E-07
797	567800.00	4176000.00	RECREATIONAL	-4.82E-07	1.86E-08	-5.70E-07

**OAK Terminal Modernization**

**Table 2-20. Offsite Worker Cancer Risk Combined Construction & Operations**

Maximum-> **-3.33E-08**    **2.29E-07**    **-3.92E-08**  
 Minimum-> **-3.89E-06**    **1.08E-09**    **-4.51E-06**  
 Max RecID->    **2965**    **3296**    **2965**  
 Exposure Years-> **2025-2049**    **2025-2030**    **2028-2052**  
 Exposure Duration->    **25 Yrs**    **6 Yrs**    **25 Yrs**

RecID	UTM X	UTM Y	Receptor Type	Adult Worker During Construction and Operations	Adult Worker During Construction	Adult Worker During Operations
798	567800.00	4176100.00	RECREATIONAL	-4.65E-07	1.67E-08	-5.49E-07
799	567800.00	4176200.00	RECREATIONAL	-4.53E-07	1.51E-08	-5.33E-07
800	567800.00	4176300.00	RECREATIONAL	-4.45E-07	1.37E-08	-5.23E-07
801	567800.00	4176400.00	RECREATIONAL	-4.41E-07	1.26E-08	-5.17E-07
802	567800.00	4176500.00	RECREATIONAL	-4.39E-07	1.17E-08	-5.14E-07
803	567800.00	4176600.00	RECREATIONAL	-4.39E-07	1.09E-08	-5.13E-07
804	567800.00	4176700.00	RECREATIONAL	-4.46E-07	1.02E-08	-5.20E-07
805	567800.00	4176800.00	RECREATIONAL	-4.58E-07	9.64E-09	-5.33E-07
806	567800.00	4176900.00	RECREATIONAL	-4.70E-07	9.12E-09	-5.46E-07
807	567800.00	4177000.00	RECREATIONAL	-4.66E-07	8.64E-09	-5.41E-07
808	567800.00	4177100.00	RECREATIONAL	-4.42E-07	8.25E-09	-5.14E-07
809	567800.00	4177200.00	RECREATIONAL	-4.08E-07	7.87E-09	-4.75E-07
810	567800.00	4177300.00	RECREATIONAL	-3.68E-07	7.53E-09	-4.29E-07
811	567800.00	4177400.00	RECREATIONAL	-3.32E-07	7.15E-09	-3.86E-07
812	567800.00	4177500.00	RECREATIONAL	-2.99E-07	6.84E-09	-3.49E-07
813	567800.00	4177600.00	RECREATIONAL	-2.70E-07	6.50E-09	-3.15E-07
814	567800.00	4177700.00	RECREATIONAL	-2.42E-07	6.13E-09	-2.83E-07
815	567800.00	4177800.00	RECREATIONAL	-2.18E-07	5.71E-09	-2.56E-07
816	567800.00	4177900.00	ROAD	-1.97E-07	5.34E-09	-2.31E-07
817	567800.00	4178000.00	WORKER	-1.70E-07	4.73E-09	-2.00E-07
826	567900.00	4175800.00	WORKER	-5.50E-07	2.60E-08	-6.57E-07
827	567878.00	4175900.00	WORKER	-5.53E-07	2.75E-08	-6.62E-07
828	567883.00	4176000.00	RECREATIONAL	-5.29E-07	2.49E-08	-6.32E-07
829	567900.00	4176100.00	RECREATIONAL	-5.07E-07	2.12E-08	-6.02E-07
830	567900.00	4176200.00	RECREATIONAL	-4.84E-07	1.73E-08	-5.72E-07
831	567900.00	4176300.00	RECREATIONAL	-4.73E-07	1.51E-08	-5.56E-07
832	567900.00	4176400.00	RECREATIONAL	-4.66E-07	1.35E-08	-5.47E-07
833	567900.00	4176500.00	RECREATIONAL	-4.65E-07	1.24E-08	-5.44E-07
834	567900.00	4176600.00	RECREATIONAL	-4.68E-07	1.15E-08	-5.47E-07
835	567900.00	4176700.00	RECREATIONAL	-4.78E-07	1.08E-08	-5.57E-07
836	567900.00	4176800.00	RECREATIONAL	-4.97E-07	1.02E-08	-5.78E-07
837	567900.00	4176900.00	RECREATIONAL	-5.31E-07	9.67E-09	-6.17E-07
838	567900.00	4177000.00	RECREATIONAL	-5.62E-07	9.26E-09	-6.52E-07
839	567900.00	4177100.00	RECREATIONAL	-5.54E-07	8.88E-09	-6.42E-07
840	567900.00	4177200.00	RECREATIONAL	-5.06E-07	8.47E-09	-5.87E-07
841	567900.00	4177300.00	RECREATIONAL	-4.43E-07	8.13E-09	-5.14E-07
842	567900.00	4177400.00	RECREATIONAL	-3.85E-07	7.75E-09	-4.48E-07

**OAK Terminal Modernization**

**Table 2-20. Offsite Worker Cancer Risk Combined Construction & Operations**

Maximum-> -3.33E-08 2.29E-07 -3.92E-08  
 Minimum-> -3.89E-06 1.08E-09 -4.51E-06  
 Max RecID-> 2965 3296 2965  
 Exposure Years-> 2025-2049 2025-2030 2028-2052  
 Exposure Duration-> 25 Yrs 6 Yrs 25 Yrs

RecID	UTM X	UTM Y	Receptor Type	Adult Worker During Construction and Operations	Adult Worker During Construction	Adult Worker During Operations
843	567900.00	4177500.00	RECREATIONAL	-3.35E-07	7.44E-09	-3.91E-07
844	567900.00	4177600.00	RECREATIONAL	-2.93E-07	7.08E-09	-3.42E-07
845	567900.00	4177700.00	RECREATIONAL	-2.57E-07	6.68E-09	-3.01E-07
846	567900.00	4177800.00	RECREATIONAL	-2.28E-07	6.18E-09	-2.68E-07
847	567900.00	4177900.00	WORKER	-2.04E-07	5.67E-09	-2.39E-07
848	567900.00	4178000.00	WORKER	-1.72E-07	4.84E-09	-2.01E-07
856	568000.00	4176300.00	RECREATIONAL	-5.22E-07	2.05E-08	-6.18E-07
857	568000.00	4176400.00	RECREATIONAL	-5.00E-07	1.60E-08	-5.88E-07
858	568000.00	4176500.00	RECREATIONAL	-4.97E-07	1.39E-08	-5.83E-07
859	568000.00	4176600.00	RECREATIONAL	-5.04E-07	1.26E-08	-5.89E-07
860	568000.00	4176700.00	RECREATIONAL	-5.16E-07	1.18E-08	-6.02E-07
861	568000.00	4176800.00	RECREATIONAL	-5.43E-07	1.13E-08	-6.32E-07
862	568000.00	4176900.00	RECREATIONAL	-5.99E-07	1.08E-08	-6.96E-07
863	568000.00	4177000.00	RECREATIONAL	-6.98E-07	1.04E-08	-8.09E-07
864	568000.00	4177100.00	RECREATIONAL	-7.64E-07	9.95E-09	-8.83E-07
865	568000.00	4177200.00	RECREATIONAL	-7.06E-07	9.59E-09	-8.17E-07
866	568000.00	4177300.00	RECREATIONAL	-5.85E-07	9.21E-09	-6.78E-07
867	568000.00	4177400.00	RECREATIONAL	-4.70E-07	8.85E-09	-5.46E-07
868	568000.00	4177500.00	RECREATIONAL	-3.84E-07	8.54E-09	-4.48E-07
869	568000.00	4177600.00	RECREATIONAL	-3.20E-07	8.24E-09	-3.75E-07
870	568000.00	4177700.00	RECREATIONAL	-2.77E-07	7.87E-09	-3.25E-07
871	568000.00	4177800.00	RECREATIONAL	-2.43E-07	7.23E-09	-2.85E-07
872	568000.00	4177900.00	RECREATIONAL	-2.12E-07	6.34E-09	-2.49E-07
873	568000.00	4178000.00	WORKER	-1.79E-07	5.22E-09	-2.10E-07
881	568096.00	4176500.00	RECREATIONAL	-5.62E-07	2.09E-08	-6.64E-07
882	568100.00	4176600.00	RECREATIONAL	-5.57E-07	1.64E-08	-6.54E-07
883	568100.00	4176700.00	RECREATIONAL	-5.77E-07	1.56E-08	-6.75E-07
884	568100.00	4176800.00	RECREATIONAL	-6.13E-07	1.51E-08	-7.17E-07
885	568100.00	4176900.00	RECREATIONAL	-6.89E-07	1.47E-08	-8.02E-07
886	568100.00	4177000.00	RECREATIONAL	-8.71E-07	1.42E-08	-1.01E-06
887	568100.00	4177100.00	RECREATIONAL	-1.25E-06	1.39E-08	-1.44E-06
888	568100.00	4177200.00	RECREATIONAL	-1.29E-06	1.37E-08	-1.49E-06
889	568100.00	4177300.00	RECREATIONAL	-9.50E-07	1.35E-08	-1.10E-06
890	568100.00	4177400.00	RECREATIONAL	-6.38E-07	1.34E-08	-7.44E-07
891	568100.00	4177500.00	RECREATIONAL	-4.56E-07	1.32E-08	-5.36E-07
892	568100.00	4177600.00	RECREATIONAL	-3.65E-07	1.32E-08	-4.32E-07
893	568100.00	4177700.00	RECREATIONAL	-3.16E-07	1.33E-08	-3.75E-07

**OAK Terminal Modernization**

**Table 2-20. Offsite Worker Cancer Risk Combined Construction & Operations**

Maximum-> -3.33E-08 2.29E-07 -3.92E-08  
 Minimum-> -3.89E-06 1.08E-09 -4.51E-06  
 Max ReclD-> 2965 3296 2965  
 Exposure Years-> 2025-2049 2025-2030 2028-2052  
 Exposure Duration-> 25 Yrs 6 Yrs 25 Yrs

ReclD	UTM X	UTM Y	Receptor Type	Adult Worker During Construction and Operations	Adult Worker During Construction	Adult Worker During Operations
894	568100.00	4177800.00	RECREATIONAL	-2.95E-07	1.36E-08	-3.52E-07
895	568100.00	4177900.00	RECREATIONAL	-2.35E-07	7.98E-09	-2.77E-07
896	568100.00	4178000.00	WORKER	-1.92E-07	5.86E-09	-2.26E-07
941	569004.00	4177402.00	RECREATIONAL	-1.02E-06	3.45E-08	-1.20E-06
942	569000.00	4177500.00	RECREATIONAL	-6.04E-07	2.29E-08	-7.16E-07
948	569100.00	4177300.00	RECREATIONAL	-1.04E-06	2.32E-08	-1.21E-06
949	569100.00	4177400.00	RECREATIONAL	-6.99E-07	1.73E-08	-8.17E-07
956	569202.00	4177104.00	RECREATIONAL	-1.38E-06	3.17E-08	-1.61E-06
957	569200.00	4177200.00	RECREATIONAL	-1.00E-06	1.89E-08	-1.17E-06
958	569200.00	4177300.00	RECREATIONAL	-7.68E-07	1.48E-08	-8.93E-07
966	569300.00	4176900.00	WORKER	-1.15E-06	2.68E-08	-1.30E-06
967	569300.00	4177000.00	RECREATIONAL	-1.15E-06	2.43E-08	-1.33E-06
978	569400.00	4176700.00	WORKER	-2.17E-06	2.84E-08	-2.50E-06
1032	569600.00	4176900.00	RECREATIONAL	-8.07E-07	1.35E-08	-9.33E-07
1033	569600.00	4177000.00	RECREATIONAL	-6.89E-07	1.21E-08	-7.98E-07
1034	569600.00	4177100.00	RECREATIONAL	-6.08E-07	1.10E-08	-7.04E-07
1035	569600.00	4177200.00	RECREATIONAL	-5.44E-07	1.00E-08	-6.31E-07
1036	569600.00	4177300.00	RECREATIONAL	-4.82E-07	9.17E-09	-5.59E-07
1037	569600.00	4177400.00	RECREATIONAL	-4.25E-07	8.45E-09	-4.94E-07
1043	569600.00	4178000.00	WORKER	-2.12E-07	5.39E-09	-2.48E-07
1056	569705.00	4176207.00	ROAD	-3.44E-06	4.28E-08	-3.97E-06
1060	569700.00	4176600.00	WORKER	-1.14E-06	1.60E-08	-1.32E-06
1061	569700.00	4176700.00	RECREATIONAL	-9.73E-07	1.47E-08	-1.12E-06
1062	569700.00	4176800.00	RECREATIONAL	-8.36E-07	1.35E-08	-9.67E-07
1063	569700.00	4176900.00	RECREATIONAL	-7.19E-07	1.24E-08	-8.33E-07
1064	569700.00	4177000.00	RECREATIONAL	-6.28E-07	1.14E-08	-7.28E-07
1065	569700.00	4177100.00	RECREATIONAL	-5.62E-07	1.04E-08	-6.52E-07
1066	569700.00	4177200.00	RECREATIONAL	-5.06E-07	9.55E-09	-5.88E-07
1067	569700.00	4177300.00	RECREATIONAL	-4.57E-07	8.83E-09	-5.30E-07
1068	569700.00	4177400.00	RECREATIONAL	-4.05E-07	8.20E-09	-4.71E-07
1069	569700.00	4177500.00	RECREATIONAL	-3.58E-07	7.61E-09	-4.16E-07
1072	569700.00	4177800.00	WORKER	-2.53E-07	6.13E-09	-2.95E-07
1073	569700.00	4177900.00	WORKER	-2.28E-07	5.71E-09	-2.67E-07
1074	569700.00	4178000.00	WORKER	-2.10E-07	5.36E-09	-2.45E-07
1087	569800.00	4176200.00	RECREATIONAL	-2.18E-06	2.83E-08	-2.52E-06
1088	569800.00	4176300.00	WORKER	-1.58E-06	2.13E-08	-1.82E-06
1089	569800.00	4176400.00	WORKER	-1.30E-06	1.83E-08	-1.50E-06

**OAK Terminal Modernization**

**Table 2-20. Offsite Worker Cancer Risk Combined Construction & Operations**

Maximum-> **-3.33E-08**    **2.29E-07**    **-3.92E-08**  
 Minimum-> **-3.89E-06**    **1.08E-09**    **-4.51E-06**  
 Max RecID->    **2965**    **3296**    **2965**  
 Exposure Years-> **2025-2049**    **2025-2030**    **2028-2052**  
 Exposure Duration->    **25 Yrs**    **6 Yrs**    **25 Yrs**

RecID	UTM X	UTM Y	Receptor Type	Adult Worker During Construction and Operations	Adult Worker During Construction	Adult Worker During Operations
1090	569800.00	4176500.00	WORKER	-1.12E-06	1.64E-08	-1.30E-06
1091	569800.00	4176600.00	WORKER	-9.84E-07	1.50E-08	-1.14E-06
1092	569800.00	4176700.00	RECREATIONAL	-8.58E-07	1.38E-08	-9.94E-07
1093	569800.00	4176800.00	RECREATIONAL	-7.50E-07	1.27E-08	-8.69E-07
1094	569800.00	4176900.00	RECREATIONAL	-6.57E-07	1.18E-08	-7.62E-07
1095	569800.00	4177000.00	RECREATIONAL	-5.83E-07	1.09E-08	-6.76E-07
1096	569800.00	4177100.00	RECREATIONAL	-5.25E-07	9.99E-09	-6.10E-07
1097	569800.00	4177200.00	RECREATIONAL	-4.77E-07	9.22E-09	-5.54E-07
1098	569800.00	4177300.00	RECREATIONAL	-4.34E-07	8.56E-09	-5.04E-07
1099	569800.00	4177400.00	RECREATIONAL	-3.90E-07	7.95E-09	-4.54E-07
1102	569800.00	4177700.00	WORKER	-2.77E-07	6.54E-09	-3.23E-07
1103	569800.00	4177800.00	WORKER	-2.50E-07	6.12E-09	-2.92E-07
1104	569800.00	4177900.00	WORKER	-2.28E-07	5.70E-09	-2.66E-07
1105	569800.00	4178000.00	WORKER	-2.09E-07	5.36E-09	-2.44E-07
1118	569900.00	4176100.00	WORKER	-2.66E-06	3.54E-08	-3.08E-06
1119	569900.00	4176200.00	WORKER	-1.68E-06	2.40E-08	-1.95E-06
1120	569900.00	4176300.00	WORKER	-1.34E-06	1.99E-08	-1.55E-06
1121	569900.00	4176400.00	WORKER	-1.13E-06	1.74E-08	-1.31E-06
1122	569900.00	4176500.00	WORKER	-9.96E-07	1.57E-08	-1.15E-06
1123	569900.00	4176600.00	WORKER	-8.82E-07	1.43E-08	-1.02E-06
1124	569900.00	4176700.00	WORKER	-7.81E-07	1.32E-08	-9.05E-07
1125	569900.00	4176800.00	RECREATIONAL	-6.92E-07	1.22E-08	-8.03E-07
1126	569900.00	4176900.00	RECREATIONAL	-6.13E-07	1.13E-08	-7.11E-07
1127	569900.00	4177000.00	RECREATIONAL	-5.48E-07	1.05E-08	-6.37E-07
1128	569900.00	4177100.00	RECREATIONAL	-4.98E-07	9.69E-09	-5.78E-07
1129	569900.00	4177200.00	RECREATIONAL	-4.54E-07	8.97E-09	-5.28E-07
1130	569900.00	4177300.00	RECREATIONAL	-4.15E-07	8.34E-09	-4.83E-07
1132	569900.00	4177500.00	WORKER	-3.37E-07	7.33E-09	-3.92E-07
1133	569900.00	4177600.00	WORKER	-3.01E-07	6.88E-09	-3.51E-07
1134	569900.00	4177700.00	WORKER	-2.72E-07	6.49E-09	-3.18E-07
1135	569900.00	4177800.00	WORKER	-2.47E-07	6.04E-09	-2.89E-07
1136	569900.00	4177900.00	WORKER	-2.26E-07	5.65E-09	-2.64E-07
1137	569900.00	4178000.00	WORKER	-2.08E-07	5.31E-09	-2.43E-07
1150	570008.00	4176021.00	WORKER	-2.84E-06	4.02E-08	-3.28E-06
1151	570000.00	4176100.00	WORKER	-1.88E-06	2.81E-08	-2.18E-06
1152	570000.00	4176200.00	WORKER	-1.42E-06	2.24E-08	-1.65E-06
1153	570000.00	4176300.00	WORKER	-1.18E-06	1.92E-08	-1.37E-06

**OAK Terminal Modernization**

**Table 2-20. Offsite Worker Cancer Risk Combined Construction & Operations**

Maximum-> **-3.33E-08**    **2.29E-07**    **-3.92E-08**  
 Minimum-> **-3.89E-06**    **1.08E-09**    **-4.51E-06**  
 Max RecID->    **2965**    **3296**    **2965**  
 Exposure Years-> **2025-2049**    **2025-2030**    **2028-2052**  
 Exposure Duration->    **25 Yrs**    **6 Yrs**    **25 Yrs**

RecID	UTM X	UTM Y	Receptor Type	Adult Worker During Construction and Operations	Adult Worker During Construction	Adult Worker During Operations
1154	570000.00	4176400.00	WORKER	-1.02E-06	1.70E-08	-1.19E-06
1155	570000.00	4176500.00	WORKER	-9.08E-07	1.53E-08	-1.05E-06
1156	570000.00	4176600.00	WORKER	-8.10E-07	1.39E-08	-9.39E-07
1157	570000.00	4176700.00	WORKER	-7.23E-07	1.28E-08	-8.39E-07
1158	570000.00	4176800.00	RECREATIONAL	-6.47E-07	1.18E-08	-7.51E-07
1159	570000.00	4176900.00	RECREATIONAL	-5.80E-07	1.10E-08	-6.73E-07
1160	570000.00	4177000.00	RECREATIONAL	-5.21E-07	1.02E-08	-6.06E-07
1161	570000.00	4177100.00	RECREATIONAL	-4.74E-07	9.41E-09	-5.51E-07
1162	570000.00	4177200.00	RECREATIONAL	-4.35E-07	8.73E-09	-5.06E-07
1163	570000.00	4177300.00	WORKER	-3.99E-07	8.15E-09	-4.64E-07
1164	570000.00	4177400.00	WORKER	-3.63E-07	7.62E-09	-4.23E-07
1165	570000.00	4177500.00	WORKER	-3.28E-07	7.15E-09	-3.82E-07
1166	570000.00	4177600.00	WORKER	-2.96E-07	6.75E-09	-3.45E-07
1167	570000.00	4177700.00	WORKER	-2.68E-07	6.33E-09	-3.13E-07
1168	570000.00	4177800.00	WORKER	-2.45E-07	5.96E-09	-2.86E-07
1169	570000.00	4177900.00	WORKER	-2.24E-07	5.57E-09	-2.61E-07
1170	570000.00	4178000.00	WORKER	-2.07E-07	5.25E-09	-2.42E-07
1184	570100.00	4176000.00	WORKER	-2.17E-06	3.42E-08	-2.52E-06
1185	570100.00	4176100.00	WORKER	-1.55E-06	2.58E-08	-1.80E-06
1186	570100.00	4176200.00	WORKER	-1.26E-06	2.17E-08	-1.47E-06
1187	570100.00	4176300.00	WORKER	-1.08E-06	1.89E-08	-1.25E-06
1188	570100.00	4176400.00	WORKER	-9.48E-07	1.68E-08	-1.10E-06
1189	570100.00	4176500.00	WORKER	-8.47E-07	1.51E-08	-9.83E-07
1190	570100.00	4176600.00	WORKER	-7.61E-07	1.38E-08	-8.83E-07
1191	570100.00	4176700.00	WORKER	-6.82E-07	1.26E-08	-7.92E-07
1192	570100.00	4176800.00	WORKER	-6.14E-07	1.16E-08	-7.14E-07
1193	570100.00	4176900.00	RECREATIONAL	-5.53E-07	1.07E-08	-6.43E-07
1194	570100.00	4177000.00	RECREATIONAL	-5.02E-07	9.96E-09	-5.83E-07
1196	570100.00	4177200.00	WORKER	-4.19E-07	8.56E-09	-4.88E-07
1197	570100.00	4177300.00	WORKER	-3.85E-07	7.99E-09	-4.48E-07
1198	570100.00	4177400.00	WORKER	-3.51E-07	7.43E-09	-4.09E-07
1199	570100.00	4177500.00	WORKER	-3.19E-07	6.99E-09	-3.72E-07
1200	570100.00	4177600.00	WORKER	-2.89E-07	6.59E-09	-3.37E-07
1201	570100.00	4177700.00	WORKER	-2.63E-07	6.22E-09	-3.07E-07
1202	570100.00	4177800.00	WORKER	-2.41E-07	5.86E-09	-2.82E-07
1203	570100.00	4177900.00	WORKER	-2.22E-07	5.51E-09	-2.60E-07
1204	570100.00	4178000.00	WORKER	-2.06E-07	5.22E-09	-2.40E-07

**OAK Terminal Modernization**

**Table 2-20. Offsite Worker Cancer Risk Combined Construction & Operations**

Maximum-> **-3.33E-08**    **2.29E-07**    **-3.92E-08**  
 Minimum-> **-3.89E-06**    **1.08E-09**    **-4.51E-06**  
 Max ReclD->    **2965**    **3296**    **2965**  
 Exposure Years-> **2025-2049**    **2025-2030**    **2028-2052**  
 Exposure Duration->    **25 Yrs**    **6 Yrs**    **25 Yrs**

ReclD	UTM X	UTM Y	Receptor Type	Adult Worker During Construction and Operations	Adult Worker During Construction	Adult Worker During Operations
1218	570200.00	4175900.00	WORKER	-2.72E-06	4.47E-08	-3.15E-06
1219	570200.00	4176000.00	WORKER	-1.74E-06	3.07E-08	-2.02E-06
1220	570200.00	4176100.00	WORKER	-1.40E-06	2.51E-08	-1.62E-06
1221	570200.00	4176200.00	WORKER	-1.18E-06	2.16E-08	-1.37E-06
1222	570200.00	4176300.00	WORKER	-1.03E-06	1.89E-08	-1.19E-06
1223	570200.00	4176400.00	WORKER	-9.05E-07	1.68E-08	-1.05E-06
1224	570200.00	4176500.00	WORKER	-8.10E-07	1.51E-08	-9.41E-07
1225	570200.00	4176600.00	WORKER	-7.29E-07	1.37E-08	-8.47E-07
1226	570200.00	4176700.00	WORKER	-6.57E-07	1.25E-08	-7.64E-07
1227	570200.00	4176800.00	WORKER	-5.92E-07	1.15E-08	-6.88E-07
1228	570200.00	4176900.00	WORKER	-5.36E-07	1.06E-08	-6.24E-07
1229	570200.00	4177000.00	WORKER	-4.86E-07	9.82E-09	-5.65E-07
1230	570200.00	4177100.00	WORKER	-4.44E-07	9.08E-09	-5.17E-07
1231	570200.00	4177200.00	WORKER	-4.07E-07	8.40E-09	-4.74E-07
1232	570200.00	4177300.00	WORKER	-3.74E-07	7.85E-09	-4.36E-07
1233	570200.00	4177400.00	WORKER	-3.42E-07	7.35E-09	-3.99E-07
1234	570200.00	4177500.00	WORKER	-3.11E-07	6.93E-09	-3.63E-07
1235	570200.00	4177600.00	WORKER	-2.83E-07	6.51E-09	-3.30E-07
1236	570200.00	4177700.00	WORKER	-2.59E-07	6.12E-09	-3.02E-07
1237	570200.00	4177800.00	WORKER	-2.38E-07	5.75E-09	-2.78E-07
1238	570200.00	4177900.00	WORKER	-2.19E-07	5.44E-09	-2.56E-07
1239	570200.00	4178000.00	WORKER	-2.03E-07	5.12E-09	-2.37E-07
1253	570312.00	4175819.00	WORKER	-3.15E-06	5.38E-08	-3.66E-06
1254	570300.00	4175900.00	WORKER	-2.10E-06	3.85E-08	-2.44E-06
1255	570300.00	4176000.00	WORKER	-1.62E-06	3.05E-08	-1.89E-06
1256	570300.00	4176100.00	WORKER	-1.35E-06	2.56E-08	-1.57E-06
1257	570300.00	4176200.00	WORKER	-1.16E-06	2.20E-08	-1.35E-06
1258	570300.00	4176300.00	WORKER	-1.02E-06	1.92E-08	-1.18E-06
1259	570300.00	4176400.00	WORKER	-8.98E-07	1.71E-08	-1.04E-06
1260	570300.00	4176500.00	WORKER	-8.01E-07	1.53E-08	-9.31E-07
1261	570300.00	4176600.00	WORKER	-7.20E-07	1.38E-08	-8.36E-07
1262	570300.00	4176700.00	WORKER	-6.48E-07	1.26E-08	-7.53E-07
1264	570300.00	4176900.00	WORKER	-5.27E-07	1.06E-08	-6.13E-07
1265	570300.00	4177000.00	WORKER	-4.78E-07	9.76E-09	-5.56E-07
1266	570300.00	4177100.00	WORKER	-4.35E-07	9.00E-09	-5.07E-07
1267	570300.00	4177200.00	WORKER	-3.99E-07	8.37E-09	-4.65E-07
1268	570300.00	4177300.00	WORKER	-3.66E-07	7.77E-09	-4.26E-07

**OAK Terminal Modernization**

**Table 2-20. Offsite Worker Cancer Risk Combined Construction & Operations**

Maximum-> **-3.33E-08**    **2.29E-07**    **-3.92E-08**  
 Minimum-> **-3.89E-06**    **1.08E-09**    **-4.51E-06**  
 Max RecID->    **2965**    **3296**    **2965**  
 Exposure Years-> **2025-2049**    **2025-2030**    **2028-2052**  
 Exposure Duration->    **25 Yrs**    **6 Yrs**    **25 Yrs**

RecID	UTM X	UTM Y	Receptor Type	Adult Worker During Construction and Operations	Adult Worker During Construction	Adult Worker During Operations
1269	570300.00	4177400.00	WORKER	-3.34E-07	7.27E-09	-3.89E-07
1270	570300.00	4177500.00	WORKER	-3.05E-07	6.82E-09	-3.56E-07
1271	570300.00	4177600.00	WORKER	-2.78E-07	6.41E-09	-3.25E-07
1272	570300.00	4177700.00	WORKER	-2.55E-07	6.06E-09	-2.98E-07
1273	570300.00	4177800.00	WORKER	-2.35E-07	5.67E-09	-2.74E-07
1274	570300.00	4177900.00	WORKER	-2.16E-07	5.38E-09	-2.53E-07
1275	570300.00	4178000.00	WORKER	-2.01E-07	5.09E-09	-2.35E-07
1281	570400.00	4173500.00	RECREATIONAL	-3.25E-06	6.93E-08	-3.78E-06
1282	570400.00	4173600.00	RECREATIONAL	-3.25E-06	7.59E-08	-3.79E-06
1283	570400.00	4173700.00	RECREATIONAL	-3.16E-06	8.22E-08	-3.69E-06
1284	570400.00	4173800.00	RECREATIONAL	-3.15E-06	9.00E-08	-3.68E-06
1285	570400.00	4173900.00	RECREATIONAL	-3.24E-06	1.00E-07	-3.80E-06
1286	570400.00	4174000.00	RECREATIONAL	-3.34E-06	1.12E-07	-3.93E-06
1287	570400.00	4174100.00	RECREATIONAL	-3.32E-06	1.25E-07	-3.92E-06
1288	570400.00	4174200.00	RECREATIONAL	-3.10E-06	1.46E-07	-3.70E-06
1290	570400.00	4175800.00	WORKER	-3.27E-06	5.39E-08	-3.80E-06
1291	570410.00	4175900.00	WORKER	-2.89E-06	4.60E-08	-3.35E-06
1292	570400.00	4176000.00	WORKER	-2.12E-06	3.67E-08	-2.46E-06
1293	570400.00	4176100.00	WORKER	-1.56E-06	2.86E-08	-1.81E-06
1294	570400.00	4176200.00	WORKER	-1.28E-06	2.36E-08	-1.48E-06
1295	570400.00	4176300.00	WORKER	-1.08E-06	2.02E-08	-1.26E-06
1296	570400.00	4176400.00	WORKER	-9.40E-07	1.77E-08	-1.09E-06
1297	570400.00	4176500.00	WORKER	-8.31E-07	1.58E-08	-9.66E-07
1298	570400.00	4176600.00	WORKER	-7.38E-07	1.42E-08	-8.58E-07
1299	570400.00	4176700.00	WORKER	-6.58E-07	1.28E-08	-7.65E-07
1300	570400.00	4176800.00	WORKER	-5.90E-07	1.17E-08	-6.86E-07
1301	570400.00	4176900.00	WORKER	-5.29E-07	1.07E-08	-6.15E-07
1302	570400.00	4177000.00	WORKER	-4.77E-07	9.83E-09	-5.55E-07
1303	570400.00	4177100.00	WORKER	-4.32E-07	9.04E-09	-5.03E-07
1304	570400.00	4177200.00	WORKER	-3.94E-07	8.31E-09	-4.59E-07
1305	570400.00	4177300.00	WORKER	-3.60E-07	7.71E-09	-4.19E-07
1306	570400.00	4177400.00	WORKER	-3.29E-07	7.21E-09	-3.83E-07
1307	570400.00	4177500.00	WORKER	-3.00E-07	6.76E-09	-3.50E-07
1308	570400.00	4177600.00	WORKER	-2.74E-07	6.32E-09	-3.20E-07
1309	570400.00	4177700.00	WORKER	-2.52E-07	5.98E-09	-2.94E-07
1310	570400.00	4177800.00	WORKER	-2.32E-07	5.62E-09	-2.71E-07
1311	570400.00	4177900.00	WORKER	-2.14E-07	5.30E-09	-2.50E-07

**OAK Terminal Modernization**

**Table 2-20. Offsite Worker Cancer Risk Combined Construction & Operations**

Maximum-> **-3.33E-08**    **2.29E-07**    **-3.92E-08**  
 Minimum-> **-3.89E-06**    **1.08E-09**    **-4.51E-06**  
 Max ReclD->    **2965**    **3296**    **2965**  
 Exposure Years-> **2025-2049**    **2025-2030**    **2028-2052**  
 Exposure Duration->    **25 Yrs**    **6 Yrs**    **25 Yrs**

ReclD	UTM X	UTM Y	Receptor Type	Adult Worker During Construction and Operations	Adult Worker During Construction	Adult Worker During Operations
1312	570400.00	4178000.00	WORKER	-1.99E-07	5.01E-09	-2.33E-07
1317	570500.00	4173400.00	RECREATIONAL	-2.77E-06	5.97E-08	-3.21E-06
1318	570500.00	4173500.00	RECREATIONAL	-2.79E-06	6.49E-08	-3.24E-06
1319	570500.00	4173600.00	RECREATIONAL	-2.73E-06	6.99E-08	-3.18E-06
1320	570500.00	4173700.00	RECREATIONAL	-2.67E-06	7.52E-08	-3.13E-06
1321	570500.00	4173800.00	RECREATIONAL	-2.65E-06	8.11E-08	-3.11E-06
1322	570500.00	4173900.00	RECREATIONAL	-2.75E-06	8.99E-08	-3.24E-06
1323	570500.00	4174000.00	RECREATIONAL	-2.88E-06	1.00E-07	-3.40E-06
1324	570500.00	4174100.00	RECREATIONAL	-2.90E-06	1.10E-07	-3.42E-06
1325	570500.00	4174200.00	RECREATIONAL	-2.73E-06	1.23E-07	-3.24E-06
1327	570511.00	4175717.00	WORKER	-3.22E-06	5.88E-08	-3.74E-06
1328	570510.00	4175800.00	WORKER	-3.89E-06	5.29E-08	-4.51E-06
1329	570500.00	4175900.00	WORKER	-2.38E-06	4.04E-08	-2.76E-06
1330	570500.00	4176000.00	WORKER	-2.26E-06	3.91E-08	-2.62E-06
1331	570514.00	4176106.00	WORKER	-2.58E-06	4.12E-08	-3.00E-06
1332	570488.00	4176205.00	WORKER	-1.98E-06	2.90E-08	-2.30E-06
1333	570500.00	4176300.00	WORKER	-1.47E-06	2.33E-08	-1.70E-06
1334	570500.00	4176400.00	WORKER	-1.14E-06	1.95E-08	-1.32E-06
1335	570500.00	4176500.00	WORKER	-9.47E-07	1.69E-08	-1.10E-06
1336	570500.00	4176600.00	WORKER	-8.15E-07	1.50E-08	-9.48E-07
1337	570500.00	4176700.00	WORKER	-7.12E-07	1.35E-08	-8.28E-07
1338	570500.00	4176800.00	WORKER	-6.24E-07	1.21E-08	-7.26E-07
1339	570500.00	4176900.00	WORKER	-5.49E-07	1.10E-08	-6.39E-07
1340	570500.00	4177000.00	WORKER	-4.85E-07	9.98E-09	-5.65E-07
1341	570500.00	4177100.00	WORKER	-4.33E-07	9.14E-09	-5.05E-07
1342	570500.00	4177200.00	WORKER	-3.91E-07	8.38E-09	-4.56E-07
1343	570500.00	4177300.00	WORKER	-3.55E-07	7.75E-09	-4.14E-07
1344	570500.00	4177400.00	WORKER	-3.24E-07	7.20E-09	-3.78E-07
1345	570500.00	4177500.00	WORKER	-2.96E-07	6.71E-09	-3.45E-07
1346	570500.00	4177600.00	WORKER	-2.71E-07	6.29E-09	-3.16E-07
1347	570500.00	4177700.00	WORKER	-2.49E-07	5.95E-09	-2.91E-07
1348	570500.00	4177800.00	WORKER	-2.31E-07	5.56E-09	-2.70E-07
1349	570500.00	4177900.00	WORKER	-2.12E-07	5.25E-09	-2.48E-07
1350	570500.00	4178000.00	WORKER	-1.97E-07	4.99E-09	-2.31E-07
1354	570600.00	4173300.00	RECREATIONAL	-2.38E-06	5.24E-08	-2.77E-06
1355	570600.00	4173400.00	RECREATIONAL	-2.44E-06	5.67E-08	-2.84E-06
1356	570600.00	4173500.00	RECREATIONAL	-2.41E-06	6.09E-08	-2.81E-06

**OAK Terminal Modernization**

**Table 2-20. Offsite Worker Cancer Risk Combined Construction & Operations**

Maximum-> **-3.33E-08**    **2.29E-07**    **-3.92E-08**  
 Minimum-> **-3.89E-06**    **1.08E-09**    **-4.51E-06**  
 Max ReclD->    **2965**    **3296**    **2965**  
 Exposure Years-> **2025-2049**    **2025-2030**    **2028-2052**  
 Exposure Duration->    **25 Yrs**    **6 Yrs**    **25 Yrs**

ReclD	UTM X	UTM Y	Receptor Type	Adult Worker During Construction and Operations	Adult Worker During Construction	Adult Worker During Operations
1357	570600.00	4173600.00	RECREATIONAL	-2.35E-06	6.49E-08	-2.75E-06
1358	570600.00	4173700.00	RECREATIONAL	-2.35E-06	7.03E-08	-2.75E-06
1359	570600.00	4173800.00	RECREATIONAL	-2.34E-06	7.52E-08	-2.74E-06
1360	570600.00	4173900.00	RECREATIONAL	-2.37E-06	8.02E-08	-2.79E-06
1361	570600.00	4174000.00	RECREATIONAL	-2.49E-06	8.84E-08	-2.93E-06
1362	570600.00	4174100.00	RECREATIONAL	-2.54E-06	9.73E-08	-3.01E-06
1363	570600.00	4174200.00	RECREATIONAL	-2.44E-06	1.06E-07	-2.90E-06
1365	570600.00	4174400.00	WORKER	-1.98E-06	1.19E-07	-2.39E-06
1366	570600.00	4175700.00	WORKER	-2.83E-06	5.66E-08	-3.29E-06
1367	570600.00	4175800.00	WORKER	-2.81E-06	4.79E-08	-3.26E-06
1368	570590.00	4175915.00	WORKER	-3.04E-06	4.71E-08	-3.53E-06
1369	570600.00	4176000.00	WORKER	-2.19E-06	4.00E-08	-2.55E-06
1370	570600.00	4176100.00	WORKER	-1.76E-06	3.05E-08	-2.04E-06
1371	570600.00	4176200.00	WORKER	-1.82E-06	2.71E-08	-2.10E-06
1372	570600.00	4176300.00	WORKER	-2.19E-06	2.77E-08	-2.54E-06
1373	570621.00	4176400.00	WORKER	-2.73E-06	3.02E-08	-3.15E-06
1374	570600.00	4176500.00	WORKER	-1.66E-06	2.22E-08	-1.92E-06
1375	570600.00	4176600.00	WORKER	-1.14E-06	1.75E-08	-1.32E-06
1376	570600.00	4176700.00	WORKER	-8.92E-07	1.49E-08	-1.04E-06
1377	570600.00	4176800.00	WORKER	-7.37E-07	1.32E-08	-8.57E-07
1378	570600.00	4176900.00	WORKER	-6.18E-07	1.17E-08	-7.19E-07
1379	570600.00	4177000.00	WORKER	-5.19E-07	1.04E-08	-6.04E-07
1380	570600.00	4177100.00	WORKER	-4.42E-07	9.29E-09	-5.15E-07
1381	570600.00	4177200.00	WORKER	-3.89E-07	8.43E-09	-4.54E-07
1382	570600.00	4177300.00	WORKER	-3.51E-07	7.77E-09	-4.09E-07
1383	570600.00	4177400.00	WORKER	-3.20E-07	7.20E-09	-3.73E-07
1384	570600.00	4177500.00	WORKER	-2.92E-07	6.73E-09	-3.41E-07
1385	570600.00	4177600.00	WORKER	-2.68E-07	6.31E-09	-3.13E-07
1386	570600.00	4177700.00	WORKER	-2.47E-07	5.92E-09	-2.88E-07
1387	570600.00	4177800.00	WORKER	-2.28E-07	5.58E-09	-2.67E-07
1388	570600.00	4177900.00	WORKER	-2.12E-07	5.29E-09	-2.47E-07
1389	570600.00	4178000.00	WORKER	-1.97E-07	4.98E-09	-2.30E-07
1393	570700.00	4173300.00	RECREATIONAL	-2.14E-06	5.00E-08	-2.49E-06
1394	570700.00	4173400.00	RECREATIONAL	-2.16E-06	5.38E-08	-2.51E-06
1395	570700.00	4173500.00	RECREATIONAL	-2.13E-06	5.76E-08	-2.49E-06
1396	570700.00	4173600.00	RECREATIONAL	-2.10E-06	6.16E-08	-2.46E-06
1397	570700.00	4173700.00	RECREATIONAL	-2.06E-06	6.49E-08	-2.42E-06

**OAK Terminal Modernization**

**Table 2-20. Offsite Worker Cancer Risk Combined Construction & Operations**

Maximum-> **-3.33E-08**    **2.29E-07**    **-3.92E-08**  
 Minimum-> **-3.89E-06**    **1.08E-09**    **-4.51E-06**  
 Max ReclD->    **2965**    **3296**    **2965**  
 Exposure Years-> **2025-2049**    **2025-2030**    **2028-2052**  
 Exposure Duration->    **25 Yrs**    **6 Yrs**    **25 Yrs**

ReclD	UTM X	UTM Y	Receptor Type	Adult Worker During Construction and Operations	Adult Worker During Construction	Adult Worker During Operations
1398	570700.00	4173800.00	RECREATIONAL	-1.99E-06	6.63E-08	-2.34E-06
1399	570700.00	4173900.00	RECREATIONAL	-1.97E-06	6.81E-08	-2.32E-06
1400	570700.00	4174000.00	RECREATIONAL	-2.13E-06	7.66E-08	-2.51E-06
1401	570700.00	4174100.00	RECREATIONAL	-2.23E-06	8.50E-08	-2.63E-06
1402	570700.00	4174200.00	RECREATIONAL	-2.19E-06	9.29E-08	-2.60E-06
1403	570700.00	4174300.00	RECREATIONAL	-2.05E-06	9.93E-08	-2.45E-06
1404	570700.00	4174400.00	WORKER	-1.86E-06	1.02E-07	-2.23E-06
1405	570700.00	4174500.00	WORKER	-1.69E-06	1.02E-07	-2.04E-06
1406	570700.00	4175600.00	WORKER	-2.25E-06	5.59E-08	-2.63E-06
1407	570700.00	4175700.00	WORKER	-1.95E-06	4.39E-08	-2.27E-06
1408	570700.00	4175800.00	WORKER	-2.15E-06	4.22E-08	-2.49E-06
1409	570700.00	4175900.00	WORKER	-3.39E-06	4.54E-08	-3.90E-06
1410	570700.00	4176000.00	WORKER	-2.14E-06	3.45E-08	-2.48E-06
1411	570700.00	4176100.00	WORKER	-1.53E-06	2.74E-08	-1.77E-06
1412	570700.00	4176200.00	WORKER	-1.38E-06	2.40E-08	-1.60E-06
1413	570700.00	4176300.00	WORKER	-1.33E-06	2.22E-08	-1.54E-06
1414	570700.00	4176400.00	WORKER	-1.44E-06	2.12E-08	-1.67E-06
1415	570700.00	4176500.00	WORKER	-1.70E-06	2.18E-08	-1.97E-06
1416	570700.00	4176600.00	WORKER	-2.19E-06	2.44E-08	-2.53E-06
1417	570670.00	4176700.00	WORKER	-1.50E-06	1.94E-08	-1.74E-06
1418	570700.00	4176800.00	WORKER	-1.34E-06	1.76E-08	-1.55E-06
1419	570700.00	4176900.00	WORKER	-9.35E-07	1.41E-08	-1.08E-06
1420	570700.00	4177000.00	WORKER	-6.47E-07	1.14E-08	-7.52E-07
1421	570700.00	4177100.00	WORKER	-4.59E-07	9.50E-09	-5.35E-07
1422	570700.00	4177200.00	WORKER	-3.88E-07	8.55E-09	-4.52E-07
1423	570700.00	4177300.00	WORKER	-3.44E-07	7.79E-09	-4.02E-07
1424	570700.00	4177400.00	WORKER	-3.14E-07	7.27E-09	-3.66E-07
1425	570700.00	4177500.00	WORKER	-2.88E-07	6.73E-09	-3.36E-07
1426	570700.00	4177600.00	WORKER	-2.64E-07	6.33E-09	-3.09E-07
1427	570700.00	4177700.00	WORKER	-2.43E-07	5.92E-09	-2.84E-07
1428	570700.00	4177800.00	WORKER	-2.26E-07	5.63E-09	-2.65E-07
1429	570700.00	4177900.00	WORKER	-2.10E-07	5.29E-09	-2.46E-07
1430	570700.00	4178000.00	WORKER	-1.96E-07	4.98E-09	-2.29E-07
1433	570800.00	4173200.00	RECREATIONAL	-1.89E-06	4.44E-08	-2.20E-06
1434	570800.00	4173300.00	RECREATIONAL	-1.93E-06	4.78E-08	-2.25E-06
1435	570800.00	4173400.00	RECREATIONAL	-1.92E-06	5.11E-08	-2.24E-06
1436	570800.00	4173500.00	RECREATIONAL	-1.88E-06	5.40E-08	-2.20E-06

**OAK Terminal Modernization**

**Table 2-20. Offsite Worker Cancer Risk Combined Construction & Operations**

Maximum-> **-3.33E-08**    **2.29E-07**    **-3.92E-08**  
 Minimum-> **-3.89E-06**    **1.08E-09**    **-4.51E-06**  
 Max ReclD->    **2965**    **3296**    **2965**  
 Exposure Years-> **2025-2049**    **2025-2030**    **2028-2052**  
 Exposure Duration->    **25 Yrs**    **6 Yrs**    **25 Yrs**

ReclD	UTM X	UTM Y	Receptor Type	Adult Worker During Construction and Operations	Adult Worker During Construction	Adult Worker During Operations
1437	570800.00	4173600.00	RECREATIONAL	-1.89E-06	5.81E-08	-2.22E-06
1438	570800.00	4173700.00	RECREATIONAL	-1.89E-06	6.23E-08	-2.22E-06
1439	570800.00	4173800.00	RECREATIONAL	-1.88E-06	6.53E-08	-2.22E-06
1440	570800.00	4173900.00	RECREATIONAL	-1.94E-06	6.93E-08	-2.28E-06
1441	570800.00	4174000.00	RECREATIONAL	-1.97E-06	7.19E-08	-2.32E-06
1442	570800.00	4174100.00	RECREATIONAL	-2.01E-06	7.66E-08	-2.38E-06
1443	570800.00	4174200.00	RECREATIONAL	-1.98E-06	8.19E-08	-2.35E-06
1444	570800.00	4174300.00	RECREATIONAL	-1.89E-06	8.68E-08	-2.26E-06
1446	570800.00	4174500.00	WORKER	-1.60E-06	8.88E-08	-1.93E-06
1447	570800.00	4174600.00	WORKER	-1.49E-06	8.73E-08	-1.80E-06
1448	570805.00	4175505.00	WORKER	-1.80E-06	5.12E-08	-2.11E-06
1449	570800.00	4175600.00	WORKER	-1.53E-06	4.35E-08	-1.77E-06
1450	570800.00	4175700.00	WORKER	-1.46E-06	3.82E-08	-1.69E-06
1451	570800.00	4175800.00	WORKER	-1.65E-06	3.57E-08	-1.90E-06
1452	570800.00	4175900.00	WORKER	-2.19E-06	3.52E-08	-2.53E-06
1453	570790.00	4176017.00	WORKER	-2.71E-06	3.56E-08	-3.14E-06
1454	570800.00	4176100.00	WORKER	-1.54E-06	2.67E-08	-1.79E-06
1455	570800.00	4176200.00	WORKER	-1.23E-06	2.28E-08	-1.43E-06
1456	570800.00	4176300.00	WORKER	-1.13E-06	2.05E-08	-1.31E-06
1457	570800.00	4176400.00	WORKER	-1.11E-06	1.90E-08	-1.29E-06
1458	570800.00	4176500.00	WORKER	-1.11E-06	1.79E-08	-1.29E-06
1459	570800.00	4176600.00	WORKER	-1.17E-06	1.73E-08	-1.35E-06
1460	570800.00	4176700.00	WORKER	-1.30E-06	1.74E-08	-1.50E-06
1461	570800.00	4176800.00	WORKER	-1.53E-06	1.83E-08	-1.77E-06
1462	570800.00	4176900.00	WORKER	-1.78E-06	1.95E-08	-2.06E-06
1463	570800.00	4177000.00	WORKER	-1.01E-06	1.39E-08	-1.17E-06
1464	570800.00	4177100.00	WORKER	-4.67E-07	9.63E-09	-5.44E-07
1465	570800.00	4177200.00	WORKER	-3.81E-07	8.54E-09	-4.45E-07
1466	570800.00	4177300.00	WORKER	-3.40E-07	7.89E-09	-3.97E-07
1467	570800.00	4177400.00	WORKER	-3.09E-07	7.31E-09	-3.61E-07
1468	570800.00	4177500.00	WORKER	-2.67E-07	6.55E-09	-3.12E-07
1469	570800.00	4177600.00	WORKER	-2.60E-07	6.37E-09	-3.04E-07
1470	570800.00	4177700.00	WORKER	-2.41E-07	5.96E-09	-2.81E-07
1471	570800.00	4177800.00	WORKER	-2.24E-07	5.65E-09	-2.62E-07
1472	570800.00	4177900.00	WORKER	-2.09E-07	5.29E-09	-2.45E-07
1473	570800.00	4178000.00	WORKER	-1.95E-07	4.98E-09	-2.28E-07
1476	570900.00	4173200.00	RECREATIONAL	-1.72E-06	4.26E-08	-2.01E-06

**OAK Terminal Modernization**

**Table 2-20. Offsite Worker Cancer Risk Combined Construction & Operations**

Maximum-> -3.33E-08 2.29E-07 -3.92E-08  
 Minimum-> -3.89E-06 1.08E-09 -4.51E-06  
 Max ReclD-> 2965 3296 2965  
 Exposure Years-> 2025-2049 2025-2030 2028-2052  
 Exposure Duration-> 25 Yrs 6 Yrs 25 Yrs

ReclD	UTM X	UTM Y	Receptor Type	Adult Worker During Construction and Operations	Adult Worker During Construction	Adult Worker During Operations
1477	570900.00	4173300.00	RECREATIONAL	-1.74E-06	4.55E-08	-2.03E-06
1478	570900.00	4173400.00	RECREATIONAL	-1.70E-06	4.77E-08	-1.98E-06
1479	570900.00	4173500.00	RECREATIONAL	-1.70E-06	5.09E-08	-1.99E-06
1480	570900.00	4173600.00	RECREATIONAL	-1.70E-06	5.46E-08	-2.00E-06
1481	570900.00	4173700.00	RECREATIONAL	-1.70E-06	5.81E-08	-2.01E-06
1482	570900.00	4173800.00	RECREATIONAL	-1.70E-06	6.06E-08	-2.01E-06
1483	570900.00	4173900.00	RECREATIONAL	-1.76E-06	6.43E-08	-2.08E-06
1484	570900.00	4174000.00	RECREATIONAL	-1.85E-06	6.89E-08	-2.19E-06
1485	570900.00	4174100.00	WORKER	-1.89E-06	7.16E-08	-2.23E-06
1486	570900.00	4174200.00	WORKER	-1.84E-06	7.42E-08	-2.18E-06
1487	570900.00	4174300.00	WORKER	-1.75E-06	7.67E-08	-2.08E-06
1488	570900.00	4174400.00	WORKER	-1.63E-06	7.77E-08	-1.94E-06
1489	570900.00	4174500.00	WORKER	-1.51E-06	7.77E-08	-1.81E-06
1490	570900.00	4174600.00	WORKER	-1.42E-06	7.65E-08	-1.70E-06
1491	570907.00	4175410.00	WORKER	-1.86E-06	5.73E-08	-2.18E-06
1492	570900.00	4175500.00	WORKER	-1.47E-06	4.45E-08	-1.72E-06
1493	570900.00	4175600.00	WORKER	-1.34E-06	3.82E-08	-1.57E-06
1494	570900.00	4175700.00	WORKER	-1.33E-06	3.45E-08	-1.55E-06
1495	570900.00	4175800.00	WORKER	-1.43E-06	3.21E-08	-1.66E-06
1496	570900.00	4175900.00	WORKER	-1.70E-06	3.09E-08	-1.97E-06
1497	570900.00	4176000.00	WORKER	-2.82E-06	3.43E-08	-3.26E-06
1498	570900.00	4176100.00	WORKER	-1.91E-06	2.82E-08	-2.21E-06
1499	570900.00	4176200.00	WORKER	-1.22E-06	2.23E-08	-1.42E-06
1500	570900.00	4176300.00	WORKER	-1.04E-06	1.97E-08	-1.20E-06
1501	570900.00	4176400.00	WORKER	-9.55E-07	1.79E-08	-1.11E-06
1502	570900.00	4176500.00	WORKER	-9.09E-07	1.66E-08	-1.06E-06
1503	570900.00	4176600.00	WORKER	-8.86E-07	1.55E-08	-1.03E-06
1504	570900.00	4176700.00	WORKER	-8.86E-07	1.47E-08	-1.03E-06
1505	570900.00	4176800.00	WORKER	-8.88E-07	1.41E-08	-1.03E-06
1506	570900.00	4176900.00	WORKER	-8.32E-07	1.32E-08	-9.65E-07
1507	570900.00	4177000.00	WORKER	-6.10E-07	1.13E-08	-7.10E-07
1508	570900.00	4177100.00	WORKER	-4.39E-07	9.54E-09	-5.12E-07
1509	570900.00	4177200.00	WORKER	-3.71E-07	8.61E-09	-4.33E-07
1510	570900.00	4177300.00	WORKER	-3.31E-07	7.88E-09	-3.87E-07
1511	570900.00	4177400.00	WORKER	-3.02E-07	7.33E-09	-3.53E-07
1512	570900.00	4177500.00	WORKER	-2.77E-07	6.84E-09	-3.24E-07
1513	570900.00	4177600.00	WORKER	-2.56E-07	6.42E-09	-2.99E-07

**OAK Terminal Modernization**

**Table 2-20. Offsite Worker Cancer Risk Combined Construction & Operations**

Maximum-> **-3.33E-08**    **2.29E-07**    **-3.92E-08**  
 Minimum-> **-3.89E-06**    **1.08E-09**    **-4.51E-06**  
 Max ReclD->    **2965**    **3296**    **2965**  
 Exposure Years-> **2025-2049**    **2025-2030**    **2028-2052**  
 Exposure Duration->    **25 Yrs**    **6 Yrs**    **25 Yrs**

ReclD	UTM X	UTM Y	Receptor Type	Adult Worker During Construction and Operations	Adult Worker During Construction	Adult Worker During Operations
1514	570900.00	4177700.00	WORKER	-2.37E-07	6.03E-09	-2.77E-07
1515	570900.00	4177800.00	WORKER	-2.20E-07	5.67E-09	-2.58E-07
1516	570900.00	4177900.00	WORKER	-2.06E-07	5.31E-09	-2.42E-07
1517	570900.00	4178000.00	WORKER	-1.93E-07	5.02E-09	-2.26E-07
1520	571000.00	4173200.00	RECREATIONAL	-1.58E-06	4.08E-08	-1.84E-06
1521	571000.00	4173300.00	RECREATIONAL	-1.58E-06	4.34E-08	-1.85E-06
1522	571000.00	4173400.00	RECREATIONAL	-1.55E-06	4.55E-08	-1.82E-06
1523	571000.00	4173500.00	RECREATIONAL	-1.55E-06	4.83E-08	-1.81E-06
1524	571000.00	4173600.00	RECREATIONAL	-1.54E-06	5.09E-08	-1.81E-06
1525	571000.00	4173700.00	RECREATIONAL	-1.54E-06	5.38E-08	-1.81E-06
1526	571000.00	4173800.00	RECREATIONAL	-1.55E-06	5.62E-08	-1.82E-06
1527	571000.00	4173900.00	WORKER	-1.62E-06	5.99E-08	-1.91E-06
1528	571000.00	4174000.00	WORKER	-1.68E-06	6.24E-08	-1.99E-06
1529	571000.00	4174100.00	WORKER	-1.73E-06	6.47E-08	-2.04E-06
1530	571000.00	4174200.00	WORKER	-1.70E-06	6.68E-08	-2.01E-06
1531	571000.00	4174300.00	WORKER	-1.63E-06	6.82E-08	-1.93E-06
1532	571000.00	4174400.00	WORKER	-1.53E-06	6.89E-08	-1.82E-06
1533	571000.00	4174500.00	WORKER	-1.43E-06	6.88E-08	-1.71E-06
1534	571000.00	4174600.00	WORKER	-1.35E-06	6.80E-08	-1.61E-06
1535	571000.00	4174700.00	WORKER	-1.27E-06	6.70E-08	-1.53E-06
1536	571008.00	4175316.00	WORKER	-1.71E-06	5.81E-08	-2.02E-06
1537	571000.00	4175400.00	WORKER	-1.35E-06	4.59E-08	-1.59E-06
1538	571000.00	4175500.00	WORKER	-1.22E-06	3.89E-08	-1.44E-06
1539	571000.00	4175600.00	WORKER	-1.18E-06	3.47E-08	-1.39E-06
1540	571000.00	4175700.00	WORKER	-1.18E-06	3.17E-08	-1.38E-06
1541	571000.00	4175800.00	WORKER	-1.24E-06	2.95E-08	-1.45E-06
1542	571000.00	4175900.00	WORKER	-1.40E-06	2.82E-08	-1.63E-06
1543	571000.00	4176000.00	WORKER	-1.91E-06	2.87E-08	-2.21E-06
1544	571028.00	4176085.00	WORKER	-3.46E-06	3.52E-08	-3.99E-06
1551	571000.00	4176800.00	WORKER	-6.78E-07	1.27E-08	-7.89E-07
1552	571000.00	4176900.00	WORKER	-6.03E-07	1.17E-08	-7.02E-07
1553	571000.00	4177000.00	WORKER	-5.00E-07	1.05E-08	-5.83E-07
1554	571000.00	4177100.00	WORKER	-4.09E-07	9.39E-09	-4.77E-07
1555	571000.00	4177200.00	WORKER	-3.57E-07	8.60E-09	-4.17E-07
1556	571000.00	4177300.00	WORKER	-3.23E-07	7.90E-09	-3.77E-07
1557	571000.00	4177400.00	WORKER	-2.94E-07	7.35E-09	-3.44E-07
1558	571000.00	4177500.00	WORKER	-2.71E-07	6.88E-09	-3.17E-07

**OAK Terminal Modernization**

**Table 2-20. Offsite Worker Cancer Risk Combined Construction & Operations**

Maximum-> **-3.33E-08**    **2.29E-07**    **-3.92E-08**  
 Minimum-> **-3.89E-06**    **1.08E-09**    **-4.51E-06**  
 Max RecID->    **2965**    **3296**    **2965**  
 Exposure Years-> **2025-2049**    **2025-2030**    **2028-2052**  
 Exposure Duration->    **25 Yrs**    **6 Yrs**    **25 Yrs**

RecID	UTM X	UTM Y	Receptor Type	Adult Worker During Construction and Operations	Adult Worker During Construction	Adult Worker During Operations
1559	571000.00	4177600.00	WORKER	-2.50E-07	6.44E-09	-2.93E-07
1560	571000.00	4177700.00	WORKER	-2.33E-07	6.08E-09	-2.72E-07
1561	571000.00	4177800.00	WORKER	-2.17E-07	5.69E-09	-2.54E-07
1562	571000.00	4177900.00	WORKER	-2.03E-07	5.36E-09	-2.38E-07
1563	571000.00	4178000.00	WORKER	-1.91E-07	5.09E-09	-2.24E-07
1566	566000.00	4178750.00	RECREATIONAL	-9.44E-08	2.88E-09	-1.11E-07
1591	566500.00	4180000.00	SCHOOL	-6.04E-08	1.95E-09	-7.10E-08
1601	566750.00	4180000.00	WORKER	-6.13E-08	1.93E-09	-7.20E-08
1602	566750.00	4180250.00	WORKER	-5.61E-08	1.80E-09	-6.58E-08
1606	567000.00	4178750.00	RECREATIONAL	-1.03E-07	3.12E-09	-1.21E-07
1653	568000.00	4180500.00	WORKER	-5.69E-08	1.70E-09	-6.67E-08
1662	568250.00	4180250.00	WORKER	-6.22E-08	1.83E-09	-7.30E-08
1663	568250.00	4180500.00	WORKER	-5.84E-08	1.70E-09	-6.85E-08
1669	568500.00	4179500.00	WORKER	-8.02E-08	2.33E-09	-9.41E-08
1670	568500.00	4179750.00	WORKER	-7.30E-08	2.12E-09	-8.56E-08
1671	568500.00	4180000.00	WORKER	-6.71E-08	1.96E-09	-7.87E-08
1672	568500.00	4180250.00	WORKER	-6.17E-08	1.83E-09	-7.24E-08
1673	568500.00	4180500.00	WORKER	-5.68E-08	1.70E-09	-6.67E-08
1679	568750.00	4179500.00	WORKER	-7.98E-08	2.28E-09	-9.35E-08
1680	568750.00	4179750.00	WORKER	-7.20E-08	2.12E-09	-8.45E-08
1681	568750.00	4180000.00	WORKER	-6.60E-08	1.96E-09	-7.75E-08
1682	568750.00	4180250.00	WORKER	-6.06E-08	1.83E-09	-7.12E-08
1683	568750.00	4180500.00	WORKER	-5.61E-08	1.68E-09	-6.59E-08
1688	569000.00	4179250.00	RECREATIONAL	-9.02E-08	2.56E-09	-1.06E-07
1690	569000.00	4179750.00	WORKER	-7.41E-08	2.09E-09	-8.69E-08
1691	569000.00	4180000.00	WORKER	-6.84E-08	1.94E-09	-8.02E-08
1692	569000.00	4180250.00	WORKER	-6.31E-08	1.78E-09	-7.39E-08
1693	569000.00	4180500.00	WORKER	-5.84E-08	1.65E-09	-6.85E-08
1697	569250.00	4179000.00	RECREATIONAL	-1.08E-07	2.85E-09	-1.27E-07
1698	569250.00	4179250.00	WORKER	-9.70E-08	2.59E-09	-1.14E-07
1699	569250.00	4179500.00	WORKER	-8.77E-08	2.36E-09	-1.03E-07
1700	569250.00	4179750.00	WORKER	-7.90E-08	2.14E-09	-9.25E-08
1701	569250.00	4180000.00	WORKER	-7.35E-08	1.99E-09	-8.60E-08
1702	569250.00	4180250.00	WORKER	-6.75E-08	1.83E-09	-7.91E-08
1703	569250.00	4180500.00	WORKER	-6.18E-08	1.67E-09	-7.24E-08
1704	569500.00	4178250.00	WORKER	-1.76E-07	4.47E-09	-2.06E-07
1706	569500.00	4178750.00	WORKER	-1.28E-07	3.35E-09	-1.50E-07

**OAK Terminal Modernization**

**Table 2-20. Offsite Worker Cancer Risk Combined Construction & Operations**

Maximum-> **-3.33E-08**    **2.29E-07**    **-3.92E-08**  
 Minimum-> **-3.89E-06**    **1.08E-09**    **-4.51E-06**  
 Max ReclD->    **2965**    **3296**    **2965**  
 Exposure Years-> **2025-2049**    **2025-2030**    **2028-2052**  
 Exposure Duration->    **25 Yrs**    **6 Yrs**    **25 Yrs**

ReclD	UTM X	UTM Y	Receptor Type	Adult Worker During Construction and Operations	Adult Worker During Construction	Adult Worker During Operations
1707	569500.00	4179000.00	WORKER	-1.13E-07	3.00E-09	-1.32E-07
1708	569500.00	4179250.00	WORKER	-1.01E-07	2.69E-09	-1.18E-07
1709	569500.00	4179500.00	WORKER	-9.11E-08	2.46E-09	-1.07E-07
1710	569500.00	4179750.00	WORKER	-8.26E-08	2.27E-09	-9.67E-08
1712	569500.00	4180250.00	WORKER	-7.00E-08	1.94E-09	-8.20E-08
1713	569500.00	4180500.00	WORKER	-6.34E-08	1.75E-09	-7.42E-08
1714	569750.00	4178250.00	WORKER	-1.74E-07	4.57E-09	-2.03E-07
1715	569750.00	4178500.00	WORKER	-1.48E-07	3.97E-09	-1.73E-07
1716	569750.00	4178750.00	WORKER	-1.30E-07	3.47E-09	-1.52E-07
1717	569750.00	4179000.00	WORKER	-1.15E-07	3.16E-09	-1.35E-07
1718	569750.00	4179250.00	WORKER	-1.03E-07	2.79E-09	-1.21E-07
1719	569750.00	4179500.00	WORKER	-9.19E-08	2.56E-09	-1.08E-07
1720	569750.00	4179750.00	WORKER	-8.41E-08	2.37E-09	-9.86E-08
1721	569750.00	4180000.00	WORKER	-7.67E-08	2.12E-09	-8.99E-08
1722	569750.00	4180250.00	SCHOOL	-6.93E-08	1.99E-09	-8.13E-08
1724	570000.00	4178250.00	WORKER	-1.72E-07	4.54E-09	-2.01E-07
1725	570000.00	4178500.00	WORKER	-1.48E-07	3.99E-09	-1.73E-07
1726	570000.00	4178750.00	WORKER	-1.28E-07	3.57E-09	-1.50E-07
1727	570000.00	4179000.00	WORKER	-1.14E-07	3.21E-09	-1.34E-07
1728	570000.00	4179250.00	WORKER	-1.03E-07	2.85E-09	-1.21E-07
1729	570000.00	4179500.00	WORKER	-9.30E-08	2.61E-09	-1.09E-07
1730	570000.00	4179750.00	WORKER	-8.58E-08	2.40E-09	-1.01E-07
1731	570000.00	4180000.00	WORKER	-7.83E-08	2.17E-09	-9.18E-08
1734	570250.00	4178250.00	WORKER	-1.70E-07	4.46E-09	-1.98E-07
1735	570250.00	4178500.00	WORKER	-1.43E-07	3.86E-09	-1.68E-07
1736	570250.00	4178750.00	WORKER	-1.27E-07	3.55E-09	-1.49E-07
1737	570250.00	4179000.00	WORKER	-1.13E-07	3.21E-09	-1.32E-07
1738	570250.00	4179250.00	WORKER	-1.01E-07	2.87E-09	-1.18E-07
1739	570250.00	4179500.00	WORKER	-9.17E-08	2.61E-09	-1.07E-07
1741	570250.00	4180000.00	WORKER	-7.78E-08	2.20E-09	-9.11E-08
1744	570500.00	4178250.00	WORKER	-1.67E-07	4.36E-09	-1.95E-07
1745	570500.00	4178500.00	WORKER	-1.43E-07	3.84E-09	-1.68E-07
1746	570500.00	4178750.00	WORKER	-1.26E-07	3.45E-09	-1.48E-07
1747	570500.00	4179000.00	WORKER	-1.12E-07	3.13E-09	-1.31E-07
1749	570500.00	4179500.00	SCHOOL	-9.00E-08	2.61E-09	-1.05E-07
1754	570750.00	4178250.00	WORKER	-1.66E-07	4.33E-09	-1.95E-07
1755	570750.00	4178500.00	WORKER	-1.44E-07	3.81E-09	-1.69E-07

**OAK Terminal Modernization**

**Table 2-20. Offsite Worker Cancer Risk Combined Construction & Operations**

Maximum-> **-3.33E-08**    **2.29E-07**    **-3.92E-08**  
 Minimum-> **-3.89E-06**    **1.08E-09**    **-4.51E-06**  
 Max RecID->    **2965**    **3296**    **2965**  
 Exposure Years-> **2025-2049**    **2025-2030**    **2028-2052**  
 Exposure Duration->    **25 Yrs**    **6 Yrs**    **25 Yrs**

RecID	UTM X	UTM Y	Receptor Type	Adult Worker During Construction and Operations	Adult Worker During Construction	Adult Worker During Operations
1756	570750.00	4178750.00	WORKER	-1.27E-07	3.37E-09	-1.48E-07
1764	571000.00	4178250.00	WORKER	-1.64E-07	4.42E-09	-1.92E-07
1765	571000.00	4178500.00	WORKER	-1.43E-07	3.83E-09	-1.68E-07
1766	571000.00	4178750.00	WORKER	-1.27E-07	3.41E-09	-1.49E-07
1774	571250.00	4178250.00	WORKER	-1.60E-07	4.47E-09	-1.88E-07
1775	571250.00	4178500.00	WORKER	-1.41E-07	3.98E-09	-1.65E-07
1784	571500.00	4178250.00	WORKER	-1.58E-07	4.61E-09	-1.85E-07
1785	571500.00	4178500.00	WORKER	-1.39E-07	4.07E-09	-1.63E-07
1786	571500.00	4178750.00	SCHOOL	-1.24E-07	3.63E-09	-1.45E-07
1796	571750.00	4178750.00	SCHOOL	-1.22E-07	3.66E-09	-1.44E-07
1874	571250.00	4178000.00	WORKER	-1.85E-07	5.14E-09	-2.17E-07
1875	571250.00	4177750.00	WORKER	-2.16E-07	5.96E-09	-2.54E-07
1876	571250.00	4177500.00	WORKER	-2.58E-07	6.90E-09	-3.02E-07
1877	571250.00	4177250.00	WORKER	-3.14E-07	8.14E-09	-3.68E-07
1879	571250.00	4176750.00	SCHOOL	-5.20E-07	1.19E-08	-6.06E-07
1882	571250.00	4176000.00	WORKER	-1.15E-06	2.29E-08	-1.33E-06
1883	571250.00	4175750.00	WORKER	-9.34E-07	2.58E-08	-1.09E-06
1884	571250.00	4175500.00	WORKER	-9.39E-07	3.20E-08	-1.11E-06
1885	571250.00	4175250.00	WORKER	-1.06E-06	4.30E-08	-1.26E-06
1886	571250.00	4174750.00	WORKER	-1.13E-06	5.66E-08	-1.35E-06
1887	571250.00	4174500.00	WORKER	-1.25E-06	5.30E-08	-1.48E-06
1888	571250.00	4174250.00	WORKER	-1.39E-06	5.22E-08	-1.64E-06
1889	571250.00	4174000.00	WORKER	-1.37E-06	5.05E-08	-1.61E-06
1890	571250.00	4173750.00	WORKER	-1.25E-06	4.70E-08	-1.48E-06
1891	571250.00	4173500.00	WORKER	-1.26E-06	4.23E-08	-1.48E-06
1895	571250.00	4172500.00	RECREATIONAL	-9.35E-07	2.42E-08	-1.09E-06
1904	571500.00	4178000.00	WORKER	-1.81E-07	5.24E-09	-2.13E-07
1905	571500.00	4177750.00	WORKER	-2.11E-07	5.96E-09	-2.47E-07
1906	571500.00	4177500.00	WORKER	-2.50E-07	6.84E-09	-2.92E-07
1907	571500.00	4177250.00	WORKER	-2.98E-07	7.98E-09	-3.49E-07
1908	571500.00	4177000.00	SCHOOL	-3.61E-07	9.44E-09	-4.22E-07
1913	571500.00	4175750.00	WORKER	-7.63E-07	2.23E-08	-8.95E-07
1914	571500.00	4175500.00	WORKER	-7.78E-07	2.77E-08	-9.19E-07
1915	571500.00	4175250.00	WORKER	-8.54E-07	3.51E-08	-1.01E-06
1916	571500.00	4175000.00	WORKER	-1.01E-06	4.33E-08	-1.20E-06
1917	571500.00	4174750.00	WORKER	-1.25E-06	5.27E-08	-1.49E-06
1918	571500.00	4174500.00	WORKER	-1.11E-06	4.31E-08	-1.31E-06

**OAK Terminal Modernization**

**Table 2-20. Offsite Worker Cancer Risk Combined Construction & Operations**

Maximum-> **-3.33E-08**    **2.29E-07**    **-3.92E-08**  
 Minimum-> **-3.89E-06**    **1.08E-09**    **-4.51E-06**  
 Max ReclD->    **2965**    **3296**    **2965**  
 Exposure Years-> **2025-2049**    **2025-2030**    **2028-2052**  
 Exposure Duration->    **25 Yrs**    **6 Yrs**    **25 Yrs**

ReclD	UTM X	UTM Y	Receptor Type	Adult Worker During Construction and Operations	Adult Worker During Construction	Adult Worker During Operations
1919	571500.00	4174250.00	WORKER	-1.19E-06	4.19E-08	-1.41E-06
1920	571500.00	4174000.00	WORKER	-1.14E-06	4.11E-08	-1.35E-06
1921	571500.00	4173750.00	WORKER	-1.04E-06	3.96E-08	-1.22E-06
1922	571500.00	4173500.00	WORKER	-1.03E-06	3.67E-08	-1.21E-06
1925	571500.00	4172750.00	RECREATIONAL	-9.89E-07	2.59E-08	-1.15E-06
1926	571500.00	4172500.00	RECREATIONAL	-8.73E-07	2.27E-08	-1.02E-06
1928	571500.00	4172000.00	RECREATIONAL	-6.36E-07	1.77E-08	-7.43E-07
1935	571750.00	4178000.00	WORKER	-1.78E-07	5.18E-09	-2.09E-07
1936	571750.00	4177750.00	WORKER	-2.07E-07	5.93E-09	-2.43E-07
1937	571750.00	4177500.00	WORKER	-2.41E-07	6.73E-09	-2.83E-07
1944	571750.00	4175750.00	WORKER	-6.37E-07	1.99E-08	-7.49E-07
1945	571750.00	4175500.00	WORKER	-6.71E-07	2.45E-08	-7.93E-07
1946	571750.00	4175250.00	WORKER	-7.44E-07	2.99E-08	-8.82E-07
1947	571750.00	4175000.00	WORKER	-8.41E-07	3.49E-08	-9.99E-07
1948	571750.00	4174750.00	WORKER	-1.04E-06	4.08E-08	-1.24E-06
1949	571750.00	4174500.00	WORKER	-1.00E-06	3.64E-08	-1.18E-06
1950	571750.00	4174250.00	WORKER	-1.03E-06	3.44E-08	-1.21E-06
1951	571750.00	4174000.00	WORKER	-9.76E-07	3.40E-08	-1.15E-06
1952	571750.00	4173750.00	WORKER	-8.78E-07	3.34E-08	-1.04E-06
1957	571750.00	4172500.00	RECREATIONAL	-7.99E-07	2.11E-08	-9.33E-07
1958	571750.00	4172250.00	RECREATIONAL	-7.00E-07	1.88E-08	-8.17E-07
1959	571750.00	4172000.00	RECREATIONAL	-6.03E-07	1.68E-08	-7.05E-07
1960	571750.00	4171750.00	RECREATIONAL	-5.32E-07	1.51E-08	-6.22E-07
1966	572000.00	4178000.00	WORKER	-1.77E-07	5.15E-09	-2.07E-07
1967	572000.00	4177750.00	WORKER	-2.02E-07	5.82E-09	-2.37E-07
1968	572000.00	4177500.00	WORKER	-2.28E-07	6.64E-09	-2.68E-07
1969	572000.00	4177250.00	WORKER	-2.57E-07	7.56E-09	-3.02E-07
1978	572000.00	4175000.00	WORKER	-7.49E-07	2.97E-08	-8.88E-07
1979	572000.00	4174750.00	WORKER	-1.08E-06	4.27E-08	-1.28E-06
1980	572000.00	4174500.00	WORKER	-8.83E-07	3.05E-08	-1.04E-06
1981	572000.00	4174250.00	WORKER	-9.02E-07	2.88E-08	-1.06E-06
1982	572000.00	4174000.00	WORKER	-8.48E-07	2.85E-08	-9.98E-07
1983	572000.00	4173750.00	WORKER	-7.62E-07	2.85E-08	-8.99E-07
1988	572000.00	4172500.00	RECREATIONAL	-7.19E-07	1.97E-08	-8.41E-07
1989	572000.00	4172250.00	RECREATIONAL	-6.55E-07	1.76E-08	-7.65E-07
1990	572000.00	4172000.00	RECREATIONAL	-5.75E-07	1.58E-08	-6.73E-07
1991	572000.00	4171750.00	RECREATIONAL	-5.08E-07	1.43E-08	-5.94E-07

**OAK Terminal Modernization**

**Table 2-20. Offsite Worker Cancer Risk Combined Construction & Operations**

Maximum-> **-3.33E-08**    **2.29E-07**    **-3.92E-08**  
 Minimum-> **-3.89E-06**    **1.08E-09**    **-4.51E-06**  
 Max RecID->    **2965**    **3296**    **2965**  
 Exposure Years-> **2025-2049**    **2025-2030**    **2028-2052**  
 Exposure Duration->    **25 Yrs**    **6 Yrs**    **25 Yrs**

RecID	UTM X	UTM Y	Receptor Type	Adult Worker During Construction and Operations	Adult Worker During Construction	Adult Worker During Operations
2000	572250.00	4177250.00	WORKER	-2.34E-07	7.35E-09	-2.75E-07
2001	572250.00	4177000.00	WORKER	-2.61E-07	8.33E-09	-3.06E-07
2002	572250.00	4176750.00	WORKER	-2.94E-07	9.39E-09	-3.46E-07
2006	572250.00	4175750.00	SCHOOL	-4.80E-07	1.64E-08	-5.66E-07
2010	572250.00	4174750.00	WORKER	-7.90E-07	2.93E-08	-9.35E-07
2011	572250.00	4174500.00	WORKER	-7.72E-07	2.57E-08	-9.09E-07
2012	572250.00	4174250.00	WORKER	-7.94E-07	2.44E-08	-9.32E-07
2013	572250.00	4174000.00	WORKER	-7.47E-07	2.42E-08	-8.79E-07
2014	572250.00	4173750.00	WORKER	-6.71E-07	2.44E-08	-7.92E-07
2015	572250.00	4173500.00	WORKER	-6.46E-07	2.43E-08	-7.63E-07
2022	572250.00	4171750.00	RECREATIONAL	-4.83E-07	1.36E-08	-5.65E-07
2023	572250.00	4171500.00	RECREATIONAL	-4.35E-07	1.24E-08	-5.09E-07
2031	572500.00	4177250.00	WORKER	-2.16E-07	7.06E-09	-2.54E-07
2032	572500.00	4177000.00	WORKER	-2.38E-07	7.89E-09	-2.80E-07
2034	572500.00	4176500.00	WORKER	-3.15E-07	9.75E-09	-3.70E-07
2037	572500.00	4175750.00	SCHOOL	-4.33E-07	1.50E-08	-5.11E-07
2040	572500.00	4175000.00	ROAD	-6.15E-07	2.31E-08	-7.28E-07
2042	572500.00	4174500.00	WORKER	-6.80E-07	2.20E-08	-8.00E-07
2043	572500.00	4174250.00	WORKER	-7.04E-07	2.10E-08	-8.26E-07
2044	572500.00	4174000.00	WORKER	-6.65E-07	2.07E-08	-7.80E-07
2045	572500.00	4173750.00	WORKER	-5.99E-07	2.11E-08	-7.06E-07
2053	572500.00	4171750.00	RECREATIONAL	-4.64E-07	1.29E-08	-5.42E-07
2054	572500.00	4171500.00	RECREATIONAL	-4.17E-07	1.18E-08	-4.88E-07
2055	572500.00	4171250.00	RECREATIONAL	-3.80E-07	1.09E-08	-4.44E-07
2056	572500.00	4171000.00	RECREATIONAL	-3.46E-07	1.01E-08	-4.05E-07
2063	572750.00	4177000.00	SCHOOL	-2.26E-07	7.48E-09	-2.66E-07
2073	572750.00	4174500.00	WORKER	-6.02E-07	1.90E-08	-7.08E-07
2074	572750.00	4174250.00	WORKER	-6.26E-07	1.83E-08	-7.34E-07
2075	572750.00	4174000.00	WORKER	-5.94E-07	1.80E-08	-6.97E-07
2076	572750.00	4173750.00	WORKER	-5.39E-07	1.83E-08	-6.35E-07
2077	572750.00	4173500.00	WORKER	-5.14E-07	1.87E-08	-6.06E-07
2078	572750.00	4173250.00	WORKER	-5.03E-07	1.86E-08	-5.94E-07
2080	572750.00	4172750.00	WORKER	-5.05E-07	1.72E-08	-5.94E-07
2084	572750.00	4171750.00	RECREATIONAL	-4.41E-07	1.23E-08	-5.16E-07
2085	572750.00	4171500.00	RECREATIONAL	-3.99E-07	1.13E-08	-4.67E-07
2086	572750.00	4171250.00	RECREATIONAL	-3.64E-07	1.04E-08	-4.25E-07
2087	572750.00	4171000.00	RECREATIONAL	-3.33E-07	9.64E-09	-3.90E-07

**OAK Terminal Modernization**

**Table 2-20. Offsite Worker Cancer Risk Combined Construction & Operations**

Maximum-> **-3.33E-08**    **2.29E-07**    **-3.92E-08**  
 Minimum-> **-3.89E-06**    **1.08E-09**    **-4.51E-06**  
 Max RecID->    **2965**    **3296**    **2965**  
 Exposure Years-> **2025-2049**    **2025-2030**    **2028-2052**  
 Exposure Duration->    **25 Yrs**    **6 Yrs**    **25 Yrs**

RecID	UTM X	UTM Y	Receptor Type	Adult Worker During Construction and Operations	Adult Worker During Construction	Adult Worker During Operations
2104	573000.00	4174500.00	SCHOOL	-5.39E-07	1.67E-08	-6.33E-07
2105	573000.00	4174250.00	WORKER	-5.61E-07	1.61E-08	-6.57E-07
2106	573000.00	4174000.00	WORKER	-5.35E-07	1.59E-08	-6.28E-07
2107	573000.00	4173750.00	WORKER	-4.88E-07	1.61E-08	-5.74E-07
2108	573000.00	4173500.00	WORKER	-4.65E-07	1.65E-08	-5.48E-07
2109	573000.00	4173250.00	WORKER	-4.54E-07	1.66E-08	-5.36E-07
2110	573000.00	4173000.00	WORKER	-4.52E-07	1.64E-08	-5.33E-07
2111	573000.00	4172750.00	WORKER	-4.53E-07	1.58E-08	-5.33E-07
2112	573000.00	4172500.00	WORKER	-4.52E-07	1.50E-08	-5.31E-07
2113	573000.00	4172250.00	WORKER	-4.50E-07	1.39E-08	-5.27E-07
2114	573000.00	4172000.00	WORKER	-4.40E-07	1.28E-08	-5.15E-07
2115	573000.00	4171750.00	RECREATIONAL	-4.16E-07	1.17E-08	-4.86E-07
2116	573000.00	4171500.00	RECREATIONAL	-3.84E-07	1.08E-08	-4.48E-07
2117	573000.00	4171250.00	RECREATIONAL	-3.47E-07	9.92E-09	-4.06E-07
2118	573000.00	4171000.00	RECREATIONAL	-3.20E-07	9.20E-09	-3.74E-07
2119	573000.00	4170750.00	RECREATIONAL	-2.95E-07	8.64E-09	-3.46E-07
2135	573250.00	4174500.00	SCHOOL	-4.83E-07	1.48E-08	-5.68E-07
2137	573250.00	4174000.00	WORKER	-4.84E-07	1.41E-08	-5.67E-07
2138	573250.00	4173750.00	WORKER	-4.45E-07	1.43E-08	-5.22E-07
2139	573250.00	4173500.00	WORKER	-4.25E-07	1.47E-08	-5.00E-07
2140	573250.00	4173250.00	WORKER	-4.13E-07	1.49E-08	-4.87E-07
2141	573250.00	4173000.00	WORKER	-4.08E-07	1.49E-08	-4.81E-07
2142	573250.00	4172750.00	WORKER	-4.08E-07	1.46E-08	-4.81E-07
2143	573250.00	4172500.00	WORKER	-4.07E-07	1.40E-08	-4.79E-07
2144	573250.00	4172250.00	WORKER	-4.07E-07	1.31E-08	-4.77E-07
2145	573250.00	4172000.00	WORKER	-4.03E-07	1.22E-08	-4.72E-07
2146	573250.00	4171750.00	RECREATIONAL	-3.89E-07	1.12E-08	-4.55E-07
2147	573250.00	4171500.00	RECREATIONAL	-3.65E-07	1.03E-08	-4.27E-07
2148	573250.00	4171250.00	RECREATIONAL	-3.36E-07	9.48E-09	-3.92E-07
2149	573250.00	4171000.00	RECREATIONAL	-3.07E-07	8.84E-09	-3.59E-07
2150	573250.00	4170750.00	RECREATIONAL	-2.85E-07	8.23E-09	-3.34E-07
2151	573250.00	4170500.00	RECREATIONAL	-2.64E-07	7.74E-09	-3.10E-07
2159	573500.00	4176250.00	WORKER	-2.63E-07	8.53E-09	-3.10E-07
2160	573500.00	4176000.00	WORKER	-2.89E-07	9.78E-09	-3.41E-07
2168	573500.00	4174000.00	ROAD	-4.40E-07	1.27E-08	-5.16E-07
2169	573500.00	4173750.00	WORKER	-4.07E-07	1.28E-08	-4.78E-07
2170	573500.00	4173500.00	WORKER	-3.90E-07	1.30E-08	-4.58E-07

**OAK Terminal Modernization**

**Table 2-20. Offsite Worker Cancer Risk Combined Construction & Operations**

Maximum-> **-3.33E-08**    **2.29E-07**    **-3.92E-08**  
 Minimum-> **-3.89E-06**    **1.08E-09**    **-4.51E-06**  
 Max RecID->    **2965**    **3296**    **2965**  
 Exposure Years-> **2025-2049**    **2025-2030**    **2028-2052**  
 Exposure Duration->    **25 Yrs**    **6 Yrs**    **25 Yrs**

RecID	UTM X	UTM Y	Receptor Type	Adult Worker During Construction and Operations	Adult Worker During Construction	Adult Worker During Operations
2171	573500.00	4173250.00	WORKER	-3.78E-07	1.34E-08	-4.45E-07
2172	573500.00	4173000.00	WORKER	-3.72E-07	1.35E-08	-4.39E-07
2173	573500.00	4172750.00	WORKER	-3.71E-07	1.34E-08	-4.37E-07
2174	573500.00	4172500.00	WORKER	-3.70E-07	1.30E-08	-4.36E-07
2175	573500.00	4172250.00	WORKER	-3.69E-07	1.24E-08	-4.34E-07
2176	573500.00	4172000.00	WORKER	-3.69E-07	1.16E-08	-4.32E-07
2178	573500.00	4171500.00	RECREATIONAL	-3.45E-07	9.92E-09	-4.04E-07
2179	573500.00	4171250.00	RECREATIONAL	-3.23E-07	9.15E-09	-3.78E-07
2180	573500.00	4171000.00	RECREATIONAL	-2.97E-07	8.51E-09	-3.48E-07
2181	573500.00	4170750.00	RECREATIONAL	-2.75E-07	7.92E-09	-3.21E-07
2182	573500.00	4170500.00	RECREATIONAL	-2.55E-07	7.46E-09	-2.99E-07
2517	565750.00	4179000.00	WORKER	-8.48E-08	2.65E-09	-9.96E-08
2518	565750.00	4179250.00	WORKER	-7.92E-08	2.44E-09	-9.30E-08
2519	565750.00	4179500.00	WORKER	-7.35E-08	2.29E-09	-8.64E-08
2520	565750.00	4179750.00	HOSPITAL	-6.81E-08	2.13E-09	-8.00E-08
2548	565500.00	4179000.00	RECREATIONAL	-8.18E-08	2.55E-09	-9.60E-08
2611	565000.00	4179250.00	RECREATIONAL	-7.00E-08	2.26E-09	-8.23E-08
2612	565000.00	4179500.00	SCHOOL	-6.71E-08	2.08E-09	-7.87E-08
2674	564500.00	4179500.00	RECREATIONAL	-6.25E-08	2.03E-09	-7.34E-08
2803	567000.00	4180750.00	WORKER	-4.87E-08	1.57E-09	-5.72E-08
2805	567500.00	4180750.00	WORKER	-4.91E-08	1.52E-09	-5.76E-08
2806	567750.00	4180750.00	WORKER	-5.14E-08	1.60E-09	-6.04E-08
2807	568000.00	4180750.00	WORKER	-5.39E-08	1.60E-09	-6.32E-08
2808	568250.00	4180750.00	WORKER	-5.40E-08	1.52E-09	-6.33E-08
2809	568500.00	4180750.00	WORKER	-5.20E-08	1.52E-09	-6.09E-08
2810	568750.00	4180750.00	WORKER	-5.02E-08	1.52E-09	-5.89E-08
2811	569000.00	4180750.00	WORKER	-5.25E-08	1.50E-09	-6.15E-08
2812	569250.00	4180750.00	WORKER	-5.68E-08	1.57E-09	-6.65E-08
2830	567000.00	4181000.00	WORKER	-4.52E-08	1.50E-09	-5.32E-08
2831	567250.00	4181000.00	WORKER	-4.48E-08	1.49E-09	-5.27E-08
2832	567500.00	4181000.00	WORKER	-4.60E-08	1.47E-09	-5.41E-08
2833	567750.00	4181000.00	WORKER	-4.84E-08	1.44E-09	-5.68E-08
2834	568000.00	4181000.00	WORKER	-4.89E-08	1.47E-09	-5.74E-08
2835	568250.00	4181000.00	WORKER	-4.96E-08	1.47E-09	-5.82E-08
2836	568500.00	4181000.00	WORKER	-4.78E-08	1.42E-09	-5.61E-08
2838	569000.00	4181000.00	WORKER	-4.85E-08	1.42E-09	-5.68E-08
2857	567000.00	4181250.00	WORKER	-4.22E-08	1.39E-09	-4.96E-08



**OAK Terminal Modernization & Development**

**Table 2-21. Offsite Worker Cancer Risks Combined Construction & Operations**

				Non-Inhalation Risks			Inhalation Risks			Multi-Pathway Risks		
Maximum->				9.48E-08	7.78E-09	9.42E-08	-3.33E-08	2.29E-07	-3.92E-08	-3.30E-08	2.37E-07	-3.89E-08
Minimum->				2.05E-10	2.72E-11	1.75E-10	-3.89E-06	1.08E-09	-4.51E-06	-3.81E-06	1.11E-09	-4.42E-06
Max Receptor No.->				1544	3296	1544	2965	3296	2965	2965	3296	2965
Exposure Years->				2025-2049	2025-2030	2028-2052	2025-2049	2025-2030	2028-2052	2025-2049	2025-2030	2028-2052
Exposure Duration->				25 Yrs	6 Yrs	25 Yrs	25 Yrs	6 Yrs	25 Yrs	25 Yrs	6 Yrs	25 Yrs
RecID	UTM X	UTM Y	Receptor Type	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations
33	566000.00	4176300.00	ROAD	9.12E-10	1.80E-10	7.32E-10	-2.25E-07	6.84E-09	-2.64E-07	-2.24E-07	7.02E-09	-2.63E-07
34	566000.00	4176400.00	WORKER	8.99E-10	1.75E-10	7.24E-10	-2.19E-07	6.63E-09	-2.57E-07	-2.18E-07	6.81E-09	-2.56E-07
35	566000.00	4176500.00	WORKER	8.90E-10	1.71E-10	7.18E-10	-2.13E-07	6.43E-09	-2.50E-07	-2.12E-07	6.60E-09	-2.50E-07
40	566000.00	4177000.00	ROAD	8.62E-10	1.50E-10	7.12E-10	-1.80E-07	5.52E-09	-2.11E-07	-1.79E-07	5.67E-09	-2.10E-07
45	566000.00	4177500.00	RECREATIONAL	7.80E-10	1.27E-10	6.53E-10	-1.41E-07	4.53E-09	-1.66E-07	-1.40E-07	4.65E-09	-1.65E-07
46	566000.00	4177600.00	SCHOOL	7.64E-10	1.22E-10	6.42E-10	-1.35E-07	4.37E-09	-1.59E-07	-1.34E-07	4.49E-09	-1.58E-07
47	566000.00	4177700.00	SCHOOL	7.39E-10	1.18E-10	6.21E-10	-1.30E-07	4.22E-09	-1.53E-07	-1.29E-07	4.34E-09	-1.52E-07
79	566100.00	4176200.00	RECREATIONAL	8.89E-10	1.94E-10	6.95E-10	-2.40E-07	7.23E-09	-2.81E-07	-2.39E-07	7.42E-09	-2.80E-07
80	566100.00	4176300.00	RECREATIONAL	9.61E-10	1.88E-10	7.72E-10	-2.34E-07	7.07E-09	-2.75E-07	-2.33E-07	7.26E-09	-2.74E-07
81	566100.00	4176400.00	RECREATIONAL	9.44E-10	1.83E-10	7.61E-10	-2.27E-07	6.87E-09	-2.67E-07	-2.26E-07	7.05E-09	-2.66E-07
123	566200.00	4176100.00	ROAD	1.04E-09	2.08E-10	8.35E-10	-2.57E-07	7.74E-09	-3.01E-07	-2.55E-07	7.94E-09	-3.00E-07
124	566200.00	4176200.00	WORKER	1.03E-09	2.02E-10	8.24E-10	-2.51E-07	7.51E-09	-2.94E-07	-2.50E-07	7.71E-09	-2.93E-07
125	566200.00	4176300.00	WORKER	1.01E-09	1.96E-10	8.10E-10	-2.43E-07	7.30E-09	-2.86E-07	-2.42E-07	7.50E-09	-2.85E-07
166	566300.00	4176000.00	WORKER	1.11E-09	2.24E-10	8.84E-10	-2.74E-07	8.25E-09	-3.22E-07	-2.73E-07	8.48E-09	-3.21E-07
167	566300.00	4176100.00	WORKER	1.10E-09	2.17E-10	8.78E-10	-2.68E-07	8.05E-09	-3.15E-07	-2.67E-07	8.26E-09	-3.14E-07
168	566300.00	4176200.00	WORKER	1.08E-09	2.10E-10	8.67E-10	-2.61E-07	7.82E-09	-3.06E-07	-2.60E-07	8.03E-09	-3.05E-07
169	566300.00	4176300.00	WORKER	1.05E-09	2.04E-10	8.47E-10	-2.53E-07	7.61E-09	-2.97E-07	-2.52E-07	7.82E-09	-2.96E-07
210	566400.00	4175900.00	WORKER	1.11E-09	2.42E-10	8.69E-10	-2.93E-07	8.84E-09	-3.44E-07	-2.92E-07	9.08E-09	-3.43E-07
211	566400.00	4176000.00	WORKER	1.09E-09	2.34E-10	8.55E-10	-2.87E-07	8.63E-09	-3.37E-07	-2.86E-07	8.87E-09	-3.36E-07
212	566400.00	4176100.00	WORKER	1.15E-09	2.27E-10	9.22E-10	-2.79E-07	8.36E-09	-3.28E-07	-2.78E-07	8.58E-09	-3.27E-07
213	566400.00	4176200.00	WORKER	1.12E-09	2.20E-10	9.05E-10	-2.72E-07	8.15E-09	-3.19E-07	-2.70E-07	8.37E-09	-3.18E-07
254	566500.00	4175800.00	WORKER	1.22E-09	2.63E-10	9.59E-10	-3.12E-07	9.56E-09	-3.66E-07	-3.11E-07	9.83E-09	-3.65E-07
255	566500.00	4175900.00	WORKER	1.20E-09	2.55E-10	9.44E-10	-3.07E-07	9.26E-09	-3.60E-07	-3.05E-07	9.51E-09	-3.59E-07
256	566500.00	4176000.00	WORKER	1.17E-09	2.46E-10	9.22E-10	-3.00E-07	9.02E-09	-3.52E-07	-2.99E-07	9.27E-09	-3.51E-07
257	566500.00	4176100.00	WORKER	1.14E-09	2.39E-10	9.01E-10	-2.91E-07	8.74E-09	-3.42E-07	-2.90E-07	8.98E-09	-3.41E-07
258	566500.00	4176200.00	WORKER	1.12E-09	2.30E-10	8.89E-10	-2.82E-07	8.41E-09	-3.30E-07	-2.80E-07	8.64E-09	-3.30E-07
259	566500.00	4176300.00	WORKER	1.07E-09	2.23E-10	8.45E-10	-2.72E-07	8.13E-09	-3.19E-07	-2.70E-07	8.36E-09	-3.18E-07
297	566600.00	4175700.00	WORKER	1.39E-09	2.88E-10	1.10E-09	-3.32E-07	1.03E-08	-3.89E-07	-3.30E-07	1.06E-08	-3.88E-07
298	566600.00	4175800.00	WORKER	1.35E-09	2.78E-10	1.08E-09	-3.27E-07	1.00E-08	-3.84E-07	-3.25E-07	1.03E-08	-3.82E-07
299	566600.00	4175900.00	WORKER	1.33E-09	2.69E-10	1.06E-09	-3.21E-07	9.74E-09	-3.77E-07	-3.20E-07	1.00E-08	-3.76E-07
300	566600.00	4176000.00	WORKER	1.29E-09	2.58E-10	1.03E-09	-3.13E-07	9.39E-09	-3.67E-07	-3.12E-07	9.65E-09	-3.66E-07
301	566600.00	4176100.00	WORKER	1.26E-09	2.50E-10	1.02E-09	-3.03E-07	9.08E-09	-3.56E-07	-3.02E-07	9.33E-09	-3.55E-07
302	566600.00	4176200.00	WORKER	1.24E-09	2.41E-10	9.96E-10	-2.92E-07	8.78E-09	-3.43E-07	-2.91E-07	9.02E-09	-3.42E-07
340	566700.00	4175600.00	ROAD	1.45E-09	3.16E-10	1.13E-09	-3.54E-07	1.12E-08	-4.16E-07	-3.52E-07	1.15E-08	-4.15E-07
341	566700.00	4175700.00	WORKER	1.40E-09	3.05E-10	1.10E-09	-3.49E-07	1.08E-08	-4.10E-07	-3.47E-07	1.11E-08	-4.09E-07
342	566700.00	4175800.00	WORKER	1.37E-09	2.94E-10	1.07E-09	-3.42E-07	1.05E-08	-4.02E-07	-3.41E-07	1.08E-08	-4.01E-07
343	566700.00	4175900.00	WORKER	1.33E-09	2.82E-10	1.04E-09	-3.36E-07	1.01E-08	-3.94E-07	-3.34E-07	1.04E-08	-3.93E-07
344	566700.00	4176000.00	WORKER	1.28E-09	2.73E-10	1.01E-09	-3.26E-07	9.83E-09	-3.82E-07	-3.24E-07	1.01E-08	-3.81E-07
345	566700.00	4176100.00	WORKER	1.24E-09	2.63E-10	9.82E-10	-3.15E-07	9.49E-09	-3.70E-07	-3.14E-07	9.76E-09	-3.69E-07
346	566700.00	4176200.00	WORKER	1.21E-09	2.53E-10	9.56E-10	-3.02E-07	9.11E-09	-3.55E-07	-3.01E-07	9.37E-09	-3.54E-07
383	566800.00	4175500.00	WORKER	1.60E-09	3.51E-10	1.25E-09	-3.77E-07	1.22E-08	-4.43E-07	-3.75E-07	1.25E-08	-4.42E-07
384	566800.00	4175600.00	ROAD	1.54E-09	3.37E-10	1.20E-09	-3.72E-07	1.18E-08	-4.37E-07	-3.70E-07	1.21E-08	-4.36E-07
385	566800.00	4175700.00	WORKER	1.49E-09	3.24E-10	1.16E-09	-3.66E-07	1.14E-08	-4.30E-07	-3.64E-07	1.17E-08	-4.28E-07
386	566800.00	4175800.00	WORKER	1.44E-09	3.11E-10	1.13E-09	-3.59E-07	1.10E-08	-4.21E-07	-3.57E-07	1.13E-08	-4.20E-07
387	566800.00	4175900.00	WORKER	1.40E-09	2.99E-10	1.11E-09	-3.49E-07	1.06E-08	-4.10E-07	-3.48E-07	1.09E-08	-4.09E-07
388	566800.00	4176000.00	WORKER	1.37E-09	2.88E-10	1.08E-09	-3.39E-07	1.02E-08	-3.98E-07	-3.38E-07	1.05E-08	-3.97E-07
389	566800.00	4176100.00	WORKER	1.33E-09	2.76E-10	1.05E-09	-3.26E-07	9.86E-09	-3.82E-07	-3.24E-07	1.01E-08	-3.81E-07
426	566900.00	4175400.00	WORKER	1.76E-09	3.92E-10	1.37E-09	-4.05E-07	1.33E-08	-4.76E-07	-4.03E-07	1.37E-08	-4.75E-07
427	566900.00	4175500.00	WORKER	1.69E-09	3.76E-10	1.32E-09	-3.98E-07	1.29E-08	-4.68E-07	-3.96E-07	1.33E-08	-4.67E-07
428	566900.00	4175600.00	ROAD	1.63E-09	3.61E-10	1.27E-09	-3.91E-07	1.24E-08	-4.60E-07	-3.90E-07	1.28E-08	-4.58E-07
429	566900.00	4175700.00	WORKER	1.58E-09	3.45E-10	1.23E-09	-3.84E-07	1.20E-08	-4.51E-07	-3.82E-07	1.24E-08	-4.50E-07
430	566900.00	4175800.00	WORKER	1.52E-09	3.31E-10	1.19E-09	-3.74E-07	1.16E-08	-4.39E-07	-3.73E-07	1.19E-08	-4.38E-07
431	566900.00	4175900.00	WORKER	1.46E-09	3.17E-10	1.14E-09	-3.63E-07	1.11E-08	-4.26E-07	-3.61E-07	1.15E-08	-4.25E-07
432	566900.00	4176000.00	WORKER	1.41E-09	3.04E-10	1.11E-09	-3.51E-07	1.07E-08	-4.12E-07	-3.49E-07	1.10E-08	-4.11E-07
433	566900.00	4176100.00	WORKER	1.37E-09	2.91E-10	1.08E-09	-3.37E-07	1.03E-08	-3.96E-07	-3.36E-07	1.06E-08	-3.95E-07
469	567000.00	4175300.00	WORKER	1.98E-09	4.41E-10	1.54E-09	-4.37E-07	1.47E-08	-5.14E-07	-4.35E-07	1.51E-08	-5.13E-07
470	567000.00	4175400.00	WORKER	1.87E-09	4.24E-10	1.45E-09	-4.29E-07	1.42E-08	-5.05E-07	-4.27E-07	1.46E-08	-5.03E-07
471	567000.00	4175500.00	ROAD	1.79E-09	4.05E-10	1.39E-09	-4.21E-07	1.37E-08	-4.95E-07	-4.19E-07	1.41E-08	-4.94E-07
472	567000.00	4175600.00	ROAD	1.73E-09	3.88E-10	1.34E-09	-4.12E-07	1.32E-08	-4.85E-07	-4.11E-07	1.36E-08	-4.83E-07
473	567000.00	4175700.00	WORKER	1.67E-09	3.70E-10	1.30E-09	-4.01E-07	1.27E-08	-4.71E-07	-3.99E-07	1.31E-08	-4.70E-07
474	567000.00	4175800.00	WORKER	1.61E-09	3.53E-10	1.26E-09	-3.89E-07	1.22E-08	-4.57E-07	-3.87E-07	1.26E-08	-4.56E-07

**OAK Terminal Modernization & Development**

**Table 2-21. Offsite Worker Cancer Risks**

**Combined Construction & Operations**

**Non-Inhalation Risks**

**Inhalation Risks**

**Multi-Pathway Risks**

Maximum->	9.48E-08	7.78E-09	9.42E-08	-3.33E-08	2.29E-07	-3.92E-08	-3.30E-08	2.37E-07	-3.89E-08
Minimum->	2.05E-10	2.72E-11	1.75E-10	-3.89E-06	1.08E-09	-4.51E-06	-3.81E-06	1.11E-09	-4.42E-06
Max Receptor No.->	1544	3296	1544	2965	3296	2965	2965	3296	2965
Exposure Years->	2025-2049	2025-2030	2028-2052	2025-2049	2025-2030	2028-2052	2025-2049	2025-2030	2028-2052
Exposure Duration->	25 Yrs	6 Yrs	25 Yrs	25 Yrs	6 Yrs	25 Yrs	25 Yrs	6 Yrs	25 Yrs

RecID	UTM X	UTM Y	Receptor Type	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations
475	567000.00	4175900.00	RECREATIONAL	1.56E-09	3.37E-10	1.22E-09	-3.76E-07	1.17E-08	-4.42E-07	-3.75E-07	1.20E-08	-4.41E-07
476	567000.00	4176000.00	WORKER	1.51E-09	3.22E-10	1.19E-09	-3.63E-07	1.13E-08	-4.26E-07	-3.61E-07	1.16E-08	-4.25E-07
512	567100.00	4175200.00	WORKER	2.33E-09	4.99E-10	1.83E-09	-4.77E-07	1.63E-08	-5.62E-07	-4.75E-07	1.68E-08	-5.60E-07
513	567100.00	4175300.00	WORKER	2.18E-09	4.81E-10	1.70E-09	-4.64E-07	1.57E-08	-5.47E-07	-4.62E-07	1.62E-08	-5.45E-07
514	567100.00	4175400.00	WORKER	1.98E-09	4.61E-10	1.52E-09	-4.54E-07	1.51E-08	-5.35E-07	-4.52E-07	1.55E-08	-5.33E-07
515	567100.00	4175500.00	WORKER	1.91E-09	4.41E-10	1.46E-09	-4.45E-07	1.45E-08	-5.23E-07	-4.43E-07	1.50E-08	-5.21E-07
516	567100.00	4175600.00	WORKER	1.83E-09	4.20E-10	1.41E-09	-4.33E-07	1.40E-08	-5.09E-07	-4.31E-07	1.44E-08	-5.07E-07
517	567100.00	4175700.00	WORKER	1.77E-09	3.99E-10	1.37E-09	-4.19E-07	1.34E-08	-4.93E-07	-4.17E-07	1.38E-08	-4.91E-07
518	567100.00	4175800.00	WORKER	1.70E-09	3.79E-10	1.32E-09	-4.05E-07	1.29E-08	-4.76E-07	-4.03E-07	1.32E-08	-4.75E-07
519	567100.00	4175900.00	WORKER	1.62E-09	3.60E-10	1.26E-09	-3.90E-07	1.23E-08	-4.58E-07	-3.88E-07	1.27E-08	-4.57E-07
556	567200.00	4175200.00	WORKER	2.39E-09	5.49E-10	1.84E-09	-5.06E-07	1.74E-08	-5.96E-07	-5.03E-07	1.80E-08	-5.94E-07
557	567200.00	4175300.00	WORKER	2.25E-09	5.31E-10	1.72E-09	-4.93E-07	1.68E-08	-5.81E-07	-4.91E-07	1.73E-08	-5.79E-07
558	567200.00	4175400.00	WORKER	2.13E-09	5.08E-10	1.63E-09	-4.81E-07	1.62E-08	-5.67E-07	-4.79E-07	1.67E-08	-5.65E-07
559	567200.00	4175500.00	WORKER	2.04E-09	4.83E-10	1.55E-09	-4.69E-07	1.55E-08	-5.51E-07	-4.67E-07	1.60E-08	-5.50E-07
560	567200.00	4175600.00	WORKER	1.95E-09	4.57E-10	1.49E-09	-4.53E-07	1.48E-08	-5.33E-07	-4.51E-07	1.53E-08	-5.32E-07
561	567200.00	4175700.00	WORKER	1.87E-09	4.32E-10	1.44E-09	-4.37E-07	1.43E-08	-5.14E-07	-4.35E-07	1.47E-08	-5.12E-07
562	567200.00	4175800.00	WORKER	1.80E-09	4.08E-10	1.39E-09	-4.19E-07	1.36E-08	-4.93E-07	-4.17E-07	1.40E-08	-4.91E-07
563	567200.00	4175900.00	WORKER	1.73E-09	3.87E-10	1.34E-09	-4.02E-07	1.29E-08	-4.73E-07	-4.00E-07	1.33E-08	-4.72E-07
575	567200.00	4177100.00	RECREATIONAL	1.16E-09	1.88E-10	9.74E-10	-2.48E-07	6.87E-09	-2.90E-07	-2.47E-07	7.05E-09	-2.89E-07
576	567200.00	4177200.00	RECREATIONAL	1.13E-09	1.77E-10	9.55E-10	-2.36E-07	6.51E-09	-2.77E-07	-2.35E-07	6.68E-09	-2.76E-07
577	567200.00	4177300.00	RECREATIONAL	1.10E-09	1.67E-10	9.29E-10	-2.24E-07	6.17E-09	-2.62E-07	-2.23E-07	6.34E-09	-2.61E-07
578	567200.00	4177400.00	RECREATIONAL	9.89E-10	1.57E-10	8.32E-10	-2.13E-07	5.91E-09	-2.49E-07	-2.12E-07	6.07E-09	-2.48E-07
579	567200.00	4177500.00	RECREATIONAL	9.31E-10	1.49E-10	7.82E-10	-2.02E-07	5.58E-09	-2.37E-07	-2.01E-07	5.73E-09	-2.36E-07
580	567200.00	4177600.00	RECREATIONAL	8.95E-10	1.41E-10	7.54E-10	-1.93E-07	5.32E-09	-2.26E-07	-1.92E-07	5.46E-09	-2.25E-07
581	567200.00	4177700.00	ROAD	8.57E-10	1.33E-10	7.23E-10	-1.82E-07	5.04E-09	-2.14E-07	-1.82E-07	5.17E-09	-2.13E-07
582	567200.00	4177800.00	SCHOOL	9.07E-10	1.27E-10	7.79E-10	-1.73E-07	4.86E-09	-2.03E-07	-1.72E-07	4.98E-09	-2.02E-07
599	567300.00	4175100.00	WORKER	2.71E-09	6.21E-10	2.09E-09	-5.50E-07	1.94E-08	-6.49E-07	-5.47E-07	2.00E-08	-6.47E-07
600	567300.00	4175200.00	WORKER	2.53E-09	6.09E-10	1.92E-09	-5.39E-07	1.88E-08	-6.35E-07	-5.36E-07	1.94E-08	-6.33E-07
601	567300.00	4175300.00	WORKER	2.45E-09	5.91E-10	1.86E-09	-5.25E-07	1.81E-08	-6.18E-07	-5.22E-07	1.87E-08	-6.17E-07
602	567300.00	4175400.00	WORKER	2.26E-09	5.67E-10	1.69E-09	-5.10E-07	1.74E-08	-6.00E-07	-5.08E-07	1.79E-08	-5.99E-07
603	567300.00	4175500.00	WORKER	2.18E-09	5.37E-10	1.64E-09	-4.93E-07	1.66E-08	-5.80E-07	-4.90E-07	1.72E-08	-5.78E-07
604	567300.00	4175600.00	WORKER	2.08E-09	5.04E-10	1.57E-09	-4.73E-07	1.59E-08	-5.57E-07	-4.71E-07	1.64E-08	-5.56E-07
605	567300.00	4175700.00	WORKER	1.99E-09	4.73E-10	1.52E-09	-4.54E-07	1.52E-08	-5.34E-07	-4.52E-07	1.56E-08	-5.33E-07
606	567300.00	4175800.00	WORKER	1.90E-09	4.44E-10	1.46E-09	-4.34E-07	1.44E-08	-5.11E-07	-4.32E-07	1.49E-08	-5.09E-07
607	567300.00	4175900.00	WORKER	1.82E-09	4.17E-10	1.41E-09	-4.15E-07	1.37E-08	-4.89E-07	-4.13E-07	1.41E-08	-4.87E-07
609	567300.00	4176100.00	RECREATIONAL	1.68E-09	3.67E-10	1.31E-09	-3.81E-07	1.22E-08	-4.49E-07	-3.80E-07	1.26E-08	-4.48E-07
618	567300.00	4177000.00	RECREATIONAL	1.25E-09	2.03E-10	1.05E-09	-2.77E-07	7.44E-09	-3.24E-07	-2.76E-07	7.64E-09	-3.23E-07
619	567300.00	4177100.00	RECREATIONAL	1.22E-09	1.91E-10	1.03E-09	-2.63E-07	7.05E-09	-3.08E-07	-2.62E-07	7.24E-09	-3.07E-07
620	567300.00	4177200.00	RECREATIONAL	1.11E-09	1.80E-10	9.33E-10	-2.49E-07	6.64E-09	-2.91E-07	-2.48E-07	6.82E-09	-2.90E-07
621	567300.00	4177300.00	RECREATIONAL	1.05E-09	1.70E-10	8.81E-10	-2.35E-07	6.31E-09	-2.75E-07	-2.34E-07	6.48E-09	-2.74E-07
622	567300.00	4177400.00	RECREATIONAL	1.01E-09	1.59E-10	8.50E-10	-2.23E-07	6.00E-09	-2.61E-07	-2.22E-07	6.16E-09	-2.60E-07
623	567300.00	4177500.00	RECREATIONAL	9.76E-10	1.51E-10	8.25E-10	-2.12E-07	5.71E-09	-2.48E-07	-2.11E-07	5.86E-09	-2.47E-07
624	567300.00	4177600.00	RECREATIONAL	1.01E-09	1.43E-10	8.71E-10	-2.00E-07	5.40E-09	-2.34E-07	-1.99E-07	5.55E-09	-2.34E-07
625	567300.00	4177700.00	RECREATIONAL	9.17E-10	1.36E-10	7.82E-10	-1.89E-07	5.17E-09	-2.22E-07	-1.88E-07	5.31E-09	-2.21E-07
626	567300.00	4177800.00	RECREATIONAL	8.56E-10	1.28E-10	7.28E-10	-1.79E-07	4.91E-09	-2.10E-07	-1.78E-07	5.04E-09	-2.09E-07
627	567300.00	4177900.00	WORKER	8.22E-10	1.22E-10	7.00E-10	-1.69E-07	4.65E-09	-1.98E-07	-1.68E-07	4.78E-09	-1.97E-07
628	567300.00	4178000.00	RECREATIONAL	8.69E-10	1.16E-10	7.53E-10	-1.60E-07	4.47E-09	-1.88E-07	-1.59E-07	4.59E-09	-1.87E-07
642	567400.00	4175200.00	WORKER	2.66E-09	6.83E-10	1.98E-09	-5.76E-07	2.03E-08	-6.79E-07	-5.73E-07	2.10E-08	-6.77E-07
643	567400.00	4175300.00	WORKER	2.55E-09	6.68E-10	1.88E-09	-5.59E-07	1.96E-08	-6.59E-07	-5.57E-07	2.03E-08	-6.57E-07
644	567400.00	4175400.00	WORKER	2.44E-09	6.42E-10	1.80E-09	-5.40E-07	1.88E-08	-6.36E-07	-5.37E-07	1.94E-08	-6.34E-07
645	567400.00	4175500.00	WORKER	2.25E-09	6.06E-10	1.65E-09	-5.17E-07	1.80E-08	-6.09E-07	-5.14E-07	1.86E-08	-6.07E-07
646	567400.00	4175600.00	WORKER	2.15E-09	5.66E-10	1.58E-09	-4.94E-07	1.71E-08	-5.82E-07	-4.91E-07	1.77E-08	-5.80E-07
647	567400.00	4175700.00	WORKER	2.04E-09	5.25E-10	1.51E-09	-4.70E-07	1.62E-08	-5.54E-07	-4.68E-07	1.67E-08	-5.53E-07
648	567400.00	4175800.00	WORKER	2.00E-09	4.87E-10	1.52E-09	-4.47E-07	1.53E-08	-5.28E-07	-4.45E-07	1.58E-08	-5.26E-07
649	567400.00	4175900.00	WORKER	1.91E-09	4.53E-10	1.46E-09	-4.28E-07	1.45E-08	-5.04E-07	-4.42E-07	1.49E-08	-5.03E-07
650	567400.00	4176000.00	RECREATIONAL	1.83E-09	4.20E-10	1.41E-09	-4.10E-07	1.37E-08	-4.83E-07	-4.08E-07	1.41E-08	-4.81E-07
651	567400.00	4176100.00	RECREATIONAL	1.76E-09	3.90E-10	1.37E-09	-3.93E-07	1.29E-08	-4.63E-07	-3.92E-07	1.32E-08	-4.62E-07
652	567400.00	4176200.00	RECREATIONAL	1.66E-09	3.61E-10	1.30E-09	-3.80E-07	1.21E-08	-4.47E-07	-3.78E-07	1.24E-08	-4.46E-07
653	567400.00	4176300.00	RECREATIONAL	1.59E-09	3.33E-10	1.26E-09	-3.69E-07	1.14E-08	-4.33E-07	-3.67E-07	1.17E-08	-4.32E-07
654	567400.00	4176400.00	RECREATIONAL	1.53E-09	3.10E-10	1.22E-09	-3.60E-07	1.07E-08	-4.23E-07	-3.58E-07	1.11E-08	-4.21E-07
655	567400.00	4176500.00	RECREATIONAL	1.47E-09	2.88E-10	1.18E-09	-3.53E-07	1.01E-08	-4.14E-07	-3.51E-07	1.04E-08	-4.12E-07

**OAK Terminal Modernization & Development**

**Table 2-21. Offsite Worker Cancer Risks Combined Construction & Operations**

				Non-Inhalation Risks			Inhalation Risks			Multi-Pathway Risks		
Maximum->				9.48E-08	7.78E-09	9.42E-08	-3.33E-08	2.29E-07	-3.92E-08	-3.30E-08	2.37E-07	-3.89E-08
Minimum->				2.05E-10	2.72E-11	1.75E-10	-3.89E-06	1.08E-09	-4.51E-06	-3.81E-06	1.11E-09	-4.42E-06
Max Receptor No.->				1544	3296	1544	2965	3296	2965	2965	3296	2965
Exposure Years->				2025-2049	2025-2030	2028-2052	2025-2049	2025-2030	2028-2052	2025-2049	2025-2030	2028-2052
Exposure Duration->				25 Yrs	6 Yrs	25 Yrs	25 Yrs	6 Yrs	25 Yrs	25 Yrs	6 Yrs	25 Yrs
RecID	UTM X	UTM Y	Receptor Type	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations
656	567400.00	4176600.00	RECREATIONAL	1.48E-09	2.68E-10	1.22E-09	-3.45E-07	9.58E-09	-4.04E-07	-3.44E-07	9.85E-09	-4.03E-07
657	567400.00	4176700.00	RECREATIONAL	1.44E-09	2.51E-10	1.19E-09	-3.37E-07	8.99E-09	-3.95E-07	-3.36E-07	9.24E-09	-3.93E-07
658	567400.00	4176800.00	RECREATIONAL	1.39E-09	2.36E-10	1.15E-09	-3.26E-07	8.48E-09	-3.81E-07	-3.24E-07	8.71E-09	-3.79E-07
659	567400.00	4176900.00	RECREATIONAL	1.28E-09	2.21E-10	1.06E-09	-3.12E-07	8.04E-09	-3.64E-07	-3.10E-07	8.26E-09	-3.63E-07
660	567400.00	4177000.00	RECREATIONAL	1.23E-09	2.07E-10	1.02E-09	-2.96E-07	7.60E-09	-3.46E-07	-2.95E-07	7.81E-09	-3.45E-07
661	567400.00	4177100.00	RECREATIONAL	1.18E-09	1.94E-10	9.87E-10	-2.81E-07	7.19E-09	-3.28E-07	-2.79E-07	7.38E-09	-3.27E-07
662	567400.00	4177200.00	RECREATIONAL	1.14E-09	1.83E-10	9.60E-10	-2.65E-07	6.83E-09	-3.10E-07	-2.64E-07	7.01E-09	-3.09E-07
663	567400.00	4177300.00	RECREATIONAL	1.11E-09	1.73E-10	9.33E-10	-2.49E-07	6.47E-09	-2.92E-07	-2.48E-07	6.64E-09	-2.91E-07
664	567400.00	4177400.00	RECREATIONAL	1.06E-09	1.62E-10	8.99E-10	-2.35E-07	6.16E-09	-2.75E-07	-2.34E-07	6.32E-09	-2.74E-07
665	567400.00	4177500.00	RECREATIONAL	1.04E-09	1.54E-10	8.90E-10	-2.22E-07	5.82E-09	-2.60E-07	-2.21E-07	5.98E-09	-2.59E-07
666	567400.00	4177600.00	RECREATIONAL	9.81E-10	1.45E-10	8.36E-10	-2.09E-07	5.54E-09	-2.44E-07	-2.08E-07	5.68E-09	-2.43E-07
667	567400.00	4177700.00	RECREATIONAL	9.39E-10	1.37E-10	8.02E-10	-1.97E-07	5.25E-09	-2.31E-07	-1.96E-07	5.39E-09	-2.30E-07
668	567400.00	4177800.00	RECREATIONAL	9.84E-10	1.30E-10	8.54E-10	-1.86E-07	5.02E-09	-2.17E-07	-1.85E-07	5.15E-09	-2.17E-07
669	567400.00	4177900.00	RECREATIONAL	8.83E-10	1.24E-10	7.59E-10	-1.75E-07	4.76E-09	-2.04E-07	-1.74E-07	4.88E-09	-2.04E-07
670	567400.00	4178000.00	ROAD	8.23E-10	1.18E-10	7.05E-10	-1.65E-07	4.53E-09	-1.93E-07	-1.64E-07	4.65E-09	-1.92E-07
683	567500.00	4175300.00	WORKER	2.72E-09	7.68E-10	1.96E-09	-5.94E-07	2.14E-08	-7.01E-07	-5.91E-07	2.21E-08	-6.99E-07
684	567500.00	4175400.00	WORKER	2.62E-09	7.44E-10	1.87E-09	-5.68E-07	2.05E-08	-6.71E-07	-5.66E-07	2.12E-08	-6.69E-07
685	567500.00	4175500.00	WORKER	2.53E-09	7.01E-10	1.82E-09	-5.40E-07	1.95E-08	-6.37E-07	-5.37E-07	2.02E-08	-6.35E-07
686	567500.00	4175600.00	WORKER	2.41E-09	6.48E-10	1.76E-09	-5.12E-07	1.84E-08	-6.05E-07	-5.10E-07	1.91E-08	-6.03E-07
687	567500.00	4175700.00	WORKER	2.20E-09	5.92E-10	1.61E-09	-4.87E-07	1.74E-08	-5.75E-07	-4.85E-07	1.80E-08	-5.73E-07
688	567500.00	4175800.00	WORKER	2.08E-09	5.41E-10	1.54E-09	-4.62E-07	1.64E-08	-5.45E-07	-4.60E-07	1.69E-08	-5.44E-07
689	567500.00	4175900.00	WORKER	1.97E-09	4.96E-10	1.48E-09	-4.41E-07	1.54E-08	-5.21E-07	-4.39E-07	1.59E-08	-5.19E-07
690	567500.00	4176000.00	RECREATIONAL	1.93E-09	4.53E-10	1.48E-09	-4.23E-07	1.44E-08	-4.99E-07	-4.21E-07	1.49E-08	-4.97E-07
691	567500.00	4176100.00	RECREATIONAL	1.84E-09	4.13E-10	1.43E-09	-4.07E-07	1.35E-08	-4.80E-07	-4.06E-07	1.39E-08	-4.78E-07
692	567500.00	4176200.00	RECREATIONAL	1.75E-09	3.77E-10	1.37E-09	-3.95E-07	1.27E-08	-4.65E-07	-3.93E-07	1.31E-08	-4.63E-07
693	567500.00	4176300.00	RECREATIONAL	1.67E-09	3.46E-10	1.33E-09	-3.84E-07	1.19E-08	-4.51E-07	-3.82E-07	1.23E-08	-4.50E-07
694	567500.00	4176400.00	RECREATIONAL	1.60E-09	3.19E-10	1.28E-09	-3.76E-07	1.11E-08	-4.42E-07	-3.75E-07	1.15E-08	-4.41E-07
695	567500.00	4176500.00	RECREATIONAL	1.54E-09	2.96E-10	1.24E-09	-3.71E-07	1.05E-08	-4.35E-07	-3.70E-07	1.08E-08	-4.34E-07
696	567500.00	4176600.00	RECREATIONAL	1.55E-09	2.75E-10	1.27E-09	-3.67E-07	9.85E-09	-4.29E-07	-3.65E-07	1.01E-08	-4.28E-07
697	567500.00	4176700.00	RECREATIONAL	1.49E-09	2.57E-10	1.24E-09	-3.62E-07	9.25E-09	-4.23E-07	-3.60E-07	9.51E-09	-4.21E-07
698	567500.00	4176800.00	RECREATIONAL	1.38E-09	2.41E-10	1.14E-09	-3.53E-07	8.74E-09	-4.12E-07	-3.51E-07	8.98E-09	-4.11E-07
699	567500.00	4176900.00	RECREATIONAL	1.33E-09	2.25E-10	1.11E-09	-3.38E-07	8.25E-09	-3.95E-07	-3.37E-07	8.48E-09	-3.94E-07
700	567500.00	4177000.00	RECREATIONAL	1.29E-09	2.11E-10	1.08E-09	-3.21E-07	7.82E-09	-3.75E-07	-3.20E-07	8.03E-09	-3.74E-07
701	567500.00	4177100.00	RECREATIONAL	1.24E-09	1.98E-10	1.04E-09	-3.04E-07	7.35E-09	-3.54E-07	-3.02E-07	7.55E-09	-3.53E-07
702	567500.00	4177200.00	RECREATIONAL	1.20E-09	1.86E-10	1.01E-09	-2.85E-07	6.99E-09	-3.33E-07	-2.84E-07	7.18E-09	-3.32E-07
703	567500.00	4177300.00	RECREATIONAL	1.09E-09	1.76E-10	9.15E-10	-2.68E-07	6.66E-09	-3.13E-07	-2.67E-07	6.84E-09	-3.12E-07
704	567500.00	4177400.00	RECREATIONAL	1.12E-09	1.65E-10	9.51E-10	-2.50E-07	6.30E-09	-2.92E-07	-2.49E-07	6.46E-09	-2.92E-07
705	567500.00	4177500.00	RECREATIONAL	1.08E-09	1.56E-10	9.20E-10	-2.34E-07	5.98E-09	-2.74E-07	-2.33E-07	6.14E-09	-2.73E-07
706	567500.00	4177600.00	RECREATIONAL	1.03E-09	1.48E-10	8.80E-10	-2.20E-07	5.68E-09	-2.58E-07	-2.19E-07	5.83E-09	-2.57E-07
707	567500.00	4177700.00	RECREATIONAL	1.01E-09	1.39E-10	8.73E-10	-2.07E-07	5.39E-09	-2.42E-07	-2.06E-07	5.53E-09	-2.41E-07
708	567500.00	4177800.00	RECREATIONAL	9.44E-10	1.32E-10	8.12E-10	-1.93E-07	5.16E-09	-2.26E-07	-1.92E-07	5.29E-09	-2.25E-07
709	567500.00	4177900.00	RECREATIONAL	9.84E-10	1.25E-10	8.59E-10	-1.80E-07	4.87E-09	-2.11E-07	-1.79E-07	4.99E-09	-2.10E-07
710	567500.00	4178000.00	WORKER	8.76E-10	1.19E-10	7.57E-10	-1.68E-07	4.61E-09	-1.97E-07	-1.67E-07	4.73E-09	-1.96E-07
722	567600.00	4175400.00	WORKER	2.87E-09	8.88E-10	1.98E-09	-5.95E-07	2.26E-08	-7.04E-07	-5.92E-07	2.35E-08	-7.02E-07
723	567600.00	4175500.00	WORKER	2.75E-09	8.43E-10	1.90E-09	-5.62E-07	2.15E-08	-6.66E-07	-5.60E-07	2.24E-08	-6.64E-07
724	567600.00	4175600.00	WORKER	2.63E-09	7.69E-10	1.86E-09	-5.32E-07	2.02E-08	-6.29E-07	-5.29E-07	2.10E-08	-6.28E-07
725	567600.00	4175700.00	WORKER	2.40E-09	6.88E-10	1.71E-09	-5.03E-07	1.90E-08	-5.95E-07	-5.01E-07	1.96E-08	-5.94E-07
726	567600.00	4175800.00	WORKER	2.26E-09	6.13E-10	1.65E-09	-4.78E-07	1.77E-08	-5.65E-07	-4.75E-07	1.83E-08	-5.63E-07
727	567600.00	4175900.00	WORKER	2.13E-09	5.47E-10	1.58E-09	-4.56E-07	1.65E-08	-5.38E-07	-4.54E-07	1.70E-08	-5.37E-07
728	567600.00	4176000.00	RECREATIONAL	2.07E-09	4.89E-10	1.58E-09	-4.38E-07	1.54E-08	-5.17E-07	-4.36E-07	1.58E-08	-5.16E-07
729	567600.00	4176100.00	RECREATIONAL	1.95E-09	4.37E-10	1.52E-09	-4.23E-07	1.43E-08	-4.99E-07	-4.22E-07	1.47E-08	-4.98E-07
730	567600.00	4176200.00	RECREATIONAL	1.79E-09	3.94E-10	1.40E-09	-4.11E-07	1.33E-08	-4.84E-07	-4.09E-07	1.37E-08	-4.82E-07
731	567600.00	4176300.00	RECREATIONAL	1.70E-09	3.58E-10	1.34E-09	-4.02E-07	1.24E-08	-4.72E-07	-4.00E-07	1.28E-08	-4.71E-07
732	567600.00	4176400.00	RECREATIONAL	1.62E-09	3.29E-10	1.29E-09	-3.95E-07	1.16E-08	-4.64E-07	-3.94E-07	1.19E-08	-4.63E-07
733	567600.00	4176500.00	RECREATIONAL	1.59E-09	3.03E-10	1.29E-09	-3.91E-07	1.09E-08	-4.58E-07	-3.90E-07	1.12E-08	-4.57E-07
734	567600.00	4176600.00	RECREATIONAL	1.54E-09	2.82E-10	1.26E-09	-3.90E-07	1.01E-08	-4.56E-07	-3.88E-07	1.04E-08	-4.55E-07
735	567600.00	4176700.00	RECREATIONAL	1.48E-09	2.63E-10	1.22E-09	-3.89E-07	9.52E-09	-4.54E-07	-3.87E-07	9.79E-09	-4.53E-07
736	567600.00	4176800.00	RECREATIONAL	1.53E-09	2.45E-10	1.28E-09	-3.84E-07	8.98E-09	-4.48E-07	-3.82E-07	9.23E-09	-4.47E-07
737	567600.00	4176900.00	RECREATIONAL	1.42E-09	2.30E-10	1.19E-09	-3.73E-07	8.47E-09	-4.34E-07	-3.71E-07	8.70E-09	-4.33E-07
738	567600.00	4177000.00	RECREATIONAL	1.35E-09	2.16E-10	1.13E-09	-3.55E-07	8.01E-09	-4.14E-07	-3.53E-07	8.23E-09	-4.13E-07
739	567600.00	4177100.00	RECREATIONAL	1.30E-09	2.03E-10	1.10E-09	-3.35E-07	7.60E-09	-3.90E-07	-3.34E-07	7.80E-09	-3.89E-07

**OAK Terminal Modernization & Development**

**Table 2-21. Offsite Worker Cancer Risks**

**Combined Construction & Operations**

**Non-Inhalation Risks**

**Inhalation Risks**

**Multi-Pathway Risks**

Maximum->	9.48E-08	7.78E-09	9.42E-08	-3.33E-08	2.29E-07	-3.92E-08	-3.30E-08	2.37E-07	-3.89E-08
Minimum->	2.05E-10	2.72E-11	1.75E-10	-3.89E-06	1.08E-09	-4.51E-06	-3.81E-06	1.11E-09	-4.42E-06
Max Receptor No.->	1544	3296	1544	2965	3296	2965	2965	3296	2965
Exposure Years->	2025-2049	2025-2030	2028-2052	2025-2049	2025-2030	2028-2052	2025-2049	2025-2030	2028-2052
Exposure Duration->	25 Yrs	6 Yrs	25 Yrs	25 Yrs	6 Yrs	25 Yrs	25 Yrs	6 Yrs	25 Yrs

RecID	UTM X	UTM Y	Receptor Type	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations
740	567600.00	4177200.00	RECREATIONAL	1.27E-09	1.91E-10	1.08E-09	-3.13E-07	7.24E-09	-3.65E-07	-3.11E-07	7.43E-09	-3.63E-07
741	567600.00	4177300.00	RECREATIONAL	1.14E-09	1.79E-10	9.57E-10	-2.90E-07	6.85E-09	-3.39E-07	-2.89E-07	7.03E-09	-3.38E-07
742	567600.00	4177400.00	RECREATIONAL	1.18E-09	1.69E-10	1.01E-09	-2.69E-07	6.52E-09	-3.15E-07	-2.68E-07	6.69E-09	-3.14E-07
743	567600.00	4177500.00	RECREATIONAL	1.14E-09	1.60E-10	9.82E-10	-2.52E-07	6.15E-09	-2.94E-07	-2.50E-07	6.31E-09	-2.93E-07
744	567600.00	4177600.00	RECREATIONAL	1.12E-09	1.51E-10	9.69E-10	-2.33E-07	5.89E-09	-2.73E-07	-2.32E-07	6.04E-09	-2.72E-07
745	567600.00	4177700.00	RECREATIONAL	1.05E-09	1.42E-10	9.05E-10	-2.18E-07	5.53E-09	-2.54E-07	-2.16E-07	5.67E-09	-2.53E-07
746	567600.00	4177800.00	RECREATIONAL	1.09E-09	1.34E-10	9.51E-10	-2.01E-07	5.24E-09	-2.35E-07	-2.00E-07	5.38E-09	-2.34E-07
747	567600.00	4177900.00	RECREATIONAL	9.77E-10	1.27E-10	8.50E-10	-1.87E-07	5.01E-09	-2.19E-07	-1.86E-07	5.13E-09	-2.18E-07
748	567600.00	4178000.00	WORKER	9.58E-10	1.18E-10	8.39E-10	-1.69E-07	4.64E-09	-1.97E-07	-1.68E-07	4.75E-09	-1.97E-07
759	567700.00	4175500.00	WORKER	3.10E-09	1.07E-09	2.03E-09	-5.84E-07	2.44E-08	-6.93E-07	-5.80E-07	2.54E-08	-6.91E-07
760	567700.00	4175600.00	WORKER	2.93E-09	9.72E-10	1.96E-09	-5.50E-07	2.27E-08	-6.53E-07	-5.47E-07	2.37E-08	-6.51E-07
761	567700.00	4175700.00	WORKER	2.67E-09	8.35E-10	1.84E-09	-5.21E-07	2.09E-08	-6.17E-07	-5.18E-07	2.18E-08	-6.15E-07
762	567700.00	4175800.00	WORKER	2.50E-09	7.14E-10	1.78E-09	-4.95E-07	1.94E-08	-5.86E-07	-4.93E-07	2.01E-08	-5.85E-07
763	567700.00	4175900.00	WORKER	2.33E-09	6.10E-10	1.72E-09	-4.74E-07	1.79E-08	-5.60E-07	-4.71E-07	1.85E-08	-5.58E-07
764	567700.00	4176000.00	RECREATIONAL	2.15E-09	5.27E-10	1.62E-09	-4.56E-07	1.65E-08	-5.39E-07	-4.54E-07	1.71E-08	-5.37E-07
765	567700.00	4176100.00	RECREATIONAL	2.04E-09	4.62E-10	1.58E-09	-4.42E-07	1.53E-08	-5.21E-07	-4.40E-07	1.57E-08	-5.19E-07
766	567700.00	4176200.00	RECREATIONAL	1.97E-09	4.10E-10	1.56E-09	-4.30E-07	1.41E-08	-5.06E-07	-4.28E-07	1.45E-08	-5.05E-07
767	567700.00	4176300.00	RECREATIONAL	1.87E-09	3.70E-10	1.50E-09	-4.22E-07	1.30E-08	-4.96E-07	-4.20E-07	1.33E-08	-4.94E-07
768	567700.00	4176400.00	RECREATIONAL	1.77E-09	3.38E-10	1.44E-09	-4.16E-07	1.20E-08	-4.88E-07	-4.15E-07	1.24E-08	-4.87E-07
769	567700.00	4176500.00	RECREATIONAL	1.69E-09	3.10E-10	1.38E-09	-4.13E-07	1.12E-08	-4.84E-07	-4.12E-07	1.15E-08	-4.83E-07
770	567700.00	4176600.00	RECREATIONAL	1.62E-09	2.88E-10	1.34E-09	-4.14E-07	1.05E-08	-4.84E-07	-4.13E-07	1.08E-08	-4.83E-07
771	567700.00	4176700.00	RECREATIONAL	1.57E-09	2.68E-10	1.30E-09	-4.17E-07	9.82E-09	-4.86E-07	-4.15E-07	1.01E-08	-4.85E-07
772	567700.00	4176800.00	RECREATIONAL	1.52E-09	2.51E-10	1.27E-09	-4.20E-07	9.26E-09	-4.89E-07	-4.18E-07	9.51E-09	-4.88E-07
773	567700.00	4176900.00	RECREATIONAL	1.47E-09	2.35E-10	1.23E-09	-4.16E-07	8.74E-09	-4.84E-07	-4.15E-07	8.98E-09	-4.83E-07
774	567700.00	4177000.00	RECREATIONAL	1.36E-09	2.21E-10	1.14E-09	-4.01E-07	8.28E-09	-4.67E-07	-4.00E-07	8.50E-09	-4.65E-07
775	567700.00	4177100.00	RECREATIONAL	1.29E-09	2.07E-10	1.09E-09	-3.77E-07	7.89E-09	-4.39E-07	-3.76E-07	8.10E-09	-4.38E-07
776	567700.00	4177200.00	RECREATIONAL	1.34E-09	1.95E-10	1.14E-09	-3.50E-07	7.46E-09	-4.08E-07	-3.49E-07	7.65E-09	-4.06E-07
777	567700.00	4177300.00	RECREATIONAL	1.22E-09	1.85E-10	1.03E-09	-3.22E-07	7.12E-09	-3.75E-07	-3.21E-07	7.31E-09	-3.74E-07
778	567700.00	4177400.00	RECREATIONAL	1.26E-09	1.74E-10	1.08E-09	-2.95E-07	6.81E-09	-3.45E-07	-2.94E-07	6.99E-09	-3.44E-07
779	567700.00	4177500.00	RECREATIONAL	1.22E-09	1.64E-10	1.06E-09	-2.72E-07	6.48E-09	-3.18E-07	-2.71E-07	6.64E-09	-3.17E-07
780	567700.00	4177600.00	RECREATIONAL	1.18E-09	1.55E-10	1.02E-09	-2.50E-07	6.12E-09	-2.92E-07	-2.49E-07	6.27E-09	-2.91E-07
781	567700.00	4177700.00	RECREATIONAL	1.13E-09	1.46E-10	9.84E-10	-2.29E-07	5.78E-09	-2.68E-07	-2.28E-07	5.92E-09	-2.67E-07
782	567700.00	4177800.00	RECREATIONAL	1.10E-09	1.37E-10	9.61E-10	-2.10E-07	5.46E-09	-2.46E-07	-2.09E-07	5.60E-09	-2.45E-07
783	567700.00	4177900.00	RECREATIONAL	1.11E-09	1.29E-10	9.80E-10	-1.91E-07	5.12E-09	-2.24E-07	-1.90E-07	5.25E-09	-2.23E-07
784	567700.00	4178000.00	WORKER	1.01E-09	1.19E-10	8.89E-10	-1.71E-07	4.64E-09	-2.00E-07	-1.70E-07	4.76E-09	-1.99E-07
794	567800.00	4175700.00	WORKER	3.10E-09	1.11E-09	1.99E-09	-5.39E-07	2.42E-08	-6.42E-07	-5.36E-07	2.53E-08	-6.40E-07
795	567800.00	4175800.00	WORKER	2.84E-09	8.61E-10	1.98E-09	-5.17E-07	2.19E-08	-6.14E-07	-5.14E-07	2.27E-08	-6.12E-07
796	567800.00	4175900.00	WORKER	2.64E-09	6.92E-10	1.95E-09	-4.99E-07	2.03E-08	-5.92E-07	-4.97E-07	2.10E-08	-5.90E-07
797	567800.00	4176000.00	RECREATIONAL	2.43E-09	5.74E-10	1.86E-09	-4.82E-07	1.86E-08	-5.70E-07	-4.79E-07	1.92E-08	-5.68E-07
798	567800.00	4176100.00	RECREATIONAL	2.21E-09	4.88E-10	1.72E-09	-4.65E-07	1.67E-08	-5.49E-07	-4.63E-07	1.72E-08	-5.48E-07
799	567800.00	4176200.00	RECREATIONAL	2.03E-09	4.27E-10	1.60E-09	-4.53E-07	1.51E-08	-5.33E-07	-4.51E-07	1.56E-08	-5.32E-07
800	567800.00	4176300.00	RECREATIONAL	1.92E-09	3.82E-10	1.54E-09	-4.45E-07	1.37E-08	-5.23E-07	-4.43E-07	1.41E-08	-5.21E-07
801	567800.00	4176400.00	RECREATIONAL	1.81E-09	3.46E-10	1.46E-09	-4.41E-07	1.26E-08	-5.17E-07	-4.39E-07	1.30E-08	-5.16E-07
802	567800.00	4176500.00	RECREATIONAL	1.78E-09	3.18E-10	1.46E-09	-4.39E-07	1.17E-08	-5.14E-07	-4.37E-07	1.20E-08	-5.12E-07
803	567800.00	4176600.00	RECREATIONAL	1.69E-09	2.94E-10	1.39E-09	-4.39E-07	1.09E-08	-5.13E-07	-4.38E-07	1.12E-08	-5.12E-07
804	567800.00	4176700.00	RECREATIONAL	1.63E-09	2.74E-10	1.35E-09	-4.46E-07	1.02E-08	-5.20E-07	-4.44E-07	1.05E-08	-5.18E-07
805	567800.00	4176800.00	RECREATIONAL	1.52E-09	2.57E-10	1.26E-09	-4.58E-07	9.64E-09	-5.33E-07	-4.57E-07	9.90E-09	-5.32E-07
806	567800.00	4176900.00	RECREATIONAL	1.48E-09	2.41E-10	1.23E-09	-4.70E-07	9.12E-09	-5.46E-07	-4.68E-07	9.37E-09	-5.45E-07
807	567800.00	4177000.00	RECREATIONAL	1.43E-09	2.28E-10	1.20E-09	-4.66E-07	8.64E-09	-5.41E-07	-4.64E-07	8.87E-09	-5.40E-07
808	567800.00	4177100.00	RECREATIONAL	1.41E-09	2.14E-10	1.20E-09	-4.42E-07	8.25E-09	-5.14E-07	-4.41E-07	8.47E-09	-5.12E-07
809	567800.00	4177200.00	RECREATIONAL	1.35E-09	2.02E-10	1.14E-09	-4.08E-07	7.87E-09	-4.75E-07	-4.07E-07	8.07E-09	-4.73E-07
810	567800.00	4177300.00	RECREATIONAL	1.33E-09	1.92E-10	1.14E-09	-3.68E-07	7.53E-09	-4.29E-07	-3.67E-07	7.72E-09	-4.28E-07
811	567800.00	4177400.00	RECREATIONAL	1.36E-09	1.80E-10	1.18E-09	-3.32E-07	7.15E-09	-3.86E-07	-3.30E-07	7.33E-09	-3.85E-07
812	567800.00	4177500.00	RECREATIONAL	1.26E-09	1.71E-10	1.09E-09	-2.99E-07	6.84E-09	-3.49E-07	-2.98E-07	7.01E-09	-3.48E-07
813	567800.00	4177600.00	RECREATIONAL	1.29E-09	1.61E-10	1.13E-09	-2.70E-07	6.50E-09	-3.15E-07	-2.69E-07	6.66E-09	-3.14E-07
814	567800.00	4177700.00	RECREATIONAL	1.26E-09	1.51E-10	1.11E-09	-2.42E-07	6.13E-09	-2.83E-07	-2.41E-07	6.28E-09	-2.82E-07
815	567800.00	4177800.00	RECREATIONAL	1.18E-09	1.42E-10	1.04E-09	-2.18E-07	5.71E-09	-2.56E-07	-2.17E-07	5.85E-09	-2.55E-07
816	567800.00	4177900.00	ROAD	1.14E-09	1.34E-10	1.00E-09	-1.97E-07	5.34E-09	-2.31E-07	-1.96E-07	5.48E-09	-2.30E-07
817	567800.00	4178000.00	WORKER	1.05E-09	1.21E-10	9.25E-10	-1.70E-07	4.73E-09	-2.00E-07	-1.69E-07	4.85E-09	-1.99E-07
826	567900.00	4175800.00	WORKER	3.40E-09	1.08E-09	2.32E-09	-5.50E-07	2.60E-08	-6.57E-07	-5.47E-07	2.71E-08	-6.55E-07
827	567878.00	4175900.00	WORKER	3.52E-09	8.12E-10	2.71E-09	-5.53E-07	2.75E-08	-6.62E-07	-5.49E-07	2.83E-08	-6.59E-07

**OAK Terminal Modernization & Development**

**Table 2-21. Offsite Worker Cancer Risks Combined Construction & Operations**

				Non-Inhalation Risks			Inhalation Risks			Multi-Pathway Risks		
Maximum->				9.48E-08	7.78E-09	9.42E-08	-3.33E-08	2.29E-07	-3.92E-08	-3.30E-08	2.37E-07	-3.89E-08
Minimum->				2.05E-10	2.72E-11	1.75E-10	-3.89E-06	1.08E-09	-4.51E-06	-3.81E-06	1.11E-09	-4.42E-06
Max Receptor No.->				1544	3296	1544	2965	3296	2965	2965	3296	2965
Exposure Years->				2025-2049	2025-2030	2028-2052	2025-2049	2025-2030	2028-2052	2025-2049	2025-2030	2028-2052
Exposure Duration->				25 Yrs	6 Yrs	25 Yrs	25 Yrs	6 Yrs	25 Yrs	25 Yrs	6 Yrs	25 Yrs
RecID	UTM X	UTM Y	Receptor Type	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations
828	567883.00	4176000.00	RECREATIONAL	3.01E-09	6.60E-10	2.35E-09	-5.29E-07	2.49E-08	-6.32E-07	-5.26E-07	2.55E-08	-6.29E-07
829	567900.00	4176100.00	RECREATIONAL	2.59E-09	5.46E-10	2.04E-09	-5.07E-07	2.12E-08	-6.02E-07	-5.04E-07	2.17E-08	-6.00E-07
830	567900.00	4176200.00	RECREATIONAL	2.28E-09	4.56E-10	1.82E-09	-4.84E-07	1.73E-08	-5.72E-07	-4.82E-07	1.78E-08	-5.70E-07
831	567900.00	4176300.00	RECREATIONAL	2.09E-09	4.00E-10	1.69E-09	-4.73E-07	1.51E-08	-5.56E-07	-4.71E-07	1.55E-08	-5.54E-07
832	567900.00	4176400.00	RECREATIONAL	1.94E-09	3.59E-10	1.58E-09	-4.66E-07	1.35E-08	-5.47E-07	-4.65E-07	1.39E-08	-5.46E-07
833	567900.00	4176500.00	RECREATIONAL	1.89E-09	3.28E-10	1.56E-09	-4.65E-07	1.24E-08	-5.44E-07	-4.63E-07	1.27E-08	-5.43E-07
834	567900.00	4176600.00	RECREATIONAL	1.78E-09	3.02E-10	1.48E-09	-4.68E-07	1.15E-08	-5.47E-07	-4.67E-07	1.18E-08	-5.46E-07
835	567900.00	4176700.00	RECREATIONAL	1.66E-09	2.82E-10	1.38E-09	-4.78E-07	1.08E-08	-5.57E-07	-4.76E-07	1.11E-08	-5.56E-07
836	567900.00	4176800.00	RECREATIONAL	1.53E-09	2.65E-10	1.27E-09	-4.97E-07	1.02E-08	-5.78E-07	-4.95E-07	1.05E-08	-5.77E-07
837	567900.00	4176900.00	RECREATIONAL	1.58E-09	2.50E-10	1.33E-09	-5.31E-07	9.67E-09	-6.17E-07	-5.30E-07	9.92E-09	-6.16E-07
838	567900.00	4177000.00	RECREATIONAL	1.49E-09	2.37E-10	1.25E-09	-5.62E-07	9.26E-09	-6.52E-07	-5.60E-07	9.50E-09	-6.50E-07
839	567900.00	4177100.00	RECREATIONAL	1.52E-09	2.24E-10	1.30E-09	-5.54E-07	8.88E-09	-6.42E-07	-5.53E-07	9.10E-09	-6.41E-07
840	567900.00	4177200.00	RECREATIONAL	1.50E-09	2.13E-10	1.29E-09	-5.06E-07	8.47E-09	-5.87E-07	-5.05E-07	8.68E-09	-5.86E-07
841	567900.00	4177300.00	RECREATIONAL	1.52E-09	2.02E-10	1.32E-09	-4.43E-07	8.13E-09	-5.14E-07	-4.41E-07	8.33E-09	-5.13E-07
842	567900.00	4177400.00	RECREATIONAL	1.42E-09	1.90E-10	1.23E-09	-3.85E-07	7.75E-09	-4.48E-07	-3.83E-07	7.94E-09	-4.46E-07
843	567900.00	4177500.00	RECREATIONAL	1.39E-09	1.80E-10	1.21E-09	-3.35E-07	7.44E-09	-3.91E-07	-3.34E-07	7.62E-09	-3.90E-07
844	567900.00	4177600.00	RECREATIONAL	1.44E-09	1.71E-10	1.27E-09	-2.93E-07	7.08E-09	-3.42E-07	-2.92E-07	7.25E-09	-3.41E-07
845	567900.00	4177700.00	RECREATIONAL	1.44E-09	1.61E-10	1.28E-09	-2.57E-07	6.68E-09	-3.01E-07	-2.56E-07	6.84E-09	-3.00E-07
846	567900.00	4177800.00	RECREATIONAL	1.44E-09	1.49E-10	1.30E-09	-2.28E-07	6.18E-09	-2.68E-07	-2.27E-07	6.33E-09	-2.66E-07
847	567900.00	4177900.00	WORKER	1.35E-09	1.39E-10	1.21E-09	-2.04E-07	5.67E-09	-2.39E-07	-2.02E-07	5.81E-09	-2.37E-07
848	567900.00	4178000.00	WORKER	1.15E-09	1.22E-10	1.02E-09	-1.72E-07	4.84E-09	-2.01E-07	-1.70E-07	4.96E-09	-2.00E-07
856	568000.00	4176300.00	RECREATIONAL	2.58E-09	4.72E-10	2.10E-09	-5.22E-07	2.05E-08	-6.18E-07	-5.19E-07	2.10E-08	-6.16E-07
857	568000.00	4176400.00	RECREATIONAL	2.18E-09	3.93E-10	1.79E-09	-5.00E-07	1.60E-08	-5.88E-07	-4.97E-07	1.64E-08	-5.86E-07
858	568000.00	4176500.00	RECREATIONAL	1.98E-09	3.49E-10	1.64E-09	-4.97E-07	1.39E-08	-5.83E-07	-4.95E-07	1.42E-08	-5.81E-07
859	568000.00	4176600.00	RECREATIONAL	1.86E-09	3.18E-10	1.54E-09	-5.04E-07	1.26E-08	-5.89E-07	-5.02E-07	1.29E-08	-5.87E-07
860	568000.00	4176700.00	RECREATIONAL	1.72E-09	2.97E-10	1.42E-09	-5.16E-07	1.18E-08	-6.02E-07	-5.15E-07	1.21E-08	-6.01E-07
861	568000.00	4176800.00	RECREATIONAL	1.61E-09	2.81E-10	1.32E-09	-5.43E-07	1.13E-08	-6.32E-07	-5.41E-07	1.16E-08	-6.31E-07
862	568000.00	4176900.00	RECREATIONAL	1.67E-09	2.67E-10	1.40E-09	-5.99E-07	1.08E-08	-6.96E-07	-5.98E-07	1.11E-08	-6.95E-07
863	568000.00	4177000.00	RECREATIONAL	1.68E-09	2.54E-10	1.42E-09	-6.98E-07	1.04E-08	-8.09E-07	-6.97E-07	1.06E-08	-8.07E-07
864	568000.00	4177100.00	RECREATIONAL	1.74E-09	2.43E-10	1.50E-09	-7.64E-07	9.95E-09	-8.83E-07	-7.62E-07	1.02E-08	-8.82E-07
865	568000.00	4177200.00	RECREATIONAL	1.72E-09	2.31E-10	1.49E-09	-7.06E-07	9.59E-09	-8.17E-07	-7.04E-07	9.82E-09	-8.15E-07
866	568000.00	4177300.00	RECREATIONAL	1.67E-09	2.20E-10	1.45E-09	-5.85E-07	9.21E-09	-6.78E-07	-5.83E-07	9.43E-09	-6.76E-07
867	568000.00	4177400.00	RECREATIONAL	1.62E-09	2.09E-10	1.41E-09	-4.70E-07	8.85E-09	-5.46E-07	-4.68E-07	9.06E-09	-5.45E-07
868	568000.00	4177500.00	RECREATIONAL	1.58E-09	1.97E-10	1.38E-09	-3.84E-07	8.54E-09	-4.48E-07	-3.82E-07	8.74E-09	-4.46E-07
869	568000.00	4177600.00	RECREATIONAL	1.70E-09	1.89E-10	1.51E-09	-3.20E-07	8.24E-09	-3.75E-07	-3.19E-07	8.43E-09	-3.73E-07
870	568000.00	4177700.00	RECREATIONAL	1.75E-09	1.78E-10	1.57E-09	-2.77E-07	7.87E-09	-3.25E-07	-2.75E-07	8.05E-09	-3.23E-07
871	568000.00	4177800.00	RECREATIONAL	1.76E-09	1.66E-10	1.59E-09	-2.43E-07	7.23E-09	-2.85E-07	-2.41E-07	7.40E-09	-2.83E-07
872	568000.00	4177900.00	RECREATIONAL	1.60E-09	1.50E-10	1.45E-09	-2.12E-07	6.34E-09	-2.49E-07	-2.10E-07	6.49E-09	-2.47E-07
873	568000.00	4178000.00	WORKER	1.39E-09	1.29E-10	1.26E-09	-1.79E-07	5.22E-09	-2.10E-07	-1.77E-07	5.35E-09	-2.09E-07
881	568096.00	4176500.00	RECREATIONAL	2.66E-09	4.42E-10	2.22E-09	-5.62E-07	2.09E-08	-6.64E-07	-5.59E-07	2.14E-08	-6.62E-07
882	568100.00	4176600.00	RECREATIONAL	2.09E-09	3.70E-10	1.72E-09	-5.57E-07	1.64E-08	-6.54E-07	-5.55E-07	1.68E-08	-6.52E-07
883	568100.00	4176700.00	RECREATIONAL	2.02E-09	3.48E-10	1.68E-09	-5.77E-07	1.56E-08	-6.75E-07	-5.74E-07	1.60E-08	-6.74E-07
884	568100.00	4176800.00	RECREATIONAL	2.00E-09	3.32E-10	1.67E-09	-6.13E-07	1.51E-08	-7.17E-07	-6.11E-07	1.54E-08	-7.15E-07
885	568100.00	4176900.00	RECREATIONAL	2.08E-09	3.20E-10	1.76E-09	-6.89E-07	1.47E-08	-8.02E-07	-6.87E-07	1.50E-08	-8.01E-07
886	568100.00	4177000.00	RECREATIONAL	2.12E-09	3.09E-10	1.81E-09	-8.71E-07	1.42E-08	-1.01E-06	-8.69E-07	1.46E-08	-1.01E-06
887	568100.00	4177100.00	RECREATIONAL	2.27E-09	2.99E-10	1.97E-09	-1.25E-06	1.39E-08	-1.44E-06	-1.24E-06	1.42E-08	-1.44E-06
888	568100.00	4177200.00	RECREATIONAL	2.39E-09	2.90E-10	2.10E-09	-1.29E-06	1.37E-08	-1.49E-06	-1.29E-06	1.40E-08	-1.48E-06
889	568100.00	4177300.00	RECREATIONAL	2.26E-09	2.81E-10	1.98E-09	-9.50E-07	1.35E-08	-1.10E-06	-9.48E-07	1.38E-08	-1.10E-06
890	568100.00	4177400.00	RECREATIONAL	2.15E-09	2.72E-10	1.88E-09	-6.38E-07	1.34E-08	-7.44E-07	-6.36E-07	1.37E-08	-7.42E-07
891	568100.00	4177500.00	RECREATIONAL	2.19E-09	2.61E-10	1.93E-09	-4.56E-07	1.32E-08	-5.36E-07	-4.54E-07	1.35E-08	-5.34E-07
892	568100.00	4177600.00	RECREATIONAL	2.27E-09	2.54E-10	2.01E-09	-3.65E-07	1.32E-08	-4.32E-07	-3.63E-07	1.34E-08	-4.30E-07
893	568100.00	4177700.00	RECREATIONAL	2.60E-09	2.48E-10	2.35E-09	-3.16E-07	1.33E-08	-3.75E-07	-3.13E-07	1.36E-08	-3.73E-07
894	568100.00	4177800.00	RECREATIONAL	3.66E-09	2.46E-10	3.41E-09	-2.95E-07	1.36E-08	-3.52E-07	-2.91E-07	1.39E-08	-3.49E-07
895	568100.00	4177900.00	RECREATIONAL	2.75E-09	1.71E-10	2.57E-09	-2.35E-07	7.98E-09	-2.77E-07	-2.32E-07	8.16E-09	-2.74E-07
896	568100.00	4178000.00	WORKER	1.72E-09	1.40E-10	1.58E-09	-1.92E-07	5.86E-09	-2.26E-07	-1.91E-07	6.00E-09	-2.24E-07
941	569004.00	4177402.00	RECREATIONAL	2.05E-08	8.29E-10	1.97E-08	-1.02E-06	3.45E-08	-1.20E-06	-9.98E-07	3.53E-08	-1.18E-06
942	569000.00	4177500.00	RECREATIONAL	1.00E-08	7.41E-10	9.29E-09	-6.04E-07	2.29E-08	-7.16E-07	-5.94E-07	2.37E-08	-7.07E-07
948	569100.00	4177300.00	RECREATIONAL	1.30E-08	5.08E-10	1.25E-08	-1.04E-06	2.32E-08	-1.21E-06	-1.02E-06	2.38E-08	-1.20E-06
949	569100.00	4177400.00	RECREATIONAL	7.14E-09	4.71E-10	6.67E-09	-6.99E-07	1.73E-08	-8.17E-07	-6.91E-07	1.77E-08	-8.11E-07
956	569202.00	4177104.00	RECREATIONAL	2.19E-08	5.44E-10	2.13E-08	-1.38E-06	3.17E-08	-1.61E-06	-1.36E-06	3.22E-08	-1.58E-06
957	569200.00	4177200.00	RECREATIONAL	9.17E-09	3.99E-10	8.77E-09	-1.00E-06	1.89E-08	-1.17E-06	-9.94E-07	1.93E-08	-1.16E-06

**OAK Terminal Modernization & Development**

**Table 2-21. Offsite Worker Cancer Risks Combined Construction & Operations**

				Non-Inhalation Risks			Inhalation Risks			Multi-Pathway Risks		
Maximum->				9.48E-08	7.78E-09	9.42E-08	-3.33E-08	2.29E-07	-3.92E-08	-3.30E-08	2.37E-07	-3.89E-08
Minimum->				2.05E-10	2.72E-11	1.75E-10	-3.89E-06	1.08E-09	-4.51E-06	-3.81E-06	1.11E-09	-4.42E-06
Max Receptor No.->				1544	3296	1544	2965	3296	2965	2965	3296	2965
Exposure Years->				2025-2049	2025-2030	2028-2052	2025-2049	2025-2030	2028-2052	2025-2049	2025-2030	2028-2052
Exposure Duration->				25 Yrs	6 Yrs	25 Yrs	25 Yrs	6 Yrs	25 Yrs	25 Yrs	6 Yrs	25 Yrs
RecID	UTM X	UTM Y	Receptor Type	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations
958	569200.00	4177300.00	RECREATIONAL	5.60E-09	3.62E-10	5.23E-09	-7.68E-07	1.48E-08	-8.93E-07	-7.63E-07	1.51E-08	-8.88E-07
966	569300.00	4176900.00	WORKER	2.09E-08	4.73E-10	2.04E-08	-1.15E-06	2.68E-08	-1.30E-06	-1.13E-06	2.73E-08	-1.28E-06
967	569300.00	4177000.00	RECREATIONAL	1.75E-08	4.42E-10	1.71E-08	-1.15E-06	2.43E-08	-1.33E-06	-1.14E-06	2.48E-08	-1.32E-06
978	569400.00	4176700.00	WORKER	1.79E-08	5.04E-10	1.74E-08	-2.17E-06	2.84E-08	-2.50E-06	-2.15E-06	2.89E-08	-2.48E-06
1032	569600.00	4176900.00	RECREATIONAL	5.45E-09	3.06E-10	5.15E-09	-8.07E-07	1.35E-08	-9.33E-07	-8.01E-07	1.38E-08	-9.28E-07
1033	569600.00	4177000.00	RECREATIONAL	4.37E-09	2.83E-10	4.09E-09	-6.89E-07	1.21E-08	-7.98E-07	-6.85E-07	1.24E-08	-7.94E-07
1034	569600.00	4177100.00	RECREATIONAL	3.63E-09	2.64E-10	3.36E-09	-6.08E-07	1.10E-08	-7.04E-07	-6.04E-07	1.12E-08	-7.01E-07
1035	569600.00	4177200.00	RECREATIONAL	3.12E-09	2.48E-10	2.87E-09	-5.44E-07	1.00E-08	-6.31E-07	-5.41E-07	1.03E-08	-6.28E-07
1036	569600.00	4177300.00	RECREATIONAL	2.71E-09	2.31E-10	2.48E-09	-4.82E-07	9.17E-09	-5.59E-07	-4.79E-07	9.40E-09	-5.57E-07
1037	569600.00	4177400.00	RECREATIONAL	2.47E-09	2.17E-10	2.25E-09	-4.25E-07	8.45E-09	-4.94E-07	-4.23E-07	8.67E-09	-4.92E-07
1043	569600.00	4178000.00	WORKER	1.45E-09	1.34E-10	1.31E-09	-2.12E-07	5.39E-09	-2.48E-07	-2.11E-07	5.53E-09	-2.47E-07
1056	569705.00	4176207.00	ROAD	4.28E-08	7.64E-10	4.20E-08	-3.44E-06	4.28E-08	-3.97E-06	-3.40E-06	4.36E-08	-3.93E-06
1060	569700.00	4176600.00	WORKER	6.18E-09	3.64E-10	5.82E-09	-1.14E-06	1.60E-08	-1.32E-06	-1.13E-06	1.64E-08	-1.31E-06
1061	569700.00	4176700.00	RECREATIONAL	5.67E-09	3.36E-10	5.34E-09	-9.73E-07	1.47E-08	-1.12E-06	-9.67E-07	1.50E-08	-1.12E-06
1062	569700.00	4176800.00	RECREATIONAL	5.14E-09	3.13E-10	4.83E-09	-8.36E-07	1.35E-08	-9.67E-07	-8.31E-07	1.38E-08	-9.62E-07
1063	569700.00	4176900.00	RECREATIONAL	4.48E-09	2.92E-10	4.19E-09	-7.19E-07	1.24E-08	-8.33E-07	-7.15E-07	1.27E-08	-8.28E-07
1064	569700.00	4177000.00	RECREATIONAL	3.90E-09	2.72E-10	3.63E-09	-6.28E-07	1.14E-08	-7.28E-07	-6.25E-07	1.16E-08	-7.24E-07
1065	569700.00	4177100.00	RECREATIONAL	3.32E-09	2.54E-10	3.07E-09	-5.62E-07	1.04E-08	-6.52E-07	-5.59E-07	1.07E-08	-6.49E-07
1066	569700.00	4177200.00	RECREATIONAL	2.96E-09	2.38E-10	2.73E-09	-5.06E-07	9.55E-09	-5.88E-07	-5.04E-07	9.79E-09	-5.85E-07
1067	569700.00	4177300.00	RECREATIONAL	2.57E-09	2.22E-10	2.34E-09	-4.57E-07	8.83E-09	-5.30E-07	-4.54E-07	9.05E-09	-5.28E-07
1068	569700.00	4177400.00	RECREATIONAL	2.35E-09	2.09E-10	2.14E-09	-4.05E-07	8.20E-09	-4.71E-07	-4.03E-07	8.41E-09	-4.69E-07
1069	569700.00	4177500.00	RECREATIONAL	2.10E-09	1.98E-10	1.90E-09	-3.58E-07	7.61E-09	-4.16E-07	-3.56E-07	7.81E-09	-4.14E-07
1072	569700.00	4177800.00	WORKER	1.65E-09	1.57E-10	1.49E-09	-2.53E-07	6.13E-09	-2.95E-07	-2.51E-07	6.29E-09	-2.94E-07
1073	569700.00	4177900.00	WORKER	1.58E-09	1.46E-10	1.43E-09	-2.28E-07	5.71E-09	-2.67E-07	-2.27E-07	5.86E-09	-2.65E-07
1074	569700.00	4178000.00	WORKER	1.41E-09	1.34E-10	1.27E-09	-2.10E-07	5.36E-09	-2.45E-07	-2.08E-07	5.50E-09	-2.44E-07
1087	569800.00	4176200.00	RECREATIONAL	1.48E-08	5.86E-10	1.42E-08	-2.18E-06	2.83E-08	-2.52E-06	-2.17E-06	2.89E-08	-2.51E-06
1088	569800.00	4176300.00	WORKER	8.07E-09	4.77E-10	7.59E-09	-1.58E-06	2.13E-08	-1.82E-06	-1.57E-06	2.18E-08	-1.82E-06
1089	569800.00	4176400.00	WORKER	6.55E-09	4.22E-10	6.13E-09	-1.30E-06	1.83E-08	-1.50E-06	-1.29E-06	1.87E-08	-1.50E-06
1090	569800.00	4176500.00	WORKER	5.86E-09	3.82E-10	5.48E-09	-1.12E-06	1.64E-08	-1.30E-06	-1.12E-06	1.68E-08	-1.30E-06
1091	569800.00	4176600.00	WORKER	5.38E-09	3.51E-10	5.03E-09	-9.84E-07	1.50E-08	-1.14E-06	-9.79E-07	1.53E-08	-1.13E-06
1092	569800.00	4176700.00	RECREATIONAL	4.90E-09	3.25E-10	4.57E-09	-8.58E-07	1.38E-08	-9.94E-07	-8.54E-07	1.41E-08	-9.89E-07
1093	569800.00	4176800.00	RECREATIONAL	4.48E-09	3.03E-10	4.18E-09	-7.50E-07	1.27E-08	-8.69E-07	-7.46E-07	1.30E-08	-8.65E-07
1094	569800.00	4176900.00	RECREATIONAL	4.15E-09	2.83E-10	3.87E-09	-6.57E-07	1.18E-08	-7.62E-07	-6.53E-07	1.21E-08	-7.58E-07
1095	569800.00	4177000.00	RECREATIONAL	3.50E-09	2.65E-10	3.24E-09	-5.83E-07	1.09E-08	-6.76E-07	-5.80E-07	1.11E-08	-6.73E-07
1096	569800.00	4177100.00	RECREATIONAL	3.20E-09	2.47E-10	2.96E-09	-5.25E-07	9.99E-09	-6.10E-07	-5.22E-07	1.02E-08	-6.07E-07
1097	569800.00	4177200.00	RECREATIONAL	2.83E-09	2.31E-10	2.59E-09	-4.77E-07	9.22E-09	-5.54E-07	-4.75E-07	9.45E-09	-5.52E-07
1098	569800.00	4177300.00	RECREATIONAL	2.51E-09	2.16E-10	2.29E-09	-4.34E-07	8.56E-09	-5.04E-07	-4.32E-07	8.77E-09	-5.02E-07
1099	569800.00	4177400.00	RECREATIONAL	2.21E-09	2.04E-10	2.00E-09	-3.90E-07	7.95E-09	-4.54E-07	-3.88E-07	8.16E-09	-4.52E-07
1102	569800.00	4177700.00	WORKER	1.79E-09	1.70E-10	1.62E-09	-2.77E-07	6.54E-09	-3.23E-07	-2.75E-07	6.71E-09	-3.22E-07
1103	569800.00	4177800.00	WORKER	1.71E-09	1.57E-10	1.56E-09	-2.50E-07	6.12E-09	-2.92E-07	-2.48E-07	6.28E-09	-2.91E-07
1104	569800.00	4177900.00	WORKER	1.48E-09	1.46E-10	1.33E-09	-2.28E-07	5.70E-09	-2.66E-07	-2.26E-07	5.85E-09	-2.65E-07
1105	569800.00	4178000.00	WORKER	1.34E-09	1.36E-10	1.20E-09	-2.09E-07	5.36E-09	-2.44E-07	-2.07E-07	5.49E-09	-2.43E-07
1118	569900.00	4176100.00	WORKER	2.44E-08	7.02E-10	2.37E-08	-2.66E-06	3.54E-08	-3.08E-06	-2.63E-06	3.61E-08	-3.05E-06
1119	569900.00	4176200.00	WORKER	9.89E-09	5.34E-10	9.36E-09	-1.68E-06	2.40E-08	-1.95E-06	-1.67E-06	2.46E-08	-1.94E-06
1120	569900.00	4176300.00	WORKER	7.26E-09	4.61E-10	6.80E-09	-1.34E-06	1.99E-08	-1.55E-06	-1.33E-06	2.04E-08	-1.54E-06
1121	569900.00	4176400.00	WORKER	6.22E-09	4.11E-10	5.81E-09	-1.13E-06	1.74E-08	-1.31E-06	-1.13E-06	1.78E-08	-1.31E-06
1122	569900.00	4176500.00	WORKER	5.53E-09	3.74E-10	5.16E-09	-9.96E-07	1.57E-08	-1.15E-06	-9.90E-07	1.61E-08	-1.15E-06
1123	569900.00	4176600.00	WORKER	5.02E-09	3.44E-10	4.68E-09	-8.82E-07	1.43E-08	-1.02E-06	-8.77E-07	1.46E-08	-1.02E-06
1124	569900.00	4176700.00	WORKER	4.55E-09	3.19E-10	4.23E-09	-7.81E-07	1.32E-08	-9.05E-07	-7.76E-07	1.35E-08	-9.01E-07
1125	569900.00	4176800.00	RECREATIONAL	4.27E-09	2.98E-10	3.97E-09	-6.92E-07	1.22E-08	-8.03E-07	-6.88E-07	1.25E-08	-7.99E-07
1126	569900.00	4176900.00	RECREATIONAL	3.92E-09	2.78E-10	3.64E-09	-6.13E-07	1.13E-08	-7.11E-07	-6.09E-07	1.16E-08	-7.07E-07
1127	569900.00	4177000.00	RECREATIONAL	3.44E-09	2.59E-10	3.18E-09	-5.48E-07	1.05E-08	-6.37E-07	-5.45E-07	1.08E-08	-6.33E-07
1128	569900.00	4177100.00	RECREATIONAL	3.11E-09	2.42E-10	2.87E-09	-4.98E-07	9.69E-09	-5.78E-07	-4.95E-07	9.93E-09	-5.75E-07
1129	569900.00	4177200.00	RECREATIONAL	2.78E-09	2.27E-10	2.55E-09	-4.54E-07	8.97E-09	-5.28E-07	-4.51E-07	9.20E-09	-5.25E-07
1130	569900.00	4177300.00	RECREATIONAL	2.47E-09	2.12E-10	2.26E-09	-4.15E-07	8.34E-09	-4.83E-07	-4.13E-07	8.55E-09	-4.81E-07
1132	569900.00	4177500.00	WORKER	2.11E-09	1.89E-10	1.92E-09	-3.37E-07	7.33E-09	-3.92E-07	-3.35E-07	7.52E-09	-3.90E-07
1133	569900.00	4177600.00	WORKER	1.93E-09	1.79E-10	1.76E-09	-3.01E-07	6.88E-09	-3.51E-07	-2.99E-07	7.06E-09	-3.49E-07
1134	569900.00	4177700.00	WORKER	1.70E-09	1.68E-10	1.53E-09	-2.72E-07	6.49E-09	-3.18E-07	-2.70E-07	6.66E-09	-3.16E-07
1135	569900.00	4177800.00	WORKER	1.61E-09	1.57E-10	1.45E-09	-2.47E-07	6.04E-09	-2.89E-07	-2.46E-07	6.20E-09	-2.87E-07
1136	569900.00	4177900.00	WORKER	1.47E-09	1.46E-10	1.32E-09	-2.26E-07	5.65E-09	-2.64E-07	-2.25E-07	5.80E-09	-2.63E-07
1137	569900.00	4178000.00	WORKER	1.41E-09	1.37E-10	1.28E-09	-2.08E-07	5.31E-09	-2.43E-07	-2.07E-07	5.44E-09	-2.42E-07

**OAK Terminal Modernization & Development**

**Table 2-21. Offsite Worker Cancer Risks**

**Combined Construction & Operations**

**Non-Inhalation Risks**

**Inhalation Risks**

**Multi-Pathway Risks**

Maximum->	9.48E-08	7.78E-09	9.42E-08	-3.33E-08	2.29E-07	-3.92E-08	-3.30E-08	2.37E-07	-3.89E-08
Minimum->	2.05E-10	2.72E-11	1.75E-10	-3.89E-06	1.08E-09	-4.51E-06	-3.81E-06	1.11E-09	-4.42E-06
Max Receptor No.->	1544	3296	1544	2965	3296	2965	2965	3296	2965
Exposure Years->	2025-2049	2025-2030	2028-2052	2025-2049	2025-2030	2028-2052	2025-2049	2025-2030	2028-2052
Exposure Duration->	25 Yrs	6 Yrs	25 Yrs	25 Yrs	6 Yrs	25 Yrs	25 Yrs	6 Yrs	25 Yrs

RecID	UTM X	UTM Y	Receptor Type	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations
1150	570008.00	4176021.00	WORKER	3.10E-08	7.87E-10	3.02E-08	-2.84E-06	4.02E-08	-3.28E-06	-2.80E-06	4.09E-08	-3.25E-06
1151	570000.00	4176100.00	WORKER	1.29E-08	6.10E-10	1.23E-08	-1.88E-06	2.81E-08	-2.18E-06	-1.87E-06	2.87E-08	-2.17E-06
1152	570000.00	4176200.00	WORKER	8.71E-09	5.13E-10	8.20E-09	-1.42E-06	2.24E-08	-1.65E-06	-1.41E-06	2.29E-08	-1.64E-06
1153	570000.00	4176300.00	WORKER	7.17E-09	4.52E-10	6.71E-09	-1.18E-06	1.92E-08	-1.37E-06	-1.18E-06	1.97E-08	-1.37E-06
1154	570000.00	4176400.00	WORKER	6.23E-09	4.06E-10	5.83E-09	-1.02E-06	1.70E-08	-1.19E-06	-1.02E-06	1.74E-08	-1.18E-06
1155	570000.00	4176500.00	WORKER	5.46E-09	3.69E-10	5.09E-09	-9.08E-07	1.53E-08	-1.05E-06	-9.02E-07	1.57E-08	-1.05E-06
1156	570000.00	4176600.00	WORKER	4.91E-09	3.39E-10	4.57E-09	-8.10E-07	1.39E-08	-9.39E-07	-8.05E-07	1.43E-08	-9.34E-07
1157	570000.00	4176700.00	WORKER	4.53E-09	3.15E-10	4.21E-09	-7.23E-07	1.28E-08	-8.39E-07	-7.19E-07	1.31E-08	-8.35E-07
1158	570000.00	4176800.00	RECREATIONAL	4.13E-09	2.93E-10	3.84E-09	-6.47E-07	1.18E-08	-7.51E-07	-6.43E-07	1.21E-08	-7.47E-07
1159	570000.00	4176900.00	RECREATIONAL	3.74E-09	2.74E-10	3.47E-09	-5.80E-07	1.10E-08	-6.73E-07	-5.76E-07	1.12E-08	-6.70E-07
1160	570000.00	4177000.00	RECREATIONAL	3.47E-09	2.55E-10	3.22E-09	-5.21E-07	1.02E-08	-6.06E-07	-5.18E-07	1.04E-08	-6.02E-07
1161	570000.00	4177100.00	RECREATIONAL	3.10E-09	2.38E-10	2.86E-09	-4.74E-07	9.41E-09	-5.51E-07	-4.71E-07	9.65E-09	-5.48E-07
1162	570000.00	4177200.00	RECREATIONAL	2.83E-09	2.23E-10	2.60E-09	-4.35E-07	8.73E-09	-5.06E-07	-4.32E-07	8.95E-09	-5.03E-07
1163	570000.00	4177300.00	WORKER	2.46E-09	2.09E-10	2.25E-09	-3.99E-07	8.15E-09	-4.64E-07	-3.97E-07	8.36E-09	-4.62E-07
1164	570000.00	4177400.00	WORKER	2.24E-09	1.97E-10	2.04E-09	-3.63E-07	7.62E-09	-4.23E-07	-3.61E-07	7.82E-09	-4.21E-07
1165	570000.00	4177500.00	WORKER	2.02E-09	1.87E-10	1.83E-09	-3.28E-07	7.15E-09	-3.82E-07	-3.26E-07	7.34E-09	-3.80E-07
1166	570000.00	4177600.00	WORKER	1.92E-09	1.77E-10	1.74E-09	-2.96E-07	6.75E-09	-3.45E-07	-2.94E-07	6.93E-09	-3.43E-07
1167	570000.00	4177700.00	WORKER	1.74E-09	1.66E-10	1.58E-09	-2.68E-07	6.33E-09	-3.13E-07	-2.66E-07	6.49E-09	-3.11E-07
1168	570000.00	4177800.00	WORKER	1.59E-09	1.55E-10	1.44E-09	-2.45E-07	5.96E-09	-2.86E-07	-2.43E-07	6.12E-09	-2.84E-07
1169	570000.00	4177900.00	WORKER	1.54E-09	1.45E-10	1.39E-09	-2.24E-07	5.57E-09	-2.61E-07	-2.22E-07	5.71E-09	-2.60E-07
1170	570000.00	4178000.00	WORKER	1.41E-09	1.35E-10	1.27E-09	-2.07E-07	5.25E-09	-2.42E-07	-2.05E-07	5.38E-09	-2.40E-07
1184	570100.00	4176000.00	WORKER	1.88E-08	7.15E-10	1.81E-08	-2.17E-06	3.42E-08	-2.52E-06	-2.15E-06	3.49E-08	-2.50E-06
1185	570100.00	4176100.00	WORKER	1.09E-08	5.78E-10	1.04E-08	-1.55E-06	2.58E-08	-1.80E-06	-1.54E-06	2.64E-08	-1.79E-06
1186	570100.00	4176200.00	WORKER	8.68E-09	5.02E-10	8.18E-09	-1.26E-06	2.17E-08	-1.47E-06	-1.26E-06	2.22E-08	-1.46E-06
1187	570100.00	4176300.00	WORKER	7.36E-09	4.47E-10	6.92E-09	-1.08E-06	1.89E-08	-1.25E-06	-1.07E-06	1.94E-08	-1.25E-06
1188	570100.00	4176400.00	WORKER	6.41E-09	4.03E-10	6.00E-09	-9.48E-07	1.68E-08	-1.10E-06	-9.42E-07	1.72E-08	-1.09E-06
1189	570100.00	4176500.00	WORKER	5.69E-09	3.67E-10	5.32E-09	-8.47E-07	1.51E-08	-9.83E-07	-8.41E-07	1.55E-08	-9.78E-07
1190	570100.00	4176600.00	WORKER	5.09E-09	3.36E-10	4.75E-09	-7.61E-07	1.38E-08	-8.83E-07	-7.56E-07	1.41E-08	-8.78E-07
1191	570100.00	4176700.00	WORKER	4.58E-09	3.11E-10	4.27E-09	-6.82E-07	1.26E-08	-7.92E-07	-6.77E-07	1.29E-08	-7.87E-07
1192	570100.00	4176800.00	WORKER	4.18E-09	2.89E-10	3.89E-09	-6.14E-07	1.16E-08	-7.14E-07	-6.10E-07	1.19E-08	-7.10E-07
1193	570100.00	4176900.00	RECREATIONAL	3.81E-09	2.69E-10	3.54E-09	-5.53E-07	1.07E-08	-6.43E-07	-5.50E-07	1.10E-08	-6.40E-07
1194	570100.00	4177000.00	RECREATIONAL	3.48E-09	2.51E-10	3.23E-09	-5.02E-07	9.96E-09	-5.83E-07	-4.98E-07	1.02E-08	-5.80E-07
1196	570100.00	4177200.00	WORKER	2.74E-09	2.20E-10	2.52E-09	-4.19E-07	8.56E-09	-4.88E-07	-4.17E-07	8.78E-09	-4.85E-07
1197	570100.00	4177300.00	WORKER	2.52E-09	2.06E-10	2.31E-09	-3.85E-07	7.99E-09	-4.48E-07	-3.82E-07	8.19E-09	-4.46E-07
1198	570100.00	4177400.00	WORKER	2.34E-09	1.94E-10	2.14E-09	-3.51E-07	7.43E-09	-4.09E-07	-3.49E-07	7.63E-09	-4.07E-07
1199	570100.00	4177500.00	WORKER	2.10E-09	1.84E-10	1.92E-09	-3.19E-07	6.99E-09	-3.72E-07	-3.17E-07	7.17E-09	-3.70E-07
1200	570100.00	4177600.00	WORKER	1.91E-09	1.74E-10	1.73E-09	-2.89E-07	6.59E-09	-3.37E-07	-2.87E-07	6.77E-09	-3.36E-07
1201	570100.00	4177700.00	WORKER	1.73E-09	1.64E-10	1.56E-09	-2.63E-07	6.22E-09	-3.07E-07	-2.62E-07	6.39E-09	-3.06E-07
1202	570100.00	4177800.00	WORKER	1.58E-09	1.55E-10	1.43E-09	-2.41E-07	5.86E-09	-2.82E-07	-2.40E-07	6.01E-09	-2.80E-07
1203	570100.00	4177900.00	WORKER	1.53E-09	1.45E-10	1.39E-09	-2.22E-07	5.51E-09	-2.60E-07	-2.21E-07	5.66E-09	-2.58E-07
1204	570100.00	4178000.00	WORKER	1.40E-09	1.35E-10	1.27E-09	-2.06E-07	5.22E-09	-2.40E-07	-2.04E-07	5.36E-09	-2.39E-07
1218	570200.00	4175900.00	WORKER	3.40E-08	8.78E-10	3.31E-08	-2.72E-06	4.47E-08	-3.15E-06	-2.68E-06	4.56E-08	-3.12E-06
1219	570200.00	4176000.00	WORKER	1.48E-08	6.64E-10	1.41E-08	-1.74E-06	3.07E-08	-2.02E-06	-1.73E-06	3.14E-08	-2.01E-06
1220	570200.00	4176100.00	WORKER	1.11E-08	5.65E-10	1.06E-08	-1.40E-06	2.51E-08	-1.62E-06	-1.39E-06	2.57E-08	-1.61E-06
1221	570200.00	4176200.00	WORKER	9.24E-09	4.97E-10	8.75E-09	-1.18E-06	2.16E-08	-1.37E-06	-1.17E-06	2.21E-08	-1.36E-06
1222	570200.00	4176300.00	WORKER	7.90E-09	4.43E-10	7.46E-09	-1.03E-06	1.89E-08	-1.19E-06	-1.02E-06	1.94E-08	-1.19E-06
1223	570200.00	4176400.00	WORKER	7.02E-09	4.00E-10	6.62E-09	-9.05E-07	1.68E-08	-1.05E-06	-8.98E-07	1.72E-08	-1.04E-06
1224	570200.00	4176500.00	WORKER	6.14E-09	3.64E-10	5.78E-09	-8.10E-07	1.51E-08	-9.41E-07	-8.04E-07	1.54E-08	-9.35E-07
1225	570200.00	4176600.00	WORKER	5.45E-09	3.34E-10	5.12E-09	-7.29E-07	1.37E-08	-8.47E-07	-7.24E-07	1.40E-08	-8.42E-07
1226	570200.00	4176700.00	WORKER	4.89E-09	3.08E-10	4.59E-09	-6.57E-07	1.25E-08	-7.64E-07	-6.53E-07	1.28E-08	-7.59E-07
1227	570200.00	4176800.00	WORKER	4.40E-09	2.86E-10	4.11E-09	-5.92E-07	1.15E-08	-6.88E-07	-5.88E-07	1.18E-08	-6.84E-07
1228	570200.00	4176900.00	WORKER	3.92E-09	2.66E-10	3.65E-09	-5.36E-07	1.06E-08	-6.24E-07	-5.33E-07	1.09E-08	-6.20E-07
1229	570200.00	4177000.00	WORKER	3.55E-09	2.48E-10	3.30E-09	-4.86E-07	9.82E-09	-5.65E-07	-4.82E-07	1.01E-08	-5.62E-07
1230	570200.00	4177100.00	WORKER	3.13E-09	2.31E-10	2.90E-09	-4.44E-07	9.08E-09	-5.17E-07	-4.41E-07	9.31E-09	-5.14E-07
1231	570200.00	4177200.00	WORKER	2.76E-09	2.16E-10	2.55E-09	-4.07E-07	8.40E-09	-4.74E-07	-4.04E-07	8.62E-09	-4.71E-07
1232	570200.00	4177300.00	WORKER	2.53E-09	2.04E-10	2.32E-09	-3.74E-07	7.85E-09	-4.36E-07	-3.72E-07	8.06E-09	-4.33E-07
1233	570200.00	4177400.00	WORKER	2.26E-09	1.91E-10	2.06E-09	-3.42E-07	7.35E-09	-3.99E-07	-3.40E-07	7.54E-09	-3.97E-07
1234	570200.00	4177500.00	WORKER	2.04E-09	1.81E-10	1.86E-09	-3.11E-07	6.93E-09	-3.63E-07	-3.09E-07	7.11E-09	-3.61E-07
1235	570200.00	4177600.00	WORKER	1.90E-09	1.71E-10	1.72E-09	-2.83E-07	6.51E-09	-3.30E-07	-2.81E-07	6.68E-09	-3.29E-07
1236	570200.00	4177700.00	WORKER	1.65E-09	1.61E-10	1.49E-09	-2.59E-07	6.12E-09	-3.02E-07	-2.57E-07	6.28E-09	-3.01E-07
1237	570200.00	4177800.00	WORKER	1.57E-09	1.52E-10	1.42E-09	-2.38E-07	5.75E-09	-2.78E-07	-2.36E-07	5.90E-09	-2.76E-07

OAK Terminal Modernization & Development

Table 2-21. Offsite Worker Cancer Risks Combined Construction & Operations

				Non-Inhalation Risks			Inhalation Risks			Multi-Pathway Risks		
Maximum->				9.48E-08	7.78E-09	9.42E-08	-3.33E-08	2.29E-07	-3.92E-08	-3.30E-08	2.37E-07	-3.89E-08
Minimum->				2.05E-10	2.72E-11	1.75E-10	-3.89E-06	1.08E-09	-4.51E-06	-3.81E-06	1.11E-09	-4.42E-06
Max Receptor No.->				1544	3296	1544	2965	3296	2965	2965	3296	2965
Exposure Years->				2025-2049	2025-2030	2028-2052	2025-2049	2025-2030	2028-2052	2025-2049	2025-2030	2028-2052
Exposure Duration->				25 Yrs	6 Yrs	25 Yrs	25 Yrs	6 Yrs	25 Yrs	25 Yrs	6 Yrs	25 Yrs
RecID	UTM X	UTM Y	Receptor Type	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations
1238	570200.00	4177900.00	WORKER	1.44E-09	1.44E-10	1.30E-09	-2.19E-07	5.44E-09	-2.56E-07	-2.18E-07	5.58E-09	-2.55E-07
1239	570200.00	4178000.00	WORKER	1.32E-09	1.36E-10	1.18E-09	-2.03E-07	5.12E-09	-2.37E-07	-2.02E-07	5.26E-09	-2.36E-07
1253	570312.00	4175819.00	WORKER	4.84E-08	1.02E-09	4.73E-08	-3.15E-06	5.38E-08	-3.66E-06	-3.10E-06	5.48E-08	-3.61E-06
1254	570300.00	4175900.00	WORKER	2.36E-08	7.88E-10	2.28E-08	-2.10E-06	3.85E-08	-2.44E-06	-2.07E-06	3.93E-08	-2.41E-06
1255	570300.00	4176000.00	WORKER	1.64E-08	6.56E-10	1.58E-08	-1.62E-06	3.05E-08	-1.89E-06	-1.61E-06	3.12E-08	-1.87E-06
1256	570300.00	4176100.00	WORKER	1.30E-08	5.66E-10	1.25E-08	-1.35E-06	2.56E-08	-1.57E-06	-1.34E-06	2.62E-08	-1.56E-06
1257	570300.00	4176200.00	WORKER	1.07E-08	4.99E-10	1.02E-08	-1.16E-06	2.20E-08	-1.35E-06	-1.15E-06	2.25E-08	-1.34E-06
1258	570300.00	4176300.00	WORKER	9.18E-09	4.44E-10	8.73E-09	-1.02E-06	1.92E-08	-1.18E-06	-1.01E-06	1.97E-08	-1.17E-06
1259	570300.00	4176400.00	WORKER	7.93E-09	4.00E-10	7.53E-09	-8.98E-07	1.71E-08	-1.04E-06	-8.90E-07	1.75E-08	-1.04E-06
1260	570300.00	4176500.00	WORKER	6.92E-09	3.64E-10	6.56E-09	-8.01E-07	1.53E-08	-9.31E-07	-7.94E-07	1.57E-08	-9.25E-07
1261	570300.00	4176600.00	WORKER	6.09E-09	3.33E-10	5.75E-09	-7.20E-07	1.38E-08	-8.36E-07	-7.14E-07	1.41E-08	-8.31E-07
1262	570300.00	4176700.00	WORKER	5.37E-09	3.07E-10	5.06E-09	-6.48E-07	1.26E-08	-7.53E-07	-6.42E-07	1.29E-08	-7.48E-07
1264	570300.00	4176900.00	WORKER	4.12E-09	2.63E-10	3.86E-09	-5.27E-07	1.06E-08	-6.13E-07	-5.23E-07	1.08E-08	-6.09E-07
1265	570300.00	4177000.00	WORKER	3.68E-09	2.45E-10	3.44E-09	-4.78E-07	9.76E-09	-5.56E-07	-4.74E-07	1.00E-08	-5.52E-07
1266	570300.00	4177100.00	WORKER	3.22E-09	2.29E-10	2.99E-09	-4.35E-07	9.00E-09	-5.07E-07	-4.32E-07	9.23E-09	-5.04E-07
1267	570300.00	4177200.00	WORKER	2.91E-09	2.13E-10	2.69E-09	-3.99E-07	8.37E-09	-4.65E-07	-3.97E-07	8.58E-09	-4.62E-07
1268	570300.00	4177300.00	WORKER	2.56E-09	2.00E-10	2.36E-09	-3.66E-07	7.77E-09	-4.26E-07	-3.63E-07	7.97E-09	-4.23E-07
1269	570300.00	4177400.00	WORKER	2.35E-09	1.89E-10	2.16E-09	-3.34E-07	7.27E-09	-3.89E-07	-3.32E-07	7.46E-09	-3.87E-07
1270	570300.00	4177500.00	WORKER	2.02E-09	1.78E-10	1.84E-09	-3.05E-07	6.82E-09	-3.56E-07	-3.03E-07	7.00E-09	-3.54E-07
1271	570300.00	4177600.00	WORKER	1.89E-09	1.70E-10	1.72E-09	-2.78E-07	6.41E-09	-3.25E-07	-2.76E-07	6.57E-09	-3.23E-07
1272	570300.00	4177700.00	WORKER	1.71E-09	1.60E-10	1.55E-09	-2.55E-07	6.06E-09	-2.98E-07	-2.53E-07	6.22E-09	-2.96E-07
1273	570300.00	4177800.00	WORKER	1.56E-09	1.51E-10	1.41E-09	-2.35E-07	5.67E-09	-2.74E-07	-2.33E-07	5.82E-09	-2.73E-07
1274	570300.00	4177900.00	WORKER	1.43E-09	1.42E-10	1.29E-09	-2.16E-07	5.38E-09	-2.53E-07	-2.15E-07	5.52E-09	-2.51E-07
1275	570300.00	4178000.00	WORKER	1.30E-09	1.35E-10	1.17E-09	-2.01E-07	5.09E-09	-2.35E-07	-2.00E-07	5.23E-09	-2.34E-07
1281	570400.00	4173500.00	RECREATIONAL	7.38E-09	1.94E-09	5.45E-09	-3.25E-06	6.93E-08	-3.78E-06	-3.24E-06	7.13E-08	-3.77E-06
1282	570400.00	4173600.00	RECREATIONAL	8.23E-09	2.15E-09	6.08E-09	-3.25E-06	7.59E-08	-3.79E-06	-3.24E-06	7.81E-08	-3.78E-06
1283	570400.00	4173700.00	RECREATIONAL	9.02E-09	2.38E-09	6.64E-09	-3.16E-06	8.22E-08	-3.69E-06	-3.15E-06	8.46E-08	-3.69E-06
1284	570400.00	4173800.00	RECREATIONAL	9.97E-09	2.68E-09	7.30E-09	-3.15E-06	9.00E-08	-3.68E-06	-3.14E-06	9.27E-08	-3.68E-06
1285	570400.00	4173900.00	RECREATIONAL	1.11E-08	3.08E-09	8.06E-09	-3.24E-06	1.00E-07	-3.80E-06	-3.23E-06	1.03E-07	-3.79E-06
1286	570400.00	4174000.00	RECREATIONAL	1.24E-08	3.58E-09	8.84E-09	-3.34E-06	1.12E-07	-3.93E-06	-3.33E-06	1.15E-07	-3.92E-06
1287	570400.00	4174100.00	RECREATIONAL	1.41E-08	4.18E-09	9.89E-09	-3.32E-06	1.25E-07	-3.92E-06	-3.31E-06	1.29E-07	-3.91E-06
1288	570400.00	4174200.00	RECREATIONAL	1.65E-08	5.31E-09	1.12E-08	-3.10E-06	1.46E-07	-3.70E-06	-3.08E-06	1.51E-07	-3.69E-06
1290	570400.00	4175800.00	WORKER	5.84E-08	1.02E-09	5.74E-08	-3.27E-06	5.39E-08	-3.80E-06	-3.21E-06	5.49E-08	-3.74E-06
1291	570410.00	4175900.00	WORKER	5.75E-08	8.86E-10	5.66E-08	-2.89E-06	4.60E-08	-3.35E-06	-2.83E-06	4.69E-08	-3.29E-06
1292	570400.00	4176000.00	WORKER	3.41E-08	7.29E-10	3.34E-08	-2.12E-06	3.67E-08	-2.46E-06	-2.08E-06	3.75E-08	-2.43E-06
1293	570400.00	4176100.00	WORKER	2.01E-08	6.00E-10	1.95E-08	-1.56E-06	2.86E-08	-1.81E-06	-1.54E-06	2.92E-08	-1.79E-06
1294	570400.00	4176200.00	WORKER	1.50E-08	5.14E-10	1.44E-08	-1.28E-06	2.36E-08	-1.48E-06	-1.26E-06	2.41E-08	-1.47E-06
1295	570400.00	4176300.00	WORKER	1.19E-08	4.53E-10	1.14E-08	-1.08E-06	2.02E-08	-1.26E-06	-1.07E-06	2.06E-08	-1.25E-06
1296	570400.00	4176400.00	WORKER	9.79E-09	4.06E-10	9.38E-09	-9.40E-07	1.77E-08	-1.09E-06	-9.30E-07	1.81E-08	-1.08E-06
1297	570400.00	4176500.00	WORKER	8.33E-09	3.67E-10	7.97E-09	-8.31E-07	1.58E-08	-9.66E-07	-8.22E-07	1.62E-08	-9.58E-07
1298	570400.00	4176600.00	WORKER	7.18E-09	3.35E-10	6.84E-09	-7.38E-07	1.42E-08	-8.58E-07	-7.30E-07	1.45E-08	-8.51E-07
1299	570400.00	4176700.00	WORKER	6.05E-09	3.07E-10	5.74E-09	-6.58E-07	1.28E-08	-7.65E-07	-6.52E-07	1.31E-08	-7.60E-07
1300	570400.00	4176800.00	WORKER	5.28E-09	2.82E-10	5.00E-09	-5.90E-07	1.17E-08	-6.86E-07	-5.84E-07	1.20E-08	-6.81E-07
1301	570400.00	4176900.00	WORKER	4.59E-09	2.61E-10	4.33E-09	-5.29E-07	1.07E-08	-6.15E-07	-5.24E-07	1.10E-08	-6.11E-07
1302	570400.00	4177000.00	WORKER	3.94E-09	2.42E-10	3.70E-09	-4.77E-07	9.83E-09	-5.55E-07	-4.73E-07	1.01E-08	-5.51E-07
1303	570400.00	4177100.00	WORKER	3.38E-09	2.26E-10	3.16E-09	-4.32E-07	9.04E-09	-5.03E-07	-4.28E-07	9.27E-09	-5.00E-07
1304	570400.00	4177200.00	WORKER	3.00E-09	2.10E-10	2.79E-09	-3.94E-07	8.31E-09	-4.59E-07	-3.91E-07	8.52E-09	-4.56E-07
1305	570400.00	4177300.00	WORKER	2.61E-09	1.98E-10	2.41E-09	-3.60E-07	7.71E-09	-4.19E-07	-3.57E-07	7.91E-09	-4.17E-07
1306	570400.00	4177400.00	WORKER	2.29E-09	1.86E-10	2.10E-09	-3.29E-07	7.21E-09	-3.83E-07	-3.26E-07	7.40E-09	-3.81E-07
1307	570400.00	4177500.00	WORKER	2.11E-09	1.76E-10	1.93E-09	-3.00E-07	6.76E-09	-3.50E-07	-2.98E-07	6.94E-09	-3.48E-07
1308	570400.00	4177600.00	WORKER	1.90E-09	1.66E-10	1.73E-09	-2.74E-07	6.32E-09	-3.20E-07	-2.72E-07	6.49E-09	-3.18E-07
1309	570400.00	4177700.00	WORKER	1.72E-09	1.58E-10	1.56E-09	-2.52E-07	5.98E-09	-2.94E-07	-2.50E-07	6.14E-09	-2.93E-07
1310	570400.00	4177800.00	WORKER	1.56E-09	1.49E-10	1.41E-09	-2.32E-07	5.62E-09	-2.71E-07	-2.31E-07	5.77E-09	-2.70E-07
1311	570400.00	4177900.00	WORKER	1.50E-09	1.41E-10	1.36E-09	-2.14E-07	5.30E-09	-2.50E-07	-2.13E-07	5.44E-09	-2.49E-07
1312	570400.00	4178000.00	WORKER	1.30E-09	1.33E-10	1.17E-09	-1.99E-07	5.01E-09	-2.33E-07	-1.98E-07	5.14E-09	-2.32E-07
1317	570500.00	4173400.00	RECREATIONAL	6.70E-09	1.66E-09	5.04E-09	-2.77E-06	5.97E-08	-3.21E-06	-2.76E-06	6.14E-08	-3.21E-06
1318	570500.00	4173500.00	RECREATIONAL	7.34E-09	1.82E-09	5.52E-09	-2.79E-06	6.49E-08	-3.24E-06	-2.78E-06	6.67E-08	-3.24E-06
1319	570500.00	4173600.00	RECREATIONAL	7.96E-09	1.99E-09	5.97E-09	-2.73E-06	6.99E-08	-3.18E-06	-2.72E-06	7.19E-08	-3.18E-06
1320	570500.00	4173700.00	RECREATIONAL	8.53E-09	2.19E-09	6.34E-09	-2.67E-06	7.52E-08	-3.13E-06	-2.67E-06	7.74E-08	-3.12E-06
1321	570500.00	4173800.00	RECREATIONAL	9.30E-09	2.41E-09	6.88E-09	-2.65E-06	8.11E-08	-3.11E-06	-2.64E-06	8.35E-08	-3.11E-06
1322	570500.00	4173900.00	RECREATIONAL	1.03E-08	2.76E-09	7.51E-09	-2.75E-06	8.99E-08	-3.24E-06	-2.74E-06	9.26E-08	-3.23E-06

**OAK Terminal Modernization & Development**

**Table 2-21. Offsite Worker Cancer Risks**

**Combined Construction & Operations**

**Non-Inhalation Risks**

**Inhalation Risks**

**Multi-Pathway Risks**

Maximum->	9.48E-08	7.78E-09	9.42E-08	-3.33E-08	2.29E-07	-3.92E-08	-3.30E-08	2.37E-07	-3.89E-08
Minimum->	2.05E-10	2.72E-11	1.75E-10	-3.89E-06	1.08E-09	-4.51E-06	-3.81E-06	1.11E-09	-4.42E-06
Max Receptor No.->	1544	3296	1544	2965	3296	2965	2965	3296	2965
Exposure Years->	2025-2049	2025-2030	2028-2052	2025-2049	2025-2030	2028-2052	2025-2049	2025-2030	2028-2052
Exposure Duration->	25 Yrs	6 Yrs	25 Yrs	25 Yrs	6 Yrs	25 Yrs	25 Yrs	6 Yrs	25 Yrs

RecID	UTM X	UTM Y	Receptor Type	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations
1323	570500.00	4174000.00	RECREATIONAL	1.15E-08	3.19E-09	8.30E-09	-2.88E-06	1.00E-07	-3.40E-06	-2.87E-06	1.03E-07	-3.39E-06
1324	570500.00	4174100.00	RECREATIONAL	1.28E-08	3.66E-09	9.17E-09	-2.90E-06	1.10E-07	-3.42E-06	-2.88E-06	1.14E-07	-3.41E-06
1325	570500.00	4174200.00	RECREATIONAL	1.44E-08	4.29E-09	1.01E-08	-2.73E-06	1.23E-07	-3.24E-06	-2.71E-06	1.27E-07	-3.23E-06
1327	570511.00	4175717.00	WORKER	6.01E-08	1.11E-09	5.90E-08	-3.22E-06	5.88E-08	-3.74E-06	-3.16E-06	6.00E-08	-3.68E-06
1328	570510.00	4175800.00	WORKER	8.80E-08	1.01E-09	8.70E-08	-3.89E-06	5.29E-08	-4.51E-06	-3.81E-06	5.39E-08	-4.42E-06
1329	570500.00	4175900.00	WORKER	3.95E-08	8.06E-10	3.87E-08	-2.38E-06	4.04E-08	-2.76E-06	-2.34E-06	4.12E-08	-2.72E-06
1330	570500.00	4176000.00	WORKER	3.92E-08	7.65E-10	3.84E-08	-2.26E-06	3.91E-08	-2.62E-06	-2.22E-06	3.99E-08	-2.58E-06
1331	570514.00	4176106.00	WORKER	5.66E-08	7.63E-10	5.58E-08	-2.58E-06	4.12E-08	-3.00E-06	-2.53E-06	4.19E-08	-2.94E-06
1332	570488.00	4176205.00	WORKER	3.70E-08	5.81E-10	3.64E-08	-1.98E-06	2.90E-08	-2.30E-06	-1.95E-06	2.95E-08	-2.26E-06
1333	570500.00	4176300.00	WORKER	2.26E-08	4.90E-10	2.21E-08	-1.47E-06	2.33E-08	-1.70E-06	-1.44E-06	2.38E-08	-1.68E-06
1334	570500.00	4176400.00	WORKER	1.52E-08	4.25E-10	1.47E-08	-1.14E-06	1.95E-08	-1.32E-06	-1.12E-06	1.99E-08	-1.31E-06
1335	570500.00	4176500.00	WORKER	1.15E-08	3.79E-10	1.12E-08	-9.47E-07	1.69E-08	-1.10E-06	-9.36E-07	1.73E-08	-1.09E-06
1336	570500.00	4176600.00	WORKER	9.35E-09	3.42E-10	9.00E-09	-8.15E-07	1.50E-08	-9.48E-07	-8.06E-07	1.53E-08	-9.39E-07
1337	570500.00	4176700.00	WORKER	7.70E-09	3.12E-10	7.39E-09	-7.12E-07	1.35E-08	-8.28E-07	-7.04E-07	1.38E-08	-8.21E-07
1338	570500.00	4176800.00	WORKER	6.48E-09	2.85E-10	6.20E-09	-6.24E-07	1.21E-08	-7.26E-07	-6.18E-07	1.24E-08	-7.20E-07
1339	570500.00	4176900.00	WORKER	5.34E-09	2.62E-10	5.08E-09	-5.49E-07	1.10E-08	-6.39E-07	-5.44E-07	1.12E-08	-6.34E-07
1340	570500.00	4177000.00	WORKER	4.40E-09	2.42E-10	4.16E-09	-4.85E-07	9.98E-09	-5.65E-07	-4.81E-07	1.02E-08	-5.61E-07
1341	570500.00	4177100.00	WORKER	3.72E-09	2.24E-10	3.50E-09	-4.33E-07	9.14E-09	-5.05E-07	-4.30E-07	9.36E-09	-5.01E-07
1342	570500.00	4177200.00	WORKER	3.06E-09	2.09E-10	2.85E-09	-3.91E-07	8.38E-09	-4.56E-07	-3.88E-07	8.59E-09	-4.53E-07
1343	570500.00	4177300.00	WORKER	2.67E-09	1.95E-10	2.47E-09	-3.55E-07	7.75E-09	-4.14E-07	-3.53E-07	7.95E-09	-4.12E-07
1344	570500.00	4177400.00	WORKER	2.40E-09	1.84E-10	2.22E-09	-3.24E-07	7.20E-09	-3.78E-07	-3.21E-07	7.39E-09	-3.75E-07
1345	570500.00	4177500.00	WORKER	2.04E-09	1.73E-10	1.87E-09	-2.96E-07	6.71E-09	-3.45E-07	-2.94E-07	6.88E-09	-3.43E-07
1346	570500.00	4177600.00	WORKER	1.90E-09	1.64E-10	1.74E-09	-2.71E-07	6.29E-09	-3.16E-07	-2.69E-07	6.45E-09	-3.15E-07
1347	570500.00	4177700.00	WORKER	1.72E-09	1.55E-10	1.56E-09	-2.49E-07	5.95E-09	-2.91E-07	-2.47E-07	6.10E-09	-2.89E-07
1348	570500.00	4177800.00	WORKER	1.64E-09	1.48E-10	1.49E-09	-2.31E-07	5.56E-09	-2.70E-07	-2.29E-07	5.71E-09	-2.68E-07
1349	570500.00	4177900.00	WORKER	1.50E-09	1.40E-10	1.36E-09	-2.12E-07	5.25E-09	-2.48E-07	-2.11E-07	5.39E-09	-2.47E-07
1350	570500.00	4178000.00	WORKER	1.37E-09	1.32E-10	1.24E-09	-1.97E-07	4.99E-09	-2.31E-07	-1.96E-07	5.12E-09	-2.30E-07
1354	570600.00	4173300.00	RECREATIONAL	6.02E-09	1.45E-09	4.57E-09	-2.38E-06	5.24E-08	-2.77E-06	-2.37E-06	5.38E-08	-2.76E-06
1355	570600.00	4173400.00	RECREATIONAL	6.57E-09	1.58E-09	4.99E-09	-2.44E-06	5.67E-08	-2.84E-06	-2.43E-06	5.83E-08	-2.83E-06
1356	570600.00	4173500.00	RECREATIONAL	7.01E-09	1.71E-09	5.29E-09	-2.41E-06	6.09E-08	-2.81E-06	-2.40E-06	6.26E-08	-2.80E-06
1357	570600.00	4173600.00	RECREATIONAL	7.50E-09	1.85E-09	5.65E-09	-2.35E-06	6.49E-08	-2.75E-06	-2.34E-06	6.67E-08	-2.74E-06
1358	570600.00	4173700.00	RECREATIONAL	8.23E-09	2.05E-09	6.18E-09	-2.35E-06	7.03E-08	-2.75E-06	-2.34E-06	7.24E-08	-2.74E-06
1359	570600.00	4173800.00	RECREATIONAL	8.78E-09	2.24E-09	6.53E-09	-2.34E-06	7.52E-08	-2.74E-06	-2.33E-06	7.75E-08	-2.74E-06
1360	570600.00	4173900.00	RECREATIONAL	9.48E-09	2.45E-09	7.03E-09	-2.37E-06	8.02E-08	-2.79E-06	-2.36E-06	8.26E-08	-2.78E-06
1361	570600.00	4174000.00	RECREATIONAL	1.05E-08	2.79E-09	7.72E-09	-2.49E-06	8.84E-08	-2.93E-06	-2.48E-06	9.12E-08	-2.93E-06
1362	570600.00	4174100.00	RECREATIONAL	1.17E-08	3.17E-09	8.50E-09	-2.54E-06	9.73E-08	-3.01E-06	-2.53E-06	1.00E-07	-3.00E-06
1363	570600.00	4174200.00	RECREATIONAL	1.30E-08	3.58E-09	9.38E-09	-2.44E-06	1.06E-07	-2.90E-06	-2.43E-06	1.10E-07	-2.89E-06
1365	570600.00	4174400.00	WORKER	1.57E-08	4.11E-09	1.16E-08	-1.98E-06	1.19E-07	-2.39E-06	-1.97E-06	1.23E-07	-2.38E-06
1366	570600.00	4175700.00	WORKER	5.40E-08	1.09E-09	5.29E-08	-2.83E-06	5.66E-08	-3.29E-06	-2.77E-06	5.77E-08	-3.24E-06
1367	570600.00	4175800.00	WORKER	5.44E-08	9.34E-10	5.35E-08	-2.81E-06	4.79E-08	-3.26E-06	-2.75E-06	4.88E-08	-3.20E-06
1368	570590.00	4175915.00	WORKER	6.44E-08	8.81E-10	6.36E-08	-3.04E-06	4.71E-08	-3.53E-06	-2.98E-06	4.80E-08	-3.46E-06
1369	570600.00	4176000.00	WORKER	4.16E-08	7.72E-10	4.09E-08	-2.19E-06	4.00E-08	-2.55E-06	-2.15E-06	4.08E-08	-2.51E-06
1370	570600.00	4176100.00	WORKER	2.86E-08	6.22E-10	2.80E-08	-1.76E-06	3.05E-08	-2.04E-06	-1.73E-06	3.11E-08	-2.02E-06
1371	570600.00	4176200.00	WORKER	3.19E-08	5.60E-10	3.14E-08	-1.82E-06	2.71E-08	-2.10E-06	-1.78E-06	2.76E-08	-2.07E-06
1372	570600.00	4176300.00	WORKER	4.72E-08	5.50E-10	4.66E-08	-2.19E-06	2.77E-08	-2.54E-06	-2.15E-06	2.82E-08	-2.49E-06
1373	570621.00	4176400.00	WORKER	7.02E-08	5.65E-10	6.96E-08	-2.73E-06	3.02E-08	-3.15E-06	-2.66E-06	3.08E-08	-3.08E-06
1374	570600.00	4176500.00	WORKER	3.09E-08	4.45E-10	3.04E-08	-1.66E-06	2.22E-08	-1.92E-06	-1.63E-06	2.26E-08	-1.89E-06
1375	570600.00	4176600.00	WORKER	1.72E-08	3.72E-10	1.69E-08	-1.14E-06	1.75E-08	-1.32E-06	-1.12E-06	1.79E-08	-1.30E-06
1376	570600.00	4176700.00	WORKER	1.21E-08	3.29E-10	1.17E-08	-8.92E-07	1.49E-08	-1.04E-06	-8.80E-07	1.53E-08	-1.02E-06
1377	570600.00	4176800.00	WORKER	9.19E-09	2.96E-10	8.89E-09	-7.37E-07	1.32E-08	-8.57E-07	-7.28E-07	1.35E-08	-8.48E-07
1378	570600.00	4176900.00	WORKER	7.18E-09	2.69E-10	6.91E-09	-6.18E-07	1.17E-08	-7.19E-07	-6.11E-07	1.19E-08	-7.12E-07
1379	570600.00	4177000.00	WORKER	5.37E-09	2.44E-10	5.13E-09	-5.19E-07	1.04E-08	-6.04E-07	-5.13E-07	1.06E-08	-5.99E-07
1380	570600.00	4177100.00	WORKER	4.15E-09	2.24E-10	3.92E-09	-4.42E-07	9.29E-09	-5.15E-07	-4.38E-07	9.52E-09	-5.11E-07
1381	570600.00	4177200.00	WORKER	3.30E-09	2.08E-10	3.09E-09	-3.89E-07	8.43E-09	-4.54E-07	-3.86E-07	8.64E-09	-4.51E-07
1382	570600.00	4177300.00	WORKER	2.74E-09	1.94E-10	2.55E-09	-3.51E-07	7.77E-09	-4.09E-07	-3.48E-07	7.97E-09	-4.06E-07
1383	570600.00	4177400.00	WORKER	2.44E-09	1.82E-10	2.26E-09	-3.20E-07	7.20E-09	-3.73E-07	-3.17E-07	7.38E-09	-3.71E-07
1384	570600.00	4177500.00	WORKER	2.15E-09	1.73E-10	1.97E-09	-2.92E-07	6.73E-09	-3.41E-07	-2.90E-07	6.90E-09	-3.39E-07
1385	570600.00	4177600.00	WORKER	1.92E-09	1.63E-10	1.75E-09	-2.68E-07	6.31E-09	-3.13E-07	-2.66E-07	6.48E-09	-3.12E-07
1386	570600.00	4177700.00	WORKER	1.72E-09	1.55E-10	1.57E-09	-2.47E-07	5.92E-09	-2.88E-07	-2.45E-07	6.08E-09	-2.87E-07
1387	570600.00	4177800.00	WORKER	1.64E-09	1.45E-10	1.50E-09	-2.28E-07	5.58E-09	-2.67E-07	-2.26E-07	5.72E-09	-2.65E-07
1388	570600.00	4177900.00	WORKER	1.50E-09	1.38E-10	1.36E-09	-2.12E-07	5.29E-09	-2.47E-07	-2.10E-07	5.43E-09	-2.46E-07

**OAK Terminal Modernization & Development**

**Table 2-21. Offsite Worker Cancer Risks Combined Construction & Operations**

				Non-Inhalation Risks			Inhalation Risks			Multi-Pathway Risks		
Maximum->				9.48E-08	7.78E-09	9.42E-08	-3.33E-08	2.29E-07	-3.92E-08	-3.30E-08	2.37E-07	-3.89E-08
Minimum->				2.05E-10	2.72E-11	1.75E-10	-3.89E-06	1.08E-09	-4.51E-06	-3.81E-06	1.11E-09	-4.42E-06
Max Receptor No.->				1544	3296	1544	2965	3296	2965	2965	3296	2965
Exposure Years->				2025-2049	2025-2030	2028-2052	2025-2049	2025-2030	2028-2052	2025-2049	2025-2030	2028-2052
Exposure Duration->				25 Yrs	6 Yrs	25 Yrs	25 Yrs	6 Yrs	25 Yrs	25 Yrs	6 Yrs	25 Yrs
RecID	UTM X	UTM Y	Receptor Type	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations
1389	570600.00	4178000.00	WORKER	1.37E-09	1.30E-10	1.24E-09	-1.97E-07	4.98E-09	-2.30E-07	-1.95E-07	5.11E-09	-2.29E-07
1393	570700.00	4173300.00	RECREATIONAL	5.90E-09	1.39E-09	4.51E-09	-2.14E-06	5.00E-08	-2.49E-06	-2.14E-06	5.14E-08	-2.49E-06
1394	570700.00	4173400.00	RECREATIONAL	6.36E-09	1.50E-09	4.86E-09	-2.16E-06	5.38E-08	-2.51E-06	-2.15E-06	5.53E-08	-2.51E-06
1395	570700.00	4173500.00	RECREATIONAL	6.83E-09	1.63E-09	5.20E-09	-2.13E-06	5.76E-08	-2.49E-06	-2.12E-06	5.92E-08	-2.48E-06
1396	570700.00	4173600.00	RECREATIONAL	7.23E-09	1.77E-09	5.47E-09	-2.10E-06	6.16E-08	-2.46E-06	-2.10E-06	6.34E-08	-2.46E-06
1397	570700.00	4173700.00	RECREATIONAL	7.69E-09	1.90E-09	5.79E-09	-2.06E-06	6.49E-08	-2.42E-06	-2.05E-06	6.68E-08	-2.41E-06
1398	570700.00	4173800.00	RECREATIONAL	7.98E-09	1.97E-09	6.01E-09	-1.99E-06	6.63E-08	-2.34E-06	-1.98E-06	6.83E-08	-2.34E-06
1399	570700.00	4173900.00	RECREATIONAL	8.29E-09	2.06E-09	6.23E-09	-1.97E-06	6.81E-08	-2.32E-06	-1.96E-06	7.02E-08	-2.32E-06
1400	570700.00	4174000.00	RECREATIONAL	9.39E-09	2.39E-09	7.00E-09	-2.13E-06	7.66E-08	-2.51E-06	-2.12E-06	7.89E-08	-2.50E-06
1401	570700.00	4174100.00	RECREATIONAL	1.06E-08	2.72E-09	7.88E-09	-2.23E-06	8.50E-08	-2.63E-06	-2.22E-06	8.77E-08	-2.62E-06
1402	570700.00	4174200.00	RECREATIONAL	1.17E-08	3.03E-09	8.66E-09	-2.19E-06	9.29E-08	-2.60E-06	-2.18E-06	9.59E-08	-2.59E-06
1403	570700.00	4174300.00	RECREATIONAL	1.28E-08	3.30E-09	9.53E-09	-2.05E-06	9.93E-08	-2.45E-06	-2.04E-06	1.03E-07	-2.44E-06
1404	570700.00	4174400.00	WORKER	1.39E-08	3.40E-09	1.05E-08	-1.86E-06	1.02E-07	-2.23E-06	-1.84E-06	1.05E-07	-2.22E-06
1405	570700.00	4174500.00	WORKER	1.49E-08	3.38E-09	1.16E-08	-1.69E-06	1.02E-07	-2.04E-06	-1.67E-06	1.06E-07	-2.03E-06
1406	570700.00	4175600.00	WORKER	4.10E-08	1.13E-09	3.99E-08	-2.25E-06	5.59E-08	-2.63E-06	-2.21E-06	5.71E-08	-2.59E-06
1407	570700.00	4175700.00	WORKER	3.15E-08	9.16E-10	3.06E-08	-1.95E-06	4.39E-08	-2.27E-06	-1.92E-06	4.49E-08	-2.24E-06
1408	570700.00	4175800.00	WORKER	4.02E-08	8.55E-10	3.93E-08	-2.15E-06	4.22E-08	-2.49E-06	-2.11E-06	4.31E-08	-2.45E-06
1409	570700.00	4175900.00	WORKER	8.24E-08	8.65E-10	8.15E-08	-3.39E-06	4.54E-08	-3.90E-06	-3.30E-06	4.63E-08	-3.82E-06
1410	570700.00	4176000.00	WORKER	3.93E-08	6.87E-10	3.86E-08	-2.14E-06	3.45E-08	-2.48E-06	-2.10E-06	3.52E-08	-2.44E-06
1411	570700.00	4176100.00	WORKER	2.34E-08	5.76E-10	2.29E-08	-1.53E-06	2.74E-08	-1.77E-06	-1.50E-06	2.80E-08	-1.75E-06
1412	570700.00	4176200.00	WORKER	2.08E-08	5.14E-10	2.03E-08	-1.38E-06	2.40E-08	-1.60E-06	-1.36E-06	2.45E-08	-1.58E-06
1413	570700.00	4176300.00	WORKER	2.18E-08	4.76E-10	2.13E-08	-1.33E-06	2.22E-08	-1.54E-06	-1.31E-06	2.27E-08	-1.52E-06
1414	570700.00	4176400.00	WORKER	2.44E-08	4.48E-10	2.40E-08	-1.44E-06	2.12E-08	-1.67E-06	-1.42E-06	2.16E-08	-1.64E-06
1415	570700.00	4176500.00	WORKER	3.21E-08	4.43E-10	3.16E-08	-1.70E-06	2.18E-08	-1.97E-06	-1.67E-06	2.22E-08	-1.94E-06
1416	570700.00	4176600.00	WORKER	5.13E-08	4.62E-10	5.09E-08	-2.19E-06	2.44E-08	-2.53E-06	-2.14E-06	2.48E-08	-2.48E-06
1417	570670.00	4176700.00	WORKER	2.88E-08	3.86E-10	2.84E-08	-1.50E-06	1.94E-08	-1.74E-06	-1.48E-06	1.98E-08	-1.71E-06
1418	570700.00	4176800.00	WORKER	2.49E-08	3.51E-10	2.45E-08	-1.34E-06	1.76E-08	-1.55E-06	-1.31E-06	1.80E-08	-1.52E-06
1419	570700.00	4176900.00	WORKER	1.48E-08	2.97E-10	1.45E-08	-9.35E-07	1.41E-08	-1.08E-06	-9.20E-07	1.44E-08	-1.07E-06
1420	570700.00	4177000.00	WORKER	8.56E-09	2.55E-10	8.30E-09	-6.47E-07	1.14E-08	-7.52E-07	-6.38E-07	1.16E-08	-7.44E-07
1421	570700.00	4177100.00	WORKER	4.77E-09	2.26E-10	4.55E-09	-4.59E-07	9.50E-09	-5.35E-07	-4.55E-07	9.73E-09	-5.31E-07
1422	570700.00	4177200.00	WORKER	3.47E-09	2.08E-10	3.26E-09	-3.88E-07	8.55E-09	-4.52E-07	-3.84E-07	8.76E-09	-4.49E-07
1423	570700.00	4177300.00	WORKER	2.86E-09	1.92E-10	2.67E-09	-3.44E-07	7.79E-09	-4.02E-07	-3.42E-07	7.98E-09	-3.99E-07
1424	570700.00	4177400.00	WORKER	2.37E-09	1.81E-10	2.19E-09	-3.14E-07	7.27E-09	-3.66E-07	-3.11E-07	7.45E-09	-3.64E-07
1425	570700.00	4177500.00	WORKER	2.16E-09	1.71E-10	1.98E-09	-2.88E-07	6.73E-09	-3.36E-07	-2.86E-07	6.90E-09	-3.34E-07
1426	570700.00	4177600.00	WORKER	1.92E-09	1.61E-10	1.76E-09	-2.64E-07	6.33E-09	-3.09E-07	-2.62E-07	6.49E-09	-3.07E-07
1427	570700.00	4177700.00	WORKER	1.73E-09	1.53E-10	1.57E-09	-2.43E-07	5.92E-09	-2.84E-07	-2.42E-07	6.07E-09	-2.83E-07
1428	570700.00	4177800.00	WORKER	1.56E-09	1.44E-10	1.42E-09	-2.26E-07	5.63E-09	-2.65E-07	-2.25E-07	5.77E-09	-2.63E-07
1429	570700.00	4177900.00	WORKER	1.41E-09	1.36E-10	1.28E-09	-2.10E-07	5.29E-09	-2.46E-07	-2.09E-07	5.42E-09	-2.45E-07
1430	570700.00	4178000.00	WORKER	1.38E-09	1.30E-10	1.25E-09	-1.96E-07	4.98E-09	-2.29E-07	-1.94E-07	5.11E-09	-2.28E-07
1433	570800.00	4173200.00	RECREATIONAL	5.30E-09	1.23E-09	4.07E-09	-1.89E-06	4.44E-08	-2.20E-06	-1.88E-06	4.56E-08	-2.19E-06
1434	570800.00	4173300.00	RECREATIONAL	5.71E-09	1.33E-09	4.39E-09	-1.93E-06	4.78E-08	-2.25E-06	-1.92E-06	4.91E-08	-2.24E-06
1435	570800.00	4173400.00	RECREATIONAL	6.13E-09	1.43E-09	4.70E-09	-1.92E-06	5.11E-08	-2.24E-06	-1.91E-06	5.25E-08	-2.24E-06
1436	570800.00	4173500.00	RECREATIONAL	6.44E-09	1.53E-09	4.91E-09	-1.88E-06	5.40E-08	-2.20E-06	-1.88E-06	5.55E-08	-2.20E-06
1437	570800.00	4173600.00	RECREATIONAL	7.02E-09	1.67E-09	5.34E-09	-1.89E-06	5.81E-08	-2.22E-06	-1.88E-06	5.98E-08	-2.21E-06
1438	570800.00	4173700.00	RECREATIONAL	7.46E-09	1.83E-09	5.64E-09	-1.89E-06	6.23E-08	-2.22E-06	-1.88E-06	6.41E-08	-2.22E-06
1439	570800.00	4173800.00	RECREATIONAL	7.93E-09	1.95E-09	5.98E-09	-1.88E-06	6.53E-08	-2.22E-06	-1.87E-06	6.72E-08	-2.21E-06
1440	570800.00	4173900.00	RECREATIONAL	8.44E-09	2.12E-09	6.32E-09	-1.94E-06	6.93E-08	-2.28E-06	-1.93E-06	7.14E-08	-2.28E-06
1441	570800.00	4174000.00	RECREATIONAL	8.97E-09	2.24E-09	6.74E-09	-1.97E-06	7.19E-08	-2.32E-06	-1.96E-06	7.41E-08	-2.32E-06
1442	570800.00	4174100.00	RECREATIONAL	9.79E-09	2.42E-09	7.38E-09	-2.01E-06	7.66E-08	-2.38E-06	-2.00E-06	7.90E-08	-2.37E-06
1443	570800.00	4174200.00	RECREATIONAL	1.07E-08	2.61E-09	8.10E-09	-1.98E-06	8.19E-08	-2.35E-06	-1.97E-06	8.45E-08	-2.34E-06
1444	570800.00	4174300.00	RECREATIONAL	1.16E-08	2.80E-09	8.77E-09	-1.89E-06	8.68E-08	-2.26E-06	-1.88E-06	8.96E-08	-2.25E-06
1446	570800.00	4174500.00	WORKER	1.34E-08	2.88E-09	1.05E-08	-1.60E-06	8.88E-08	-1.93E-06	-1.59E-06	9.17E-08	-1.92E-06
1447	570800.00	4174600.00	WORKER	1.43E-08	2.84E-09	1.15E-08	-1.49E-06	8.73E-08	-1.80E-06	-1.48E-06	9.01E-08	-1.79E-06
1448	570805.00	4175505.00	WORKER	2.96E-08	1.13E-09	2.84E-08	-1.80E-06	5.12E-08	-2.11E-06	-1.77E-06	5.23E-08	-2.08E-06
1449	570800.00	4175600.00	WORKER	2.43E-08	9.57E-10	2.34E-08	-1.53E-06	4.35E-08	-1.77E-06	-1.50E-06	4.45E-08	-1.75E-06
1450	570800.00	4175700.00	WORKER	2.37E-08	8.34E-10	2.28E-08	-1.46E-06	3.82E-08	-1.69E-06	-1.44E-06	3.91E-08	-1.67E-06
1451	570800.00	4175800.00	WORKER	2.79E-08	7.62E-10	2.72E-08	-1.65E-06	3.57E-08	-1.90E-06	-1.62E-06	3.65E-08	-1.88E-06
1452	570800.00	4175900.00	WORKER	4.16E-08	7.22E-10	4.09E-08	-2.19E-06	3.52E-08	-2.53E-06	-2.14E-06	3.59E-08	-2.49E-06
1453	570790.00	4176017.00	WORKER	6.18E-08	6.89E-10	6.11E-08	-2.71E-06	3.56E-08	-3.14E-06	-2.65E-06	3.63E-08	-3.08E-06
1454	570800.00	4176100.00	WORKER	2.49E-08	5.59E-10	2.44E-08	-1.54E-06	2.67E-08	-1.79E-06	-1.52E-06	2.73E-08	-1.77E-06
1455	570800.00	4176200.00	WORKER	1.80E-08	4.93E-10	1.75E-08	-1.23E-06	2.28E-08	-1.43E-06	-1.22E-06	2.33E-08	-1.41E-06

**OAK Terminal Modernization & Development**

**Table 2-21. Offsite Worker Cancer Risks**

**Combined Construction & Operations**  
 Maximum->  
 Minimum->  
 Max Receptor No.->  
 Exposure Years->  
 Exposure Duration->

**Non-Inhalation Risks**

9.48E-08 7.78E-09 9.42E-08  
 2.05E-10 2.72E-11 1.75E-10  
 1544 3296 1544  
 2025-2049 2025-2030 2028-2052  
 25 Yrs 6 Yrs 25 Yrs

**Inhalation Risks**

-3.33E-08 2.29E-07 -3.92E-08  
 -3.89E-06 1.08E-09 -4.51E-06  
 2965 3296 2965  
 2025-2049 2025-2030 2028-2052  
 25 Yrs 6 Yrs 25 Yrs

**Multi-Pathway Risks**

-3.30E-08 2.37E-07 -3.89E-08  
 -3.81E-06 1.11E-09 -4.42E-06  
 2965 3296 2965  
 2025-2049 2025-2030 2028-2052  
 25 Yrs 6 Yrs 25 Yrs

RecID	UTM X	UTM Y	Receptor Type	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations
1456	570800.00	4176300.00	WORKER	1.63E-08	4.49E-10	1.59E-08	-1.13E-06	2.05E-08	-1.31E-06	-1.12E-06	2.09E-08	-1.30E-06
1457	570800.00	4176400.00	WORKER	1.62E-08	4.16E-10	1.58E-08	-1.11E-06	1.90E-08	-1.29E-06	-1.09E-06	1.94E-08	-1.27E-06
1458	570800.00	4176500.00	WORKER	1.69E-08	3.91E-10	1.65E-08	-1.11E-06	1.79E-08	-1.29E-06	-1.10E-06	1.83E-08	-1.27E-06
1459	570800.00	4176600.00	WORKER	1.89E-08	3.72E-10	1.86E-08	-1.17E-06	1.73E-08	-1.35E-06	-1.15E-06	1.77E-08	-1.33E-06
1460	570800.00	4176700.00	WORKER	2.29E-08	3.62E-10	2.25E-08	-1.30E-06	1.74E-08	-1.50E-06	-1.27E-06	1.78E-08	-1.48E-06
1461	570800.00	4176800.00	WORKER	3.08E-08	3.64E-10	3.05E-08	-1.53E-06	1.83E-08	-1.77E-06	-1.50E-06	1.87E-08	-1.74E-06
1462	570800.00	4176900.00	WORKER	4.18E-08	3.68E-10	4.14E-08	-1.78E-06	1.95E-08	-2.06E-06	-1.74E-06	1.98E-08	-2.02E-06
1463	570800.00	4177000.00	WORKER	2.08E-08	2.87E-10	2.05E-08	-1.01E-06	1.39E-08	-1.17E-06	-9.87E-07	1.42E-08	-1.15E-06
1464	570800.00	4177100.00	WORKER	5.10E-09	2.26E-10	4.88E-09	-4.67E-07	9.63E-09	-5.44E-07	-4.62E-07	9.86E-09	-5.40E-07
1465	570800.00	4177200.00	WORKER	3.57E-09	2.06E-10	3.36E-09	-3.81E-07	8.54E-09	-4.45E-07	-3.78E-07	8.75E-09	-4.41E-07
1466	570800.00	4177300.00	WORKER	2.81E-09	1.92E-10	2.62E-09	-3.40E-07	7.89E-09	-3.97E-07	-3.37E-07	8.08E-09	-3.95E-07
1467	570800.00	4177400.00	WORKER	2.47E-09	1.81E-10	2.29E-09	-3.09E-07	7.31E-09	-3.61E-07	-3.06E-07	7.50E-09	-3.59E-07
1468	570800.00	4177500.00	WORKER	1.93E-09	1.66E-10	1.77E-09	-2.67E-07	6.55E-09	-3.12E-07	-2.65E-07	6.72E-09	-3.10E-07
1469	570800.00	4177600.00	WORKER	1.91E-09	1.60E-10	1.75E-09	-2.60E-07	6.37E-09	-3.04E-07	-2.58E-07	6.53E-09	-3.03E-07
1470	570800.00	4177700.00	WORKER	1.72E-09	1.52E-10	1.57E-09	-2.41E-07	5.96E-09	-2.81E-07	-2.39E-07	6.12E-09	-2.80E-07
1471	570800.00	4177800.00	WORKER	1.56E-09	1.44E-10	1.42E-09	-2.24E-07	5.65E-09	-2.62E-07	-2.22E-07	5.79E-09	-2.60E-07
1472	570800.00	4177900.00	WORKER	1.42E-09	1.36E-10	1.28E-09	-2.09E-07	5.29E-09	-2.45E-07	-2.08E-07	5.42E-09	-2.44E-07
1473	570800.00	4178000.00	WORKER	1.36E-09	1.29E-10	1.23E-09	-1.95E-07	4.98E-09	-2.28E-07	-1.94E-07	5.11E-09	-2.27E-07
1476	570900.00	4173200.00	RECREATIONAL	5.12E-09	1.18E-09	3.94E-09	-1.72E-06	4.26E-08	-2.01E-06	-1.72E-06	4.37E-08	-2.01E-06
1477	570900.00	4173300.00	RECREATIONAL	5.53E-09	1.26E-09	4.27E-09	-1.74E-06	4.55E-08	-2.03E-06	-1.73E-06	4.67E-08	-2.02E-06
1478	570900.00	4173400.00	RECREATIONAL	5.86E-09	1.33E-09	4.53E-09	-1.70E-06	4.77E-08	-1.98E-06	-1.69E-06	4.91E-08	-1.98E-06
1479	570900.00	4173500.00	RECREATIONAL	6.26E-09	1.44E-09	4.82E-09	-1.70E-06	5.09E-08	-1.99E-06	-1.69E-06	5.24E-08	-1.98E-06
1480	570900.00	4173600.00	RECREATIONAL	6.65E-09	1.57E-09	5.07E-09	-1.70E-06	5.46E-08	-2.00E-06	-1.70E-06	5.62E-08	-1.99E-06
1481	570900.00	4173700.00	RECREATIONAL	7.10E-09	1.71E-09	5.39E-09	-1.70E-06	5.81E-08	-2.01E-06	-1.70E-06	5.98E-08	-2.00E-06
1482	570900.00	4173800.00	RECREATIONAL	7.52E-09	1.81E-09	5.71E-09	-1.70E-06	6.06E-08	-2.01E-06	-1.69E-06	6.24E-08	-2.00E-06
1483	570900.00	4173900.00	RECREATIONAL	7.98E-09	1.96E-09	6.02E-09	-1.76E-06	6.43E-08	-2.08E-06	-1.75E-06	6.62E-08	-2.07E-06
1484	570900.00	4174000.00	RECREATIONAL	8.44E-09	2.13E-09	6.30E-09	-1.85E-06	6.89E-08	-2.19E-06	-1.84E-06	7.10E-08	-2.18E-06
1485	570900.00	4174100.00	WORKER	9.14E-09	2.24E-09	6.90E-09	-1.89E-06	7.16E-08	-2.23E-06	-1.88E-06	7.38E-08	-2.23E-06
1486	570900.00	4174200.00	WORKER	9.78E-09	2.32E-09	7.46E-09	-1.84E-06	7.42E-08	-2.18E-06	-1.83E-06	7.65E-08	-2.18E-06
1487	570900.00	4174300.00	WORKER	1.05E-08	2.42E-09	8.03E-09	-1.75E-06	7.67E-08	-2.08E-06	-1.74E-06	7.91E-08	-2.08E-06
1488	570900.00	4174400.00	WORKER	1.12E-08	2.47E-09	8.77E-09	-1.63E-06	7.77E-08	-1.94E-06	-1.62E-06	8.01E-08	-1.93E-06
1489	570900.00	4174500.00	WORKER	1.20E-08	2.49E-09	9.55E-09	-1.51E-06	7.77E-08	-1.81E-06	-1.50E-06	8.02E-08	-1.80E-06
1490	570900.00	4174600.00	WORKER	1.27E-08	2.46E-09	1.03E-08	-1.42E-06	7.65E-08	-1.70E-06	-1.41E-06	7.90E-08	-1.69E-06
1491	570907.00	4175410.00	WORKER	3.39E-08	1.26E-09	3.26E-08	-1.86E-06	5.73E-08	-2.18E-06	-1.82E-06	5.86E-08	-2.15E-06
1492	570900.00	4175500.00	WORKER	2.12E-08	1.02E-09	2.02E-08	-1.47E-06	4.45E-08	-1.72E-06	-1.45E-06	4.55E-08	-1.70E-06
1493	570900.00	4175600.00	WORKER	1.87E-08	8.80E-10	1.78E-08	-1.34E-06	3.82E-08	-1.57E-06	-1.33E-06	3.90E-08	-1.55E-06
1494	570900.00	4175700.00	WORKER	1.91E-08	7.81E-10	1.83E-08	-1.33E-06	3.45E-08	-1.55E-06	-1.32E-06	3.53E-08	-1.54E-06
1495	570900.00	4175800.00	WORKER	2.18E-08	7.09E-10	2.11E-08	-1.43E-06	3.21E-08	-1.66E-06	-1.41E-06	3.28E-08	-1.64E-06
1496	570900.00	4175900.00	WORKER	2.93E-08	6.61E-10	2.86E-08	-1.70E-06	3.09E-08	-1.97E-06	-1.67E-06	3.16E-08	-1.94E-06
1497	570900.00	4176000.00	WORKER	6.50E-08	6.81E-10	6.44E-08	-2.82E-06	3.43E-08	-3.26E-06	-2.75E-06	3.50E-08	-3.19E-06
1498	570900.00	4176100.00	WORKER	3.72E-08	5.71E-10	3.66E-08	-1.91E-06	2.82E-08	-2.21E-06	-1.87E-06	2.88E-08	-2.18E-06
1499	570900.00	4176200.00	WORKER	1.84E-08	4.82E-10	1.79E-08	-1.22E-06	2.23E-08	-1.42E-06	-1.20E-06	2.28E-08	-1.40E-06
1500	570900.00	4176300.00	WORKER	1.46E-08	4.34E-10	1.41E-08	-1.04E-06	1.97E-08	-1.20E-06	-1.02E-06	2.01E-08	-1.19E-06
1501	570900.00	4176400.00	WORKER	1.32E-08	3.99E-10	1.28E-08	-9.55E-07	1.79E-08	-1.11E-06	-9.42E-07	1.83E-08	-1.10E-06
1502	570900.00	4176500.00	WORKER	1.25E-08	3.70E-10	1.22E-08	-9.09E-07	1.66E-08	-1.06E-06	-8.96E-07	1.69E-08	-1.04E-06
1503	570900.00	4176600.00	WORKER	1.26E-08	3.46E-10	1.23E-08	-8.86E-07	1.55E-08	-1.03E-06	-8.74E-07	1.59E-08	-1.02E-06
1504	570900.00	4176700.00	WORKER	1.31E-08	3.26E-10	1.28E-08	-8.86E-07	1.47E-08	-1.03E-06	-8.73E-07	1.50E-08	-1.02E-06
1505	570900.00	4176800.00	WORKER	1.38E-08	3.08E-10	1.35E-08	-8.88E-07	1.41E-08	-1.03E-06	-8.74E-07	1.44E-08	-1.02E-06
1506	570900.00	4176900.00	WORKER	1.31E-08	2.86E-10	1.28E-08	-8.32E-07	1.32E-08	-9.65E-07	-8.19E-07	1.35E-08	-9.52E-07
1507	570900.00	4177000.00	WORKER	8.33E-09	2.53E-10	8.08E-09	-6.10E-07	1.13E-08	-7.10E-07	-6.02E-07	1.15E-08	-7.02E-07
1508	570900.00	4177100.00	WORKER	4.61E-09	2.25E-10	4.38E-09	-4.39E-07	9.54E-09	-5.12E-07	-4.34E-07	9.76E-09	-5.07E-07
1509	570900.00	4177200.00	WORKER	3.37E-09	2.07E-10	3.17E-09	-3.71E-07	8.61E-09	-4.33E-07	-3.68E-07	8.82E-09	-4.30E-07
1510	570900.00	4177300.00	WORKER	2.82E-09	1.92E-10	2.62E-09	-3.31E-07	7.88E-09	-3.87E-07	-3.28E-07	8.07E-09	-3.84E-07
1511	570900.00	4177400.00	WORKER	2.39E-09	1.81E-10	2.20E-09	-3.02E-07	7.33E-09	-3.53E-07	-2.99E-07	7.51E-09	-3.51E-07
1512	570900.00	4177500.00	WORKER	2.11E-09	1.70E-10	1.94E-09	-2.77E-07	6.84E-09	-3.24E-07	-2.75E-07	7.01E-09	-3.22E-07
1513	570900.00	4177600.00	WORKER	1.88E-09	1.60E-10	1.72E-09	-2.56E-07	6.42E-09	-2.99E-07	-2.54E-07	6.58E-09	-2.97E-07
1514	570900.00	4177700.00	WORKER	1.70E-09	1.51E-10	1.55E-09	-2.37E-07	6.03E-09	-2.77E-07	-2.35E-07	6.18E-09	-2.75E-07
1515	570900.00	4177800.00	WORKER	1.54E-09	1.43E-10	1.40E-09	-2.20E-07	5.67E-09	-2.58E-07	-2.19E-07	5.81E-09	-2.56E-07
1516	570900.00	4177900.00	WORKER	1.49E-09	1.36E-10	1.35E-09	-2.06E-07	5.31E-09	-2.42E-07	-2.05E-07	5.44E-09	-2.40E-07
1517	570900.00	4178000.00	WORKER	1.29E-09	1.28E-10	1.16E-09	-1.93E-07	5.02E-09	-2.26E-07	-1.92E-07	5.15E-09	-2.25E-07
1520	571000.00	4173200.00	RECREATIONAL	4.95E-09	1.13E-09	3.83E-09	-1.58E-06	4.08E-08	-1.84E-06	-1.57E-06	4.19E-08	-1.84E-06

**OAK Terminal Modernization & Development**

**Table 2-21. Offsite Worker Cancer Risks**

**Combined Construction & Operations**

**Non-Inhalation Risks**

**Inhalation Risks**

**Multi-Pathway Risks**

Maximum->	9.48E-08	7.78E-09	9.42E-08	-3.33E-08	2.29E-07	-3.92E-08	-3.30E-08	2.37E-07	-3.89E-08
Minimum->	2.05E-10	2.72E-11	1.75E-10	-3.89E-06	1.08E-09	-4.51E-06	-3.81E-06	1.11E-09	-4.42E-06
Max Receptor No.->	1544	3296	1544	2965	3296	2965	2965	3296	2965
Exposure Years->	2025-2049	2025-2030	2028-2052	2025-2049	2025-2030	2028-2052	2025-2049	2025-2030	2028-2052
Exposure Duration->	25 Yrs	6 Yrs	25 Yrs	25 Yrs	6 Yrs	25 Yrs	25 Yrs	6 Yrs	25 Yrs

RecID	UTM X	UTM Y	Receptor Type	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations
1521	571000.00	4173300.00	RECREATIONAL	5.26E-09	1.21E-09	4.05E-09	-1.58E-06	4.34E-08	-1.85E-06	-1.57E-06	4.47E-08	-1.84E-06
1522	571000.00	4173400.00	RECREATIONAL	5.66E-09	1.28E-09	4.39E-09	-1.55E-06	4.55E-08	-1.82E-06	-1.54E-06	4.68E-08	-1.81E-06
1523	571000.00	4173500.00	RECREATIONAL	6.02E-09	1.37E-09	4.65E-09	-1.55E-06	4.83E-08	-1.81E-06	-1.54E-06	4.97E-08	-1.81E-06
1524	571000.00	4173600.00	RECREATIONAL	6.31E-09	1.47E-09	4.84E-09	-1.54E-06	5.09E-08	-1.81E-06	-1.53E-06	5.24E-08	-1.80E-06
1525	571000.00	4173700.00	RECREATIONAL	6.72E-09	1.58E-09	5.14E-09	-1.54E-06	5.38E-08	-1.81E-06	-1.53E-06	5.53E-08	-1.80E-06
1526	571000.00	4173800.00	RECREATIONAL	7.13E-09	1.68E-09	5.45E-09	-1.55E-06	5.62E-08	-1.82E-06	-1.54E-06	5.79E-08	-1.82E-06
1527	571000.00	4173900.00	WORKER	7.54E-09	1.82E-09	5.72E-09	-1.62E-06	5.99E-08	-1.91E-06	-1.61E-06	6.17E-08	-1.90E-06
1528	571000.00	4174000.00	WORKER	8.04E-09	1.91E-09	6.12E-09	-1.68E-06	6.24E-08	-1.99E-06	-1.67E-06	6.43E-08	-1.98E-06
1529	571000.00	4174100.00	WORKER	8.50E-09	1.99E-09	6.50E-09	-1.73E-06	6.47E-08	-2.04E-06	-1.72E-06	6.67E-08	-2.03E-06
1530	571000.00	4174200.00	WORKER	9.04E-09	2.06E-09	6.98E-09	-1.70E-06	6.68E-08	-2.01E-06	-1.69E-06	6.88E-08	-2.00E-06
1531	571000.00	4174300.00	WORKER	9.63E-09	2.12E-09	7.51E-09	-1.63E-06	6.82E-08	-1.93E-06	-1.62E-06	7.03E-08	-1.93E-06
1532	571000.00	4174400.00	WORKER	1.03E-08	2.16E-09	8.09E-09	-1.53E-06	6.89E-08	-1.82E-06	-1.52E-06	7.11E-08	-1.81E-06
1533	571000.00	4174500.00	WORKER	1.08E-08	2.18E-09	8.63E-09	-1.43E-06	6.88E-08	-1.71E-06	-1.42E-06	7.10E-08	-1.70E-06
1534	571000.00	4174600.00	WORKER	1.14E-08	2.17E-09	9.23E-09	-1.35E-06	6.80E-08	-1.61E-06	-1.34E-06	7.02E-08	-1.60E-06
1535	571000.00	4174700.00	WORKER	1.21E-08	2.13E-09	9.96E-09	-1.27E-06	6.70E-08	-1.53E-06	-1.26E-06	6.91E-08	-1.52E-06
1536	571008.00	4175316.00	WORKER	3.03E-08	1.33E-09	2.90E-08	-1.71E-06	5.81E-08	-2.02E-06	-1.68E-06	5.95E-08	-1.99E-06
1537	571000.00	4175400.00	WORKER	1.91E-08	1.09E-09	1.80E-08	-1.35E-06	4.59E-08	-1.59E-06	-1.33E-06	4.70E-08	-1.57E-06
1538	571000.00	4175500.00	WORKER	1.62E-08	9.36E-10	1.53E-08	-1.22E-06	3.89E-08	-1.44E-06	-1.21E-06	3.99E-08	-1.42E-06
1539	571000.00	4175600.00	WORKER	1.55E-08	8.25E-10	1.47E-08	-1.18E-06	3.47E-08	-1.39E-06	-1.17E-06	3.56E-08	-1.37E-06
1540	571000.00	4175700.00	WORKER	1.61E-08	7.40E-10	1.53E-08	-1.18E-06	3.17E-08	-1.38E-06	-1.17E-06	3.25E-08	-1.37E-06
1541	571000.00	4175800.00	WORKER	1.81E-08	6.71E-10	1.74E-08	-1.24E-06	2.95E-08	-1.45E-06	-1.22E-06	3.02E-08	-1.43E-06
1542	571000.00	4175900.00	WORKER	2.28E-08	6.21E-10	2.22E-08	-1.40E-06	2.82E-08	-1.63E-06	-1.38E-06	2.88E-08	-1.61E-06
1543	571000.00	4176000.00	WORKER	3.70E-08	6.01E-10	3.64E-08	-1.91E-06	2.87E-08	-2.21E-06	-1.87E-06	2.93E-08	-2.18E-06
1544	571028.00	4176085.00	WORKER	9.48E-08	6.68E-10	9.42E-08	-3.46E-06	3.52E-08	-3.99E-06	-3.36E-06	3.58E-08	-3.89E-06
1551	571000.00	4176800.00	WORKER	9.10E-09	2.88E-10	8.81E-09	-6.78E-07	1.27E-08	-7.89E-07	-6.69E-07	1.30E-08	-7.80E-07
1552	571000.00	4176900.00	WORKER	7.78E-09	2.66E-10	7.51E-09	-6.03E-07	1.17E-08	-7.02E-07	-5.95E-07	1.20E-08	-6.94E-07
1553	571000.00	4177000.00	WORKER	5.76E-09	2.43E-10	5.52E-09	-5.00E-07	1.05E-08	-5.83E-07	-4.95E-07	1.07E-08	-5.77E-07
1554	571000.00	4177100.00	WORKER	4.06E-09	2.22E-10	3.84E-09	-4.09E-07	9.39E-09	-4.77E-07	-4.05E-07	9.61E-09	-4.74E-07
1555	571000.00	4177200.00	WORKER	3.19E-09	2.06E-10	2.98E-09	-3.57E-07	8.60E-09	-4.17E-07	-3.54E-07	8.81E-09	-4.15E-07
1556	571000.00	4177300.00	WORKER	2.71E-09	1.91E-10	2.52E-09	-3.23E-07	7.90E-09	-3.77E-07	-3.20E-07	8.09E-09	-3.75E-07
1557	571000.00	4177400.00	WORKER	2.35E-09	1.80E-10	2.17E-09	-2.94E-07	7.35E-09	-3.44E-07	-2.92E-07	7.53E-09	-3.42E-07
1558	571000.00	4177500.00	WORKER	2.06E-09	1.70E-10	1.89E-09	-2.71E-07	6.88E-09	-3.17E-07	-2.69E-07	7.05E-09	-3.15E-07
1559	571000.00	4177600.00	WORKER	1.84E-09	1.60E-10	1.68E-09	-2.50E-07	6.44E-09	-2.93E-07	-2.48E-07	6.60E-09	-2.91E-07
1560	571000.00	4177700.00	WORKER	1.74E-09	1.51E-10	1.59E-09	-2.33E-07	6.08E-09	-2.72E-07	-2.31E-07	6.23E-09	-2.71E-07
1561	571000.00	4177800.00	WORKER	1.59E-09	1.42E-10	1.45E-09	-2.17E-07	5.69E-09	-2.54E-07	-2.16E-07	5.83E-09	-2.53E-07
1562	571000.00	4177900.00	WORKER	1.46E-09	1.35E-10	1.33E-09	-2.03E-07	5.36E-09	-2.38E-07	-2.02E-07	5.49E-09	-2.37E-07
1563	571000.00	4178000.00	WORKER	1.35E-09	1.28E-10	1.22E-09	-1.91E-07	5.09E-09	-2.24E-07	-1.89E-07	5.22E-09	-2.22E-07
1566	566000.00	4178750.00	RECREATIONAL	4.94E-10	7.70E-11	4.17E-10	-9.44E-08	2.88E-09	-1.11E-07	-9.39E-08	2.96E-09	-1.10E-07
1591	566500.00	4180000.00	SCHOOL	3.37E-10	5.09E-11	2.86E-10	-6.04E-08	1.95E-09	-7.10E-08	-6.01E-08	2.00E-09	-7.07E-08
1601	566750.00	4180000.00	WORKER	3.64E-10	5.11E-11	3.13E-10	-6.13E-08	1.93E-09	-7.20E-08	-6.10E-08	1.98E-09	-7.17E-08
1602	566750.00	4180250.00	WORKER	3.25E-10	4.66E-11	2.78E-10	-5.61E-08	1.80E-09	-6.58E-08	-5.57E-08	1.85E-09	-6.56E-08
1606	567000.00	4178750.00	RECREATIONAL	6.38E-10	8.18E-11	5.56E-10	-1.03E-07	3.12E-09	-1.21E-07	-1.02E-07	3.20E-09	-1.20E-07
1653	568000.00	4180500.00	WORKER	4.38E-10	4.21E-11	3.96E-10	-5.69E-08	1.70E-09	-6.67E-08	-5.64E-08	1.74E-09	-6.63E-08
1662	568250.00	4180250.00	WORKER	3.98E-10	4.59E-11	3.52E-10	-6.22E-08	1.83E-09	-7.30E-08	-6.18E-08	1.88E-09	-7.26E-08
1663	568250.00	4180500.00	WORKER	3.60E-10	4.21E-11	3.18E-10	-5.84E-08	1.70E-09	-6.85E-08	-5.80E-08	1.74E-09	-6.82E-08
1669	568500.00	4179500.00	WORKER	4.69E-10	5.94E-11	4.10E-10	-8.02E-08	2.33E-09	-9.41E-08	-7.97E-08	2.39E-09	-9.37E-08
1670	568500.00	4179750.00	WORKER	4.93E-10	5.40E-11	4.39E-10	-7.30E-08	2.12E-09	-8.56E-08	-7.25E-08	2.17E-09	-8.52E-08
1671	568500.00	4180000.00	WORKER	4.43E-10	4.94E-11	3.94E-10	-6.71E-08	1.96E-09	-7.87E-08	-6.67E-08	2.01E-09	-7.83E-08
1672	568500.00	4180250.00	WORKER	4.04E-10	4.62E-11	3.58E-10	-6.17E-08	1.83E-09	-7.24E-08	-6.13E-08	1.88E-09	-7.20E-08
1673	568500.00	4180500.00	WORKER	3.71E-10	4.27E-11	3.29E-10	-5.68E-08	1.70E-09	-6.67E-08	-5.64E-08	1.74E-09	-6.63E-08
1679	568750.00	4179500.00	WORKER	5.60E-10	5.96E-11	5.00E-10	-7.98E-08	2.28E-09	-9.35E-08	-7.92E-08	2.34E-09	-9.30E-08
1680	568750.00	4179750.00	WORKER	5.00E-10	5.36E-11	4.47E-10	-7.20E-08	2.12E-09	-8.45E-08	-7.15E-08	2.17E-09	-8.41E-08
1681	568750.00	4180000.00	WORKER	3.88E-10	4.94E-11	3.39E-10	-6.60E-08	1.96E-09	-7.75E-08	-6.56E-08	2.01E-09	-7.71E-08
1682	568750.00	4180250.00	WORKER	4.12E-10	4.67E-11	3.65E-10	-6.06E-08	1.83E-09	-7.12E-08	-6.02E-08	1.88E-09	-7.08E-08
1683	568750.00	4180500.00	WORKER	3.89E-10	4.22E-11	3.46E-10	-5.61E-08	1.68E-09	-6.59E-08	-5.57E-08	1.72E-09	-6.55E-08
1688	569000.00	4179250.00	RECREATIONAL	5.53E-10	6.44E-11	4.89E-10	-9.02E-08	2.56E-09	-1.06E-07	-8.97E-08	2.63E-09	-1.05E-07
1690	569000.00	4179750.00	WORKER	4.40E-10	5.36E-11	3.86E-10	-7.41E-08	2.09E-09	-8.69E-08	-7.37E-08	2.15E-09	-8.65E-08
1691	569000.00	4180000.00	WORKER	4.53E-10	4.95E-11	4.03E-10	-6.84E-08	1.94E-09	-8.02E-08	-6.80E-08	1.99E-09	-7.98E-08
1692	569000.00	4180250.00	WORKER	4.05E-10	4.62E-11	3.59E-10	-6.31E-08	1.78E-09	-7.39E-08	-6.27E-08	1.83E-09	-7.36E-08
1693	569000.00	4180500.00	WORKER	3.65E-10	4.21E-11	3.23E-10	-5.84E-08	1.65E-09	-6.85E-08	-5.81E-08	1.69E-09	-6.82E-08
1697	569250.00	4179000.00	RECREATIONAL	5.92E-10	7.22E-11	5.20E-10	-1.08E-07	2.85E-09	-1.27E-07	-1.08E-07	2.92E-09	-1.26E-07

**OAK Terminal Modernization & Development**

**Table 2-21. Offsite Worker Cancer Risks**

**Combined Construction & Operations**

**Non-Inhalation Risks**

**Inhalation Risks**

**Multi-Pathway Risks**

	Maximum->	9.48E-08	7.78E-09	9.42E-08	-3.33E-08	2.29E-07	-3.92E-08	-3.30E-08	2.37E-07	-3.89E-08
	Minimum->	2.05E-10	2.72E-11	1.75E-10	-3.89E-06	1.08E-09	-4.51E-06	-3.81E-06	1.11E-09	-4.42E-06
	Max Receptor No.->	1544	3296	1544	2965	3296	2965	2965	3296	2965
	Exposure Years->	2025-2049	2025-2030	2028-2052	2025-2049	2025-2030	2028-2052	2025-2049	2025-2030	2028-2052
	Exposure Duration->	25 Yrs	6 Yrs	25 Yrs	25 Yrs	6 Yrs	25 Yrs	25 Yrs	6 Yrs	25 Yrs

RecID	UTM X	UTM Y	Receptor Type	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations
1698	569250.00	4179250.00	WORKER	5.65E-10	6.57E-11	4.99E-10	-9.70E-08	2.59E-09	-1.14E-07	-9.65E-08	2.66E-09	-1.13E-07
1699	569250.00	4179500.00	WORKER	5.13E-10	5.98E-11	4.53E-10	-8.77E-08	2.36E-09	-1.03E-07	-8.72E-08	2.42E-09	-1.02E-07
1700	569250.00	4179750.00	WORKER	4.50E-10	5.40E-11	3.96E-10	-7.90E-08	2.14E-09	-9.25E-08	-7.86E-08	2.20E-09	-9.21E-08
1701	569250.00	4180000.00	WORKER	4.63E-10	5.04E-11	4.13E-10	-7.35E-08	1.99E-09	-8.60E-08	-7.30E-08	2.04E-09	-8.56E-08
1702	569250.00	4180250.00	WORKER	4.32E-10	4.67E-11	3.86E-10	-6.75E-08	1.83E-09	-7.91E-08	-6.71E-08	1.88E-09	-7.87E-08
1703	569250.00	4180500.00	WORKER	3.58E-10	4.25E-11	3.16E-10	-6.18E-08	1.67E-09	-7.24E-08	-6.15E-08	1.72E-09	-7.21E-08
1704	569500.00	4178250.00	WORKER	1.11E-09	1.12E-10	9.97E-10	-1.76E-07	4.47E-09	-2.06E-07	-1.75E-07	4.59E-09	-2.05E-07
1706	569500.00	4178750.00	WORKER	7.11E-10	8.44E-11	6.26E-10	-1.28E-07	3.35E-09	-1.50E-07	-1.27E-07	3.43E-09	-1.49E-07
1707	569500.00	4179000.00	WORKER	6.81E-10	7.47E-11	6.07E-10	-1.13E-07	3.00E-09	-1.32E-07	-1.12E-07	3.08E-09	-1.32E-07
1708	569500.00	4179250.00	WORKER	5.24E-10	6.75E-11	4.56E-10	-1.01E-07	2.69E-09	-1.18E-07	-1.00E-07	2.76E-09	-1.18E-07
1709	569500.00	4179500.00	WORKER	5.32E-10	6.20E-11	4.70E-10	-9.11E-08	2.46E-09	-1.07E-07	-9.05E-08	2.52E-09	-1.06E-07
1710	569500.00	4179750.00	WORKER	5.30E-10	5.58E-11	4.74E-10	-8.26E-08	2.27E-09	-9.67E-08	-8.20E-08	2.33E-09	-9.62E-08
1712	569500.00	4180250.00	WORKER	3.62E-10	4.84E-11	3.14E-10	-7.00E-08	1.94E-09	-8.20E-08	-6.97E-08	1.98E-09	-8.17E-08
1713	569500.00	4180500.00	WORKER	3.78E-10	4.39E-11	3.34E-10	-6.34E-08	1.75E-09	-7.42E-08	-6.30E-08	1.80E-09	-7.38E-08
1714	569750.00	4178250.00	WORKER	1.13E-09	1.15E-10	1.01E-09	-1.74E-07	4.57E-09	-2.03E-07	-1.72E-07	4.69E-09	-2.02E-07
1715	569750.00	4178500.00	WORKER	9.16E-10	9.96E-11	8.16E-10	-1.48E-07	3.97E-09	-1.73E-07	-1.47E-07	4.07E-09	-1.72E-07
1716	569750.00	4178750.00	WORKER	8.16E-10	8.79E-11	7.28E-10	-1.30E-07	3.47E-09	-1.52E-07	-1.29E-07	3.56E-09	-1.51E-07
1717	569750.00	4179000.00	WORKER	6.98E-10	7.91E-11	6.19E-10	-1.15E-07	3.16E-09	-1.35E-07	-1.15E-07	3.24E-09	-1.34E-07
1718	569750.00	4179250.00	WORKER	6.05E-10	7.13E-11	5.33E-10	-1.03E-07	2.79E-09	-1.21E-07	-1.03E-07	2.86E-09	-1.20E-07
1719	569750.00	4179500.00	WORKER	6.14E-10	6.50E-11	5.49E-10	-9.19E-08	2.56E-09	-1.08E-07	-9.13E-08	2.63E-09	-1.07E-07
1720	569750.00	4179750.00	WORKER	5.46E-10	5.88E-11	4.88E-10	-8.41E-08	2.37E-09	-9.86E-08	-8.36E-08	2.43E-09	-9.81E-08
1721	569750.00	4180000.00	WORKER	4.02E-10	5.38E-11	3.48E-10	-7.67E-08	2.12E-09	-8.99E-08	-7.63E-08	2.17E-09	-8.95E-08
1722	569750.00	4180250.00	SCHOOL	4.31E-10	4.99E-11	3.81E-10	-6.93E-08	1.99E-09	-8.13E-08	-6.89E-08	2.03E-09	-8.09E-08
1724	570000.00	4178250.00	WORKER	1.13E-09	1.18E-10	1.02E-09	-1.72E-07	4.54E-09	-2.01E-07	-1.71E-07	4.66E-09	-2.00E-07
1725	570000.00	4178500.00	WORKER	9.34E-10	1.03E-10	8.31E-10	-1.48E-07	3.99E-09	-1.73E-07	-1.47E-07	4.10E-09	-1.72E-07
1726	570000.00	4178750.00	WORKER	8.37E-10	9.13E-11	7.45E-10	-1.28E-07	3.57E-09	-1.50E-07	-1.27E-07	3.66E-09	-1.49E-07
1727	570000.00	4179000.00	WORKER	7.11E-10	8.25E-11	6.29E-10	-1.14E-07	3.21E-09	-1.34E-07	-1.13E-07	3.29E-09	-1.33E-07
1728	570000.00	4179250.00	WORKER	6.15E-10	7.39E-11	5.41E-10	-1.03E-07	2.85E-09	-1.21E-07	-1.02E-07	2.92E-09	-1.20E-07
1729	570000.00	4179500.00	WORKER	6.15E-10	6.83E-11	5.46E-10	-9.30E-08	2.61E-09	-1.09E-07	-9.24E-08	2.68E-09	-1.08E-07
1730	570000.00	4179750.00	WORKER	4.68E-10	6.14E-11	4.07E-10	-8.58E-08	2.40E-09	-1.01E-07	-8.53E-08	2.46E-09	-1.00E-07
1731	570000.00	4180000.00	WORKER	4.11E-10	5.68E-11	3.54E-10	-7.83E-08	2.17E-09	-9.18E-08	-7.79E-08	2.23E-09	-9.15E-08
1734	570250.00	4178250.00	WORKER	1.13E-09	1.17E-10	1.01E-09	-1.70E-07	4.46E-09	-1.98E-07	-1.68E-07	4.58E-09	-1.97E-07
1735	570250.00	4178500.00	WORKER	9.77E-10	1.03E-10	8.73E-10	-1.43E-07	3.86E-09	-1.68E-07	-1.42E-07	3.96E-09	-1.67E-07
1736	570250.00	4178750.00	WORKER	8.45E-10	9.33E-11	7.52E-10	-1.27E-07	3.55E-09	-1.49E-07	-1.27E-07	3.64E-09	-1.48E-07
1737	570250.00	4179000.00	WORKER	7.20E-10	8.40E-11	6.36E-10	-1.13E-07	3.21E-09	-1.32E-07	-1.12E-07	3.29E-09	-1.32E-07
1738	570250.00	4179250.00	WORKER	7.05E-10	7.58E-11	6.29E-10	-1.01E-07	2.87E-09	-1.18E-07	-1.00E-07	2.95E-09	-1.18E-07
1739	570250.00	4179500.00	WORKER	5.44E-10	7.00E-11	4.74E-10	-9.17E-08	2.61E-09	-1.07E-07	-9.11E-08	2.68E-09	-1.07E-07
1741	570250.00	4180000.00	WORKER	4.28E-10	5.81E-11	3.70E-10	-7.78E-08	2.20E-09	-9.11E-08	-7.73E-08	2.25E-09	-9.07E-08
1744	570500.00	4178250.00	WORKER	1.13E-09	1.16E-10	1.01E-09	-1.67E-07	4.36E-09	-1.95E-07	-1.66E-07	4.48E-09	-1.94E-07
1745	570500.00	4178500.00	WORKER	9.93E-10	1.02E-10	8.91E-10	-1.43E-07	3.84E-09	-1.68E-07	-1.42E-07	3.94E-09	-1.67E-07
1746	570500.00	4178750.00	WORKER	8.47E-10	9.27E-11	7.54E-10	-1.26E-07	3.45E-09	-1.48E-07	-1.25E-07	3.54E-09	-1.47E-07
1747	570500.00	4179000.00	WORKER	7.45E-10	8.37E-11	6.62E-10	-1.12E-07	3.13E-09	-1.31E-07	-1.11E-07	3.22E-09	-1.30E-07
1749	570500.00	4179500.00	SCHOOL	6.33E-10	7.09E-11	5.62E-10	-9.00E-08	2.61E-09	-1.05E-07	-8.94E-08	2.68E-09	-1.05E-07
1754	570750.00	4178250.00	WORKER	1.13E-09	1.14E-10	1.01E-09	-1.66E-07	4.33E-09	-1.95E-07	-1.65E-07	4.44E-09	-1.94E-07
1755	570750.00	4178500.00	WORKER	9.38E-10	1.01E-10	8.38E-10	-1.44E-07	3.81E-09	-1.69E-07	-1.43E-07	3.91E-09	-1.68E-07
1756	570750.00	4178750.00	WORKER	8.64E-10	9.07E-11	7.74E-10	-1.27E-07	3.37E-09	-1.48E-07	-1.26E-07	3.46E-09	-1.48E-07
1764	571000.00	4178250.00	WORKER	1.18E-09	1.13E-10	1.07E-09	-1.64E-07	4.42E-09	-1.92E-07	-1.63E-07	4.54E-09	-1.91E-07
1765	571000.00	4178500.00	WORKER	9.27E-10	1.00E-10	8.27E-10	-1.43E-07	3.83E-09	-1.68E-07	-1.42E-07	3.93E-09	-1.67E-07
1766	571000.00	4178750.00	WORKER	8.69E-10	8.94E-11	7.80E-10	-1.27E-07	3.41E-09	-1.49E-07	-1.26E-07	3.50E-09	-1.48E-07
1774	571250.00	4178250.00	WORKER	1.06E-09	1.13E-10	9.50E-10	-1.60E-07	4.47E-09	-1.88E-07	-1.59E-07	4.58E-09	-1.87E-07
1775	571250.00	4178500.00	WORKER	8.92E-10	1.00E-10	7.92E-10	-1.41E-07	3.98E-09	-1.65E-07	-1.40E-07	4.08E-09	-1.64E-07
1784	571500.00	4178250.00	WORKER	1.05E-09	1.14E-10	9.39E-10	-1.58E-07	4.61E-09	-1.85E-07	-1.57E-07	4.73E-09	-1.84E-07
1785	571500.00	4178500.00	WORKER	9.64E-10	1.00E-10	8.64E-10	-1.39E-07	4.07E-09	-1.63E-07	-1.38E-07	4.17E-09	-1.62E-07
1786	571500.00	4178750.00	SCHOOL	8.27E-10	9.02E-11	7.37E-10	-1.24E-07	3.63E-09	-1.45E-07	-1.23E-07	3.72E-09	-1.45E-07
1796	571750.00	4178750.00	SCHOOL	8.24E-10	9.24E-11	7.32E-10	-1.22E-07	3.66E-09	-1.44E-07	-1.22E-07	3.75E-09	-1.43E-07
1874	571250.00	4178000.00	WORKER	1.30E-09	1.29E-10	1.17E-09	-1.85E-07	5.14E-09	-2.17E-07	-1.84E-07	5.27E-09	-2.16E-07
1875	571250.00	4177750.00	WORKER	1.61E-09	1.47E-10	1.46E-09	-2.16E-07	5.96E-09	-2.54E-07	-2.15E-07	6.11E-09	-2.52E-07
1876	571250.00	4177500.00	WORKER	1.95E-09	1.70E-10	1.78E-09	-2.58E-07	6.90E-09	-3.02E-07	-2.56E-07	7.07E-09	-3.00E-07
1877	571250.00	4177250.00	WORKER	2.54E-09	1.97E-10	2.34E-09	-3.14E-07	8.14E-09	-3.68E-07	-3.12E-07	8.34E-09	-3.66E-07
1879	571250.00	4176750.00	SCHOOL	5.71E-09	2.77E-10	5.43E-09	-5.20E-07	1.19E-08	-6.06E-07	-5.14E-07	1.22E-08	-6.01E-07
1882	571250.00	4176000.00	WORKER	1.85E-08	5.18E-10	1.80E-08	-1.15E-06	2.29E-08	-1.33E-06	-1.13E-06	2.34E-08	-1.31E-06

**OAK Terminal Modernization & Development**

**Table 2-21. Offsite Worker Cancer Risks**

**Combined Construction & Operations**

**Non-Inhalation Risks**

**Inhalation Risks**

**Multi-Pathway Risks**

Maximum->	9.48E-08	7.78E-09	9.42E-08	-3.33E-08	2.29E-07	-3.92E-08	-3.30E-08	2.37E-07	-3.89E-08
Minimum->	2.05E-10	2.72E-11	1.75E-10	-3.89E-06	1.08E-09	-4.51E-06	-3.81E-06	1.11E-09	-4.42E-06
Max Receptor No.->	1544	3296	1544	2965	3296	2965	2965	3296	2965
Exposure Years->	2025-2049	2025-2030	2028-2052	2025-2049	2025-2030	2028-2052	2025-2049	2025-2030	2028-2052
Exposure Duration->	25 Yrs	6 Yrs	25 Yrs	25 Yrs	6 Yrs	25 Yrs	25 Yrs	6 Yrs	25 Yrs

RecID	UTM X	UTM Y	Receptor Type	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations
1883	571250.00	4175750.00	WORKER	1.20E-08	6.26E-10	1.13E-08	-9.34E-07	2.58E-08	-1.09E-06	-9.22E-07	2.64E-08	-1.08E-06
1884	571250.00	4175500.00	WORKER	1.11E-08	8.05E-10	1.03E-08	-9.39E-07	3.20E-08	-1.11E-06	-9.28E-07	3.28E-08	-1.10E-06
1885	571250.00	4175250.00	WORKER	1.27E-08	1.11E-09	1.16E-08	-1.06E-06	4.30E-08	-1.26E-06	-1.04E-06	4.41E-08	-1.24E-06
1886	571250.00	4174750.00	WORKER	1.03E-08	1.85E-09	8.44E-09	-1.13E-06	5.66E-08	-1.35E-06	-1.12E-06	5.84E-08	-1.34E-06
1887	571250.00	4174500.00	WORKER	8.80E-09	1.63E-09	7.16E-09	-1.25E-06	5.30E-08	-1.48E-06	-1.24E-06	5.46E-08	-1.48E-06
1888	571250.00	4174250.00	WORKER	7.65E-09	1.57E-09	6.08E-09	-1.39E-06	5.22E-08	-1.64E-06	-1.38E-06	5.38E-08	-1.64E-06
1889	571250.00	4174000.00	WORKER	6.80E-09	1.51E-09	5.29E-09	-1.37E-06	5.05E-08	-1.61E-06	-1.36E-06	5.20E-08	-1.61E-06
1890	571250.00	4173750.00	WORKER	6.06E-09	1.39E-09	4.67E-09	-1.25E-06	4.70E-08	-1.48E-06	-1.25E-06	4.84E-08	-1.47E-06
1891	571250.00	4173500.00	WORKER	5.28E-09	1.21E-09	4.07E-09	-1.26E-06	4.23E-08	-1.48E-06	-1.25E-06	4.36E-08	-1.47E-06
1895	571250.00	4172500.00	RECREATIONAL	3.37E-09	6.60E-10	2.71E-09	-9.35E-07	2.42E-08	-1.09E-06	-9.32E-07	2.48E-08	-1.09E-06
1904	571500.00	4178000.00	WORKER	1.24E-09	1.29E-10	1.11E-09	-1.81E-07	5.24E-09	-2.13E-07	-1.80E-07	5.36E-09	-2.12E-07
1905	571500.00	4177750.00	WORKER	1.45E-09	1.48E-10	1.30E-09	-2.11E-07	5.96E-09	-2.47E-07	-2.09E-07	6.11E-09	-2.46E-07
1906	571500.00	4177500.00	WORKER	1.77E-09	1.68E-10	1.60E-09	-2.50E-07	6.84E-09	-2.92E-07	-2.48E-07	7.01E-09	-2.91E-07
1907	571500.00	4177250.00	WORKER	2.25E-09	1.93E-10	2.06E-09	-2.98E-07	7.98E-09	-3.49E-07	-2.96E-07	8.17E-09	-3.47E-07
1908	571500.00	4177000.00	SCHOOL	3.15E-09	2.23E-10	2.93E-09	-3.61E-07	9.44E-09	-4.22E-07	-3.58E-07	9.67E-09	-4.19E-07
1913	571500.00	4175750.00	WORKER	8.99E-09	5.64E-10	8.43E-09	-7.63E-07	2.23E-08	-8.95E-07	-7.54E-07	2.29E-08	-8.87E-07
1914	571500.00	4175500.00	WORKER	8.53E-09	7.14E-10	7.81E-09	-7.78E-07	2.77E-08	-9.19E-07	-7.70E-07	2.84E-08	-9.11E-07
1915	571500.00	4175250.00	WORKER	8.92E-09	9.39E-10	7.98E-09	-8.54E-07	3.51E-08	-1.01E-06	-8.45E-07	3.60E-08	-1.01E-06
1916	571500.00	4175000.00	WORKER	1.06E-08	1.24E-09	9.38E-09	-1.01E-06	4.33E-08	-1.20E-06	-1.00E-06	4.46E-08	-1.19E-06
1917	571500.00	4174750.00	WORKER	1.39E-08	1.56E-09	1.24E-08	-1.25E-06	5.27E-08	-1.49E-06	-1.24E-06	5.43E-08	-1.47E-06
1918	571500.00	4174500.00	WORKER	7.58E-09	1.30E-09	6.28E-09	-1.11E-06	4.31E-08	-1.31E-06	-1.10E-06	4.44E-08	-1.31E-06
1919	571500.00	4174250.00	WORKER	6.49E-09	1.24E-09	5.25E-09	-1.19E-06	4.19E-08	-1.41E-06	-1.19E-06	4.32E-08	-1.40E-06
1920	571500.00	4174000.00	WORKER	5.81E-09	1.21E-09	4.60E-09	-1.14E-06	4.11E-08	-1.35E-06	-1.14E-06	4.24E-08	-1.34E-06
1921	571500.00	4173750.00	WORKER	5.25E-09	1.15E-09	4.10E-09	-1.04E-06	3.96E-08	-1.22E-06	-1.03E-06	4.07E-08	-1.22E-06
1922	571500.00	4173500.00	WORKER	4.74E-09	1.05E-09	3.69E-09	-1.03E-06	3.67E-08	-1.21E-06	-1.02E-06	3.78E-08	-1.21E-06
1925	571500.00	4172750.00	RECREATIONAL	3.38E-09	7.02E-10	2.68E-09	-9.89E-07	2.59E-08	-1.15E-06	-9.86E-07	2.66E-08	-1.15E-06
1926	571500.00	4172500.00	RECREATIONAL	3.04E-09	6.15E-10	2.43E-09	-8.73E-07	2.27E-08	-1.02E-06	-8.69E-07	2.33E-08	-1.02E-06
1928	571500.00	4172000.00	RECREATIONAL	2.62E-09	4.84E-10	2.13E-09	-6.36E-07	1.77E-08	-7.43E-07	-6.33E-07	1.82E-08	-7.41E-07
1935	571750.00	4178000.00	WORKER	1.20E-09	1.30E-10	1.07E-09	-1.78E-07	5.18E-09	-2.09E-07	-1.77E-07	5.31E-09	-2.08E-07
1936	571750.00	4177750.00	WORKER	1.42E-09	1.47E-10	1.27E-09	-2.07E-07	5.93E-09	-2.43E-07	-2.06E-07	6.07E-09	-2.42E-07
1937	571750.00	4177500.00	WORKER	1.63E-09	1.65E-10	1.46E-09	-2.41E-07	6.73E-09	-2.83E-07	-2.40E-07	6.89E-09	-2.81E-07
1944	571750.00	4175750.00	WORKER	7.03E-09	5.12E-10	6.51E-09	-6.37E-07	1.99E-08	-7.49E-07	-6.30E-07	2.04E-08	-7.42E-07
1945	571750.00	4175500.00	WORKER	6.79E-09	6.42E-10	6.15E-09	-6.71E-07	2.45E-08	-7.93E-07	-6.65E-07	2.51E-08	-7.87E-07
1946	571750.00	4175250.00	WORKER	7.05E-09	8.12E-10	6.24E-09	-7.44E-07	2.99E-08	-8.82E-07	-7.37E-07	3.07E-08	-8.76E-07
1947	571750.00	4175000.00	WORKER	7.47E-09	9.96E-10	6.48E-09	-8.41E-07	3.49E-08	-9.99E-07	-8.34E-07	3.59E-08	-9.93E-07
1948	571750.00	4174750.00	WORKER	1.00E-08	1.14E-09	8.88E-09	-1.04E-06	4.08E-08	-1.24E-06	-1.03E-06	4.20E-08	-1.23E-06
1949	571750.00	4174500.00	WORKER	6.87E-09	1.06E-09	5.81E-09	-1.00E-06	3.64E-08	-1.18E-06	-9.94E-07	3.74E-08	-1.18E-06
1950	571750.00	4174250.00	WORKER	5.65E-09	1.00E-09	4.65E-09	-1.03E-06	3.44E-08	-1.21E-06	-1.03E-06	3.54E-08	-1.21E-06
1951	571750.00	4174000.00	WORKER	5.10E-09	9.89E-10	4.11E-09	-9.76E-07	3.40E-08	-1.15E-06	-9.70E-07	3.50E-08	-1.15E-06
1952	571750.00	4173750.00	WORKER	4.72E-09	9.65E-10	3.75E-09	-8.78E-07	3.34E-08	-1.04E-06	-8.73E-07	3.44E-08	-1.03E-06
1957	571750.00	4172500.00	RECREATIONAL	2.81E-09	5.71E-10	2.24E-09	-7.99E-07	2.11E-08	-9.33E-07	-7.96E-07	2.17E-08	-9.31E-07
1958	571750.00	4172250.00	RECREATIONAL	2.58E-09	5.08E-10	2.07E-09	-7.00E-07	1.88E-08	-8.17E-07	-6.97E-07	1.93E-08	-8.15E-07
1959	571750.00	4172000.00	RECREATIONAL	2.39E-09	4.56E-10	1.94E-09	-6.03E-07	1.68E-08	-7.05E-07	-6.01E-07	1.72E-08	-7.03E-07
1960	571750.00	4171750.00	RECREATIONAL	2.13E-09	4.11E-10	1.72E-09	-5.32E-07	1.51E-08	-6.22E-07	-5.30E-07	1.55E-08	-6.21E-07
1966	572000.00	4178000.00	WORKER	1.12E-09	1.28E-10	9.89E-10	-1.77E-07	5.15E-09	-2.07E-07	-1.75E-07	5.28E-09	-2.06E-07
1967	572000.00	4177750.00	WORKER	1.30E-09	1.43E-10	1.15E-09	-2.02E-07	5.82E-09	-2.37E-07	-2.01E-07	5.96E-09	-2.36E-07
1968	572000.00	4177500.00	WORKER	1.57E-09	1.60E-10	1.41E-09	-2.28E-07	6.64E-09	-2.68E-07	-2.27E-07	6.80E-09	-2.66E-07
1969	572000.00	4177250.00	WORKER	1.90E-09	1.79E-10	1.72E-09	-2.57E-07	7.56E-09	-3.02E-07	-2.55E-07	7.74E-09	-3.00E-07
1978	572000.00	4175000.00	WORKER	6.16E-09	8.38E-10	5.32E-09	-7.49E-07	2.97E-08	-8.88E-07	-7.43E-07	3.06E-08	-8.83E-07
1979	572000.00	4174750.00	WORKER	1.33E-08	1.04E-09	1.22E-08	-1.08E-06	4.27E-08	-1.28E-06	-1.07E-06	4.37E-08	-1.27E-06
1980	572000.00	4174500.00	WORKER	5.79E-09	8.72E-10	4.92E-09	-8.83E-07	3.05E-08	-1.04E-06	-8.77E-07	3.14E-08	-1.04E-06
1981	572000.00	4174250.00	WORKER	4.89E-09	8.29E-10	4.06E-09	-9.02E-07	2.88E-08	-1.06E-06	-8.97E-07	2.97E-08	-1.06E-06
1982	572000.00	4174000.00	WORKER	4.46E-09	8.20E-10	3.64E-09	-8.48E-07	2.85E-08	-9.98E-07	-8.44E-07	2.93E-08	-9.94E-07
1983	572000.00	4173750.00	WORKER	4.18E-09	8.15E-10	3.36E-09	-7.62E-07	2.85E-08	-8.99E-07	-7.57E-07	2.93E-08	-8.96E-07
1988	572000.00	4172500.00	RECREATIONAL	2.71E-09	5.31E-10	2.18E-09	-7.19E-07	1.97E-08	-8.41E-07	-7.17E-07	2.02E-08	-8.38E-07
1989	572000.00	4172250.00	RECREATIONAL	2.48E-09	4.75E-10	2.00E-09	-6.55E-07	1.76E-08	-7.65E-07	-6.53E-07	1.81E-08	-7.63E-07
1990	572000.00	4172000.00	RECREATIONAL	2.26E-09	4.29E-10	1.83E-09	-5.75E-07	1.58E-08	-6.73E-07	-5.73E-07	1.63E-08	-6.71E-07
1991	572000.00	4171750.00	RECREATIONAL	2.13E-09	3.89E-10	1.74E-09	-5.08E-07	1.43E-08	-5.94E-07	-5.05E-07	1.47E-08	-5.92E-07
2000	572250.00	4177250.00	WORKER	1.71E-09	1.72E-10	1.54E-09	-2.34E-07	7.35E-09	-2.75E-07	-2.32E-07	7.52E-09	-2.74E-07
2001	572250.00	4177000.00	WORKER	2.08E-09	1.97E-10	1.89E-09	-2.61E-07	8.33E-09	-3.06E-07	-2.59E-07	8.52E-09	-3.05E-07
2002	572250.00	4176750.00	WORKER	2.40E-09	2.28E-10	2.18E-09	-2.94E-07	9.39E-09	-3.46E-07	-2.91E-07	9.61E-09	-3.43E-07

**OAK Terminal Modernization & Development**

**Table 2-21. Offsite Worker Cancer Risks**

**Combined Construction & Operations**

**Non-Inhalation Risks**

Maximum-> 9.48E-08 7.78E-09 9.42E-08  
 Minimum-> 2.05E-10 2.72E-11 1.75E-10  
 Max Receptor No.-> 1544 3296 1544  
 Exposure Years-> 2025-2049 2025-2030 2028-2052  
 Exposure Duration-> 25 Yrs 6 Yrs 25 Yrs

**Inhalation Risks**

Maximum-> -3.33E-08 2.29E-07 -3.92E-08  
 Minimum-> -3.89E-06 1.08E-09 -4.51E-06  
 Max Receptor No.-> 2965 3296 2965  
 Exposure Years-> 2025-2049 2025-2030 2028-2052  
 Exposure Duration-> 25 Yrs 6 Yrs 25 Yrs

**Multi-Pathway Risks**

Maximum-> -3.30E-08 2.37E-07 -3.89E-08  
 Minimum-> -3.81E-06 1.11E-09 -4.42E-06  
 Max Receptor No.-> 2965 3296 2965  
 Exposure Years-> 2025-2049 2025-2030 2028-2052  
 Exposure Duration-> 25 Yrs 6 Yrs 25 Yrs

RecID	UTM X	UTM Y	Receptor Type	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations
2006	572250.00	4175750.00	SCHOOL	4.42E-09	4.34E-10	3.99E-09	-4.80E-07	1.64E-08	-5.66E-07	-4.76E-07	1.68E-08	-5.62E-07
2010	572250.00	4174750.00	WORKER	6.51E-09	7.83E-10	5.72E-09	-7.90E-07	2.93E-08	-9.35E-07	-7.84E-07	3.00E-08	-9.29E-07
2011	572250.00	4174500.00	WORKER	4.86E-09	7.29E-10	4.14E-09	-7.72E-07	2.57E-08	-9.09E-07	-7.67E-07	2.64E-08	-9.05E-07
2012	572250.00	4174250.00	WORKER	4.20E-09	6.96E-10	3.50E-09	-7.94E-07	2.44E-08	-9.32E-07	-7.90E-07	2.51E-08	-9.29E-07
2013	572250.00	4174000.00	WORKER	3.89E-09	6.91E-10	3.19E-09	-7.47E-07	2.42E-08	-8.79E-07	-7.44E-07	2.49E-08	-8.75E-07
2014	572250.00	4173750.00	WORKER	3.68E-09	6.93E-10	2.99E-09	-6.71E-07	2.44E-08	-7.92E-07	-6.67E-07	2.51E-08	-7.89E-07
2015	572250.00	4173500.00	WORKER	3.50E-09	6.84E-10	2.81E-09	-6.46E-07	2.43E-08	-7.63E-07	-6.43E-07	2.49E-08	-7.60E-07
2022	572250.00	4171750.00	RECREATIONAL	1.95E-09	3.67E-10	1.58E-09	-4.83E-07	1.36E-08	-5.65E-07	-4.81E-07	1.40E-08	-5.64E-07
2023	572250.00	4171500.00	RECREATIONAL	1.84E-09	3.37E-10	1.50E-09	-4.35E-07	1.24E-08	-5.09E-07	-4.33E-07	1.28E-08	-5.07E-07
2031	572500.00	4177250.00	WORKER	1.52E-09	1.67E-10	1.36E-09	-2.16E-07	7.06E-09	-2.54E-07	-2.15E-07	7.23E-09	-2.53E-07
2032	572500.00	4177000.00	WORKER	1.78E-09	1.91E-10	1.59E-09	-2.38E-07	7.89E-09	-2.80E-07	-2.36E-07	8.08E-09	-2.79E-07
2034	572500.00	4176500.00	WORKER	2.45E-09	2.48E-10	2.20E-09	-3.15E-07	9.75E-09	-3.70E-07	-3.13E-07	1.00E-08	-3.68E-07
2037	572500.00	4175750.00	SCHOOL	3.63E-09	3.99E-10	3.23E-09	-4.33E-07	1.50E-08	-5.11E-07	-4.29E-07	1.54E-08	-5.07E-07
2040	572500.00	4175000.00	ROAD	4.77E-09	6.29E-10	4.14E-09	-6.15E-07	2.31E-08	-7.28E-07	-6.11E-07	2.37E-08	-7.24E-07
2042	572500.00	4174500.00	WORKER	3.95E-09	6.21E-10	3.33E-09	-6.80E-07	2.20E-08	-8.00E-07	-6.76E-07	2.27E-08	-7.97E-07
2043	572500.00	4174250.00	WORKER	3.64E-09	5.96E-10	3.05E-09	-7.04E-07	2.10E-08	-8.26E-07	-7.01E-07	2.16E-08	-8.23E-07
2044	572500.00	4174000.00	WORKER	3.44E-09	5.89E-10	2.85E-09	-6.65E-07	2.07E-08	-7.80E-07	-6.61E-07	2.13E-08	-7.77E-07
2045	572500.00	4173750.00	WORKER	3.27E-09	5.95E-10	2.67E-09	-5.99E-07	2.11E-08	-7.06E-07	-5.96E-07	2.17E-08	-7.03E-07
2053	572500.00	4171750.00	RECREATIONAL	1.93E-09	3.46E-10	1.59E-09	-4.64E-07	1.29E-08	-5.42E-07	-4.62E-07	1.32E-08	-5.40E-07
2054	572500.00	4171500.00	RECREATIONAL	1.71E-09	3.17E-10	1.39E-09	-4.17E-07	1.18E-08	-4.88E-07	-4.15E-07	1.21E-08	-4.87E-07
2055	572500.00	4171250.00	RECREATIONAL	1.52E-09	2.94E-10	1.22E-09	-3.80E-07	1.09E-08	-4.44E-07	-3.78E-07	1.12E-08	-4.43E-07
2056	572500.00	4171000.00	RECREATIONAL	1.45E-09	2.74E-10	1.17E-09	-3.46E-07	1.01E-08	-4.05E-07	-3.44E-07	1.04E-08	-4.04E-07
2063	572750.00	4177000.00	SCHOOL	1.48E-09	1.85E-10	1.30E-09	-2.26E-07	7.48E-09	-2.66E-07	-2.25E-07	7.66E-09	-2.65E-07
2073	572750.00	4174500.00	WORKER	3.33E-09	5.36E-10	2.80E-09	-6.02E-07	1.90E-08	-7.08E-07	-5.99E-07	1.96E-08	-7.05E-07
2074	572750.00	4174250.00	WORKER	3.14E-09	5.16E-10	2.62E-09	-6.26E-07	1.83E-08	-7.34E-07	-6.23E-07	1.88E-08	-7.31E-07
2075	572750.00	4174000.00	WORKER	3.03E-09	5.12E-10	2.52E-09	-5.94E-07	1.80E-08	-6.97E-07	-5.91E-07	1.85E-08	-6.95E-07
2076	572750.00	4173750.00	WORKER	2.92E-09	5.16E-10	2.40E-09	-5.39E-07	1.83E-08	-6.35E-07	-5.36E-07	1.88E-08	-6.32E-07
2077	572750.00	4173500.00	WORKER	2.75E-09	5.21E-10	2.23E-09	-5.14E-07	1.87E-08	-6.06E-07	-5.11E-07	1.92E-08	-6.04E-07
2078	572750.00	4173250.00	WORKER	2.68E-09	5.16E-10	2.17E-09	-5.03E-07	1.86E-08	-5.94E-07	-5.01E-07	1.92E-08	-5.92E-07
2080	572750.00	4172750.00	WORKER	2.36E-09	4.69E-10	1.89E-09	-5.05E-07	1.72E-08	-5.94E-07	-5.02E-07	1.77E-08	-5.92E-07
2084	572750.00	4171750.00	RECREATIONAL	1.76E-09	3.29E-10	1.43E-09	-4.41E-07	1.23E-08	-5.16E-07	-4.40E-07	1.26E-08	-5.14E-07
2085	572750.00	4171500.00	RECREATIONAL	1.69E-09	3.03E-10	1.39E-09	-3.99E-07	1.13E-08	-4.67E-07	-3.97E-07	1.16E-08	-4.65E-07
2086	572750.00	4171250.00	RECREATIONAL	1.55E-09	2.79E-10	1.27E-09	-3.64E-07	1.04E-08	-4.25E-07	-3.62E-07	1.07E-08	-4.24E-07
2087	572750.00	4171000.00	RECREATIONAL	1.41E-09	2.61E-10	1.15E-09	-3.33E-07	9.64E-09	-3.90E-07	-3.32E-07	9.90E-09	-3.89E-07
2104	573000.00	4174500.00	SCHOOL	2.97E-09	4.70E-10	2.50E-09	-5.39E-07	1.67E-08	-6.33E-07	-5.36E-07	1.72E-08	-6.30E-07
2105	573000.00	4174250.00	WORKER	2.79E-09	4.53E-10	2.33E-09	-5.61E-07	1.61E-08	-6.57E-07	-5.58E-07	1.65E-08	-6.55E-07
2106	573000.00	4174000.00	WORKER	2.68E-09	4.50E-10	2.23E-09	-5.35E-07	1.59E-08	-6.28E-07	-5.33E-07	1.63E-08	-6.25E-07
2107	573000.00	4173750.00	WORKER	2.55E-09	4.54E-10	2.09E-09	-4.88E-07	1.61E-08	-5.74E-07	-4.86E-07	1.66E-08	-5.72E-07
2108	573000.00	4173500.00	WORKER	2.56E-09	4.60E-10	2.10E-09	-4.65E-07	1.65E-08	-5.48E-07	-4.62E-07	1.69E-08	-5.46E-07
2109	573000.00	4173250.00	WORKER	2.42E-09	4.60E-10	1.96E-09	-4.54E-07	1.66E-08	-5.36E-07	-4.52E-07	1.71E-08	-5.34E-07
2110	573000.00	4173000.00	WORKER	2.36E-09	4.51E-10	1.91E-09	-4.52E-07	1.64E-08	-5.33E-07	-4.50E-07	1.69E-08	-5.31E-07
2111	573000.00	4172750.00	WORKER	2.20E-09	4.31E-10	1.77E-09	-4.53E-07	1.58E-08	-5.33E-07	-4.50E-07	1.63E-08	-5.31E-07
2112	573000.00	4172500.00	WORKER	2.03E-09	4.05E-10	1.62E-09	-4.52E-07	1.50E-08	-5.31E-07	-4.50E-07	1.54E-08	-5.29E-07
2113	573000.00	4172250.00	WORKER	1.97E-09	3.74E-10	1.59E-09	-4.50E-07	1.39E-08	-5.27E-07	-4.48E-07	1.43E-08	-5.26E-07
2114	573000.00	4172000.00	WORKER	1.82E-09	3.42E-10	1.48E-09	-4.40E-07	1.28E-08	-5.15E-07	-4.38E-07	1.31E-08	-5.14E-07
2115	573000.00	4171750.00	RECREATIONAL	1.68E-09	3.13E-10	1.37E-09	-4.16E-07	1.17E-08	-4.86E-07	-4.14E-07	1.20E-08	-4.85E-07
2116	573000.00	4171500.00	RECREATIONAL	1.54E-09	2.88E-10	1.25E-09	-3.84E-07	1.08E-08	-4.48E-07	-3.82E-07	1.10E-08	-4.47E-07
2117	573000.00	4171250.00	RECREATIONAL	1.41E-09	2.66E-10	1.14E-09	-3.47E-07	9.92E-09	-4.06E-07	-3.46E-07	1.02E-08	-4.05E-07
2118	573000.00	4171000.00	RECREATIONAL	1.28E-09	2.49E-10	1.03E-09	-3.20E-07	9.20E-09	-3.74E-07	-3.19E-07	9.45E-09	-3.73E-07
2119	573000.00	4170750.00	RECREATIONAL	1.25E-09	2.31E-10	1.01E-09	-2.95E-07	8.64E-09	-3.46E-07	-2.94E-07	8.87E-09	-3.45E-07
2135	573250.00	4174500.00	SCHOOL	2.45E-09	4.16E-10	2.03E-09	-4.83E-07	1.48E-08	-5.68E-07	-4.81E-07	1.52E-08	-5.66E-07
2137	573250.00	4174000.00	WORKER	2.36E-09	3.99E-10	1.97E-09	-4.84E-07	1.41E-08	-5.67E-07	-4.82E-07	1.45E-08	-5.65E-07
2138	573250.00	4173750.00	WORKER	2.35E-09	4.03E-10	1.94E-09	-4.45E-07	1.43E-08	-5.22E-07	-4.42E-07	1.47E-08	-5.20E-07
2139	573250.00	4173500.00	WORKER	2.32E-09	4.10E-10	1.91E-09	-4.25E-07	1.47E-08	-5.00E-07	-4.22E-07	1.51E-08	-4.98E-07
2140	573250.00	4173250.00	WORKER	2.29E-09	4.11E-10	1.88E-09	-4.13E-07	1.49E-08	-4.87E-07	-4.11E-07	1.53E-08	-4.85E-07
2141	573250.00	4173000.00	WORKER	2.08E-09	4.08E-10	1.68E-09	-4.08E-07	1.49E-08	-4.81E-07	-4.06E-07	1.53E-08	-4.79E-07
2142	573250.00	4172750.00	WORKER	2.04E-09	3.97E-10	1.64E-09	-4.08E-07	1.46E-08	-4.81E-07	-4.06E-07	1.50E-08	-4.79E-07
2143	573250.00	4172500.00	WORKER	1.99E-09	3.77E-10	1.61E-09	-4.07E-07	1.40E-08	-4.79E-07	-4.05E-07	1.44E-08	-4.77E-07
2144	573250.00	4172250.00	WORKER	1.86E-09	3.52E-10	1.50E-09	-4.07E-07	1.31E-08	-4.77E-07	-4.05E-07	1.35E-08	-4.76E-07
2145	573250.00	4172000.00	WORKER	1.73E-09	3.25E-10	1.41E-09	-4.03E-07	1.22E-08	-4.72E-07	-4.01E-07	1.25E-08	-4.70E-07
2146	573250.00	4171750.00	RECREATIONAL	1.60E-09	2.99E-10	1.31E-09	-3.89E-07	1.12E-08	-4.55E-07	-3.87E-07	1.15E-08	-4.54E-07

**OAK Terminal Modernization & Development**

**Table 2-21. Offsite Worker Cancer Risks**

**Combined Construction & Operations**  
 Maximum->  
 Minimum->  
 Max Receptor No.->  
 Exposure Years->  
 Exposure Duration->

**Non-Inhalation Risks**

9.48E-08 7.78E-09 9.42E-08  
 2.05E-10 2.72E-11 1.75E-10  
 1544 3296 1544  
 2025-2049 2025-2030 2028-2052  
 25 Yrs 6 Yrs 25 Yrs

**Inhalation Risks**

-3.33E-08 2.29E-07 -3.92E-08  
 -3.89E-06 1.08E-09 -4.51E-06  
 2965 3296 2965  
 2025-2049 2025-2030 2028-2052  
 25 Yrs 6 Yrs 25 Yrs

**Multi-Pathway Risks**

-3.30E-08 2.37E-07 -3.89E-08  
 -3.81E-06 1.11E-09 -4.42E-06  
 2965 3296 2965  
 2025-2049 2025-2030 2028-2052  
 25 Yrs 6 Yrs 25 Yrs

RecID	UTM X	UTM Y	Receptor Type	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations
2147	573250.00	4171500.00	RECREATIONAL	1.56E-09	2.75E-10	1.28E-09	-3.65E-07	1.03E-08	-4.27E-07	-3.64E-07	1.06E-08	-4.26E-07
2148	573250.00	4171250.00	RECREATIONAL	1.42E-09	2.55E-10	1.16E-09	-3.36E-07	9.48E-09	-3.92E-07	-3.34E-07	9.74E-09	-3.91E-07
2149	573250.00	4171000.00	RECREATIONAL	1.32E-09	2.37E-10	1.08E-09	-3.07E-07	8.84E-09	-3.59E-07	-3.05E-07	9.08E-09	-3.58E-07
2150	573250.00	4170750.00	RECREATIONAL	1.21E-09	2.22E-10	9.90E-10	-2.85E-07	8.23E-09	-3.34E-07	-2.84E-07	8.45E-09	-3.33E-07
2151	573250.00	4170500.00	RECREATIONAL	1.11E-09	2.08E-10	8.99E-10	-2.64E-07	7.74E-09	-3.10E-07	-2.63E-07	7.95E-09	-3.09E-07
2159	573500.00	4176250.00	WORKER	1.68E-09	2.30E-10	1.45E-09	-2.63E-07	8.53E-09	-3.10E-07	-2.62E-07	8.76E-09	-3.08E-07
2160	573500.00	4176000.00	WORKER	1.76E-09	2.63E-10	1.50E-09	-2.89E-07	9.78E-09	-3.41E-07	-2.88E-07	1.00E-08	-3.39E-07
2168	573500.00	4174000.00	ROAD	2.12E-09	3.58E-10	1.76E-09	-4.40E-07	1.27E-08	-5.16E-07	-4.38E-07	1.30E-08	-5.14E-07
2169	573500.00	4173750.00	WORKER	2.04E-09	3.60E-10	1.68E-09	-4.07E-07	1.28E-08	-4.78E-07	-4.05E-07	1.32E-08	-4.77E-07
2170	573500.00	4173500.00	WORKER	2.04E-09	3.65E-10	1.67E-09	-3.90E-07	1.30E-08	-4.58E-07	-3.88E-07	1.34E-08	-4.57E-07
2171	573500.00	4173250.00	WORKER	2.07E-09	3.69E-10	1.71E-09	-3.78E-07	1.34E-08	-4.45E-07	-3.76E-07	1.38E-08	-4.44E-07
2172	573500.00	4173000.00	WORKER	2.00E-09	3.69E-10	1.63E-09	-3.72E-07	1.35E-08	-4.39E-07	-3.70E-07	1.39E-08	-4.37E-07
2173	573500.00	4172750.00	WORKER	1.89E-09	3.62E-10	1.53E-09	-3.71E-07	1.34E-08	-4.37E-07	-3.69E-07	1.37E-08	-4.36E-07
2174	573500.00	4172500.00	WORKER	1.78E-09	3.49E-10	1.43E-09	-3.70E-07	1.30E-08	-4.36E-07	-3.68E-07	1.33E-08	-4.34E-07
2175	573500.00	4172250.00	WORKER	1.67E-09	3.31E-10	1.34E-09	-3.69E-07	1.24E-08	-4.34E-07	-3.68E-07	1.27E-08	-4.32E-07
2176	573500.00	4172000.00	WORKER	1.64E-09	3.09E-10	1.33E-09	-3.69E-07	1.16E-08	-4.32E-07	-3.67E-07	1.19E-08	-4.31E-07
2178	573500.00	4171500.00	RECREATIONAL	1.42E-09	2.65E-10	1.15E-09	-3.45E-07	9.92E-09	-4.04E-07	-3.44E-07	1.02E-08	-4.03E-07
2179	573500.00	4171250.00	RECREATIONAL	1.39E-09	2.45E-10	1.15E-09	-3.23E-07	9.15E-09	-3.78E-07	-3.22E-07	9.39E-09	-3.77E-07
2180	573500.00	4171000.00	RECREATIONAL	1.28E-09	2.27E-10	1.05E-09	-2.97E-07	8.51E-09	-3.48E-07	-2.96E-07	8.73E-09	-3.46E-07
2181	573500.00	4170750.00	RECREATIONAL	1.18E-09	2.12E-10	9.66E-10	-2.75E-07	7.92E-09	-3.21E-07	-2.73E-07	8.14E-09	-3.20E-07
2182	573500.00	4170500.00	RECREATIONAL	1.06E-09	2.00E-10	8.60E-10	-2.55E-07	7.46E-09	-2.99E-07	-2.54E-07	7.66E-09	-2.98E-07
2517	565750.00	4179000.00	WORKER	4.70E-10	6.96E-11	4.00E-10	-8.48E-08	2.65E-09	-9.96E-08	-8.44E-08	2.72E-09	-9.92E-08
2518	565750.00	4179250.00	WORKER	4.16E-10	6.34E-11	3.53E-10	-7.92E-08	2.44E-09	-9.30E-08	-7.88E-08	2.50E-09	-9.27E-08
2519	565750.00	4179500.00	WORKER	3.87E-10	5.85E-11	3.28E-10	-7.35E-08	2.29E-09	-8.64E-08	-7.32E-08	2.34E-09	-8.60E-08
2520	565750.00	4179750.00	HOSPITAL	3.62E-10	5.46E-11	3.07E-10	-6.81E-08	2.13E-09	-8.00E-08	-6.77E-08	2.19E-09	-7.97E-08
2548	565500.00	4179000.00	RECREATIONAL	4.26E-10	6.85E-11	3.57E-10	-8.18E-08	2.55E-09	-9.60E-08	-8.14E-08	2.61E-09	-9.56E-08
2611	565000.00	4179250.00	RECREATIONAL	4.55E-10	6.25E-11	3.92E-10	-7.00E-08	2.26E-09	-8.23E-08	-6.96E-08	2.33E-09	-8.19E-08
2612	565000.00	4179500.00	SCHOOL	3.71E-10	5.78E-11	3.13E-10	-6.71E-08	2.08E-09	-7.87E-08	-6.67E-08	2.14E-09	-7.84E-08
2674	564500.00	4179500.00	RECREATIONAL	3.20E-10	5.74E-11	2.63E-10	-6.25E-08	2.03E-09	-7.34E-08	-6.22E-08	2.09E-09	-7.32E-08
2803	567000.00	4180750.00	WORKER	3.82E-10	4.10E-11	3.41E-10	-4.87E-08	1.57E-09	-5.72E-08	-4.83E-08	1.61E-09	-5.68E-08
2805	567500.00	4180750.00	WORKER	3.94E-10	3.97E-11	3.54E-10	-4.91E-08	1.52E-09	-5.76E-08	-4.87E-08	1.56E-09	-5.73E-08
2806	567750.00	4180750.00	WORKER	3.22E-10	3.97E-11	2.83E-10	-5.14E-08	1.60E-09	-6.04E-08	-5.11E-08	1.64E-09	-6.01E-08
2807	568000.00	4180750.00	WORKER	3.47E-10	3.99E-11	3.07E-10	-5.39E-08	1.60E-09	-6.32E-08	-5.36E-08	1.64E-09	-6.29E-08
2808	568250.00	4180750.00	WORKER	4.18E-10	3.99E-11	3.78E-10	-5.40E-08	1.52E-09	-6.33E-08	-5.36E-08	1.56E-09	-6.29E-08
2809	568500.00	4180750.00	WORKER	3.22E-10	4.01E-11	2.82E-10	-5.20E-08	1.52E-09	-6.09E-08	-5.17E-08	1.56E-09	-6.07E-08
2810	568750.00	4180750.00	WORKER	3.16E-10	3.97E-11	2.77E-10	-5.02E-08	1.52E-09	-5.89E-08	-4.99E-08	1.56E-09	-5.87E-08
2811	569000.00	4180750.00	WORKER	3.08E-10	3.97E-11	2.68E-10	-5.25E-08	1.50E-09	-6.15E-08	-5.22E-08	1.54E-09	-6.12E-08
2812	569250.00	4180750.00	WORKER	3.30E-10	3.97E-11	2.90E-10	-5.68E-08	1.57E-09	-6.65E-08	-5.64E-08	1.61E-09	-6.62E-08
2830	567000.00	4181000.00	WORKER	2.95E-10	3.84E-11	2.56E-10	-4.52E-08	1.50E-09	-5.32E-08	-4.50E-08	1.53E-09	-5.30E-08
2831	567250.00	4181000.00	WORKER	3.68E-10	3.80E-11	3.30E-10	-4.48E-08	1.49E-09	-5.27E-08	-4.44E-08	1.53E-09	-5.24E-08
2832	567500.00	4181000.00	WORKER	3.77E-10	3.80E-11	3.39E-10	-4.60E-08	1.47E-09	-5.41E-08	-4.56E-08	1.51E-09	-5.37E-08
2833	567750.00	4181000.00	WORKER	2.95E-10	3.75E-11	2.57E-10	-4.84E-08	1.44E-09	-5.68E-08	-4.81E-08	1.48E-09	-5.65E-08
2834	568000.00	4181000.00	WORKER	2.83E-10	3.73E-11	2.46E-10	-4.89E-08	1.47E-09	-5.74E-08	-4.87E-08	1.50E-09	-5.72E-08
2835	568250.00	4181000.00	WORKER	2.78E-10	3.77E-11	2.41E-10	-4.96E-08	1.47E-09	-5.82E-08	-4.93E-08	1.50E-09	-5.80E-08
2836	568500.00	4181000.00	WORKER	3.62E-10	3.73E-11	3.24E-10	-4.78E-08	1.42E-09	-5.61E-08	-4.75E-08	1.45E-09	-5.58E-08
2838	569000.00	4181000.00	WORKER	2.69E-10	3.68E-11	2.33E-10	-4.85E-08	1.42E-09	-5.68E-08	-4.82E-08	1.45E-09	-5.66E-08
2857	567000.00	4181250.00	WORKER	2.56E-10	3.55E-11	2.20E-10	-4.22E-08	1.39E-09	-4.96E-08	-4.20E-08	1.43E-09	-4.94E-08
2858	567250.00	4181250.00	WORKER	2.82E-10	3.55E-11	2.46E-10	-4.21E-08	1.39E-09	-4.95E-08	-4.18E-08	1.43E-09	-4.93E-08
2860	567750.00	4181250.00	WORKER	3.29E-10	3.37E-11	2.95E-10	-4.44E-08	1.33E-09	-5.21E-08	-4.41E-08	1.37E-09	-5.18E-08
2861	568000.00	4181250.00	WORKER	2.45E-10	3.37E-11	2.11E-10	-4.65E-08	1.36E-09	-5.45E-08	-4.63E-08	1.39E-09	-5.43E-08
2862	568250.00	4181250.00	WORKER	2.41E-10	3.46E-11	2.07E-10	-4.58E-08	1.36E-09	-5.37E-08	-4.55E-08	1.39E-09	-5.35E-08
2863	568500.00	4181250.00	WORKER	2.39E-10	3.41E-11	2.04E-10	-4.42E-08	1.36E-09	-5.19E-08	-4.40E-08	1.39E-09	-5.17E-08
2884	567000.00	4181500.00	WORKER	2.35E-10	3.35E-11	2.01E-10	-3.93E-08	1.34E-09	-4.62E-08	-3.90E-08	1.37E-09	-4.60E-08
2885	567250.00	4181500.00	WORKER	2.45E-10	3.26E-11	2.12E-10	-3.98E-08	1.34E-09	-4.68E-08	-3.95E-08	1.37E-09	-4.66E-08
2886	567500.00	4181500.00	WORKER	2.36E-10	3.15E-11	2.04E-10	-4.01E-08	1.28E-09	-4.71E-08	-3.99E-08	1.31E-09	-4.69E-08
2887	567750.00	4181500.00	WORKER	3.08E-10	3.15E-11	2.77E-10	-4.18E-08	1.28E-09	-4.90E-08	-4.15E-08	1.31E-09	-4.87E-08
2888	568000.00	4181500.00	WORKER	2.95E-10	3.15E-11	2.64E-10	-4.35E-08	1.31E-09	-5.10E-08	-4.32E-08	1.34E-09	-5.07E-08
2889	568250.00	4181500.00	WORKER	3.01E-10	3.20E-11	2.69E-10	-4.25E-08	1.31E-09	-4.99E-08	-4.22E-08	1.34E-09	-4.96E-08
2911	567000.00	4181750.00	WORKER	3.07E-10	3.11E-11	2.76E-10	-3.70E-08	1.23E-09	-4.35E-08	-3.67E-08	1.26E-09	-4.32E-08
2912	567250.00	4181750.00	WORKER	2.24E-10	3.02E-11	1.94E-10	-3.75E-08	1.23E-09	-4.41E-08	-3.72E-08	1.26E-09	-4.39E-08
2913	567500.00	4181750.00	WORKER	2.05E-10	2.98E-11	1.75E-10	-3.83E-08	1.21E-09	-4.50E-08	-3.81E-08	1.24E-09	-4.48E-08

OAK Terminal Modernization & Development

Table 2-21. Offsite Worker Cancer Risks

Combined Construction & Operations

Non-Inhalation Risks

Inhalation Risks

Multi-Pathway Risks

Maximum->	9.48E-08	7.78E-09	9.42E-08	-3.33E-08	2.29E-07	-3.92E-08	-3.30E-08	2.37E-07	-3.89E-08
Minimum->	2.05E-10	2.72E-11	1.75E-10	-3.89E-06	1.08E-09	-4.51E-06	-3.81E-06	1.11E-09	-4.42E-06
Max Receptor No.->	1544	3296	1544	2965	3296	2965	2965	3296	2965
Exposure Years->	2025-2049	2025-2030	2028-2052	2025-2049	2025-2030	2028-2052	2025-2049	2025-2030	2028-2052
Exposure Duration->	25 Yrs	6 Yrs	25 Yrs	25 Yrs	6 Yrs	25 Yrs	25 Yrs	6 Yrs	25 Yrs

RecID	UTM X	UTM Y	Receptor Type	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations
2938	567000.00	4182000.00	WORKER	2.90E-10	2.89E-11	2.61E-10	-3.51E-08	1.13E-09	-4.12E-08	-3.48E-08	1.16E-09	-4.10E-08
2939	567250.00	4182000.00	WORKER	2.97E-10	2.85E-11	2.68E-10	-3.62E-08	1.13E-09	-4.25E-08	-3.59E-08	1.16E-09	-4.22E-08
2965	567000.00	4182250.00	SCHOOL	2.77E-10	2.72E-11	2.50E-10	-3.33E-08	1.08E-09	-3.92E-08	-3.30E-08	1.11E-09	-3.89E-08
3295	570540.00	4175555.00	RECREATIONAL	5.53E-08	1.21E-09	5.41E-08	-2.82E-06	5.85E-08	-3.28E-06	-2.76E-06	5.97E-08	-3.23E-06
3296	570275.00	4174825.00	RECREATIONAL	6.69E-08	7.78E-09	5.91E-08	-2.67E-06	2.29E-07	-3.32E-06	-2.60E-06	2.37E-07	-3.26E-06
3297	570565.00	4174490.00	RECREATIONAL	1.78E-08	4.34E-09	1.34E-08	-1.82E-06	1.27E-07	-2.23E-06	-1.81E-06	1.32E-07	-2.21E-06
3298	571035.00	4175080.00	RECREATIONAL	1.41E-08	1.58E-09	1.25E-08	-1.15E-06	5.65E-08	-1.38E-06	-1.14E-06	5.81E-08	-1.36E-06
3299	570675.00	4175040.00	RECREATIONAL	2.49E-08	2.36E-09	2.26E-08	-1.51E-06	8.33E-08	-1.81E-06	-1.48E-06	8.56E-08	-1.79E-06

<b>OAK Terminal Modernization</b>	<b>Maximum-&gt;</b>	<b>-1.32E-06</b>	<b>1.01E-06</b>	<b>-1.34E-06</b>
<b>Table 2-22. Offsite Worker Cancer Risk</b>	<b>Minimum-&gt;</b>	<b>-1.54E-04</b>	<b>2.13E-08</b>	<b>-1.55E-04</b>
<b>Combined Construction &amp; Operations</b>	<b>Max RecID-&gt;</b>	<b>6</b>	<b>3</b>	<b>6</b>
	<b>Exposure Years-&gt;</b>	<b>2025-2049</b>	<b>2025-2030</b>	<b>2028-2052</b>
	<b>Exposure Duration-&gt;</b>	<b>25 Yrs</b>	<b>6 Yrs</b>	<b>25 Yrs</b>

RecID	UTM X	UTM Y	Receptor Type	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations
1	569712.76	4174275.96	ON-AIRPORT	-6.46E-06	3.31E-07	-6.79E-06
2	569483.17	4174092.29	ON-AIRPORT	-4.05E-05	3.90E-07	-4.09E-05
3	569283.43	4174257.59	ON-AIRPORT	-1.09E-05	1.01E-06	-1.19E-05
4	569074.50	4174009.64	ON-AIRPORT	-1.54E-04	4.50E-07	-1.55E-04
5	568792.10	4174895.86	ON-AIRPORT	-3.17E-06	8.37E-08	-3.25E-06
6	569167.77	4176928.00	ON-AIRPORT	-1.32E-06	2.24E-08	-1.34E-06
7	569492.49	4176178.97	ON-AIRPORT	-4.61E-06	2.13E-08	-4.63E-06
8	570228.53	4175725.23	ON-AIRPORT	-3.50E-06	4.45E-08	-3.54E-06

**OAK Terminal Modernization & Development**

**Table 2-23. On-Airport Worker Cancer Risks**

**Combined Construction & Operations**

		<u>Non-Inhalation Risks</u>			<u>Inhalation Risks</u>			<u>Multi-Pathway Risks</u>		
Maximum->		1.12E-07	3.59E-08	7.65E-08	-1.32E-06	1.01E-06	-1.34E-06	-1.25E-06	1.04E-06	-1.27E-06
Minimum->		1.01E-08	4.58E-10	2.41E-09	-1.54E-04	2.13E-08	-1.55E-04	-1.54E-04	2.18E-08	-1.55E-04
Max Receptor No.->		3	3	3	6	3	6	6	3	6
Exposure Years->		2025-2049	2025-2030	2028-2052	2025-2049	2025-2030	2028-2052	2025-2049	2025-2030	2028-2052
Exposure Duration->		25 Yrs	6 Yrs	25 Yrs	25 Yrs	6 Yrs	25 Yrs	25 Yrs	6 Yrs	25 Yrs

RecID	UTM X	UTM Y	Receptor Type	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations	Adult Worker During Construction & Operations	Adult Worker During Construction	Adult Worker During Operations
1	569712.76	4174275.96	ON-AIRPORT	7.68E-08	1.24E-08	6.44E-08	-6.46E-06	3.31E-07	-6.79E-06	-6.38E-06	3.44E-07	-6.72E-06
2	569483.17	4174092.29	ON-AIRPORT	7.29E-08	1.02E-08	6.28E-08	-4.05E-05	3.90E-07	-4.09E-05	-4.04E-05	4.00E-07	-4.08E-05
3	569283.43	4174257.59	ON-AIRPORT	1.12E-07	3.59E-08	7.65E-08	-1.09E-05	1.01E-06	-1.19E-05	-1.08E-05	1.04E-06	-1.18E-05
4	569074.50	4174009.64	ON-AIRPORT	1.01E-08	7.65E-09	2.41E-09	-1.54E-04	4.50E-07	-1.55E-04	-1.54E-04	4.58E-07	-1.55E-04
5	568792.10	4174895.86	ON-AIRPORT	1.78E-08	2.35E-09	1.54E-08	-3.17E-06	8.37E-08	-3.25E-06	-3.15E-06	8.60E-08	-3.24E-06
6	569167.77	4176928.00	ON-AIRPORT	6.44E-08	4.58E-10	6.40E-08	-1.32E-06	2.24E-08	-1.34E-06	-1.25E-06	2.28E-08	-1.27E-06
7	569492.49	4176178.97	ON-AIRPORT	2.23E-08	5.40E-10	2.18E-08	-4.61E-06	2.13E-08	-4.63E-06	-4.59E-06	2.18E-08	-4.61E-06
8	570228.53	4175725.23	ON-AIRPORT	6.43E-08	1.04E-09	6.33E-08	-3.50E-06	4.45E-08	-3.54E-06	-3.43E-06	4.56E-08	-3.48E-06

OAK Terminal Modernization

Table 2-24. Chronic Non-Cancer Hazard Indices

Combined Construction & Operations

	Construction + Operations			Construction Only			Operations Only		
	Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI		
Maximum->	2.27E-02	1.11E-02	8.13E-02	1.83E-03	1.10E-03	2.24E-02	2.27E-02	1.11E-02	5.49E-02
Minimum->	2.39E-04	9.12E-04	6.08E-04	2.60E-05	6.70E-05	6.70E-05	-4.96E-03	9.12E-04	-1.58E-02
Max ReclD->	1923	2104	3296	1953	2006	3296	1923	2104	1365
Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
33	566000.00	4176300.00	ROAD	-	-	4.60E-03	-	-	4.04E-04	-	-	4.60E-03
34	566000.00	4176400.00	WORKER	-	-	4.58E-03	-	-	3.92E-04	-	-	4.58E-03
35	566000.00	4176500.00	WORKER	-	-	4.50E-03	-	-	3.84E-04	-	-	4.50E-03
36	566000.00	4176600.00	RESIDENTIAL	4.36E-03	-	-	3.74E-04	-	-	4.36E-03	-	-
37	566000.00	4176700.00	RESIDENTIAL	4.17E-03	-	-	3.64E-04	-	-	4.17E-03	-	-
38	566000.00	4176800.00	RESIDENTIAL	3.95E-03	-	-	3.56E-04	-	-	3.95E-03	-	-
39	566000.00	4176900.00	RESIDENTIAL	3.74E-03	-	-	3.48E-04	-	-	3.74E-03	-	-
40	566000.00	4177000.00	ROAD	-	-	3.59E-03	-	-	3.39E-04	-	-	3.59E-03
41	566000.00	4177100.00	RESIDENTIAL	3.50E-03	-	-	3.30E-04	-	-	3.50E-03	-	-
42	566000.00	4177200.00	RESIDENTIAL	3.39E-03	-	-	3.23E-04	-	-	3.39E-03	-	-
43	566000.00	4177300.00	RESIDENTIAL	3.28E-03	-	-	3.13E-04	-	-	3.28E-03	-	-
44	566000.00	4177400.00	RESIDENTIAL	3.24E-03	-	-	3.04E-04	-	-	3.24E-03	-	-
45	566000.00	4177500.00	RECREATIONAL	-	-	3.26E-03	-	-	2.93E-04	-	-	-
46	566000.00	4177600.00	SCHOOL	3.28E-03	3.28E-03	3.28E-03	2.84E-04	2.84E-04	2.84E-04	3.28E-03	3.28E-03	3.28E-03
47	566000.00	4177700.00	SCHOOL	3.31E-03	3.31E-03	3.31E-03	2.70E-04	2.70E-04	2.70E-04	3.31E-03	3.31E-03	3.31E-03
48	566000.00	4177800.00	RESIDENTIAL	3.27E-03	-	-	2.61E-04	-	-	3.27E-03	-	-
49	566000.00	4177900.00	RESIDENTIAL	3.16E-03	-	-	2.51E-04	-	-	3.16E-03	-	-
50	566000.00	4178000.00	RESIDENTIAL	3.04E-03	-	-	2.44E-04	-	-	3.04E-03	-	-
79	566100.00	4176200.00	RECREATIONAL	-	-	4.86E-03	-	-	4.35E-04	-	-	-
80	566100.00	4176300.00	RECREATIONAL	-	-	4.86E-03	-	-	4.24E-04	-	-	-
81	566100.00	4176400.00	RECREATIONAL	-	-	4.80E-03	-	-	4.14E-04	-	-	-
83	566100.00	4176600.00	RESIDENTIAL	4.48E-03	-	-	3.93E-04	-	-	4.48E-03	-	-
84	566100.00	4176700.00	RESIDENTIAL	4.25E-03	-	-	3.85E-04	-	-	4.25E-03	-	-
85	566100.00	4176800.00	RESIDENTIAL	4.02E-03	-	-	3.73E-04	-	-	4.02E-03	-	-
86	566100.00	4176900.00	RESIDENTIAL	3.80E-03	-	-	3.61E-04	-	-	3.80E-03	-	-
87	566100.00	4177000.00	RESIDENTIAL	3.70E-03	-	-	3.51E-04	-	-	3.70E-03	-	-
88	566100.00	4177100.00	RESIDENTIAL	3.59E-03	-	-	3.42E-04	-	-	3.59E-03	-	-
89	566100.00	4177200.00	RESIDENTIAL	3.47E-03	-	-	3.31E-04	-	-	3.47E-03	-	-
90	566100.00	4177300.00	RESIDENTIAL	3.41E-03	-	-	3.20E-04	-	-	3.41E-03	-	-
91	566100.00	4177400.00	RESIDENTIAL	3.41E-03	-	-	3.12E-04	-	-	3.41E-03	-	-
92	566100.00	4177500.00	RESIDENTIAL	3.44E-03	-	-	3.00E-04	-	-	3.44E-03	-	-
93	566100.00	4177600.00	RESIDENTIAL	3.48E-03	-	-	2.89E-04	-	-	3.48E-03	-	-
94	566100.00	4177700.00	RESIDENTIAL	3.45E-03	-	-	2.79E-04	-	-	3.45E-03	-	-
95	566100.00	4177800.00	RESIDENTIAL	3.31E-03	-	-	2.68E-04	-	-	3.31E-03	-	-
96	566100.00	4177900.00	RESIDENTIAL	3.19E-03	-	-	2.56E-04	-	-	3.19E-03	-	-
97	566100.00	4178000.00	RESIDENTIAL	3.07E-03	-	-	2.45E-04	-	-	3.07E-03	-	-
123	566200.00	4176100.00	ROAD	-	-	5.14E-03	-	-	4.68E-04	-	-	5.14E-03
124	566200.00	4176200.00	WORKER	-	-	5.15E-03	-	-	4.55E-04	-	-	5.15E-03
125	566200.00	4176300.00	WORKER	-	-	5.11E-03	-	-	4.42E-04	-	-	5.11E-03
127	566200.00	4176500.00	RESIDENTIAL	4.81E-03	-	-	4.20E-04	-	-	4.81E-03	-	-
128	566200.00	4176600.00	RESIDENTIAL	4.58E-03	-	-	4.08E-04	-	-	4.58E-03	-	-
129	566200.00	4176700.00	RESIDENTIAL	4.32E-03	-	-	3.98E-04	-	-	4.32E-03	-	-
130	566200.00	4176800.00	RESIDENTIAL	4.09E-03	-	-	3.88E-04	-	-	4.09E-03	-	-
131	566200.00	4176900.00	RESIDENTIAL	3.91E-03	-	-	3.78E-04	-	-	3.91E-03	-	-
132	566200.00	4177000.00	RESIDENTIAL	3.80E-03	-	-	3.67E-04	-	-	3.80E-03	-	-
133	566200.00	4177100.00	RESIDENTIAL	3.68E-03	-	-	3.56E-04	-	-	3.68E-03	-	-
134	566200.00	4177200.00	RESIDENTIAL	3.57E-03	-	-	3.44E-04	-	-	3.57E-03	-	-
135	566200.00	4177300.00	RESIDENTIAL	3.58E-03	-	-	3.29E-04	-	-	3.58E-03	-	-
136	566200.00	4177400.00	RESIDENTIAL	3.60E-03	-	-	3.18E-04	-	-	3.60E-03	-	-
137	566200.00	4177500.00	RESIDENTIAL	3.63E-03	-	-	3.06E-04	-	-	3.63E-03	-	-
138	566200.00	4177600.00	RESIDENTIAL	3.63E-03	-	-	2.94E-04	-	-	3.63E-03	-	-
139	566200.00	4177700.00	RESIDENTIAL	3.48E-03	-	-	2.82E-04	-	-	3.48E-03	-	-
140	566200.00	4177800.00	RESIDENTIAL	3.34E-03	-	-	2.74E-04	-	-	3.34E-03	-	-
141	566200.00	4177900.00	RESIDENTIAL	3.22E-03	-	-	2.61E-04	-	-	3.22E-03	-	-
142	566200.00	4178000.00	RESIDENTIAL	3.09E-03	-	-	2.51E-04	-	-	3.09E-03	-	-
166	566300.00	4176000.00	WORKER	-	-	5.45E-03	-	-	5.06E-04	-	-	5.45E-03
167	566300.00	4176100.00	WORKER	-	-	5.49E-03	-	-	4.94E-04	-	-	5.49E-03
168	566300.00	4176200.00	WORKER	-	-	5.44E-03	-	-	4.78E-04	-	-	5.44E-03
169	566300.00	4176300.00	WORKER	-	-	5.35E-03	-	-	4.66E-04	-	-	5.35E-03
170	566300.00	4176400.00	RESIDENTIAL	5.17E-03	-	-	4.53E-04	-	-	5.17E-03	-	-
171	566300.00	4176500.00	RESIDENTIAL	4.93E-03	-	-	4.42E-04	-	-	4.93E-03	-	-
172	566300.00	4176600.00	RESIDENTIAL	4.67E-03	-	-	4.26E-04	-	-	4.67E-03	-	-
173	566300.00	4176700.00	RESIDENTIAL	4.40E-03	-	-	4.14E-04	-	-	4.40E-03	-	-
174	566300.00	4176800.00	RESIDENTIAL	4.15E-03	-	-	4.01E-04	-	-	4.15E-03	-	-

OAK Terminal Modernization

Table 2-24. Chronic Non-Cancer Hazard Indices

Combined Construction & Operations

	Construction + Operations			Construction Only			Operations Only		
	Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI		
Maximum->	2.27E-02	1.11E-02	8.13E-02	1.83E-03	1.10E-03	2.24E-02	2.27E-02	1.11E-02	5.49E-02
Minimum->	2.39E-04	9.12E-04	6.08E-04	2.60E-05	6.70E-05	6.70E-05	-4.96E-03	9.12E-04	-1.58E-02
Max ReclD->	1923	2104	3296	1953	2006	3296	1923	2104	1365
Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
175	566300.00	4176900.00	RESIDENTIAL	4.03E-03	-	-	3.91E-04	-	-	4.03E-03	-	-
176	566300.00	4177000.00	RESIDENTIAL	3.90E-03	-	-	3.79E-04	-	-	3.90E-03	-	-
177	566300.00	4177100.00	RESIDENTIAL	3.78E-03	-	-	3.66E-04	-	-	3.78E-03	-	-
178	566300.00	4177200.00	RESIDENTIAL	3.76E-03	-	-	3.55E-04	-	-	3.76E-03	-	-
179	566300.00	4177300.00	RESIDENTIAL	3.76E-03	-	-	3.42E-04	-	-	3.76E-03	-	-
180	566300.00	4177400.00	RESIDENTIAL	3.79E-03	-	-	3.28E-04	-	-	3.79E-03	-	-
181	566300.00	4177500.00	RESIDENTIAL	3.82E-03	-	-	3.12E-04	-	-	3.82E-03	-	-
182	566300.00	4177600.00	RESIDENTIAL	3.67E-03	-	-	2.99E-04	-	-	3.67E-03	-	-
183	566300.00	4177700.00	RESIDENTIAL	3.52E-03	-	-	2.87E-04	-	-	3.52E-03	-	-
184	566300.00	4177800.00	RESIDENTIAL	3.37E-03	-	-	2.75E-04	-	-	3.37E-03	-	-
185	566300.00	4177900.00	RESIDENTIAL	3.23E-03	-	-	2.67E-04	-	-	3.23E-03	-	-
186	566300.00	4178000.00	RESIDENTIAL	3.12E-03	-	-	2.55E-04	-	-	3.12E-03	-	-
210	566400.00	4175900.00	WORKER	-	-	5.82E-03	-	-	5.48E-04	-	-	5.82E-03
211	566400.00	4176000.00	WORKER	-	-	5.85E-03	-	-	5.31E-04	-	-	5.85E-03
212	566400.00	4176100.00	WORKER	-	-	5.83E-03	-	-	5.16E-04	-	-	5.83E-03
213	566400.00	4176200.00	WORKER	-	-	5.72E-03	-	-	5.02E-04	-	-	5.72E-03
214	566400.00	4176300.00	RESIDENTIAL	5.56E-03	-	-	4.88E-04	-	-	5.56E-03	-	-
215	566400.00	4176400.00	RESIDENTIAL	5.31E-03	-	-	4.74E-04	-	-	5.31E-03	-	-
216	566400.00	4176500.00	RESIDENTIAL	5.03E-03	-	-	4.59E-04	-	-	5.03E-03	-	-
217	566400.00	4176600.00	RESIDENTIAL	4.74E-03	-	-	4.48E-04	-	-	4.74E-03	-	-
218	566400.00	4176700.00	RESIDENTIAL	4.48E-03	-	-	4.35E-04	-	-	4.48E-03	-	-
219	566400.00	4176800.00	RESIDENTIAL	4.26E-03	-	-	4.22E-04	-	-	4.26E-03	-	-
220	566400.00	4176900.00	RESIDENTIAL	4.13E-03	-	-	4.09E-04	-	-	4.13E-03	-	-
221	566400.00	4177000.00	RESIDENTIAL	4.01E-03	-	-	3.94E-04	-	-	4.01E-03	-	-
222	566400.00	4177100.00	RESIDENTIAL	3.96E-03	-	-	3.76E-04	-	-	3.96E-03	-	-
223	566400.00	4177200.00	RESIDENTIAL	3.95E-03	-	-	3.62E-04	-	-	3.95E-03	-	-
224	566400.00	4177300.00	RESIDENTIAL	3.98E-03	-	-	3.49E-04	-	-	3.98E-03	-	-
225	566400.00	4177400.00	RESIDENTIAL	3.99E-03	-	-	3.35E-04	-	-	3.99E-03	-	-
226	566400.00	4177500.00	RESIDENTIAL	3.87E-03	-	-	3.21E-04	-	-	3.87E-03	-	-
227	566400.00	4177600.00	RESIDENTIAL	3.70E-03	-	-	3.10E-04	-	-	3.70E-03	-	-
228	566400.00	4177700.00	RESIDENTIAL	3.54E-03	-	-	2.92E-04	-	-	3.54E-03	-	-
229	566400.00	4177800.00	RESIDENTIAL	3.39E-03	-	-	2.80E-04	-	-	3.39E-03	-	-
230	566400.00	4177900.00	RESIDENTIAL	3.26E-03	-	-	2.68E-04	-	-	3.26E-03	-	-
231	566400.00	4178000.00	RESIDENTIAL	3.14E-03	-	-	2.56E-04	-	-	3.14E-03	-	-
254	566500.00	4175800.00	WORKER	-	-	6.28E-03	-	-	6.02E-04	-	-	6.28E-03
255	566500.00	4175900.00	WORKER	-	-	6.32E-03	-	-	5.82E-04	-	-	6.32E-03
256	566500.00	4176000.00	WORKER	-	-	6.27E-03	-	-	5.64E-04	-	-	6.27E-03
257	566500.00	4176100.00	WORKER	-	-	6.15E-03	-	-	5.47E-04	-	-	6.15E-03
258	566500.00	4176200.00	WORKER	-	-	5.97E-03	-	-	5.30E-04	-	-	5.97E-03
259	566500.00	4176300.00	WORKER	-	-	5.72E-03	-	-	5.14E-04	-	-	5.72E-03
260	566500.00	4176400.00	RESIDENTIAL	5.42E-03	-	-	4.99E-04	-	-	5.42E-03	-	-
261	566500.00	4176500.00	RESIDENTIAL	5.11E-03	-	-	4.85E-04	-	-	5.11E-03	-	-
262	566500.00	4176600.00	RESIDENTIAL	4.83E-03	-	-	4.66E-04	-	-	4.83E-03	-	-
263	566500.00	4176700.00	RESIDENTIAL	4.58E-03	-	-	4.52E-04	-	-	4.58E-03	-	-
264	566500.00	4176800.00	RESIDENTIAL	4.40E-03	-	-	4.38E-04	-	-	4.40E-03	-	-
265	566500.00	4176900.00	RESIDENTIAL	4.27E-03	-	-	4.23E-04	-	-	4.27E-03	-	-
266	566500.00	4177000.00	RESIDENTIAL	4.21E-03	-	-	4.06E-04	-	-	4.21E-03	-	-
267	566500.00	4177100.00	RESIDENTIAL	4.18E-03	-	-	3.91E-04	-	-	4.18E-03	-	-
268	566500.00	4177200.00	RESIDENTIAL	4.18E-03	-	-	3.76E-04	-	-	4.18E-03	-	-
269	566500.00	4177300.00	RESIDENTIAL	4.19E-03	-	-	3.60E-04	-	-	4.19E-03	-	-
270	566500.00	4177400.00	RESIDENTIAL	4.11E-03	-	-	3.41E-04	-	-	4.11E-03	-	-
271	566500.00	4177500.00	RESIDENTIAL	3.91E-03	-	-	3.28E-04	-	-	3.91E-03	-	-
272	566500.00	4177600.00	RESIDENTIAL	3.73E-03	-	-	3.13E-04	-	-	3.73E-03	-	-
273	566500.00	4177700.00	RESIDENTIAL	3.57E-03	-	-	2.99E-04	-	-	3.57E-03	-	-
274	566500.00	4177800.00	RESIDENTIAL	3.42E-03	-	-	2.86E-04	-	-	3.42E-03	-	-
275	566500.00	4177900.00	RESIDENTIAL	3.29E-03	-	-	2.70E-04	-	-	3.29E-03	-	-
276	566500.00	4178000.00	RESIDENTIAL	3.17E-03	-	-	2.60E-04	-	-	3.17E-03	-	-
297	566600.00	4175700.00	WORKER	-	-	6.81E-03	-	-	6.58E-04	-	-	6.81E-03
298	566600.00	4175800.00	WORKER	-	-	6.83E-03	-	-	6.35E-04	-	-	6.83E-03
299	566600.00	4175900.00	WORKER	-	-	6.77E-03	-	-	6.16E-04	-	-	6.77E-03
300	566600.00	4176000.00	WORKER	-	-	6.64E-03	-	-	5.94E-04	-	-	6.64E-03
301	566600.00	4176100.00	WORKER	-	-	6.44E-03	-	-	5.75E-04	-	-	6.44E-03
302	566600.00	4176200.00	WORKER	-	-	6.18E-03	-	-	5.57E-04	-	-	6.18E-03
303	566600.00	4176300.00	RESIDENTIAL	5.86E-03	-	-	5.40E-04	-	-	5.86E-03	-	-

OAK Terminal Modernization

Table 2-24. Chronic Non-Cancer Hazard Indices

Combined Construction & Operations

	Construction + Operations			Construction Only			Operations Only		
	Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI		
Maximum->	2.27E-02	1.11E-02	8.13E-02	1.83E-03	1.10E-03	2.24E-02	2.27E-02	1.11E-02	5.49E-02
Minimum->	2.39E-04	9.12E-04	6.08E-04	2.60E-05	6.70E-05	6.70E-05	-4.96E-03	9.12E-04	-1.58E-02
Max ReclD->	1923	2104	3296	1953	2006	3296	1923	2104	1365
Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
304	566600.00	4176400.00	RESIDENTIAL	5.52E-03	-	-	5.24E-04	-	-	5.52E-03	-	-
305	566600.00	4176500.00	RESIDENTIAL	5.19E-03	-	-	5.09E-04	-	-	5.19E-03	-	-
306	566600.00	4176600.00	RESIDENTIAL	4.92E-03	-	-	4.91E-04	-	-	4.92E-03	-	-
307	566600.00	4176700.00	RESIDENTIAL	4.72E-03	-	-	4.74E-04	-	-	4.72E-03	-	-
308	566600.00	4176800.00	RESIDENTIAL	4.57E-03	-	-	4.56E-04	-	-	4.57E-03	-	-
309	566600.00	4176900.00	RESIDENTIAL	4.48E-03	-	-	4.41E-04	-	-	4.48E-03	-	-
310	566600.00	4177000.00	RESIDENTIAL	4.43E-03	-	-	4.22E-04	-	-	4.43E-03	-	-
311	566600.00	4177100.00	RESIDENTIAL	4.41E-03	-	-	4.02E-04	-	-	4.41E-03	-	-
312	566600.00	4177200.00	RESIDENTIAL	4.41E-03	-	-	3.84E-04	-	-	4.41E-03	-	-
313	566600.00	4177300.00	RESIDENTIAL	4.35E-03	-	-	3.67E-04	-	-	4.35E-03	-	-
314	566600.00	4177400.00	RESIDENTIAL	4.15E-03	-	-	3.52E-04	-	-	4.15E-03	-	-
315	566600.00	4177500.00	RESIDENTIAL	3.95E-03	-	-	3.37E-04	-	-	3.95E-03	-	-
316	566600.00	4177600.00	RESIDENTIAL	3.77E-03	-	-	3.17E-04	-	-	3.77E-03	-	-
317	566600.00	4177700.00	RESIDENTIAL	3.60E-03	-	-	3.03E-04	-	-	3.60E-03	-	-
318	566600.00	4177800.00	RESIDENTIAL	3.46E-03	-	-	2.91E-04	-	-	3.46E-03	-	-
319	566600.00	4177900.00	RESIDENTIAL	3.32E-03	-	-	2.78E-04	-	-	3.32E-03	-	-
320	566600.00	4178000.00	RESIDENTIAL	3.21E-03	-	-	2.68E-04	-	-	3.21E-03	-	-
340	566700.00	4175600.00	ROAD	-	-	7.40E-03	-	-	7.30E-04	-	-	7.40E-03
341	566700.00	4175700.00	WORKER	-	-	7.40E-03	-	-	7.03E-04	-	-	7.40E-03
342	566700.00	4175800.00	WORKER	-	-	7.36E-03	-	-	6.78E-04	-	-	7.36E-03
343	566700.00	4175900.00	WORKER	-	-	7.21E-03	-	-	6.53E-04	-	-	7.21E-03
344	566700.00	4176000.00	WORKER	-	-	7.00E-03	-	-	6.32E-04	-	-	7.00E-03
345	566700.00	4176100.00	WORKER	-	-	6.70E-03	-	-	6.12E-04	-	-	6.70E-03
346	566700.00	4176200.00	WORKER	-	-	6.35E-03	-	-	5.90E-04	-	-	6.35E-03
347	566700.00	4176300.00	RESIDENTIAL	5.97E-03	-	-	5.72E-04	-	-	5.97E-03	-	-
348	566700.00	4176400.00	RESIDENTIAL	5.61E-03	-	-	5.54E-04	-	-	5.61E-03	-	-
349	566700.00	4176500.00	RESIDENTIAL	5.30E-03	-	-	5.35E-04	-	-	5.30E-03	-	-
350	566700.00	4176600.00	RESIDENTIAL	5.05E-03	-	-	5.15E-04	-	-	5.05E-03	-	-
351	566700.00	4176700.00	RESIDENTIAL	4.89E-03	-	-	4.98E-04	-	-	4.89E-03	-	-
352	566700.00	4176800.00	RESIDENTIAL	4.79E-03	-	-	4.74E-04	-	-	4.79E-03	-	-
353	566700.00	4176900.00	RESIDENTIAL	4.72E-03	-	-	4.54E-04	-	-	4.72E-03	-	-
354	566700.00	4177000.00	RESIDENTIAL	4.69E-03	-	-	4.34E-04	-	-	4.69E-03	-	-
355	566700.00	4177100.00	RESIDENTIAL	4.65E-03	-	-	4.15E-04	-	-	4.65E-03	-	-
356	566700.00	4177200.00	RESIDENTIAL	4.63E-03	-	-	3.96E-04	-	-	4.63E-03	-	-
357	566700.00	4177300.00	RESIDENTIAL	4.41E-03	-	-	3.76E-04	-	-	4.41E-03	-	-
358	566700.00	4177400.00	RESIDENTIAL	4.19E-03	-	-	3.58E-04	-	-	4.19E-03	-	-
359	566700.00	4177500.00	RESIDENTIAL	3.98E-03	-	-	3.41E-04	-	-	3.98E-03	-	-
360	566700.00	4177600.00	RESIDENTIAL	3.80E-03	-	-	3.27E-04	-	-	3.80E-03	-	-
361	566700.00	4177700.00	RESIDENTIAL	3.64E-03	-	-	3.13E-04	-	-	3.64E-03	-	-
362	566700.00	4177800.00	RESIDENTIAL	3.49E-03	-	-	2.95E-04	-	-	3.49E-03	-	-
363	566700.00	4177900.00	RESIDENTIAL	3.37E-03	-	-	2.82E-04	-	-	3.37E-03	-	-
364	566700.00	4178000.00	RESIDENTIAL	3.25E-03	-	-	2.70E-04	-	-	3.25E-03	-	-
383	566800.00	4175500.00	WORKER	-	-	8.05E-03	-	-	8.11E-04	-	-	8.05E-03
384	566800.00	4175600.00	ROAD	-	-	8.07E-03	-	-	7.82E-04	-	-	8.07E-03
385	566800.00	4175700.00	WORKER	-	-	8.01E-03	-	-	7.51E-04	-	-	8.01E-03
386	566800.00	4175800.00	WORKER	-	-	7.87E-03	-	-	7.22E-04	-	-	7.87E-03
387	566800.00	4175900.00	WORKER	-	-	7.64E-03	-	-	7.00E-04	-	-	7.64E-03
388	566800.00	4176000.00	WORKER	-	-	7.30E-03	-	-	6.73E-04	-	-	7.30E-03
389	566800.00	4176100.00	WORKER	-	-	6.91E-03	-	-	6.51E-04	-	-	6.91E-03
390	566800.00	4176200.00	RESIDENTIAL	6.48E-03	-	-	6.29E-04	-	-	6.48E-03	-	-
391	566800.00	4176300.00	RESIDENTIAL	6.08E-03	-	-	6.06E-04	-	-	6.08E-03	-	-
392	566800.00	4176400.00	RESIDENTIAL	5.72E-03	-	-	5.81E-04	-	-	5.72E-03	-	-
393	566800.00	4176500.00	RESIDENTIAL	5.44E-03	-	-	5.61E-04	-	-	5.44E-03	-	-
394	566800.00	4176600.00	RESIDENTIAL	5.24E-03	-	-	5.36E-04	-	-	5.24E-03	-	-
395	566800.00	4176700.00	RESIDENTIAL	5.12E-03	-	-	5.15E-04	-	-	5.12E-03	-	-
396	566800.00	4176800.00	RESIDENTIAL	5.05E-03	-	-	4.93E-04	-	-	5.05E-03	-	-
397	566800.00	4176900.00	RESIDENTIAL	4.99E-03	-	-	4.71E-04	-	-	4.99E-03	-	-
398	566800.00	4177000.00	RESIDENTIAL	4.94E-03	-	-	4.50E-04	-	-	4.94E-03	-	-
399	566800.00	4177100.00	RESIDENTIAL	4.90E-03	-	-	4.25E-04	-	-	4.90E-03	-	-
400	566800.00	4177200.00	RESIDENTIAL	4.68E-03	-	-	4.06E-04	-	-	4.68E-03	-	-
401	566800.00	4177300.00	RESIDENTIAL	4.45E-03	-	-	3.87E-04	-	-	4.45E-03	-	-
402	566800.00	4177400.00	RESIDENTIAL	4.23E-03	-	-	3.69E-04	-	-	4.23E-03	-	-
403	566800.00	4177500.00	RESIDENTIAL	4.03E-03	-	-	3.47E-04	-	-	4.03E-03	-	-
404	566800.00	4177600.00	RESIDENTIAL	3.84E-03	-	-	3.31E-04	-	-	3.84E-03	-	-

OAK Terminal Modernization

Table 2-24. Chronic Non-Cancer Hazard Indices

Combined Construction & Operations

	Construction + Operations			Construction Only			Operations Only		
	Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI		
Maximum->	2.27E-02	1.11E-02	8.13E-02	1.83E-03	1.10E-03	2.24E-02	2.27E-02	1.11E-02	5.49E-02
Minimum->	2.39E-04	9.12E-04	6.08E-04	2.60E-05	6.70E-05	6.70E-05	-4.96E-03	9.12E-04	-1.58E-02
Max ReclD->	1923	2104	3296	1953	2006	3296	1923	2104	1365
Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child	School Child	Adult Worker	Adult Resident & Child	School Child	Adult Worker	Adult Resident & Child	School Child	Adult Worker
405	566800.00	4177700.00	RESIDENTIAL	3.67E-03	-	-	3.17E-04	-	-	3.67E-03	-	-
406	566800.00	4177800.00	RESIDENTIAL	3.54E-03	-	-	3.03E-04	-	-	3.54E-03	-	-
407	566800.00	4177900.00	RESIDENTIAL	3.42E-03	-	-	2.90E-04	-	-	3.42E-03	-	-
408	566800.00	4178000.00	RESIDENTIAL	3.30E-03	-	-	2.73E-04	-	-	3.30E-03	-	-
426	566900.00	4175400.00	WORKER	-	-	8.67E-03	-	-	9.16E-04	-	-	8.67E-03
427	566900.00	4175500.00	WORKER	-	-	8.72E-03	-	-	8.81E-04	-	-	8.72E-03
428	566900.00	4175600.00	ROAD	-	-	8.71E-03	-	-	8.46E-04	-	-	8.71E-03
429	566900.00	4175700.00	WORKER	-	-	8.59E-03	-	-	8.10E-04	-	-	8.59E-03
430	566900.00	4175800.00	WORKER	-	-	8.35E-03	-	-	7.75E-04	-	-	8.35E-03
431	566900.00	4175900.00	WORKER	-	-	8.00E-03	-	-	7.45E-04	-	-	8.00E-03
432	566900.00	4176000.00	WORKER	-	-	7.56E-03	-	-	7.16E-04	-	-	7.56E-03
433	566900.00	4176100.00	WORKER	-	-	7.08E-03	-	-	6.90E-04	-	-	7.08E-03
434	566900.00	4176200.00	RESIDENTIAL	6.61E-03	-	-	6.64E-04	-	-	6.61E-03	-	-
435	566900.00	4176300.00	RESIDENTIAL	6.20E-03	-	-	6.41E-04	-	-	6.20E-03	-	-
436	566900.00	4176400.00	RESIDENTIAL	5.87E-03	-	-	6.15E-04	-	-	5.87E-03	-	-
437	566900.00	4176500.00	RESIDENTIAL	5.64E-03	-	-	5.89E-04	-	-	5.64E-03	-	-
438	566900.00	4176600.00	RESIDENTIAL	5.48E-03	-	-	5.64E-04	-	-	5.48E-03	-	-
439	566900.00	4176700.00	RESIDENTIAL	5.39E-03	-	-	5.38E-04	-	-	5.39E-03	-	-
440	566900.00	4176800.00	RESIDENTIAL	5.34E-03	-	-	5.13E-04	-	-	5.34E-03	-	-
441	566900.00	4176900.00	RESIDENTIAL	5.27E-03	-	-	4.88E-04	-	-	5.27E-03	-	-
442	566900.00	4177000.00	RESIDENTIAL	5.22E-03	-	-	4.63E-04	-	-	5.22E-03	-	-
443	566900.00	4177100.00	RESIDENTIAL	5.00E-03	-	-	4.41E-04	-	-	5.00E-03	-	-
444	566900.00	4177200.00	RESIDENTIAL	4.74E-03	-	-	4.18E-04	-	-	4.74E-03	-	-
445	566900.00	4177300.00	RESIDENTIAL	4.51E-03	-	-	3.98E-04	-	-	4.51E-03	-	-
446	566900.00	4177400.00	RESIDENTIAL	4.29E-03	-	-	3.75E-04	-	-	4.29E-03	-	-
447	566900.00	4177500.00	RESIDENTIAL	4.06E-03	-	-	3.56E-04	-	-	4.06E-03	-	-
448	566900.00	4177600.00	RESIDENTIAL	3.88E-03	-	-	3.40E-04	-	-	3.88E-03	-	-
449	566900.00	4177700.00	RESIDENTIAL	3.72E-03	-	-	3.22E-04	-	-	3.72E-03	-	-
450	566900.00	4177800.00	RESIDENTIAL	3.59E-03	-	-	3.07E-04	-	-	3.59E-03	-	-
451	566900.00	4177900.00	RESIDENTIAL	3.44E-03	-	-	2.94E-04	-	-	3.44E-03	-	-
452	566900.00	4178000.00	RESIDENTIAL	3.31E-03	-	-	2.80E-04	-	-	3.31E-03	-	-
469	567000.00	4175300.00	WORKER	-	-	9.36E-03	-	-	1.04E-03	-	-	9.36E-03
470	567000.00	4175400.00	WORKER	-	-	9.34E-03	-	-	1.01E-03	-	-	9.34E-03
471	567000.00	4175500.00	ROAD	-	-	9.36E-03	-	-	9.63E-04	-	-	9.36E-03
472	567000.00	4175600.00	ROAD	-	-	9.31E-03	-	-	9.20E-04	-	-	9.31E-03
473	567000.00	4175700.00	WORKER	-	-	9.12E-03	-	-	8.79E-04	-	-	9.12E-03
474	567000.00	4175800.00	WORKER	-	-	8.77E-03	-	-	8.39E-04	-	-	8.77E-03
475	567000.00	4175900.00	RECREATIONAL	-	-	8.30E-03	-	-	8.03E-04	-	-	-
476	567000.00	4176000.00	WORKER	-	-	7.75E-03	-	-	7.70E-04	-	-	7.75E-03
477	567000.00	4176100.00	RESIDENTIAL	7.22E-03	-	-	7.38E-04	-	-	7.22E-03	-	-
478	567000.00	4176200.00	RESIDENTIAL	6.75E-03	-	-	7.09E-04	-	-	6.75E-03	-	-
479	567000.00	4176300.00	RESIDENTIAL	6.37E-03	-	-	6.79E-04	-	-	6.37E-03	-	-
480	567000.00	4176400.00	RESIDENTIAL	6.09E-03	-	-	6.49E-04	-	-	6.09E-03	-	-
481	567000.00	4176500.00	RESIDENTIAL	5.90E-03	-	-	6.19E-04	-	-	5.90E-03	-	-
482	567000.00	4176600.00	RESIDENTIAL	5.77E-03	-	-	5.89E-04	-	-	5.77E-03	-	-
483	567000.00	4176700.00	RESIDENTIAL	5.70E-03	-	-	5.61E-04	-	-	5.70E-03	-	-
484	567000.00	4176800.00	RESIDENTIAL	5.63E-03	-	-	5.33E-04	-	-	5.63E-03	-	-
485	567000.00	4176900.00	RESIDENTIAL	5.56E-03	-	-	5.03E-04	-	-	5.56E-03	-	-
486	567000.00	4177000.00	RESIDENTIAL	5.35E-03	-	-	4.79E-04	-	-	5.35E-03	-	-
487	567000.00	4177100.00	RESIDENTIAL	5.08E-03	-	-	4.53E-04	-	-	5.08E-03	-	-
488	567000.00	4177200.00	RESIDENTIAL	4.81E-03	-	-	4.33E-04	-	-	4.81E-03	-	-
489	567000.00	4177300.00	RESIDENTIAL	4.57E-03	-	-	4.08E-04	-	-	4.57E-03	-	-
490	567000.00	4177400.00	RESIDENTIAL	4.32E-03	-	-	3.87E-04	-	-	4.32E-03	-	-
491	567000.00	4177500.00	RESIDENTIAL	4.11E-03	-	-	3.68E-04	-	-	4.11E-03	-	-
492	567000.00	4177600.00	RESIDENTIAL	3.91E-03	-	-	3.46E-04	-	-	3.91E-03	-	-
493	567000.00	4177700.00	RESIDENTIAL	3.75E-03	-	-	3.30E-04	-	-	3.75E-03	-	-
494	567000.00	4177800.00	RESIDENTIAL	3.61E-03	-	-	3.15E-04	-	-	3.61E-03	-	-
495	567000.00	4177900.00	RESIDENTIAL	3.46E-03	-	-	2.98E-04	-	-	3.46E-03	-	-
496	567000.00	4178000.00	RESIDENTIAL	3.32E-03	-	-	2.84E-04	-	-	3.32E-03	-	-
512	567100.00	4175200.00	WORKER	-	-	9.82E-03	-	-	1.19E-03	-	-	9.82E-03
513	567100.00	4175300.00	WORKER	-	-	1.02E-02	-	-	1.15E-03	-	-	1.02E-02
514	567100.00	4175400.00	WORKER	-	-	1.02E-02	-	-	1.11E-03	-	-	1.02E-02
515	567100.00	4175500.00	WORKER	-	-	1.01E-02	-	-	1.06E-03	-	-	1.01E-02
516	567100.00	4175600.00	WORKER	-	-	9.88E-03	-	-	1.01E-03	-	-	9.88E-03

OAK Terminal Modernization

Table 2-24. Chronic Non-Cancer Hazard Indices

Combined Construction & Operations

	Construction + Operations			Construction Only			Operations Only		
	Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI		
Maximum->	2.27E-02	1.11E-02	8.13E-02	1.83E-03	1.10E-03	2.24E-02	2.27E-02	1.11E-02	5.49E-02
Minimum->	2.39E-04	9.12E-04	6.08E-04	2.60E-05	6.70E-05	6.70E-05	-4.96E-03	9.12E-04	-1.58E-02
Max ReclD->	1923	2104	3296	1953	2006	3296	1923	2104	1365
Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
517	567100.00	4175700.00	WORKER	-	-	9.56E-03	-	-	9.60E-04	-	-	9.56E-03
518	567100.00	4175800.00	WORKER	-	-	9.09E-03	-	-	9.12E-04	-	-	9.09E-03
519	567100.00	4175900.00	WORKER	-	-	8.52E-03	-	-	8.68E-04	-	-	8.52E-03
520	567100.00	4176000.00	RESIDENTIAL	7.91E-03	-	-	8.29E-04	-	-	7.91E-03	-	-
521	567100.00	4176100.00	RESIDENTIAL	7.38E-03	-	-	7.92E-04	-	-	7.38E-03	-	-
522	567100.00	4176200.00	RESIDENTIAL	6.94E-03	-	-	7.55E-04	-	-	6.94E-03	-	-
523	567100.00	4176300.00	RESIDENTIAL	6.62E-03	-	-	7.20E-04	-	-	6.62E-03	-	-
524	567100.00	4176400.00	RESIDENTIAL	6.38E-03	-	-	6.83E-04	-	-	6.38E-03	-	-
525	567100.00	4176500.00	RESIDENTIAL	6.22E-03	-	-	6.50E-04	-	-	6.22E-03	-	-
526	567100.00	4176600.00	RESIDENTIAL	6.10E-03	-	-	6.14E-04	-	-	6.10E-03	-	-
527	567100.00	4176700.00	RESIDENTIAL	6.01E-03	-	-	5.84E-04	-	-	6.01E-03	-	-
528	567100.00	4176800.00	RESIDENTIAL	5.93E-03	-	-	5.53E-04	-	-	5.93E-03	-	-
529	567100.00	4176900.00	RESIDENTIAL	5.74E-03	-	-	5.21E-04	-	-	5.74E-03	-	-
530	567100.00	4177000.00	RESIDENTIAL	5.45E-03	-	-	4.94E-04	-	-	5.45E-03	-	-
531	567100.00	4177100.00	RESIDENTIAL	5.17E-03	-	-	4.69E-04	-	-	5.17E-03	-	-
532	567100.00	4177200.00	RESIDENTIAL	4.89E-03	-	-	4.42E-04	-	-	4.89E-03	-	-
533	567100.00	4177300.00	RESIDENTIAL	4.62E-03	-	-	4.19E-04	-	-	4.62E-03	-	-
534	567100.00	4177400.00	RESIDENTIAL	4.37E-03	-	-	3.97E-04	-	-	4.37E-03	-	-
535	567100.00	4177500.00	RESIDENTIAL	4.15E-03	-	-	3.74E-04	-	-	4.15E-03	-	-
536	567100.00	4177600.00	RESIDENTIAL	3.95E-03	-	-	3.57E-04	-	-	3.95E-03	-	-
537	567100.00	4177700.00	RESIDENTIAL	3.78E-03	-	-	3.38E-04	-	-	3.78E-03	-	-
538	567100.00	4177800.00	RESIDENTIAL	3.62E-03	-	-	3.20E-04	-	-	3.62E-03	-	-
539	567100.00	4177900.00	RESIDENTIAL	3.46E-03	-	-	3.06E-04	-	-	3.46E-03	-	-
540	567100.00	4178000.00	RESIDENTIAL	3.17E-03	-	-	2.92E-04	-	-	3.17E-03	-	-
556	567200.00	4175200.00	WORKER	-	-	1.10E-02	-	-	1.33E-03	-	-	1.10E-02
557	567200.00	4175300.00	WORKER	-	-	1.11E-02	-	-	1.30E-03	-	-	1.11E-02
558	567200.00	4175400.00	WORKER	-	-	1.11E-02	-	-	1.24E-03	-	-	1.11E-02
559	567200.00	4175500.00	WORKER	-	-	1.08E-02	-	-	1.19E-03	-	-	1.08E-02
560	567200.00	4175600.00	WORKER	-	-	1.05E-02	-	-	1.12E-03	-	-	1.05E-02
561	567200.00	4175700.00	WORKER	-	-	9.97E-03	-	-	1.06E-03	-	-	9.97E-03
562	567200.00	4175800.00	WORKER	-	-	9.36E-03	-	-	1.00E-03	-	-	9.36E-03
563	567200.00	4175900.00	WORKER	-	-	8.70E-03	-	-	9.51E-04	-	-	8.70E-03
564	567200.00	4176000.00	RESIDENTIAL	8.08E-03	-	-	9.02E-04	-	-	8.08E-03	-	-
565	567200.00	4176100.00	RESIDENTIAL	7.57E-03	-	-	8.56E-04	-	-	7.57E-03	-	-
566	567200.00	4176200.00	RESIDENTIAL	7.21E-03	-	-	8.12E-04	-	-	7.21E-03	-	-
567	567200.00	4176300.00	RESIDENTIAL	6.95E-03	-	-	7.66E-04	-	-	6.95E-03	-	-
568	567200.00	4176400.00	RESIDENTIAL	6.75E-03	-	-	7.24E-04	-	-	6.75E-03	-	-
569	567200.00	4176500.00	RESIDENTIAL	6.57E-03	-	-	6.80E-04	-	-	6.57E-03	-	-
570	567200.00	4176600.00	RESIDENTIAL	6.43E-03	-	-	6.41E-04	-	-	6.43E-03	-	-
571	567200.00	4176700.00	RESIDENTIAL	6.30E-03	-	-	6.06E-04	-	-	6.30E-03	-	-
572	567200.00	4176800.00	RESIDENTIAL	6.15E-03	-	-	5.75E-04	-	-	6.15E-03	-	-
573	567200.00	4176900.00	RESIDENTIAL	5.86E-03	-	-	5.39E-04	-	-	5.86E-03	-	-
574	567200.00	4177000.00	RESIDENTIAL	5.57E-03	-	-	5.10E-04	-	-	5.57E-03	-	-
575	567200.00	4177100.00	RECREATIONAL	-	-	5.29E-03	-	-	4.84E-04	-	-	-
576	567200.00	4177200.00	RECREATIONAL	-	-	4.98E-03	-	-	4.54E-04	-	-	-
577	567200.00	4177300.00	RECREATIONAL	-	-	4.70E-03	-	-	4.32E-04	-	-	-
578	567200.00	4177400.00	RECREATIONAL	-	-	4.42E-03	-	-	4.09E-04	-	-	-
579	567200.00	4177500.00	RECREATIONAL	-	-	4.19E-03	-	-	3.86E-04	-	-	-
580	567200.00	4177600.00	RECREATIONAL	-	-	3.98E-03	-	-	3.66E-04	-	-	-
581	567200.00	4177700.00	ROAD	-	-	3.79E-03	-	-	3.45E-04	-	-	3.79E-03
582	567200.00	4177800.00	SCHOOL	3.60E-03	3.60E-03	3.60E-03	3.30E-04	3.30E-04	3.30E-04	3.60E-03	3.60E-03	3.60E-03
583	567200.00	4177900.00	RESIDENTIAL	3.29E-03	-	-	3.13E-04	-	-	3.29E-03	-	-
584	567200.00	4178000.00	RESIDENTIAL	3.06E-03	-	-	2.96E-04	-	-	3.06E-03	-	-
599	567300.00	4175100.00	WORKER	-	-	1.22E-02	-	-	1.50E-03	-	-	1.22E-02
600	567300.00	4175200.00	WORKER	-	-	1.21E-02	-	-	1.50E-03	-	-	1.21E-02
601	567300.00	4175300.00	WORKER	-	-	1.20E-02	-	-	1.47E-03	-	-	1.20E-02
602	567300.00	4175400.00	WORKER	-	-	1.18E-02	-	-	1.42E-03	-	-	1.18E-02
603	567300.00	4175500.00	WORKER	-	-	1.15E-02	-	-	1.35E-03	-	-	1.15E-02
604	567300.00	4175600.00	WORKER	-	-	1.10E-02	-	-	1.26E-03	-	-	1.10E-02
605	567300.00	4175700.00	WORKER	-	-	1.03E-02	-	-	1.19E-03	-	-	1.03E-02
606	567300.00	4175800.00	WORKER	-	-	9.64E-03	-	-	1.11E-03	-	-	9.64E-03
607	567300.00	4175900.00	WORKER	-	-	8.94E-03	-	-	1.04E-03	-	-	8.94E-03
608	567300.00	4176000.00	RESIDENTIAL	8.33E-03	-	-	9.83E-04	-	-	8.33E-03	-	-
609	567300.00	4176100.00	RECREATIONAL	-	-	7.88E-03	-	-	9.22E-04	-	-	-

OAK Terminal Modernization

Table 2-24. Chronic Non-Cancer Hazard Indices

Combined Construction & Operations

	Construction + Operations			Construction Only			Operations Only		
	Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI		
Maximum->	2.27E-02	1.11E-02	8.13E-02	1.83E-03	1.10E-03	2.24E-02	2.27E-02	1.11E-02	5.49E-02
Minimum->	2.39E-04	9.12E-04	6.08E-04	2.60E-05	6.70E-05	6.70E-05	-4.96E-03	9.12E-04	-1.58E-02
Max ReclD->	1923	2104	3296	1953	2006	3296	1923	2104	1365
Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
610	567300.00	4176200.00	RESIDENTIAL	7.59E-03	-	-	8.64E-04	-	-	7.59E-03	-	-
611	567300.00	4176300.00	RESIDENTIAL	7.36E-03	-	-	8.10E-04	-	-	7.36E-03	-	-
612	567300.00	4176400.00	RESIDENTIAL	7.15E-03	-	-	7.58E-04	-	-	7.15E-03	-	-
613	567300.00	4176500.00	RESIDENTIAL	6.94E-03	-	-	7.13E-04	-	-	6.94E-03	-	-
614	567300.00	4176600.00	RESIDENTIAL	6.75E-03	-	-	6.68E-04	-	-	6.75E-03	-	-
615	567300.00	4176700.00	RESIDENTIAL	6.56E-03	-	-	6.30E-04	-	-	6.56E-03	-	-
616	567300.00	4176800.00	RESIDENTIAL	6.27E-03	-	-	5.95E-04	-	-	6.27E-03	-	-
617	567300.00	4176900.00	RESIDENTIAL	5.99E-03	-	-	5.63E-04	-	-	5.99E-03	-	-
618	567300.00	4177000.00	RECREATIONAL	-	-	5.69E-03	-	-	5.29E-04	-	-	-
619	567300.00	4177100.00	RECREATIONAL	-	-	5.38E-03	-	-	4.99E-04	-	-	-
620	567300.00	4177200.00	RECREATIONAL	-	-	5.06E-03	-	-	4.73E-04	-	-	-
621	567300.00	4177300.00	RECREATIONAL	-	-	4.75E-03	-	-	4.45E-04	-	-	-
622	567300.00	4177400.00	RECREATIONAL	-	-	4.44E-03	-	-	4.22E-04	-	-	-
623	567300.00	4177500.00	RECREATIONAL	-	-	4.19E-03	-	-	3.97E-04	-	-	-
624	567300.00	4177600.00	RECREATIONAL	-	-	3.97E-03	-	-	3.78E-04	-	-	-
625	567300.00	4177700.00	RECREATIONAL	-	-	3.73E-03	-	-	3.57E-04	-	-	-
626	567300.00	4177800.00	RECREATIONAL	-	-	3.47E-03	-	-	3.38E-04	-	-	-
627	567300.00	4177900.00	WORKER	-	-	3.23E-03	-	-	3.20E-04	-	-	3.23E-03
628	567300.00	4178000.00	RECREATIONAL	-	-	2.99E-03	-	-	3.05E-04	-	-	-
642	567400.00	4175200.00	WORKER	-	-	1.31E-02	-	-	1.72E-03	-	-	1.31E-02
643	567400.00	4175300.00	WORKER	-	-	1.28E-02	-	-	1.71E-03	-	-	1.28E-02
644	567400.00	4175400.00	WORKER	-	-	1.25E-02	-	-	1.65E-03	-	-	1.25E-02
645	567400.00	4175500.00	WORKER	-	-	1.21E-02	-	-	1.56E-03	-	-	1.21E-02
646	567400.00	4175600.00	WORKER	-	-	1.15E-02	-	-	1.46E-03	-	-	1.15E-02
647	567400.00	4175700.00	WORKER	-	-	1.07E-02	-	-	1.35E-03	-	-	1.07E-02
648	567400.00	4175800.00	WORKER	-	-	9.97E-03	-	-	1.25E-03	-	-	9.97E-03
649	567400.00	4175900.00	WORKER	-	-	9.30E-03	-	-	1.16E-03	-	-	9.30E-03
650	567400.00	4176000.00	RECREATIONAL	-	-	8.75E-03	-	-	1.08E-03	-	-	-
651	567400.00	4176100.00	RECREATIONAL	-	-	8.36E-03	-	-	9.98E-04	-	-	-
652	567400.00	4176200.00	RECREATIONAL	-	-	8.06E-03	-	-	9.22E-04	-	-	-
653	567400.00	4176300.00	RECREATIONAL	-	-	7.82E-03	-	-	8.57E-04	-	-	-
654	567400.00	4176400.00	RECREATIONAL	-	-	7.56E-03	-	-	7.97E-04	-	-	-
655	567400.00	4176500.00	RECREATIONAL	-	-	7.28E-03	-	-	7.42E-04	-	-	-
656	567400.00	4176600.00	RECREATIONAL	-	-	7.00E-03	-	-	6.98E-04	-	-	-
657	567400.00	4176700.00	RECREATIONAL	-	-	6.74E-03	-	-	6.57E-04	-	-	-
658	567400.00	4176800.00	RECREATIONAL	-	-	6.41E-03	-	-	6.17E-04	-	-	-
659	567400.00	4176900.00	RECREATIONAL	-	-	6.12E-03	-	-	5.82E-04	-	-	-
660	567400.00	4177000.00	RECREATIONAL	-	-	5.81E-03	-	-	5.50E-04	-	-	-
661	567400.00	4177100.00	RECREATIONAL	-	-	5.48E-03	-	-	5.17E-04	-	-	-
662	567400.00	4177200.00	RECREATIONAL	-	-	5.11E-03	-	-	4.89E-04	-	-	-
663	567400.00	4177300.00	RECREATIONAL	-	-	4.76E-03	-	-	4.62E-04	-	-	-
664	567400.00	4177400.00	RECREATIONAL	-	-	4.44E-03	-	-	4.36E-04	-	-	-
665	567400.00	4177500.00	RECREATIONAL	-	-	4.19E-03	-	-	4.14E-04	-	-	-
666	567400.00	4177600.00	RECREATIONAL	-	-	3.95E-03	-	-	3.89E-04	-	-	-
667	567400.00	4177700.00	RECREATIONAL	-	-	3.63E-03	-	-	3.66E-04	-	-	-
668	567400.00	4177800.00	RECREATIONAL	-	-	3.31E-03	-	-	3.50E-04	-	-	-
669	567400.00	4177900.00	RECREATIONAL	-	-	3.05E-03	-	-	3.30E-04	-	-	-
670	567400.00	4178000.00	ROAD	-	-	2.83E-03	-	-	3.15E-04	-	-	2.83E-03
683	567500.00	4175300.00	WORKER	-	-	1.37E-02	-	-	2.02E-03	-	-	1.37E-02
684	567500.00	4175400.00	WORKER	-	-	1.32E-02	-	-	1.97E-03	-	-	1.32E-02
685	567500.00	4175500.00	WORKER	-	-	1.26E-02	-	-	1.87E-03	-	-	1.26E-02
686	567500.00	4175600.00	WORKER	-	-	1.19E-02	-	-	1.72E-03	-	-	1.19E-02
687	567500.00	4175700.00	WORKER	-	-	1.11E-02	-	-	1.57E-03	-	-	1.11E-02
688	567500.00	4175800.00	WORKER	-	-	1.04E-02	-	-	1.43E-03	-	-	1.04E-02
689	567500.00	4175900.00	WORKER	-	-	9.85E-03	-	-	1.30E-03	-	-	9.85E-03
690	567500.00	4176000.00	RECREATIONAL	-	-	9.36E-03	-	-	1.19E-03	-	-	-
691	567500.00	4176100.00	RECREATIONAL	-	-	8.98E-03	-	-	1.08E-03	-	-	-
692	567500.00	4176200.00	RECREATIONAL	-	-	8.64E-03	-	-	9.86E-04	-	-	-
693	567500.00	4176300.00	RECREATIONAL	-	-	8.30E-03	-	-	9.01E-04	-	-	-
694	567500.00	4176400.00	RECREATIONAL	-	-	7.93E-03	-	-	8.36E-04	-	-	-
695	567500.00	4176500.00	RECREATIONAL	-	-	7.55E-03	-	-	7.76E-04	-	-	-
696	567500.00	4176600.00	RECREATIONAL	-	-	7.18E-03	-	-	7.29E-04	-	-	-
697	567500.00	4176700.00	RECREATIONAL	-	-	6.82E-03	-	-	6.81E-04	-	-	-
698	567500.00	4176800.00	RECREATIONAL	-	-	6.48E-03	-	-	6.42E-04	-	-	-

OAK Terminal Modernization

Table 2-24. Chronic Non-Cancer Hazard Indices

Combined Construction & Operations

	Construction + Operations			Construction Only			Operations Only		
	Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI		
Maximum->	2.27E-02	1.11E-02	8.13E-02	1.83E-03	1.10E-03	2.24E-02	2.27E-02	1.11E-02	5.49E-02
Minimum->	2.39E-04	9.12E-04	6.08E-04	2.60E-05	6.70E-05	6.70E-05	-4.96E-03	9.12E-04	-1.58E-02
Max ReclD->	1923	2104	3296	1953	2006	3296	1923	2104	1365
Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
699	567500.00	4176900.00	RECREATIONAL	-	-	6.19E-03	-	-	6.05E-04	-	-	-
700	567500.00	4177000.00	RECREATIONAL	-	-	5.87E-03	-	-	5.68E-04	-	-	-
701	567500.00	4177100.00	RECREATIONAL	-	-	5.46E-03	-	-	5.36E-04	-	-	-
702	567500.00	4177200.00	RECREATIONAL	-	-	5.03E-03	-	-	5.09E-04	-	-	-
703	567500.00	4177300.00	RECREATIONAL	-	-	4.63E-03	-	-	4.79E-04	-	-	-
704	567500.00	4177400.00	RECREATIONAL	-	-	4.44E-03	-	-	4.55E-04	-	-	-
705	567500.00	4177500.00	RECREATIONAL	-	-	4.13E-03	-	-	4.29E-04	-	-	-
706	567500.00	4177600.00	RECREATIONAL	-	-	3.75E-03	-	-	4.09E-04	-	-	-
707	567500.00	4177700.00	RECREATIONAL	-	-	3.42E-03	-	-	3.85E-04	-	-	-
708	567500.00	4177800.00	RECREATIONAL	-	-	3.11E-03	-	-	3.62E-04	-	-	-
709	567500.00	4177900.00	RECREATIONAL	-	-	2.86E-03	-	-	3.41E-04	-	-	-
710	567500.00	4178000.00	WORKER	-	-	2.66E-03	-	-	3.20E-04	-	-	2.66E-03
722	567600.00	4175400.00	WORKER	-	-	1.39E-02	-	-	2.45E-03	-	-	1.39E-02
723	567600.00	4175500.00	WORKER	-	-	1.31E-02	-	-	2.34E-03	-	-	1.31E-02
724	567600.00	4175600.00	WORKER	-	-	1.23E-02	-	-	2.13E-03	-	-	1.23E-02
725	567600.00	4175700.00	WORKER	-	-	1.16E-02	-	-	1.89E-03	-	-	1.16E-02
726	567600.00	4175800.00	WORKER	-	-	1.11E-02	-	-	1.68E-03	-	-	1.11E-02
727	567600.00	4175900.00	WORKER	-	-	1.06E-02	-	-	1.49E-03	-	-	1.06E-02
728	567600.00	4176000.00	RECREATIONAL	-	-	1.02E-02	-	-	1.32E-03	-	-	-
729	567600.00	4176100.00	RECREATIONAL	-	-	9.71E-03	-	-	1.17E-03	-	-	-
730	567600.00	4176200.00	RECREATIONAL	-	-	9.23E-03	-	-	1.05E-03	-	-	-
731	567600.00	4176300.00	RECREATIONAL	-	-	8.71E-03	-	-	9.56E-04	-	-	-
732	567600.00	4176400.00	RECREATIONAL	-	-	8.19E-03	-	-	8.79E-04	-	-	-
733	567600.00	4176500.00	RECREATIONAL	-	-	7.70E-03	-	-	8.12E-04	-	-	-
734	567600.00	4176600.00	RECREATIONAL	-	-	7.23E-03	-	-	7.57E-04	-	-	-
735	567600.00	4176700.00	RECREATIONAL	-	-	6.80E-03	-	-	7.11E-04	-	-	-
736	567600.00	4176800.00	RECREATIONAL	-	-	6.43E-03	-	-	6.65E-04	-	-	-
737	567600.00	4176900.00	RECREATIONAL	-	-	6.10E-03	-	-	6.29E-04	-	-	-
738	567600.00	4177000.00	RECREATIONAL	-	-	5.78E-03	-	-	5.90E-04	-	-	-
739	567600.00	4177100.00	RECREATIONAL	-	-	5.39E-03	-	-	5.61E-04	-	-	-
740	567600.00	4177200.00	RECREATIONAL	-	-	4.94E-03	-	-	5.34E-04	-	-	-
741	567600.00	4177300.00	RECREATIONAL	-	-	4.61E-03	-	-	5.02E-04	-	-	-
742	567600.00	4177400.00	RECREATIONAL	-	-	4.33E-03	-	-	4.79E-04	-	-	-
743	567600.00	4177500.00	RECREATIONAL	-	-	3.93E-03	-	-	4.50E-04	-	-	-
744	567600.00	4177600.00	RECREATIONAL	-	-	3.54E-03	-	-	4.29E-04	-	-	-
745	567600.00	4177700.00	RECREATIONAL	-	-	3.19E-03	-	-	4.03E-04	-	-	-
746	567600.00	4177800.00	RECREATIONAL	-	-	2.91E-03	-	-	3.80E-04	-	-	-
747	567600.00	4177900.00	RECREATIONAL	-	-	2.70E-03	-	-	3.58E-04	-	-	-
748	567600.00	4178000.00	WORKER	-	-	2.41E-03	-	-	3.28E-04	-	-	2.41E-03
759	567700.00	4175500.00	WORKER	-	-	1.37E-02	-	-	3.13E-03	-	-	1.37E-02
760	567700.00	4175600.00	WORKER	-	-	1.29E-02	-	-	2.83E-03	-	-	1.29E-02
761	567700.00	4175700.00	WORKER	-	-	1.23E-02	-	-	2.40E-03	-	-	1.23E-02
762	567700.00	4175800.00	WORKER	-	-	1.20E-02	-	-	2.03E-03	-	-	1.20E-02
763	567700.00	4175900.00	WORKER	-	-	1.16E-02	-	-	1.72E-03	-	-	1.16E-02
764	567700.00	4176000.00	RECREATIONAL	-	-	1.11E-02	-	-	1.47E-03	-	-	-
765	567700.00	4176100.00	RECREATIONAL	-	-	1.05E-02	-	-	1.27E-03	-	-	-
766	567700.00	4176200.00	RECREATIONAL	-	-	9.80E-03	-	-	1.12E-03	-	-	-
767	567700.00	4176300.00	RECREATIONAL	-	-	9.06E-03	-	-	1.01E-03	-	-	-
768	567700.00	4176400.00	RECREATIONAL	-	-	8.34E-03	-	-	9.17E-04	-	-	-
769	567700.00	4176500.00	RECREATIONAL	-	-	7.69E-03	-	-	8.46E-04	-	-	-
770	567700.00	4176600.00	RECREATIONAL	-	-	7.15E-03	-	-	7.88E-04	-	-	-
771	567700.00	4176700.00	RECREATIONAL	-	-	6.70E-03	-	-	7.37E-04	-	-	-
772	567700.00	4176800.00	RECREATIONAL	-	-	6.32E-03	-	-	6.95E-04	-	-	-
773	567700.00	4176900.00	RECREATIONAL	-	-	6.00E-03	-	-	6.59E-04	-	-	-
774	567700.00	4177000.00	RECREATIONAL	-	-	5.71E-03	-	-	6.24E-04	-	-	-
775	567700.00	4177100.00	RECREATIONAL	-	-	5.37E-03	-	-	5.93E-04	-	-	-
776	567700.00	4177200.00	RECREATIONAL	-	-	4.90E-03	-	-	5.64E-04	-	-	-
777	567700.00	4177300.00	RECREATIONAL	-	-	4.50E-03	-	-	5.35E-04	-	-	-
778	567700.00	4177400.00	RECREATIONAL	-	-	4.14E-03	-	-	5.09E-04	-	-	-
779	567700.00	4177500.00	RECREATIONAL	-	-	3.72E-03	-	-	4.82E-04	-	-	-
780	567700.00	4177600.00	RECREATIONAL	-	-	3.32E-03	-	-	4.53E-04	-	-	-
781	567700.00	4177700.00	RECREATIONAL	-	-	3.00E-03	-	-	4.27E-04	-	-	-
782	567700.00	4177800.00	RECREATIONAL	-	-	2.76E-03	-	-	4.01E-04	-	-	-
783	567700.00	4177900.00	RECREATIONAL	-	-	2.60E-03	-	-	3.71E-04	-	-	-

OAK Terminal Modernization

Table 2-24. Chronic Non-Cancer Hazard Indices

Combined Construction & Operations

	Construction + Operations			Construction Only			Operations Only		
	Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI		
Maximum->	2.27E-02	1.11E-02	8.13E-02	1.83E-03	1.10E-03	2.24E-02	2.27E-02	1.11E-02	5.49E-02
Minimum->	2.39E-04	9.12E-04	6.08E-04	2.60E-05	6.70E-05	6.70E-05	-4.96E-03	9.12E-04	-1.58E-02
Max ReclD->	1923	2104	3296	1953	2006	3296	1923	2104	1365
Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
784	567700.00	4178000.00	WORKER	-	-	2.29E-03	-	-	3.32E-04	-	-	2.29E-03
794	567800.00	4175700.00	WORKER	-	-	1.33E-02	-	-	3.36E-03	-	-	1.33E-02
795	567800.00	4175800.00	WORKER	-	-	1.31E-02	-	-	2.58E-03	-	-	1.31E-02
796	567800.00	4175900.00	WORKER	-	-	1.27E-02	-	-	2.07E-03	-	-	1.27E-02
797	567800.00	4176000.00	RECREATIONAL	-	-	1.20E-02	-	-	1.70E-03	-	-	-
798	567800.00	4176100.00	RECREATIONAL	-	-	1.12E-02	-	-	1.41E-03	-	-	-
799	567800.00	4176200.00	RECREATIONAL	-	-	1.02E-02	-	-	1.21E-03	-	-	-
800	567800.00	4176300.00	RECREATIONAL	-	-	9.25E-03	-	-	1.08E-03	-	-	-
801	567800.00	4176400.00	RECREATIONAL	-	-	8.34E-03	-	-	9.70E-04	-	-	-
802	567800.00	4176500.00	RECREATIONAL	-	-	7.58E-03	-	-	8.89E-04	-	-	-
803	567800.00	4176600.00	RECREATIONAL	-	-	6.97E-03	-	-	8.25E-04	-	-	-
804	567800.00	4176700.00	RECREATIONAL	-	-	6.52E-03	-	-	7.73E-04	-	-	-
805	567800.00	4176800.00	RECREATIONAL	-	-	6.20E-03	-	-	7.35E-04	-	-	-
806	567800.00	4176900.00	RECREATIONAL	-	-	5.94E-03	-	-	6.96E-04	-	-	-
807	567800.00	4177000.00	RECREATIONAL	-	-	5.72E-03	-	-	6.65E-04	-	-	-
808	567800.00	4177100.00	RECREATIONAL	-	-	5.39E-03	-	-	6.36E-04	-	-	-
809	567800.00	4177200.00	RECREATIONAL	-	-	4.74E-03	-	-	6.05E-04	-	-	-
810	567800.00	4177300.00	RECREATIONAL	-	-	4.34E-03	-	-	5.78E-04	-	-	-
811	567800.00	4177400.00	RECREATIONAL	-	-	3.99E-03	-	-	5.52E-04	-	-	-
812	567800.00	4177500.00	RECREATIONAL	-	-	3.53E-03	-	-	5.22E-04	-	-	-
813	567800.00	4177600.00	RECREATIONAL	-	-	3.14E-03	-	-	4.93E-04	-	-	-
814	567800.00	4177700.00	RECREATIONAL	-	-	2.86E-03	-	-	4.64E-04	-	-	-
815	567800.00	4177800.00	RECREATIONAL	-	-	2.69E-03	-	-	4.30E-04	-	-	-
816	567800.00	4177900.00	ROAD	-	-	2.56E-03	-	-	3.98E-04	-	-	2.56E-03
817	567800.00	4178000.00	WORKER	-	-	2.29E-03	-	-	3.47E-04	-	-	2.29E-03
826	567900.00	4175800.00	WORKER	-	-	1.41E-02	-	-	3.44E-03	-	-	1.41E-02
827	567878.00	4175900.00	WORKER	-	-	1.31E-02	-	-	2.79E-03	-	-	1.31E-02
828	567883.00	4176000.00	RECREATIONAL	-	-	1.23E-02	-	-	2.28E-03	-	-	-
829	567900.00	4176100.00	RECREATIONAL	-	-	1.14E-02	-	-	1.81E-03	-	-	-
830	567900.00	4176200.00	RECREATIONAL	-	-	1.04E-02	-	-	1.41E-03	-	-	-
831	567900.00	4176300.00	RECREATIONAL	-	-	9.28E-03	-	-	1.19E-03	-	-	-
832	567900.00	4176400.00	RECREATIONAL	-	-	8.54E-03	-	-	1.05E-03	-	-	-
833	567900.00	4176500.00	RECREATIONAL	-	-	7.76E-03	-	-	9.53E-04	-	-	-
834	567900.00	4176600.00	RECREATIONAL	-	-	6.93E-03	-	-	8.80E-04	-	-	-
835	567900.00	4176700.00	RECREATIONAL	-	-	6.39E-03	-	-	8.32E-04	-	-	-
836	567900.00	4176800.00	RECREATIONAL	-	-	6.12E-03	-	-	7.91E-04	-	-	-
837	567900.00	4176900.00	RECREATIONAL	-	-	5.88E-03	-	-	7.56E-04	-	-	-
838	567900.00	4177000.00	RECREATIONAL	-	-	5.48E-03	-	-	7.27E-04	-	-	-
839	567900.00	4177100.00	RECREATIONAL	-	-	5.20E-03	-	-	7.01E-04	-	-	-
840	567900.00	4177200.00	RECREATIONAL	-	-	4.59E-03	-	-	6.73E-04	-	-	-
841	567900.00	4177300.00	RECREATIONAL	-	-	4.27E-03	-	-	6.42E-04	-	-	-
842	567900.00	4177400.00	RECREATIONAL	-	-	3.88E-03	-	-	6.14E-04	-	-	-
843	567900.00	4177500.00	RECREATIONAL	-	-	3.37E-03	-	-	5.87E-04	-	-	-
844	567900.00	4177600.00	RECREATIONAL	-	-	3.01E-03	-	-	5.58E-04	-	-	-
845	567900.00	4177700.00	RECREATIONAL	-	-	2.82E-03	-	-	5.26E-04	-	-	-
846	567900.00	4177800.00	RECREATIONAL	-	-	2.70E-03	-	-	4.84E-04	-	-	-
847	567900.00	4177900.00	WORKER	-	-	2.60E-03	-	-	4.35E-04	-	-	2.60E-03
848	567900.00	4178000.00	WORKER	-	-	2.41E-03	-	-	3.61E-04	-	-	2.41E-03
856	568000.00	4176300.00	RECREATIONAL	-	-	9.39E-03	-	-	1.71E-03	-	-	-
857	568000.00	4176400.00	RECREATIONAL	-	-	8.85E-03	-	-	1.28E-03	-	-	-
858	568000.00	4176500.00	RECREATIONAL	-	-	7.94E-03	-	-	1.09E-03	-	-	-
859	568000.00	4176600.00	RECREATIONAL	-	-	6.94E-03	-	-	9.91E-04	-	-	-
860	568000.00	4176700.00	RECREATIONAL	-	-	6.46E-03	-	-	9.36E-04	-	-	-
861	568000.00	4176800.00	RECREATIONAL	-	-	5.94E-03	-	-	8.99E-04	-	-	-
862	568000.00	4176900.00	RECREATIONAL	-	-	5.48E-03	-	-	8.70E-04	-	-	-
863	568000.00	4177000.00	RECREATIONAL	-	-	5.13E-03	-	-	8.42E-04	-	-	-
864	568000.00	4177100.00	RECREATIONAL	-	-	5.02E-03	-	-	8.17E-04	-	-	-
865	568000.00	4177200.00	RECREATIONAL	-	-	4.59E-03	-	-	7.92E-04	-	-	-
866	568000.00	4177300.00	RECREATIONAL	-	-	4.28E-03	-	-	7.63E-04	-	-	-
867	568000.00	4177400.00	RECREATIONAL	-	-	3.84E-03	-	-	7.36E-04	-	-	-
868	568000.00	4177500.00	RECREATIONAL	-	-	3.26E-03	-	-	7.05E-04	-	-	-
869	568000.00	4177600.00	RECREATIONAL	-	-	2.98E-03	-	-	6.82E-04	-	-	-
870	568000.00	4177700.00	RECREATIONAL	-	-	2.83E-03	-	-	6.48E-04	-	-	-
871	568000.00	4177800.00	RECREATIONAL	-	-	2.75E-03	-	-	5.90E-04	-	-	-

OAK Terminal Modernization

Table 2-24. Chronic Non-Cancer Hazard Indices

Combined Construction & Operations

	Construction + Operations			Construction Only			Operations Only		
	Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI		
Maximum->	2.27E-02	1.11E-02	8.13E-02	1.83E-03	1.10E-03	2.24E-02	2.27E-02	1.11E-02	5.49E-02
Minimum->	2.39E-04	9.12E-04	6.08E-04	2.60E-05	6.70E-05	6.70E-05	-4.96E-03	9.12E-04	-1.58E-02
Max ReclD->	1923	2104	3296	1953	2006	3296	1923	2104	1365
Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
872	568000.00	4177900.00	RECREATIONAL	-	-	2.69E-03	-	-	5.06E-04	-	-	-
873	568000.00	4178000.00	WORKER	-	-	2.60E-03	-	-	4.00E-04	-	-	2.60E-03
881	568096.00	4176500.00	RECREATIONAL	-	-	7.75E-03	-	-	1.77E-03	-	-	-
882	568100.00	4176600.00	RECREATIONAL	-	-	6.94E-03	-	-	1.36E-03	-	-	-
883	568100.00	4176700.00	RECREATIONAL	-	-	6.21E-03	-	-	1.30E-03	-	-	-
884	568100.00	4176800.00	RECREATIONAL	-	-	5.67E-03	-	-	1.27E-03	-	-	-
885	568100.00	4176900.00	RECREATIONAL	-	-	5.00E-03	-	-	1.25E-03	-	-	-
886	568100.00	4177000.00	RECREATIONAL	-	-	4.31E-03	-	-	1.23E-03	-	-	-
887	568100.00	4177100.00	RECREATIONAL	-	-	4.54E-03	-	-	1.21E-03	-	-	-
888	568100.00	4177200.00	RECREATIONAL	-	-	4.81E-03	-	-	1.20E-03	-	-	-
889	568100.00	4177300.00	RECREATIONAL	-	-	4.57E-03	-	-	1.19E-03	-	-	-
890	568100.00	4177400.00	RECREATIONAL	-	-	3.75E-03	-	-	1.18E-03	-	-	-
891	568100.00	4177500.00	RECREATIONAL	-	-	3.04E-03	-	-	1.16E-03	-	-	-
892	568100.00	4177600.00	RECREATIONAL	-	-	2.82E-03	-	-	1.16E-03	-	-	-
893	568100.00	4177700.00	RECREATIONAL	-	-	2.68E-03	-	-	1.16E-03	-	-	-
894	568100.00	4177800.00	RECREATIONAL	-	-	2.62E-03	-	-	1.19E-03	-	-	-
895	568100.00	4177900.00	RECREATIONAL	-	-	2.78E-03	-	-	6.63E-04	-	-	-
896	568100.00	4178000.00	WORKER	-	-	2.72E-03	-	-	4.63E-04	-	-	2.72E-03
941	569004.00	4177402.00	RECREATIONAL	-	-	4.15E-03	-	-	4.15E-03	-	-	-
942	569000.00	4177500.00	RECREATIONAL	-	-	3.28E-03	-	-	3.28E-03	-	-	-
948	569100.00	4177300.00	RECREATIONAL	-	-	2.48E-03	-	-	2.48E-03	-	-	-
949	569100.00	4177400.00	RECREATIONAL	-	-	2.30E-03	-	-	2.07E-03	-	-	-
956	569202.00	4177104.00	RECREATIONAL	-	-	2.95E-03	-	-	2.95E-03	-	-	-
957	569200.00	4177200.00	RECREATIONAL	-	-	1.86E-03	-	-	1.86E-03	-	-	-
958	569200.00	4177300.00	RECREATIONAL	-	-	2.24E-03	-	-	1.55E-03	-	-	-
966	569300.00	4176900.00	WORKER	-	-	2.39E-03	-	-	2.39E-03	-	-	-1.58E-02
967	569300.00	4177000.00	RECREATIONAL	-	-	2.20E-03	-	-	2.20E-03	-	-	-
978	569400.00	4176700.00	WORKER	-	-	2.48E-03	-	-	2.48E-03	-	-	-9.17E-03
1032	569600.00	4176900.00	RECREATIONAL	-	-	3.41E-03	-	-	1.13E-03	-	-	-
1033	569600.00	4177000.00	RECREATIONAL	-	-	3.75E-03	-	-	1.02E-03	-	-	-
1034	569600.00	4177100.00	RECREATIONAL	-	-	4.15E-03	-	-	9.30E-04	-	-	-
1035	569600.00	4177200.00	RECREATIONAL	-	-	4.30E-03	-	-	8.58E-04	-	-	-
1036	569600.00	4177300.00	RECREATIONAL	-	-	4.13E-03	-	-	7.88E-04	-	-	-
1037	569600.00	4177400.00	RECREATIONAL	-	-	3.98E-03	-	-	7.27E-04	-	-	-
1043	569600.00	4178000.00	WORKER	-	-	2.69E-03	-	-	4.05E-04	-	-	2.69E-03
1056	569705.00	4176207.00	ROAD	-	-	3.67E-03	-	-	3.67E-03	-	-	3.52E-03
1060	569700.00	4176600.00	WORKER	-	-	7.48E-03	-	-	1.29E-03	-	-	7.48E-03
1061	569700.00	4176700.00	RECREATIONAL	-	-	5.82E-03	-	-	1.18E-03	-	-	-
1062	569700.00	4176800.00	RECREATIONAL	-	-	5.18E-03	-	-	1.10E-03	-	-	-
1063	569700.00	4176900.00	RECREATIONAL	-	-	4.70E-03	-	-	1.01E-03	-	-	-
1064	569700.00	4177000.00	RECREATIONAL	-	-	4.58E-03	-	-	9.32E-04	-	-	-
1065	569700.00	4177100.00	RECREATIONAL	-	-	4.62E-03	-	-	8.57E-04	-	-	-
1066	569700.00	4177200.00	RECREATIONAL	-	-	4.59E-03	-	-	7.91E-04	-	-	-
1067	569700.00	4177300.00	RECREATIONAL	-	-	4.35E-03	-	-	7.30E-04	-	-	-
1068	569700.00	4177400.00	RECREATIONAL	-	-	4.13E-03	-	-	6.77E-04	-	-	-
1069	569700.00	4177500.00	RECREATIONAL	-	-	3.96E-03	-	-	6.35E-04	-	-	-
1072	569700.00	4177800.00	WORKER	-	-	3.40E-03	-	-	4.87E-04	-	-	3.40E-03
1073	569700.00	4177900.00	WORKER	-	-	3.22E-03	-	-	4.40E-04	-	-	3.22E-03
1074	569700.00	4178000.00	WORKER	-	-	3.04E-03	-	-	3.98E-04	-	-	3.04E-03
1087	569800.00	4176200.00	RECREATIONAL	-	-	2.16E-02	-	-	2.32E-03	-	-	-
1088	569800.00	4176300.00	WORKER	-	-	1.87E-02	-	-	1.70E-03	-	-	1.87E-02
1089	569800.00	4176400.00	WORKER	-	-	1.42E-02	-	-	1.45E-03	-	-	1.42E-02
1090	569800.00	4176500.00	WORKER	-	-	1.05E-02	-	-	1.30E-03	-	-	1.05E-02
1091	569800.00	4176600.00	WORKER	-	-	8.08E-03	-	-	1.19E-03	-	-	8.08E-03
1092	569800.00	4176700.00	RECREATIONAL	-	-	6.51E-03	-	-	1.09E-03	-	-	-
1093	569800.00	4176800.00	RECREATIONAL	-	-	5.73E-03	-	-	1.01E-03	-	-	-
1094	569800.00	4176900.00	RECREATIONAL	-	-	5.30E-03	-	-	9.42E-04	-	-	-
1095	569800.00	4177000.00	RECREATIONAL	-	-	4.95E-03	-	-	8.69E-04	-	-	-
1096	569800.00	4177100.00	RECREATIONAL	-	-	4.82E-03	-	-	8.03E-04	-	-	-
1097	569800.00	4177200.00	RECREATIONAL	-	-	4.69E-03	-	-	7.46E-04	-	-	-
1098	569800.00	4177300.00	RECREATIONAL	-	-	4.46E-03	-	-	6.90E-04	-	-	-
1099	569800.00	4177400.00	RECREATIONAL	-	-	4.23E-03	-	-	6.41E-04	-	-	-
1102	569800.00	4177700.00	WORKER	-	-	3.70E-03	-	-	5.23E-04	-	-	3.70E-03
1103	569800.00	4177800.00	WORKER	-	-	3.52E-03	-	-	4.76E-04	-	-	3.52E-03

OAK Terminal Modernization

Table 2-24. Chronic Non-Cancer Hazard Indices

Combined Construction & Operations

	Construction + Operations			Construction Only			Operations Only		
	Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI		
Maximum->	2.27E-02	1.11E-02	8.13E-02	1.83E-03	1.10E-03	2.24E-02	2.27E-02	1.11E-02	5.49E-02
Minimum->	2.39E-04	9.12E-04	6.08E-04	2.60E-05	6.70E-05	6.70E-05	-4.96E-03	9.12E-04	-1.58E-02
Max ReclD->	1923	2104	3296	1953	2006	3296	1923	2104	1365
Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
1104	569800.00	4177900.00	WORKER	-	-	3.35E-03	-	-	4.33E-04	-	-	3.35E-03
1105	569800.00	4178000.00	WORKER	-	-	3.20E-03	-	-	3.98E-04	-	-	3.20E-03
1118	569900.00	4176100.00	WORKER	-	-	2.21E-02	-	-	2.94E-03	-	-	2.21E-02
1119	569900.00	4176200.00	WORKER	-	-	2.22E-02	-	-	1.91E-03	-	-	2.22E-02
1120	569900.00	4176300.00	WORKER	-	-	1.80E-02	-	-	1.56E-03	-	-	1.80E-02
1121	569900.00	4176400.00	WORKER	-	-	1.43E-02	-	-	1.36E-03	-	-	1.43E-02
1122	569900.00	4176500.00	WORKER	-	-	1.11E-02	-	-	1.23E-03	-	-	1.11E-02
1123	569900.00	4176600.00	WORKER	-	-	8.53E-03	-	-	1.12E-03	-	-	8.53E-03
1124	569900.00	4176700.00	WORKER	-	-	6.89E-03	-	-	1.04E-03	-	-	6.89E-03
1125	569900.00	4176800.00	RECREATIONAL	-	-	5.94E-03	-	-	9.63E-04	-	-	-
1126	569900.00	4176900.00	RECREATIONAL	-	-	5.47E-03	-	-	8.97E-04	-	-	-
1127	569900.00	4177000.00	RECREATIONAL	-	-	5.14E-03	-	-	8.31E-04	-	-	-
1128	569900.00	4177100.00	RECREATIONAL	-	-	4.87E-03	-	-	7.70E-04	-	-	-
1129	569900.00	4177200.00	RECREATIONAL	-	-	4.70E-03	-	-	7.13E-04	-	-	-
1130	569900.00	4177300.00	RECREATIONAL	-	-	4.48E-03	-	-	6.59E-04	-	-	-
1132	569900.00	4177500.00	WORKER	-	-	4.07E-03	-	-	5.79E-04	-	-	4.07E-03
1133	569900.00	4177600.00	WORKER	-	-	3.91E-03	-	-	5.47E-04	-	-	3.91E-03
1134	569900.00	4177700.00	WORKER	-	-	3.75E-03	-	-	5.08E-04	-	-	3.75E-03
1135	569900.00	4177800.00	WORKER	-	-	3.58E-03	-	-	4.66E-04	-	-	3.58E-03
1136	569900.00	4177900.00	WORKER	-	-	3.43E-03	-	-	4.29E-04	-	-	3.43E-03
1137	569900.00	4178000.00	WORKER	-	-	3.29E-03	-	-	3.93E-04	-	-	3.29E-03
1150	570008.00	4176021.00	WORKER	-	-	2.29E-02	-	-	3.33E-03	-	-	2.29E-02
1151	570000.00	4176100.00	WORKER	-	-	2.56E-02	-	-	2.23E-03	-	-	2.56E-02
1152	570000.00	4176200.00	WORKER	-	-	2.15E-02	-	-	1.74E-03	-	-	2.15E-02
1153	570000.00	4176300.00	WORKER	-	-	1.79E-02	-	-	1.49E-03	-	-	1.79E-02
1154	570000.00	4176400.00	WORKER	-	-	1.46E-02	-	-	1.31E-03	-	-	1.46E-02
1155	570000.00	4176500.00	WORKER	-	-	1.13E-02	-	-	1.19E-03	-	-	1.13E-02
1156	570000.00	4176600.00	WORKER	-	-	8.88E-03	-	-	1.08E-03	-	-	8.88E-03
1157	570000.00	4176700.00	WORKER	-	-	7.22E-03	-	-	9.98E-04	-	-	7.22E-03
1158	570000.00	4176800.00	RECREATIONAL	-	-	6.10E-03	-	-	9.27E-04	-	-	-
1159	570000.00	4176900.00	RECREATIONAL	-	-	5.44E-03	-	-	8.65E-04	-	-	-
1160	570000.00	4177000.00	RECREATIONAL	-	-	5.07E-03	-	-	8.01E-04	-	-	-
1161	570000.00	4177100.00	RECREATIONAL	-	-	4.92E-03	-	-	7.42E-04	-	-	-
1162	570000.00	4177200.00	RECREATIONAL	-	-	4.66E-03	-	-	6.84E-04	-	-	-
1163	570000.00	4177300.00	WORKER	-	-	4.44E-03	-	-	6.37E-04	-	-	4.44E-03
1164	570000.00	4177400.00	WORKER	-	-	4.23E-03	-	-	5.97E-04	-	-	4.23E-03
1165	570000.00	4177500.00	WORKER	-	-	4.06E-03	-	-	5.62E-04	-	-	4.06E-03
1166	570000.00	4177600.00	WORKER	-	-	3.92E-03	-	-	5.31E-04	-	-	3.92E-03
1167	570000.00	4177700.00	WORKER	-	-	3.76E-03	-	-	4.94E-04	-	-	3.76E-03
1168	570000.00	4177800.00	WORKER	-	-	3.60E-03	-	-	4.59E-04	-	-	3.60E-03
1169	570000.00	4177900.00	WORKER	-	-	3.46E-03	-	-	4.23E-04	-	-	3.46E-03
1170	570000.00	4178000.00	WORKER	-	-	3.34E-03	-	-	3.91E-04	-	-	3.34E-03
1184	570100.00	4176000.00	WORKER	-	-	2.84E-02	-	-	2.72E-03	-	-	2.84E-02
1185	570100.00	4176100.00	WORKER	-	-	2.41E-02	-	-	1.99E-03	-	-	2.41E-02
1186	570100.00	4176200.00	WORKER	-	-	2.04E-02	-	-	1.66E-03	-	-	2.04E-02
1187	570100.00	4176300.00	WORKER	-	-	1.73E-02	-	-	1.44E-03	-	-	1.73E-02
1188	570100.00	4176400.00	WORKER	-	-	1.44E-02	-	-	1.28E-03	-	-	1.44E-02
1189	570100.00	4176500.00	WORKER	-	-	1.15E-02	-	-	1.16E-03	-	-	1.15E-02
1190	570100.00	4176600.00	WORKER	-	-	9.29E-03	-	-	1.06E-03	-	-	9.29E-03
1191	570100.00	4176700.00	WORKER	-	-	7.57E-03	-	-	9.71E-04	-	-	7.57E-03
1192	570100.00	4176800.00	WORKER	-	-	6.38E-03	-	-	8.99E-04	-	-	6.38E-03
1193	570100.00	4176900.00	RECREATIONAL	-	-	5.55E-03	-	-	8.37E-04	-	-	-
1194	570100.00	4177000.00	RECREATIONAL	-	-	5.08E-03	-	-	7.74E-04	-	-	-
1196	570100.00	4177200.00	WORKER	-	-	4.64E-03	-	-	6.67E-04	-	-	4.64E-03
1197	570100.00	4177300.00	WORKER	-	-	4.40E-03	-	-	6.20E-04	-	-	4.40E-03
1198	570100.00	4177400.00	WORKER	-	-	4.20E-03	-	-	5.78E-04	-	-	4.20E-03
1199	570100.00	4177500.00	WORKER	-	-	4.04E-03	-	-	5.46E-04	-	-	4.04E-03
1200	570100.00	4177600.00	WORKER	-	-	3.89E-03	-	-	5.14E-04	-	-	3.89E-03
1201	570100.00	4177700.00	WORKER	-	-	3.73E-03	-	-	4.81E-04	-	-	3.73E-03
1202	570100.00	4177800.00	WORKER	-	-	3.60E-03	-	-	4.50E-04	-	-	3.60E-03
1203	570100.00	4177900.00	WORKER	-	-	3.45E-03	-	-	4.16E-04	-	-	3.45E-03
1204	570100.00	4178000.00	WORKER	-	-	3.33E-03	-	-	3.87E-04	-	-	3.33E-03
1218	570200.00	4175900.00	WORKER	-	-	2.71E-02	-	-	3.60E-03	-	-	2.71E-02
1219	570200.00	4176000.00	WORKER	-	-	2.69E-02	-	-	2.35E-03	-	-	2.69E-02

OAK Terminal Modernization

Table 2-24. Chronic Non-Cancer Hazard Indices

Combined Construction & Operations

Construction + Operations

Inhalation Chronic (Annual) HI

Construction Only

Inhalation Chronic (Annual) HI

Operations Only

Inhalation Chronic (Annual) HI

ReclD	UTM X	UTM Y	Receptor Type	2025-2038			2025-2030			2028-2038		
				Adult Resident & Child	School Child	Adult Worker	Adult Resident & Child	School Child	Adult Worker	Adult Resident & Child	School Child	Adult Worker
1220	570200.00	4176100.00	WORKER	-	-	2.19E-02	-	-	1.90E-03	-	-	2.19E-02
1221	570200.00	4176200.00	WORKER	-	-	1.81E-02	-	-	1.62E-03	-	-	1.81E-02
1222	570200.00	4176300.00	WORKER	-	-	1.58E-02	-	-	1.42E-03	-	-	1.58E-02
1223	570200.00	4176400.00	WORKER	-	-	1.36E-02	-	-	1.26E-03	-	-	1.36E-02
1224	570200.00	4176500.00	WORKER	-	-	1.13E-02	-	-	1.14E-03	-	-	1.13E-02
1225	570200.00	4176600.00	WORKER	-	-	9.36E-03	-	-	1.04E-03	-	-	9.36E-03
1226	570200.00	4176700.00	WORKER	-	-	7.80E-03	-	-	9.52E-04	-	-	7.80E-03
1227	570200.00	4176800.00	WORKER	-	-	6.59E-03	-	-	8.79E-04	-	-	6.59E-03
1228	570200.00	4176900.00	WORKER	-	-	5.71E-03	-	-	8.13E-04	-	-	5.71E-03
1229	570200.00	4177000.00	WORKER	-	-	5.12E-03	-	-	7.56E-04	-	-	5.12E-03
1230	570200.00	4177100.00	WORKER	-	-	4.72E-03	-	-	6.96E-04	-	-	4.72E-03
1231	570200.00	4177200.00	WORKER	-	-	4.49E-03	-	-	6.46E-04	-	-	4.49E-03
1232	570200.00	4177300.00	WORKER	-	-	4.31E-03	-	-	6.05E-04	-	-	4.31E-03
1233	570200.00	4177400.00	WORKER	-	-	4.12E-03	-	-	5.64E-04	-	-	4.12E-03
1234	570200.00	4177500.00	WORKER	-	-	3.96E-03	-	-	5.31E-04	-	-	3.96E-03
1235	570200.00	4177600.00	WORKER	-	-	3.82E-03	-	-	5.01E-04	-	-	3.82E-03
1236	570200.00	4177700.00	WORKER	-	-	3.66E-03	-	-	4.72E-04	-	-	3.66E-03
1237	570200.00	4177800.00	WORKER	-	-	3.53E-03	-	-	4.40E-04	-	-	3.53E-03
1238	570200.00	4177900.00	WORKER	-	-	3.41E-03	-	-	4.09E-04	-	-	3.41E-03
1239	570200.00	4178000.00	WORKER	-	-	3.30E-03	-	-	3.83E-04	-	-	3.30E-03
1253	570312.00	4175819.00	WORKER	-	-	2.66E-02	-	-	4.34E-03	-	-	2.66E-02
1254	570300.00	4175900.00	WORKER	-	-	3.09E-02	-	-	2.96E-03	-	-	3.09E-02
1255	570300.00	4176000.00	WORKER	-	-	2.55E-02	-	-	2.30E-03	-	-	2.55E-02
1256	570300.00	4176100.00	WORKER	-	-	2.09E-02	-	-	1.91E-03	-	-	2.09E-02
1257	570300.00	4176200.00	WORKER	-	-	1.73E-02	-	-	1.63E-03	-	-	1.73E-02
1258	570300.00	4176300.00	WORKER	-	-	1.44E-02	-	-	1.42E-03	-	-	1.44E-02
1259	570300.00	4176400.00	WORKER	-	-	1.24E-02	-	-	1.26E-03	-	-	1.24E-02
1260	570300.00	4176500.00	WORKER	-	-	1.07E-02	-	-	1.14E-03	-	-	1.07E-02
1261	570300.00	4176600.00	WORKER	-	-	9.17E-03	-	-	1.03E-03	-	-	9.17E-03
1262	570300.00	4176700.00	WORKER	-	-	7.78E-03	-	-	9.42E-04	-	-	7.78E-03
1264	570300.00	4176900.00	WORKER	-	-	5.75E-03	-	-	7.97E-04	-	-	5.75E-03
1265	570300.00	4177000.00	WORKER	-	-	5.09E-03	-	-	7.40E-04	-	-	5.09E-03
1266	570300.00	4177100.00	WORKER	-	-	4.64E-03	-	-	6.81E-04	-	-	4.64E-03
1267	570300.00	4177200.00	WORKER	-	-	4.35E-03	-	-	6.31E-04	-	-	4.35E-03
1268	570300.00	4177300.00	WORKER	-	-	4.16E-03	-	-	5.89E-04	-	-	4.16E-03
1269	570300.00	4177400.00	WORKER	-	-	3.99E-03	-	-	5.50E-04	-	-	3.99E-03
1270	570300.00	4177500.00	WORKER	-	-	3.82E-03	-	-	5.16E-04	-	-	3.82E-03
1271	570300.00	4177600.00	WORKER	-	-	3.67E-03	-	-	4.91E-04	-	-	3.67E-03
1272	570300.00	4177700.00	WORKER	-	-	3.54E-03	-	-	4.60E-04	-	-	3.54E-03
1273	570300.00	4177800.00	WORKER	-	-	3.40E-03	-	-	4.32E-04	-	-	3.40E-03
1274	570300.00	4177900.00	WORKER	-	-	3.29E-03	-	-	4.04E-04	-	-	3.29E-03
1275	570300.00	4178000.00	WORKER	-	-	3.19E-03	-	-	3.75E-04	-	-	3.19E-03
1281	570400.00	4173500.00	RECREATIONAL	-	-	3.27E-02	-	-	3.62E-03	-	-	-
1282	570400.00	4173600.00	RECREATIONAL	-	-	3.75E-02	-	-	3.98E-03	-	-	-
1283	570400.00	4173700.00	RECREATIONAL	-	-	4.09E-02	-	-	4.33E-03	-	-	-
1284	570400.00	4173800.00	RECREATIONAL	-	-	4.34E-02	-	-	4.76E-03	-	-	-
1285	570400.00	4173900.00	RECREATIONAL	-	-	4.57E-02	-	-	5.39E-03	-	-	-
1286	570400.00	4174000.00	RECREATIONAL	-	-	4.84E-02	-	-	6.30E-03	-	-	-
1287	570400.00	4174100.00	RECREATIONAL	-	-	5.08E-02	-	-	7.41E-03	-	-	-
1288	570400.00	4174200.00	RECREATIONAL	-	-	5.76E-02	-	-	8.96E-03	-	-	-
1290	570400.00	4175800.00	WORKER	-	-	2.30E-02	-	-	4.33E-03	-	-	2.30E-02
1291	570410.00	4175900.00	WORKER	-	-	1.41E-02	-	-	3.69E-03	-	-	1.41E-02
1292	570400.00	4176000.00	WORKER	-	-	1.78E-02	-	-	2.86E-03	-	-	1.78E-02
1293	570400.00	4176100.00	WORKER	-	-	1.81E-02	-	-	2.17E-03	-	-	1.81E-02
1294	570400.00	4176200.00	WORKER	-	-	1.59E-02	-	-	1.75E-03	-	-	1.59E-02
1295	570400.00	4176300.00	WORKER	-	-	1.38E-02	-	-	1.49E-03	-	-	1.38E-02
1296	570400.00	4176400.00	WORKER	-	-	1.18E-02	-	-	1.30E-03	-	-	1.18E-02
1297	570400.00	4176500.00	WORKER	-	-	9.92E-03	-	-	1.16E-03	-	-	9.92E-03
1298	570400.00	4176600.00	WORKER	-	-	8.72E-03	-	-	1.04E-03	-	-	8.72E-03
1299	570400.00	4176700.00	WORKER	-	-	7.67E-03	-	-	9.45E-04	-	-	7.67E-03
1300	570400.00	4176800.00	WORKER	-	-	6.60E-03	-	-	8.64E-04	-	-	6.60E-03
1301	570400.00	4176900.00	WORKER	-	-	5.75E-03	-	-	7.91E-04	-	-	5.75E-03
1302	570400.00	4177000.00	WORKER	-	-	5.07E-03	-	-	7.26E-04	-	-	5.07E-03
1303	570400.00	4177100.00	WORKER	-	-	4.58E-03	-	-	6.72E-04	-	-	4.58E-03

OAK Terminal Modernization

Table 2-24. Chronic Non-Cancer Hazard Indices

Combined Construction & Operations

	Construction + Operations			Construction Only			Operations Only		
	Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI		
Maximum->	2.27E-02	1.11E-02	8.13E-02	1.83E-03	1.10E-03	2.24E-02	2.27E-02	1.11E-02	5.49E-02
Minimum->	2.39E-04	9.12E-04	6.08E-04	2.60E-05	6.70E-05	6.70E-05	-4.96E-03	9.12E-04	-1.58E-02
Max ReclD->	1923	2104	3296	1953	2006	3296	1923	2104	1365
Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
1304	570400.00	4177200.00	WORKER	-	-	4.24E-03	-	-	6.20E-04	-	-	4.24E-03
1305	570400.00	4177300.00	WORKER	-	-	4.00E-03	-	-	5.76E-04	-	-	4.00E-03
1306	570400.00	4177400.00	WORKER	-	-	3.83E-03	-	-	5.39E-04	-	-	3.83E-03
1307	570400.00	4177500.00	WORKER	-	-	3.65E-03	-	-	5.07E-04	-	-	3.65E-03
1308	570400.00	4177600.00	WORKER	-	-	3.49E-03	-	-	4.77E-04	-	-	3.49E-03
1309	570400.00	4177700.00	WORKER	-	-	3.36E-03	-	-	4.51E-04	-	-	3.36E-03
1310	570400.00	4177800.00	WORKER	-	-	3.23E-03	-	-	4.22E-04	-	-	3.23E-03
1311	570400.00	4177900.00	WORKER	-	-	3.12E-03	-	-	3.95E-04	-	-	3.12E-03
1312	570400.00	4178000.00	WORKER	-	-	3.03E-03	-	-	3.70E-04	-	-	3.03E-03
1317	570500.00	4173400.00	RECREATIONAL	-	-	2.91E-02	-	-	3.09E-03	-	-	-
1318	570500.00	4173500.00	RECREATIONAL	-	-	3.36E-02	-	-	3.36E-03	-	-	-
1319	570500.00	4173600.00	RECREATIONAL	-	-	3.72E-02	-	-	3.64E-03	-	-	-
1320	570500.00	4173700.00	RECREATIONAL	-	-	3.92E-02	-	-	3.93E-03	-	-	-
1321	570500.00	4173800.00	RECREATIONAL	-	-	4.05E-02	-	-	4.27E-03	-	-	-
1322	570500.00	4173900.00	RECREATIONAL	-	-	4.22E-02	-	-	4.94E-03	-	-	-
1323	570500.00	4174000.00	RECREATIONAL	-	-	4.44E-02	-	-	5.79E-03	-	-	-
1324	570500.00	4174100.00	RECREATIONAL	-	-	4.70E-02	-	-	6.72E-03	-	-	-
1325	570500.00	4174200.00	RECREATIONAL	-	-	5.19E-02	-	-	7.84E-03	-	-	-
1327	570511.00	4175717.00	WORKER	-	-	2.33E-02	-	-	4.70E-03	-	-	2.33E-02
1328	570510.00	4175800.00	WORKER	-	-	9.57E-03	-	-	4.25E-03	-	-	9.57E-03
1329	570500.00	4175900.00	WORKER	-	-	1.95E-02	-	-	3.13E-03	-	-	1.95E-02
1330	570500.00	4176000.00	WORKER	-	-	1.50E-02	-	-	3.12E-03	-	-	1.50E-02
1331	570514.00	4176106.00	WORKER	-	-	4.69E-03	-	-	3.38E-03	-	-	4.69E-03
1332	570488.00	4176205.00	WORKER	-	-	8.20E-03	-	-	2.25E-03	-	-	8.20E-03
1333	570500.00	4176300.00	WORKER	-	-	1.05E-02	-	-	1.76E-03	-	-	1.05E-02
1334	570500.00	4176400.00	WORKER	-	-	1.03E-02	-	-	1.45E-03	-	-	1.03E-02
1335	570500.00	4176500.00	WORKER	-	-	9.37E-03	-	-	1.25E-03	-	-	9.37E-03
1336	570500.00	4176600.00	WORKER	-	-	8.17E-03	-	-	1.10E-03	-	-	8.17E-03
1337	570500.00	4176700.00	WORKER	-	-	7.18E-03	-	-	9.84E-04	-	-	7.18E-03
1338	570500.00	4176800.00	WORKER	-	-	6.45E-03	-	-	8.83E-04	-	-	6.45E-03
1339	570500.00	4176900.00	WORKER	-	-	5.75E-03	-	-	7.99E-04	-	-	5.75E-03
1340	570500.00	4177000.00	WORKER	-	-	5.12E-03	-	-	7.27E-04	-	-	5.12E-03
1341	570500.00	4177100.00	WORKER	-	-	4.62E-03	-	-	6.65E-04	-	-	4.62E-03
1342	570500.00	4177200.00	WORKER	-	-	4.22E-03	-	-	6.09E-04	-	-	4.22E-03
1343	570500.00	4177300.00	WORKER	-	-	3.93E-03	-	-	5.62E-04	-	-	3.93E-03
1344	570500.00	4177400.00	WORKER	-	-	3.71E-03	-	-	5.27E-04	-	-	3.71E-03
1345	570500.00	4177500.00	WORKER	-	-	3.50E-03	-	-	4.93E-04	-	-	3.50E-03
1346	570500.00	4177600.00	WORKER	-	-	3.33E-03	-	-	4.65E-04	-	-	3.33E-03
1347	570500.00	4177700.00	WORKER	-	-	3.19E-03	-	-	4.39E-04	-	-	3.19E-03
1348	570500.00	4177800.00	WORKER	-	-	3.05E-03	-	-	4.13E-04	-	-	3.05E-03
1349	570500.00	4177900.00	WORKER	-	-	2.94E-03	-	-	3.90E-04	-	-	2.94E-03
1350	570500.00	4178000.00	WORKER	-	-	2.84E-03	-	-	3.65E-04	-	-	2.84E-03
1354	570600.00	4173300.00	RECREATIONAL	-	-	2.59E-02	-	-	2.69E-03	-	-	-
1355	570600.00	4173400.00	RECREATIONAL	-	-	2.98E-02	-	-	2.91E-03	-	-	-
1356	570600.00	4173500.00	RECREATIONAL	-	-	3.38E-02	-	-	3.13E-03	-	-	-
1357	570600.00	4173600.00	RECREATIONAL	-	-	3.62E-02	-	-	3.35E-03	-	-	-
1358	570600.00	4173700.00	RECREATIONAL	-	-	3.77E-02	-	-	3.65E-03	-	-	-
1359	570600.00	4173800.00	RECREATIONAL	-	-	3.84E-02	-	-	4.04E-03	-	-	-
1360	570600.00	4173900.00	RECREATIONAL	-	-	3.88E-02	-	-	4.50E-03	-	-	-
1361	570600.00	4174000.00	RECREATIONAL	-	-	4.04E-02	-	-	5.22E-03	-	-	-
1362	570600.00	4174100.00	RECREATIONAL	-	-	4.31E-02	-	-	6.04E-03	-	-	-
1363	570600.00	4174200.00	RECREATIONAL	-	-	4.74E-02	-	-	6.92E-03	-	-	-
1365	570600.00	4174400.00	WORKER	-	-	5.49E-02	-	-	8.47E-03	-	-	5.49E-02
1366	570600.00	4175700.00	WORKER	-	-	1.78E-02	-	-	4.51E-03	-	-	1.78E-02
1367	570600.00	4175800.00	WORKER	-	-	1.06E-02	-	-	3.77E-03	-	-	1.06E-02
1368	570590.00	4175915.00	WORKER	-	-	7.80E-03	-	-	3.77E-03	-	-	7.80E-03
1369	570600.00	4176000.00	WORKER	-	-	7.91E-03	-	-	3.20E-03	-	-	7.91E-03
1370	570600.00	4176100.00	WORKER	-	-	1.28E-02	-	-	2.34E-03	-	-	1.28E-02
1371	570600.00	4176200.00	WORKER	-	-	9.10E-03	-	-	2.09E-03	-	-	9.10E-03
1372	570600.00	4176300.00	WORKER	-	-	2.20E-03	-	-	2.20E-03	-	-	1.07E-03
1373	570621.00	4176400.00	WORKER	-	-	2.47E-03	-	-	2.47E-03	-	-	-8.36E-03
1374	570600.00	4176500.00	WORKER	-	-	2.83E-03	-	-	1.73E-03	-	-	2.83E-03
1375	570600.00	4176600.00	WORKER	-	-	6.16E-03	-	-	1.32E-03	-	-	6.16E-03
1376	570600.00	4176700.00	WORKER	-	-	6.19E-03	-	-	1.11E-03	-	-	6.19E-03

OAK Terminal Modernization

Table 2-24. Chronic Non-Cancer Hazard Indices

Combined Construction & Operations

	Construction + Operations			Construction Only			Operations Only		
	Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI		
Maximum->	2.27E-02	1.11E-02	8.13E-02	1.83E-03	1.10E-03	2.24E-02	2.27E-02	1.11E-02	5.49E-02
Minimum->	2.39E-04	9.12E-04	6.08E-04	2.60E-05	6.70E-05	6.70E-05	-4.96E-03	9.12E-04	-1.58E-02
Max ReclD->	1923	2104	3296	1953	2006	3296	1923	2104	1365
Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
1377	570600.00	4176800.00	WORKER	-	-	5.76E-03	-	-	9.63E-04	-	-	5.76E-03
1378	570600.00	4176900.00	WORKER	-	-	5.47E-03	-	-	8.44E-04	-	-	5.47E-03
1379	570600.00	4177000.00	WORKER	-	-	5.12E-03	-	-	7.45E-04	-	-	5.12E-03
1380	570600.00	4177100.00	WORKER	-	-	4.74E-03	-	-	6.64E-04	-	-	4.74E-03
1381	570600.00	4177200.00	WORKER	-	-	4.34E-03	-	-	6.04E-04	-	-	4.34E-03
1382	570600.00	4177300.00	WORKER	-	-	3.99E-03	-	-	5.57E-04	-	-	3.99E-03
1383	570600.00	4177400.00	WORKER	-	-	3.68E-03	-	-	5.19E-04	-	-	3.68E-03
1384	570600.00	4177500.00	WORKER	-	-	3.43E-03	-	-	4.89E-04	-	-	3.43E-03
1385	570600.00	4177600.00	WORKER	-	-	3.23E-03	-	-	4.58E-04	-	-	3.23E-03
1386	570600.00	4177700.00	WORKER	-	-	3.07E-03	-	-	4.32E-04	-	-	3.07E-03
1387	570600.00	4177800.00	WORKER	-	-	2.91E-03	-	-	4.05E-04	-	-	2.91E-03
1388	570600.00	4177900.00	WORKER	-	-	2.77E-03	-	-	3.80E-04	-	-	2.77E-03
1389	570600.00	4178000.00	WORKER	-	-	2.66E-03	-	-	3.57E-04	-	-	2.66E-03
1393	570700.00	4173300.00	RECREATIONAL	-	-	2.64E-02	-	-	2.54E-03	-	-	-
1394	570700.00	4173400.00	RECREATIONAL	-	-	3.02E-02	-	-	2.75E-03	-	-	-
1395	570700.00	4173500.00	RECREATIONAL	-	-	3.33E-02	-	-	2.95E-03	-	-	-
1396	570700.00	4173600.00	RECREATIONAL	-	-	3.51E-02	-	-	3.17E-03	-	-	-
1397	570700.00	4173700.00	RECREATIONAL	-	-	3.58E-02	-	-	3.43E-03	-	-	-
1398	570700.00	4173800.00	RECREATIONAL	-	-	3.52E-02	-	-	3.62E-03	-	-	-
1399	570700.00	4173900.00	RECREATIONAL	-	-	3.45E-02	-	-	3.87E-03	-	-	-
1400	570700.00	4174000.00	RECREATIONAL	-	-	3.64E-02	-	-	4.58E-03	-	-	-
1401	570700.00	4174100.00	RECREATIONAL	-	-	3.91E-02	-	-	5.36E-03	-	-	-
1402	570700.00	4174200.00	RECREATIONAL	-	-	4.32E-02	-	-	6.12E-03	-	-	-
1403	570700.00	4174300.00	RECREATIONAL	-	-	4.69E-02	-	-	6.78E-03	-	-	-
1404	570700.00	4174400.00	WORKER	-	-	4.88E-02	-	-	7.23E-03	-	-	4.88E-02
1405	570700.00	4174500.00	WORKER	-	-	4.92E-02	-	-	7.54E-03	-	-	4.92E-02
1406	570700.00	4175600.00	WORKER	-	-	1.79E-02	-	-	4.39E-03	-	-	1.79E-02
1407	570700.00	4175700.00	WORKER	-	-	1.40E-02	-	-	3.32E-03	-	-	1.40E-02
1408	570700.00	4175800.00	WORKER	-	-	3.25E-03	-	-	3.25E-03	-	-	-6.43E-03
1409	570700.00	4175900.00	WORKER	-	-	3.65E-03	-	-	3.65E-03	-	-	-1.24E-02
1410	570700.00	4176000.00	WORKER	-	-	9.27E-03	-	-	2.63E-03	-	-	9.27E-03
1411	570700.00	4176100.00	WORKER	-	-	1.25E-02	-	-	2.04E-03	-	-	1.25E-02
1412	570700.00	4176200.00	WORKER	-	-	9.93E-03	-	-	1.77E-03	-	-	9.93E-03
1413	570700.00	4176300.00	WORKER	-	-	1.66E-03	-	-	1.66E-03	-	-	-2.94E-03
1414	570700.00	4176400.00	WORKER	-	-	5.11E-03	-	-	1.61E-03	-	-	5.11E-03
1415	570700.00	4176500.00	WORKER	-	-	2.59E-03	-	-	1.71E-03	-	-	2.59E-03
1416	570700.00	4176600.00	WORKER	-	-	1.98E-03	-	-	1.98E-03	-	-	-5.34E-03
1417	570670.00	4176700.00	WORKER	-	-	1.52E-03	-	-	1.52E-03	-	-	6.20E-04
1418	570700.00	4176800.00	WORKER	-	-	1.37E-03	-	-	1.37E-03	-	-	9.19E-04
1419	570700.00	4176900.00	WORKER	-	-	3.19E-03	-	-	1.06E-03	-	-	3.19E-03
1420	570700.00	4177000.00	WORKER	-	-	4.26E-03	-	-	8.24E-04	-	-	4.26E-03
1421	570700.00	4177100.00	WORKER	-	-	4.69E-03	-	-	6.74E-04	-	-	4.69E-03
1422	570700.00	4177200.00	WORKER	-	-	4.42E-03	-	-	6.01E-04	-	-	4.42E-03
1423	570700.00	4177300.00	WORKER	-	-	4.05E-03	-	-	5.47E-04	-	-	4.05E-03
1424	570700.00	4177400.00	WORKER	-	-	3.72E-03	-	-	5.10E-04	-	-	3.72E-03
1425	570700.00	4177500.00	WORKER	-	-	3.46E-03	-	-	4.78E-04	-	-	3.46E-03
1426	570700.00	4177600.00	WORKER	-	-	3.22E-03	-	-	4.52E-04	-	-	3.22E-03
1427	570700.00	4177700.00	WORKER	-	-	3.00E-03	-	-	4.22E-04	-	-	3.00E-03
1428	570700.00	4177800.00	WORKER	-	-	2.82E-03	-	-	3.99E-04	-	-	2.82E-03
1429	570700.00	4177900.00	WORKER	-	-	2.67E-03	-	-	3.76E-04	-	-	2.67E-03
1430	570700.00	4178000.00	WORKER	-	-	2.54E-03	-	-	3.52E-04	-	-	2.54E-03
1433	570800.00	4173200.00	RECREATIONAL	-	-	2.39E-02	-	-	2.25E-03	-	-	-
1434	570800.00	4173300.00	RECREATIONAL	-	-	2.69E-02	-	-	2.42E-03	-	-	-
1435	570800.00	4173400.00	RECREATIONAL	-	-	3.01E-02	-	-	2.59E-03	-	-	-
1436	570800.00	4173500.00	RECREATIONAL	-	-	3.22E-02	-	-	2.75E-03	-	-	-
1437	570800.00	4173600.00	RECREATIONAL	-	-	3.38E-02	-	-	3.03E-03	-	-	-
1438	570800.00	4173700.00	RECREATIONAL	-	-	3.48E-02	-	-	3.35E-03	-	-	-
1439	570800.00	4173800.00	RECREATIONAL	-	-	3.49E-02	-	-	3.65E-03	-	-	-
1440	570800.00	4173900.00	RECREATIONAL	-	-	3.50E-02	-	-	4.05E-03	-	-	-
1441	570800.00	4174000.00	RECREATIONAL	-	-	3.48E-02	-	-	4.39E-03	-	-	-
1442	570800.00	4174100.00	RECREATIONAL	-	-	3.64E-02	-	-	4.89E-03	-	-	-
1443	570800.00	4174200.00	RECREATIONAL	-	-	3.94E-02	-	-	5.42E-03	-	-	-
1444	570800.00	4174300.00	RECREATIONAL	-	-	4.23E-02	-	-	5.92E-03	-	-	-
1446	570800.00	4174500.00	WORKER	-	-	4.38E-02	-	-	6.43E-03	-	-	4.38E-02



OAK Terminal Modernization

Table 2-24. Chronic Non-Cancer Hazard Indices

Combined Construction & Operations

	Construction + Operations			Construction Only			Operations Only		
	Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI		
Maximum->	2.27E-02	1.11E-02	8.13E-02	1.83E-03	1.10E-03	2.24E-02	2.27E-02	1.11E-02	5.49E-02
Minimum->	2.39E-04	9.12E-04	6.08E-04	2.60E-05	6.70E-05	6.70E-05	-4.96E-03	9.12E-04	-1.58E-02
Max ReclD->	1923	2104	3296	1953	2006	3296	1923	2104	1365
Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
1513	570900.00	4177600.00	WORKER	-	-	3.38E-03	-	-	4.41E-04	-	-	3.38E-03
1514	570900.00	4177700.00	WORKER	-	-	3.12E-03	-	-	4.13E-04	-	-	3.12E-03
1515	570900.00	4177800.00	WORKER	-	-	2.89E-03	-	-	3.88E-04	-	-	2.89E-03
1516	570900.00	4177900.00	WORKER	-	-	2.67E-03	-	-	3.65E-04	-	-	2.67E-03
1517	570900.00	4178000.00	WORKER	-	-	2.49E-03	-	-	3.47E-04	-	-	2.49E-03
1520	571000.00	4173200.00	RECREATIONAL	-	-	2.43E-02	-	-	2.05E-03	-	-	-
1521	571000.00	4173300.00	RECREATIONAL	-	-	2.68E-02	-	-	2.19E-03	-	-	-
1522	571000.00	4173400.00	RECREATIONAL	-	-	2.86E-02	-	-	2.33E-03	-	-	-
1523	571000.00	4173500.00	RECREATIONAL	-	-	2.99E-02	-	-	2.52E-03	-	-	-
1524	571000.00	4173600.00	RECREATIONAL	-	-	3.06E-02	-	-	2.73E-03	-	-	-
1525	571000.00	4173700.00	RECREATIONAL	-	-	3.12E-02	-	-	2.99E-03	-	-	-
1526	571000.00	4173800.00	RECREATIONAL	-	-	3.14E-02	-	-	3.25E-03	-	-	-
1527	571000.00	4173900.00	WORKER	-	-	3.19E-02	-	-	3.61E-03	-	-	3.19E-02
1528	571000.00	4174000.00	WORKER	-	-	3.19E-02	-	-	3.91E-03	-	-	3.19E-02
1529	571000.00	4174100.00	WORKER	-	-	3.26E-02	-	-	4.19E-03	-	-	3.26E-02
1530	571000.00	4174200.00	WORKER	-	-	3.38E-02	-	-	4.43E-03	-	-	3.38E-02
1531	571000.00	4174300.00	WORKER	-	-	3.49E-02	-	-	4.62E-03	-	-	3.49E-02
1532	571000.00	4174400.00	WORKER	-	-	3.56E-02	-	-	4.75E-03	-	-	3.56E-02
1533	571000.00	4174500.00	WORKER	-	-	3.57E-02	-	-	4.85E-03	-	-	3.57E-02
1534	571000.00	4174600.00	WORKER	-	-	3.50E-02	-	-	4.92E-03	-	-	3.50E-02
1535	571000.00	4174700.00	WORKER	-	-	3.39E-02	-	-	4.94E-03	-	-	3.39E-02
1536	571008.00	4175316.00	WORKER	-	-	1.94E-02	-	-	4.56E-03	-	-	1.94E-02
1537	571000.00	4175400.00	WORKER	-	-	2.26E-02	-	-	3.43E-03	-	-	2.26E-02
1538	571000.00	4175500.00	WORKER	-	-	2.00E-02	-	-	2.85E-03	-	-	2.00E-02
1539	571000.00	4175600.00	WORKER	-	-	1.61E-02	-	-	2.50E-03	-	-	1.61E-02
1540	571000.00	4175700.00	WORKER	-	-	1.35E-02	-	-	2.27E-03	-	-	1.35E-02
1541	571000.00	4175800.00	WORKER	-	-	1.30E-02	-	-	2.10E-03	-	-	1.30E-02
1542	571000.00	4175900.00	WORKER	-	-	1.16E-02	-	-	2.02E-03	-	-	1.16E-02
1543	571000.00	4176000.00	WORKER	-	-	6.81E-03	-	-	2.13E-03	-	-	6.81E-03
1544	571028.00	4176085.00	WORKER	-	-	2.80E-03	-	-	2.80E-03	-	-	-1.10E-02
1546	571000.00	4176300.00	RESIDENTIAL	1.36E-03	-	-	1.36E-03	-	-	-4.96E-03	-	-
1547	571000.00	4176400.00	RESIDENTIAL	7.51E-03	-	-	1.21E-03	-	-	7.51E-03	-	-
1548	571000.00	4176500.00	RESIDENTIAL	7.83E-03	-	-	1.11E-03	-	-	7.83E-03	-	-
1549	571000.00	4176600.00	RESIDENTIAL	7.31E-03	-	-	1.03E-03	-	-	7.31E-03	-	-
1550	571000.00	4176700.00	RESIDENTIAL	6.67E-03	-	-	9.66E-04	-	-	6.67E-03	-	-
1551	571000.00	4176800.00	WORKER	-	-	6.06E-03	-	-	8.98E-04	-	-	6.06E-03
1552	571000.00	4176900.00	WORKER	-	-	5.72E-03	-	-	8.19E-04	-	-	5.72E-03
1553	571000.00	4177000.00	WORKER	-	-	5.61E-03	-	-	7.25E-04	-	-	5.61E-03
1554	571000.00	4177100.00	WORKER	-	-	5.44E-03	-	-	6.39E-04	-	-	5.44E-03
1555	571000.00	4177200.00	WORKER	-	-	5.00E-03	-	-	5.79E-04	-	-	5.00E-03
1556	571000.00	4177300.00	WORKER	-	-	4.45E-03	-	-	5.31E-04	-	-	4.45E-03
1557	571000.00	4177400.00	WORKER	-	-	4.14E-03	-	-	4.96E-04	-	-	4.14E-03
1558	571000.00	4177500.00	WORKER	-	-	3.82E-03	-	-	4.62E-04	-	-	3.82E-03
1559	571000.00	4177600.00	WORKER	-	-	3.52E-03	-	-	4.37E-04	-	-	3.52E-03
1560	571000.00	4177700.00	WORKER	-	-	3.26E-03	-	-	4.10E-04	-	-	3.26E-03
1561	571000.00	4177800.00	WORKER	-	-	3.01E-03	-	-	3.85E-04	-	-	3.01E-03
1562	571000.00	4177900.00	WORKER	-	-	2.77E-03	-	-	3.64E-04	-	-	2.77E-03
1563	571000.00	4178000.00	WORKER	-	-	2.56E-03	-	-	3.42E-04	-	-	2.56E-03
1566	566000.00	4178750.00	RECREATIONAL	-	-	2.39E-03	-	-	1.81E-04	-	-	-
1567	566000.00	4179000.00	RESIDENTIAL	2.22E-03	-	-	1.67E-04	-	-	2.22E-03	-	-
1568	566000.00	4179250.00	RESIDENTIAL	2.08E-03	-	-	1.55E-04	-	-	2.08E-03	-	-
1569	566000.00	4179500.00	RESIDENTIAL	1.96E-03	-	-	1.44E-04	-	-	1.96E-03	-	-
1570	566000.00	4179750.00	RESIDENTIAL	1.75E-03	-	-	1.31E-04	-	-	1.75E-03	-	-
1571	566000.00	4180000.00	RESIDENTIAL	1.61E-03	-	-	1.21E-04	-	-	1.61E-03	-	-
1572	566000.00	4180250.00	RESIDENTIAL	1.47E-03	-	-	1.13E-04	-	-	1.47E-03	-	-
1573	566000.00	4180500.00	RESIDENTIAL	1.35E-03	-	-	1.03E-04	-	-	1.35E-03	-	-
1576	566250.00	4178750.00	RESIDENTIAL	2.44E-03	-	-	1.88E-04	-	-	2.44E-03	-	-
1577	566250.00	4179000.00	RESIDENTIAL	2.28E-03	-	-	1.70E-04	-	-	2.28E-03	-	-
1578	566250.00	4179250.00	RESIDENTIAL	1.98E-03	-	-	1.58E-04	-	-	1.98E-03	-	-
1579	566250.00	4179500.00	RESIDENTIAL	1.84E-03	-	-	1.47E-04	-	-	1.84E-03	-	-
1580	566250.00	4179750.00	RESIDENTIAL	1.68E-03	-	-	1.31E-04	-	-	1.68E-03	-	-
1581	566250.00	4180000.00	RESIDENTIAL	1.53E-03	-	-	1.21E-04	-	-	1.53E-03	-	-
1582	566250.00	4180250.00	RESIDENTIAL	1.41E-03	-	-	1.13E-04	-	-	1.41E-03	-	-
1583	566250.00	4180500.00	RESIDENTIAL	1.32E-03	-	-	1.05E-04	-	-	1.32E-03	-	-

OAK Terminal Modernization

Table 2-24. Chronic Non-Cancer Hazard Indices

Combined Construction & Operations

	Construction + Operations			Construction Only			Operations Only		
	Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI		
Maximum->	2.27E-02	1.11E-02	8.13E-02	1.83E-03	1.10E-03	2.24E-02	2.27E-02	1.11E-02	5.49E-02
Minimum->	2.39E-04	9.12E-04	6.08E-04	2.60E-05	6.70E-05	6.70E-05	-4.96E-03	9.12E-04	-1.58E-02
Max ReclD->	1923	2104	3296	1953	2006	3296	1923	2104	1365
Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
1586	566500.00	4178750.00	RESIDENTIAL	2.46E-03	-	-	1.93E-04	-	-	2.46E-03	-	-
1587	566500.00	4179000.00	RESIDENTIAL	2.12E-03	-	-	1.77E-04	-	-	2.12E-03	-	-
1588	566500.00	4179250.00	RESIDENTIAL	1.94E-03	-	-	1.60E-04	-	-	1.94E-03	-	-
1589	566500.00	4179500.00	RESIDENTIAL	1.77E-03	-	-	1.47E-04	-	-	1.77E-03	-	-
1590	566500.00	4179750.00	RESIDENTIAL	1.61E-03	-	-	1.32E-04	-	-	1.61E-03	-	-
1591	566500.00	4180000.00	SCHOOL	1.49E-03	1.49E-03	1.49E-03	1.21E-04	1.21E-04	1.21E-04	1.49E-03	1.49E-03	1.49E-03
1592	566500.00	4180250.00	RESIDENTIAL	1.36E-03	-	-	1.11E-04	-	-	1.36E-03	-	-
1593	566500.00	4180500.00	RESIDENTIAL	1.25E-03	-	-	1.05E-04	-	-	1.25E-03	-	-
1596	566750.00	4178750.00	RESIDENTIAL	2.28E-03	-	-	2.00E-04	-	-	2.28E-03	-	-
1597	566750.00	4179000.00	RESIDENTIAL	2.08E-03	-	-	1.80E-04	-	-	2.08E-03	-	-
1598	566750.00	4179250.00	RESIDENTIAL	1.89E-03	-	-	1.64E-04	-	-	1.89E-03	-	-
1599	566750.00	4179500.00	RESIDENTIAL	1.73E-03	-	-	1.47E-04	-	-	1.73E-03	-	-
1600	566750.00	4179750.00	RESIDENTIAL	1.51E-03	-	-	1.30E-04	-	-	1.51E-03	-	-
1601	566750.00	4180000.00	WORKER	-	-	1.35E-03	-	-	1.20E-04	-	-	1.35E-03
1602	566750.00	4180250.00	WORKER	-	-	1.24E-03	-	-	1.11E-04	-	-	1.24E-03
1603	566750.00	4180500.00	RESIDENTIAL	1.16E-03	-	-	1.06E-04	-	-	1.16E-03	-	-
1605	567000.00	4178500.00	RESIDENTIAL	2.45E-03	-	-	2.30E-04	-	-	2.45E-03	-	-
1606	567000.00	4178750.00	RECREATIONAL	-	-	2.24E-03	-	-	2.05E-04	-	-	-
1607	567000.00	4179000.00	RESIDENTIAL	1.99E-03	-	-	1.82E-04	-	-	1.99E-03	-	-
1608	567000.00	4179250.00	RESIDENTIAL	1.73E-03	-	-	1.65E-04	-	-	1.73E-03	-	-
1609	567000.00	4179500.00	RESIDENTIAL	1.51E-03	-	-	1.45E-04	-	-	1.51E-03	-	-
1610	567000.00	4179750.00	RESIDENTIAL	1.37E-03	-	-	1.30E-04	-	-	1.37E-03	-	-
1611	567000.00	4180000.00	RESIDENTIAL	1.27E-03	-	-	1.22E-04	-	-	1.27E-03	-	-
1612	567000.00	4180250.00	RESIDENTIAL	1.21E-03	-	-	1.14E-04	-	-	1.21E-03	-	-
1613	567000.00	4180500.00	RESIDENTIAL	1.16E-03	-	-	1.08E-04	-	-	1.16E-03	-	-
1615	567250.00	4178500.00	RESIDENTIAL	2.27E-03	-	-	2.39E-04	-	-	2.27E-03	-	-
1616	567250.00	4178750.00	RESIDENTIAL	2.00E-03	-	-	2.13E-04	-	-	2.00E-03	-	-
1617	567250.00	4179000.00	RESIDENTIAL	1.77E-03	-	-	1.88E-04	-	-	1.77E-03	-	-
1618	567250.00	4179250.00	RESIDENTIAL	1.58E-03	-	-	1.66E-04	-	-	1.58E-03	-	-
1619	567250.00	4179500.00	RESIDENTIAL	1.44E-03	-	-	1.46E-04	-	-	1.44E-03	-	-
1620	567250.00	4179750.00	RESIDENTIAL	1.37E-03	-	-	1.36E-04	-	-	1.37E-03	-	-
1621	567250.00	4180000.00	RESIDENTIAL	1.32E-03	-	-	1.22E-04	-	-	1.32E-03	-	-
1622	567250.00	4180250.00	RESIDENTIAL	1.27E-03	-	-	1.15E-04	-	-	1.27E-03	-	-
1623	567250.00	4180500.00	RESIDENTIAL	1.23E-03	-	-	1.07E-04	-	-	1.23E-03	-	-
1625	567500.00	4178500.00	RESIDENTIAL	2.07E-03	-	-	2.45E-04	-	-	2.07E-03	-	-
1626	567500.00	4178750.00	RESIDENTIAL	1.87E-03	-	-	2.14E-04	-	-	1.87E-03	-	-
1627	567500.00	4179000.00	RESIDENTIAL	1.73E-03	-	-	1.88E-04	-	-	1.73E-03	-	-
1628	567500.00	4179250.00	RESIDENTIAL	1.64E-03	-	-	1.67E-04	-	-	1.64E-03	-	-
1629	567500.00	4179500.00	RESIDENTIAL	1.56E-03	-	-	1.52E-04	-	-	1.56E-03	-	-
1630	567500.00	4179750.00	RESIDENTIAL	1.51E-03	-	-	1.36E-04	-	-	1.51E-03	-	-
1631	567500.00	4180000.00	RESIDENTIAL	1.44E-03	-	-	1.25E-04	-	-	1.44E-03	-	-
1632	567500.00	4180250.00	RESIDENTIAL	1.36E-03	-	-	1.17E-04	-	-	1.36E-03	-	-
1633	567500.00	4180500.00	RESIDENTIAL	1.30E-03	-	-	1.06E-04	-	-	1.30E-03	-	-
1636	567750.00	4178750.00	RESIDENTIAL	1.99E-03	-	-	2.21E-04	-	-	1.99E-03	-	-
1637	567750.00	4179000.00	RESIDENTIAL	1.90E-03	-	-	1.89E-04	-	-	1.90E-03	-	-
1638	567750.00	4179250.00	RESIDENTIAL	1.79E-03	-	-	1.72E-04	-	-	1.79E-03	-	-
1639	567750.00	4179500.00	RESIDENTIAL	1.69E-03	-	-	1.52E-04	-	-	1.69E-03	-	-
1640	567750.00	4179750.00	RESIDENTIAL	1.60E-03	-	-	1.35E-04	-	-	1.60E-03	-	-
1641	567750.00	4180000.00	RESIDENTIAL	1.49E-03	-	-	1.25E-04	-	-	1.49E-03	-	-
1642	567750.00	4180250.00	RESIDENTIAL	1.40E-03	-	-	1.16E-04	-	-	1.40E-03	-	-
1646	568000.00	4178750.00	RESIDENTIAL	2.16E-03	-	-	2.21E-04	-	-	2.16E-03	-	-
1647	568000.00	4179000.00	RESIDENTIAL	1.99E-03	-	-	1.93E-04	-	-	1.99E-03	-	-
1648	568000.00	4179250.00	RESIDENTIAL	1.84E-03	-	-	1.71E-04	-	-	1.84E-03	-	-
1649	568000.00	4179500.00	RESIDENTIAL	1.71E-03	-	-	1.51E-04	-	-	1.71E-03	-	-
1650	568000.00	4179750.00	RESIDENTIAL	1.58E-03	-	-	1.38E-04	-	-	1.58E-03	-	-
1651	568000.00	4180000.00	RESIDENTIAL	1.47E-03	-	-	1.23E-04	-	-	1.47E-03	-	-
1652	568000.00	4180250.00	RESIDENTIAL	1.38E-03	-	-	1.15E-04	-	-	1.38E-03	-	-
1653	568000.00	4180500.00	WORKER	-	-	1.27E-03	-	-	1.03E-04	-	-	1.27E-03
1658	568250.00	4179250.00	RESIDENTIAL	1.76E-03	-	-	1.72E-04	-	-	1.76E-03	-	-
1659	568250.00	4179500.00	RESIDENTIAL	1.61E-03	-	-	1.51E-04	-	-	1.61E-03	-	-
1660	568250.00	4179750.00	RESIDENTIAL	1.48E-03	-	-	1.38E-04	-	-	1.48E-03	-	-
1662	568250.00	4180250.00	WORKER	-	-	1.28E-03	-	-	1.16E-04	-	-	1.28E-03
1663	568250.00	4180500.00	WORKER	-	-	1.19E-03	-	-	1.05E-04	-	-	1.19E-03
1669	568500.00	4179500.00	WORKER	-	-	1.51E-03	-	-	1.55E-04	-	-	1.51E-03

OAK Terminal Modernization

Table 2-24. Chronic Non-Cancer Hazard Indices

Combined Construction & Operations

	Construction + Operations			Construction Only			Operations Only		
	Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI		
Maximum->	2.27E-02	1.11E-02	8.13E-02	1.83E-03	1.10E-03	2.24E-02	2.27E-02	1.11E-02	5.49E-02
Minimum->	2.39E-04	9.12E-04	6.08E-04	2.60E-05	6.70E-05	6.70E-05	-4.96E-03	9.12E-04	-1.58E-02
Max ReclD->	1923	2104	3296	1953	2006	3296	1923	2104	1365
Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
1670	568500.00	4179750.00	WORKER	-	-	1.40E-03	-	-	1.40E-04	-	-	1.40E-03
1671	568500.00	4180000.00	WORKER	-	-	1.30E-03	-	-	1.27E-04	-	-	1.30E-03
1672	568500.00	4180250.00	WORKER	-	-	1.22E-03	-	-	1.17E-04	-	-	1.22E-03
1673	568500.00	4180500.00	WORKER	-	-	1.14E-03	-	-	1.10E-04	-	-	1.14E-03
1679	568750.00	4179500.00	WORKER	-	-	1.49E-03	-	-	1.56E-04	-	-	1.49E-03
1680	568750.00	4179750.00	WORKER	-	-	1.39E-03	-	-	1.40E-04	-	-	1.39E-03
1681	568750.00	4180000.00	WORKER	-	-	1.30E-03	-	-	1.28E-04	-	-	1.30E-03
1682	568750.00	4180250.00	WORKER	-	-	1.22E-03	-	-	1.19E-04	-	-	1.22E-03
1683	568750.00	4180500.00	WORKER	-	-	1.14E-03	-	-	1.10E-04	-	-	1.14E-03
1688	569000.00	4179250.00	RECREATIONAL	-	-	1.51E-03	-	-	1.76E-04	-	-	-
1690	569000.00	4179750.00	WORKER	-	-	1.23E-03	-	-	1.41E-04	-	-	1.23E-03
1691	569000.00	4180000.00	WORKER	-	-	1.13E-03	-	-	1.29E-04	-	-	1.13E-03
1692	569000.00	4180250.00	WORKER	-	-	1.02E-03	-	-	1.17E-04	-	-	1.02E-03
1693	569000.00	4180500.00	WORKER	-	-	9.11E-04	-	-	1.04E-04	-	-	9.11E-04
1697	569250.00	4179000.00	RECREATIONAL	-	-	1.28E-03	-	-	1.96E-04	-	-	-
1698	569250.00	4179250.00	WORKER	-	-	1.16E-03	-	-	1.73E-04	-	-	1.16E-03
1699	569250.00	4179500.00	WORKER	-	-	1.06E-03	-	-	1.55E-04	-	-	1.06E-03
1700	569250.00	4179750.00	WORKER	-	-	9.56E-04	-	-	1.39E-04	-	-	9.56E-04
1701	569250.00	4180000.00	WORKER	-	-	8.75E-04	-	-	1.29E-04	-	-	8.75E-04
1702	569250.00	4180250.00	WORKER	-	-	7.90E-04	-	-	1.17E-04	-	-	7.90E-04
1703	569250.00	4180500.00	WORKER	-	-	6.73E-04	-	-	1.03E-04	-	-	6.73E-04
1704	569500.00	4178250.00	WORKER	-	-	1.99E-03	-	-	3.23E-04	-	-	1.99E-03
1706	569500.00	4178750.00	WORKER	-	-	1.47E-03	-	-	2.25E-04	-	-	1.47E-03
1707	569500.00	4179000.00	WORKER	-	-	1.33E-03	-	-	1.97E-04	-	-	1.33E-03
1708	569500.00	4179250.00	WORKER	-	-	1.21E-03	-	-	1.76E-04	-	-	1.21E-03
1709	569500.00	4179500.00	WORKER	-	-	1.10E-03	-	-	1.56E-04	-	-	1.10E-03
1710	569500.00	4179750.00	WORKER	-	-	1.02E-03	-	-	1.41E-04	-	-	1.02E-03
1711	569500.00	4180000.00	RESIDENTIAL	9.44E-04	-	-	1.29E-04	-	-	9.44E-04	-	-
1712	569500.00	4180250.00	WORKER	-	-	8.65E-04	-	-	1.18E-04	-	-	8.65E-04
1713	569500.00	4180500.00	WORKER	-	-	7.75E-04	-	-	1.04E-04	-	-	7.75E-04
1714	569750.00	4178250.00	WORKER	-	-	2.74E-03	-	-	3.24E-04	-	-	2.74E-03
1715	569750.00	4178500.00	WORKER	-	-	2.30E-03	-	-	2.73E-04	-	-	2.30E-03
1716	569750.00	4178750.00	WORKER	-	-	1.92E-03	-	-	2.33E-04	-	-	1.92E-03
1717	569750.00	4179000.00	WORKER	-	-	1.61E-03	-	-	2.07E-04	-	-	1.61E-03
1718	569750.00	4179250.00	WORKER	-	-	1.45E-03	-	-	1.83E-04	-	-	1.45E-03
1719	569750.00	4179500.00	WORKER	-	-	1.35E-03	-	-	1.64E-04	-	-	1.35E-03
1720	569750.00	4179750.00	WORKER	-	-	1.24E-03	-	-	1.45E-04	-	-	1.24E-03
1721	569750.00	4180000.00	WORKER	-	-	1.15E-03	-	-	1.34E-04	-	-	1.15E-03
1722	569750.00	4180250.00	SCHOOL	1.08E-03	1.08E-03	1.08E-03	1.21E-04	1.21E-04	1.21E-04	1.08E-03	1.08E-03	1.08E-03
1723	569750.00	4180500.00	RESIDENTIAL	1.03E-03	-	-	1.07E-04	-	-	1.03E-03	-	-
1724	570000.00	4178250.00	WORKER	-	-	3.07E-03	-	-	3.27E-04	-	-	3.07E-03
1725	570000.00	4178500.00	WORKER	-	-	2.80E-03	-	-	2.75E-04	-	-	2.80E-03
1726	570000.00	4178750.00	WORKER	-	-	2.51E-03	-	-	2.41E-04	-	-	2.51E-03
1727	570000.00	4179000.00	WORKER	-	-	2.18E-03	-	-	2.15E-04	-	-	2.18E-03
1728	570000.00	4179250.00	WORKER	-	-	1.88E-03	-	-	1.90E-04	-	-	1.88E-03
1729	570000.00	4179500.00	WORKER	-	-	1.63E-03	-	-	1.71E-04	-	-	1.63E-03
1730	570000.00	4179750.00	WORKER	-	-	1.40E-03	-	-	1.52E-04	-	-	1.40E-03
1731	570000.00	4180000.00	WORKER	-	-	1.27E-03	-	-	1.41E-04	-	-	1.27E-03
1732	570000.00	4180250.00	RESIDENTIAL	1.21E-03	-	-	1.26E-04	-	-	1.21E-03	-	-
1733	570000.00	4180500.00	RESIDENTIAL	1.15E-03	-	-	1.13E-04	-	-	1.15E-03	-	-
1734	570250.00	4178250.00	WORKER	-	-	3.05E-03	-	-	3.22E-04	-	-	3.05E-03
1735	570250.00	4178500.00	WORKER	-	-	2.90E-03	-	-	2.71E-04	-	-	2.90E-03
1736	570250.00	4178750.00	WORKER	-	-	2.68E-03	-	-	2.46E-04	-	-	2.68E-03
1737	570250.00	4179000.00	WORKER	-	-	2.47E-03	-	-	2.15E-04	-	-	2.47E-03
1738	570250.00	4179250.00	WORKER	-	-	2.28E-03	-	-	1.89E-04	-	-	2.28E-03
1739	570250.00	4179500.00	WORKER	-	-	2.04E-03	-	-	1.75E-04	-	-	2.04E-03
1740	570250.00	4179750.00	RESIDENTIAL	1.81E-03	-	-	1.56E-04	-	-	1.81E-03	-	-
1741	570250.00	4180000.00	WORKER	-	-	1.61E-03	-	-	1.39E-04	-	-	1.61E-03
1742	570250.00	4180250.00	RESIDENTIAL	1.44E-03	-	-	1.27E-04	-	-	1.44E-03	-	-
1743	570250.00	4180500.00	RESIDENTIAL	1.28E-03	-	-	1.13E-04	-	-	1.28E-03	-	-
1744	570500.00	4178250.00	WORKER	-	-	2.69E-03	-	-	3.10E-04	-	-	2.69E-03
1745	570500.00	4178500.00	WORKER	-	-	2.59E-03	-	-	2.72E-04	-	-	2.59E-03
1746	570500.00	4178750.00	WORKER	-	-	2.51E-03	-	-	2.40E-04	-	-	2.51E-03
1747	570500.00	4179000.00	WORKER	-	-	2.40E-03	-	-	2.13E-04	-	-	2.40E-03

OAK Terminal Modernization

Table 2-24. Chronic Non-Cancer Hazard Indices

Combined Construction & Operations

	Construction + Operations			Construction Only			Operations Only		
	Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI		
Maximum->	2.27E-02	1.11E-02	8.13E-02	1.83E-03	1.10E-03	2.24E-02	2.27E-02	1.11E-02	5.49E-02
Minimum->	2.39E-04	9.12E-04	6.08E-04	2.60E-05	6.70E-05	6.70E-05	-4.96E-03	9.12E-04	-1.58E-02
Max ReclD->	1923	2104	3296	1953	2006	3296	1923	2104	1365
Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
1748	570500.00	4179250.00	RESIDENTIAL	2.28E-03	-	-	1.91E-04	-	-	2.28E-03	-	-
1749	570500.00	4179500.00	SCHOOL	2.15E-03	2.15E-03	2.15E-03	1.78E-04	1.78E-04	1.78E-04	2.15E-03	2.15E-03	2.15E-03
1750	570500.00	4179750.00	RESIDENTIAL	2.01E-03	-	-	1.57E-04	-	-	2.01E-03	-	-
1751	570500.00	4180000.00	RESIDENTIAL	1.90E-03	-	-	1.42E-04	-	-	1.90E-03	-	-
1752	570500.00	4180250.00	RESIDENTIAL	1.75E-03	-	-	1.26E-04	-	-	1.75E-03	-	-
1753	570500.00	4180500.00	RESIDENTIAL	1.62E-03	-	-	1.15E-04	-	-	1.62E-03	-	-
1754	570750.00	4178250.00	WORKER	-	-	2.25E-03	-	-	3.04E-04	-	-	2.25E-03
1755	570750.00	4178500.00	WORKER	-	-	2.13E-03	-	-	2.63E-04	-	-	2.13E-03
1756	570750.00	4178750.00	WORKER	-	-	2.08E-03	-	-	2.35E-04	-	-	2.08E-03
1757	570750.00	4179000.00	RESIDENTIAL	2.05E-03	-	-	2.09E-04	-	-	2.05E-03	-	-
1758	570750.00	4179250.00	RESIDENTIAL	2.03E-03	-	-	1.90E-04	-	-	2.03E-03	-	-
1759	570750.00	4179500.00	RESIDENTIAL	1.97E-03	-	-	1.73E-04	-	-	1.97E-03	-	-
1760	570750.00	4179750.00	RESIDENTIAL	1.90E-03	-	-	1.57E-04	-	-	1.90E-03	-	-
1761	570750.00	4180000.00	RESIDENTIAL	1.83E-03	-	-	1.41E-04	-	-	1.83E-03	-	-
1762	570750.00	4180250.00	RESIDENTIAL	1.76E-03	-	-	1.29E-04	-	-	1.76E-03	-	-
1763	570750.00	4180500.00	RESIDENTIAL	1.68E-03	-	-	1.19E-04	-	-	1.68E-03	-	-
1764	571000.00	4178250.00	WORKER	-	-	2.16E-03	-	-	2.95E-04	-	-	2.16E-03
1765	571000.00	4178500.00	WORKER	-	-	1.90E-03	-	-	2.58E-04	-	-	1.90E-03
1766	571000.00	4178750.00	WORKER	-	-	1.76E-03	-	-	2.32E-04	-	-	1.76E-03
1767	571000.00	4179000.00	RESIDENTIAL	1.69E-03	-	-	2.07E-04	-	-	1.69E-03	-	-
1768	571000.00	4179250.00	RESIDENTIAL	1.65E-03	-	-	1.85E-04	-	-	1.65E-03	-	-
1769	571000.00	4179500.00	RESIDENTIAL	1.65E-03	-	-	1.68E-04	-	-	1.65E-03	-	-
1770	571000.00	4179750.00	RESIDENTIAL	1.64E-03	-	-	1.55E-04	-	-	1.64E-03	-	-
1771	571000.00	4180000.00	RESIDENTIAL	1.58E-03	-	-	1.39E-04	-	-	1.58E-03	-	-
1772	571000.00	4180250.00	RESIDENTIAL	1.52E-03	-	-	1.26E-04	-	-	1.52E-03	-	-
1773	571000.00	4180500.00	RESIDENTIAL	1.47E-03	-	-	1.17E-04	-	-	1.47E-03	-	-
1774	571250.00	4178250.00	WORKER	-	-	2.32E-03	-	-	2.94E-04	-	-	2.32E-03
1775	571250.00	4178500.00	WORKER	-	-	1.95E-03	-	-	2.60E-04	-	-	1.95E-03
1776	571250.00	4178750.00	RESIDENTIAL	1.71E-03	-	-	2.30E-04	-	-	1.71E-03	-	-
1777	571250.00	4179000.00	RESIDENTIAL	1.54E-03	-	-	2.05E-04	-	-	1.54E-03	-	-
1778	571250.00	4179250.00	RESIDENTIAL	1.44E-03	-	-	1.84E-04	-	-	1.44E-03	-	-
1779	571250.00	4179500.00	RESIDENTIAL	1.37E-03	-	-	1.67E-04	-	-	1.37E-03	-	-
1780	571250.00	4179750.00	RESIDENTIAL	1.34E-03	-	-	1.47E-04	-	-	1.34E-03	-	-
1781	571250.00	4180000.00	RESIDENTIAL	1.35E-03	-	-	1.36E-04	-	-	1.35E-03	-	-
1782	571250.00	4180250.00	RESIDENTIAL	1.30E-03	-	-	1.22E-04	-	-	1.30E-03	-	-
1783	571250.00	4180500.00	RESIDENTIAL	1.24E-03	-	-	1.14E-04	-	-	1.24E-03	-	-
1784	571500.00	4178250.00	WORKER	-	-	2.55E-03	-	-	2.93E-04	-	-	2.55E-03
1785	571500.00	4178500.00	WORKER	-	-	2.14E-03	-	-	2.56E-04	-	-	2.14E-03
1786	571500.00	4178750.00	SCHOOL	1.81E-03	1.81E-03	1.81E-03	2.27E-04	2.27E-04	2.27E-04	1.81E-03	1.81E-03	1.81E-03
1787	571500.00	4179000.00	RESIDENTIAL	1.56E-03	-	-	2.02E-04	-	-	1.56E-03	-	-
1788	571500.00	4179250.00	RESIDENTIAL	1.39E-03	-	-	1.86E-04	-	-	1.39E-03	-	-
1789	571500.00	4179500.00	RESIDENTIAL	1.27E-03	-	-	1.65E-04	-	-	1.27E-03	-	-
1790	571500.00	4179750.00	RESIDENTIAL	1.19E-03	-	-	1.46E-04	-	-	1.19E-03	-	-
1791	571500.00	4180000.00	RESIDENTIAL	1.16E-03	-	-	1.30E-04	-	-	1.16E-03	-	-
1792	571500.00	4180250.00	RESIDENTIAL	1.14E-03	-	-	1.20E-04	-	-	1.14E-03	-	-
1793	571500.00	4180500.00	RESIDENTIAL	1.15E-03	-	-	1.13E-04	-	-	1.15E-03	-	-
1794	571750.00	4178250.00	RESIDENTIAL	2.75E-03	-	-	2.93E-04	-	-	2.75E-03	-	-
1795	571750.00	4178500.00	RESIDENTIAL	2.35E-03	-	-	2.61E-04	-	-	2.35E-03	-	-
1796	571750.00	4178750.00	SCHOOL	1.99E-03	1.99E-03	1.99E-03	2.30E-04	2.30E-04	2.30E-04	1.99E-03	1.99E-03	1.99E-03
1797	571750.00	4179000.00	RESIDENTIAL	1.69E-03	-	-	2.03E-04	-	-	1.69E-03	-	-
1798	571750.00	4179250.00	RESIDENTIAL	1.45E-03	-	-	1.81E-04	-	-	1.45E-03	-	-
1799	571750.00	4179500.00	RESIDENTIAL	1.28E-03	-	-	1.64E-04	-	-	1.28E-03	-	-
1800	571750.00	4179750.00	RESIDENTIAL	1.15E-03	-	-	1.45E-04	-	-	1.15E-03	-	-
1801	571750.00	4180000.00	RESIDENTIAL	1.07E-03	-	-	1.30E-04	-	-	1.07E-03	-	-
1802	571750.00	4180250.00	RESIDENTIAL	1.03E-03	-	-	1.20E-04	-	-	1.03E-03	-	-
1803	571750.00	4180500.00	RESIDENTIAL	1.01E-03	-	-	1.13E-04	-	-	1.01E-03	-	-
1804	572000.00	4178250.00	RESIDENTIAL	2.78E-03	-	-	2.92E-04	-	-	2.78E-03	-	-
1805	572000.00	4178500.00	RESIDENTIAL	2.49E-03	-	-	2.62E-04	-	-	2.49E-03	-	-
1806	572000.00	4178750.00	RESIDENTIAL	2.18E-03	-	-	2.31E-04	-	-	2.18E-03	-	-
1807	572000.00	4179000.00	RESIDENTIAL	1.88E-03	-	-	2.06E-04	-	-	1.88E-03	-	-
1808	572000.00	4179250.00	RESIDENTIAL	1.59E-03	-	-	1.81E-04	-	-	1.59E-03	-	-
1809	572000.00	4179500.00	RESIDENTIAL	1.37E-03	-	-	1.61E-04	-	-	1.37E-03	-	-
1810	572000.00	4179750.00	RESIDENTIAL	1.18E-03	-	-	1.48E-04	-	-	1.18E-03	-	-
1811	572000.00	4180000.00	RESIDENTIAL	1.06E-03	-	-	1.32E-04	-	-	1.06E-03	-	-

OAK Terminal Modernization

Table 2-24. Chronic Non-Cancer Hazard Indices

Combined Construction & Operations

	Construction + Operations			Construction Only			Operations Only		
	Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI		
Maximum->	2.27E-02	1.11E-02	8.13E-02	1.83E-03	1.10E-03	2.24E-02	2.27E-02	1.11E-02	5.49E-02
Minimum->	2.39E-04	9.12E-04	6.08E-04	2.60E-05	6.70E-05	6.70E-05	-4.96E-03	9.12E-04	-1.58E-02
Max ReclD->	1923	2104	3296	1953	2006	3296	1923	2104	1365
Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
1812	572000.00	4180250.00	RESIDENTIAL	9.75E-04	-	-	1.22E-04	-	-	9.75E-04	-	-
1813	572000.00	4180500.00	RESIDENTIAL	9.26E-04	-	-	1.13E-04	-	-	9.26E-04	-	-
1814	572250.00	4178250.00	RESIDENTIAL	2.73E-03	-	-	2.84E-04	-	-	2.73E-03	-	-
1815	572250.00	4178500.00	RESIDENTIAL	2.47E-03	-	-	2.55E-04	-	-	2.47E-03	-	-
1816	572250.00	4178750.00	RESIDENTIAL	2.30E-03	-	-	2.27E-04	-	-	2.30E-03	-	-
1817	572250.00	4179000.00	RESIDENTIAL	2.05E-03	-	-	2.00E-04	-	-	2.05E-03	-	-
1818	572250.00	4179250.00	RESIDENTIAL	1.79E-03	-	-	1.84E-04	-	-	1.79E-03	-	-
1819	572250.00	4179500.00	RESIDENTIAL	1.54E-03	-	-	1.64E-04	-	-	1.54E-03	-	-
1820	572250.00	4179750.00	RESIDENTIAL	1.31E-03	-	-	1.52E-04	-	-	1.31E-03	-	-
1821	572250.00	4180000.00	RESIDENTIAL	1.12E-03	-	-	1.34E-04	-	-	1.12E-03	-	-
1822	572250.00	4180250.00	RESIDENTIAL	9.85E-04	-	-	1.23E-04	-	-	9.85E-04	-	-
1823	572250.00	4180500.00	RESIDENTIAL	8.96E-04	-	-	1.16E-04	-	-	8.96E-04	-	-
1824	572500.00	4178250.00	RESIDENTIAL	2.67E-03	-	-	2.79E-04	-	-	2.67E-03	-	-
1825	572500.00	4178500.00	RESIDENTIAL	2.42E-03	-	-	2.44E-04	-	-	2.42E-03	-	-
1826	572500.00	4178750.00	RESIDENTIAL	2.20E-03	-	-	2.23E-04	-	-	2.20E-03	-	-
1827	572500.00	4179000.00	RESIDENTIAL	2.06E-03	-	-	2.02E-04	-	-	2.06E-03	-	-
1828	572500.00	4179250.00	RESIDENTIAL	1.93E-03	-	-	1.79E-04	-	-	1.93E-03	-	-
1829	572500.00	4179500.00	RESIDENTIAL	1.72E-03	-	-	1.65E-04	-	-	1.72E-03	-	-
1830	572500.00	4179750.00	RESIDENTIAL	1.49E-03	-	-	1.53E-04	-	-	1.49E-03	-	-
1831	572500.00	4180000.00	RESIDENTIAL	1.26E-03	-	-	1.37E-04	-	-	1.26E-03	-	-
1832	572500.00	4180250.00	RESIDENTIAL	1.07E-03	-	-	1.25E-04	-	-	1.07E-03	-	-
1833	572500.00	4180500.00	RESIDENTIAL	9.30E-04	-	-	1.16E-04	-	-	9.30E-04	-	-
1834	572750.00	4178250.00	RESIDENTIAL	2.67E-03	-	-	2.67E-04	-	-	2.67E-03	-	-
1835	572750.00	4178500.00	RESIDENTIAL	2.38E-03	-	-	2.40E-04	-	-	2.38E-03	-	-
1836	572750.00	4178750.00	RESIDENTIAL	2.19E-03	-	-	2.17E-04	-	-	2.19E-03	-	-
1837	572750.00	4179000.00	RESIDENTIAL	1.98E-03	-	-	1.97E-04	-	-	1.98E-03	-	-
1838	572750.00	4179250.00	RESIDENTIAL	1.85E-03	-	-	1.80E-04	-	-	1.85E-03	-	-
1839	572750.00	4179500.00	RESIDENTIAL	1.82E-03	-	-	1.66E-04	-	-	1.82E-03	-	-
1840	572750.00	4179750.00	RESIDENTIAL	1.65E-03	-	-	1.49E-04	-	-	1.65E-03	-	-
1841	572750.00	4180000.00	RESIDENTIAL	1.45E-03	-	-	1.38E-04	-	-	1.45E-03	-	-
1842	572750.00	4180250.00	RESIDENTIAL	1.23E-03	-	-	1.26E-04	-	-	1.23E-03	-	-
1843	572750.00	4180500.00	RESIDENTIAL	1.03E-03	-	-	1.18E-04	-	-	1.03E-03	-	-
1844	573000.00	4178250.00	RESIDENTIAL	2.74E-03	-	-	2.53E-04	-	-	2.74E-03	-	-
1845	573000.00	4178500.00	RESIDENTIAL	2.38E-03	-	-	2.34E-04	-	-	2.38E-03	-	-
1846	573000.00	4178750.00	RESIDENTIAL	2.16E-03	-	-	2.12E-04	-	-	2.16E-03	-	-
1847	573000.00	4179000.00	RESIDENTIAL	2.00E-03	-	-	1.96E-04	-	-	2.00E-03	-	-
1848	573000.00	4179250.00	RESIDENTIAL	1.81E-03	-	-	1.77E-04	-	-	1.81E-03	-	-
1849	573000.00	4179500.00	RESIDENTIAL	1.66E-03	-	-	1.64E-04	-	-	1.66E-03	-	-
1850	573000.00	4179750.00	RESIDENTIAL	1.71E-03	-	-	1.48E-04	-	-	1.71E-03	-	-
1851	573000.00	4180000.00	RESIDENTIAL	1.58E-03	-	-	1.37E-04	-	-	1.58E-03	-	-
1852	573000.00	4180250.00	RESIDENTIAL	1.41E-03	-	-	1.26E-04	-	-	1.41E-03	-	-
1853	573000.00	4180500.00	RESIDENTIAL	1.21E-03	-	-	1.15E-04	-	-	1.21E-03	-	-
1854	573250.00	4178250.00	RESIDENTIAL	2.81E-03	-	-	2.48E-04	-	-	2.81E-03	-	-
1855	573250.00	4178500.00	RESIDENTIAL	2.46E-03	-	-	2.24E-04	-	-	2.46E-03	-	-
1856	573250.00	4178750.00	RESIDENTIAL	2.14E-03	-	-	2.07E-04	-	-	2.14E-03	-	-
1857	573250.00	4179000.00	RESIDENTIAL	1.97E-03	-	-	1.89E-04	-	-	1.97E-03	-	-
1858	573250.00	4179250.00	RESIDENTIAL	1.84E-03	-	-	1.74E-04	-	-	1.84E-03	-	-
1859	573250.00	4179500.00	RESIDENTIAL	1.67E-03	-	-	1.64E-04	-	-	1.67E-03	-	-
1860	573250.00	4179750.00	RESIDENTIAL	1.49E-03	-	-	1.48E-04	-	-	1.49E-03	-	-
1861	573250.00	4180000.00	RESIDENTIAL	1.60E-03	-	-	1.35E-04	-	-	1.60E-03	-	-
1862	573250.00	4180250.00	RESIDENTIAL	1.52E-03	-	-	1.26E-04	-	-	1.52E-03	-	-
1863	573250.00	4180500.00	RESIDENTIAL	1.35E-03	-	-	1.10E-04	-	-	1.35E-03	-	-
1864	573500.00	4178250.00	RESIDENTIAL	2.78E-03	-	-	2.45E-04	-	-	2.78E-03	-	-
1865	573500.00	4178500.00	RESIDENTIAL	2.54E-03	-	-	2.19E-04	-	-	2.54E-03	-	-
1866	573500.00	4178750.00	RESIDENTIAL	2.21E-03	-	-	2.02E-04	-	-	2.21E-03	-	-
1867	573500.00	4179000.00	RESIDENTIAL	1.94E-03	-	-	1.85E-04	-	-	1.94E-03	-	-
1868	573500.00	4179250.00	RESIDENTIAL	1.81E-03	-	-	1.72E-04	-	-	1.81E-03	-	-
1869	573500.00	4179500.00	RESIDENTIAL	1.71E-03	-	-	1.57E-04	-	-	1.71E-03	-	-
1870	573500.00	4179750.00	RESIDENTIAL	1.56E-03	-	-	1.46E-04	-	-	1.56E-03	-	-
1871	573500.00	4180000.00	RESIDENTIAL	1.36E-03	-	-	1.31E-04	-	-	1.36E-03	-	-
1872	573500.00	4180250.00	RESIDENTIAL	1.40E-03	-	-	1.15E-04	-	-	1.40E-03	-	-
1873	573500.00	4180500.00	RESIDENTIAL	1.28E-03	-	-	9.08E-05	-	-	1.28E-03	-	-
1874	571250.00	4178000.00	WORKER	-	-	2.82E-03	-	-	3.41E-04	-	-	2.82E-03
1875	571250.00	4177750.00	WORKER	-	-	3.42E-03	-	-	3.89E-04	-	-	3.42E-03

**OAK Terminal Modernization**

**Table 2-24. Chronic Non-Cancer Hazard Indices**

**Combined Construction & Operations**

	Construction + Operations			Construction Only			Operations Only		
	Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI		
Maximum->	2.27E-02	1.11E-02	8.13E-02	1.83E-03	1.10E-03	2.24E-02	2.27E-02	1.11E-02	5.49E-02
Minimum->	2.39E-04	9.12E-04	6.08E-04	2.60E-05	6.70E-05	6.70E-05	-4.96E-03	9.12E-04	-1.58E-02
Max ReclD->	1923	2104	3296	1953	2006	3296	1923	2104	1365
Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
1876	571250.00	4177500.00	WORKER	-	-	4.20E-03	-	-	4.53E-04	-	-	4.20E-03
1877	571250.00	4177250.00	WORKER	-	-	5.15E-03	-	-	5.38E-04	-	-	5.15E-03
1878	571250.00	4177000.00	RESIDENTIAL	5.81E-03	-	-	6.53E-04	-	-	5.81E-03	-	-
1879	571250.00	4176750.00	SCHOOL	6.60E-03	6.60E-03	6.60E-03	8.00E-04	8.00E-04	8.00E-04	6.60E-03	6.60E-03	6.60E-03
1880	571250.00	4176500.00	RESIDENTIAL	7.74E-03	-	-	9.99E-04	-	-	7.74E-03	-	-
1881	571250.00	4176250.00	RESIDENTIAL	1.82E-03	-	-	1.82E-03	-	-	-3.82E-03	-	-
1882	571250.00	4176000.00	WORKER	-	-	9.12E-03	-	-	1.61E-03	-	-	9.12E-03
1883	571250.00	4175750.00	WORKER	-	-	1.29E-02	-	-	1.81E-03	-	-	1.29E-02
1884	571250.00	4175500.00	WORKER	-	-	1.74E-02	-	-	2.28E-03	-	-	1.74E-02
1885	571250.00	4175250.00	WORKER	-	-	2.14E-02	-	-	3.14E-03	-	-	2.14E-02
1886	571250.00	4174750.00	WORKER	-	-	2.74E-02	-	-	4.77E-03	-	-	2.74E-02
1887	571250.00	4174500.00	WORKER	-	-	2.87E-02	-	-	3.67E-03	-	-	2.87E-02
1888	571250.00	4174250.00	WORKER	-	-	2.77E-02	-	-	3.47E-03	-	-	2.77E-02
1889	571250.00	4174000.00	WORKER	-	-	2.77E-02	-	-	3.21E-03	-	-	2.77E-02
1890	571250.00	4173750.00	WORKER	-	-	2.80E-02	-	-	2.76E-03	-	-	2.80E-02
1891	571250.00	4173500.00	WORKER	-	-	2.70E-02	-	-	2.29E-03	-	-	2.70E-02
1895	571250.00	4172500.00	RECREATIONAL	-	-	1.59E-02	-	-	1.21E-03	-	-	-
1904	571500.00	4178000.00	WORKER	-	-	3.05E-03	-	-	3.36E-04	-	-	3.05E-03
1905	571500.00	4177750.00	WORKER	-	-	3.65E-03	-	-	3.89E-04	-	-	3.65E-03
1906	571500.00	4177500.00	WORKER	-	-	4.33E-03	-	-	4.44E-04	-	-	4.33E-03
1907	571500.00	4177250.00	WORKER	-	-	4.86E-03	-	-	5.17E-04	-	-	4.86E-03
1908	571500.00	4177000.00	SCHOOL	5.49E-03	5.49E-03	5.49E-03	6.11E-04	6.11E-04	6.11E-04	5.49E-03	5.49E-03	5.49E-03
1909	571500.00	4176750.00	RESIDENTIAL	6.63E-03	-	-	7.31E-04	-	-	6.63E-03	-	-
1910	571500.00	4176500.00	RESIDENTIAL	8.06E-03	-	-	9.02E-04	-	-	8.06E-03	-	-
1911	571500.00	4176250.00	RESIDENTIAL	5.80E-03	-	-	1.27E-03	-	-	5.80E-03	-	-
1912	571500.00	4176000.00	RESIDENTIAL	9.11E-03	-	-	1.35E-03	-	-	9.11E-03	-	-
1913	571500.00	4175750.00	WORKER	-	-	1.19E-02	-	-	1.55E-03	-	-	1.19E-02
1914	571500.00	4175500.00	WORKER	-	-	1.53E-02	-	-	1.94E-03	-	-	1.53E-02
1915	571500.00	4175250.00	WORKER	-	-	1.79E-02	-	-	2.49E-03	-	-	1.79E-02
1916	571500.00	4175000.00	WORKER	-	-	2.06E-02	-	-	3.29E-03	-	-	2.06E-02
1917	571500.00	4174750.00	WORKER	-	-	2.11E-02	-	-	4.45E-03	-	-	2.11E-02
1918	571500.00	4174500.00	WORKER	-	-	2.38E-02	-	-	2.98E-03	-	-	2.38E-02
1919	571500.00	4174250.00	WORKER	-	-	2.29E-02	-	-	2.78E-03	-	-	2.29E-02
1920	571500.00	4174000.00	WORKER	-	-	2.36E-02	-	-	2.64E-03	-	-	2.36E-02
1921	571500.00	4173750.00	WORKER	-	-	2.45E-02	-	-	2.38E-03	-	-	2.45E-02
1922	571500.00	4173500.00	WORKER	-	-	2.41E-02	-	-	2.05E-03	-	-	2.41E-02
1923	571500.00	4173250.00	RESIDENTIAL	2.27E-02	-	-	1.74E-03	-	-	2.27E-02	-	-
1924	571500.00	4173000.00	RESIDENTIAL	2.00E-02	-	-	1.50E-03	-	-	2.00E-02	-	-
1925	571500.00	4172750.00	RECREATIONAL	-	-	1.66E-02	-	-	1.30E-03	-	-	-
1926	571500.00	4172500.00	RECREATIONAL	-	-	1.47E-02	-	-	1.14E-03	-	-	-
1928	571500.00	4172000.00	RECREATIONAL	-	-	1.18E-02	-	-	8.99E-04	-	-	-
1935	571750.00	4178000.00	WORKER	-	-	3.18E-03	-	-	3.32E-04	-	-	3.18E-03
1936	571750.00	4177750.00	WORKER	-	-	3.65E-03	-	-	3.80E-04	-	-	3.65E-03
1937	571750.00	4177500.00	WORKER	-	-	4.09E-03	-	-	4.33E-04	-	-	4.09E-03
1938	571750.00	4177250.00	RESIDENTIAL	4.61E-03	-	-	4.95E-04	-	-	4.61E-03	-	-
1939	571750.00	4177000.00	RESIDENTIAL	5.46E-03	-	-	5.75E-04	-	-	5.46E-03	-	-
1940	571750.00	4176750.00	RESIDENTIAL	6.76E-03	-	-	6.78E-04	-	-	6.76E-03	-	-
1941	571750.00	4176500.00	RESIDENTIAL	7.93E-03	-	-	8.12E-04	-	-	7.93E-03	-	-
1942	571750.00	4176250.00	RESIDENTIAL	8.02E-03	-	-	9.91E-04	-	-	8.02E-03	-	-
1943	571750.00	4176000.00	RESIDENTIAL	8.57E-03	-	-	1.12E-03	-	-	8.57E-03	-	-
1944	571750.00	4175750.00	WORKER	-	-	1.12E-02	-	-	1.37E-03	-	-	1.12E-02
1945	571750.00	4175500.00	WORKER	-	-	1.31E-02	-	-	1.68E-03	-	-	1.31E-02
1946	571750.00	4175250.00	WORKER	-	-	1.51E-02	-	-	2.07E-03	-	-	1.51E-02
1947	571750.00	4175000.00	WORKER	-	-	1.77E-02	-	-	2.49E-03	-	-	1.77E-02
1948	571750.00	4174750.00	WORKER	-	-	1.86E-02	-	-	3.00E-03	-	-	1.86E-02
1949	571750.00	4174500.00	WORKER	-	-	2.01E-02	-	-	2.48E-03	-	-	2.01E-02
1950	571750.00	4174250.00	WORKER	-	-	1.94E-02	-	-	2.25E-03	-	-	1.94E-02
1951	571750.00	4174000.00	WORKER	-	-	2.00E-02	-	-	2.18E-03	-	-	2.00E-02
1952	571750.00	4173750.00	WORKER	-	-	2.13E-02	-	-	2.05E-03	-	-	2.13E-02
1953	571750.00	4173500.00	RESIDENTIAL	2.15E-02	-	-	1.83E-03	-	-	2.15E-02	-	-
1954	571750.00	4173250.00	RESIDENTIAL	2.08E-02	-	-	1.59E-03	-	-	2.08E-02	-	-
1955	571750.00	4173000.00	RESIDENTIAL	1.92E-02	-	-	1.38E-03	-	-	1.92E-02	-	-
1956	571750.00	4172750.00	RESIDENTIAL	1.66E-02	-	-	1.21E-03	-	-	1.66E-02	-	-
1957	571750.00	4172500.00	RECREATIONAL	-	-	1.42E-02	-	-	1.07E-03	-	-	-

OAK Terminal Modernization

Table 2-24. Chronic Non-Cancer Hazard Indices

Combined Construction & Operations

	Construction + Operations			Construction Only			Operations Only		
	Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI		
Maximum->	2.27E-02	1.11E-02	8.13E-02	1.83E-03	1.10E-03	2.24E-02	2.27E-02	1.11E-02	5.49E-02
Minimum->	2.39E-04	9.12E-04	6.08E-04	2.60E-05	6.70E-05	6.70E-05	-4.96E-03	9.12E-04	-1.58E-02
Max ReclD->	1923	2104	3296	1953	2006	3296	1923	2104	1365
Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
1958	571750.00	4172250.00	RECREATIONAL	-	-	1.28E-02	-	-	9.58E-04	-	-	-
1959	571750.00	4172000.00	RECREATIONAL	-	-	1.15E-02	-	-	8.61E-04	-	-	-
1960	571750.00	4171750.00	RECREATIONAL	-	-	9.66E-03	-	-	7.73E-04	-	-	-
1966	572000.00	4178000.00	WORKER	-	-	3.14E-03	-	-	3.27E-04	-	-	3.14E-03
1967	572000.00	4177750.00	WORKER	-	-	3.48E-03	-	-	3.67E-04	-	-	3.48E-03
1968	572000.00	4177500.00	WORKER	-	-	3.93E-03	-	-	4.16E-04	-	-	3.93E-03
1969	572000.00	4177250.00	WORKER	-	-	4.59E-03	-	-	4.71E-04	-	-	4.59E-03
1970	572000.00	4177000.00	RESIDENTIAL	5.52E-03	-	-	5.44E-04	-	-	5.52E-03	-	-
1971	572000.00	4176750.00	RESIDENTIAL	6.79E-03	-	-	6.34E-04	-	-	6.79E-03	-	-
1972	572000.00	4176500.00	RESIDENTIAL	7.39E-03	-	-	7.43E-04	-	-	7.39E-03	-	-
1973	572000.00	4176250.00	RESIDENTIAL	7.63E-03	-	-	8.78E-04	-	-	7.63E-03	-	-
1974	572000.00	4176000.00	RESIDENTIAL	8.60E-03	-	-	1.02E-03	-	-	8.60E-03	-	-
1975	572000.00	4175750.00	RESIDENTIAL	1.03E-02	-	-	1.22E-03	-	-	1.03E-02	-	-
1976	572000.00	4175500.00	RESIDENTIAL	1.11E-02	-	-	1.47E-03	-	-	1.11E-02	-	-
1977	572000.00	4175250.00	RESIDENTIAL	1.30E-02	-	-	1.76E-03	-	-	1.30E-02	-	-
1978	572000.00	4175000.00	WORKER	-	-	1.52E-02	-	-	2.06E-03	-	-	1.52E-02
1979	572000.00	4174750.00	WORKER	-	-	1.42E-02	-	-	3.21E-03	-	-	1.42E-02
1980	572000.00	4174500.00	WORKER	-	-	1.74E-02	-	-	2.02E-03	-	-	1.74E-02
1981	572000.00	4174250.00	WORKER	-	-	1.68E-02	-	-	1.86E-03	-	-	1.68E-02
1982	572000.00	4174000.00	WORKER	-	-	1.71E-02	-	-	1.82E-03	-	-	1.71E-02
1983	572000.00	4173750.00	WORKER	-	-	1.84E-02	-	-	1.76E-03	-	-	1.84E-02
1984	572000.00	4173500.00	RESIDENTIAL	1.91E-02	-	-	1.63E-03	-	-	1.91E-02	-	-
1985	572000.00	4173250.00	RESIDENTIAL	1.88E-02	-	-	1.46E-03	-	-	1.88E-02	-	-
1986	572000.00	4173000.00	RESIDENTIAL	1.79E-02	-	-	1.28E-03	-	-	1.79E-02	-	-
1987	572000.00	4172750.00	RESIDENTIAL	1.62E-02	-	-	1.12E-03	-	-	1.62E-02	-	-
1988	572000.00	4172500.00	RECREATIONAL	-	-	1.40E-02	-	-	9.99E-04	-	-	-
1989	572000.00	4172250.00	RECREATIONAL	-	-	1.23E-02	-	-	8.99E-04	-	-	-
1990	572000.00	4172000.00	RECREATIONAL	-	-	1.12E-02	-	-	8.15E-04	-	-	-
1991	572000.00	4171750.00	RECREATIONAL	-	-	9.53E-03	-	-	7.42E-04	-	-	-
1997	572250.00	4178000.00	RESIDENTIAL	3.03E-03	-	-	3.16E-04	-	-	3.03E-03	-	-
1998	572250.00	4177750.00	RESIDENTIAL	3.41E-03	-	-	3.53E-04	-	-	3.41E-03	-	-
1999	572250.00	4177500.00	RESIDENTIAL	3.96E-03	-	-	3.93E-04	-	-	3.96E-03	-	-
2000	572250.00	4177250.00	WORKER	-	-	4.65E-03	-	-	4.46E-04	-	-	4.65E-03
2001	572250.00	4177000.00	WORKER	-	-	5.52E-03	-	-	5.11E-04	-	-	5.52E-03
2002	572250.00	4176750.00	WORKER	-	-	6.41E-03	-	-	5.89E-04	-	-	6.41E-03
2003	572250.00	4176500.00	RESIDENTIAL	6.74E-03	-	-	6.77E-04	-	-	6.74E-03	-	-
2004	572250.00	4176250.00	RESIDENTIAL	7.14E-03	-	-	7.92E-04	-	-	7.14E-03	-	-
2005	572250.00	4176000.00	RESIDENTIAL	8.26E-03	-	-	9.23E-04	-	-	8.26E-03	-	-
2006	572250.00	4175750.00	SCHOOL	9.03E-03	9.03E-03	9.03E-03	1.10E-03	1.10E-03	1.10E-03	9.03E-03	9.03E-03	9.03E-03
2007	572250.00	4175500.00	RESIDENTIAL	9.67E-03	-	-	1.30E-03	-	-	9.67E-03	-	-
2008	572250.00	4175250.00	RESIDENTIAL	1.14E-02	-	-	1.52E-03	-	-	1.14E-02	-	-
2009	572250.00	4175000.00	RESIDENTIAL	1.31E-02	-	-	1.81E-03	-	-	1.31E-02	-	-
2010	572250.00	4174750.00	WORKER	-	-	1.44E-02	-	-	2.00E-03	-	-	1.44E-02
2011	572250.00	4174500.00	WORKER	-	-	1.54E-02	-	-	1.66E-03	-	-	1.54E-02
2012	572250.00	4174250.00	WORKER	-	-	1.48E-02	-	-	1.56E-03	-	-	1.48E-02
2013	572250.00	4174000.00	WORKER	-	-	1.47E-02	-	-	1.54E-03	-	-	1.47E-02
2014	572250.00	4173750.00	WORKER	-	-	1.59E-02	-	-	1.51E-03	-	-	1.59E-02
2015	572250.00	4173500.00	WORKER	-	-	1.69E-02	-	-	1.45E-03	-	-	1.69E-02
2016	572250.00	4173250.00	RESIDENTIAL	1.71E-02	-	-	1.33E-03	-	-	1.71E-02	-	-
2017	572250.00	4173000.00	RESIDENTIAL	1.66E-02	-	-	1.19E-03	-	-	1.66E-02	-	-
2018	572250.00	4172750.00	RESIDENTIAL	1.56E-02	-	-	1.05E-03	-	-	1.56E-02	-	-
2019	572250.00	4172500.00	RESIDENTIAL	1.39E-02	-	-	9.38E-04	-	-	1.39E-02	-	-
2020	572250.00	4172250.00	RESIDENTIAL	1.21E-02	-	-	8.41E-04	-	-	1.21E-02	-	-
2021	572250.00	4172000.00	RESIDENTIAL	1.08E-02	-	-	7.65E-04	-	-	1.08E-02	-	-
2022	572250.00	4171750.00	RECREATIONAL	-	-	9.80E-03	-	-	7.05E-04	-	-	-
2023	572250.00	4171500.00	RECREATIONAL	-	-	7.91E-03	-	-	6.45E-04	-	-	-
2028	572500.00	4178000.00	RESIDENTIAL	2.99E-03	-	-	3.05E-04	-	-	2.99E-03	-	-
2029	572500.00	4177750.00	RESIDENTIAL	3.46E-03	-	-	3.35E-04	-	-	3.46E-03	-	-
2030	572500.00	4177500.00	RESIDENTIAL	4.01E-03	-	-	3.76E-04	-	-	4.01E-03	-	-
2031	572500.00	4177250.00	WORKER	-	-	4.62E-03	-	-	4.27E-04	-	-	4.62E-03
2032	572500.00	4177000.00	WORKER	-	-	5.50E-03	-	-	4.84E-04	-	-	5.50E-03
2033	572500.00	4176750.00	RESIDENTIAL	5.92E-03	-	-	5.47E-04	-	-	5.92E-03	-	-
2034	572500.00	4176500.00	WORKER	-	-	6.19E-03	-	-	6.21E-04	-	-	6.19E-03
2035	572500.00	4176250.00	RESIDENTIAL	6.78E-03	-	-	7.13E-04	-	-	6.78E-03	-	-

**OAK Terminal Modernization**

**Table 2-24. Chronic Non-Cancer Hazard Indices**

**Combined Construction & Operations**

	Construction + Operations			Construction Only			Operations Only		
	Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI		
Maximum->	2.27E-02	1.11E-02	8.13E-02	1.83E-03	1.10E-03	2.24E-02	2.27E-02	1.11E-02	5.49E-02
Minimum->	2.39E-04	9.12E-04	6.08E-04	2.60E-05	6.70E-05	6.70E-05	-4.96E-03	9.12E-04	-1.58E-02
Max ReclD->	1923	2104	3296	1953	2006	3296	1923	2104	1365
Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
2036	572500.00	4176000.00	RESIDENTIAL	7.56E-03	-	-	8.40E-04	-	-	7.56E-03	-	-
2037	572500.00	4175750.00	SCHOOL	7.91E-03	7.91E-03	7.91E-03	9.90E-04	9.90E-04	9.90E-04	7.91E-03	7.91E-03	7.91E-03
2038	572500.00	4175500.00	RESIDENTIAL	8.66E-03	-	-	1.15E-03	-	-	8.66E-03	-	-
2039	572500.00	4175250.00	RESIDENTIAL	1.01E-02	-	-	1.32E-03	-	-	1.01E-02	-	-
2040	572500.00	4175000.00	ROAD	-	-	1.16E-02	-	-	1.53E-03	-	-	1.16E-02
2041	572500.00	4174750.00	RESIDENTIAL	1.30E-02	-	-	1.54E-03	-	-	1.30E-02	-	-
2042	572500.00	4174500.00	WORKER	-	-	1.37E-02	-	-	1.38E-03	-	-	1.37E-02
2043	572500.00	4174250.00	WORKER	-	-	1.32E-02	-	-	1.32E-03	-	-	1.32E-02
2044	572500.00	4174000.00	WORKER	-	-	1.30E-02	-	-	1.31E-03	-	-	1.30E-02
2045	572500.00	4173750.00	WORKER	-	-	1.39E-02	-	-	1.31E-03	-	-	1.39E-02
2046	572500.00	4173500.00	RESIDENTIAL	1.50E-02	-	-	1.28E-03	-	-	1.50E-02	-	-
2047	572500.00	4173250.00	RESIDENTIAL	1.54E-02	-	-	1.21E-03	-	-	1.54E-02	-	-
2048	572500.00	4173000.00	RESIDENTIAL	1.52E-02	-	-	1.10E-03	-	-	1.52E-02	-	-
2049	572500.00	4172750.00	RESIDENTIAL	1.46E-02	-	-	9.91E-04	-	-	1.46E-02	-	-
2050	572500.00	4172500.00	RESIDENTIAL	1.35E-02	-	-	8.82E-04	-	-	1.35E-02	-	-
2051	572500.00	4172250.00	RESIDENTIAL	1.20E-02	-	-	7.94E-04	-	-	1.20E-02	-	-
2052	572500.00	4172000.00	RESIDENTIAL	1.06E-02	-	-	7.23E-04	-	-	1.06E-02	-	-
2053	572500.00	4171750.00	RECREATIONAL	-	-	9.47E-03	-	-	6.61E-04	-	-	-
2054	572500.00	4171500.00	RECREATIONAL	-	-	8.16E-03	-	-	6.13E-04	-	-	-
2055	572500.00	4171250.00	RECREATIONAL	-	-	6.57E-03	-	-	5.67E-04	-	-	-
2056	572500.00	4171000.00	RECREATIONAL	-	-	5.77E-03	-	-	5.28E-04	-	-	-
2059	572750.00	4178000.00	RESIDENTIAL	3.07E-03	-	-	2.95E-04	-	-	3.07E-03	-	-
2060	572750.00	4177750.00	RESIDENTIAL	3.52E-03	-	-	3.23E-04	-	-	3.52E-03	-	-
2061	572750.00	4177500.00	RESIDENTIAL	3.95E-03	-	-	3.60E-04	-	-	3.95E-03	-	-
2062	572750.00	4177250.00	RESIDENTIAL	4.61E-03	-	-	4.11E-04	-	-	4.61E-03	-	-
2063	572750.00	4177000.00	SCHOOL	5.17E-03	5.17E-03	5.17E-03	4.60E-04	4.60E-04	4.60E-04	5.17E-03	5.17E-03	5.17E-03
2064	572750.00	4176750.00	RESIDENTIAL	5.48E-03	-	-	5.13E-04	-	-	5.48E-03	-	-
2065	572750.00	4176500.00	RESIDENTIAL	5.81E-03	-	-	5.72E-04	-	-	5.81E-03	-	-
2066	572750.00	4176250.00	RESIDENTIAL	6.34E-03	-	-	6.62E-04	-	-	6.34E-03	-	-
2067	572750.00	4176000.00	RESIDENTIAL	6.73E-03	-	-	7.70E-04	-	-	6.73E-03	-	-
2068	572750.00	4175750.00	RESIDENTIAL	7.14E-03	-	-	8.99E-04	-	-	7.14E-03	-	-
2069	572750.00	4175500.00	RESIDENTIAL	7.86E-03	-	-	1.03E-03	-	-	7.86E-03	-	-
2070	572750.00	4175250.00	RESIDENTIAL	9.13E-03	-	-	1.15E-03	-	-	9.13E-03	-	-
2071	572750.00	4175000.00	RESIDENTIAL	1.06E-02	-	-	1.25E-03	-	-	1.06E-02	-	-
2072	572750.00	4174750.00	RESIDENTIAL	1.18E-02	-	-	1.24E-03	-	-	1.18E-02	-	-
2073	572750.00	4174500.00	WORKER	-	-	1.23E-02	-	-	1.17E-03	-	-	1.23E-02
2074	572750.00	4174250.00	WORKER	-	-	1.19E-02	-	-	1.14E-03	-	-	1.19E-02
2075	572750.00	4174000.00	WORKER	-	-	1.16E-02	-	-	1.13E-03	-	-	1.16E-02
2076	572750.00	4173750.00	WORKER	-	-	1.23E-02	-	-	1.14E-03	-	-	1.23E-02
2077	572750.00	4173500.00	WORKER	-	-	1.33E-02	-	-	1.13E-03	-	-	1.33E-02
2078	572750.00	4173250.00	WORKER	-	-	1.39E-02	-	-	1.09E-03	-	-	1.39E-02
2079	572750.00	4173000.00	RESIDENTIAL	1.39E-02	-	-	1.01E-03	-	-	1.39E-02	-	-
2080	572750.00	4172750.00	WORKER	-	-	1.36E-02	-	-	9.29E-04	-	-	1.36E-02
2081	572750.00	4172500.00	RESIDENTIAL	1.29E-02	-	-	8.38E-04	-	-	1.29E-02	-	-
2082	572750.00	4172250.00	RESIDENTIAL	1.17E-02	-	-	7.54E-04	-	-	1.17E-02	-	-
2083	572750.00	4172000.00	RESIDENTIAL	1.04E-02	-	-	6.85E-04	-	-	1.04E-02	-	-
2084	572750.00	4171750.00	RECREATIONAL	-	-	9.29E-03	-	-	6.28E-04	-	-	-
2085	572750.00	4171500.00	RECREATIONAL	-	-	8.36E-03	-	-	5.84E-04	-	-	-
2086	572750.00	4171250.00	RECREATIONAL	-	-	6.92E-03	-	-	5.39E-04	-	-	-
2087	572750.00	4171000.00	RECREATIONAL	-	-	5.80E-03	-	-	5.06E-04	-	-	-
2090	573000.00	4178000.00	RESIDENTIAL	3.13E-03	-	-	2.82E-04	-	-	3.13E-03	-	-
2091	573000.00	4177750.00	RESIDENTIAL	3.46E-03	-	-	3.15E-04	-	-	3.46E-03	-	-
2092	573000.00	4177500.00	RESIDENTIAL	3.89E-03	-	-	3.51E-04	-	-	3.89E-03	-	-
2093	573000.00	4177250.00	RESIDENTIAL	4.52E-03	-	-	3.91E-04	-	-	4.52E-03	-	-
2094	573000.00	4177000.00	RESIDENTIAL	4.87E-03	-	-	4.34E-04	-	-	4.87E-03	-	-
2095	573000.00	4176750.00	RESIDENTIAL	5.13E-03	-	-	4.75E-04	-	-	5.13E-03	-	-
2096	573000.00	4176500.00	RESIDENTIAL	5.43E-03	-	-	5.37E-04	-	-	5.43E-03	-	-
2097	573000.00	4176250.00	RESIDENTIAL	5.74E-03	-	-	6.16E-04	-	-	5.74E-03	-	-
2098	573000.00	4176000.00	RESIDENTIAL	6.04E-03	-	-	7.13E-04	-	-	6.04E-03	-	-
2099	573000.00	4175750.00	RESIDENTIAL	6.59E-03	-	-	8.17E-04	-	-	6.59E-03	-	-
2100	573000.00	4175500.00	RESIDENTIAL	7.21E-03	-	-	9.22E-04	-	-	7.21E-03	-	-
2101	573000.00	4175250.00	RESIDENTIAL	8.35E-03	-	-	1.01E-03	-	-	8.35E-03	-	-
2102	573000.00	4175000.00	RESIDENTIAL	9.68E-03	-	-	1.08E-03	-	-	9.68E-03	-	-
2103	573000.00	4174750.00	RESIDENTIAL	1.07E-02	-	-	1.05E-03	-	-	1.07E-02	-	-

OAK Terminal Modernization

Table 2-24. Chronic Non-Cancer Hazard Indices

Combined Construction & Operations

	Construction + Operations			Construction Only			Operations Only		
	Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI		
Maximum->	2.27E-02	1.11E-02	8.13E-02	1.83E-03	1.10E-03	2.24E-02	2.27E-02	1.11E-02	5.49E-02
Minimum->	2.39E-04	9.12E-04	6.08E-04	2.60E-05	6.70E-05	6.70E-05	-4.96E-03	9.12E-04	-1.58E-02
Max ReclD->	1923	2104	3296	1953	2006	3296	1923	2104	1365
Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
2104	573000.00	4174500.00	SCHOOL	1.11E-02	1.11E-02	1.11E-02	1.01E-03	1.01E-03	1.01E-03	1.11E-02	1.11E-02	1.11E-02
2105	573000.00	4174250.00	WORKER	-	-	1.07E-02	-	-	9.85E-04	-	-	1.07E-02
2106	573000.00	4174000.00	WORKER	-	-	1.06E-02	-	-	9.91E-04	-	-	1.06E-02
2107	573000.00	4173750.00	WORKER	-	-	1.10E-02	-	-	9.98E-04	-	-	1.10E-02
2108	573000.00	4173500.00	WORKER	-	-	1.19E-02	-	-	9.97E-04	-	-	1.19E-02
2109	573000.00	4173250.00	WORKER	-	-	1.25E-02	-	-	9.78E-04	-	-	1.25E-02
2110	573000.00	4173000.00	WORKER	-	-	1.28E-02	-	-	9.33E-04	-	-	1.28E-02
2111	573000.00	4172750.00	WORKER	-	-	1.26E-02	-	-	8.69E-04	-	-	1.26E-02
2112	573000.00	4172500.00	WORKER	-	-	1.22E-02	-	-	7.96E-04	-	-	1.22E-02
2113	573000.00	4172250.00	WORKER	-	-	1.14E-02	-	-	7.21E-04	-	-	1.14E-02
2114	573000.00	4172000.00	WORKER	-	-	1.03E-02	-	-	6.54E-04	-	-	1.03E-02
2115	573000.00	4171750.00	RECREATIONAL	-	-	9.18E-03	-	-	5.97E-04	-	-	-
2116	573000.00	4171500.00	RECREATIONAL	-	-	8.21E-03	-	-	5.51E-04	-	-	-
2117	573000.00	4171250.00	RECREATIONAL	-	-	7.44E-03	-	-	5.15E-04	-	-	-
2118	573000.00	4171000.00	RECREATIONAL	-	-	6.10E-03	-	-	4.79E-04	-	-	-
2119	573000.00	4170750.00	RECREATIONAL	-	-	5.18E-03	-	-	4.51E-04	-	-	-
2121	573250.00	4178000.00	RESIDENTIAL	3.08E-03	-	-	2.77E-04	-	-	3.08E-03	-	-
2122	573250.00	4177750.00	RESIDENTIAL	3.37E-03	-	-	3.04E-04	-	-	3.37E-03	-	-
2123	573250.00	4177500.00	RESIDENTIAL	3.95E-03	-	-	3.38E-04	-	-	3.95E-03	-	-
2124	573250.00	4177250.00	RESIDENTIAL	4.32E-03	-	-	3.72E-04	-	-	4.32E-03	-	-
2125	573250.00	4177000.00	RESIDENTIAL	4.60E-03	-	-	4.09E-04	-	-	4.60E-03	-	-
2126	573250.00	4176750.00	RESIDENTIAL	4.79E-03	-	-	4.46E-04	-	-	4.79E-03	-	-
2127	573250.00	4176500.00	RESIDENTIAL	4.97E-03	-	-	5.03E-04	-	-	4.97E-03	-	-
2128	573250.00	4176250.00	RESIDENTIAL	5.15E-03	-	-	5.75E-04	-	-	5.15E-03	-	-
2129	573250.00	4176000.00	RESIDENTIAL	5.59E-03	-	-	6.60E-04	-	-	5.59E-03	-	-
2130	573250.00	4175750.00	RESIDENTIAL	6.10E-03	-	-	7.49E-04	-	-	6.10E-03	-	-
2131	573250.00	4175500.00	RESIDENTIAL	6.65E-03	-	-	8.27E-04	-	-	6.65E-03	-	-
2132	573250.00	4175250.00	RESIDENTIAL	7.72E-03	-	-	9.06E-04	-	-	7.72E-03	-	-
2133	573250.00	4175000.00	RESIDENTIAL	8.88E-03	-	-	9.48E-04	-	-	8.88E-03	-	-
2134	573250.00	4174750.00	RESIDENTIAL	9.75E-03	-	-	9.21E-04	-	-	9.75E-03	-	-
2135	573250.00	4174500.00	SCHOOL	1.00E-02	1.00E-02	1.00E-02	8.77E-04	8.77E-04	8.77E-04	1.00E-02	1.00E-02	1.00E-02
2136	573250.00	4174250.00	RESIDENTIAL	9.80E-03	-	-	8.70E-04	-	-	9.80E-03	-	-
2137	573250.00	4174000.00	WORKER	-	-	9.68E-03	-	-	8.74E-04	-	-	9.68E-03
2138	573250.00	4173750.00	WORKER	-	-	9.95E-03	-	-	8.80E-04	-	-	9.95E-03
2139	573250.00	4173500.00	WORKER	-	-	1.06E-02	-	-	8.89E-04	-	-	1.06E-02
2140	573250.00	4173250.00	WORKER	-	-	1.14E-02	-	-	8.80E-04	-	-	1.14E-02
2141	573250.00	4173000.00	WORKER	-	-	1.17E-02	-	-	8.55E-04	-	-	1.17E-02
2142	573250.00	4172750.00	WORKER	-	-	1.17E-02	-	-	8.09E-04	-	-	1.17E-02
2143	573250.00	4172500.00	WORKER	-	-	1.14E-02	-	-	7.51E-04	-	-	1.14E-02
2144	573250.00	4172250.00	WORKER	-	-	1.09E-02	-	-	6.87E-04	-	-	1.09E-02
2145	573250.00	4172000.00	WORKER	-	-	1.01E-02	-	-	6.27E-04	-	-	1.01E-02
2146	573250.00	4171750.00	RECREATIONAL	-	-	9.08E-03	-	-	5.72E-04	-	-	-
2147	573250.00	4171500.00	RECREATIONAL	-	-	8.14E-03	-	-	5.27E-04	-	-	-
2148	573250.00	4171250.00	RECREATIONAL	-	-	7.32E-03	-	-	4.91E-04	-	-	-
2149	573250.00	4171000.00	RECREATIONAL	-	-	6.58E-03	-	-	4.57E-04	-	-	-
2150	573250.00	4170750.00	RECREATIONAL	-	-	5.43E-03	-	-	4.32E-04	-	-	-
2151	573250.00	4170500.00	RECREATIONAL	-	-	4.64E-03	-	-	4.07E-04	-	-	-
2152	573500.00	4178000.00	RESIDENTIAL	2.98E-03	-	-	2.69E-04	-	-	2.98E-03	-	-
2153	573500.00	4177750.00	RESIDENTIAL	3.40E-03	-	-	2.96E-04	-	-	3.40E-03	-	-
2154	573500.00	4177500.00	RESIDENTIAL	3.84E-03	-	-	3.22E-04	-	-	3.84E-03	-	-
2155	573500.00	4177250.00	RESIDENTIAL	4.15E-03	-	-	3.53E-04	-	-	4.15E-03	-	-
2156	573500.00	4177000.00	RESIDENTIAL	4.32E-03	-	-	3.84E-04	-	-	4.32E-03	-	-
2157	573500.00	4176750.00	RESIDENTIAL	4.40E-03	-	-	4.21E-04	-	-	4.40E-03	-	-
2158	573500.00	4176500.00	RESIDENTIAL	4.48E-03	-	-	4.75E-04	-	-	4.48E-03	-	-
2159	573500.00	4176250.00	WORKER	-	-	4.71E-03	-	-	5.42E-04	-	-	4.71E-03
2160	573500.00	4176000.00	WORKER	-	-	5.28E-03	-	-	6.17E-04	-	-	5.28E-03
2161	573500.00	4175750.00	RESIDENTIAL	5.56E-03	-	-	6.85E-04	-	-	5.56E-03	-	-
2162	573500.00	4175500.00	RESIDENTIAL	6.20E-03	-	-	7.52E-04	-	-	6.20E-03	-	-
2163	573500.00	4175250.00	RESIDENTIAL	7.20E-03	-	-	8.11E-04	-	-	7.20E-03	-	-
2164	573500.00	4175000.00	RESIDENTIAL	8.20E-03	-	-	8.42E-04	-	-	8.20E-03	-	-
2165	573500.00	4174750.00	RESIDENTIAL	8.92E-03	-	-	8.16E-04	-	-	8.92E-03	-	-
2166	573500.00	4174500.00	RESIDENTIAL	9.13E-03	-	-	7.83E-04	-	-	9.13E-03	-	-
2167	573500.00	4174250.00	RESIDENTIAL	8.97E-03	-	-	7.75E-04	-	-	8.97E-03	-	-
2168	573500.00	4174000.00	ROAD	-	-	8.91E-03	-	-	7.77E-04	-	-	8.91E-03

OAK Terminal Modernization

Table 2-24. Chronic Non-Cancer Hazard Indices

Combined Construction & Operations

	Construction + Operations			Construction Only			Operations Only		
	Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI		
Maximum->	2.27E-02	1.11E-02	8.13E-02	1.83E-03	1.10E-03	2.24E-02	2.27E-02	1.11E-02	5.49E-02
Minimum->	2.39E-04	9.12E-04	6.08E-04	2.60E-05	6.70E-05	6.70E-05	-4.96E-03	9.12E-04	-1.58E-02
Max ReclD->	1923	2104	3296	1953	2006	3296	1923	2104	1365
Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
2169	573500.00	4173750.00	WORKER	-	-	9.05E-03	-	-	7.85E-04	-	-	9.05E-03
2170	573500.00	4173500.00	WORKER	-	-	9.53E-03	-	-	7.91E-04	-	-	9.53E-03
2171	573500.00	4173250.00	WORKER	-	-	1.03E-02	-	-	7.92E-04	-	-	1.03E-02
2172	573500.00	4173000.00	WORKER	-	-	1.07E-02	-	-	7.79E-04	-	-	1.07E-02
2173	573500.00	4172750.00	WORKER	-	-	1.08E-02	-	-	7.51E-04	-	-	1.08E-02
2174	573500.00	4172500.00	WORKER	-	-	1.07E-02	-	-	7.08E-04	-	-	1.07E-02
2175	573500.00	4172250.00	WORKER	-	-	1.03E-02	-	-	6.56E-04	-	-	1.03E-02
2176	573500.00	4172000.00	WORKER	-	-	9.74E-03	-	-	5.99E-04	-	-	9.74E-03
2177	573500.00	4171750.00	RESIDENTIAL	8.92E-03	-	-	5.52E-04	-	-	8.92E-03	-	-
2178	573500.00	4171500.00	RECREATIONAL	-	-	8.06E-03	-	-	5.06E-04	-	-	-
2179	573500.00	4171250.00	RECREATIONAL	-	-	7.25E-03	-	-	4.71E-04	-	-	-
2180	573500.00	4171000.00	RECREATIONAL	-	-	6.56E-03	-	-	4.39E-04	-	-	-
2181	573500.00	4170750.00	RECREATIONAL	-	-	5.68E-03	-	-	4.14E-04	-	-	-
2182	573500.00	4170500.00	RECREATIONAL	-	-	4.88E-03	-	-	3.92E-04	-	-	-
2508	565750.00	4176750.00	RESIDENTIAL	3.83E-03	-	-	3.29E-04	-	-	3.83E-03	-	-
2509	565750.00	4177000.00	RESIDENTIAL	3.42E-03	-	-	3.09E-04	-	-	3.42E-03	-	-
2510	565750.00	4177250.00	RESIDENTIAL	3.15E-03	-	-	2.92E-04	-	-	3.15E-03	-	-
2511	565750.00	4177500.00	RESIDENTIAL	2.92E-03	-	-	2.74E-04	-	-	2.92E-03	-	-
2512	565750.00	4177750.00	RESIDENTIAL	2.91E-03	-	-	2.55E-04	-	-	2.91E-03	-	-
2513	565750.00	4178000.00	RESIDENTIAL	2.96E-03	-	-	2.33E-04	-	-	2.96E-03	-	-
2517	565750.00	4179000.00	WORKER	-	-	2.17E-03	-	-	1.63E-04	-	-	2.17E-03
2518	565750.00	4179250.00	WORKER	-	-	2.03E-03	-	-	1.52E-04	-	-	2.03E-03
2519	565750.00	4179500.00	WORKER	-	-	1.92E-03	-	-	1.37E-04	-	-	1.92E-03
2520	565750.00	4179750.00	HOSPITAL	1.80E-03	-	1.80E-03	1.29E-04	-	1.29E-04	1.80E-03	-	1.80E-03
2521	565750.00	4180000.00	RESIDENTIAL	1.66E-03	-	-	1.19E-04	-	-	1.66E-03	-	-
2522	565750.00	4180250.00	RESIDENTIAL	1.55E-03	-	-	1.13E-04	-	-	1.55E-03	-	-
2523	565750.00	4180500.00	RESIDENTIAL	1.43E-03	-	-	1.02E-04	-	-	1.43E-03	-	-
2540	565500.00	4177000.00	RESIDENTIAL	3.30E-03	-	-	2.86E-04	-	-	3.30E-03	-	-
2541	565500.00	4177250.00	RESIDENTIAL	2.95E-03	-	-	2.72E-04	-	-	2.95E-03	-	-
2542	565500.00	4177500.00	RESIDENTIAL	2.78E-03	-	-	2.57E-04	-	-	2.78E-03	-	-
2543	565500.00	4177750.00	RESIDENTIAL	2.58E-03	-	-	2.38E-04	-	-	2.58E-03	-	-
2548	565500.00	4179000.00	RECREATIONAL	-	-	2.13E-03	-	-	1.60E-04	-	-	-
2549	565500.00	4179250.00	RESIDENTIAL	1.99E-03	-	-	1.46E-04	-	-	1.99E-03	-	-
2550	565500.00	4179500.00	RESIDENTIAL	1.87E-03	-	-	1.36E-04	-	-	1.87E-03	-	-
2551	565500.00	4179750.00	RESIDENTIAL	1.77E-03	-	-	1.29E-04	-	-	1.77E-03	-	-
2552	565500.00	4180000.00	RESIDENTIAL	1.66E-03	-	-	1.19E-04	-	-	1.66E-03	-	-
2553	565500.00	4180250.00	RESIDENTIAL	1.58E-03	-	-	1.08E-04	-	-	1.58E-03	-	-
2554	565500.00	4180500.00	RESIDENTIAL	1.49E-03	-	-	1.02E-04	-	-	1.49E-03	-	-
2572	565250.00	4177250.00	RESIDENTIAL	2.88E-03	-	-	2.49E-04	-	-	2.88E-03	-	-
2573	565250.00	4177500.00	RESIDENTIAL	2.60E-03	-	-	2.37E-04	-	-	2.60E-03	-	-
2580	565250.00	4179250.00	RESIDENTIAL	1.95E-03	-	-	1.44E-04	-	-	1.95E-03	-	-
2581	565250.00	4179500.00	RESIDENTIAL	1.83E-03	-	-	1.34E-04	-	-	1.83E-03	-	-
2582	565250.00	4179750.00	RESIDENTIAL	1.73E-03	-	-	1.24E-04	-	-	1.73E-03	-	-
2583	565250.00	4180000.00	RESIDENTIAL	1.63E-03	-	-	1.17E-04	-	-	1.63E-03	-	-
2584	565250.00	4180250.00	RESIDENTIAL	1.55E-03	-	-	1.06E-04	-	-	1.55E-03	-	-
2585	565250.00	4180500.00	RESIDENTIAL	1.48E-03	-	-	9.99E-05	-	-	1.48E-03	-	-
2611	565000.00	4179250.00	RECREATIONAL	-	-	1.91E-03	-	-	1.41E-04	-	-	-
2612	565000.00	4179500.00	SCHOOL	1.80E-03	1.80E-03	1.80E-03	1.31E-04	1.31E-04	1.31E-04	1.80E-03	1.80E-03	1.80E-03
2613	565000.00	4179750.00	RESIDENTIAL	1.69E-03	-	-	1.22E-04	-	-	1.69E-03	-	-
2614	565000.00	4180000.00	RESIDENTIAL	1.59E-03	-	-	1.15E-04	-	-	1.59E-03	-	-
2615	565000.00	4180250.00	RESIDENTIAL	1.51E-03	-	-	1.02E-04	-	-	1.51E-03	-	-
2616	565000.00	4180500.00	RESIDENTIAL	1.44E-03	-	-	9.77E-05	-	-	1.44E-03	-	-
2643	564750.00	4179500.00	RESIDENTIAL	1.75E-03	-	-	1.29E-04	-	-	1.75E-03	-	-
2644	564750.00	4179750.00	RESIDENTIAL	1.65E-03	-	-	1.22E-04	-	-	1.65E-03	-	-
2645	564750.00	4180000.00	RESIDENTIAL	1.56E-03	-	-	1.11E-04	-	-	1.56E-03	-	-
2646	564750.00	4180250.00	RESIDENTIAL	1.48E-03	-	-	1.02E-04	-	-	1.48E-03	-	-
2647	564750.00	4180500.00	RESIDENTIAL	1.41E-03	-	-	9.57E-05	-	-	1.41E-03	-	-
2674	564500.00	4179500.00	RECREATIONAL	-	-	1.70E-03	-	-	1.29E-04	-	-	-
2675	564500.00	4179750.00	RESIDENTIAL	1.62E-03	-	-	1.17E-04	-	-	1.62E-03	-	-
2676	564500.00	4180000.00	RESIDENTIAL	1.54E-03	-	-	1.10E-04	-	-	1.54E-03	-	-
2677	564500.00	4180250.00	RESIDENTIAL	1.46E-03	-	-	1.04E-04	-	-	1.46E-03	-	-
2678	564500.00	4180500.00	RESIDENTIAL	1.38E-03	-	-	9.57E-05	-	-	1.38E-03	-	-
2703	564250.00	4179000.00	RESIDENTIAL	1.57E-03	-	-	1.42E-04	-	-	1.57E-03	-	-
2704	564250.00	4179250.00	RESIDENTIAL	1.57E-03	-	-	1.35E-04	-	-	1.57E-03	-	-

**OAK Terminal Modernization**

**Table 2-24. Chronic Non-Cancer Hazard Indices**

**Combined Construction & Operations**

	Construction + Operations			Construction Only			Operations Only		
	Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI		
Maximum->	2.27E-02	1.11E-02	8.13E-02	1.83E-03	1.10E-03	2.24E-02	2.27E-02	1.11E-02	5.49E-02
Minimum->	2.39E-04	9.12E-04	6.08E-04	2.60E-05	6.70E-05	6.70E-05	-4.96E-03	9.12E-04	-1.58E-02
Max ReclD->	1923	2104	3296	1953	2006	3296	1923	2104	1365
Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
2705	564250.00	4179500.00	RESIDENTIAL	1.63E-03	-	-	1.24E-04	-	-	1.63E-03	-	-
2706	564250.00	4179750.00	RESIDENTIAL	1.57E-03	-	-	1.17E-04	-	-	1.57E-03	-	-
2707	564250.00	4180000.00	RESIDENTIAL	1.49E-03	-	-	1.08E-04	-	-	1.49E-03	-	-
2708	564250.00	4180250.00	RESIDENTIAL	1.42E-03	-	-	1.00E-04	-	-	1.42E-03	-	-
2709	564250.00	4180500.00	RESIDENTIAL	1.35E-03	-	-	9.35E-05	-	-	1.35E-03	-	-
2734	564000.00	4179000.00	RESIDENTIAL	1.54E-03	-	-	1.36E-04	-	-	1.54E-03	-	-
2735	564000.00	4179250.00	RESIDENTIAL	1.44E-03	-	-	1.29E-04	-	-	1.44E-03	-	-
2736	564000.00	4179500.00	RESIDENTIAL	1.44E-03	-	-	1.23E-04	-	-	1.44E-03	-	-
2737	564000.00	4179750.00	RESIDENTIAL	1.49E-03	-	-	1.13E-04	-	-	1.49E-03	-	-
2738	564000.00	4180000.00	RESIDENTIAL	1.45E-03	-	-	1.07E-04	-	-	1.45E-03	-	-
2739	564000.00	4180250.00	RESIDENTIAL	1.39E-03	-	-	9.95E-05	-	-	1.39E-03	-	-
2740	564000.00	4180500.00	RESIDENTIAL	1.32E-03	-	-	9.37E-05	-	-	1.32E-03	-	-
2765	563750.00	4179000.00	RESIDENTIAL	1.49E-03	-	-	1.30E-04	-	-	1.49E-03	-	-
2766	563750.00	4179250.00	RESIDENTIAL	1.41E-03	-	-	1.24E-04	-	-	1.41E-03	-	-
2767	563750.00	4179500.00	RESIDENTIAL	1.33E-03	-	-	1.18E-04	-	-	1.33E-03	-	-
2768	563750.00	4179750.00	RESIDENTIAL	1.32E-03	-	-	1.11E-04	-	-	1.32E-03	-	-
2769	563750.00	4180000.00	RESIDENTIAL	1.37E-03	-	-	1.05E-04	-	-	1.37E-03	-	-
2770	563750.00	4180250.00	RESIDENTIAL	1.35E-03	-	-	9.95E-05	-	-	1.35E-03	-	-
2771	563750.00	4180500.00	RESIDENTIAL	1.29E-03	-	-	9.35E-05	-	-	1.29E-03	-	-
2796	563500.00	4179000.00	RESIDENTIAL	1.46E-03	-	-	1.24E-04	-	-	1.46E-03	-	-
2797	563500.00	4179250.00	RESIDENTIAL	1.39E-03	-	-	1.20E-04	-	-	1.39E-03	-	-
2798	563500.00	4179500.00	RESIDENTIAL	1.31E-03	-	-	1.16E-04	-	-	1.31E-03	-	-
2799	563500.00	4179750.00	RESIDENTIAL	1.23E-03	-	-	1.10E-04	-	-	1.23E-03	-	-
2800	563500.00	4180000.00	RESIDENTIAL	1.23E-03	-	-	1.04E-04	-	-	1.23E-03	-	-
2801	563500.00	4180250.00	RESIDENTIAL	1.27E-03	-	-	9.81E-05	-	-	1.27E-03	-	-
2802	563500.00	4180500.00	RESIDENTIAL	1.25E-03	-	-	9.35E-05	-	-	1.25E-03	-	-
2803	567000.00	4180750.00	WORKER	-	-	1.11E-03	-	-	1.01E-04	-	-	1.11E-03
2805	567500.00	4180750.00	WORKER	-	-	1.24E-03	-	-	9.61E-05	-	-	1.24E-03
2806	567750.00	4180750.00	WORKER	-	-	1.24E-03	-	-	9.61E-05	-	-	1.24E-03
2807	568000.00	4180750.00	WORKER	-	-	1.19E-03	-	-	9.69E-05	-	-	1.19E-03
2808	568250.00	4180750.00	WORKER	-	-	1.11E-03	-	-	9.69E-05	-	-	1.11E-03
2809	568500.00	4180750.00	WORKER	-	-	1.06E-03	-	-	9.72E-05	-	-	1.06E-03
2810	568750.00	4180750.00	WORKER	-	-	1.07E-03	-	-	9.72E-05	-	-	1.07E-03
2811	569000.00	4180750.00	WORKER	-	-	8.32E-04	-	-	9.72E-05	-	-	8.32E-04
2812	569250.00	4180750.00	WORKER	-	-	6.08E-04	-	-	9.58E-05	-	-	6.08E-04
2813	569500.00	4180750.00	RESIDENTIAL	7.03E-04	-	-	9.59E-05	-	-	7.03E-04	-	-
2814	569750.00	4180750.00	RESIDENTIAL	9.69E-04	-	-	1.00E-04	-	-	9.69E-04	-	-
2815	570000.00	4180750.00	RESIDENTIAL	1.09E-03	-	-	1.03E-04	-	-	1.09E-03	-	-
2816	570250.00	4180750.00	RESIDENTIAL	1.12E-03	-	-	1.01E-04	-	-	1.12E-03	-	-
2817	570500.00	4180750.00	RESIDENTIAL	1.50E-03	-	-	1.08E-04	-	-	1.50E-03	-	-
2818	570750.00	4180750.00	RESIDENTIAL	1.63E-03	-	-	1.11E-04	-	-	1.63E-03	-	-
2819	571000.00	4180750.00	RESIDENTIAL	1.43E-03	-	-	1.11E-04	-	-	1.43E-03	-	-
2820	571250.00	4180750.00	RESIDENTIAL	1.19E-03	-	-	1.04E-04	-	-	1.19E-03	-	-
2821	571500.00	4180750.00	RESIDENTIAL	1.09E-03	-	-	1.03E-04	-	-	1.09E-03	-	-
2822	571750.00	4180750.00	RESIDENTIAL	9.96E-04	-	-	1.01E-04	-	-	9.96E-04	-	-
2823	572000.00	4180750.00	RESIDENTIAL	9.01E-04	-	-	1.01E-04	-	-	9.01E-04	-	-
2824	572250.00	4180750.00	RESIDENTIAL	8.22E-04	-	-	1.01E-04	-	-	8.22E-04	-	-
2825	572500.00	4180750.00	RESIDENTIAL	8.08E-04	-	-	1.02E-04	-	-	8.08E-04	-	-
2826	572750.00	4180750.00	RESIDENTIAL	8.23E-04	-	-	9.90E-05	-	-	8.23E-04	-	-
2827	573000.00	4180750.00	RESIDENTIAL	9.73E-04	-	-	1.02E-04	-	-	9.73E-04	-	-
2828	573250.00	4180750.00	RESIDENTIAL	1.06E-03	-	-	8.57E-05	-	-	1.06E-03	-	-
2829	573500.00	4180750.00	RESIDENTIAL	1.03E-03	-	-	7.10E-05	-	-	1.03E-03	-	-
2830	567000.00	4181000.00	WORKER	-	-	1.06E-03	-	-	9.45E-05	-	-	1.06E-03
2831	567250.00	4181000.00	WORKER	-	-	1.13E-03	-	-	9.32E-05	-	-	1.13E-03
2832	567500.00	4181000.00	WORKER	-	-	1.18E-03	-	-	9.12E-05	-	-	1.18E-03
2833	567750.00	4181000.00	WORKER	-	-	1.20E-03	-	-	8.99E-05	-	-	1.20E-03
2834	568000.00	4181000.00	WORKER	-	-	1.12E-03	-	-	8.58E-05	-	-	1.12E-03
2835	568250.00	4181000.00	WORKER	-	-	1.02E-03	-	-	8.71E-05	-	-	1.02E-03
2836	568500.00	4181000.00	WORKER	-	-	9.89E-04	-	-	8.71E-05	-	-	9.89E-04
2837	568750.00	4181000.00	RESIDENTIAL	1.01E-03	-	-	8.84E-05	-	-	1.01E-03	-	-
2838	569000.00	4181000.00	WORKER	-	-	7.64E-04	-	-	8.71E-05	-	-	7.64E-04
2839	569250.00	4181000.00	RESIDENTIAL	5.46E-04	-	-	8.51E-05	-	-	5.46E-04	-	-
2840	569500.00	4181000.00	RESIDENTIAL	6.46E-04	-	-	8.71E-05	-	-	6.46E-04	-	-
2841	569750.00	4181000.00	RESIDENTIAL	9.24E-04	-	-	9.02E-05	-	-	9.24E-04	-	-

OAK Terminal Modernization

Table 2-24. Chronic Non-Cancer Hazard Indices

Combined Construction & Operations

	Construction + Operations			Construction Only			Operations Only		
	Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI		
Maximum->	2.27E-02	1.11E-02	8.13E-02	1.83E-03	1.10E-03	2.24E-02	2.27E-02	1.11E-02	5.49E-02
Minimum->	2.39E-04	9.12E-04	6.08E-04	2.60E-05	6.70E-05	6.70E-05	-4.96E-03	9.12E-04	-1.58E-02
Max ReclD->	1923	2104	3296	1953	2006	3296	1923	2104	1365
Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
2842	570000.00	4181000.00	RESIDENTIAL	1.04E-03	-	-	9.28E-05	-	-	1.04E-03	-	-
2843	570250.00	4181000.00	RESIDENTIAL	1.01E-03	-	-	9.44E-05	-	-	1.01E-03	-	-
2844	570500.00	4181000.00	RESIDENTIAL	1.37E-03	-	-	9.57E-05	-	-	1.37E-03	-	-
2845	570750.00	4181000.00	RESIDENTIAL	1.52E-03	-	-	9.92E-05	-	-	1.52E-03	-	-
2846	571000.00	4181000.00	RESIDENTIAL	1.39E-03	-	-	9.99E-05	-	-	1.39E-03	-	-
2847	571250.00	4181000.00	RESIDENTIAL	1.15E-03	-	-	9.66E-05	-	-	1.15E-03	-	-
2848	571500.00	4181000.00	RESIDENTIAL	1.02E-03	-	-	9.66E-05	-	-	1.02E-03	-	-
2849	571750.00	4181000.00	RESIDENTIAL	1.02E-03	-	-	9.24E-05	-	-	1.02E-03	-	-
2850	572000.00	4181000.00	RESIDENTIAL	8.89E-04	-	-	9.44E-05	-	-	8.89E-04	-	-
2851	572250.00	4181000.00	RESIDENTIAL	7.90E-04	-	-	9.44E-05	-	-	7.90E-04	-	-
2852	572500.00	4181000.00	RESIDENTIAL	7.42E-04	-	-	9.44E-05	-	-	7.42E-04	-	-
2853	572750.00	4181000.00	RESIDENTIAL	7.20E-04	-	-	8.82E-05	-	-	7.20E-04	-	-
2854	573000.00	4181000.00	RESIDENTIAL	6.63E-04	-	-	6.56E-05	-	-	6.63E-04	-	-
2855	573250.00	4181000.00	RESIDENTIAL	8.30E-04	-	-	7.10E-05	-	-	8.30E-04	-	-
2856	573500.00	4181000.00	RESIDENTIAL	9.92E-04	-	-	7.10E-05	-	-	9.92E-04	-	-
2857	567000.00	4181250.00	WORKER	-	-	1.03E-03	-	-	8.45E-05	-	-	1.03E-03
2858	567250.00	4181250.00	WORKER	-	-	1.09E-03	-	-	8.45E-05	-	-	1.09E-03
2859	567500.00	4181250.00	RESIDENTIAL	1.15E-03	-	-	8.13E-05	-	-	1.15E-03	-	-
2860	567750.00	4181250.00	WORKER	-	-	1.14E-03	-	-	7.89E-05	-	-	1.14E-03
2861	568000.00	4181250.00	WORKER	-	-	1.04E-03	-	-	7.89E-05	-	-	1.04E-03
2862	568250.00	4181250.00	WORKER	-	-	9.52E-04	-	-	8.02E-05	-	-	9.52E-04
2863	568500.00	4181250.00	WORKER	-	-	9.20E-04	-	-	8.14E-05	-	-	9.20E-04
2864	568750.00	4181250.00	RESIDENTIAL	9.44E-04	-	-	8.14E-05	-	-	9.44E-04	-	-
2865	569000.00	4181250.00	RESIDENTIAL	6.99E-04	-	-	8.24E-05	-	-	6.99E-04	-	-
2866	569250.00	4181250.00	RESIDENTIAL	4.96E-04	-	-	8.01E-05	-	-	4.96E-04	-	-
2867	569500.00	4181250.00	RESIDENTIAL	5.68E-04	-	-	8.01E-05	-	-	5.68E-04	-	-
2868	569750.00	4181250.00	RESIDENTIAL	8.83E-04	-	-	8.33E-05	-	-	8.83E-04	-	-
2869	570000.00	4181250.00	RESIDENTIAL	9.57E-04	-	-	8.11E-05	-	-	9.57E-04	-	-
2870	570250.00	4181250.00	RESIDENTIAL	9.67E-04	-	-	8.71E-05	-	-	9.67E-04	-	-
2871	570500.00	4181250.00	RESIDENTIAL	1.18E-03	-	-	8.49E-05	-	-	1.18E-03	-	-
2872	570750.00	4181250.00	RESIDENTIAL	1.42E-03	-	-	9.10E-05	-	-	1.42E-03	-	-
2873	571000.00	4181250.00	RESIDENTIAL	1.33E-03	-	-	8.97E-05	-	-	1.33E-03	-	-
2874	571250.00	4181250.00	RESIDENTIAL	1.08E-03	-	-	8.97E-05	-	-	1.08E-03	-	-
2875	571500.00	4181250.00	RESIDENTIAL	9.45E-04	-	-	8.97E-05	-	-	9.45E-04	-	-
2876	571750.00	4181250.00	RESIDENTIAL	1.01E-03	-	-	8.64E-05	-	-	1.01E-03	-	-
2877	572000.00	4181250.00	RESIDENTIAL	8.82E-04	-	-	8.84E-05	-	-	8.82E-04	-	-
2878	572250.00	4181250.00	RESIDENTIAL	7.76E-04	-	-	8.71E-05	-	-	7.76E-04	-	-
2879	572500.00	4181250.00	RESIDENTIAL	6.59E-04	-	-	8.24E-05	-	-	6.59E-04	-	-
2880	572750.00	4181250.00	RESIDENTIAL	5.77E-04	-	-	6.09E-05	-	-	5.77E-04	-	-
2881	573000.00	4181250.00	RESIDENTIAL	6.12E-04	-	-	6.56E-05	-	-	6.12E-04	-	-
2882	573250.00	4181250.00	RESIDENTIAL	6.98E-04	-	-	7.10E-05	-	-	6.98E-04	-	-
2883	573500.00	4181250.00	RESIDENTIAL	8.70E-04	-	-	6.97E-05	-	-	8.70E-04	-	-
2884	567000.00	4181500.00	WORKER	-	-	9.85E-04	-	-	7.98E-05	-	-	9.85E-04
2885	567250.00	4181500.00	WORKER	-	-	1.06E-03	-	-	7.85E-05	-	-	1.06E-03
2886	567500.00	4181500.00	WORKER	-	-	1.11E-03	-	-	7.43E-05	-	-	1.11E-03
2887	567750.00	4181500.00	WORKER	-	-	1.08E-03	-	-	7.41E-05	-	-	1.08E-03
2888	568000.00	4181500.00	WORKER	-	-	9.65E-04	-	-	7.41E-05	-	-	9.65E-04
2889	568250.00	4181500.00	WORKER	-	-	8.93E-04	-	-	7.74E-05	-	-	8.93E-04
2890	568500.00	4181500.00	RESIDENTIAL	8.73E-04	-	-	7.87E-05	-	-	8.73E-04	-	-
2891	568750.00	4181500.00	RESIDENTIAL	8.88E-04	-	-	7.67E-05	-	-	8.88E-04	-	-
2892	569000.00	4181500.00	RESIDENTIAL	6.46E-04	-	-	7.67E-05	-	-	6.46E-04	-	-
2893	569250.00	4181500.00	RESIDENTIAL	3.97E-04	-	-	7.20E-05	-	-	3.97E-04	-	-
2894	569500.00	4181500.00	RESIDENTIAL	4.82E-04	-	-	7.20E-05	-	-	4.82E-04	-	-
2895	569750.00	4181500.00	RESIDENTIAL	8.31E-04	-	-	7.85E-05	-	-	8.31E-04	-	-
2896	570000.00	4181500.00	RESIDENTIAL	9.08E-04	-	-	7.85E-05	-	-	9.08E-04	-	-
2897	570250.00	4181500.00	RESIDENTIAL	8.94E-04	-	-	7.77E-05	-	-	8.94E-04	-	-
2898	570500.00	4181500.00	RESIDENTIAL	1.02E-03	-	-	7.37E-05	-	-	1.02E-03	-	-
2899	570750.00	4181500.00	RESIDENTIAL	1.26E-03	-	-	8.02E-05	-	-	1.26E-03	-	-
2900	571000.00	4181500.00	RESIDENTIAL	1.23E-03	-	-	8.22E-05	-	-	1.23E-03	-	-
2901	571250.00	4181500.00	RESIDENTIAL	1.03E-03	-	-	8.24E-05	-	-	1.03E-03	-	-
2902	571500.00	4181500.00	RESIDENTIAL	8.62E-04	-	-	8.24E-05	-	-	8.62E-04	-	-
2903	571750.00	4181500.00	RESIDENTIAL	9.13E-04	-	-	7.76E-05	-	-	9.13E-04	-	-
2904	572000.00	4181500.00	RESIDENTIAL	9.24E-04	-	-	8.24E-05	-	-	9.24E-04	-	-
2905	572250.00	4181500.00	RESIDENTIAL	7.10E-04	-	-	6.77E-05	-	-	7.10E-04	-	-

**OAK Terminal Modernization**

**Table 2-24. Chronic Non-Cancer Hazard Indices**

**Combined Construction & Operations**

	Construction + Operations			Construction Only			Operations Only		
	Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI		
Maximum->	2.27E-02	1.11E-02	8.13E-02	1.83E-03	1.10E-03	2.24E-02	2.27E-02	1.11E-02	5.49E-02
Minimum->	2.39E-04	9.12E-04	6.08E-04	2.60E-05	6.70E-05	6.70E-05	-4.96E-03	9.12E-04	-1.58E-02
Max ReclD->	1923	2104	3296	1953	2006	3296	1923	2104	1365
Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child	School Child	Adult Worker	Adult Resident & Child	School Child	Adult Worker	Adult Resident & Child	School Child	Adult Worker
2906	572500.00	4181500.00	RESIDENTIAL	5.84E-04	-	-	6.09E-05	-	-	5.84E-04	-	-
2907	572750.00	4181500.00	RESIDENTIAL	5.54E-04	-	-	6.23E-05	-	-	5.54E-04	-	-
2908	573000.00	4181500.00	RESIDENTIAL	5.85E-04	-	-	6.56E-05	-	-	5.85E-04	-	-
2909	573250.00	4181500.00	RESIDENTIAL	6.01E-04	-	-	6.56E-05	-	-	6.01E-04	-	-
2910	573500.00	4181500.00	RESIDENTIAL	6.94E-04	-	-	6.29E-05	-	-	6.94E-04	-	-
2911	567000.00	4181750.00	WORKER	-	-	9.57E-04	-	-	7.43E-05	-	-	9.57E-04
2912	567250.00	4181750.00	WORKER	-	-	1.03E-03	-	-	7.30E-05	-	-	1.03E-03
2913	567500.00	4181750.00	WORKER	-	-	1.06E-03	-	-	6.96E-05	-	-	1.06E-03
2914	567750.00	4181750.00	RESIDENTIAL	1.01E-03	-	-	6.94E-05	-	-	1.01E-03	-	-
2915	568000.00	4181750.00	RESIDENTIAL	9.11E-04	-	-	7.27E-05	-	-	9.11E-04	-	-
2916	568250.00	4181750.00	RESIDENTIAL	8.41E-04	-	-	7.40E-05	-	-	8.41E-04	-	-
2917	568500.00	4181750.00	RESIDENTIAL	8.21E-04	-	-	7.40E-05	-	-	8.21E-04	-	-
2918	568750.00	4181750.00	RESIDENTIAL	8.28E-04	-	-	7.40E-05	-	-	8.28E-04	-	-
2919	569000.00	4181750.00	RESIDENTIAL	5.88E-04	-	-	7.07E-05	-	-	5.88E-04	-	-
2920	569250.00	4181750.00	RESIDENTIAL	3.58E-04	-	-	6.72E-05	-	-	3.58E-04	-	-
2921	569500.00	4181750.00	RESIDENTIAL	4.41E-04	-	-	6.92E-05	-	-	4.41E-04	-	-
2922	569750.00	4181750.00	RESIDENTIAL	7.95E-04	-	-	7.25E-05	-	-	7.95E-04	-	-
2923	570000.00	4181750.00	RESIDENTIAL	8.85E-04	-	-	7.51E-05	-	-	8.85E-04	-	-
2924	570250.00	4181750.00	RESIDENTIAL	8.13E-04	-	-	6.56E-05	-	-	8.13E-04	-	-
2925	570500.00	4181750.00	RESIDENTIAL	8.46E-04	-	-	6.56E-05	-	-	8.46E-04	-	-
2926	570750.00	4181750.00	RESIDENTIAL	1.09E-03	-	-	6.82E-05	-	-	1.09E-03	-	-
2927	571000.00	4181750.00	RESIDENTIAL	1.09E-03	-	-	6.82E-05	-	-	1.09E-03	-	-
2928	571250.00	4181750.00	RESIDENTIAL	9.46E-04	-	-	6.77E-05	-	-	9.46E-04	-	-
2929	571500.00	4181750.00	RESIDENTIAL	7.64E-04	-	-	7.10E-05	-	-	7.64E-04	-	-
2930	571750.00	4181750.00	RESIDENTIAL	8.00E-04	-	-	6.44E-05	-	-	8.00E-04	-	-
2931	572000.00	4181750.00	RESIDENTIAL	9.33E-04	-	-	7.76E-05	-	-	9.33E-04	-	-
2932	572250.00	4181750.00	RESIDENTIAL	7.76E-04	-	-	7.64E-05	-	-	7.76E-04	-	-
2933	572500.00	4181750.00	RESIDENTIAL	6.32E-04	-	-	6.44E-05	-	-	6.32E-04	-	-
2934	572750.00	4181750.00	RESIDENTIAL	5.33E-04	-	-	6.09E-05	-	-	5.33E-04	-	-
2935	573000.00	4181750.00	RESIDENTIAL	5.09E-04	-	-	5.63E-05	-	-	5.09E-04	-	-
2936	573250.00	4181750.00	RESIDENTIAL	4.91E-04	-	-	5.23E-05	-	-	4.91E-04	-	-
2937	573500.00	4181750.00	RESIDENTIAL	5.37E-04	-	-	5.36E-05	-	-	5.37E-04	-	-
2938	567000.00	4182000.00	WORKER	-	-	9.30E-04	-	-	6.97E-05	-	-	9.30E-04
2939	567250.00	4182000.00	WORKER	-	-	9.96E-04	-	-	6.83E-05	-	-	9.96E-04
2940	567500.00	4182000.00	RESIDENTIAL	1.02E-03	-	-	6.68E-05	-	-	1.02E-03	-	-
2941	567750.00	4182000.00	RESIDENTIAL	9.50E-04	-	-	6.68E-05	-	-	9.50E-04	-	-
2942	568000.00	4182000.00	RESIDENTIAL	8.43E-04	-	-	6.80E-05	-	-	8.43E-04	-	-
2943	568250.00	4182000.00	RESIDENTIAL	7.84E-04	-	-	6.92E-05	-	-	7.84E-04	-	-
2944	568500.00	4182000.00	RESIDENTIAL	7.71E-04	-	-	6.92E-05	-	-	7.71E-04	-	-
2945	568750.00	4182000.00	RESIDENTIAL	7.79E-04	-	-	6.92E-05	-	-	7.79E-04	-	-
2946	569000.00	4182000.00	RESIDENTIAL	5.35E-04	-	-	6.20E-05	-	-	5.35E-04	-	-
2947	569250.00	4182000.00	RESIDENTIAL	3.30E-04	-	-	6.07E-05	-	-	3.30E-04	-	-
2948	569500.00	4182000.00	RESIDENTIAL	3.93E-04	-	-	5.85E-05	-	-	3.93E-04	-	-
2949	569750.00	4182000.00	RESIDENTIAL	7.54E-04	-	-	6.18E-05	-	-	7.54E-04	-	-
2950	570000.00	4182000.00	RESIDENTIAL	8.31E-04	-	-	6.86E-05	-	-	8.31E-04	-	-
2951	570250.00	4182000.00	RESIDENTIAL	8.36E-04	-	-	6.79E-05	-	-	8.36E-04	-	-
2952	570500.00	4182000.00	RESIDENTIAL	8.36E-04	-	-	6.90E-05	-	-	8.36E-04	-	-
2953	570750.00	4182000.00	RESIDENTIAL	8.94E-04	-	-	5.96E-05	-	-	8.94E-04	-	-
2954	571000.00	4182000.00	RESIDENTIAL	9.38E-04	-	-	5.96E-05	-	-	9.38E-04	-	-
2955	571250.00	4182000.00	RESIDENTIAL	8.56E-04	-	-	5.96E-05	-	-	8.56E-04	-	-
2956	571500.00	4182000.00	RESIDENTIAL	7.88E-04	-	-	6.77E-05	-	-	7.88E-04	-	-
2957	571750.00	4182000.00	RESIDENTIAL	7.41E-04	-	-	6.79E-05	-	-	7.41E-04	-	-
2958	572000.00	4182000.00	RESIDENTIAL	9.00E-04	-	-	6.77E-05	-	-	9.00E-04	-	-
2959	572250.00	4182000.00	RESIDENTIAL	8.20E-04	-	-	6.77E-05	-	-	8.20E-04	-	-
2960	572500.00	4182000.00	RESIDENTIAL	6.06E-04	-	-	5.83E-05	-	-	6.06E-04	-	-
2961	572750.00	4182000.00	RESIDENTIAL	5.13E-04	-	-	5.49E-05	-	-	5.13E-04	-	-
2962	573000.00	4182000.00	RESIDENTIAL	4.31E-04	-	-	4.90E-05	-	-	4.31E-04	-	-
2963	573250.00	4182000.00	RESIDENTIAL	4.34E-04	-	-	4.90E-05	-	-	4.34E-04	-	-
2964	573500.00	4182000.00	RESIDENTIAL	4.37E-04	-	-	4.90E-05	-	-	4.37E-04	-	-
2965	567000.00	4182250.00	SCHOOL	9.12E-04	9.12E-04	9.12E-04	6.70E-05	6.70E-05	6.70E-05	9.12E-04	9.12E-04	9.12E-04
2966	567250.00	4182250.00	RESIDENTIAL	9.67E-04	-	-	6.36E-05	-	-	9.67E-04	-	-
2967	567500.00	4182250.00	RESIDENTIAL	9.76E-04	-	-	6.34E-05	-	-	9.76E-04	-	-
2968	567750.00	4182250.00	RESIDENTIAL	8.88E-04	-	-	5.94E-05	-	-	8.88E-04	-	-
2969	568000.00	4182250.00	RESIDENTIAL	8.03E-04	-	-	6.27E-05	-	-	8.03E-04	-	-

**OAK Terminal Modernization**

**Table 2-24. Chronic Non-Cancer Hazard Indices**

**Combined Construction & Operations**

	Construction + Operations			Construction Only			Operations Only		
	Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI		
Maximum->	2.27E-02	1.11E-02	8.13E-02	1.83E-03	1.10E-03	2.24E-02	2.27E-02	1.11E-02	5.49E-02
Minimum->	2.39E-04	9.12E-04	6.08E-04	2.60E-05	6.70E-05	6.70E-05	-4.96E-03	9.12E-04	-1.58E-02
Max ReclD->	1923	2104	3296	1953	2006	3296	1923	2104	1365
Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
2970	568250.00	4182250.00	RESIDENTIAL	7.48E-04	-	-	6.40E-05	-	-	7.48E-04	-	-
2971	568500.00	4182250.00	RESIDENTIAL	7.19E-04	-	-	6.38E-05	-	-	7.19E-04	-	-
2972	568750.00	4182250.00	RESIDENTIAL	7.31E-04	-	-	6.06E-05	-	-	7.31E-04	-	-
2973	569000.00	4182250.00	RESIDENTIAL	5.08E-04	-	-	6.06E-05	-	-	5.08E-04	-	-
2974	569250.00	4182250.00	RESIDENTIAL	3.11E-04	-	-	5.73E-05	-	-	3.11E-04	-	-
2975	569500.00	4182250.00	RESIDENTIAL	3.73E-04	-	-	5.52E-05	-	-	3.73E-04	-	-
2976	569750.00	4182250.00	RESIDENTIAL	7.09E-04	-	-	6.05E-05	-	-	7.09E-04	-	-
2977	570000.00	4182250.00	RESIDENTIAL	7.91E-04	-	-	6.31E-05	-	-	7.91E-04	-	-
2978	570250.00	4182250.00	RESIDENTIAL	7.92E-04	-	-	6.51E-05	-	-	7.92E-04	-	-
2979	570500.00	4182250.00	RESIDENTIAL	7.77E-04	-	-	6.56E-05	-	-	7.77E-04	-	-
2980	570750.00	4182250.00	RESIDENTIAL	1.00E-03	-	-	6.56E-05	-	-	1.00E-03	-	-
2981	571000.00	4182250.00	RESIDENTIAL	9.44E-04	-	-	5.76E-05	-	-	9.44E-04	-	-
2982	571250.00	4182250.00	RESIDENTIAL	9.85E-04	-	-	6.42E-05	-	-	9.85E-04	-	-
2983	571500.00	4182250.00	RESIDENTIAL	7.99E-04	-	-	6.64E-05	-	-	7.99E-04	-	-
2984	571750.00	4182250.00	RESIDENTIAL	6.54E-04	-	-	6.11E-05	-	-	6.54E-04	-	-
2985	572000.00	4182250.00	RESIDENTIAL	7.84E-04	-	-	5.63E-05	-	-	7.84E-04	-	-
2986	572250.00	4182250.00	RESIDENTIAL	7.81E-04	-	-	5.63E-05	-	-	7.81E-04	-	-
2987	572500.00	4182250.00	RESIDENTIAL	6.37E-04	-	-	5.23E-05	-	-	6.37E-04	-	-
2988	572750.00	4182250.00	RESIDENTIAL	4.96E-04	-	-	4.90E-05	-	-	4.96E-04	-	-
2989	573000.00	4182250.00	RESIDENTIAL	4.01E-04	-	-	4.63E-05	-	-	4.01E-04	-	-
2990	573250.00	4182250.00	RESIDENTIAL	3.78E-04	-	-	4.43E-05	-	-	3.78E-04	-	-
2991	573500.00	4182250.00	RESIDENTIAL	4.11E-04	-	-	4.76E-05	-	-	4.11E-04	-	-
2992	567000.00	4182500.00	RESIDENTIAL	8.88E-04	-	-	5.80E-05	-	-	8.88E-04	-	-
2993	567250.00	4182500.00	RESIDENTIAL	9.71E-04	-	-	5.39E-05	-	-	9.71E-04	-	-
2994	567500.00	4182500.00	RESIDENTIAL	9.36E-04	-	-	5.47E-05	-	-	9.36E-04	-	-
2995	567750.00	4182500.00	RESIDENTIAL	8.19E-04	-	-	5.67E-05	-	-	8.19E-04	-	-
2996	568000.00	4182500.00	RESIDENTIAL	7.43E-04	-	-	5.72E-05	-	-	7.43E-04	-	-
2997	568250.00	4182500.00	RESIDENTIAL	6.91E-04	-	-	5.85E-05	-	-	6.91E-04	-	-
2998	568500.00	4182500.00	RESIDENTIAL	6.76E-04	-	-	5.85E-05	-	-	6.76E-04	-	-
2999	568750.00	4182500.00	RESIDENTIAL	6.73E-04	-	-	5.70E-05	-	-	6.73E-04	-	-
3000	569000.00	4182500.00	RESIDENTIAL	4.77E-04	-	-	5.52E-05	-	-	4.77E-04	-	-
3001	569250.00	4182500.00	RESIDENTIAL	2.90E-04	-	-	5.39E-05	-	-	2.90E-04	-	-
3002	569500.00	4182500.00	RESIDENTIAL	3.49E-04	-	-	5.38E-05	-	-	3.49E-04	-	-
3003	569750.00	4182500.00	RESIDENTIAL	6.73E-04	-	-	5.70E-05	-	-	6.73E-04	-	-
3004	570000.00	4182500.00	RESIDENTIAL	7.53E-04	-	-	5.83E-05	-	-	7.53E-04	-	-
3005	570250.00	4182500.00	RESIDENTIAL	7.31E-04	-	-	5.83E-05	-	-	7.31E-04	-	-
3006	570500.00	4182500.00	RESIDENTIAL	7.42E-04	-	-	6.09E-05	-	-	7.42E-04	-	-
3007	570750.00	4182500.00	RESIDENTIAL	9.00E-04	-	-	6.09E-05	-	-	9.00E-04	-	-
3008	571000.00	4182500.00	RESIDENTIAL	9.96E-04	-	-	6.09E-05	-	-	9.96E-04	-	-
3009	571250.00	4182500.00	RESIDENTIAL	8.75E-04	-	-	5.62E-05	-	-	8.75E-04	-	-
3010	571500.00	4182500.00	RESIDENTIAL	7.64E-04	-	-	5.96E-05	-	-	7.64E-04	-	-
3011	571750.00	4182500.00	RESIDENTIAL	5.86E-04	-	-	5.50E-05	-	-	5.86E-04	-	-
3012	572000.00	4182500.00	RESIDENTIAL	6.37E-04	-	-	4.43E-05	-	-	6.37E-04	-	-
3013	572250.00	4182500.00	RESIDENTIAL	7.55E-04	-	-	5.36E-05	-	-	7.55E-04	-	-
3014	572500.00	4182500.00	RESIDENTIAL	6.54E-04	-	-	5.23E-05	-	-	6.54E-04	-	-
3015	572750.00	4182500.00	RESIDENTIAL	5.46E-04	-	-	4.63E-05	-	-	5.46E-04	-	-
3016	573000.00	4182500.00	RESIDENTIAL	4.21E-04	-	-	4.30E-05	-	-	4.21E-04	-	-
3017	573250.00	4182500.00	RESIDENTIAL	3.47E-04	-	-	4.30E-05	-	-	3.47E-04	-	-
3018	573500.00	4182500.00	RESIDENTIAL	3.79E-04	-	-	4.30E-05	-	-	3.79E-04	-	-
3019	567000.00	4182750.00	RESIDENTIAL	8.68E-04	-	-	5.25E-05	-	-	8.68E-04	-	-
3020	567250.00	4182750.00	RESIDENTIAL	9.40E-04	-	-	5.12E-05	-	-	9.40E-04	-	-
3021	567500.00	4182750.00	RESIDENTIAL	8.74E-04	-	-	5.25E-05	-	-	8.74E-04	-	-
3022	567750.00	4182750.00	RESIDENTIAL	7.70E-04	-	-	5.47E-05	-	-	7.70E-04	-	-
3023	568000.00	4182750.00	RESIDENTIAL	6.79E-04	-	-	5.58E-05	-	-	6.79E-04	-	-
3024	568250.00	4182750.00	RESIDENTIAL	6.53E-04	-	-	5.70E-05	-	-	6.53E-04	-	-
3025	568500.00	4182750.00	RESIDENTIAL	6.37E-04	-	-	5.70E-05	-	-	6.37E-04	-	-
3026	568750.00	4182750.00	RESIDENTIAL	6.38E-04	-	-	5.38E-05	-	-	6.38E-04	-	-
3027	569000.00	4182750.00	RESIDENTIAL	4.50E-04	-	-	5.05E-05	-	-	4.50E-04	-	-
3028	569250.00	4182750.00	RESIDENTIAL	2.76E-04	-	-	5.05E-05	-	-	2.76E-04	-	-
3029	569500.00	4182750.00	RESIDENTIAL	3.24E-04	-	-	5.25E-05	-	-	3.24E-04	-	-
3030	569750.00	4182750.00	RESIDENTIAL	6.30E-04	-	-	5.58E-05	-	-	6.30E-04	-	-
3031	570000.00	4182750.00	RESIDENTIAL	7.21E-04	-	-	5.58E-05	-	-	7.21E-04	-	-
3032	570250.00	4182750.00	RESIDENTIAL	7.03E-04	-	-	5.50E-05	-	-	7.03E-04	-	-
3033	570500.00	4182750.00	RESIDENTIAL	7.08E-04	-	-	5.51E-05	-	-	7.08E-04	-	-

OAK Terminal Modernization

Table 2-24. Chronic Non-Cancer Hazard Indices

Combined Construction & Operations

	Construction + Operations			Construction Only			Operations Only		
	Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI		
Maximum->	2.27E-02	1.11E-02	8.13E-02	1.83E-03	1.10E-03	2.24E-02	2.27E-02	1.11E-02	5.49E-02
Minimum->	2.39E-04	9.12E-04	6.08E-04	2.60E-05	6.70E-05	6.70E-05	-4.96E-03	9.12E-04	-1.58E-02
Max ReclD->	1923	2104	3296	1953	2006	3296	1923	2104	1365
Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
3034	570750.00	4182750.00	RESIDENTIAL	8.19E-04	-	-	5.84E-05	-	-	8.19E-04	-	-
3035	571000.00	4182750.00	RESIDENTIAL	9.34E-04	-	-	5.62E-05	-	-	9.34E-04	-	-
3036	571250.00	4182750.00	RESIDENTIAL	8.20E-04	-	-	5.36E-05	-	-	8.20E-04	-	-
3037	571500.00	4182750.00	RESIDENTIAL	7.48E-04	-	-	5.36E-05	-	-	7.48E-04	-	-
3038	571750.00	4182750.00	RESIDENTIAL	5.51E-04	-	-	4.78E-05	-	-	5.51E-04	-	-
3039	572000.00	4182750.00	RESIDENTIAL	5.77E-04	-	-	4.43E-05	-	-	5.77E-04	-	-
3040	572250.00	4182750.00	RESIDENTIAL	6.71E-04	-	-	4.43E-05	-	-	6.71E-04	-	-
3041	572500.00	4182750.00	RESIDENTIAL	6.19E-04	-	-	4.30E-05	-	-	6.19E-04	-	-
3042	572750.00	4182750.00	RESIDENTIAL	5.28E-04	-	-	4.18E-05	-	-	5.28E-04	-	-
3043	573000.00	4182750.00	RESIDENTIAL	4.49E-04	-	-	4.18E-05	-	-	4.49E-04	-	-
3044	573250.00	4182750.00	RESIDENTIAL	3.76E-04	-	-	4.17E-05	-	-	3.76E-04	-	-
3045	573500.00	4182750.00	RESIDENTIAL	3.44E-04	-	-	4.18E-05	-	-	3.44E-04	-	-
3046	567000.00	4183000.00	RESIDENTIAL	8.52E-04	-	-	4.92E-05	-	-	8.52E-04	-	-
3047	567250.00	4183000.00	RESIDENTIAL	9.11E-04	-	-	4.79E-05	-	-	9.11E-04	-	-
3048	567500.00	4183000.00	RESIDENTIAL	7.97E-04	-	-	4.99E-05	-	-	7.97E-04	-	-
3049	567750.00	4183000.00	RESIDENTIAL	7.01E-04	-	-	5.12E-05	-	-	7.01E-04	-	-
3050	568000.00	4183000.00	RESIDENTIAL	6.53E-04	-	-	5.25E-05	-	-	6.53E-04	-	-
3051	568250.00	4183000.00	RESIDENTIAL	5.87E-04	-	-	5.23E-05	-	-	5.87E-04	-	-
3052	568500.00	4183000.00	RESIDENTIAL	5.91E-04	-	-	5.25E-05	-	-	5.91E-04	-	-
3053	568750.00	4183000.00	RESIDENTIAL	6.12E-04	-	-	5.25E-05	-	-	6.12E-04	-	-
3054	569000.00	4183000.00	RESIDENTIAL	4.37E-04	-	-	4.78E-05	-	-	4.37E-04	-	-
3055	569250.00	4183000.00	RESIDENTIAL	2.57E-04	-	-	4.79E-05	-	-	2.57E-04	-	-
3056	569500.00	4183000.00	RESIDENTIAL	3.00E-04	-	-	4.90E-05	-	-	3.00E-04	-	-
3057	569750.00	4183000.00	RESIDENTIAL	5.97E-04	-	-	5.23E-05	-	-	5.97E-04	-	-
3058	570000.00	4183000.00	RESIDENTIAL	6.96E-04	-	-	5.23E-05	-	-	6.96E-04	-	-
3059	570250.00	4183000.00	RESIDENTIAL	6.64E-04	-	-	5.23E-05	-	-	6.64E-04	-	-
3060	570500.00	4183000.00	RESIDENTIAL	6.80E-04	-	-	5.36E-05	-	-	6.80E-04	-	-
3061	570750.00	4183000.00	RESIDENTIAL	7.20E-04	-	-	5.36E-05	-	-	7.20E-04	-	-
3062	571000.00	4183000.00	RESIDENTIAL	8.93E-04	-	-	5.49E-05	-	-	8.93E-04	-	-
3063	571250.00	4183000.00	RESIDENTIAL	8.63E-04	-	-	5.36E-05	-	-	8.63E-04	-	-
3064	571500.00	4183000.00	RESIDENTIAL	6.91E-04	-	-	4.76E-05	-	-	6.91E-04	-	-
3065	571750.00	4183000.00	RESIDENTIAL	5.18E-04	-	-	4.30E-05	-	-	5.18E-04	-	-
3066	572000.00	4183000.00	RESIDENTIAL	5.25E-04	-	-	4.30E-05	-	-	5.25E-04	-	-
3067	572250.00	4183000.00	RESIDENTIAL	6.41E-04	-	-	4.30E-05	-	-	6.41E-04	-	-
3068	572500.00	4183000.00	RESIDENTIAL	6.00E-04	-	-	4.05E-05	-	-	6.00E-04	-	-
3069	572750.00	4183000.00	RESIDENTIAL	5.25E-04	-	-	4.05E-05	-	-	5.25E-04	-	-
3070	573000.00	4183000.00	RESIDENTIAL	4.76E-04	-	-	4.05E-05	-	-	4.76E-04	-	-
3071	573250.00	4183000.00	RESIDENTIAL	3.91E-04	-	-	4.05E-05	-	-	3.91E-04	-	-
3072	573500.00	4183000.00	RESIDENTIAL	3.26E-04	-	-	4.05E-05	-	-	3.26E-04	-	-
3073	567000.00	4183250.00	RESIDENTIAL	8.36E-04	-	-	4.79E-05	-	-	8.36E-04	-	-
3074	567250.00	4183250.00	RESIDENTIAL	8.72E-04	-	-	4.65E-05	-	-	8.72E-04	-	-
3075	567500.00	4183250.00	RESIDENTIAL	7.27E-04	-	-	4.65E-05	-	-	7.27E-04	-	-
3076	567750.00	4183250.00	RESIDENTIAL	6.34E-04	-	-	4.85E-05	-	-	6.34E-04	-	-
3077	568000.00	4183250.00	RESIDENTIAL	5.81E-04	-	-	4.98E-05	-	-	5.81E-04	-	-
3078	568250.00	4183250.00	RESIDENTIAL	5.50E-04	-	-	4.78E-05	-	-	5.50E-04	-	-
3079	568500.00	4183250.00	RESIDENTIAL	5.28E-04	-	-	4.78E-05	-	-	5.28E-04	-	-
3080	568750.00	4183250.00	RESIDENTIAL	5.73E-04	-	-	4.78E-05	-	-	5.73E-04	-	-
3081	569000.00	4183250.00	RESIDENTIAL	4.20E-04	-	-	4.65E-05	-	-	4.20E-04	-	-
3082	569250.00	4183250.00	RESIDENTIAL	2.50E-04	-	-	4.45E-05	-	-	2.50E-04	-	-
3083	569500.00	4183250.00	RESIDENTIAL	2.83E-04	-	-	4.78E-05	-	-	2.83E-04	-	-
3084	569750.00	4183250.00	RESIDENTIAL	5.62E-04	-	-	4.98E-05	-	-	5.62E-04	-	-
3085	570000.00	4183250.00	RESIDENTIAL	6.61E-04	-	-	5.10E-05	-	-	6.61E-04	-	-
3086	570250.00	4183250.00	RESIDENTIAL	6.14E-04	-	-	4.78E-05	-	-	6.14E-04	-	-
3087	570500.00	4183250.00	RESIDENTIAL	6.36E-04	-	-	4.90E-05	-	-	6.36E-04	-	-
3088	570750.00	4183250.00	RESIDENTIAL	6.06E-04	-	-	4.90E-05	-	-	6.06E-04	-	-
3089	571000.00	4183250.00	RESIDENTIAL	7.66E-04	-	-	4.90E-05	-	-	7.66E-04	-	-
3090	571250.00	4183250.00	RESIDENTIAL	7.05E-04	-	-	4.43E-05	-	-	7.05E-04	-	-
3091	571500.00	4183250.00	RESIDENTIAL	5.52E-04	-	-	4.17E-05	-	-	5.52E-04	-	-
3092	571750.00	4183250.00	RESIDENTIAL	4.88E-04	-	-	4.05E-05	-	-	4.88E-04	-	-
3093	572000.00	4183250.00	RESIDENTIAL	5.04E-04	-	-	4.30E-05	-	-	5.04E-04	-	-
3094	572250.00	4183250.00	RESIDENTIAL	5.56E-04	-	-	3.85E-05	-	-	5.56E-04	-	-
3095	572500.00	4183250.00	RESIDENTIAL	5.90E-04	-	-	3.70E-05	-	-	5.90E-04	-	-
3096	572750.00	4183250.00	RESIDENTIAL	5.42E-04	-	-	3.70E-05	-	-	5.42E-04	-	-
3097	573000.00	4183250.00	RESIDENTIAL	4.75E-04	-	-	4.05E-05	-	-	4.75E-04	-	-

**OAK Terminal Modernization**

**Table 2-24. Chronic Non-Cancer Hazard Indices**

**Combined Construction & Operations**

	Construction + Operations			Construction Only			Operations Only		
	Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI		
Maximum->	2.27E-02	1.11E-02	8.13E-02	1.83E-03	1.10E-03	2.24E-02	2.27E-02	1.11E-02	5.49E-02
Minimum->	2.39E-04	9.12E-04	6.08E-04	2.60E-05	6.70E-05	6.70E-05	-4.96E-03	9.12E-04	-1.58E-02
Max ReclD->	1923	2104	3296	1953	2006	3296	1923	2104	1365
Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child	School Child	Adult Worker	Adult Resident & Child	School Child	Adult Worker	Adult Resident & Child	School Child	Adult Worker
3098	573250.00	4183250.00	RESIDENTIAL	4.06E-04	-	-	4.05E-05	-	-	4.06E-04	-	-
3099	573500.00	4183250.00	RESIDENTIAL	3.51E-04	-	-	4.05E-05	-	-	3.51E-04	-	-
3100	567000.00	4183500.00	RESIDENTIAL	8.27E-04	-	-	4.52E-05	-	-	8.27E-04	-	-
3101	567250.00	4183500.00	RESIDENTIAL	8.37E-04	-	-	4.52E-05	-	-	8.37E-04	-	-
3102	567500.00	4183500.00	RESIDENTIAL	7.24E-04	-	-	4.65E-05	-	-	7.24E-04	-	-
3103	567750.00	4183500.00	RESIDENTIAL	6.03E-04	-	-	4.65E-05	-	-	6.03E-04	-	-
3104	568000.00	4183500.00	RESIDENTIAL	5.40E-04	-	-	4.50E-05	-	-	5.40E-04	-	-
3105	568250.00	4183500.00	RESIDENTIAL	5.11E-04	-	-	4.63E-05	-	-	5.11E-04	-	-
3106	568500.00	4183500.00	RESIDENTIAL	4.95E-04	-	-	4.63E-05	-	-	4.95E-04	-	-
3107	568750.00	4183500.00	RESIDENTIAL	5.38E-04	-	-	4.65E-05	-	-	5.38E-04	-	-
3108	569000.00	4183500.00	RESIDENTIAL	4.02E-04	-	-	4.32E-05	-	-	4.02E-04	-	-
3109	569250.00	4183500.00	RESIDENTIAL	2.39E-04	-	-	4.19E-05	-	-	2.39E-04	-	-
3110	569500.00	4183500.00	RESIDENTIAL	2.61E-04	-	-	4.32E-05	-	-	2.61E-04	-	-
3111	569750.00	4183500.00	RESIDENTIAL	5.26E-04	-	-	4.65E-05	-	-	5.26E-04	-	-
3112	570000.00	4183500.00	RESIDENTIAL	6.35E-04	-	-	4.65E-05	-	-	6.35E-04	-	-
3113	570250.00	4183500.00	RESIDENTIAL	6.03E-04	-	-	4.65E-05	-	-	6.03E-04	-	-
3114	570500.00	4183500.00	RESIDENTIAL	6.09E-04	-	-	4.76E-05	-	-	6.09E-04	-	-
3115	570750.00	4183500.00	RESIDENTIAL	5.70E-04	-	-	4.63E-05	-	-	5.70E-04	-	-
3116	571000.00	4183500.00	RESIDENTIAL	6.69E-04	-	-	4.63E-05	-	-	6.69E-04	-	-
3117	571250.00	4183500.00	RESIDENTIAL	5.97E-04	-	-	4.17E-05	-	-	5.97E-04	-	-
3118	571500.00	4183500.00	RESIDENTIAL	5.36E-04	-	-	3.83E-05	-	-	5.36E-04	-	-
3119	571750.00	4183500.00	RESIDENTIAL	4.94E-04	-	-	4.05E-05	-	-	4.94E-04	-	-
3120	572000.00	4183500.00	RESIDENTIAL	4.61E-04	-	-	3.72E-05	-	-	4.61E-04	-	-
3121	572250.00	4183500.00	RESIDENTIAL	4.77E-04	-	-	3.70E-05	-	-	4.77E-04	-	-
3122	572500.00	4183500.00	RESIDENTIAL	5.57E-04	-	-	3.57E-05	-	-	5.57E-04	-	-
3123	572750.00	4183500.00	RESIDENTIAL	5.51E-04	-	-	3.70E-05	-	-	5.51E-04	-	-
3124	573000.00	4183500.00	RESIDENTIAL	4.81E-04	-	-	3.70E-05	-	-	4.81E-04	-	-
3125	573250.00	4183500.00	RESIDENTIAL	4.26E-04	-	-	3.70E-05	-	-	4.26E-04	-	-
3126	573500.00	4183500.00	RESIDENTIAL	2.65E-04	-	-	3.44E-05	-	-	2.65E-04	-	-
3127	567000.00	4183750.00	RESIDENTIAL	8.03E-04	-	-	4.19E-05	-	-	8.03E-04	-	-
3128	567250.00	4183750.00	RESIDENTIAL	7.74E-04	-	-	4.19E-05	-	-	7.74E-04	-	-
3129	567500.00	4183750.00	RESIDENTIAL	6.44E-04	-	-	4.39E-05	-	-	6.44E-04	-	-
3130	567750.00	4183750.00	RESIDENTIAL	5.85E-04	-	-	4.52E-05	-	-	5.85E-04	-	-
3131	568000.00	4183750.00	RESIDENTIAL	5.48E-04	-	-	4.65E-05	-	-	5.48E-04	-	-
3132	568250.00	4183750.00	RESIDENTIAL	4.88E-04	-	-	4.50E-05	-	-	4.88E-04	-	-
3133	568500.00	4183750.00	RESIDENTIAL	4.73E-04	-	-	4.50E-05	-	-	4.73E-04	-	-
3134	568750.00	4183750.00	RESIDENTIAL	5.04E-04	-	-	4.32E-05	-	-	5.04E-04	-	-
3135	569000.00	4183750.00	RESIDENTIAL	3.92E-04	-	-	4.19E-05	-	-	3.92E-04	-	-
3136	569250.00	4183750.00	RESIDENTIAL	2.43E-04	-	-	4.05E-05	-	-	2.43E-04	-	-
3137	569500.00	4183750.00	RESIDENTIAL	2.57E-04	-	-	4.17E-05	-	-	2.57E-04	-	-
3138	569750.00	4183750.00	RESIDENTIAL	5.05E-04	-	-	4.38E-05	-	-	5.05E-04	-	-
3139	570000.00	4183750.00	RESIDENTIAL	6.06E-04	-	-	4.50E-05	-	-	6.06E-04	-	-
3140	570250.00	4183750.00	RESIDENTIAL	5.52E-04	-	-	4.18E-05	-	-	5.52E-04	-	-
3141	570500.00	4183750.00	RESIDENTIAL	5.47E-04	-	-	4.18E-05	-	-	5.47E-04	-	-
3142	570750.00	4183750.00	RESIDENTIAL	5.41E-04	-	-	4.18E-05	-	-	5.41E-04	-	-
3143	571000.00	4183750.00	RESIDENTIAL	5.37E-04	-	-	4.03E-05	-	-	5.37E-04	-	-
3144	571250.00	4183750.00	RESIDENTIAL	5.74E-04	-	-	3.83E-05	-	-	5.74E-04	-	-
3145	571500.00	4183750.00	RESIDENTIAL	5.32E-04	-	-	3.70E-05	-	-	5.32E-04	-	-
3146	571750.00	4183750.00	RESIDENTIAL	4.93E-04	-	-	3.70E-05	-	-	4.93E-04	-	-
3147	572000.00	4183750.00	RESIDENTIAL	4.39E-04	-	-	3.57E-05	-	-	4.39E-04	-	-
3148	572250.00	4183750.00	RESIDENTIAL	4.33E-04	-	-	3.57E-05	-	-	4.33E-04	-	-
3149	572500.00	4183750.00	RESIDENTIAL	5.34E-04	-	-	3.57E-05	-	-	5.34E-04	-	-
3150	572750.00	4183750.00	RESIDENTIAL	5.47E-04	-	-	3.57E-05	-	-	5.47E-04	-	-
3151	573000.00	4183750.00	RESIDENTIAL	4.89E-04	-	-	3.57E-05	-	-	4.89E-04	-	-
3152	573250.00	4183750.00	RESIDENTIAL	3.39E-04	-	-	3.12E-05	-	-	3.39E-04	-	-
3153	573500.00	4183750.00	RESIDENTIAL	2.79E-04	-	-	3.12E-05	-	-	2.79E-04	-	-
3154	567000.00	4184000.00	RESIDENTIAL	7.75E-04	-	-	4.05E-05	-	-	7.75E-04	-	-
3155	567250.00	4184000.00	RESIDENTIAL	6.49E-04	-	-	3.92E-05	-	-	6.49E-04	-	-
3156	567500.00	4184000.00	RESIDENTIAL	5.73E-04	-	-	4.25E-05	-	-	5.73E-04	-	-
3157	567750.00	4184000.00	RESIDENTIAL	5.43E-04	-	-	4.38E-05	-	-	5.43E-04	-	-
3158	568000.00	4184000.00	RESIDENTIAL	5.00E-04	-	-	4.50E-05	-	-	5.00E-04	-	-
3159	568250.00	4184000.00	RESIDENTIAL	4.73E-04	-	-	4.50E-05	-	-	4.73E-04	-	-
3160	568500.00	4184000.00	RESIDENTIAL	4.56E-04	-	-	4.17E-05	-	-	4.56E-04	-	-
3161	568750.00	4184000.00	RESIDENTIAL	4.74E-04	-	-	4.05E-05	-	-	4.74E-04	-	-

OAK Terminal Modernization

Table 2-24. Chronic Non-Cancer Hazard Indices

Combined Construction & Operations

	Construction + Operations			Construction Only			Operations Only		
	Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI		
Maximum->	2.27E-02	1.11E-02	8.13E-02	1.83E-03	1.10E-03	2.24E-02	2.27E-02	1.11E-02	5.49E-02
Minimum->	2.39E-04	9.12E-04	6.08E-04	2.60E-05	6.70E-05	6.70E-05	-4.96E-03	9.12E-04	-1.58E-02
Max ReclD->	1923	2104	3296	1953	2006	3296	1923	2104	1365
Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
3162	569000.00	4184000.00	RESIDENTIAL	3.84E-04	-	-	4.05E-05	-	-	3.84E-04	-	-
3163	569250.00	4184000.00	RESIDENTIAL	2.46E-04	-	-	3.72E-05	-	-	2.46E-04	-	-
3164	569500.00	4184000.00	RESIDENTIAL	2.55E-04	-	-	4.05E-05	-	-	2.55E-04	-	-
3165	569750.00	4184000.00	RESIDENTIAL	4.74E-04	-	-	4.05E-05	-	-	4.74E-04	-	-
3166	570000.00	4184000.00	RESIDENTIAL	5.60E-04	-	-	4.05E-05	-	-	5.60E-04	-	-
3167	570250.00	4184000.00	RESIDENTIAL	5.28E-04	-	-	4.05E-05	-	-	5.28E-04	-	-
3168	570500.00	4184000.00	RESIDENTIAL	4.91E-04	-	-	4.05E-05	-	-	4.91E-04	-	-
3169	570750.00	4184000.00	RESIDENTIAL	5.21E-04	-	-	4.05E-05	-	-	5.21E-04	-	-
3170	571000.00	4184000.00	RESIDENTIAL	4.87E-04	-	-	3.70E-05	-	-	4.87E-04	-	-
3171	571250.00	4184000.00	RESIDENTIAL	5.66E-04	-	-	3.83E-05	-	-	5.66E-04	-	-
3172	571500.00	4184000.00	RESIDENTIAL	5.29E-04	-	-	3.70E-05	-	-	5.29E-04	-	-
3173	571750.00	4184000.00	RESIDENTIAL	4.69E-04	-	-	3.57E-05	-	-	4.69E-04	-	-
3174	572000.00	4184000.00	RESIDENTIAL	4.16E-04	-	-	3.45E-05	-	-	4.16E-04	-	-
3175	572250.00	4184000.00	RESIDENTIAL	4.11E-04	-	-	3.44E-05	-	-	4.11E-04	-	-
3176	572500.00	4184000.00	RESIDENTIAL	4.81E-04	-	-	3.24E-05	-	-	4.81E-04	-	-
3177	572750.00	4184000.00	RESIDENTIAL	4.33E-04	-	-	2.60E-05	-	-	4.33E-04	-	-
3178	573000.00	4184000.00	RESIDENTIAL	5.00E-04	-	-	3.45E-05	-	-	5.00E-04	-	-
3179	573250.00	4184000.00	RESIDENTIAL	3.40E-04	-	-	2.99E-05	-	-	3.40E-04	-	-
3180	573500.00	4184000.00	RESIDENTIAL	2.96E-04	-	-	2.99E-05	-	-	2.96E-04	-	-
3181	573750.00	4176750.00	RESIDENTIAL	4.00E-03	-	-	4.04E-04	-	-	4.00E-03	-	-
3182	574000.00	4176750.00	RESIDENTIAL	3.63E-03	-	-	3.87E-04	-	-	3.63E-03	-	-
3183	574250.00	4176750.00	RESIDENTIAL	3.32E-03	-	-	3.71E-04	-	-	3.32E-03	-	-
3184	574500.00	4176750.00	RESIDENTIAL	3.18E-03	-	-	3.54E-04	-	-	3.18E-03	-	-
3185	574750.00	4176750.00	RESIDENTIAL	3.07E-03	-	-	3.42E-04	-	-	3.07E-03	-	-
3186	575000.00	4176750.00	RESIDENTIAL	3.00E-03	-	-	3.25E-04	-	-	3.00E-03	-	-
3187	573750.00	4177000.00	RESIDENTIAL	3.99E-03	-	-	3.64E-04	-	-	3.99E-03	-	-
3188	574000.00	4177000.00	RESIDENTIAL	3.65E-03	-	-	3.50E-04	-	-	3.65E-03	-	-
3189	574250.00	4177000.00	RESIDENTIAL	3.31E-03	-	-	3.34E-04	-	-	3.31E-03	-	-
3190	574500.00	4177000.00	RESIDENTIAL	3.02E-03	-	-	3.23E-04	-	-	3.02E-03	-	-
3191	574750.00	4177000.00	RESIDENTIAL	2.78E-03	-	-	3.08E-04	-	-	2.78E-03	-	-
3192	575000.00	4177000.00	RESIDENTIAL	2.67E-03	-	-	2.99E-04	-	-	2.67E-03	-	-
3193	573750.00	4177250.00	RESIDENTIAL	3.93E-03	-	-	3.38E-04	-	-	3.93E-03	-	-
3194	574000.00	4177250.00	RESIDENTIAL	3.66E-03	-	-	3.19E-04	-	-	3.66E-03	-	-
3195	574250.00	4177250.00	RESIDENTIAL	3.36E-03	-	-	3.07E-04	-	-	3.36E-03	-	-
3196	574500.00	4177250.00	RESIDENTIAL	3.07E-03	-	-	2.92E-04	-	-	3.07E-03	-	-
3197	574750.00	4177250.00	RESIDENTIAL	2.80E-03	-	-	2.83E-04	-	-	2.80E-03	-	-
3198	575000.00	4177250.00	RESIDENTIAL	2.56E-03	-	-	2.71E-04	-	-	2.56E-03	-	-
3199	573750.00	4177500.00	RESIDENTIAL	3.74E-03	-	-	3.11E-04	-	-	3.74E-03	-	-
3200	574000.00	4177500.00	RESIDENTIAL	3.60E-03	-	-	2.98E-04	-	-	3.60E-03	-	-
3201	574250.00	4177500.00	RESIDENTIAL	3.38E-03	-	-	2.81E-04	-	-	3.38E-03	-	-
3202	574500.00	4177500.00	RESIDENTIAL	3.10E-03	-	-	2.72E-04	-	-	3.10E-03	-	-
3203	574750.00	4177500.00	RESIDENTIAL	2.84E-03	-	-	2.56E-04	-	-	2.84E-03	-	-
3204	575000.00	4177500.00	RESIDENTIAL	2.60E-03	-	-	2.48E-04	-	-	2.60E-03	-	-
3205	573750.00	4177750.00	RESIDENTIAL	3.42E-03	-	-	2.84E-04	-	-	3.42E-03	-	-
3206	574000.00	4177750.00	RESIDENTIAL	3.37E-03	-	-	2.76E-04	-	-	3.37E-03	-	-
3207	574250.00	4177750.00	RESIDENTIAL	3.29E-03	-	-	2.65E-04	-	-	3.29E-03	-	-
3208	574500.00	4177750.00	RESIDENTIAL	3.14E-03	-	-	2.49E-04	-	-	3.14E-03	-	-
3209	574750.00	4177750.00	RESIDENTIAL	2.89E-03	-	-	2.38E-04	-	-	2.89E-03	-	-
3210	575000.00	4177750.00	RESIDENTIAL	2.63E-03	-	-	2.28E-04	-	-	2.63E-03	-	-
3211	573750.00	4178000.00	RESIDENTIAL	2.97E-03	-	-	2.62E-04	-	-	2.97E-03	-	-
3212	574000.00	4178000.00	RESIDENTIAL	3.03E-03	-	-	2.56E-04	-	-	3.03E-03	-	-
3213	574250.00	4178000.00	RESIDENTIAL	3.05E-03	-	-	2.43E-04	-	-	3.05E-03	-	-
3214	574500.00	4178000.00	RESIDENTIAL	2.93E-03	-	-	2.24E-04	-	-	2.93E-03	-	-
3215	574750.00	4178000.00	RESIDENTIAL	2.90E-03	-	-	2.22E-04	-	-	2.90E-03	-	-
3216	575000.00	4178000.00	RESIDENTIAL	2.54E-03	-	-	1.97E-04	-	-	2.54E-03	-	-
3217	573750.00	4178250.00	RESIDENTIAL	2.68E-03	-	-	2.40E-04	-	-	2.68E-03	-	-
3218	574000.00	4178250.00	RESIDENTIAL	2.60E-03	-	-	2.32E-04	-	-	2.60E-03	-	-
3219	574250.00	4178250.00	RESIDENTIAL	2.59E-03	-	-	2.23E-04	-	-	2.59E-03	-	-
3220	574500.00	4178250.00	RESIDENTIAL	2.43E-03	-	-	1.87E-04	-	-	2.43E-03	-	-
3221	574750.00	4178250.00	RESIDENTIAL	2.72E-03	-	-	2.02E-04	-	-	2.72E-03	-	-
3222	575000.00	4178250.00	RESIDENTIAL	2.35E-03	-	-	1.64E-04	-	-	2.35E-03	-	-
3223	573750.00	4178500.00	RESIDENTIAL	2.53E-03	-	-	2.16E-04	-	-	2.53E-03	-	-
3224	574000.00	4178500.00	RESIDENTIAL	2.35E-03	-	-	2.04E-04	-	-	2.35E-03	-	-
3225	574250.00	4178500.00	RESIDENTIAL	2.07E-03	-	-	1.85E-04	-	-	2.07E-03	-	-

OAK Terminal Modernization

Table 2-24. Chronic Non-Cancer Hazard Indices

Combined Construction & Operations

	Construction + Operations			Construction Only			Operations Only		
	Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI			Inhalation Chronic (Annual) HI		
Maximum->	2.27E-02	1.11E-02	8.13E-02	1.83E-03	1.10E-03	2.24E-02	2.27E-02	1.11E-02	5.49E-02
Minimum->	2.39E-04	9.12E-04	6.08E-04	2.60E-05	6.70E-05	6.70E-05	-4.96E-03	9.12E-04	-1.58E-02
Max ReclD->	1923	2104	3296	1953	2006	3296	1923	2104	1365
Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child	School Child	Adult Worker	Adult Resident & Child	School Child	Adult Worker	Adult Resident & Child	School Child	Adult Worker
3226	574500.00	4178500.00	RESIDENTIAL	1.83E-03	-	-	1.47E-04	-	-	1.83E-03	-	-
3227	574750.00	4178500.00	RESIDENTIAL	2.24E-03	-	-	1.71E-04	-	-	2.24E-03	-	-
3228	575000.00	4178500.00	RESIDENTIAL	2.21E-03	-	-	1.56E-04	-	-	2.21E-03	-	-
3229	573750.00	4178750.00	RESIDENTIAL	2.31E-03	-	-	1.95E-04	-	-	2.31E-03	-	-
3230	574000.00	4178750.00	RESIDENTIAL	2.26E-03	-	-	1.84E-04	-	-	2.26E-03	-	-
3231	574250.00	4178750.00	RESIDENTIAL	1.94E-03	-	-	1.60E-04	-	-	1.94E-03	-	-
3232	574500.00	4178750.00	RESIDENTIAL	1.70E-03	-	-	1.45E-04	-	-	1.70E-03	-	-
3233	574750.00	4178750.00	RESIDENTIAL	1.84E-03	-	-	1.58E-04	-	-	1.84E-03	-	-
3234	575000.00	4178750.00	RESIDENTIAL	1.96E-03	-	-	1.54E-04	-	-	1.96E-03	-	-
3235	573750.00	4179000.00	RESIDENTIAL	2.01E-03	-	-	1.81E-04	-	-	2.01E-03	-	-
3236	574000.00	4179000.00	RESIDENTIAL	2.07E-03	-	-	1.72E-04	-	-	2.07E-03	-	-
3237	574250.00	4179000.00	RESIDENTIAL	1.58E-03	-	-	1.21E-04	-	-	1.58E-03	-	-
3238	574500.00	4179000.00	RESIDENTIAL	1.81E-03	-	-	1.47E-04	-	-	1.81E-03	-	-
3239	574750.00	4179000.00	RESIDENTIAL	1.66E-03	-	-	1.44E-04	-	-	1.66E-03	-	-
3240	575000.00	4179000.00	RESIDENTIAL	1.53E-03	-	-	1.26E-04	-	-	1.53E-03	-	-
3241	573750.00	4179250.00	RESIDENTIAL	1.77E-03	-	-	1.68E-04	-	-	1.77E-03	-	-
3242	574000.00	4179250.00	RESIDENTIAL	1.53E-03	-	-	1.33E-04	-	-	1.53E-03	-	-
3243	574250.00	4179250.00	RESIDENTIAL	1.58E-03	-	-	1.27E-04	-	-	1.58E-03	-	-
3244	574500.00	4179250.00	RESIDENTIAL	1.74E-03	-	-	1.38E-04	-	-	1.74E-03	-	-
3245	574750.00	4179250.00	RESIDENTIAL	1.43E-03	-	-	1.09E-04	-	-	1.43E-03	-	-
3246	575000.00	4179250.00	RESIDENTIAL	1.41E-03	-	-	1.13E-04	-	-	1.41E-03	-	-
3247	573750.00	4179500.00	RESIDENTIAL	1.67E-03	-	-	1.54E-04	-	-	1.67E-03	-	-
3248	574000.00	4179500.00	RESIDENTIAL	1.33E-03	-	-	1.20E-04	-	-	1.33E-03	-	-
3249	574250.00	4179500.00	RESIDENTIAL	1.64E-03	-	-	1.44E-04	-	-	1.64E-03	-	-
3250	574500.00	4179500.00	RESIDENTIAL	1.45E-03	-	-	1.14E-04	-	-	1.45E-03	-	-
3251	574750.00	4179500.00	RESIDENTIAL	1.24E-03	-	-	9.62E-05	-	-	1.24E-03	-	-
3252	575000.00	4179500.00	RESIDENTIAL	1.37E-03	-	-	1.05E-04	-	-	1.37E-03	-	-
3253	573750.00	4179750.00	RESIDENTIAL	1.59E-03	-	-	1.41E-04	-	-	1.59E-03	-	-
3254	574000.00	4179750.00	RESIDENTIAL	1.47E-03	-	-	1.32E-04	-	-	1.47E-03	-	-
3255	574250.00	4179750.00	RESIDENTIAL	1.26E-03	-	-	1.14E-04	-	-	1.26E-03	-	-
3256	574500.00	4179750.00	RESIDENTIAL	1.13E-03	-	-	9.15E-05	-	-	1.13E-03	-	-
3257	574750.00	4179750.00	RESIDENTIAL	1.10E-03	-	-	8.89E-05	-	-	1.10E-03	-	-
3258	575000.00	4179750.00	RESIDENTIAL	1.38E-03	-	-	1.07E-04	-	-	1.38E-03	-	-
3259	573750.00	4180000.00	RESIDENTIAL	1.35E-03	-	-	1.15E-04	-	-	1.35E-03	-	-
3260	574000.00	4180000.00	RESIDENTIAL	1.24E-03	-	-	1.00E-04	-	-	1.24E-03	-	-
3261	574250.00	4180000.00	RESIDENTIAL	1.07E-03	-	-	8.82E-05	-	-	1.07E-03	-	-
3262	574500.00	4180000.00	RESIDENTIAL	9.74E-04	-	-	8.42E-05	-	-	9.74E-04	-	-
3263	574750.00	4180000.00	RESIDENTIAL	1.10E-03	-	-	8.89E-05	-	-	1.10E-03	-	-
3264	575000.00	4180000.00	RESIDENTIAL	1.22E-03	-	-	9.50E-05	-	-	1.22E-03	-	-
3265	573750.00	4180250.00	RESIDENTIAL	1.17E-03	-	-	9.41E-05	-	-	1.17E-03	-	-
3266	574000.00	4180250.00	RESIDENTIAL	1.13E-03	-	-	8.48E-05	-	-	1.13E-03	-	-
3267	574250.00	4180250.00	RESIDENTIAL	1.05E-03	-	-	7.83E-05	-	-	1.05E-03	-	-
3268	574500.00	4180250.00	RESIDENTIAL	1.02E-03	-	-	8.55E-05	-	-	1.02E-03	-	-
3269	574750.00	4180250.00	RESIDENTIAL	9.55E-04	-	-	8.09E-05	-	-	9.55E-04	-	-
3270	575000.00	4180250.00	RESIDENTIAL	1.04E-03	-	-	8.42E-05	-	-	1.04E-03	-	-
3271	573750.00	4180500.00	RESIDENTIAL	1.12E-03	-	-	7.48E-05	-	-	1.12E-03	-	-
3272	574000.00	4180500.00	RESIDENTIAL	1.09E-03	-	-	7.35E-05	-	-	1.09E-03	-	-
3273	574250.00	4180500.00	RESIDENTIAL	1.09E-03	-	-	7.63E-05	-	-	1.09E-03	-	-
3274	574500.00	4180500.00	RESIDENTIAL	1.09E-03	-	-	8.68E-05	-	-	1.09E-03	-	-
3275	574750.00	4180500.00	RESIDENTIAL	9.06E-04	-	-	7.10E-05	-	-	9.06E-04	-	-
3276	575000.00	4180500.00	RESIDENTIAL	9.25E-04	-	-	7.57E-05	-	-	9.25E-04	-	-
3277	573750.00	4180750.00	RESIDENTIAL	1.03E-03	-	-	6.90E-05	-	-	1.03E-03	-	-
3278	574000.00	4180750.00	RESIDENTIAL	1.09E-03	-	-	7.23E-05	-	-	1.09E-03	-	-
3279	574250.00	4180750.00	RESIDENTIAL	1.06E-03	-	-	7.48E-05	-	-	1.06E-03	-	-
3280	574500.00	4180750.00	RESIDENTIAL	1.07E-03	-	-	7.83E-05	-	-	1.07E-03	-	-
3281	574750.00	4180750.00	RESIDENTIAL	9.32E-04	-	-	6.69E-05	-	-	9.32E-04	-	-
3282	575000.00	4180750.00	RESIDENTIAL	8.86E-04	-	-	7.10E-05	-	-	8.86E-04	-	-
3283	573750.00	4181000.00	RESIDENTIAL	1.02E-03	-	-	6.69E-05	-	-	1.02E-03	-	-
3284	574000.00	4181000.00	RESIDENTIAL	1.01E-03	-	-	6.69E-05	-	-	1.01E-03	-	-
3285	574250.00	4181000.00	RESIDENTIAL	1.07E-03	-	-	7.23E-05	-	-	1.07E-03	-	-
3286	574500.00	4181000.00	RESIDENTIAL	9.96E-04	-	-	7.02E-05	-	-	9.96E-04	-	-
3287	574750.00	4181000.00	RESIDENTIAL	8.83E-04	-	-	6.22E-05	-	-	8.83E-04	-	-
3288	575000.00	4181000.00	RESIDENTIAL	8.80E-04	-	-	6.55E-05	-	-	8.80E-04	-	-
3289	573750.00	4181250.00	RESIDENTIAL	9.76E-04	-	-	6.56E-05	-	-	9.76E-04	-	-

OAK Terminal Modernization

Table 2-24. Chronic Non-Cancer Hazard Indices

Combined Construction & Operations

Construction + Operations

Inhalation Chronic (Annual) HI

Construction Only

Inhalation Chronic (Annual) HI

Operations Only

Inhalation Chronic (Annual) HI

ReclD	UTM X	UTM Y	Receptor Type	Construction + Operations			Construction Only			Operations Only			
				Adult Resident & Child	School Child	Adult Worker	Adult Resident & Child	School Child	Adult Worker	Adult Resident & Child	School Child	Adult Worker	
				Maximum->	2.27E-02	1.11E-02	8.13E-02	1.83E-03	1.10E-03	2.24E-02	2.27E-02	1.11E-02	5.49E-02
				Minimum->	2.39E-04	9.12E-04	6.08E-04	2.60E-05	6.70E-05	6.70E-05	-4.96E-03	9.12E-04	-1.58E-02
				Max ReclD->	1923	2104	3296	1953	2006	3296	1923	2104	1365
				Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
3290	574000.00	4181250.00	RESIDENTIAL	9.88E-04	-	-	6.22E-05	-	-	-	9.88E-04	-	-
3291	574250.00	4181250.00	RESIDENTIAL	9.91E-04	-	-	6.09E-05	-	-	-	9.91E-04	-	-
3292	574500.00	4181250.00	RESIDENTIAL	9.90E-04	-	-	6.09E-05	-	-	-	9.90E-04	-	-
3293	574750.00	4181250.00	RESIDENTIAL	8.60E-04	-	-	6.09E-05	-	-	-	8.60E-04	-	-
3294	575000.00	4181250.00	RESIDENTIAL	8.42E-04	-	-	6.09E-05	-	-	-	8.42E-04	-	-
3295	570540.00	4175555.00	RECREATIONAL	-	-	3.49E-02	-	-	4.53E-03	-	-	-	-
3296	570275.00	4174825.00	RECREATIONAL	-	-	8.13E-02	-	-	2.24E-02	-	-	-	-
3297	570565.00	4174490.00	RECREATIONAL	-	-	5.78E-02	-	-	9.61E-03	-	-	-	-
3298	571035.00	4175080.00	RECREATIONAL	-	-	2.98E-02	-	-	4.26E-03	-	-	-	-
3299	570675.00	4175040.00	RECREATIONAL	-	-	4.46E-02	-	-	6.60E-03	-	-	-	-

**OAK Terminal Modernization  
Table 2-25. Offsite Worker Cancer Risk  
Combined Construction & Operations**

**Maximum-> 8.89E-01 8.31E-02 8.89E-01**  
**Minimum-> 2.19E-03 1.88E-03 -1.46E-02**  
**Max ReclD-> 4 3 4**  
**Exposure Years-> 2025-2049 2025-2030 2028-2052**  
**Exposure Duration-> 25 Yrs 6 Yrs 25 Yrs**

ReclD	UTM X	UTM Y	Receptor Type	Airport Worker During Construction & Operations	Airport Worker During Construction	Airport Worker During Operations
1	569712.76	4174275.96	ON-AIRPORT	1.59E-01	2.54E-02	1.59E-01
2	569483.17	4174092.29	ON-AIRPORT	2.41E-02	2.41E-02	6.49E-03
3	569283.43	4174257.59	ON-AIRPORT	4.68E-01	8.31E-02	4.68E-01
4	569074.50	4174009.64	ON-AIRPORT	8.89E-01	2.02E-02	8.89E-01
5	568792.10	4174895.86	ON-AIRPORT	1.09E-01	4.69E-03	1.09E-01
6	569167.77	4176928.00	ON-AIRPORT	2.19E-03	2.19E-03	-1.46E-02
7	569492.49	4176178.97	ON-AIRPORT	6.94E-02	1.88E-03	6.94E-02
8	570228.53	4175725.23	ON-AIRPORT	8.98E-02	3.87E-03	8.98E-02

OAK Terminal Modernization  
 Table 2-26. Eight (8)-Hour Hazard Indices  
 Combined Construction & Operations

				Combined Construction + Operations			Construction Only			Operations Only		
				8-Hour Hazard Index			8-Hour Hazard Index			8-Hour Hazard Index		
Maximum->				5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
Minimum->				2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
Max ReclD->				1924	582	1281	1546	1879	3296	1924	582	1281
Exposure Years->				2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child	School Child	Adult Worker	Adult Resident & Child	School Child	Adult Worker	Adult Resident & Child	School Child	Adult Worker
33	566000.00	4176300.00	ROAD	-	-	1.92E-01	-	-	1.75E-03	-	-	1.92E-01
34	566000.00	4176400.00	WORKER	-	-	1.87E-01	-	-	1.76E-03	-	-	1.87E-01
35	566000.00	4176500.00	WORKER	-	-	1.72E-01	-	-	1.82E-03	-	-	1.72E-01
36	566000.00	4176600.00	RESIDENTIAL	1.51E-01	-	-	1.90E-03	-	-	1.51E-01	-	-
37	566000.00	4176700.00	RESIDENTIAL	1.57E-01	-	-	1.93E-03	-	-	1.57E-01	-	-
38	566000.00	4176800.00	RESIDENTIAL	1.60E-01	-	-	1.93E-03	-	-	1.60E-01	-	-
39	566000.00	4176900.00	RESIDENTIAL	1.47E-01	-	-	1.89E-03	-	-	1.47E-01	-	-
40	566000.00	4177000.00	ROAD	-	-	1.41E-01	-	-	1.82E-03	-	-	1.41E-01
41	566000.00	4177100.00	RESIDENTIAL	1.46E-01	-	-	1.73E-03	-	-	1.46E-01	-	-
42	566000.00	4177200.00	RESIDENTIAL	1.48E-01	-	-	1.62E-03	-	-	1.48E-01	-	-
43	566000.00	4177300.00	RESIDENTIAL	1.48E-01	-	-	1.54E-03	-	-	1.48E-01	-	-
44	566000.00	4177400.00	RESIDENTIAL	1.45E-01	-	-	1.45E-03	-	-	1.45E-01	-	-
45	566000.00	4177500.00	RECREATIONAL	-	-	1.48E-01	-	-	1.36E-03	-	-	1.48E-01
46	566000.00	4177600.00	SCHOOL	1.53E-01	1.53E-01	1.53E-01	1.34E-03	1.34E-03	1.34E-03	1.53E-01	1.53E-01	1.53E-01
47	566000.00	4177700.00	SCHOOL	1.46E-01	1.46E-01	1.46E-01	1.30E-03	1.30E-03	1.30E-03	1.46E-01	1.46E-01	1.46E-01
48	566000.00	4177800.00	RESIDENTIAL	1.35E-01	-	-	1.26E-03	-	-	1.35E-01	-	-
49	566000.00	4177900.00	RESIDENTIAL	1.20E-01	-	-	1.21E-03	-	-	1.20E-01	-	-
50	566000.00	4178000.00	RESIDENTIAL	1.03E-01	-	-	1.16E-03	-	-	1.03E-01	-	-
79	566100.00	4176200.00	RECREATIONAL	-	-	2.01E-01	-	-	1.84E-03	-	-	2.01E-01
80	566100.00	4176300.00	RECREATIONAL	-	-	1.99E-01	-	-	1.83E-03	-	-	1.99E-01
81	566100.00	4176400.00	RECREATIONAL	-	-	1.86E-01	-	-	1.86E-03	-	-	1.86E-01
83	566100.00	4176600.00	RESIDENTIAL	1.64E-01	-	-	2.01E-03	-	-	1.64E-01	-	-
84	566100.00	4176700.00	RESIDENTIAL	1.71E-01	-	-	2.02E-03	-	-	1.71E-01	-	-
85	566100.00	4176800.00	RESIDENTIAL	1.61E-01	-	-	1.99E-03	-	-	1.61E-01	-	-
86	566100.00	4176900.00	RESIDENTIAL	1.45E-01	-	-	1.93E-03	-	-	1.45E-01	-	-
87	566100.00	4177000.00	RESIDENTIAL	1.54E-01	-	-	1.84E-03	-	-	1.54E-01	-	-
88	566100.00	4177100.00	RESIDENTIAL	1.56E-01	-	-	1.73E-03	-	-	1.56E-01	-	-
89	566100.00	4177200.00	RESIDENTIAL	1.57E-01	-	-	1.63E-03	-	-	1.57E-01	-	-
90	566100.00	4177300.00	RESIDENTIAL	1.55E-01	-	-	1.54E-03	-	-	1.55E-01	-	-
91	566100.00	4177400.00	RESIDENTIAL	1.50E-01	-	-	1.43E-03	-	-	1.50E-01	-	-
92	566100.00	4177500.00	RESIDENTIAL	1.56E-01	-	-	1.40E-03	-	-	1.56E-01	-	-
93	566100.00	4177600.00	RESIDENTIAL	1.50E-01	-	-	1.36E-03	-	-	1.50E-01	-	-
94	566100.00	4177700.00	RESIDENTIAL	1.39E-01	-	-	1.32E-03	-	-	1.39E-01	-	-
95	566100.00	4177800.00	RESIDENTIAL	1.24E-01	-	-	1.27E-03	-	-	1.24E-01	-	-
96	566100.00	4177900.00	RESIDENTIAL	1.07E-01	-	-	1.22E-03	-	-	1.07E-01	-	-
97	566100.00	4178000.00	RESIDENTIAL	1.05E-01	-	-	1.16E-03	-	-	1.05E-01	-	-
123	566200.00	4176100.00	ROAD	-	-	2.09E-01	-	-	1.99E-03	-	-	2.09E-01
124	566200.00	4176200.00	WORKER	-	-	2.10E-01	-	-	1.90E-03	-	-	2.10E-01
125	566200.00	4176300.00	WORKER	-	-	2.01E-01	-	-	1.92E-03	-	-	2.01E-01
127	566200.00	4176500.00	RESIDENTIAL	1.70E-01	-	-	2.08E-03	-	-	1.70E-01	-	-
128	566200.00	4176600.00	RESIDENTIAL	1.81E-01	-	-	2.12E-03	-	-	1.81E-01	-	-
129	566200.00	4176700.00	RESIDENTIAL	1.76E-01	-	-	2.11E-03	-	-	1.76E-01	-	-
130	566200.00	4176800.00	RESIDENTIAL	1.58E-01	-	-	2.05E-03	-	-	1.58E-01	-	-
131	566200.00	4176900.00	RESIDENTIAL	1.61E-01	-	-	1.97E-03	-	-	1.61E-01	-	-
132	566200.00	4177000.00	RESIDENTIAL	1.64E-01	-	-	1.85E-03	-	-	1.64E-01	-	-
133	566200.00	4177100.00	RESIDENTIAL	1.67E-01	-	-	1.73E-03	-	-	1.67E-01	-	-
134	566200.00	4177200.00	RESIDENTIAL	1.65E-01	-	-	1.63E-03	-	-	1.65E-01	-	-
135	566200.00	4177300.00	RESIDENTIAL	1.62E-01	-	-	1.52E-03	-	-	1.62E-01	-	-
136	566200.00	4177400.00	RESIDENTIAL	1.58E-01	-	-	1.47E-03	-	-	1.58E-01	-	-
137	566200.00	4177500.00	RESIDENTIAL	1.54E-01	-	-	1.43E-03	-	-	1.54E-01	-	-
138	566200.00	4177600.00	RESIDENTIAL	1.43E-01	-	-	1.38E-03	-	-	1.43E-01	-	-
139	566200.00	4177700.00	RESIDENTIAL	1.28E-01	-	-	1.33E-03	-	-	1.28E-01	-	-
140	566200.00	4177800.00	RESIDENTIAL	1.10E-01	-	-	1.27E-03	-	-	1.10E-01	-	-
141	566200.00	4177900.00	RESIDENTIAL	1.12E-01	-	-	1.21E-03	-	-	1.12E-01	-	-
142	566200.00	4178000.00	RESIDENTIAL	1.17E-01	-	-	1.15E-03	-	-	1.17E-01	-	-
166	566300.00	4176000.00	WORKER	-	-	2.15E-01	-	-	2.15E-03	-	-	2.15E-01
167	566300.00	4176100.00	WORKER	-	-	2.22E-01	-	-	2.06E-03	-	-	2.22E-01
168	566300.00	4176200.00	WORKER	-	-	2.16E-01	-	-	2.01E-03	-	-	2.16E-01
169	566300.00	4176300.00	WORKER	-	-	1.98E-01	-	-	2.05E-03	-	-	1.98E-01
170	566300.00	4176400.00	RESIDENTIAL	1.80E-01	-	-	2.15E-03	-	-	1.80E-01	-	-
171	566300.00	4176500.00	RESIDENTIAL	1.94E-01	-	-	2.21E-03	-	-	1.94E-01	-	-
172	566300.00	4176600.00	RESIDENTIAL	1.92E-01	-	-	2.22E-03	-	-	1.92E-01	-	-
173	566300.00	4176700.00	RESIDENTIAL	1.74E-01	-	-	2.18E-03	-	-	1.74E-01	-	-

OAK Terminal Modernization  
 Table 2-26. Eight (8)-Hour Hazard Indices  
 Combined Construction & Operations

				Combined Construction + Operations			Construction Only			Operations Only		
				8-Hour Hazard Index			8-Hour Hazard Index			8-Hour Hazard Index		
Maximum->				5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
Minimum->				2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
Max ReclD->				1924	582	1281	1546	1879	3296	1924	582	1281
Exposure Years->				2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
174	566300.00	4176800.00	RESIDENTIAL	1.67E-01	-	-	2.10E-03	-	-	1.67E-01	-	-
175	566300.00	4176900.00	RESIDENTIAL	1.72E-01	-	-	1.99E-03	-	-	1.72E-01	-	-
176	566300.00	4177000.00	RESIDENTIAL	1.76E-01	-	-	1.85E-03	-	-	1.76E-01	-	-
177	566300.00	4177100.00	RESIDENTIAL	1.76E-01	-	-	1.74E-03	-	-	1.76E-01	-	-
178	566300.00	4177200.00	RESIDENTIAL	1.74E-01	-	-	1.63E-03	-	-	1.74E-01	-	-
179	566300.00	4177300.00	RESIDENTIAL	1.60E-01	-	-	1.55E-03	-	-	1.60E-01	-	-
180	566300.00	4177400.00	RESIDENTIAL	1.56E-01	-	-	1.50E-03	-	-	1.56E-01	-	-
181	566300.00	4177500.00	RESIDENTIAL	1.47E-01	-	-	1.45E-03	-	-	1.47E-01	-	-
182	566300.00	4177600.00	RESIDENTIAL	1.30E-01	-	-	1.39E-03	-	-	1.30E-01	-	-
183	566300.00	4177700.00	RESIDENTIAL	1.16E-01	-	-	1.33E-03	-	-	1.16E-01	-	-
184	566300.00	4177800.00	RESIDENTIAL	1.19E-01	-	-	1.27E-03	-	-	1.19E-01	-	-
185	566300.00	4177900.00	RESIDENTIAL	1.25E-01	-	-	1.20E-03	-	-	1.25E-01	-	-
186	566300.00	4178000.00	RESIDENTIAL	1.34E-01	-	-	1.13E-03	-	-	1.34E-01	-	-
210	566400.00	4175900.00	WORKER	-	-	2.18E-01	-	-	2.29E-03	-	-	2.18E-01
211	566400.00	4176000.00	WORKER	-	-	2.31E-01	-	-	2.23E-03	-	-	2.31E-01
212	566400.00	4176100.00	WORKER	-	-	2.31E-01	-	-	2.13E-03	-	-	2.31E-01
213	566400.00	4176200.00	WORKER	-	-	2.16E-01	-	-	2.12E-03	-	-	2.16E-01
214	566400.00	4176300.00	RESIDENTIAL	1.92E-01	-	-	2.21E-03	-	-	1.92E-01	-	-
215	566400.00	4176400.00	RESIDENTIAL	2.08E-01	-	-	2.31E-03	-	-	2.08E-01	-	-
216	566400.00	4176500.00	RESIDENTIAL	2.08E-01	-	-	2.34E-03	-	-	2.08E-01	-	-
217	566400.00	4176600.00	RESIDENTIAL	1.90E-01	-	-	2.32E-03	-	-	1.90E-01	-	-
218	566400.00	4176700.00	RESIDENTIAL	1.73E-01	-	-	2.25E-03	-	-	1.73E-01	-	-
219	566400.00	4176800.00	RESIDENTIAL	1.79E-01	-	-	2.14E-03	-	-	1.79E-01	-	-
220	566400.00	4176900.00	RESIDENTIAL	1.84E-01	-	-	2.00E-03	-	-	1.84E-01	-	-
221	566400.00	4177000.00	RESIDENTIAL	1.87E-01	-	-	1.85E-03	-	-	1.87E-01	-	-
222	566400.00	4177100.00	RESIDENTIAL	1.85E-01	-	-	1.74E-03	-	-	1.85E-01	-	-
223	566400.00	4177200.00	RESIDENTIAL	1.71E-01	-	-	1.63E-03	-	-	1.71E-01	-	-
224	566400.00	4177300.00	RESIDENTIAL	1.57E-01	-	-	1.58E-03	-	-	1.57E-01	-	-
225	566400.00	4177400.00	RESIDENTIAL	1.45E-01	-	-	1.53E-03	-	-	1.45E-01	-	-
226	566400.00	4177500.00	RESIDENTIAL	1.30E-01	-	-	1.46E-03	-	-	1.30E-01	-	-
227	566400.00	4177600.00	RESIDENTIAL	1.23E-01	-	-	1.40E-03	-	-	1.23E-01	-	-
228	566400.00	4177700.00	RESIDENTIAL	1.27E-01	-	-	1.33E-03	-	-	1.27E-01	-	-
229	566400.00	4177800.00	RESIDENTIAL	1.35E-01	-	-	1.26E-03	-	-	1.35E-01	-	-
230	566400.00	4177900.00	RESIDENTIAL	1.44E-01	-	-	1.18E-03	-	-	1.44E-01	-	-
231	566400.00	4178000.00	RESIDENTIAL	1.56E-01	-	-	1.12E-03	-	-	1.56E-01	-	-
254	566500.00	4175800.00	WORKER	-	-	2.19E-01	-	-	2.42E-03	-	-	2.19E-01
255	566500.00	4175900.00	WORKER	-	-	2.41E-01	-	-	2.40E-03	-	-	2.41E-01
256	566500.00	4176000.00	WORKER	-	-	2.46E-01	-	-	2.33E-03	-	-	2.46E-01
257	566500.00	4176100.00	WORKER	-	-	2.35E-01	-	-	2.21E-03	-	-	2.35E-01
258	566500.00	4176200.00	WORKER	-	-	2.09E-01	-	-	2.27E-03	-	-	2.09E-01
259	566500.00	4176300.00	WORKER	-	-	2.22E-01	-	-	2.39E-03	-	-	2.22E-01
260	566500.00	4176400.00	RESIDENTIAL	2.23E-01	-	-	2.46E-03	-	-	2.23E-01	-	-
261	566500.00	4176500.00	RESIDENTIAL	2.09E-01	-	-	2.47E-03	-	-	2.09E-01	-	-
262	566500.00	4176600.00	RESIDENTIAL	1.83E-01	-	-	2.41E-03	-	-	1.83E-01	-	-
263	566500.00	4176700.00	RESIDENTIAL	1.87E-01	-	-	2.30E-03	-	-	1.87E-01	-	-
264	566500.00	4176800.00	RESIDENTIAL	1.92E-01	-	-	2.16E-03	-	-	1.92E-01	-	-
265	566500.00	4176900.00	RESIDENTIAL	1.96E-01	-	-	1.99E-03	-	-	1.96E-01	-	-
266	566500.00	4177000.00	RESIDENTIAL	1.98E-01	-	-	1.86E-03	-	-	1.98E-01	-	-
267	566500.00	4177100.00	RESIDENTIAL	1.79E-01	-	-	1.73E-03	-	-	1.79E-01	-	-
268	566500.00	4177200.00	RESIDENTIAL	1.54E-01	-	-	1.67E-03	-	-	1.54E-01	-	-
269	566500.00	4177300.00	RESIDENTIAL	1.43E-01	-	-	1.61E-03	-	-	1.43E-01	-	-
270	566500.00	4177400.00	RESIDENTIAL	1.31E-01	-	-	1.54E-03	-	-	1.31E-01	-	-
271	566500.00	4177500.00	RESIDENTIAL	1.32E-01	-	-	1.47E-03	-	-	1.32E-01	-	-
272	566500.00	4177600.00	RESIDENTIAL	1.36E-01	-	-	1.39E-03	-	-	1.36E-01	-	-
273	566500.00	4177700.00	RESIDENTIAL	1.46E-01	-	-	1.31E-03	-	-	1.46E-01	-	-
274	566500.00	4177800.00	RESIDENTIAL	1.57E-01	-	-	1.24E-03	-	-	1.57E-01	-	-
275	566500.00	4177900.00	RESIDENTIAL	1.69E-01	-	-	1.17E-03	-	-	1.69E-01	-	-
276	566500.00	4178000.00	RESIDENTIAL	1.80E-01	-	-	1.11E-03	-	-	1.80E-01	-	-
297	566600.00	4175700.00	WORKER	-	-	2.21E-01	-	-	2.53E-03	-	-	2.21E-01
298	566600.00	4175800.00	WORKER	-	-	2.47E-01	-	-	2.56E-03	-	-	2.47E-01
299	566600.00	4175900.00	WORKER	-	-	2.59E-01	-	-	2.52E-03	-	-	2.59E-01
300	566600.00	4176000.00	WORKER	-	-	2.54E-01	-	-	2.42E-03	-	-	2.54E-01
301	566600.00	4176100.00	WORKER	-	-	2.31E-01	-	-	2.35E-03	-	-	2.31E-01

OAK Terminal Modernization  
 Table 2-26. Eight (8)-Hour Hazard Indices  
 Combined Construction & Operations

				Combined Construction + Operations			Construction Only			Operations Only		
				8-Hour Hazard Index			8-Hour Hazard Index			8-Hour Hazard Index		
Maximum->				5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
Minimum->				2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
Max ReclD->				1924	582	1281	1546	1879	3296	1924	582	1281
Exposure Years->				2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child	School Child	Adult Worker	Adult Resident & Child	School Child	Adult Worker	Adult Resident & Child	School Child	Adult Worker
302	566600.00	4176200.00	WORKER	-	-	2.32E-01	-	-	2.47E-03	-	-	2.32E-01
303	566600.00	4176300.00	RESIDENTIAL	2.38E-01	-	-	2.58E-03	-	-	2.38E-01	-	-
304	566600.00	4176400.00	RESIDENTIAL	2.28E-01	-	-	2.61E-03	-	-	2.28E-01	-	-
305	566600.00	4176500.00	RESIDENTIAL	2.02E-01	-	-	2.58E-03	-	-	2.02E-01	-	-
306	566600.00	4176600.00	RESIDENTIAL	1.95E-01	-	-	2.48E-03	-	-	1.95E-01	-	-
307	566600.00	4176700.00	RESIDENTIAL	2.00E-01	-	-	2.33E-03	-	-	2.00E-01	-	-
308	566600.00	4176800.00	RESIDENTIAL	2.05E-01	-	-	2.16E-03	-	-	2.05E-01	-	-
309	566600.00	4176900.00	RESIDENTIAL	2.07E-01	-	-	1.99E-03	-	-	2.07E-01	-	-
310	566600.00	4177000.00	RESIDENTIAL	1.85E-01	-	-	1.85E-03	-	-	1.85E-01	-	-
311	566600.00	4177100.00	RESIDENTIAL	1.55E-01	-	-	1.77E-03	-	-	1.55E-01	-	-
312	566600.00	4177200.00	RESIDENTIAL	1.42E-01	-	-	1.70E-03	-	-	1.42E-01	-	-
313	566600.00	4177300.00	RESIDENTIAL	1.40E-01	-	-	1.62E-03	-	-	1.40E-01	-	-
314	566600.00	4177400.00	RESIDENTIAL	1.42E-01	-	-	1.54E-03	-	-	1.42E-01	-	-
315	566600.00	4177500.00	RESIDENTIAL	1.49E-01	-	-	1.46E-03	-	-	1.49E-01	-	-
316	566600.00	4177600.00	RESIDENTIAL	1.59E-01	-	-	1.38E-03	-	-	1.59E-01	-	-
317	566600.00	4177700.00	RESIDENTIAL	1.71E-01	-	-	1.29E-03	-	-	1.71E-01	-	-
318	566600.00	4177800.00	RESIDENTIAL	1.84E-01	-	-	1.22E-03	-	-	1.84E-01	-	-
319	566600.00	4177900.00	RESIDENTIAL	1.95E-01	-	-	1.16E-03	-	-	1.95E-01	-	-
320	566600.00	4178000.00	RESIDENTIAL	2.05E-01	-	-	1.19E-03	-	-	2.05E-01	-	-
340	566700.00	4175600.00	ROAD	-	-	2.22E-01	-	-	2.62E-03	-	-	2.22E-01
341	566700.00	4175700.00	WORKER	-	-	2.49E-01	-	-	2.69E-03	-	-	2.49E-01
342	566700.00	4175800.00	WORKER	-	-	2.72E-01	-	-	2.70E-03	-	-	2.72E-01
343	566700.00	4175900.00	WORKER	-	-	2.73E-01	-	-	2.65E-03	-	-	2.73E-01
344	566700.00	4176000.00	WORKER	-	-	2.54E-01	-	-	2.52E-03	-	-	2.54E-01
345	566700.00	4176100.00	WORKER	-	-	2.41E-01	-	-	2.55E-03	-	-	2.41E-01
346	566700.00	4176200.00	WORKER	-	-	2.51E-01	-	-	2.69E-03	-	-	2.51E-01
347	566700.00	4176300.00	RESIDENTIAL	2.48E-01	-	-	2.77E-03	-	-	2.48E-01	-	-
348	566700.00	4176400.00	RESIDENTIAL	2.21E-01	-	-	2.76E-03	-	-	2.21E-01	-	-
349	566700.00	4176500.00	RESIDENTIAL	2.03E-01	-	-	2.67E-03	-	-	2.03E-01	-	-
350	566700.00	4176600.00	RESIDENTIAL	2.08E-01	-	-	2.53E-03	-	-	2.08E-01	-	-
351	566700.00	4176700.00	RESIDENTIAL	2.14E-01	-	-	2.35E-03	-	-	2.14E-01	-	-
352	566700.00	4176800.00	RESIDENTIAL	2.14E-01	-	-	2.15E-03	-	-	2.14E-01	-	-
353	566700.00	4176900.00	RESIDENTIAL	1.90E-01	-	-	1.99E-03	-	-	1.90E-01	-	-
354	566700.00	4177000.00	RESIDENTIAL	1.60E-01	-	-	1.88E-03	-	-	1.60E-01	-	-
355	566700.00	4177100.00	RESIDENTIAL	1.50E-01	-	-	1.80E-03	-	-	1.50E-01	-	-
356	566700.00	4177200.00	RESIDENTIAL	1.50E-01	-	-	1.72E-03	-	-	1.50E-01	-	-
357	566700.00	4177300.00	RESIDENTIAL	1.54E-01	-	-	1.63E-03	-	-	1.54E-01	-	-
358	566700.00	4177400.00	RESIDENTIAL	1.62E-01	-	-	1.54E-03	-	-	1.62E-01	-	-
359	566700.00	4177500.00	RESIDENTIAL	1.74E-01	-	-	1.44E-03	-	-	1.74E-01	-	-
360	566700.00	4177600.00	RESIDENTIAL	1.87E-01	-	-	1.35E-03	-	-	1.87E-01	-	-
361	566700.00	4177700.00	RESIDENTIAL	2.01E-01	-	-	1.28E-03	-	-	2.01E-01	-	-
362	566700.00	4177800.00	RESIDENTIAL	2.11E-01	-	-	1.23E-03	-	-	2.11E-01	-	-
363	566700.00	4177900.00	RESIDENTIAL	2.20E-01	-	-	1.27E-03	-	-	2.20E-01	-	-
364	566700.00	4178000.00	RESIDENTIAL	2.26E-01	-	-	1.30E-03	-	-	2.26E-01	-	-
383	566800.00	4175500.00	WORKER	-	-	2.20E-01	-	-	2.70E-03	-	-	2.20E-01
384	566800.00	4175600.00	ROAD	-	-	2.46E-01	-	-	2.80E-03	-	-	2.46E-01
385	566800.00	4175700.00	WORKER	-	-	2.82E-01	-	-	2.86E-03	-	-	2.82E-01
386	566800.00	4175800.00	WORKER	-	-	2.92E-01	-	-	2.87E-03	-	-	2.92E-01
387	566800.00	4175900.00	WORKER	-	-	2.78E-01	-	-	2.78E-03	-	-	2.78E-01
388	566800.00	4176000.00	WORKER	-	-	2.55E-01	-	-	2.64E-03	-	-	2.55E-01
389	566800.00	4176100.00	WORKER	-	-	2.62E-01	-	-	2.80E-03	-	-	2.62E-01
390	566800.00	4176200.00	RESIDENTIAL	2.63E-01	-	-	2.92E-03	-	-	2.63E-01	-	-
391	566800.00	4176300.00	RESIDENTIAL	2.41E-01	-	-	2.95E-03	-	-	2.41E-01	-	-
392	566800.00	4176400.00	RESIDENTIAL	2.15E-01	-	-	2.88E-03	-	-	2.15E-01	-	-
393	566800.00	4176500.00	RESIDENTIAL	2.17E-01	-	-	2.74E-03	-	-	2.17E-01	-	-
394	566800.00	4176600.00	RESIDENTIAL	2.22E-01	-	-	2.56E-03	-	-	2.22E-01	-	-
395	566800.00	4176700.00	RESIDENTIAL	2.18E-01	-	-	2.34E-03	-	-	2.18E-01	-	-
396	566800.00	4176800.00	RESIDENTIAL	1.95E-01	-	-	2.15E-03	-	-	1.95E-01	-	-
397	566800.00	4176900.00	RESIDENTIAL	1.65E-01	-	-	2.00E-03	-	-	1.65E-01	-	-
398	566800.00	4177000.00	RESIDENTIAL	1.59E-01	-	-	1.91E-03	-	-	1.59E-01	-	-
399	566800.00	4177100.00	RESIDENTIAL	1.62E-01	-	-	1.82E-03	-	-	1.62E-01	-	-
400	566800.00	4177200.00	RESIDENTIAL	1.68E-01	-	-	1.72E-03	-	-	1.68E-01	-	-
401	566800.00	4177300.00	RESIDENTIAL	1.77E-01	-	-	1.62E-03	-	-	1.77E-01	-	-

OAK Terminal Modernization  
 Table 2-26. Eight (8)-Hour Hazard Indices  
 Combined Construction & Operations

				Combined Construction + Operations			Construction Only			Operations Only		
				8-Hour Hazard Index			8-Hour Hazard Index			8-Hour Hazard Index		
Maximum->				5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
Minimum->				2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
Max ReclD->				1924	582	1281	1546	1879	3296	1924	582	1281
Exposure Years->				2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
402	566800.00	4177400.00	RESIDENTIAL	1.90E-01	-	-	1.52E-03	-	-	1.90E-01	-	-
403	566800.00	4177500.00	RESIDENTIAL	2.06E-01	-	-	1.42E-03	-	-	2.06E-01	-	-
404	566800.00	4177600.00	RESIDENTIAL	2.18E-01	-	-	1.34E-03	-	-	2.18E-01	-	-
405	566800.00	4177700.00	RESIDENTIAL	2.28E-01	-	-	1.31E-03	-	-	2.28E-01	-	-
406	566800.00	4177800.00	RESIDENTIAL	2.36E-01	-	-	1.35E-03	-	-	2.36E-01	-	-
407	566800.00	4177900.00	RESIDENTIAL	2.31E-01	-	-	1.39E-03	-	-	2.31E-01	-	-
408	566800.00	4178000.00	RESIDENTIAL	2.19E-01	-	-	1.42E-03	-	-	2.19E-01	-	-
426	566900.00	4175400.00	WORKER	-	-	2.19E-01	-	-	2.78E-03	-	-	2.19E-01
427	566900.00	4175500.00	WORKER	-	-	2.36E-01	-	-	2.88E-03	-	-	2.36E-01
428	566900.00	4175600.00	ROAD	-	-	2.89E-01	-	-	3.00E-03	-	-	2.89E-01
429	566900.00	4175700.00	WORKER	-	-	3.09E-01	-	-	3.06E-03	-	-	3.09E-01
430	566900.00	4175800.00	WORKER	-	-	3.04E-01	-	-	3.04E-03	-	-	3.04E-01
431	566900.00	4175900.00	WORKER	-	-	2.71E-01	-	-	2.93E-03	-	-	2.71E-01
432	566900.00	4176000.00	WORKER	-	-	2.68E-01	-	-	2.89E-03	-	-	2.68E-01
433	566900.00	4176100.00	WORKER	-	-	2.75E-01	-	-	3.07E-03	-	-	2.75E-01
434	566900.00	4176200.00	RESIDENTIAL	2.60E-01	-	-	3.15E-03	-	-	2.60E-01	-	-
435	566900.00	4176300.00	RESIDENTIAL	2.33E-01	-	-	3.12E-03	-	-	2.33E-01	-	-
436	566900.00	4176400.00	RESIDENTIAL	2.27E-01	-	-	2.99E-03	-	-	2.27E-01	-	-
437	566900.00	4176500.00	RESIDENTIAL	2.31E-01	-	-	2.80E-03	-	-	2.31E-01	-	-
438	566900.00	4176600.00	RESIDENTIAL	2.21E-01	-	-	2.56E-03	-	-	2.21E-01	-	-
439	566900.00	4176700.00	RESIDENTIAL	1.97E-01	-	-	2.33E-03	-	-	1.97E-01	-	-
440	566900.00	4176800.00	RESIDENTIAL	1.76E-01	-	-	2.15E-03	-	-	1.76E-01	-	-
441	566900.00	4176900.00	RESIDENTIAL	1.71E-01	-	-	2.04E-03	-	-	1.71E-01	-	-
442	566900.00	4177000.00	RESIDENTIAL	1.75E-01	-	-	1.93E-03	-	-	1.75E-01	-	-
443	566900.00	4177100.00	RESIDENTIAL	1.83E-01	-	-	1.82E-03	-	-	1.83E-01	-	-
444	566900.00	4177200.00	RESIDENTIAL	1.95E-01	-	-	1.71E-03	-	-	1.95E-01	-	-
445	566900.00	4177300.00	RESIDENTIAL	2.09E-01	-	-	1.60E-03	-	-	2.09E-01	-	-
446	566900.00	4177400.00	RESIDENTIAL	2.25E-01	-	-	1.49E-03	-	-	2.25E-01	-	-
447	566900.00	4177500.00	RESIDENTIAL	2.36E-01	-	-	1.40E-03	-	-	2.36E-01	-	-
448	566900.00	4177600.00	RESIDENTIAL	2.46E-01	-	-	1.40E-03	-	-	2.46E-01	-	-
449	566900.00	4177700.00	RESIDENTIAL	2.43E-01	-	-	1.45E-03	-	-	2.43E-01	-	-
450	566900.00	4177800.00	RESIDENTIAL	2.31E-01	-	-	1.48E-03	-	-	2.31E-01	-	-
451	566900.00	4177900.00	RESIDENTIAL	2.17E-01	-	-	1.50E-03	-	-	2.17E-01	-	-
452	566900.00	4178000.00	RESIDENTIAL	2.14E-01	-	-	1.52E-03	-	-	2.14E-01	-	-
469	567000.00	4175300.00	WORKER	-	-	2.20E-01	-	-	2.89E-03	-	-	2.20E-01
470	567000.00	4175400.00	WORKER	-	-	2.31E-01	-	-	2.96E-03	-	-	2.31E-01
471	567000.00	4175500.00	ROAD	-	-	2.90E-01	-	-	3.09E-03	-	-	2.90E-01
472	567000.00	4175600.00	ROAD	-	-	3.25E-01	-	-	3.22E-03	-	-	3.25E-01
473	567000.00	4175700.00	WORKER	-	-	3.29E-01	-	-	3.28E-03	-	-	3.29E-01
474	567000.00	4175800.00	WORKER	-	-	2.96E-01	-	-	3.24E-03	-	-	2.96E-01
475	567000.00	4175900.00	RECREATIONAL	-	-	2.82E-01	-	-	3.07E-03	-	-	2.82E-01
476	567000.00	4176000.00	WORKER	-	-	2.82E-01	-	-	3.21E-03	-	-	2.82E-01
477	567000.00	4176100.00	RESIDENTIAL	2.77E-01	-	-	3.36E-03	-	-	2.77E-01	-	-
478	567000.00	4176200.00	RESIDENTIAL	2.50E-01	-	-	3.37E-03	-	-	2.50E-01	-	-
479	567000.00	4176300.00	RESIDENTIAL	2.42E-01	-	-	3.26E-03	-	-	2.42E-01	-	-
480	567000.00	4176400.00	RESIDENTIAL	2.40E-01	-	-	3.07E-03	-	-	2.40E-01	-	-
481	567000.00	4176500.00	RESIDENTIAL	2.23E-01	-	-	2.81E-03	-	-	2.23E-01	-	-
482	567000.00	4176600.00	RESIDENTIAL	2.01E-01	-	-	2.55E-03	-	-	2.01E-01	-	-
483	567000.00	4176700.00	RESIDENTIAL	1.88E-01	-	-	2.34E-03	-	-	1.88E-01	-	-
484	567000.00	4176800.00	RESIDENTIAL	1.86E-01	-	-	2.17E-03	-	-	1.86E-01	-	-
485	567000.00	4176900.00	RESIDENTIAL	1.92E-01	-	-	2.06E-03	-	-	1.92E-01	-	-
486	567000.00	4177000.00	RESIDENTIAL	2.03E-01	-	-	1.94E-03	-	-	2.03E-01	-	-
487	567000.00	4177100.00	RESIDENTIAL	2.13E-01	-	-	1.82E-03	-	-	2.13E-01	-	-
488	567000.00	4177200.00	RESIDENTIAL	2.29E-01	-	-	1.69E-03	-	-	2.29E-01	-	-
489	567000.00	4177300.00	RESIDENTIAL	2.44E-01	-	-	1.58E-03	-	-	2.44E-01	-	-
490	567000.00	4177400.00	RESIDENTIAL	2.56E-01	-	-	1.49E-03	-	-	2.56E-01	-	-
491	567000.00	4177500.00	RESIDENTIAL	2.56E-01	-	-	1.51E-03	-	-	2.56E-01	-	-
492	567000.00	4177600.00	RESIDENTIAL	2.42E-01	-	-	1.55E-03	-	-	2.42E-01	-	-
493	567000.00	4177700.00	RESIDENTIAL	2.29E-01	-	-	1.58E-03	-	-	2.29E-01	-	-
494	567000.00	4177800.00	RESIDENTIAL	2.21E-01	-	-	1.60E-03	-	-	2.21E-01	-	-
495	567000.00	4177900.00	RESIDENTIAL	2.34E-01	-	-	1.61E-03	-	-	2.34E-01	-	-
496	567000.00	4178000.00	RESIDENTIAL	2.47E-01	-	-	1.60E-03	-	-	2.47E-01	-	-
512	567100.00	4175200.00	WORKER	-	-	2.54E-01	-	-	3.14E-03	-	-	2.54E-01

OAK Terminal Modernization  
 Table 2-26. Eight (8)-Hour Hazard Indices  
 Combined Construction & Operations

				Combined Construction + Operations			Construction Only			Operations Only		
				8-Hour Hazard Index			8-Hour Hazard Index			8-Hour Hazard Index		
Maximum->				5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
Minimum->				2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
Max ReclD->				1924	582	1281	1546	1879	3296	1924	582	1281
Exposure Years->				2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child	School Child	Adult Worker	Adult Resident & Child	School Child	Adult Worker	Adult Resident & Child	School Child	Adult Worker
513	567100.00	4175300.00	WORKER	-	-	2.26E-01	-	-	3.03E-03	-	-	2.26E-01
514	567100.00	4175400.00	WORKER	-	-	2.81E-01	-	-	3.18E-03	-	-	2.81E-01
515	567100.00	4175500.00	WORKER	-	-	3.37E-01	-	-	3.35E-03	-	-	3.37E-01
516	567100.00	4175600.00	WORKER	-	-	3.53E-01	-	-	3.49E-03	-	-	3.53E-01
517	567100.00	4175700.00	WORKER	-	-	3.26E-01	-	-	3.54E-03	-	-	3.26E-01
518	567100.00	4175800.00	WORKER	-	-	3.01E-01	-	-	3.46E-03	-	-	3.01E-01
519	567100.00	4175900.00	WORKER	-	-	2.91E-01	-	-	3.34E-03	-	-	2.91E-01
520	567100.00	4176000.00	RESIDENTIAL	2.90E-01	-	-	3.57E-03	-	-	2.90E-01	-	-
521	567100.00	4176100.00	RESIDENTIAL	2.63E-01	-	-	3.65E-03	-	-	2.63E-01	-	-
522	567100.00	4176200.00	RESIDENTIAL	2.61E-01	-	-	3.58E-03	-	-	2.61E-01	-	-
523	567100.00	4176300.00	RESIDENTIAL	2.55E-01	-	-	3.38E-03	-	-	2.55E-01	-	-
524	567100.00	4176400.00	RESIDENTIAL	2.32E-01	-	-	3.10E-03	-	-	2.32E-01	-	-
525	567100.00	4176500.00	RESIDENTIAL	2.14E-01	-	-	2.79E-03	-	-	2.14E-01	-	-
526	567100.00	4176600.00	RESIDENTIAL	2.03E-01	-	-	2.55E-03	-	-	2.03E-01	-	-
527	567100.00	4176700.00	RESIDENTIAL	2.03E-01	-	-	2.34E-03	-	-	2.03E-01	-	-
528	567100.00	4176800.00	RESIDENTIAL	2.10E-01	-	-	2.20E-03	-	-	2.10E-01	-	-
529	567100.00	4176900.00	RESIDENTIAL	2.21E-01	-	-	2.06E-03	-	-	2.21E-01	-	-
530	567100.00	4177000.00	RESIDENTIAL	2.36E-01	-	-	1.93E-03	-	-	2.36E-01	-	-
531	567100.00	4177100.00	RESIDENTIAL	2.52E-01	-	-	1.79E-03	-	-	2.52E-01	-	-
532	567100.00	4177200.00	RESIDENTIAL	2.66E-01	-	-	1.68E-03	-	-	2.66E-01	-	-
533	567100.00	4177300.00	RESIDENTIAL	2.75E-01	-	-	1.59E-03	-	-	2.75E-01	-	-
534	567100.00	4177400.00	RESIDENTIAL	2.60E-01	-	-	1.62E-03	-	-	2.60E-01	-	-
535	567100.00	4177500.00	RESIDENTIAL	2.44E-01	-	-	1.67E-03	-	-	2.44E-01	-	-
536	567100.00	4177600.00	RESIDENTIAL	2.28E-01	-	-	1.69E-03	-	-	2.28E-01	-	-
537	567100.00	4177700.00	RESIDENTIAL	2.43E-01	-	-	1.70E-03	-	-	2.43E-01	-	-
538	567100.00	4177800.00	RESIDENTIAL	2.58E-01	-	-	1.70E-03	-	-	2.58E-01	-	-
539	567100.00	4177900.00	RESIDENTIAL	2.71E-01	-	-	1.69E-03	-	-	2.71E-01	-	-
540	567100.00	4178000.00	RESIDENTIAL	2.82E-01	-	-	1.66E-03	-	-	2.82E-01	-	-
556	567200.00	4175200.00	WORKER	-	-	2.48E-01	-	-	3.29E-03	-	-	2.48E-01
557	567200.00	4175300.00	WORKER	-	-	2.64E-01	-	-	3.25E-03	-	-	2.64E-01
558	567200.00	4175400.00	WORKER	-	-	3.42E-01	-	-	3.43E-03	-	-	3.42E-01
559	567200.00	4175500.00	WORKER	-	-	3.77E-01	-	-	3.64E-03	-	-	3.77E-01
560	567200.00	4175600.00	WORKER	-	-	3.57E-01	-	-	3.80E-03	-	-	3.57E-01
561	567200.00	4175700.00	WORKER	-	-	3.22E-01	-	-	3.83E-03	-	-	3.22E-01
562	567200.00	4175800.00	WORKER	-	-	3.14E-01	-	-	3.70E-03	-	-	3.14E-01
563	567200.00	4175900.00	WORKER	-	-	3.05E-01	-	-	3.77E-03	-	-	3.05E-01
564	567200.00	4176000.00	RESIDENTIAL	2.72E-01	-	-	3.96E-03	-	-	2.72E-01	-	-
565	567200.00	4176100.00	RESIDENTIAL	2.80E-01	-	-	3.94E-03	-	-	2.80E-01	-	-
566	567200.00	4176200.00	RESIDENTIAL	2.71E-01	-	-	3.75E-03	-	-	2.71E-01	-	-
567	567200.00	4176300.00	RESIDENTIAL	2.48E-01	-	-	3.44E-03	-	-	2.48E-01	-	-
568	567200.00	4176400.00	RESIDENTIAL	2.30E-01	-	-	3.09E-03	-	-	2.30E-01	-	-
569	567200.00	4176500.00	RESIDENTIAL	2.20E-01	-	-	2.80E-03	-	-	2.20E-01	-	-
570	567200.00	4176600.00	RESIDENTIAL	2.22E-01	-	-	2.56E-03	-	-	2.22E-01	-	-
571	567200.00	4176700.00	RESIDENTIAL	2.33E-01	-	-	2.35E-03	-	-	2.33E-01	-	-
572	567200.00	4176800.00	RESIDENTIAL	2.44E-01	-	-	2.20E-03	-	-	2.44E-01	-	-
573	567200.00	4176900.00	RESIDENTIAL	2.61E-01	-	-	2.05E-03	-	-	2.61E-01	-	-
574	567200.00	4177000.00	RESIDENTIAL	2.77E-01	-	-	1.91E-03	-	-	2.77E-01	-	-
575	567200.00	4177100.00	RECREATIONAL	-	-	2.90E-01	-	-	1.80E-03	-	-	2.90E-01
576	567200.00	4177200.00	RECREATIONAL	-	-	2.82E-01	-	-	1.71E-03	-	-	2.82E-01
577	567200.00	4177300.00	RECREATIONAL	-	-	2.66E-01	-	-	1.75E-03	-	-	2.66E-01
578	567200.00	4177400.00	RECREATIONAL	-	-	2.47E-01	-	-	1.79E-03	-	-	2.47E-01
579	567200.00	4177500.00	RECREATIONAL	-	-	2.54E-01	-	-	1.80E-03	-	-	2.54E-01
580	567200.00	4177600.00	RECREATIONAL	-	-	2.69E-01	-	-	1.81E-03	-	-	2.69E-01
581	567200.00	4177700.00	ROAD	-	-	2.83E-01	-	-	1.80E-03	-	-	2.83E-01
582	567200.00	4177800.00	SCHOOL	2.96E-01	2.96E-01	2.96E-01	1.78E-03	1.78E-03	1.78E-03	2.96E-01	2.96E-01	2.96E-01
583	567200.00	4177900.00	RESIDENTIAL	3.07E-01	-	-	1.74E-03	-	-	3.07E-01	-	-
584	567200.00	4178000.00	RESIDENTIAL	3.14E-01	-	-	1.77E-03	-	-	3.14E-01	-	-
599	567300.00	4175100.00	WORKER	-	-	2.81E-01	-	-	3.69E-03	-	-	2.81E-01
600	567300.00	4175200.00	WORKER	-	-	2.52E-01	-	-	3.45E-03	-	-	2.52E-01
601	567300.00	4175300.00	WORKER	-	-	3.39E-01	-	-	3.50E-03	-	-	3.39E-01
602	567300.00	4175400.00	WORKER	-	-	3.97E-01	-	-	3.75E-03	-	-	3.97E-01
603	567300.00	4175500.00	WORKER	-	-	3.91E-01	-	-	3.99E-03	-	-	3.91E-01
604	567300.00	4175600.00	WORKER	-	-	3.44E-01	-	-	4.16E-03	-	-	3.44E-01

OAK Terminal Modernization  
 Table 2-26. Eight (8)-Hour Hazard Indices  
 Combined Construction & Operations

				Combined Construction + Operations			Construction Only			Operations Only		
				8-Hour Hazard Index			8-Hour Hazard Index			8-Hour Hazard Index		
Maximum->				5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
Minimum->				2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
Max ReclD->				1924	582	1281	1546	1879	3296	1924	582	1281
Exposure Years->				2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
605	567300.00	4175700.00	WORKER	-	-	3.40E-01	-	-	4.18E-03	-	-	3.40E-01
606	567300.00	4175800.00	WORKER	-	-	3.30E-01	-	-	3.99E-03	-	-	3.30E-01
607	567300.00	4175900.00	WORKER	-	-	2.94E-01	-	-	4.27E-03	-	-	2.94E-01
608	567300.00	4176000.00	RESIDENTIAL	2.99E-01	-	-	4.36E-03	-	-	2.99E-01	-	-
609	567300.00	4176100.00	RECREATIONAL	-	-	2.88E-01	-	-	4.19E-03	-	-	2.88E-01
610	567300.00	4176200.00	RESIDENTIAL	2.67E-01	-	-	3.85E-03	-	-	2.67E-01	-	-
611	567300.00	4176300.00	RESIDENTIAL	2.49E-01	-	-	3.45E-03	-	-	2.49E-01	-	-
612	567300.00	4176400.00	RESIDENTIAL	2.42E-01	-	-	3.09E-03	-	-	2.42E-01	-	-
613	567300.00	4176500.00	RESIDENTIAL	2.45E-01	-	-	2.81E-03	-	-	2.45E-01	-	-
614	567300.00	4176600.00	RESIDENTIAL	2.57E-01	-	-	2.55E-03	-	-	2.57E-01	-	-
615	567300.00	4176700.00	RESIDENTIAL	2.70E-01	-	-	2.35E-03	-	-	2.70E-01	-	-
616	567300.00	4176800.00	RESIDENTIAL	2.88E-01	-	-	2.18E-03	-	-	2.88E-01	-	-
617	567300.00	4176900.00	RESIDENTIAL	3.04E-01	-	-	2.05E-03	-	-	3.04E-01	-	-
618	567300.00	4177000.00	RECREATIONAL	-	-	2.97E-01	-	-	1.94E-03	-	-	2.97E-01
619	567300.00	4177100.00	RECREATIONAL	-	-	2.83E-01	-	-	1.84E-03	-	-	2.83E-01
620	567300.00	4177200.00	RECREATIONAL	-	-	2.67E-01	-	-	1.89E-03	-	-	2.67E-01
621	567300.00	4177300.00	RECREATIONAL	-	-	2.69E-01	-	-	1.92E-03	-	-	2.69E-01
622	567300.00	4177400.00	RECREATIONAL	-	-	2.84E-01	-	-	1.93E-03	-	-	2.84E-01
623	567300.00	4177500.00	RECREATIONAL	-	-	2.99E-01	-	-	1.92E-03	-	-	2.99E-01
624	567300.00	4177600.00	RECREATIONAL	-	-	3.12E-01	-	-	1.90E-03	-	-	3.12E-01
625	567300.00	4177700.00	RECREATIONAL	-	-	3.23E-01	-	-	1.87E-03	-	-	3.23E-01
626	567300.00	4177800.00	RECREATIONAL	-	-	3.32E-01	-	-	1.85E-03	-	-	3.32E-01
627	567300.00	4177900.00	WORKER	-	-	3.37E-01	-	-	1.89E-03	-	-	3.37E-01
628	567300.00	4178000.00	RECREATIONAL	-	-	3.38E-01	-	-	1.92E-03	-	-	3.38E-01
642	567400.00	4175200.00	WORKER	-	-	3.22E-01	-	-	3.66E-03	-	-	3.22E-01
643	567400.00	4175300.00	WORKER	-	-	4.09E-01	-	-	3.80E-03	-	-	4.09E-01
644	567400.00	4175400.00	WORKER	-	-	4.25E-01	-	-	4.12E-03	-	-	4.25E-01
645	567400.00	4175500.00	WORKER	-	-	3.84E-01	-	-	4.42E-03	-	-	3.84E-01
646	567400.00	4175600.00	WORKER	-	-	3.69E-01	-	-	4.62E-03	-	-	3.69E-01
647	567400.00	4175700.00	WORKER	-	-	3.57E-01	-	-	4.61E-03	-	-	3.57E-01
648	567400.00	4175800.00	WORKER	-	-	3.25E-01	-	-	4.58E-03	-	-	3.25E-01
649	567400.00	4175900.00	WORKER	-	-	3.21E-01	-	-	4.84E-03	-	-	3.21E-01
650	567400.00	4176000.00	RECREATIONAL	-	-	3.11E-01	-	-	4.74E-03	-	-	3.11E-01
651	567400.00	4176100.00	RECREATIONAL	-	-	2.89E-01	-	-	4.38E-03	-	-	2.89E-01
652	567400.00	4176200.00	RECREATIONAL	-	-	2.72E-01	-	-	3.89E-03	-	-	2.72E-01
653	567400.00	4176300.00	RECREATIONAL	-	-	2.66E-01	-	-	3.45E-03	-	-	2.66E-01
654	567400.00	4176400.00	RECREATIONAL	-	-	2.72E-01	-	-	3.12E-03	-	-	2.72E-01
655	567400.00	4176500.00	RECREATIONAL	-	-	2.85E-01	-	-	2.80E-03	-	-	2.85E-01
656	567400.00	4176600.00	RECREATIONAL	-	-	3.00E-01	-	-	2.54E-03	-	-	3.00E-01
657	567400.00	4176700.00	RECREATIONAL	-	-	3.18E-01	-	-	2.35E-03	-	-	3.18E-01
658	567400.00	4176800.00	RECREATIONAL	-	-	3.12E-01	-	-	2.21E-03	-	-	3.12E-01
659	567400.00	4176900.00	RECREATIONAL	-	-	3.01E-01	-	-	2.10E-03	-	-	3.01E-01
660	567400.00	4177000.00	RECREATIONAL	-	-	2.85E-01	-	-	1.99E-03	-	-	2.85E-01
661	567400.00	4177100.00	RECREATIONAL	-	-	2.80E-01	-	-	2.03E-03	-	-	2.80E-01
662	567400.00	4177200.00	RECREATIONAL	-	-	3.02E-01	-	-	2.06E-03	-	-	3.02E-01
663	567400.00	4177300.00	RECREATIONAL	-	-	3.20E-01	-	-	2.06E-03	-	-	3.20E-01
664	567400.00	4177400.00	RECREATIONAL	-	-	3.32E-01	-	-	2.04E-03	-	-	3.32E-01
665	567400.00	4177500.00	RECREATIONAL	-	-	3.42E-01	-	-	2.01E-03	-	-	3.42E-01
666	567400.00	4177600.00	RECREATIONAL	-	-	3.51E-01	-	-	1.98E-03	-	-	3.51E-01
667	567400.00	4177700.00	RECREATIONAL	-	-	3.57E-01	-	-	1.99E-03	-	-	3.57E-01
668	567400.00	4177800.00	RECREATIONAL	-	-	3.59E-01	-	-	2.03E-03	-	-	3.59E-01
669	567400.00	4177900.00	RECREATIONAL	-	-	3.57E-01	-	-	2.05E-03	-	-	3.57E-01
670	567400.00	4178000.00	ROAD	-	-	3.51E-01	-	-	2.05E-03	-	-	3.51E-01
683	567500.00	4175300.00	WORKER	-	-	4.57E-01	-	-	4.17E-03	-	-	4.57E-01
684	567500.00	4175400.00	WORKER	-	-	4.30E-01	-	-	4.58E-03	-	-	4.30E-01
685	567500.00	4175500.00	WORKER	-	-	4.03E-01	-	-	4.96E-03	-	-	4.03E-01
686	567500.00	4175600.00	WORKER	-	-	3.91E-01	-	-	5.21E-03	-	-	3.91E-01
687	567500.00	4175700.00	WORKER	-	-	3.60E-01	-	-	5.14E-03	-	-	3.60E-01
688	567500.00	4175800.00	WORKER	-	-	3.51E-01	-	-	5.36E-03	-	-	3.51E-01
689	567500.00	4175900.00	WORKER	-	-	3.36E-01	-	-	5.44E-03	-	-	3.36E-01
690	567500.00	4176000.00	RECREATIONAL	-	-	3.16E-01	-	-	5.06E-03	-	-	3.16E-01
691	567500.00	4176100.00	RECREATIONAL	-	-	3.01E-01	-	-	4.46E-03	-	-	3.01E-01
692	567500.00	4176200.00	RECREATIONAL	-	-	2.96E-01	-	-	3.88E-03	-	-	2.96E-01

OAK Terminal Modernization  
 Table 2-26. Eight (8)-Hour Hazard Indices  
 Combined Construction & Operations

				Combined Construction + Operations			Construction Only			Operations Only		
				8-Hour Hazard Index			8-Hour Hazard Index			8-Hour Hazard Index		
Maximum->				5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
Minimum->				2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
Max ReclD->				1924	582	1281	1546	1879	3296	1924	582	1281
Exposure Years->				2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
693	567500.00	4176300.00	RECREATIONAL	-	-	3.03E-01	-	-	3.47E-03	-	-	3.03E-01
694	567500.00	4176400.00	RECREATIONAL	-	-	3.17E-01	-	-	3.10E-03	-	-	3.17E-01
695	567500.00	4176500.00	RECREATIONAL	-	-	3.35E-01	-	-	2.76E-03	-	-	3.35E-01
696	567500.00	4176600.00	RECREATIONAL	-	-	3.28E-01	-	-	2.55E-03	-	-	3.28E-01
697	567500.00	4176700.00	RECREATIONAL	-	-	3.17E-01	-	-	2.42E-03	-	-	3.17E-01
698	567500.00	4176800.00	RECREATIONAL	-	-	3.02E-01	-	-	2.28E-03	-	-	3.02E-01
699	567500.00	4176900.00	RECREATIONAL	-	-	2.88E-01	-	-	2.17E-03	-	-	2.88E-01
700	567500.00	4177000.00	RECREATIONAL	-	-	3.15E-01	-	-	2.20E-03	-	-	3.15E-01
701	567500.00	4177100.00	RECREATIONAL	-	-	3.39E-01	-	-	2.21E-03	-	-	3.39E-01
702	567500.00	4177200.00	RECREATIONAL	-	-	3.58E-01	-	-	2.20E-03	-	-	3.58E-01
703	567500.00	4177300.00	RECREATIONAL	-	-	3.70E-01	-	-	2.17E-03	-	-	3.70E-01
704	567500.00	4177400.00	RECREATIONAL	-	-	3.75E-01	-	-	2.14E-03	-	-	3.75E-01
705	567500.00	4177500.00	RECREATIONAL	-	-	3.78E-01	-	-	2.11E-03	-	-	3.78E-01
706	567500.00	4177600.00	RECREATIONAL	-	-	3.79E-01	-	-	2.14E-03	-	-	3.79E-01
707	567500.00	4177700.00	RECREATIONAL	-	-	3.77E-01	-	-	2.17E-03	-	-	3.77E-01
708	567500.00	4177800.00	RECREATIONAL	-	-	3.72E-01	-	-	2.18E-03	-	-	3.72E-01
709	567500.00	4177900.00	RECREATIONAL	-	-	3.61E-01	-	-	2.18E-03	-	-	3.61E-01
710	567500.00	4178000.00	WORKER	-	-	3.48E-01	-	-	2.16E-03	-	-	3.48E-01
722	567600.00	4175400.00	WORKER	-	-	4.43E-01	-	-	5.16E-03	-	-	4.43E-01
723	567600.00	4175500.00	WORKER	-	-	4.32E-01	-	-	5.69E-03	-	-	4.32E-01
724	567600.00	4175600.00	WORKER	-	-	4.00E-01	-	-	6.00E-03	-	-	4.00E-01
725	567600.00	4175700.00	WORKER	-	-	3.88E-01	-	-	5.90E-03	-	-	3.88E-01
726	567600.00	4175800.00	WORKER	-	-	3.67E-01	-	-	6.32E-03	-	-	3.67E-01
727	567600.00	4175900.00	WORKER	-	-	3.47E-01	-	-	6.02E-03	-	-	3.47E-01
728	567600.00	4176000.00	RECREATIONAL	-	-	3.36E-01	-	-	5.24E-03	-	-	3.36E-01
729	567600.00	4176100.00	RECREATIONAL	-	-	3.31E-01	-	-	4.46E-03	-	-	3.31E-01
730	567600.00	4176200.00	RECREATIONAL	-	-	3.40E-01	-	-	3.91E-03	-	-	3.40E-01
731	567600.00	4176300.00	RECREATIONAL	-	-	3.56E-01	-	-	3.46E-03	-	-	3.56E-01
732	567600.00	4176400.00	RECREATIONAL	-	-	3.52E-01	-	-	3.04E-03	-	-	3.52E-01
733	567600.00	4176500.00	RECREATIONAL	-	-	3.39E-01	-	-	2.84E-03	-	-	3.39E-01
734	567600.00	4176600.00	RECREATIONAL	-	-	3.23E-01	-	-	2.66E-03	-	-	3.23E-01
735	567600.00	4176700.00	RECREATIONAL	-	-	3.03E-01	-	-	2.50E-03	-	-	3.03E-01
736	567600.00	4176800.00	RECREATIONAL	-	-	3.26E-01	-	-	2.37E-03	-	-	3.26E-01
737	567600.00	4176900.00	RECREATIONAL	-	-	3.56E-01	-	-	2.38E-03	-	-	3.56E-01
738	567600.00	4177000.00	RECREATIONAL	-	-	3.80E-01	-	-	2.37E-03	-	-	3.80E-01
739	567600.00	4177100.00	RECREATIONAL	-	-	3.98E-01	-	-	2.35E-03	-	-	3.98E-01
740	567600.00	4177200.00	RECREATIONAL	-	-	4.09E-01	-	-	2.32E-03	-	-	4.09E-01
741	567600.00	4177300.00	RECREATIONAL	-	-	4.10E-01	-	-	2.29E-03	-	-	4.10E-01
742	567600.00	4177400.00	RECREATIONAL	-	-	4.04E-01	-	-	2.26E-03	-	-	4.04E-01
743	567600.00	4177500.00	RECREATIONAL	-	-	3.97E-01	-	-	2.31E-03	-	-	3.97E-01
744	567600.00	4177600.00	RECREATIONAL	-	-	3.90E-01	-	-	2.33E-03	-	-	3.90E-01
745	567600.00	4177700.00	RECREATIONAL	-	-	3.80E-01	-	-	2.33E-03	-	-	3.80E-01
746	567600.00	4177800.00	RECREATIONAL	-	-	3.65E-01	-	-	2.31E-03	-	-	3.65E-01
747	567600.00	4177900.00	RECREATIONAL	-	-	3.36E-01	-	-	2.27E-03	-	-	3.36E-01
748	567600.00	4178000.00	WORKER	-	-	2.89E-01	-	-	2.50E-03	-	-	2.89E-01
759	567700.00	4175500.00	WORKER	-	-	4.44E-01	-	-	6.71E-03	-	-	4.44E-01
760	567700.00	4175600.00	WORKER	-	-	4.29E-01	-	-	7.17E-03	-	-	4.29E-01
761	567700.00	4175700.00	WORKER	-	-	4.01E-01	-	-	7.40E-03	-	-	4.01E-01
762	567700.00	4175800.00	WORKER	-	-	3.85E-01	-	-	7.45E-03	-	-	3.85E-01
763	567700.00	4175900.00	WORKER	-	-	3.73E-01	-	-	6.45E-03	-	-	3.73E-01
764	567700.00	4176000.00	RECREATIONAL	-	-	3.70E-01	-	-	5.29E-03	-	-	3.70E-01
765	567700.00	4176100.00	RECREATIONAL	-	-	3.85E-01	-	-	4.47E-03	-	-	3.85E-01
766	567700.00	4176200.00	RECREATIONAL	-	-	3.98E-01	-	-	3.90E-03	-	-	3.98E-01
767	567700.00	4176300.00	RECREATIONAL	-	-	3.72E-01	-	-	3.51E-03	-	-	3.72E-01
768	567700.00	4176400.00	RECREATIONAL	-	-	3.50E-01	-	-	3.17E-03	-	-	3.50E-01
769	567700.00	4176500.00	RECREATIONAL	-	-	3.29E-01	-	-	2.93E-03	-	-	3.29E-01
770	567700.00	4176600.00	RECREATIONAL	-	-	3.37E-01	-	-	2.76E-03	-	-	3.37E-01
771	567700.00	4176700.00	RECREATIONAL	-	-	3.74E-01	-	-	2.58E-03	-	-	3.74E-01
772	567700.00	4176800.00	RECREATIONAL	-	-	4.04E-01	-	-	2.57E-03	-	-	4.04E-01
773	567700.00	4176900.00	RECREATIONAL	-	-	4.26E-01	-	-	2.56E-03	-	-	4.26E-01
774	567700.00	4177000.00	RECREATIONAL	-	-	4.39E-01	-	-	2.54E-03	-	-	4.39E-01
775	567700.00	4177100.00	RECREATIONAL	-	-	4.44E-01	-	-	2.51E-03	-	-	4.44E-01
776	567700.00	4177200.00	RECREATIONAL	-	-	4.41E-01	-	-	2.46E-03	-	-	4.41E-01

OAK Terminal Modernization  
 Table 2-26. Eight (8)-Hour Hazard Indices  
 Combined Construction & Operations

				Combined Construction + Operations			Construction Only			Operations Only		
				8-Hour Hazard Index			8-Hour Hazard Index			8-Hour Hazard Index		
Maximum->				5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
Minimum->				2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
Max ReclD->				1924	582	1281	1546	1879	3296	1924	582	1281
Exposure Years->				2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child	School Child	Adult Worker	Adult Resident & Child	School Child	Adult Worker	Adult Resident & Child	School Child	Adult Worker
777	567700.00	4177300.00	RECREATIONAL	-	-	4.28E-01	-	-	2.45E-03	-	-	4.28E-01
778	567700.00	4177400.00	RECREATIONAL	-	-	4.10E-01	-	-	2.49E-03	-	-	4.10E-01
779	567700.00	4177500.00	RECREATIONAL	-	-	3.95E-01	-	-	2.50E-03	-	-	3.95E-01
780	567700.00	4177600.00	RECREATIONAL	-	-	3.80E-01	-	-	2.49E-03	-	-	3.80E-01
781	567700.00	4177700.00	RECREATIONAL	-	-	3.51E-01	-	-	2.46E-03	-	-	3.51E-01
782	567700.00	4177800.00	RECREATIONAL	-	-	3.09E-01	-	-	2.40E-03	-	-	3.09E-01
783	567700.00	4177900.00	RECREATIONAL	-	-	2.71E-01	-	-	2.34E-03	-	-	2.71E-01
784	567700.00	4178000.00	WORKER	-	-	2.03E-01	-	-	2.57E-03	-	-	2.03E-01
794	567800.00	4175700.00	WORKER	-	-	4.27E-01	-	-	9.75E-03	-	-	4.27E-01
795	567800.00	4175800.00	WORKER	-	-	4.17E-01	-	-	8.59E-03	-	-	4.17E-01
796	567800.00	4175900.00	WORKER	-	-	4.18E-01	-	-	6.64E-03	-	-	4.18E-01
797	567800.00	4176000.00	RECREATIONAL	-	-	4.36E-01	-	-	5.44E-03	-	-	4.36E-01
798	567800.00	4176100.00	RECREATIONAL	-	-	4.40E-01	-	-	4.74E-03	-	-	4.40E-01
799	567800.00	4176200.00	RECREATIONAL	-	-	4.03E-01	-	-	4.10E-03	-	-	4.03E-01
800	567800.00	4176300.00	RECREATIONAL	-	-	3.65E-01	-	-	3.58E-03	-	-	3.65E-01
801	567800.00	4176400.00	RECREATIONAL	-	-	3.48E-01	-	-	3.27E-03	-	-	3.48E-01
802	567800.00	4176500.00	RECREATIONAL	-	-	3.91E-01	-	-	3.03E-03	-	-	3.91E-01
803	567800.00	4176600.00	RECREATIONAL	-	-	4.29E-01	-	-	2.81E-03	-	-	4.29E-01
804	567800.00	4176700.00	RECREATIONAL	-	-	4.59E-01	-	-	2.81E-03	-	-	4.59E-01
805	567800.00	4176800.00	RECREATIONAL	-	-	4.76E-01	-	-	2.79E-03	-	-	4.76E-01
806	567800.00	4176900.00	RECREATIONAL	-	-	4.81E-01	-	-	2.76E-03	-	-	4.81E-01
807	567800.00	4177000.00	RECREATIONAL	-	-	4.77E-01	-	-	2.70E-03	-	-	4.77E-01
808	567800.00	4177100.00	RECREATIONAL	-	-	4.66E-01	-	-	2.64E-03	-	-	4.66E-01
809	567800.00	4177200.00	RECREATIONAL	-	-	4.46E-01	-	-	2.67E-03	-	-	4.46E-01
810	567800.00	4177300.00	RECREATIONAL	-	-	4.18E-01	-	-	2.70E-03	-	-	4.18E-01
811	567800.00	4177400.00	RECREATIONAL	-	-	3.90E-01	-	-	2.69E-03	-	-	3.90E-01
812	567800.00	4177500.00	RECREATIONAL	-	-	3.67E-01	-	-	2.67E-03	-	-	3.67E-01
813	567800.00	4177600.00	RECREATIONAL	-	-	3.22E-01	-	-	2.62E-03	-	-	3.22E-01
814	567800.00	4177700.00	RECREATIONAL	-	-	2.76E-01	-	-	2.54E-03	-	-	2.76E-01
815	567800.00	4177800.00	RECREATIONAL	-	-	2.40E-01	-	-	2.48E-03	-	-	2.40E-01
816	567800.00	4177900.00	ROAD	-	-	2.09E-01	-	-	2.44E-03	-	-	2.09E-01
817	567800.00	4178000.00	WORKER	-	-	1.54E-01	-	-	2.70E-03	-	-	1.54E-01
826	567900.00	4175800.00	WORKER	-	-	4.74E-01	-	-	9.31E-03	-	-	4.74E-01
827	567878.00	4175900.00	WORKER	-	-	4.75E-01	-	-	7.64E-03	-	-	4.75E-01
828	567883.00	4176000.00	RECREATIONAL	-	-	4.88E-01	-	-	6.35E-03	-	-	4.88E-01
829	567900.00	4176100.00	RECREATIONAL	-	-	4.44E-01	-	-	5.09E-03	-	-	4.44E-01
830	567900.00	4176200.00	RECREATIONAL	-	-	3.96E-01	-	-	4.14E-03	-	-	3.96E-01
831	567900.00	4176300.00	RECREATIONAL	-	-	4.13E-01	-	-	3.63E-03	-	-	4.13E-01
832	567900.00	4176400.00	RECREATIONAL	-	-	4.55E-01	-	-	3.30E-03	-	-	4.55E-01
833	567900.00	4176500.00	RECREATIONAL	-	-	4.90E-01	-	-	3.14E-03	-	-	4.90E-01
834	567900.00	4176600.00	RECREATIONAL	-	-	5.14E-01	-	-	3.11E-03	-	-	5.14E-01
835	567900.00	4176700.00	RECREATIONAL	-	-	5.24E-01	-	-	3.06E-03	-	-	5.24E-01
836	567900.00	4176800.00	RECREATIONAL	-	-	5.21E-01	-	-	3.00E-03	-	-	5.21E-01
837	567900.00	4176900.00	RECREATIONAL	-	-	5.06E-01	-	-	2.92E-03	-	-	5.06E-01
838	567900.00	4177000.00	RECREATIONAL	-	-	4.81E-01	-	-	2.87E-03	-	-	4.81E-01
839	567900.00	4177100.00	RECREATIONAL	-	-	4.53E-01	-	-	2.92E-03	-	-	4.53E-01
840	567900.00	4177200.00	RECREATIONAL	-	-	4.18E-01	-	-	2.94E-03	-	-	4.18E-01
841	567900.00	4177300.00	RECREATIONAL	-	-	3.76E-01	-	-	2.92E-03	-	-	3.76E-01
842	567900.00	4177400.00	RECREATIONAL	-	-	3.41E-01	-	-	2.87E-03	-	-	3.41E-01
843	567900.00	4177500.00	RECREATIONAL	-	-	2.86E-01	-	-	2.84E-03	-	-	2.86E-01
844	567900.00	4177600.00	RECREATIONAL	-	-	2.37E-01	-	-	2.81E-03	-	-	2.37E-01
845	567900.00	4177700.00	RECREATIONAL	-	-	2.04E-01	-	-	2.75E-03	-	-	2.04E-01
846	567900.00	4177800.00	RECREATIONAL	-	-	1.73E-01	-	-	2.67E-03	-	-	1.73E-01
847	567900.00	4177900.00	WORKER	-	-	1.40E-01	-	-	2.58E-03	-	-	1.40E-01
848	567900.00	4178000.00	WORKER	-	-	8.08E-02	-	-	2.83E-03	-	-	8.08E-02
856	568000.00	4176300.00	RECREATIONAL	-	-	5.26E-01	-	-	3.95E-03	-	-	5.26E-01
857	568000.00	4176400.00	RECREATIONAL	-	-	5.53E-01	-	-	3.67E-03	-	-	5.53E-01
858	568000.00	4176500.00	RECREATIONAL	-	-	5.64E-01	-	-	3.53E-03	-	-	5.64E-01
859	568000.00	4176600.00	RECREATIONAL	-	-	5.60E-01	-	-	3.41E-03	-	-	5.60E-01
860	568000.00	4176700.00	RECREATIONAL	-	-	5.48E-01	-	-	3.30E-03	-	-	5.48E-01
861	568000.00	4176800.00	RECREATIONAL	-	-	5.24E-01	-	-	3.21E-03	-	-	5.24E-01
862	568000.00	4176900.00	RECREATIONAL	-	-	4.92E-01	-	-	3.20E-03	-	-	4.92E-01
863	568000.00	4177000.00	RECREATIONAL	-	-	4.49E-01	-	-	3.23E-03	-	-	4.49E-01

OAK Terminal Modernization

Table 2-26. Eight (8)-Hour Hazard Indices

Combined Construction & Operations

Combined Construction + Operations

8-Hour Hazard Index

Construction Only

8-Hour Hazard Index

Operations Only

8-Hour Hazard Index

	Maximum->	5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
	Minimum->	2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
	Max ReclD->	1924	582	1281	1546	1879	3296	1924	582	1281
	Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
864	568000.00	4177100.00	RECREATIONAL	-	-	3.92E-01	-	-	3.26E-03	-	-	3.92E-01
865	568000.00	4177200.00	RECREATIONAL	-	-	3.38E-01	-	-	3.29E-03	-	-	3.38E-01
866	568000.00	4177300.00	RECREATIONAL	-	-	2.77E-01	-	-	3.27E-03	-	-	2.77E-01
867	568000.00	4177400.00	RECREATIONAL	-	-	2.34E-01	-	-	3.24E-03	-	-	2.34E-01
868	568000.00	4177500.00	RECREATIONAL	-	-	2.00E-01	-	-	3.18E-03	-	-	2.00E-01
869	568000.00	4177600.00	RECREATIONAL	-	-	1.61E-01	-	-	3.10E-03	-	-	1.61E-01
870	568000.00	4177700.00	RECREATIONAL	-	-	1.29E-01	-	-	2.99E-03	-	-	1.29E-01
871	568000.00	4177800.00	RECREATIONAL	-	-	1.12E-01	-	-	2.87E-03	-	-	1.12E-01
872	568000.00	4177900.00	RECREATIONAL	-	-	1.27E-01	-	-	2.76E-03	-	-	1.27E-01
873	568000.00	4178000.00	WORKER	-	-	1.42E-01	-	-	2.97E-03	-	-	1.42E-01
881	568096.00	4176500.00	RECREATIONAL	-	-	5.84E-01	-	-	4.28E-03	-	-	5.84E-01
882	568100.00	4176600.00	RECREATIONAL	-	-	5.53E-01	-	-	3.86E-03	-	-	5.53E-01
883	568100.00	4176700.00	RECREATIONAL	-	-	5.21E-01	-	-	3.77E-03	-	-	5.21E-01
884	568100.00	4176800.00	RECREATIONAL	-	-	4.52E-01	-	-	3.89E-03	-	-	4.52E-01
885	568100.00	4176900.00	RECREATIONAL	-	-	3.73E-01	-	-	3.98E-03	-	-	3.73E-01
886	568100.00	4177000.00	RECREATIONAL	-	-	3.06E-01	-	-	4.02E-03	-	-	3.06E-01
887	568100.00	4177100.00	RECREATIONAL	-	-	2.51E-01	-	-	4.03E-03	-	-	2.51E-01
888	568100.00	4177200.00	RECREATIONAL	-	-	2.11E-01	-	-	4.01E-03	-	-	2.11E-01
889	568100.00	4177300.00	RECREATIONAL	-	-	1.79E-01	-	-	3.96E-03	-	-	1.79E-01
890	568100.00	4177400.00	RECREATIONAL	-	-	1.48E-01	-	-	3.89E-03	-	-	1.48E-01
891	568100.00	4177500.00	RECREATIONAL	-	-	1.28E-01	-	-	3.79E-03	-	-	1.28E-01
892	568100.00	4177600.00	RECREATIONAL	-	-	1.49E-01	-	-	3.69E-03	-	-	1.49E-01
893	568100.00	4177700.00	RECREATIONAL	-	-	1.65E-01	-	-	3.58E-03	-	-	1.65E-01
894	568100.00	4177800.00	RECREATIONAL	-	-	1.70E-01	-	-	3.52E-03	-	-	1.70E-01
895	568100.00	4177900.00	RECREATIONAL	-	-	1.66E-01	-	-	3.10E-03	-	-	1.66E-01
896	568100.00	4178000.00	WORKER	-	-	1.63E-01	-	-	2.78E-03	-	-	1.63E-01
941	569004.00	4177402.00	RECREATIONAL	-	-	2.54E-01	-	-	4.41E-03	-	-	2.54E-01
942	569000.00	4177500.00	RECREATIONAL	-	-	2.32E-01	-	-	3.71E-03	-	-	2.32E-01
948	569100.00	4177300.00	RECREATIONAL	-	-	2.47E-01	-	-	3.34E-03	-	-	2.47E-01
949	569100.00	4177400.00	RECREATIONAL	-	-	2.37E-01	-	-	2.73E-03	-	-	2.37E-01
956	569202.00	4177104.00	RECREATIONAL	-	-	3.14E-01	-	-	4.20E-03	-	-	3.14E-01
957	569200.00	4177200.00	RECREATIONAL	-	-	2.79E-01	-	-	3.12E-03	-	-	2.79E-01
958	569200.00	4177300.00	RECREATIONAL	-	-	2.50E-01	-	-	2.74E-03	-	-	2.50E-01
966	569300.00	4176900.00	WORKER	-	-	4.04E-01	-	-	4.08E-03	-	-	4.04E-01
967	569300.00	4177000.00	RECREATIONAL	-	-	3.77E-01	-	-	3.64E-03	-	-	3.77E-01
978	569400.00	4176700.00	WORKER	-	-	4.16E-01	-	-	4.33E-03	-	-	4.16E-01
1032	569600.00	4176900.00	RECREATIONAL	-	-	2.97E-01	-	-	3.21E-03	-	-	2.97E-01
1033	569600.00	4177000.00	RECREATIONAL	-	-	2.97E-01	-	-	3.02E-03	-	-	2.97E-01
1034	569600.00	4177100.00	RECREATIONAL	-	-	2.94E-01	-	-	2.86E-03	-	-	2.94E-01
1035	569600.00	4177200.00	RECREATIONAL	-	-	2.92E-01	-	-	2.73E-03	-	-	2.92E-01
1036	569600.00	4177300.00	RECREATIONAL	-	-	2.80E-01	-	-	2.59E-03	-	-	2.80E-01
1037	569600.00	4177400.00	RECREATIONAL	-	-	2.74E-01	-	-	2.46E-03	-	-	2.74E-01
1043	569600.00	4178000.00	WORKER	-	-	2.18E-01	-	-	1.87E-03	-	-	2.18E-01
1056	569705.00	4176207.00	ROAD	-	-	3.03E-01	-	-	6.29E-03	-	-	3.03E-01
1060	569700.00	4176600.00	WORKER	-	-	3.33E-01	-	-	3.70E-03	-	-	3.33E-01
1061	569700.00	4176700.00	RECREATIONAL	-	-	2.93E-01	-	-	3.49E-03	-	-	2.93E-01
1062	569700.00	4176800.00	RECREATIONAL	-	-	2.82E-01	-	-	3.31E-03	-	-	2.82E-01
1063	569700.00	4176900.00	RECREATIONAL	-	-	2.82E-01	-	-	3.14E-03	-	-	2.82E-01
1064	569700.00	4177000.00	RECREATIONAL	-	-	2.87E-01	-	-	2.98E-03	-	-	2.87E-01
1065	569700.00	4177100.00	RECREATIONAL	-	-	2.92E-01	-	-	2.83E-03	-	-	2.92E-01
1066	569700.00	4177200.00	RECREATIONAL	-	-	2.95E-01	-	-	2.69E-03	-	-	2.95E-01
1067	569700.00	4177300.00	RECREATIONAL	-	-	2.94E-01	-	-	2.57E-03	-	-	2.94E-01
1068	569700.00	4177400.00	RECREATIONAL	-	-	2.90E-01	-	-	2.45E-03	-	-	2.90E-01
1069	569700.00	4177500.00	RECREATIONAL	-	-	2.85E-01	-	-	2.33E-03	-	-	2.85E-01
1072	569700.00	4177800.00	WORKER	-	-	2.53E-01	-	-	2.02E-03	-	-	2.53E-01
1073	569700.00	4177900.00	WORKER	-	-	2.40E-01	-	-	1.94E-03	-	-	2.40E-01
1074	569700.00	4178000.00	WORKER	-	-	2.26E-01	-	-	1.87E-03	-	-	2.26E-01
1087	569800.00	4176200.00	RECREATIONAL	-	-	3.94E-01	-	-	6.42E-03	-	-	3.94E-01
1088	569800.00	4176300.00	WORKER	-	-	2.94E-01	-	-	5.58E-03	-	-	2.94E-01
1089	569800.00	4176400.00	WORKER	-	-	2.15E-01	-	-	5.01E-03	-	-	2.15E-01
1090	569800.00	4176500.00	WORKER	-	-	2.84E-01	-	-	4.54E-03	-	-	2.84E-01
1091	569800.00	4176600.00	WORKER	-	-	3.44E-01	-	-	4.15E-03	-	-	3.44E-01
1092	569800.00	4176700.00	RECREATIONAL	-	-	3.60E-01	-	-	3.80E-03	-	-	3.60E-01

OAK Terminal Modernization  
 Table 2-26. Eight (8)-Hour Hazard Indices  
 Combined Construction & Operations

				Combined Construction + Operations			Construction Only			Operations Only		
				8-Hour Hazard Index			8-Hour Hazard Index			8-Hour Hazard Index		
Maximum->				5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
Minimum->				2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
Max ReclD->				1924	582	1281	1546	1879	3296	1924	582	1281
Exposure Years->				2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
1093	569800.00	4176800.00	RECREATIONAL	-	-	3.28E-01	-	-	3.49E-03	-	-	3.28E-01
1094	569800.00	4176900.00	RECREATIONAL	-	-	3.11E-01	-	-	3.22E-03	-	-	3.11E-01
1095	569800.00	4177000.00	RECREATIONAL	-	-	3.05E-01	-	-	2.98E-03	-	-	3.05E-01
1096	569800.00	4177100.00	RECREATIONAL	-	-	3.06E-01	-	-	2.77E-03	-	-	3.06E-01
1097	569800.00	4177200.00	RECREATIONAL	-	-	3.07E-01	-	-	2.61E-03	-	-	3.07E-01
1098	569800.00	4177300.00	RECREATIONAL	-	-	3.08E-01	-	-	2.48E-03	-	-	3.08E-01
1099	569800.00	4177400.00	RECREATIONAL	-	-	3.06E-01	-	-	2.36E-03	-	-	3.06E-01
1102	569800.00	4177700.00	WORKER	-	-	2.91E-01	-	-	2.04E-03	-	-	2.91E-01
1103	569800.00	4177800.00	WORKER	-	-	2.84E-01	-	-	1.95E-03	-	-	2.84E-01
1104	569800.00	4177900.00	WORKER	-	-	2.75E-01	-	-	1.87E-03	-	-	2.75E-01
1105	569800.00	4178000.00	WORKER	-	-	2.65E-01	-	-	1.80E-03	-	-	2.65E-01
1118	569900.00	4176100.00	WORKER	-	-	5.34E-01	-	-	7.77E-03	-	-	5.34E-01
1119	569900.00	4176200.00	WORKER	-	-	5.02E-01	-	-	6.65E-03	-	-	5.02E-01
1120	569900.00	4176300.00	WORKER	-	-	4.16E-01	-	-	5.95E-03	-	-	4.16E-01
1121	569900.00	4176400.00	WORKER	-	-	2.53E-01	-	-	5.39E-03	-	-	2.53E-01
1122	569900.00	4176500.00	WORKER	-	-	2.63E-01	-	-	4.91E-03	-	-	2.63E-01
1123	569900.00	4176600.00	WORKER	-	-	3.25E-01	-	-	4.50E-03	-	-	3.25E-01
1124	569900.00	4176700.00	WORKER	-	-	3.64E-01	-	-	4.13E-03	-	-	3.64E-01
1125	569900.00	4176800.00	RECREATIONAL	-	-	3.62E-01	-	-	3.80E-03	-	-	3.62E-01
1126	569900.00	4176900.00	RECREATIONAL	-	-	3.39E-01	-	-	3.51E-03	-	-	3.39E-01
1127	569900.00	4177000.00	RECREATIONAL	-	-	3.28E-01	-	-	3.25E-03	-	-	3.28E-01
1128	569900.00	4177100.00	RECREATIONAL	-	-	3.26E-01	-	-	3.02E-03	-	-	3.26E-01
1129	569900.00	4177200.00	RECREATIONAL	-	-	3.29E-01	-	-	2.81E-03	-	-	3.29E-01
1130	569900.00	4177300.00	RECREATIONAL	-	-	3.29E-01	-	-	2.62E-03	-	-	3.29E-01
1132	569900.00	4177500.00	WORKER	-	-	3.27E-01	-	-	2.28E-03	-	-	3.27E-01
1133	569900.00	4177600.00	WORKER	-	-	3.23E-01	-	-	2.17E-03	-	-	3.23E-01
1134	569900.00	4177700.00	WORKER	-	-	3.17E-01	-	-	2.09E-03	-	-	3.17E-01
1135	569900.00	4177800.00	WORKER	-	-	3.10E-01	-	-	2.01E-03	-	-	3.10E-01
1136	569900.00	4177900.00	WORKER	-	-	3.02E-01	-	-	1.94E-03	-	-	3.02E-01
1137	569900.00	4178000.00	WORKER	-	-	2.94E-01	-	-	1.86E-03	-	-	2.94E-01
1150	570008.00	4176021.00	WORKER	-	-	5.26E-01	-	-	8.47E-03	-	-	5.26E-01
1151	570000.00	4176100.00	WORKER	-	-	5.69E-01	-	-	7.36E-03	-	-	5.69E-01
1152	570000.00	4176200.00	WORKER	-	-	5.97E-01	-	-	6.59E-03	-	-	5.97E-01
1153	570000.00	4176300.00	WORKER	-	-	5.58E-01	-	-	6.00E-03	-	-	5.58E-01
1154	570000.00	4176400.00	WORKER	-	-	4.27E-01	-	-	5.50E-03	-	-	4.27E-01
1155	570000.00	4176500.00	WORKER	-	-	3.16E-01	-	-	5.06E-03	-	-	3.16E-01
1156	570000.00	4176600.00	WORKER	-	-	3.54E-01	-	-	4.66E-03	-	-	3.54E-01
1157	570000.00	4176700.00	WORKER	-	-	3.65E-01	-	-	4.30E-03	-	-	3.65E-01
1158	570000.00	4176800.00	RECREATIONAL	-	-	3.43E-01	-	-	3.98E-03	-	-	3.43E-01
1159	570000.00	4176900.00	RECREATIONAL	-	-	3.22E-01	-	-	3.69E-03	-	-	3.22E-01
1160	570000.00	4177000.00	RECREATIONAL	-	-	3.03E-01	-	-	3.43E-03	-	-	3.03E-01
1161	570000.00	4177100.00	RECREATIONAL	-	-	2.91E-01	-	-	3.19E-03	-	-	2.91E-01
1162	570000.00	4177200.00	RECREATIONAL	-	-	2.94E-01	-	-	2.98E-03	-	-	2.94E-01
1163	570000.00	4177300.00	WORKER	-	-	3.03E-01	-	-	2.78E-03	-	-	3.03E-01
1164	570000.00	4177400.00	WORKER	-	-	3.13E-01	-	-	2.60E-03	-	-	3.13E-01
1165	570000.00	4177500.00	WORKER	-	-	3.25E-01	-	-	2.43E-03	-	-	3.25E-01
1166	570000.00	4177600.00	WORKER	-	-	3.36E-01	-	-	2.28E-03	-	-	3.36E-01
1167	570000.00	4177700.00	WORKER	-	-	3.38E-01	-	-	2.15E-03	-	-	3.38E-01
1168	570000.00	4177800.00	WORKER	-	-	3.34E-01	-	-	2.03E-03	-	-	3.34E-01
1169	570000.00	4177900.00	WORKER	-	-	3.28E-01	-	-	1.92E-03	-	-	3.28E-01
1170	570000.00	4178000.00	WORKER	-	-	3.20E-01	-	-	1.86E-03	-	-	3.20E-01
1184	570100.00	4176000.00	WORKER	-	-	5.77E-01	-	-	8.02E-03	-	-	5.77E-01
1185	570100.00	4176100.00	WORKER	-	-	5.89E-01	-	-	7.00E-03	-	-	5.89E-01
1186	570100.00	4176200.00	WORKER	-	-	6.09E-01	-	-	6.38E-03	-	-	6.09E-01
1187	570100.00	4176300.00	WORKER	-	-	6.23E-01	-	-	5.84E-03	-	-	6.23E-01
1188	570100.00	4176400.00	WORKER	-	-	5.69E-01	-	-	5.35E-03	-	-	5.69E-01
1189	570100.00	4176500.00	WORKER	-	-	4.45E-01	-	-	4.96E-03	-	-	4.45E-01
1190	570100.00	4176600.00	WORKER	-	-	3.87E-01	-	-	4.62E-03	-	-	3.87E-01
1191	570100.00	4176700.00	WORKER	-	-	3.70E-01	-	-	4.31E-03	-	-	3.70E-01
1192	570100.00	4176800.00	WORKER	-	-	3.49E-01	-	-	4.01E-03	-	-	3.49E-01
1193	570100.00	4176900.00	RECREATIONAL	-	-	3.30E-01	-	-	3.75E-03	-	-	3.30E-01
1194	570100.00	4177000.00	RECREATIONAL	-	-	3.12E-01	-	-	3.50E-03	-	-	3.12E-01
1196	570100.00	4177200.00	WORKER	-	-	2.79E-01	-	-	3.07E-03	-	-	2.79E-01

OAK Terminal Modernization  
 Table 2-26. Eight (8)-Hour Hazard Indices  
 Combined Construction & Operations

				Combined Construction + Operations			Construction Only			Operations Only		
				8-Hour Hazard Index			8-Hour Hazard Index			8-Hour Hazard Index		
Maximum->				5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
Minimum->				2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
Max ReclD->				1924	582	1281	1546	1879	3296	1924	582	1281
Exposure Years->				2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child	School Child	Adult Worker	Adult Resident & Child	School Child	Adult Worker	Adult Resident & Child	School Child	Adult Worker
1197	570100.00	4177300.00	WORKER	-	-	2.55E-01	-	-	2.88E-03	-	-	2.55E-01
1198	570100.00	4177400.00	WORKER	-	-	2.33E-01	-	-	2.70E-03	-	-	2.33E-01
1199	570100.00	4177500.00	WORKER	-	-	2.42E-01	-	-	2.54E-03	-	-	2.42E-01
1200	570100.00	4177600.00	WORKER	-	-	2.54E-01	-	-	2.39E-03	-	-	2.54E-01
1201	570100.00	4177700.00	WORKER	-	-	2.66E-01	-	-	2.25E-03	-	-	2.66E-01
1202	570100.00	4177800.00	WORKER	-	-	2.80E-01	-	-	2.13E-03	-	-	2.80E-01
1203	570100.00	4177900.00	WORKER	-	-	2.86E-01	-	-	2.01E-03	-	-	2.86E-01
1204	570100.00	4178000.00	WORKER	-	-	2.95E-01	-	-	1.93E-03	-	-	2.95E-01
1218	570200.00	4175900.00	WORKER	-	-	4.57E-01	-	-	1.18E-02	-	-	4.57E-01
1219	570200.00	4176000.00	WORKER	-	-	3.66E-01	-	-	9.41E-03	-	-	3.66E-01
1220	570200.00	4176100.00	WORKER	-	-	3.95E-01	-	-	7.70E-03	-	-	3.95E-01
1221	570200.00	4176200.00	WORKER	-	-	4.76E-01	-	-	6.36E-03	-	-	4.76E-01
1222	570200.00	4176300.00	WORKER	-	-	5.39E-01	-	-	5.54E-03	-	-	5.39E-01
1223	570200.00	4176400.00	WORKER	-	-	5.42E-01	-	-	5.16E-03	-	-	5.42E-01
1224	570200.00	4176500.00	WORKER	-	-	4.67E-01	-	-	4.81E-03	-	-	4.67E-01
1225	570200.00	4176600.00	WORKER	-	-	3.64E-01	-	-	4.47E-03	-	-	3.64E-01
1226	570200.00	4176700.00	WORKER	-	-	3.57E-01	-	-	4.16E-03	-	-	3.57E-01
1227	570200.00	4176800.00	WORKER	-	-	3.45E-01	-	-	3.90E-03	-	-	3.45E-01
1228	570200.00	4176900.00	WORKER	-	-	3.29E-01	-	-	3.68E-03	-	-	3.29E-01
1229	570200.00	4177000.00	WORKER	-	-	3.13E-01	-	-	3.47E-03	-	-	3.13E-01
1230	570200.00	4177100.00	WORKER	-	-	2.99E-01	-	-	3.27E-03	-	-	2.99E-01
1231	570200.00	4177200.00	WORKER	-	-	2.85E-01	-	-	3.09E-03	-	-	2.85E-01
1232	570200.00	4177300.00	WORKER	-	-	2.72E-01	-	-	2.91E-03	-	-	2.72E-01
1233	570200.00	4177400.00	WORKER	-	-	2.59E-01	-	-	2.75E-03	-	-	2.59E-01
1234	570200.00	4177500.00	WORKER	-	-	2.38E-01	-	-	2.59E-03	-	-	2.38E-01
1235	570200.00	4177600.00	WORKER	-	-	2.18E-01	-	-	2.45E-03	-	-	2.18E-01
1236	570200.00	4177700.00	WORKER	-	-	1.98E-01	-	-	2.32E-03	-	-	1.98E-01
1237	570200.00	4177800.00	WORKER	-	-	1.94E-01	-	-	2.20E-03	-	-	1.94E-01
1238	570200.00	4177900.00	WORKER	-	-	2.06E-01	-	-	2.09E-03	-	-	2.06E-01
1239	570200.00	4178000.00	WORKER	-	-	2.18E-01	-	-	1.98E-03	-	-	2.18E-01
1253	570312.00	4175819.00	WORKER	-	-	3.34E-01	-	-	1.47E-02	-	-	3.34E-01
1254	570300.00	4175900.00	WORKER	-	-	4.96E-01	-	-	1.27E-02	-	-	4.96E-01
1255	570300.00	4176000.00	WORKER	-	-	4.04E-01	-	-	1.06E-02	-	-	4.04E-01
1256	570300.00	4176100.00	WORKER	-	-	3.78E-01	-	-	8.83E-03	-	-	3.78E-01
1257	570300.00	4176200.00	WORKER	-	-	3.66E-01	-	-	7.42E-03	-	-	3.66E-01
1258	570300.00	4176300.00	WORKER	-	-	4.32E-01	-	-	6.28E-03	-	-	4.32E-01
1259	570300.00	4176400.00	WORKER	-	-	4.68E-01	-	-	5.35E-03	-	-	4.68E-01
1260	570300.00	4176500.00	WORKER	-	-	4.46E-01	-	-	4.58E-03	-	-	4.46E-01
1261	570300.00	4176600.00	WORKER	-	-	3.80E-01	-	-	4.25E-03	-	-	3.80E-01
1262	570300.00	4176700.00	WORKER	-	-	3.24E-01	-	-	4.00E-03	-	-	3.24E-01
1264	570300.00	4176900.00	WORKER	-	-	3.15E-01	-	-	3.57E-03	-	-	3.15E-01
1265	570300.00	4177000.00	WORKER	-	-	3.05E-01	-	-	3.37E-03	-	-	3.05E-01
1266	570300.00	4177100.00	WORKER	-	-	2.93E-01	-	-	3.19E-03	-	-	2.93E-01
1267	570300.00	4177200.00	WORKER	-	-	2.81E-01	-	-	3.01E-03	-	-	2.81E-01
1268	570300.00	4177300.00	WORKER	-	-	2.70E-01	-	-	2.87E-03	-	-	2.70E-01
1269	570300.00	4177400.00	WORKER	-	-	2.60E-01	-	-	2.72E-03	-	-	2.60E-01
1270	570300.00	4177500.00	WORKER	-	-	2.51E-01	-	-	2.59E-03	-	-	2.51E-01
1271	570300.00	4177600.00	WORKER	-	-	2.41E-01	-	-	2.46E-03	-	-	2.41E-01
1272	570300.00	4177700.00	WORKER	-	-	2.26E-01	-	-	2.34E-03	-	-	2.26E-01
1273	570300.00	4177800.00	WORKER	-	-	2.06E-01	-	-	2.23E-03	-	-	2.06E-01
1274	570300.00	4177900.00	WORKER	-	-	1.88E-01	-	-	2.13E-03	-	-	1.88E-01
1275	570300.00	4178000.00	WORKER	-	-	1.69E-01	-	-	2.03E-03	-	-	1.69E-01
1281	570400.00	4173500.00	RECREATIONAL	-	-	9.58E-01	-	-	7.98E-03	-	-	9.58E-01
1282	570400.00	4173600.00	RECREATIONAL	-	-	8.56E-01	-	-	9.03E-03	-	-	8.56E-01
1283	570400.00	4173700.00	RECREATIONAL	-	-	4.29E-01	-	-	9.47E-03	-	-	4.29E-01
1284	570400.00	4173800.00	RECREATIONAL	-	-	4.62E-01	-	-	9.95E-03	-	-	4.62E-01
1285	570400.00	4173900.00	RECREATIONAL	-	-	4.92E-01	-	-	1.02E-02	-	-	4.92E-01
1286	570400.00	4174000.00	RECREATIONAL	-	-	5.57E-01	-	-	1.03E-02	-	-	5.57E-01
1287	570400.00	4174100.00	RECREATIONAL	-	-	3.96E-01	-	-	1.14E-02	-	-	3.96E-01
1288	570400.00	4174200.00	RECREATIONAL	-	-	1.51E-01	-	-	1.34E-02	-	-	1.51E-01
1290	570400.00	4175800.00	WORKER	-	-	3.14E-01	-	-	1.47E-02	-	-	3.14E-01
1291	570410.00	4175900.00	WORKER	-	-	3.52E-01	-	-	1.34E-02	-	-	3.52E-01
1292	570400.00	4176000.00	WORKER	-	-	4.86E-01	-	-	1.16E-02	-	-	4.86E-01

OAK Terminal Modernization  
 Table 2-26. Eight (8)-Hour Hazard Indices  
 Combined Construction & Operations

				Combined Construction + Operations			Construction Only			Operations Only		
				8-Hour Hazard Index			8-Hour Hazard Index			8-Hour Hazard Index		
Maximum->				5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
Minimum->				2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
Max ReclD->				1924	582	1281	1546	1879	3296	1924	582	1281
Exposure Years->				2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
1293	570400.00	4176100.00	WORKER	-	-	4.42E-01	-	-	9.80E-03	-	-	4.42E-01
1294	570400.00	4176200.00	WORKER	-	-	3.63E-01	-	-	8.37E-03	-	-	3.63E-01
1295	570400.00	4176300.00	WORKER	-	-	4.03E-01	-	-	7.12E-03	-	-	4.03E-01
1296	570400.00	4176400.00	WORKER	-	-	4.18E-01	-	-	6.09E-03	-	-	4.18E-01
1297	570400.00	4176500.00	WORKER	-	-	4.03E-01	-	-	5.25E-03	-	-	4.03E-01
1298	570400.00	4176600.00	WORKER	-	-	3.65E-01	-	-	4.57E-03	-	-	3.65E-01
1299	570400.00	4176700.00	WORKER	-	-	3.20E-01	-	-	3.99E-03	-	-	3.20E-01
1300	570400.00	4176800.00	WORKER	-	-	2.88E-01	-	-	3.57E-03	-	-	2.88E-01
1301	570400.00	4176900.00	WORKER	-	-	2.88E-01	-	-	3.40E-03	-	-	2.88E-01
1302	570400.00	4177000.00	WORKER	-	-	2.84E-01	-	-	3.24E-03	-	-	2.84E-01
1303	570400.00	4177100.00	WORKER	-	-	2.77E-01	-	-	3.08E-03	-	-	2.77E-01
1304	570400.00	4177200.00	WORKER	-	-	2.69E-01	-	-	2.93E-03	-	-	2.69E-01
1305	570400.00	4177300.00	WORKER	-	-	2.61E-01	-	-	2.79E-03	-	-	2.61E-01
1306	570400.00	4177400.00	WORKER	-	-	2.53E-01	-	-	2.66E-03	-	-	2.53E-01
1307	570400.00	4177500.00	WORKER	-	-	2.45E-01	-	-	2.53E-03	-	-	2.45E-01
1308	570400.00	4177600.00	WORKER	-	-	2.38E-01	-	-	2.42E-03	-	-	2.38E-01
1309	570400.00	4177700.00	WORKER	-	-	2.31E-01	-	-	2.31E-03	-	-	2.31E-01
1310	570400.00	4177800.00	WORKER	-	-	2.24E-01	-	-	2.21E-03	-	-	2.24E-01
1311	570400.00	4177900.00	WORKER	-	-	2.15E-01	-	-	2.12E-03	-	-	2.15E-01
1312	570400.00	4178000.00	WORKER	-	-	2.01E-01	-	-	2.03E-03	-	-	2.01E-01
1317	570500.00	4173400.00	RECREATIONAL	-	-	8.47E-01	-	-	7.41E-03	-	-	8.47E-01
1318	570500.00	4173500.00	RECREATIONAL	-	-	9.09E-01	-	-	7.85E-03	-	-	9.09E-01
1319	570500.00	4173600.00	RECREATIONAL	-	-	6.39E-01	-	-	8.35E-03	-	-	6.39E-01
1320	570500.00	4173700.00	RECREATIONAL	-	-	4.14E-01	-	-	8.61E-03	-	-	4.14E-01
1321	570500.00	4173800.00	RECREATIONAL	-	-	3.77E-01	-	-	8.71E-03	-	-	3.77E-01
1322	570500.00	4173900.00	RECREATIONAL	-	-	4.66E-01	-	-	8.57E-03	-	-	4.66E-01
1323	570500.00	4174000.00	RECREATIONAL	-	-	5.41E-01	-	-	9.45E-03	-	-	5.41E-01
1324	570500.00	4174100.00	RECREATIONAL	-	-	3.79E-01	-	-	1.12E-02	-	-	3.79E-01
1325	570500.00	4174200.00	RECREATIONAL	-	-	2.07E-01	-	-	1.27E-02	-	-	2.07E-01
1327	570511.00	4175717.00	WORKER	-	-	2.51E-01	-	-	1.37E-02	-	-	2.51E-01
1328	570510.00	4175800.00	WORKER	-	-	2.75E-01	-	-	1.31E-02	-	-	2.75E-01
1329	570500.00	4175900.00	WORKER	-	-	3.23E-01	-	-	1.25E-02	-	-	3.23E-01
1330	570500.00	4176000.00	WORKER	-	-	3.32E-01	-	-	1.16E-02	-	-	3.32E-01
1331	570514.00	4176106.00	WORKER	-	-	3.77E-01	-	-	1.10E-02	-	-	3.77E-01
1332	570488.00	4176205.00	WORKER	-	-	4.45E-01	-	-	9.17E-03	-	-	4.45E-01
1333	570500.00	4176300.00	WORKER	-	-	4.00E-01	-	-	7.86E-03	-	-	4.00E-01
1334	570500.00	4176400.00	WORKER	-	-	4.13E-01	-	-	6.73E-03	-	-	4.13E-01
1335	570500.00	4176500.00	WORKER	-	-	3.97E-01	-	-	5.83E-03	-	-	3.97E-01
1336	570500.00	4176600.00	WORKER	-	-	3.59E-01	-	-	5.09E-03	-	-	3.59E-01
1337	570500.00	4176700.00	WORKER	-	-	3.18E-01	-	-	4.48E-03	-	-	3.18E-01
1338	570500.00	4176800.00	WORKER	-	-	2.77E-01	-	-	3.97E-03	-	-	2.77E-01
1339	570500.00	4176900.00	WORKER	-	-	2.49E-01	-	-	3.53E-03	-	-	2.49E-01
1340	570500.00	4177000.00	WORKER	-	-	2.55E-01	-	-	3.15E-03	-	-	2.55E-01
1341	570500.00	4177100.00	WORKER	-	-	2.57E-01	-	-	2.90E-03	-	-	2.57E-01
1342	570500.00	4177200.00	WORKER	-	-	2.52E-01	-	-	2.78E-03	-	-	2.52E-01
1343	570500.00	4177300.00	WORKER	-	-	2.45E-01	-	-	2.66E-03	-	-	2.45E-01
1344	570500.00	4177400.00	WORKER	-	-	2.39E-01	-	-	2.55E-03	-	-	2.39E-01
1345	570500.00	4177500.00	WORKER	-	-	2.33E-01	-	-	2.45E-03	-	-	2.33E-01
1346	570500.00	4177600.00	WORKER	-	-	2.27E-01	-	-	2.36E-03	-	-	2.27E-01
1347	570500.00	4177700.00	WORKER	-	-	2.22E-01	-	-	2.27E-03	-	-	2.22E-01
1348	570500.00	4177800.00	WORKER	-	-	2.18E-01	-	-	2.19E-03	-	-	2.18E-01
1349	570500.00	4177900.00	WORKER	-	-	2.12E-01	-	-	2.11E-03	-	-	2.12E-01
1350	570500.00	4178000.00	WORKER	-	-	2.07E-01	-	-	2.03E-03	-	-	2.07E-01
1354	570600.00	4173300.00	RECREATIONAL	-	-	6.87E-01	-	-	6.22E-03	-	-	6.87E-01
1355	570600.00	4173400.00	RECREATIONAL	-	-	8.79E-01	-	-	7.04E-03	-	-	8.79E-01
1356	570600.00	4173500.00	RECREATIONAL	-	-	8.44E-01	-	-	7.48E-03	-	-	8.44E-01
1357	570600.00	4173600.00	RECREATIONAL	-	-	3.57E-01	-	-	7.63E-03	-	-	3.57E-01
1358	570600.00	4173700.00	RECREATIONAL	-	-	4.01E-01	-	-	7.65E-03	-	-	4.01E-01
1359	570600.00	4173800.00	RECREATIONAL	-	-	3.96E-01	-	-	7.47E-03	-	-	3.96E-01
1360	570600.00	4173900.00	RECREATIONAL	-	-	4.35E-01	-	-	7.90E-03	-	-	4.35E-01
1361	570600.00	4174000.00	RECREATIONAL	-	-	5.12E-01	-	-	9.15E-03	-	-	5.12E-01
1362	570600.00	4174100.00	RECREATIONAL	-	-	3.60E-01	-	-	1.05E-02	-	-	3.60E-01
1363	570600.00	4174200.00	RECREATIONAL	-	-	2.26E-01	-	-	1.13E-02	-	-	2.26E-01

OAK Terminal Modernization  
 Table 2-26. Eight (8)-Hour Hazard Indices  
 Combined Construction & Operations

				Combined Construction + Operations			Construction Only			Operations Only		
				8-Hour Hazard Index			8-Hour Hazard Index			8-Hour Hazard Index		
Maximum->				5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
Minimum->				2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
Max ReclD->				1924	582	1281	1546	1879	3296	1924	582	1281
Exposure Years->				2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
1365	570600.00	4174400.00	WORKER	-	-	5.28E-01	-	-	1.06E-02	-	-	5.28E-01
1366	570600.00	4175700.00	WORKER	-	-	3.02E-01	-	-	1.20E-02	-	-	3.02E-01
1367	570600.00	4175800.00	WORKER	-	-	2.41E-01	-	-	1.21E-02	-	-	2.41E-01
1368	570590.00	4175915.00	WORKER	-	-	2.89E-01	-	-	1.20E-02	-	-	2.89E-01
1369	570600.00	4176000.00	WORKER	-	-	3.02E-01	-	-	1.14E-02	-	-	3.02E-01
1370	570600.00	4176100.00	WORKER	-	-	2.94E-01	-	-	1.04E-02	-	-	2.94E-01
1371	570600.00	4176200.00	WORKER	-	-	3.25E-01	-	-	9.52E-03	-	-	3.25E-01
1372	570600.00	4176300.00	WORKER	-	-	3.67E-01	-	-	8.69E-03	-	-	3.67E-01
1373	570621.00	4176400.00	WORKER	-	-	3.75E-01	-	-	8.13E-03	-	-	3.75E-01
1374	570600.00	4176500.00	WORKER	-	-	4.01E-01	-	-	6.59E-03	-	-	4.01E-01
1375	570600.00	4176600.00	WORKER	-	-	3.70E-01	-	-	5.61E-03	-	-	3.70E-01
1376	570600.00	4176700.00	WORKER	-	-	3.31E-01	-	-	4.90E-03	-	-	3.31E-01
1377	570600.00	4176800.00	WORKER	-	-	2.94E-01	-	-	4.34E-03	-	-	2.94E-01
1378	570600.00	4176900.00	WORKER	-	-	2.60E-01	-	-	3.87E-03	-	-	2.60E-01
1379	570600.00	4177000.00	WORKER	-	-	2.22E-01	-	-	3.48E-03	-	-	2.22E-01
1380	570600.00	4177100.00	WORKER	-	-	2.23E-01	-	-	3.14E-03	-	-	2.23E-01
1381	570600.00	4177200.00	WORKER	-	-	2.26E-01	-	-	2.83E-03	-	-	2.26E-01
1382	570600.00	4177300.00	WORKER	-	-	2.28E-01	-	-	2.56E-03	-	-	2.28E-01
1383	570600.00	4177400.00	WORKER	-	-	2.25E-01	-	-	2.40E-03	-	-	2.25E-01
1384	570600.00	4177500.00	WORKER	-	-	2.19E-01	-	-	2.32E-03	-	-	2.19E-01
1385	570600.00	4177600.00	WORKER	-	-	2.13E-01	-	-	2.25E-03	-	-	2.13E-01
1386	570600.00	4177700.00	WORKER	-	-	2.09E-01	-	-	2.19E-03	-	-	2.09E-01
1387	570600.00	4177800.00	WORKER	-	-	2.05E-01	-	-	2.12E-03	-	-	2.05E-01
1388	570600.00	4177900.00	WORKER	-	-	2.02E-01	-	-	2.06E-03	-	-	2.02E-01
1389	570600.00	4178000.00	WORKER	-	-	1.99E-01	-	-	1.99E-03	-	-	1.99E-01
1393	570700.00	4173300.00	RECREATIONAL	-	-	7.64E-01	-	-	6.34E-03	-	-	7.64E-01
1394	570700.00	4173400.00	RECREATIONAL	-	-	8.34E-01	-	-	6.65E-03	-	-	8.34E-01
1395	570700.00	4173500.00	RECREATIONAL	-	-	7.19E-01	-	-	6.84E-03	-	-	7.19E-01
1396	570700.00	4173600.00	RECREATIONAL	-	-	3.04E-01	-	-	6.75E-03	-	-	3.04E-01
1397	570700.00	4173700.00	RECREATIONAL	-	-	3.87E-01	-	-	6.64E-03	-	-	3.87E-01
1398	570700.00	4173800.00	RECREATIONAL	-	-	3.78E-01	-	-	6.68E-03	-	-	3.78E-01
1399	570700.00	4173900.00	RECREATIONAL	-	-	3.70E-01	-	-	6.97E-03	-	-	3.70E-01
1400	570700.00	4174000.00	RECREATIONAL	-	-	4.63E-01	-	-	8.38E-03	-	-	4.63E-01
1401	570700.00	4174100.00	RECREATIONAL	-	-	3.31E-01	-	-	9.62E-03	-	-	3.31E-01
1402	570700.00	4174200.00	RECREATIONAL	-	-	2.11E-01	-	-	1.05E-02	-	-	2.11E-01
1403	570700.00	4174300.00	RECREATIONAL	-	-	2.24E-01	-	-	9.50E-03	-	-	2.24E-01
1404	570700.00	4174400.00	WORKER	-	-	4.33E-01	-	-	9.48E-03	-	-	4.33E-01
1405	570700.00	4174500.00	WORKER	-	-	5.15E-01	-	-	9.55E-03	-	-	5.15E-01
1406	570700.00	4175600.00	WORKER	-	-	4.37E-01	-	-	9.64E-03	-	-	4.37E-01
1407	570700.00	4175700.00	WORKER	-	-	3.24E-01	-	-	8.96E-03	-	-	3.24E-01
1408	570700.00	4175800.00	WORKER	-	-	2.36E-01	-	-	9.80E-03	-	-	2.36E-01
1409	570700.00	4175900.00	WORKER	-	-	2.45E-01	-	-	1.05E-02	-	-	2.45E-01
1410	570700.00	4176000.00	WORKER	-	-	2.57E-01	-	-	1.07E-02	-	-	2.57E-01
1411	570700.00	4176100.00	WORKER	-	-	2.69E-01	-	-	9.80E-03	-	-	2.69E-01
1412	570700.00	4176200.00	WORKER	-	-	2.58E-01	-	-	9.19E-03	-	-	2.58E-01
1413	570700.00	4176300.00	WORKER	-	-	2.97E-01	-	-	8.49E-03	-	-	2.97E-01
1414	570700.00	4176400.00	WORKER	-	-	3.05E-01	-	-	7.70E-03	-	-	3.05E-01
1415	570700.00	4176500.00	WORKER	-	-	3.30E-01	-	-	7.07E-03	-	-	3.30E-01
1416	570700.00	4176600.00	WORKER	-	-	3.63E-01	-	-	6.60E-03	-	-	3.63E-01
1417	570670.00	4176700.00	WORKER	-	-	3.41E-01	-	-	5.42E-03	-	-	3.41E-01
1418	570700.00	4176800.00	WORKER	-	-	3.14E-01	-	-	4.89E-03	-	-	3.14E-01
1419	570700.00	4176900.00	WORKER	-	-	2.85E-01	-	-	4.25E-03	-	-	2.85E-01
1420	570700.00	4177000.00	WORKER	-	-	2.55E-01	-	-	3.77E-03	-	-	2.55E-01
1421	570700.00	4177100.00	WORKER	-	-	2.18E-01	-	-	3.38E-03	-	-	2.18E-01
1422	570700.00	4177200.00	WORKER	-	-	2.01E-01	-	-	3.07E-03	-	-	2.01E-01
1423	570700.00	4177300.00	WORKER	-	-	2.01E-01	-	-	2.81E-03	-	-	2.01E-01
1424	570700.00	4177400.00	WORKER	-	-	2.03E-01	-	-	2.57E-03	-	-	2.03E-01
1425	570700.00	4177500.00	WORKER	-	-	2.04E-01	-	-	2.35E-03	-	-	2.04E-01
1426	570700.00	4177600.00	WORKER	-	-	2.05E-01	-	-	2.15E-03	-	-	2.05E-01
1427	570700.00	4177700.00	WORKER	-	-	1.99E-01	-	-	2.06E-03	-	-	1.99E-01
1428	570700.00	4177800.00	WORKER	-	-	1.93E-01	-	-	2.01E-03	-	-	1.93E-01
1429	570700.00	4177900.00	WORKER	-	-	1.90E-01	-	-	1.97E-03	-	-	1.90E-01
1430	570700.00	4178000.00	WORKER	-	-	1.87E-01	-	-	1.92E-03	-	-	1.87E-01

OAK Terminal Modernization  
 Table 2-26. Eight (8)-Hour Hazard Indices  
 Combined Construction & Operations

				Combined Construction + Operations			Construction Only			Operations Only		
				8-Hour Hazard Index			8-Hour Hazard Index			8-Hour Hazard Index		
Maximum->				5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
Minimum->				2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
Max ReclD->				1924	582	1281	1546	1879	3296	1924	582	1281
Exposure Years->				2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child	School Child	Adult Worker	Adult Resident & Child	School Child	Adult Worker	Adult Resident & Child	School Child	Adult Worker
1433	570800.00	4173200.00	RECREATIONAL	-	-	6.03E-01	-	-	5.28E-03	-	-	6.03E-01
1434	570800.00	4173300.00	RECREATIONAL	-	-	7.91E-01	-	-	5.88E-03	-	-	7.91E-01
1435	570800.00	4173400.00	RECREATIONAL	-	-	7.87E-01	-	-	6.11E-03	-	-	7.87E-01
1436	570800.00	4173500.00	RECREATIONAL	-	-	5.16E-01	-	-	5.97E-03	-	-	5.16E-01
1437	570800.00	4173600.00	RECREATIONAL	-	-	3.17E-01	-	-	6.02E-03	-	-	3.17E-01
1438	570800.00	4173700.00	RECREATIONAL	-	-	3.78E-01	-	-	6.36E-03	-	-	3.78E-01
1439	570800.00	4173800.00	RECREATIONAL	-	-	3.95E-01	-	-	6.90E-03	-	-	3.95E-01
1440	570800.00	4173900.00	RECREATIONAL	-	-	4.14E-01	-	-	7.63E-03	-	-	4.14E-01
1441	570800.00	4174000.00	RECREATIONAL	-	-	4.56E-01	-	-	8.42E-03	-	-	4.56E-01
1442	570800.00	4174100.00	RECREATIONAL	-	-	3.12E-01	-	-	9.47E-03	-	-	3.12E-01
1443	570800.00	4174200.00	RECREATIONAL	-	-	2.03E-01	-	-	9.59E-03	-	-	2.03E-01
1444	570800.00	4174300.00	RECREATIONAL	-	-	1.93E-01	-	-	8.35E-03	-	-	1.93E-01
1446	570800.00	4174500.00	WORKER	-	-	4.96E-01	-	-	8.36E-03	-	-	4.96E-01
1447	570800.00	4174600.00	WORKER	-	-	4.47E-01	-	-	8.62E-03	-	-	4.47E-01
1448	570805.00	4175505.00	WORKER	-	-	5.35E-01	-	-	8.93E-03	-	-	5.35E-01
1449	570800.00	4175600.00	WORKER	-	-	4.81E-01	-	-	8.99E-03	-	-	4.81E-01
1450	570800.00	4175700.00	WORKER	-	-	3.63E-01	-	-	7.93E-03	-	-	3.63E-01
1451	570800.00	4175800.00	WORKER	-	-	2.68E-01	-	-	7.63E-03	-	-	2.68E-01
1452	570800.00	4175900.00	WORKER	-	-	2.19E-01	-	-	8.35E-03	-	-	2.19E-01
1453	570790.00	4176017.00	WORKER	-	-	2.50E-01	-	-	9.88E-03	-	-	2.50E-01
1454	570800.00	4176100.00	WORKER	-	-	2.40E-01	-	-	9.06E-03	-	-	2.40E-01
1455	570800.00	4176200.00	WORKER	-	-	2.42E-01	-	-	8.61E-03	-	-	2.42E-01
1456	570800.00	4176300.00	WORKER	-	-	2.44E-01	-	-	8.21E-03	-	-	2.44E-01
1457	570800.00	4176400.00	WORKER	-	-	3.12E-01	-	-	7.68E-03	-	-	3.12E-01
1458	570800.00	4176500.00	WORKER	-	-	2.99E-01	-	-	7.04E-03	-	-	2.99E-01
1459	570800.00	4176600.00	WORKER	-	-	2.68E-01	-	-	6.40E-03	-	-	2.68E-01
1460	570800.00	4176700.00	WORKER	-	-	2.93E-01	-	-	5.81E-03	-	-	2.93E-01
1461	570800.00	4176800.00	WORKER	-	-	3.00E-01	-	-	5.36E-03	-	-	3.00E-01
1462	570800.00	4176900.00	WORKER	-	-	2.89E-01	-	-	5.07E-03	-	-	2.89E-01
1463	570800.00	4177000.00	WORKER	-	-	2.79E-01	-	-	4.63E-03	-	-	2.79E-01
1464	570800.00	4177100.00	WORKER	-	-	2.55E-01	-	-	3.70E-03	-	-	2.55E-01
1465	570800.00	4177200.00	WORKER	-	-	2.24E-01	-	-	3.28E-03	-	-	2.24E-01
1466	570800.00	4177300.00	WORKER	-	-	1.92E-01	-	-	2.99E-03	-	-	1.92E-01
1467	570800.00	4177400.00	WORKER	-	-	1.87E-01	-	-	2.75E-03	-	-	1.87E-01
1468	570800.00	4177500.00	WORKER	-	-	1.86E-01	-	-	2.63E-03	-	-	1.86E-01
1469	570800.00	4177600.00	WORKER	-	-	1.87E-01	-	-	2.34E-03	-	-	1.87E-01
1470	570800.00	4177700.00	WORKER	-	-	1.86E-01	-	-	2.17E-03	-	-	1.86E-01
1471	570800.00	4177800.00	WORKER	-	-	1.86E-01	-	-	2.00E-03	-	-	1.86E-01
1472	570800.00	4177900.00	WORKER	-	-	1.84E-01	-	-	1.85E-03	-	-	1.84E-01
1473	570800.00	4178000.00	WORKER	-	-	1.78E-01	-	-	1.81E-03	-	-	1.78E-01
1476	570900.00	4173200.00	RECREATIONAL	-	-	6.64E-01	-	-	4.82E-03	-	-	6.64E-01
1477	570900.00	4173300.00	RECREATIONAL	-	-	7.69E-01	-	-	5.45E-03	-	-	7.69E-01
1478	570900.00	4173400.00	RECREATIONAL	-	-	7.23E-01	-	-	5.31E-03	-	-	7.23E-01
1479	570900.00	4173500.00	RECREATIONAL	-	-	3.27E-01	-	-	5.43E-03	-	-	3.27E-01
1480	570900.00	4173600.00	RECREATIONAL	-	-	3.26E-01	-	-	5.65E-03	-	-	3.26E-01
1481	570900.00	4173700.00	RECREATIONAL	-	-	3.59E-01	-	-	6.18E-03	-	-	3.59E-01
1482	570900.00	4173800.00	RECREATIONAL	-	-	3.84E-01	-	-	6.66E-03	-	-	3.84E-01
1483	570900.00	4173900.00	RECREATIONAL	-	-	4.03E-01	-	-	7.52E-03	-	-	4.03E-01
1484	570900.00	4174000.00	RECREATIONAL	-	-	4.67E-01	-	-	7.59E-03	-	-	4.67E-01
1485	570900.00	4174100.00	WORKER	-	-	3.21E-01	-	-	8.65E-03	-	-	3.21E-01
1486	570900.00	4174200.00	WORKER	-	-	1.95E-01	-	-	8.25E-03	-	-	1.95E-01
1487	570900.00	4174300.00	WORKER	-	-	1.16E-01	-	-	7.56E-03	-	-	1.16E-01
1488	570900.00	4174400.00	WORKER	-	-	2.79E-01	-	-	7.70E-03	-	-	2.79E-01
1489	570900.00	4174500.00	WORKER	-	-	4.66E-01	-	-	7.50E-03	-	-	4.66E-01
1490	570900.00	4174600.00	WORKER	-	-	4.27E-01	-	-	7.76E-03	-	-	4.27E-01
1491	570907.00	4175410.00	WORKER	-	-	6.31E-01	-	-	8.31E-03	-	-	6.31E-01
1492	570900.00	4175500.00	WORKER	-	-	5.81E-01	-	-	7.66E-03	-	-	5.81E-01
1493	570900.00	4175600.00	WORKER	-	-	5.38E-01	-	-	8.08E-03	-	-	5.38E-01
1494	570900.00	4175700.00	WORKER	-	-	4.23E-01	-	-	7.85E-03	-	-	4.23E-01
1495	570900.00	4175800.00	WORKER	-	-	3.16E-01	-	-	6.78E-03	-	-	3.16E-01
1496	570900.00	4175900.00	WORKER	-	-	2.33E-01	-	-	6.64E-03	-	-	2.33E-01
1497	570900.00	4176000.00	WORKER	-	-	2.11E-01	-	-	7.38E-03	-	-	2.11E-01
1498	570900.00	4176100.00	WORKER	-	-	2.21E-01	-	-	8.31E-03	-	-	2.21E-01

OAK Terminal Modernization  
 Table 2-26. Eight (8)-Hour Hazard Indices  
 Combined Construction & Operations

				Combined Construction + Operations			Construction Only			Operations Only		
				8-Hour Hazard Index			8-Hour Hazard Index			8-Hour Hazard Index		
Maximum->				5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
Minimum->				2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
Max ReclD->				1924	582	1281	1546	1879	3296	1924	582	1281
Exposure Years->				2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child	School Child	Adult Worker	Adult Resident & Child	School Child	Adult Worker	Adult Resident & Child	School Child	Adult Worker
1499	570900.00	4176200.00	WORKER	-	-	2.18E-01	-	-	7.91E-03	-	-	2.18E-01
1500	570900.00	4176300.00	WORKER	-	-	2.28E-01	-	-	7.63E-03	-	-	2.28E-01
1501	570900.00	4176400.00	WORKER	-	-	2.58E-01	-	-	7.40E-03	-	-	2.58E-01
1502	570900.00	4176500.00	WORKER	-	-	3.20E-01	-	-	6.99E-03	-	-	3.20E-01
1503	570900.00	4176600.00	WORKER	-	-	2.92E-01	-	-	6.46E-03	-	-	2.92E-01
1504	570900.00	4176700.00	WORKER	-	-	2.63E-01	-	-	5.90E-03	-	-	2.63E-01
1505	570900.00	4176800.00	WORKER	-	-	2.38E-01	-	-	5.35E-03	-	-	2.38E-01
1506	570900.00	4176900.00	WORKER	-	-	2.64E-01	-	-	4.85E-03	-	-	2.64E-01
1507	570900.00	4177000.00	WORKER	-	-	2.66E-01	-	-	4.42E-03	-	-	2.66E-01
1508	570900.00	4177100.00	WORKER	-	-	2.61E-01	-	-	3.97E-03	-	-	2.61E-01
1509	570900.00	4177200.00	WORKER	-	-	2.46E-01	-	-	3.50E-03	-	-	2.46E-01
1510	570900.00	4177300.00	WORKER	-	-	2.22E-01	-	-	3.13E-03	-	-	2.22E-01
1511	570900.00	4177400.00	WORKER	-	-	2.06E-01	-	-	2.87E-03	-	-	2.06E-01
1512	570900.00	4177500.00	WORKER	-	-	1.84E-01	-	-	2.65E-03	-	-	1.84E-01
1513	570900.00	4177600.00	WORKER	-	-	1.71E-01	-	-	2.47E-03	-	-	1.71E-01
1514	570900.00	4177700.00	WORKER	-	-	1.72E-01	-	-	2.30E-03	-	-	1.72E-01
1515	570900.00	4177800.00	WORKER	-	-	1.71E-01	-	-	2.15E-03	-	-	1.71E-01
1516	570900.00	4177900.00	WORKER	-	-	1.71E-01	-	-	2.00E-03	-	-	1.71E-01
1517	570900.00	4178000.00	WORKER	-	-	1.70E-01	-	-	1.86E-03	-	-	1.70E-01
1520	571000.00	4173200.00	RECREATIONAL	-	-	6.90E-01	-	-	4.38E-03	-	-	6.90E-01
1521	571000.00	4173300.00	RECREATIONAL	-	-	7.20E-01	-	-	4.55E-03	-	-	7.20E-01
1522	571000.00	4173400.00	RECREATIONAL	-	-	6.18E-01	-	-	4.93E-03	-	-	6.18E-01
1523	571000.00	4173500.00	RECREATIONAL	-	-	2.38E-01	-	-	5.06E-03	-	-	2.38E-01
1524	571000.00	4173600.00	RECREATIONAL	-	-	3.32E-01	-	-	5.51E-03	-	-	3.32E-01
1525	571000.00	4173700.00	RECREATIONAL	-	-	3.42E-01	-	-	5.88E-03	-	-	3.42E-01
1526	571000.00	4173800.00	RECREATIONAL	-	-	3.70E-01	-	-	6.71E-03	-	-	3.70E-01
1527	571000.00	4173900.00	WORKER	-	-	4.09E-01	-	-	7.36E-03	-	-	4.09E-01
1528	571000.00	4174000.00	WORKER	-	-	4.45E-01	-	-	8.02E-03	-	-	4.45E-01
1529	571000.00	4174100.00	WORKER	-	-	3.15E-01	-	-	7.84E-03	-	-	3.15E-01
1530	571000.00	4174200.00	WORKER	-	-	2.00E-01	-	-	7.15E-03	-	-	2.00E-01
1531	571000.00	4174300.00	WORKER	-	-	1.15E-01	-	-	6.99E-03	-	-	1.15E-01
1532	571000.00	4174400.00	WORKER	-	-	2.32E-01	-	-	6.86E-03	-	-	2.32E-01
1533	571000.00	4174500.00	WORKER	-	-	4.02E-01	-	-	6.97E-03	-	-	4.02E-01
1534	571000.00	4174600.00	WORKER	-	-	3.97E-01	-	-	6.99E-03	-	-	3.97E-01
1535	571000.00	4174700.00	WORKER	-	-	3.32E-01	-	-	6.53E-03	-	-	3.32E-01
1536	571008.00	4175316.00	WORKER	-	-	5.80E-01	-	-	8.30E-03	-	-	5.80E-01
1537	571000.00	4175400.00	WORKER	-	-	6.16E-01	-	-	7.35E-03	-	-	6.16E-01
1538	571000.00	4175500.00	WORKER	-	-	5.93E-01	-	-	6.87E-03	-	-	5.93E-01
1539	571000.00	4175600.00	WORKER	-	-	5.64E-01	-	-	6.93E-03	-	-	5.64E-01
1540	571000.00	4175700.00	WORKER	-	-	4.81E-01	-	-	7.35E-03	-	-	4.81E-01
1541	571000.00	4175800.00	WORKER	-	-	3.53E-01	-	-	6.91E-03	-	-	3.53E-01
1542	571000.00	4175900.00	WORKER	-	-	2.67E-01	-	-	6.01E-03	-	-	2.67E-01
1543	571000.00	4176000.00	WORKER	-	-	1.94E-01	-	-	5.90E-03	-	-	1.94E-01
1544	571028.00	4176085.00	WORKER	-	-	1.98E-01	-	-	6.32E-03	-	-	1.98E-01
1546	571000.00	4176300.00	RESIDENTIAL	2.08E-01	-	-	7.01E-03	-	-	2.08E-01	-	-
1547	571000.00	4176400.00	RESIDENTIAL	2.23E-01	-	-	6.83E-03	-	-	2.23E-01	-	-
1548	571000.00	4176500.00	RESIDENTIAL	2.60E-01	-	-	6.69E-03	-	-	2.60E-01	-	-
1549	571000.00	4176600.00	RESIDENTIAL	3.05E-01	-	-	6.39E-03	-	-	3.05E-01	-	-
1550	571000.00	4176700.00	RESIDENTIAL	2.83E-01	-	-	5.97E-03	-	-	2.83E-01	-	-
1551	571000.00	4176800.00	WORKER	-	-	2.59E-01	-	-	5.48E-03	-	-	2.59E-01
1552	571000.00	4176900.00	WORKER	-	-	2.36E-01	-	-	4.98E-03	-	-	2.36E-01
1553	571000.00	4177000.00	WORKER	-	-	2.50E-01	-	-	4.51E-03	-	-	2.50E-01
1554	571000.00	4177100.00	WORKER	-	-	2.42E-01	-	-	4.08E-03	-	-	2.42E-01
1555	571000.00	4177200.00	WORKER	-	-	2.51E-01	-	-	3.68E-03	-	-	2.51E-01
1556	571000.00	4177300.00	WORKER	-	-	2.40E-01	-	-	3.30E-03	-	-	2.40E-01
1557	571000.00	4177400.00	WORKER	-	-	2.15E-01	-	-	2.99E-03	-	-	2.15E-01
1558	571000.00	4177500.00	WORKER	-	-	2.08E-01	-	-	2.74E-03	-	-	2.08E-01
1559	571000.00	4177600.00	WORKER	-	-	1.96E-01	-	-	2.53E-03	-	-	1.96E-01
1560	571000.00	4177700.00	WORKER	-	-	1.77E-01	-	-	2.37E-03	-	-	1.77E-01
1561	571000.00	4177800.00	WORKER	-	-	1.59E-01	-	-	2.22E-03	-	-	1.59E-01
1562	571000.00	4177900.00	WORKER	-	-	1.59E-01	-	-	2.09E-03	-	-	1.59E-01
1563	571000.00	4178000.00	WORKER	-	-	1.58E-01	-	-	1.97E-03	-	-	1.58E-01
1566	566000.00	4178750.00	RECREATIONAL	-	-	1.49E-01	-	-	8.87E-04	-	-	1.49E-01

OAK Terminal Modernization  
 Table 2-26. Eight (8)-Hour Hazard Indices  
 Combined Construction & Operations

				Combined Construction + Operations			Construction Only			Operations Only			
				8-Hour Hazard Index			8-Hour Hazard Index			8-Hour Hazard Index			
				Maximum->	5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
				Minimum->	2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
				Max ReclD->	1924	582	1281	1546	1879	3296	1924	582	1281
				Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	
1567	566000.00	4179000.00	RESIDENTIAL	1.62E-01	-	-	9.37E-04	-	-	1.62E-01	-	-	
1568	566000.00	4179250.00	RESIDENTIAL	1.65E-01	-	-	9.79E-04	-	-	1.65E-01	-	-	
1569	566000.00	4179500.00	RESIDENTIAL	1.39E-01	-	-	9.87E-04	-	-	1.39E-01	-	-	
1570	566000.00	4179750.00	RESIDENTIAL	1.44E-01	-	-	1.09E-03	-	-	1.44E-01	-	-	
1571	566000.00	4180000.00	RESIDENTIAL	1.55E-01	-	-	1.16E-03	-	-	1.55E-01	-	-	
1572	566000.00	4180250.00	RESIDENTIAL	1.65E-01	-	-	1.17E-03	-	-	1.65E-01	-	-	
1573	566000.00	4180500.00	RESIDENTIAL	1.72E-01	-	-	1.13E-03	-	-	1.72E-01	-	-	
1576	566250.00	4178750.00	RESIDENTIAL	1.84E-01	-	-	1.07E-03	-	-	1.84E-01	-	-	
1577	566250.00	4179000.00	RESIDENTIAL	1.67E-01	-	-	1.10E-03	-	-	1.67E-01	-	-	
1578	566250.00	4179250.00	RESIDENTIAL	1.62E-01	-	-	1.09E-03	-	-	1.62E-01	-	-	
1579	566250.00	4179500.00	RESIDENTIAL	1.73E-01	-	-	1.13E-03	-	-	1.73E-01	-	-	
1580	566250.00	4179750.00	RESIDENTIAL	1.85E-01	-	-	1.28E-03	-	-	1.85E-01	-	-	
1581	566250.00	4180000.00	RESIDENTIAL	1.93E-01	-	-	1.27E-03	-	-	1.93E-01	-	-	
1582	566250.00	4180250.00	RESIDENTIAL	1.96E-01	-	-	1.21E-03	-	-	1.96E-01	-	-	
1583	566250.00	4180500.00	RESIDENTIAL	1.92E-01	-	-	1.13E-03	-	-	1.92E-01	-	-	
1586	566500.00	4178750.00	RESIDENTIAL	1.79E-01	-	-	1.23E-03	-	-	1.79E-01	-	-	
1587	566500.00	4179000.00	RESIDENTIAL	1.94E-01	-	-	1.24E-03	-	-	1.94E-01	-	-	
1588	566500.00	4179250.00	RESIDENTIAL	2.06E-01	-	-	1.27E-03	-	-	2.06E-01	-	-	
1589	566500.00	4179500.00	RESIDENTIAL	2.17E-01	-	-	1.39E-03	-	-	2.17E-01	-	-	
1590	566500.00	4179750.00	RESIDENTIAL	2.21E-01	-	-	1.38E-03	-	-	2.21E-01	-	-	
1591	566500.00	4180000.00	SCHOOL	2.18E-01	2.18E-01	2.18E-01	1.29E-03	1.29E-03	1.29E-03	2.18E-01	2.18E-01	2.18E-01	
1592	566500.00	4180250.00	RESIDENTIAL	2.05E-01	-	-	1.20E-03	-	-	2.05E-01	-	-	
1593	566500.00	4180500.00	RESIDENTIAL	1.82E-01	-	-	1.09E-03	-	-	1.82E-01	-	-	
1596	566750.00	4178750.00	RESIDENTIAL	2.35E-01	-	-	1.42E-03	-	-	2.35E-01	-	-	
1597	566750.00	4179000.00	RESIDENTIAL	2.42E-01	-	-	1.43E-03	-	-	2.42E-01	-	-	
1598	566750.00	4179250.00	RESIDENTIAL	2.46E-01	-	-	1.40E-03	-	-	2.46E-01	-	-	
1599	566750.00	4179500.00	RESIDENTIAL	2.42E-01	-	-	1.47E-03	-	-	2.42E-01	-	-	
1600	566750.00	4179750.00	RESIDENTIAL	2.28E-01	-	-	1.37E-03	-	-	2.28E-01	-	-	
1601	566750.00	4180000.00	WORKER	-	-	2.02E-01	-	-	1.31E-03	-	-	2.02E-01	
1602	566750.00	4180250.00	WORKER	-	-	1.59E-01	-	-	1.26E-03	-	-	1.59E-01	
1603	566750.00	4180500.00	RESIDENTIAL	1.20E-01	-	-	1.12E-03	-	-	1.20E-01	-	-	
1605	567000.00	4178500.00	RESIDENTIAL	2.81E-01	-	-	1.63E-03	-	-	2.81E-01	-	-	
1606	567000.00	4178750.00	RECREATIONAL	-	-	2.77E-01	-	-	1.61E-03	-	-	2.77E-01	
1607	567000.00	4179000.00	RESIDENTIAL	2.62E-01	-	-	1.54E-03	-	-	2.62E-01	-	-	
1608	567000.00	4179250.00	RESIDENTIAL	2.45E-01	-	-	1.44E-03	-	-	2.45E-01	-	-	
1609	567000.00	4179500.00	RESIDENTIAL	2.06E-01	-	-	1.49E-03	-	-	2.06E-01	-	-	
1610	567000.00	4179750.00	RESIDENTIAL	1.56E-01	-	-	1.45E-03	-	-	1.56E-01	-	-	
1611	567000.00	4180000.00	RESIDENTIAL	1.10E-01	-	-	1.39E-03	-	-	1.10E-01	-	-	
1612	567000.00	4180250.00	RESIDENTIAL	8.16E-02	-	-	1.23E-03	-	-	8.16E-02	-	-	
1613	567000.00	4180500.00	RESIDENTIAL	5.59E-02	-	-	1.10E-03	-	-	5.59E-02	-	-	
1615	567250.00	4178500.00	RESIDENTIAL	3.02E-01	-	-	1.81E-03	-	-	3.02E-01	-	-	
1616	567250.00	4178750.00	RESIDENTIAL	2.65E-01	-	-	1.68E-03	-	-	2.65E-01	-	-	
1617	567250.00	4179000.00	RESIDENTIAL	2.07E-01	-	-	1.59E-03	-	-	2.07E-01	-	-	
1618	567250.00	4179250.00	RESIDENTIAL	1.51E-01	-	-	1.54E-03	-	-	1.51E-01	-	-	
1619	567250.00	4179500.00	RESIDENTIAL	1.04E-01	-	-	1.58E-03	-	-	1.04E-01	-	-	
1620	567250.00	4179750.00	RESIDENTIAL	7.07E-02	-	-	1.48E-03	-	-	7.07E-02	-	-	
1621	567250.00	4180000.00	RESIDENTIAL	4.18E-02	-	-	1.31E-03	-	-	4.18E-02	-	-	
1622	567250.00	4180250.00	RESIDENTIAL	4.54E-02	-	-	1.15E-03	-	-	4.54E-02	-	-	
1623	567250.00	4180500.00	RESIDENTIAL	5.76E-02	-	-	1.03E-03	-	-	5.76E-02	-	-	
1625	567500.00	4178500.00	RESIDENTIAL	2.13E-01	-	-	1.90E-03	-	-	2.13E-01	-	-	
1626	567500.00	4178750.00	RESIDENTIAL	1.49E-01	-	-	1.81E-03	-	-	1.49E-01	-	-	
1627	567500.00	4179000.00	RESIDENTIAL	9.56E-02	-	-	1.72E-03	-	-	9.56E-02	-	-	
1628	567500.00	4179250.00	RESIDENTIAL	5.54E-02	-	-	1.60E-03	-	-	5.54E-02	-	-	
1629	567500.00	4179500.00	RESIDENTIAL	6.25E-02	-	-	1.48E-03	-	-	6.25E-02	-	-	
1630	567500.00	4179750.00	RESIDENTIAL	7.77E-02	-	-	1.35E-03	-	-	7.77E-02	-	-	
1631	567500.00	4180000.00	RESIDENTIAL	8.32E-02	-	-	1.18E-03	-	-	8.32E-02	-	-	
1632	567500.00	4180250.00	RESIDENTIAL	7.92E-02	-	-	1.03E-03	-	-	7.92E-02	-	-	
1633	567500.00	4180500.00	RESIDENTIAL	7.68E-02	-	-	9.33E-04	-	-	7.68E-02	-	-	
1636	567750.00	4178750.00	RESIDENTIAL	8.96E-02	-	-	1.91E-03	-	-	8.96E-02	-	-	
1637	567750.00	4179000.00	RESIDENTIAL	1.04E-01	-	-	1.74E-03	-	-	1.04E-01	-	-	
1638	567750.00	4179250.00	RESIDENTIAL	1.01E-01	-	-	1.56E-03	-	-	1.01E-01	-	-	
1639	567750.00	4179500.00	RESIDENTIAL	9.71E-02	-	-	1.37E-03	-	-	9.71E-02	-	-	
1640	567750.00	4179750.00	RESIDENTIAL	9.24E-02	-	-	1.19E-03	-	-	9.24E-02	-	-	

OAK Terminal Modernization  
 Table 2-26. Eight (8)-Hour Hazard Indices  
 Combined Construction & Operations

				Combined Construction + Operations			Construction Only			Operations Only		
				8-Hour Hazard Index			8-Hour Hazard Index			8-Hour Hazard Index		
Maximum->				5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
Minimum->				2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
Max ReclD->				1924	582	1281	1546	1879	3296	1924	582	1281
Exposure Years->				2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child	School Child	Adult Worker	Adult Resident & Child	School Child	Adult Worker	Adult Resident & Child	School Child	Adult Worker
1641	567750.00	4180000.00	RESIDENTIAL	8.77E-02	-	-	1.06E-03	-	-	8.77E-02	-	-
1642	567750.00	4180250.00	RESIDENTIAL	8.35E-02	-	-	9.99E-04	-	-	8.35E-02	-	-
1646	568000.00	4178750.00	RESIDENTIAL	1.23E-01	-	-	1.89E-03	-	-	1.23E-01	-	-
1647	568000.00	4179000.00	RESIDENTIAL	1.15E-01	-	-	1.64E-03	-	-	1.15E-01	-	-
1648	568000.00	4179250.00	RESIDENTIAL	1.08E-01	-	-	1.39E-03	-	-	1.08E-01	-	-
1649	568000.00	4179500.00	RESIDENTIAL	1.01E-01	-	-	1.25E-03	-	-	1.01E-01	-	-
1650	568000.00	4179750.00	RESIDENTIAL	9.49E-02	-	-	1.14E-03	-	-	9.49E-02	-	-
1651	568000.00	4180000.00	RESIDENTIAL	8.84E-02	-	-	1.04E-03	-	-	8.84E-02	-	-
1652	568000.00	4180250.00	RESIDENTIAL	8.23E-02	-	-	9.35E-04	-	-	8.23E-02	-	-
1653	568000.00	4180500.00	WORKER	-	-	7.81E-02	-	-	8.35E-04	-	-	7.81E-02
1658	568250.00	4179250.00	RESIDENTIAL	1.11E-01	-	-	1.32E-03	-	-	1.11E-01	-	-
1659	568250.00	4179500.00	RESIDENTIAL	1.04E-01	-	-	1.16E-03	-	-	1.04E-01	-	-
1660	568250.00	4179750.00	RESIDENTIAL	9.18E-02	-	-	1.01E-03	-	-	9.18E-02	-	-
1662	568250.00	4180250.00	WORKER	-	-	6.96E-02	-	-	7.59E-04	-	-	6.96E-02
1663	568250.00	4180500.00	WORKER	-	-	6.03E-02	-	-	6.61E-04	-	-	6.03E-02
1669	568500.00	4179500.00	WORKER	-	-	7.65E-02	-	-	9.04E-04	-	-	7.65E-02
1670	568500.00	4179750.00	WORKER	-	-	6.69E-02	-	-	8.47E-04	-	-	6.69E-02
1671	568500.00	4180000.00	WORKER	-	-	5.86E-02	-	-	7.97E-04	-	-	5.86E-02
1672	568500.00	4180250.00	WORKER	-	-	5.48E-02	-	-	7.52E-04	-	-	5.48E-02
1673	568500.00	4180500.00	WORKER	-	-	5.16E-02	-	-	7.10E-04	-	-	5.16E-02
1679	568750.00	4179500.00	WORKER	-	-	8.36E-02	-	-	9.43E-04	-	-	8.36E-02
1680	568750.00	4179750.00	WORKER	-	-	7.60E-02	-	-	8.75E-04	-	-	7.60E-02
1681	568750.00	4180000.00	WORKER	-	-	6.92E-02	-	-	8.14E-04	-	-	6.92E-02
1682	568750.00	4180250.00	WORKER	-	-	6.32E-02	-	-	7.59E-04	-	-	6.32E-02
1683	568750.00	4180500.00	WORKER	-	-	5.81E-02	-	-	7.22E-04	-	-	5.81E-02
1688	569000.00	4179250.00	RECREATIONAL	-	-	9.46E-02	-	-	1.03E-03	-	-	9.46E-02
1690	569000.00	4179750.00	WORKER	-	-	7.65E-02	-	-	9.17E-04	-	-	7.65E-02
1691	569000.00	4180000.00	WORKER	-	-	6.92E-02	-	-	8.68E-04	-	-	6.92E-02
1692	569000.00	4180250.00	WORKER	-	-	6.32E-02	-	-	8.21E-04	-	-	6.32E-02
1693	569000.00	4180500.00	WORKER	-	-	5.82E-02	-	-	8.70E-04	-	-	5.82E-02
1697	569250.00	4179000.00	RECREATIONAL	-	-	5.11E-02	-	-	1.16E-03	-	-	5.11E-02
1698	569250.00	4179250.00	WORKER	-	-	3.91E-02	-	-	1.08E-03	-	-	3.91E-02
1699	569250.00	4179500.00	WORKER	-	-	3.02E-02	-	-	1.00E-03	-	-	3.02E-02
1700	569250.00	4179750.00	WORKER	-	-	1.94E-02	-	-	9.35E-04	-	-	1.94E-02
1701	569250.00	4180000.00	WORKER	-	-	2.03E-02	-	-	8.77E-04	-	-	2.03E-02
1702	569250.00	4180250.00	WORKER	-	-	2.29E-02	-	-	8.26E-04	-	-	2.29E-02
1703	569250.00	4180500.00	WORKER	-	-	4.29E-02	-	-	8.22E-04	-	-	4.29E-02
1704	569500.00	4178250.00	WORKER	-	-	1.79E-01	-	-	1.67E-03	-	-	1.79E-01
1706	569500.00	4178750.00	WORKER	-	-	1.30E-01	-	-	1.38E-03	-	-	1.30E-01
1707	569500.00	4179000.00	WORKER	-	-	1.08E-01	-	-	1.27E-03	-	-	1.08E-01
1708	569500.00	4179250.00	WORKER	-	-	9.06E-02	-	-	1.18E-03	-	-	9.06E-02
1709	569500.00	4179500.00	WORKER	-	-	7.42E-02	-	-	1.11E-03	-	-	7.42E-02
1710	569500.00	4179750.00	WORKER	-	-	5.99E-02	-	-	1.04E-03	-	-	5.99E-02
1711	569500.00	4180000.00	RESIDENTIAL	4.79E-02	-	-	9.82E-04	-	-	4.79E-02	-	-
1712	569500.00	4180250.00	WORKER	-	-	3.44E-02	-	-	9.28E-04	-	-	3.44E-02
1713	569500.00	4180500.00	WORKER	-	-	2.75E-02	-	-	9.61E-04	-	-	2.75E-02
1714	569750.00	4178250.00	WORKER	-	-	2.17E-01	-	-	1.71E-03	-	-	2.17E-01
1715	569750.00	4178500.00	WORKER	-	-	1.89E-01	-	-	1.55E-03	-	-	1.89E-01
1716	569750.00	4178750.00	WORKER	-	-	1.67E-01	-	-	1.40E-03	-	-	1.67E-01
1717	569750.00	4179000.00	WORKER	-	-	1.47E-01	-	-	1.28E-03	-	-	1.47E-01
1718	569750.00	4179250.00	WORKER	-	-	1.27E-01	-	-	1.19E-03	-	-	1.27E-01
1719	569750.00	4179500.00	WORKER	-	-	1.10E-01	-	-	1.11E-03	-	-	1.10E-01
1720	569750.00	4179750.00	WORKER	-	-	9.37E-02	-	-	1.04E-03	-	-	9.37E-02
1721	569750.00	4180000.00	WORKER	-	-	7.89E-02	-	-	9.86E-04	-	-	7.89E-02
1722	569750.00	4180250.00	SCHOOL	6.33E-02	6.33E-02	6.33E-02	1.01E-03	1.01E-03	1.01E-03	6.33E-02	6.33E-02	6.33E-02
1723	569750.00	4180500.00	RESIDENTIAL	5.14E-02	-	-	9.88E-04	-	-	5.14E-02	-	-
1724	570000.00	4178250.00	WORKER	-	-	2.99E-01	-	-	1.71E-03	-	-	2.99E-01
1725	570000.00	4178500.00	WORKER	-	-	2.79E-01	-	-	1.58E-03	-	-	2.79E-01
1726	570000.00	4178750.00	WORKER	-	-	2.59E-01	-	-	1.47E-03	-	-	2.59E-01
1727	570000.00	4179000.00	WORKER	-	-	2.39E-01	-	-	1.36E-03	-	-	2.39E-01
1728	570000.00	4179250.00	WORKER	-	-	2.18E-01	-	-	1.27E-03	-	-	2.18E-01
1729	570000.00	4179500.00	WORKER	-	-	1.96E-01	-	-	1.18E-03	-	-	1.96E-01
1730	570000.00	4179750.00	WORKER	-	-	1.73E-01	-	-	1.10E-03	-	-	1.73E-01

**OAK Terminal Modernization**  
**Table 2-26. Eight (8)-Hour Hazard Indices**  
**Combined Construction & Operations**

				<u>Combined Construction + Operations</u>			<u>Construction Only</u>			<u>Operations Only</u>			
				<u>8-Hour Hazard Index</u>			<u>8-Hour Hazard Index</u>			<u>8-Hour Hazard Index</u>			
				Maximum->	5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
				Minimum->	2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
				Max ReclD->	1924	582	1281	1546	1879	3296	1924	582	1281
				Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	
1731	570000.00	4180000.00	WORKER	-	-	1.50E-01	-	-	1.02E-03	-	-	1.50E-01	
1732	570000.00	4180250.00	RESIDENTIAL	1.25E-01	-	-	9.57E-04	-	-	1.25E-01	-	-	
1733	570000.00	4180500.00	RESIDENTIAL	9.70E-02	-	-	1.01E-03	-	-	9.70E-02	-	-	
1734	570250.00	4178250.00	WORKER	-	-	2.04E-01	-	-	1.79E-03	-	-	2.04E-01	
1735	570250.00	4178500.00	WORKER	-	-	2.22E-01	-	-	1.73E-03	-	-	2.22E-01	
1736	570250.00	4178750.00	WORKER	-	-	2.43E-01	-	-	1.52E-03	-	-	2.43E-01	
1737	570250.00	4179000.00	WORKER	-	-	2.56E-01	-	-	1.39E-03	-	-	2.56E-01	
1738	570250.00	4179250.00	WORKER	-	-	2.68E-01	-	-	1.27E-03	-	-	2.68E-01	
1739	570250.00	4179500.00	WORKER	-	-	2.60E-01	-	-	1.19E-03	-	-	2.60E-01	
1740	570250.00	4179750.00	RESIDENTIAL	2.48E-01	-	-	1.12E-03	-	-	2.48E-01	-	-	
1741	570250.00	4180000.00	WORKER	-	-	2.39E-01	-	-	1.05E-03	-	-	2.39E-01	
1742	570250.00	4180250.00	RESIDENTIAL	2.26E-01	-	-	1.10E-03	-	-	2.26E-01	-	-	
1743	570250.00	4180500.00	RESIDENTIAL	2.13E-01	-	-	1.13E-03	-	-	2.13E-01	-	-	
1744	570500.00	4178250.00	WORKER	-	-	1.84E-01	-	-	1.82E-03	-	-	1.84E-01	
1745	570500.00	4178500.00	WORKER	-	-	1.41E-01	-	-	1.65E-03	-	-	1.41E-01	
1746	570500.00	4178750.00	WORKER	-	-	1.03E-01	-	-	1.49E-03	-	-	1.03E-01	
1747	570500.00	4179000.00	WORKER	-	-	9.80E-02	-	-	1.37E-03	-	-	9.80E-02	
1748	570500.00	4179250.00	RESIDENTIAL	1.25E-01	-	-	1.29E-03	-	-	1.25E-01	-	-	
1749	570500.00	4179500.00	SCHOOL	1.48E-01	1.48E-01	1.48E-01	1.23E-03	1.23E-03	1.23E-03	1.48E-01	1.48E-01	1.48E-01	
1750	570500.00	4179750.00	RESIDENTIAL	1.70E-01	-	-	1.16E-03	-	-	1.70E-01	-	-	
1751	570500.00	4180000.00	RESIDENTIAL	1.87E-01	-	-	1.10E-03	-	-	1.87E-01	-	-	
1752	570500.00	4180250.00	RESIDENTIAL	2.04E-01	-	-	1.11E-03	-	-	2.04E-01	-	-	
1753	570500.00	4180500.00	RESIDENTIAL	2.23E-01	-	-	1.05E-03	-	-	2.23E-01	-	-	
1754	570750.00	4178250.00	WORKER	-	-	1.75E-01	-	-	1.73E-03	-	-	1.75E-01	
1755	570750.00	4178500.00	WORKER	-	-	1.68E-01	-	-	1.57E-03	-	-	1.68E-01	
1756	570750.00	4178750.00	WORKER	-	-	1.54E-01	-	-	1.44E-03	-	-	1.54E-01	
1757	570750.00	4179000.00	RESIDENTIAL	1.34E-01	-	-	1.34E-03	-	-	1.34E-01	-	-	
1758	570750.00	4179250.00	RESIDENTIAL	9.69E-02	-	-	1.25E-03	-	-	9.69E-02	-	-	
1759	570750.00	4179500.00	RESIDENTIAL	6.49E-02	-	-	1.16E-03	-	-	6.49E-02	-	-	
1760	570750.00	4179750.00	RESIDENTIAL	5.75E-02	-	-	1.08E-03	-	-	5.75E-02	-	-	
1761	570750.00	4180000.00	RESIDENTIAL	6.80E-02	-	-	1.11E-03	-	-	6.80E-02	-	-	
1762	570750.00	4180250.00	RESIDENTIAL	7.98E-02	-	-	1.08E-03	-	-	7.98E-02	-	-	
1763	570750.00	4180500.00	RESIDENTIAL	9.12E-02	-	-	1.04E-03	-	-	9.12E-02	-	-	
1764	571000.00	4178250.00	WORKER	-	-	1.55E-01	-	-	1.68E-03	-	-	1.55E-01	
1765	571000.00	4178500.00	WORKER	-	-	1.50E-01	-	-	1.42E-03	-	-	1.50E-01	
1766	571000.00	4178750.00	WORKER	-	-	1.43E-01	-	-	1.32E-03	-	-	1.43E-01	
1767	571000.00	4179000.00	RESIDENTIAL	1.38E-01	-	-	1.24E-03	-	-	1.38E-01	-	-	
1768	571000.00	4179250.00	RESIDENTIAL	1.28E-01	-	-	1.17E-03	-	-	1.28E-01	-	-	
1769	571000.00	4179500.00	RESIDENTIAL	1.14E-01	-	-	1.10E-03	-	-	1.14E-01	-	-	
1770	571000.00	4179750.00	RESIDENTIAL	9.22E-02	-	-	1.08E-03	-	-	9.22E-02	-	-	
1771	571000.00	4180000.00	RESIDENTIAL	5.52E-02	-	-	1.06E-03	-	-	5.52E-02	-	-	
1772	571000.00	4180250.00	RESIDENTIAL	3.06E-02	-	-	1.03E-03	-	-	3.06E-02	-	-	
1773	571000.00	4180500.00	RESIDENTIAL	3.14E-02	-	-	9.95E-04	-	-	3.14E-02	-	-	
1774	571250.00	4178250.00	WORKER	-	-	1.54E-01	-	-	1.81E-03	-	-	1.54E-01	
1775	571250.00	4178500.00	WORKER	-	-	1.31E-01	-	-	1.62E-03	-	-	1.31E-01	
1776	571250.00	4178750.00	RESIDENTIAL	1.28E-01	-	-	1.44E-03	-	-	1.28E-01	-	-	
1777	571250.00	4179000.00	RESIDENTIAL	1.26E-01	-	-	1.25E-03	-	-	1.26E-01	-	-	
1778	571250.00	4179250.00	RESIDENTIAL	1.21E-01	-	-	1.10E-03	-	-	1.21E-01	-	-	
1779	571250.00	4179500.00	RESIDENTIAL	1.16E-01	-	-	1.03E-03	-	-	1.16E-01	-	-	
1780	571250.00	4179750.00	RESIDENTIAL	1.09E-01	-	-	1.10E-03	-	-	1.09E-01	-	-	
1781	571250.00	4180000.00	RESIDENTIAL	9.86E-02	-	-	1.04E-03	-	-	9.86E-02	-	-	
1782	571250.00	4180250.00	RESIDENTIAL	8.40E-02	-	-	9.57E-04	-	-	8.40E-02	-	-	
1783	571250.00	4180500.00	RESIDENTIAL	5.02E-02	-	-	9.22E-04	-	-	5.02E-02	-	-	
1784	571500.00	4178250.00	WORKER	-	-	1.48E-01	-	-	1.83E-03	-	-	1.48E-01	
1785	571500.00	4178500.00	WORKER	-	-	1.54E-01	-	-	1.62E-03	-	-	1.54E-01	
1786	571500.00	4178750.00	SCHOOL	1.43E-01	1.43E-01	1.43E-01	1.50E-03	1.50E-03	1.50E-03	1.43E-01	1.43E-01	1.43E-01	
1787	571500.00	4179000.00	RESIDENTIAL	1.12E-01	-	-	1.39E-03	-	-	1.12E-01	-	-	
1788	571500.00	4179250.00	RESIDENTIAL	1.08E-01	-	-	1.27E-03	-	-	1.08E-01	-	-	
1789	571500.00	4179500.00	RESIDENTIAL	1.06E-01	-	-	1.19E-03	-	-	1.06E-01	-	-	
1790	571500.00	4179750.00	RESIDENTIAL	1.05E-01	-	-	1.09E-03	-	-	1.05E-01	-	-	
1791	571500.00	4180000.00	RESIDENTIAL	1.00E-01	-	-	1.03E-03	-	-	1.00E-01	-	-	
1792	571500.00	4180250.00	RESIDENTIAL	9.43E-02	-	-	1.03E-03	-	-	9.43E-02	-	-	
1793	571500.00	4180500.00	RESIDENTIAL	8.47E-02	-	-	1.01E-03	-	-	8.47E-02	-	-	

OAK Terminal Modernization  
**Table 2-26. Eight (8)-Hour Hazard Indices**  
**Combined Construction & Operations**

				<u>Combined Construction + Operations</u>			<u>Construction Only</u>			<u>Operations Only</u>			
				<u>8-Hour Hazard Index</u>			<u>8-Hour Hazard Index</u>			<u>8-Hour Hazard Index</u>			
				Maximum->	5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
				Minimum->	2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
				Max ReclD->	1924	582	1281	1546	1879	3296	1924	582	1281
				Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	
1794	571750.00	4178250.00	RESIDENTIAL	1.17E-01	-	-	1.99E-03	-	-	1.17E-01	-	-	
1795	571750.00	4178500.00	RESIDENTIAL	9.56E-02	-	-	1.70E-03	-	-	9.56E-02	-	-	
1796	571750.00	4178750.00	SCHOOL	1.32E-01	1.32E-01	1.32E-01	1.52E-03	1.52E-03	1.52E-03	1.32E-01	1.32E-01	1.32E-01	
1797	571750.00	4179000.00	RESIDENTIAL	1.37E-01	-	-	1.35E-03	-	-	1.37E-01	-	-	
1798	571750.00	4179250.00	RESIDENTIAL	1.31E-01	-	-	1.30E-03	-	-	1.31E-01	-	-	
1799	571750.00	4179500.00	RESIDENTIAL	1.08E-01	-	-	1.31E-03	-	-	1.08E-01	-	-	
1800	571750.00	4179750.00	RESIDENTIAL	9.42E-02	-	-	1.29E-03	-	-	9.42E-02	-	-	
1801	571750.00	4180000.00	RESIDENTIAL	9.05E-02	-	-	1.20E-03	-	-	9.05E-02	-	-	
1802	571750.00	4180250.00	RESIDENTIAL	9.06E-02	-	-	1.05E-03	-	-	9.06E-02	-	-	
1803	571750.00	4180500.00	RESIDENTIAL	8.91E-02	-	-	9.38E-04	-	-	8.91E-02	-	-	
1804	572000.00	4178250.00	RESIDENTIAL	1.55E-01	-	-	2.34E-03	-	-	1.55E-01	-	-	
1805	572000.00	4178500.00	RESIDENTIAL	1.06E-01	-	-	1.87E-03	-	-	1.06E-01	-	-	
1806	572000.00	4178750.00	RESIDENTIAL	8.41E-02	-	-	1.59E-03	-	-	8.41E-02	-	-	
1807	572000.00	4179000.00	RESIDENTIAL	9.53E-02	-	-	1.54E-03	-	-	9.53E-02	-	-	
1808	572000.00	4179250.00	RESIDENTIAL	1.23E-01	-	-	1.40E-03	-	-	1.23E-01	-	-	
1809	572000.00	4179500.00	RESIDENTIAL	1.30E-01	-	-	1.22E-03	-	-	1.30E-01	-	-	
1810	572000.00	4179750.00	RESIDENTIAL	1.22E-01	-	-	1.20E-03	-	-	1.22E-01	-	-	
1811	572000.00	4180000.00	RESIDENTIAL	1.04E-01	-	-	1.24E-03	-	-	1.04E-01	-	-	
1812	572000.00	4180250.00	RESIDENTIAL	8.39E-02	-	-	1.23E-03	-	-	8.39E-02	-	-	
1813	572000.00	4180500.00	RESIDENTIAL	8.09E-02	-	-	1.15E-03	-	-	8.09E-02	-	-	
1814	572250.00	4178250.00	RESIDENTIAL	1.54E-01	-	-	2.53E-03	-	-	1.54E-01	-	-	
1815	572250.00	4178500.00	RESIDENTIAL	1.50E-01	-	-	2.19E-03	-	-	1.50E-01	-	-	
1816	572250.00	4178750.00	RESIDENTIAL	1.09E-01	-	-	1.79E-03	-	-	1.09E-01	-	-	
1817	572250.00	4179000.00	RESIDENTIAL	8.66E-02	-	-	1.57E-03	-	-	8.66E-02	-	-	
1818	572250.00	4179250.00	RESIDENTIAL	5.73E-02	-	-	1.48E-03	-	-	5.73E-02	-	-	
1819	572250.00	4179500.00	RESIDENTIAL	9.24E-02	-	-	1.39E-03	-	-	9.24E-02	-	-	
1820	572250.00	4179750.00	RESIDENTIAL	1.15E-01	-	-	1.23E-03	-	-	1.15E-01	-	-	
1821	572250.00	4180000.00	RESIDENTIAL	1.21E-01	-	-	1.08E-03	-	-	1.21E-01	-	-	
1822	572250.00	4180250.00	RESIDENTIAL	1.14E-01	-	-	1.10E-03	-	-	1.14E-01	-	-	
1823	572250.00	4180500.00	RESIDENTIAL	9.64E-02	-	-	1.15E-03	-	-	9.64E-02	-	-	
1824	572500.00	4178250.00	RESIDENTIAL	1.19E-01	-	-	2.51E-03	-	-	1.19E-01	-	-	
1825	572500.00	4178500.00	RESIDENTIAL	1.32E-01	-	-	2.52E-03	-	-	1.32E-01	-	-	
1826	572500.00	4178750.00	RESIDENTIAL	1.37E-01	-	-	2.21E-03	-	-	1.37E-01	-	-	
1827	572500.00	4179000.00	RESIDENTIAL	1.15E-01	-	-	1.75E-03	-	-	1.15E-01	-	-	
1828	572500.00	4179250.00	RESIDENTIAL	8.43E-02	-	-	1.44E-03	-	-	8.43E-02	-	-	
1829	572500.00	4179500.00	RESIDENTIAL	5.83E-02	-	-	1.39E-03	-	-	5.83E-02	-	-	
1830	572500.00	4179750.00	RESIDENTIAL	4.15E-02	-	-	1.33E-03	-	-	4.15E-02	-	-	
1831	572500.00	4180000.00	RESIDENTIAL	9.05E-02	-	-	1.24E-03	-	-	9.05E-02	-	-	
1832	572500.00	4180250.00	RESIDENTIAL	1.09E-01	-	-	1.09E-03	-	-	1.09E-01	-	-	
1833	572500.00	4180500.00	RESIDENTIAL	1.14E-01	-	-	9.71E-04	-	-	1.14E-01	-	-	
1834	572750.00	4178250.00	RESIDENTIAL	6.62E-02	-	-	2.03E-03	-	-	6.62E-02	-	-	
1835	572750.00	4178500.00	RESIDENTIAL	9.91E-02	-	-	2.28E-03	-	-	9.91E-02	-	-	
1836	572750.00	4178750.00	RESIDENTIAL	1.13E-01	-	-	2.36E-03	-	-	1.13E-01	-	-	
1837	572750.00	4179000.00	RESIDENTIAL	1.22E-01	-	-	2.12E-03	-	-	1.22E-01	-	-	
1838	572750.00	4179250.00	RESIDENTIAL	1.17E-01	-	-	1.72E-03	-	-	1.17E-01	-	-	
1839	572750.00	4179500.00	RESIDENTIAL	7.97E-02	-	-	1.38E-03	-	-	7.97E-02	-	-	
1840	572750.00	4179750.00	RESIDENTIAL	6.58E-02	-	-	1.30E-03	-	-	6.58E-02	-	-	
1841	572750.00	4180000.00	RESIDENTIAL	3.80E-02	-	-	1.25E-03	-	-	3.80E-02	-	-	
1842	572750.00	4180250.00	RESIDENTIAL	4.08E-02	-	-	1.22E-03	-	-	4.08E-02	-	-	
1843	572750.00	4180500.00	RESIDENTIAL	8.90E-02	-	-	1.12E-03	-	-	8.90E-02	-	-	
1844	573000.00	4178250.00	RESIDENTIAL	8.64E-02	-	-	1.53E-03	-	-	8.64E-02	-	-	
1845	573000.00	4178500.00	RESIDENTIAL	5.28E-02	-	-	1.79E-03	-	-	5.28E-02	-	-	
1846	573000.00	4178750.00	RESIDENTIAL	8.26E-02	-	-	2.04E-03	-	-	8.26E-02	-	-	
1847	573000.00	4179000.00	RESIDENTIAL	1.02E-01	-	-	2.18E-03	-	-	1.02E-01	-	-	
1848	573000.00	4179250.00	RESIDENTIAL	1.06E-01	-	-	2.02E-03	-	-	1.06E-01	-	-	
1849	573000.00	4179500.00	RESIDENTIAL	1.08E-01	-	-	1.68E-03	-	-	1.08E-01	-	-	
1850	573000.00	4179750.00	RESIDENTIAL	8.44E-02	-	-	1.35E-03	-	-	8.44E-02	-	-	
1851	573000.00	4180000.00	RESIDENTIAL	6.75E-02	-	-	1.19E-03	-	-	6.75E-02	-	-	
1852	573000.00	4180250.00	RESIDENTIAL	4.39E-02	-	-	1.18E-03	-	-	4.39E-02	-	-	
1853	573000.00	4180500.00	RESIDENTIAL	3.08E-02	-	-	1.15E-03	-	-	3.08E-02	-	-	
1854	573250.00	4178250.00	RESIDENTIAL	1.41E-01	-	-	1.46E-03	-	-	1.41E-01	-	-	
1855	573250.00	4178500.00	RESIDENTIAL	6.84E-02	-	-	1.42E-03	-	-	6.84E-02	-	-	
1856	573250.00	4178750.00	RESIDENTIAL	4.71E-02	-	-	1.57E-03	-	-	4.71E-02	-	-	

OAK Terminal Modernization  
 Table 2-26. Eight (8)-Hour Hazard Indices  
 Combined Construction & Operations

				Combined Construction + Operations			Construction Only			Operations Only			
				8-Hour Hazard Index			8-Hour Hazard Index			8-Hour Hazard Index			
				Maximum->	5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
				Minimum->	2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
				Max ReclD->	1924	582	1281	1546	1879	3296	1924	582	1281
				Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	
1857	573250.00	4179000.00	RESIDENTIAL	7.40E-02	-	-	1.85E-03	-	-	7.40E-02	-	-	
1858	573250.00	4179250.00	RESIDENTIAL	9.25E-02	-	-	2.01E-03	-	-	9.25E-02	-	-	
1859	573250.00	4179500.00	RESIDENTIAL	9.69E-02	-	-	1.93E-03	-	-	9.69E-02	-	-	
1860	573250.00	4179750.00	RESIDENTIAL	9.85E-02	-	-	1.64E-03	-	-	9.85E-02	-	-	
1861	573250.00	4180000.00	RESIDENTIAL	9.16E-02	-	-	1.32E-03	-	-	9.16E-02	-	-	
1862	573250.00	4180250.00	RESIDENTIAL	6.83E-02	-	-	1.16E-03	-	-	6.83E-02	-	-	
1863	573250.00	4180500.00	RESIDENTIAL	5.30E-02	-	-	1.05E-03	-	-	5.30E-02	-	-	
1864	573500.00	4178250.00	RESIDENTIAL	1.51E-01	-	-	1.32E-03	-	-	1.51E-01	-	-	
1865	573500.00	4178500.00	RESIDENTIAL	1.21E-01	-	-	1.36E-03	-	-	1.21E-01	-	-	
1866	573500.00	4178750.00	RESIDENTIAL	5.19E-02	-	-	1.32E-03	-	-	5.19E-02	-	-	
1867	573500.00	4179000.00	RESIDENTIAL	4.26E-02	-	-	1.37E-03	-	-	4.26E-02	-	-	
1868	573500.00	4179250.00	RESIDENTIAL	7.52E-02	-	-	1.67E-03	-	-	7.52E-02	-	-	
1869	573500.00	4179500.00	RESIDENTIAL	8.24E-02	-	-	1.86E-03	-	-	8.24E-02	-	-	
1870	573500.00	4179750.00	RESIDENTIAL	9.22E-02	-	-	1.83E-03	-	-	9.22E-02	-	-	
1871	573500.00	4180000.00	RESIDENTIAL	8.67E-02	-	-	1.58E-03	-	-	8.67E-02	-	-	
1872	573500.00	4180250.00	RESIDENTIAL	8.61E-02	-	-	1.22E-03	-	-	8.61E-02	-	-	
1873	573500.00	4180500.00	RESIDENTIAL	8.11E-02	-	-	8.80E-04	-	-	8.11E-02	-	-	
1874	571250.00	4178000.00	WORKER	-	-	1.78E-01	-	-	2.05E-03	-	-	1.78E-01	
1875	571250.00	4177750.00	WORKER	-	-	1.71E-01	-	-	2.42E-03	-	-	1.71E-01	
1876	571250.00	4177500.00	WORKER	-	-	2.04E-01	-	-	3.04E-03	-	-	2.04E-01	
1877	571250.00	4177250.00	WORKER	-	-	2.10E-01	-	-	3.91E-03	-	-	2.10E-01	
1878	571250.00	4177000.00	RESIDENTIAL	2.56E-01	-	-	4.81E-03	-	-	2.56E-01	-	-	
1879	571250.00	4176750.00	SCHOOL	2.44E-01	2.44E-01	2.44E-01	5.32E-03	5.32E-03	5.32E-03	2.44E-01	2.44E-01	2.44E-01	
1880	571250.00	4176500.00	RESIDENTIAL	2.05E-01	-	-	5.36E-03	-	-	2.05E-01	-	-	
1881	571250.00	4176250.00	RESIDENTIAL	1.72E-01	-	-	5.24E-03	-	-	1.72E-01	-	-	
1882	571250.00	4176000.00	WORKER	-	-	2.71E-01	-	-	5.47E-03	-	-	2.71E-01	
1883	571250.00	4175750.00	WORKER	-	-	4.99E-01	-	-	5.51E-03	-	-	4.99E-01	
1884	571250.00	4175500.00	WORKER	-	-	5.36E-01	-	-	5.81E-03	-	-	5.36E-01	
1885	571250.00	4175250.00	WORKER	-	-	3.58E-01	-	-	6.89E-03	-	-	3.58E-01	
1886	571250.00	4174750.00	WORKER	-	-	2.25E-01	-	-	5.60E-03	-	-	2.25E-01	
1887	571250.00	4174500.00	WORKER	-	-	2.11E-01	-	-	5.76E-03	-	-	2.11E-01	
1888	571250.00	4174250.00	WORKER	-	-	1.50E-01	-	-	5.86E-03	-	-	1.50E-01	
1889	571250.00	4174000.00	WORKER	-	-	4.24E-01	-	-	5.64E-03	-	-	4.24E-01	
1890	571250.00	4173750.00	WORKER	-	-	3.46E-01	-	-	5.53E-03	-	-	3.46E-01	
1891	571250.00	4173500.00	WORKER	-	-	2.66E-01	-	-	4.51E-03	-	-	2.66E-01	
1895	571250.00	4172500.00	RECREATIONAL	-	-	3.04E-01	-	-	3.42E-03	-	-	3.04E-01	
1904	571500.00	4178000.00	WORKER	-	-	1.40E-01	-	-	2.16E-03	-	-	1.40E-01	
1905	571500.00	4177750.00	WORKER	-	-	1.64E-01	-	-	2.74E-03	-	-	1.64E-01	
1906	571500.00	4177500.00	WORKER	-	-	2.07E-01	-	-	3.47E-03	-	-	2.07E-01	
1907	571500.00	4177250.00	WORKER	-	-	2.40E-01	-	-	4.11E-03	-	-	2.40E-01	
1908	571500.00	4177000.00	SCHOOL	1.93E-01	1.93E-01	1.93E-01	4.34E-03	4.34E-03	4.34E-03	1.93E-01	1.93E-01	1.93E-01	
1909	571500.00	4176750.00	RESIDENTIAL	2.06E-01	-	-	4.22E-03	-	-	2.06E-01	-	-	
1910	571500.00	4176500.00	RESIDENTIAL	1.64E-01	-	-	3.67E-03	-	-	1.64E-01	-	-	
1911	571500.00	4176250.00	RESIDENTIAL	2.18E-01	-	-	4.23E-03	-	-	2.18E-01	-	-	
1912	571500.00	4176000.00	RESIDENTIAL	3.47E-01	-	-	4.91E-03	-	-	3.47E-01	-	-	
1913	571500.00	4175750.00	WORKER	-	-	4.75E-01	-	-	4.56E-03	-	-	4.75E-01	
1914	571500.00	4175500.00	WORKER	-	-	4.31E-01	-	-	4.92E-03	-	-	4.31E-01	
1915	571500.00	4175250.00	WORKER	-	-	3.00E-01	-	-	5.57E-03	-	-	3.00E-01	
1916	571500.00	4175000.00	WORKER	-	-	1.79E-01	-	-	5.79E-03	-	-	1.79E-01	
1917	571500.00	4174750.00	WORKER	-	-	1.54E-01	-	-	5.25E-03	-	-	1.54E-01	
1918	571500.00	4174500.00	WORKER	-	-	1.75E-01	-	-	4.75E-03	-	-	1.75E-01	
1919	571500.00	4174250.00	WORKER	-	-	1.81E-01	-	-	4.47E-03	-	-	1.81E-01	
1920	571500.00	4174000.00	WORKER	-	-	4.00E-01	-	-	4.52E-03	-	-	4.00E-01	
1921	571500.00	4173750.00	WORKER	-	-	3.29E-01	-	-	4.94E-03	-	-	3.29E-01	
1922	571500.00	4173500.00	WORKER	-	-	2.74E-01	-	-	4.37E-03	-	-	2.74E-01	
1923	571500.00	4173250.00	RESIDENTIAL	4.22E-01	-	-	3.65E-03	-	-	4.22E-01	-	-	
1924	571500.00	4173000.00	RESIDENTIAL	5.47E-01	-	-	3.09E-03	-	-	5.47E-01	-	-	
1925	571500.00	4172750.00	RECREATIONAL	-	-	3.70E-01	-	-	2.80E-03	-	-	3.70E-01	
1926	571500.00	4172500.00	RECREATIONAL	-	-	3.00E-01	-	-	2.90E-03	-	-	3.00E-01	
1928	571500.00	4172000.00	RECREATIONAL	-	-	1.93E-01	-	-	2.75E-03	-	-	1.93E-01	
1935	571750.00	4178000.00	WORKER	-	-	1.53E-01	-	-	2.52E-03	-	-	1.53E-01	
1936	571750.00	4177750.00	WORKER	-	-	2.02E-01	-	-	3.11E-03	-	-	2.02E-01	
1937	571750.00	4177500.00	WORKER	-	-	1.98E-01	-	-	3.55E-03	-	-	1.98E-01	

OAK Terminal Modernization  
 Table 2-26. Eight (8)-Hour Hazard Indices  
 Combined Construction & Operations

				Combined Construction + Operations			Construction Only			Operations Only		
				8-Hour Hazard Index			8-Hour Hazard Index			8-Hour Hazard Index		
Maximum->				5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
Minimum->				2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
Max ReclD->				1924	582	1281	1546	1879	3296	1924	582	1281
Exposure Years->				2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
1938	571750.00	4177250.00	RESIDENTIAL	1.60E-01	-	-	3.59E-03	-	-	1.60E-01	-	-
1939	571750.00	4177000.00	RESIDENTIAL	1.97E-01	-	-	3.41E-03	-	-	1.97E-01	-	-
1940	571750.00	4176750.00	RESIDENTIAL	1.70E-01	-	-	2.87E-03	-	-	1.70E-01	-	-
1941	571750.00	4176500.00	RESIDENTIAL	1.89E-01	-	-	3.25E-03	-	-	1.89E-01	-	-
1942	571750.00	4176250.00	RESIDENTIAL	2.37E-01	-	-	4.20E-03	-	-	2.37E-01	-	-
1943	571750.00	4176000.00	RESIDENTIAL	3.73E-01	-	-	3.80E-03	-	-	3.73E-01	-	-
1944	571750.00	4175750.00	WORKER	-	-	4.09E-01	-	-	4.13E-03	-	-	4.09E-01
1945	571750.00	4175500.00	WORKER	-	-	2.43E-01	-	-	4.56E-03	-	-	2.43E-01
1946	571750.00	4175250.00	WORKER	-	-	2.44E-01	-	-	4.78E-03	-	-	2.44E-01
1947	571750.00	4175000.00	WORKER	-	-	1.92E-01	-	-	4.98E-03	-	-	1.92E-01
1948	571750.00	4174750.00	WORKER	-	-	1.85E-01	-	-	4.30E-03	-	-	1.85E-01
1949	571750.00	4174500.00	WORKER	-	-	2.13E-01	-	-	4.04E-03	-	-	2.13E-01
1950	571750.00	4174250.00	WORKER	-	-	2.22E-01	-	-	4.04E-03	-	-	2.22E-01
1951	571750.00	4174000.00	WORKER	-	-	3.69E-01	-	-	3.96E-03	-	-	3.69E-01
1952	571750.00	4173750.00	WORKER	-	-	3.16E-01	-	-	3.92E-03	-	-	3.16E-01
1953	571750.00	4173500.00	RESIDENTIAL	2.59E-01	-	-	4.18E-03	-	-	2.59E-01	-	-
1954	571750.00	4173250.00	RESIDENTIAL	2.28E-01	-	-	3.57E-03	-	-	2.28E-01	-	-
1955	571750.00	4173000.00	RESIDENTIAL	4.86E-01	-	-	3.00E-03	-	-	4.86E-01	-	-
1956	571750.00	4172750.00	RESIDENTIAL	3.74E-01	-	-	2.62E-03	-	-	3.74E-01	-	-
1957	571750.00	4172500.00	RECREATIONAL	-	-	3.07E-01	-	-	2.38E-03	-	-	3.07E-01
1958	571750.00	4172250.00	RECREATIONAL	-	-	3.16E-01	-	-	2.43E-03	-	-	3.16E-01
1959	571750.00	4172000.00	RECREATIONAL	-	-	2.65E-01	-	-	2.44E-03	-	-	2.65E-01
1960	571750.00	4171750.00	RECREATIONAL	-	-	1.62E-01	-	-	2.39E-03	-	-	1.62E-01
1966	572000.00	4178000.00	WORKER	-	-	1.80E-01	-	-	2.81E-03	-	-	1.80E-01
1967	572000.00	4177750.00	WORKER	-	-	1.64E-01	-	-	3.08E-03	-	-	1.64E-01
1968	572000.00	4177500.00	WORKER	-	-	1.28E-01	-	-	3.01E-03	-	-	1.28E-01
1969	572000.00	4177250.00	WORKER	-	-	1.85E-01	-	-	2.83E-03	-	-	1.85E-01
1970	572000.00	4177000.00	RESIDENTIAL	1.68E-01	-	-	2.36E-03	-	-	1.68E-01	-	-
1971	572000.00	4176750.00	RESIDENTIAL	1.68E-01	-	-	2.71E-03	-	-	1.68E-01	-	-
1972	572000.00	4176500.00	RESIDENTIAL	2.29E-01	-	-	3.50E-03	-	-	2.29E-01	-	-
1973	572000.00	4176250.00	RESIDENTIAL	2.77E-01	-	-	3.44E-03	-	-	2.77E-01	-	-
1974	572000.00	4176000.00	RESIDENTIAL	3.14E-01	-	-	3.35E-03	-	-	3.14E-01	-	-
1975	572000.00	4175750.00	RESIDENTIAL	3.29E-01	-	-	3.38E-03	-	-	3.29E-01	-	-
1976	572000.00	4175500.00	RESIDENTIAL	1.47E-01	-	-	3.97E-03	-	-	1.47E-01	-	-
1977	572000.00	4175250.00	RESIDENTIAL	2.32E-01	-	-	4.26E-03	-	-	2.32E-01	-	-
1978	572000.00	4175000.00	WORKER	-	-	1.69E-01	-	-	4.36E-03	-	-	1.69E-01
1979	572000.00	4174750.00	WORKER	-	-	1.82E-01	-	-	4.20E-03	-	-	1.82E-01
1980	572000.00	4174500.00	WORKER	-	-	2.52E-01	-	-	3.36E-03	-	-	2.52E-01
1981	572000.00	4174250.00	WORKER	-	-	2.34E-01	-	-	3.71E-03	-	-	2.34E-01
1982	572000.00	4174000.00	WORKER	-	-	3.31E-01	-	-	3.32E-03	-	-	3.31E-01
1983	572000.00	4173750.00	WORKER	-	-	2.91E-01	-	-	3.32E-03	-	-	2.91E-01
1984	572000.00	4173500.00	RESIDENTIAL	2.34E-01	-	-	3.62E-03	-	-	2.34E-01	-	-
1985	572000.00	4173250.00	RESIDENTIAL	1.65E-01	-	-	3.48E-03	-	-	1.65E-01	-	-
1986	572000.00	4173000.00	RESIDENTIAL	3.82E-01	-	-	2.99E-03	-	-	3.82E-01	-	-
1987	572000.00	4172750.00	RESIDENTIAL	4.20E-01	-	-	2.52E-03	-	-	4.20E-01	-	-
1988	572000.00	4172500.00	RECREATIONAL	-	-	3.29E-01	-	-	2.22E-03	-	-	3.29E-01
1989	572000.00	4172250.00	RECREATIONAL	-	-	3.07E-01	-	-	2.05E-03	-	-	3.07E-01
1990	572000.00	4172000.00	RECREATIONAL	-	-	3.07E-01	-	-	2.05E-03	-	-	3.07E-01
1991	572000.00	4171750.00	RECREATIONAL	-	-	2.07E-01	-	-	2.13E-03	-	-	2.07E-01
1997	572250.00	4178000.00	RESIDENTIAL	1.38E-01	-	-	2.80E-03	-	-	1.38E-01	-	-
1998	572250.00	4177750.00	RESIDENTIAL	1.02E-01	-	-	2.60E-03	-	-	1.02E-01	-	-
1999	572250.00	4177500.00	RESIDENTIAL	1.59E-01	-	-	2.37E-03	-	-	1.59E-01	-	-
2000	572250.00	4177250.00	WORKER	-	-	1.66E-01	-	-	2.12E-03	-	-	1.66E-01
2001	572250.00	4177000.00	WORKER	-	-	1.55E-01	-	-	2.43E-03	-	-	1.55E-01
2002	572250.00	4176750.00	WORKER	-	-	2.20E-01	-	-	3.15E-03	-	-	2.20E-01
2003	572250.00	4176500.00	RESIDENTIAL	2.37E-01	-	-	3.37E-03	-	-	2.37E-01	-	-
2004	572250.00	4176250.00	RESIDENTIAL	2.48E-01	-	-	2.66E-03	-	-	2.48E-01	-	-
2005	572250.00	4176000.00	RESIDENTIAL	2.72E-01	-	-	3.14E-03	-	-	2.72E-01	-	-
2006	572250.00	4175750.00	SCHOOL	2.12E-01	2.12E-01	2.12E-01	3.45E-03	3.45E-03	3.45E-03	2.12E-01	2.12E-01	2.12E-01
2007	572250.00	4175500.00	RESIDENTIAL	1.54E-01	-	-	3.71E-03	-	-	1.54E-01	-	-
2008	572250.00	4175250.00	RESIDENTIAL	2.32E-01	-	-	3.77E-03	-	-	2.32E-01	-	-
2009	572250.00	4175000.00	RESIDENTIAL	1.44E-01	-	-	3.89E-03	-	-	1.44E-01	-	-
2010	572250.00	4174750.00	WORKER	-	-	1.61E-01	-	-	3.30E-03	-	-	1.61E-01

**OAK Terminal Modernization**  
**Table 2-26. Eight (8)-Hour Hazard Indices**  
**Combined Construction & Operations**

				<u>Combined Construction + Operations</u>			<u>Construction Only</u>			<u>Operations Only</u>			
				<u>8-Hour Hazard Index</u>			<u>8-Hour Hazard Index</u>			<u>8-Hour Hazard Index</u>			
				Maximum->	5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
				Minimum->	2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
				Max ReclD->	1924	582	1281	1546	1879	3296	1924	582	1281
				Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	
2011	572250.00	4174500.00	WORKER	-	-	2.68E-01	-	-	2.86E-03	-	-	2.68E-01	
2012	572250.00	4174250.00	WORKER	-	-	2.18E-01	-	-	3.62E-03	-	-	2.18E-01	
2013	572250.00	4174000.00	WORKER	-	-	2.91E-01	-	-	3.13E-03	-	-	2.91E-01	
2014	572250.00	4173750.00	WORKER	-	-	2.56E-01	-	-	3.16E-03	-	-	2.56E-01	
2015	572250.00	4173500.00	WORKER	-	-	1.87E-01	-	-	2.98E-03	-	-	1.87E-01	
2016	572250.00	4173250.00	RESIDENTIAL	1.69E-01	-	-	3.24E-03	-	-	1.69E-01	-	-	
2017	572250.00	4173000.00	RESIDENTIAL	2.79E-01	-	-	2.93E-03	-	-	2.79E-01	-	-	
2018	572250.00	4172750.00	RESIDENTIAL	4.15E-01	-	-	2.56E-03	-	-	4.15E-01	-	-	
2019	572250.00	4172500.00	RESIDENTIAL	3.11E-01	-	-	2.18E-03	-	-	3.11E-01	-	-	
2020	572250.00	4172250.00	RESIDENTIAL	3.18E-01	-	-	1.95E-03	-	-	3.18E-01	-	-	
2021	572250.00	4172000.00	RESIDENTIAL	2.99E-01	-	-	1.79E-03	-	-	2.99E-01	-	-	
2022	572250.00	4171750.00	RECREATIONAL	-	-	2.76E-01	-	-	1.75E-03	-	-	2.76E-01	
2023	572250.00	4171500.00	RECREATIONAL	-	-	1.57E-01	-	-	1.86E-03	-	-	1.57E-01	
2028	572500.00	4178000.00	RESIDENTIAL	8.17E-02	-	-	2.33E-03	-	-	8.17E-02	-	-	
2029	572500.00	4177750.00	RESIDENTIAL	1.29E-01	-	-	2.00E-03	-	-	1.29E-01	-	-	
2030	572500.00	4177500.00	RESIDENTIAL	1.65E-01	-	-	1.90E-03	-	-	1.65E-01	-	-	
2031	572500.00	4177250.00	WORKER	-	-	1.54E-01	-	-	2.10E-03	-	-	1.54E-01	
2032	572500.00	4177000.00	WORKER	-	-	1.91E-01	-	-	2.61E-03	-	-	1.91E-01	
2033	572500.00	4176750.00	RESIDENTIAL	1.99E-01	-	-	3.07E-03	-	-	1.99E-01	-	-	
2034	572500.00	4176500.00	WORKER	-	-	2.22E-01	-	-	2.64E-03	-	-	2.22E-01	
2035	572500.00	4176250.00	RESIDENTIAL	2.04E-01	-	-	2.97E-03	-	-	2.04E-01	-	-	
2036	572500.00	4176000.00	RESIDENTIAL	2.37E-01	-	-	2.99E-03	-	-	2.37E-01	-	-	
2037	572500.00	4175750.00	SCHOOL	1.09E-01	1.09E-01	1.09E-01	3.47E-03	3.47E-03	3.47E-03	1.09E-01	1.09E-01	1.09E-01	
2038	572500.00	4175500.00	RESIDENTIAL	1.81E-01	-	-	3.48E-03	-	-	1.81E-01	-	-	
2039	572500.00	4175250.00	RESIDENTIAL	1.96E-01	-	-	3.51E-03	-	-	1.96E-01	-	-	
2040	572500.00	4175000.00	ROAD	-	-	1.39E-01	-	-	3.73E-03	-	-	1.39E-01	
2041	572500.00	4174750.00	RESIDENTIAL	1.57E-01	-	-	3.02E-03	-	-	1.57E-01	-	-	
2042	572500.00	4174500.00	WORKER	-	-	2.77E-01	-	-	2.62E-03	-	-	2.77E-01	
2043	572500.00	4174250.00	WORKER	-	-	2.04E-01	-	-	3.26E-03	-	-	2.04E-01	
2044	572500.00	4174000.00	WORKER	-	-	2.55E-01	-	-	3.12E-03	-	-	2.55E-01	
2045	572500.00	4173750.00	WORKER	-	-	2.18E-01	-	-	2.70E-03	-	-	2.18E-01	
2046	572500.00	4173500.00	RESIDENTIAL	1.74E-01	-	-	2.69E-03	-	-	1.74E-01	-	-	
2047	572500.00	4173250.00	RESIDENTIAL	1.68E-01	-	-	2.78E-03	-	-	1.68E-01	-	-	
2048	572500.00	4173000.00	RESIDENTIAL	1.76E-01	-	-	2.84E-03	-	-	1.76E-01	-	-	
2049	572500.00	4172750.00	RESIDENTIAL	3.54E-01	-	-	2.50E-03	-	-	3.54E-01	-	-	
2050	572500.00	4172500.00	RESIDENTIAL	3.45E-01	-	-	2.21E-03	-	-	3.45E-01	-	-	
2051	572500.00	4172250.00	RESIDENTIAL	3.18E-01	-	-	1.91E-03	-	-	3.18E-01	-	-	
2052	572500.00	4172000.00	RESIDENTIAL	3.01E-01	-	-	1.73E-03	-	-	3.01E-01	-	-	
2053	572500.00	4171750.00	RECREATIONAL	-	-	2.77E-01	-	-	1.60E-03	-	-	2.77E-01	
2054	572500.00	4171500.00	RECREATIONAL	-	-	2.48E-01	-	-	1.62E-03	-	-	2.48E-01	
2055	572500.00	4171250.00	RECREATIONAL	-	-	1.29E-01	-	-	1.64E-03	-	-	1.29E-01	
2056	572500.00	4171000.00	RECREATIONAL	-	-	1.24E-01	-	-	1.65E-03	-	-	1.24E-01	
2059	572750.00	4178000.00	RESIDENTIAL	1.09E-01	-	-	1.70E-03	-	-	1.09E-01	-	-	
2060	572750.00	4177750.00	RESIDENTIAL	1.64E-01	-	-	1.73E-03	-	-	1.64E-01	-	-	
2061	572750.00	4177500.00	RESIDENTIAL	1.55E-01	-	-	1.87E-03	-	-	1.55E-01	-	-	
2062	572750.00	4177250.00	RESIDENTIAL	1.56E-01	-	-	2.13E-03	-	-	1.56E-01	-	-	
2063	572750.00	4177000.00	SCHOOL	1.92E-01	1.92E-01	1.92E-01	2.75E-03	2.75E-03	2.75E-03	1.92E-01	1.92E-01	1.92E-01	
2064	572750.00	4176750.00	RESIDENTIAL	2.08E-01	-	-	2.55E-03	-	-	2.08E-01	-	-	
2065	572750.00	4176500.00	RESIDENTIAL	1.79E-01	-	-	2.38E-03	-	-	1.79E-01	-	-	
2066	572750.00	4176250.00	RESIDENTIAL	1.97E-01	-	-	2.84E-03	-	-	1.97E-01	-	-	
2067	572750.00	4176000.00	RESIDENTIAL	1.66E-01	-	-	2.56E-03	-	-	1.66E-01	-	-	
2068	572750.00	4175750.00	RESIDENTIAL	6.95E-02	-	-	3.17E-03	-	-	6.95E-02	-	-	
2069	572750.00	4175500.00	RESIDENTIAL	2.13E-01	-	-	3.11E-03	-	-	2.13E-01	-	-	
2070	572750.00	4175250.00	RESIDENTIAL	1.61E-01	-	-	3.11E-03	-	-	1.61E-01	-	-	
2071	572750.00	4175000.00	RESIDENTIAL	1.68E-01	-	-	3.38E-03	-	-	1.68E-01	-	-	
2072	572750.00	4174750.00	RESIDENTIAL	1.76E-01	-	-	2.71E-03	-	-	1.76E-01	-	-	
2073	572750.00	4174500.00	WORKER	-	-	2.80E-01	-	-	2.40E-03	-	-	2.80E-01	
2074	572750.00	4174250.00	WORKER	-	-	1.92E-01	-	-	2.88E-03	-	-	1.92E-01	
2075	572750.00	4174000.00	WORKER	-	-	2.22E-01	-	-	2.99E-03	-	-	2.22E-01	
2076	572750.00	4173750.00	WORKER	-	-	1.80E-01	-	-	2.41E-03	-	-	1.80E-01	
2077	572750.00	4173500.00	WORKER	-	-	1.70E-01	-	-	2.40E-03	-	-	1.70E-01	
2078	572750.00	4173250.00	WORKER	-	-	1.52E-01	-	-	2.38E-03	-	-	1.52E-01	
2079	572750.00	4173000.00	RESIDENTIAL	1.29E-01	-	-	2.59E-03	-	-	1.29E-01	-	-	

OAK Terminal Modernization  
 Table 2-26. Eight (8)-Hour Hazard Indices  
 Combined Construction & Operations

				Combined Construction + Operations			Construction Only			Operations Only		
				8-Hour Hazard Index			8-Hour Hazard Index			8-Hour Hazard Index		
Maximum->				5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
Minimum->				2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
Max ReclD->				1924	582	1281	1546	1879	3296	1924	582	1281
Exposure Years->				2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
2080	572750.00	4172750.00	WORKER	-	-	2.97E-01	-	-	2.46E-03	-	-	2.97E-01
2081	572750.00	4172500.00	RESIDENTIAL	3.42E-01	-	-	2.15E-03	-	-	3.42E-01	-	-
2082	572750.00	4172250.00	RESIDENTIAL	2.95E-01	-	-	1.92E-03	-	-	2.95E-01	-	-
2083	572750.00	4172000.00	RESIDENTIAL	3.12E-01	-	-	1.67E-03	-	-	3.12E-01	-	-
2084	572750.00	4171750.00	RECREATIONAL	-	-	2.79E-01	-	-	1.56E-03	-	-	2.79E-01
2085	572750.00	4171500.00	RECREATIONAL	-	-	2.49E-01	-	-	1.44E-03	-	-	2.49E-01
2086	572750.00	4171250.00	RECREATIONAL	-	-	1.91E-01	-	-	1.37E-03	-	-	1.91E-01
2087	572750.00	4171000.00	RECREATIONAL	-	-	1.22E-01	-	-	1.44E-03	-	-	1.22E-01
2090	573000.00	4178000.00	RESIDENTIAL	1.60E-01	-	-	1.57E-03	-	-	1.60E-01	-	-
2091	573000.00	4177750.00	RESIDENTIAL	1.55E-01	-	-	1.65E-03	-	-	1.55E-01	-	-
2092	573000.00	4177500.00	RESIDENTIAL	1.28E-01	-	-	1.78E-03	-	-	1.28E-01	-	-
2093	573000.00	4177250.00	RESIDENTIAL	1.71E-01	-	-	2.42E-03	-	-	1.71E-01	-	-
2094	573000.00	4177000.00	RESIDENTIAL	1.82E-01	-	-	2.44E-03	-	-	1.82E-01	-	-
2095	573000.00	4176750.00	RESIDENTIAL	1.72E-01	-	-	2.19E-03	-	-	1.72E-01	-	-
2096	573000.00	4176500.00	RESIDENTIAL	1.55E-01	-	-	2.53E-03	-	-	1.55E-01	-	-
2097	573000.00	4176250.00	RESIDENTIAL	1.77E-01	-	-	2.60E-03	-	-	1.77E-01	-	-
2098	573000.00	4176000.00	RESIDENTIAL	9.13E-02	-	-	2.72E-03	-	-	9.13E-02	-	-
2099	573000.00	4175750.00	RESIDENTIAL	9.08E-02	-	-	2.78E-03	-	-	9.08E-02	-	-
2100	573000.00	4175500.00	RESIDENTIAL	1.89E-01	-	-	2.78E-03	-	-	1.89E-01	-	-
2101	573000.00	4175250.00	RESIDENTIAL	1.40E-01	-	-	2.75E-03	-	-	1.40E-01	-	-
2102	573000.00	4175000.00	RESIDENTIAL	1.63E-01	-	-	3.03E-03	-	-	1.63E-01	-	-
2103	573000.00	4174750.00	RESIDENTIAL	1.93E-01	-	-	2.45E-03	-	-	1.93E-01	-	-
2104	573000.00	4174500.00	SCHOOL	2.75E-01	2.75E-01	2.75E-01	2.18E-03	2.18E-03	2.18E-03	2.75E-01	2.75E-01	2.75E-01
2105	573000.00	4174250.00	WORKER	-	-	1.81E-01	-	-	2.48E-03	-	-	1.81E-01
2106	573000.00	4174000.00	WORKER	-	-	1.96E-01	-	-	2.76E-03	-	-	1.96E-01
2107	573000.00	4173750.00	WORKER	-	-	1.55E-01	-	-	2.29E-03	-	-	1.55E-01
2108	573000.00	4173500.00	WORKER	-	-	1.61E-01	-	-	2.08E-03	-	-	1.61E-01
2109	573000.00	4173250.00	WORKER	-	-	1.30E-01	-	-	2.12E-03	-	-	1.30E-01
2110	573000.00	4173000.00	WORKER	-	-	9.76E-02	-	-	2.21E-03	-	-	9.76E-02
2111	573000.00	4172750.00	WORKER	-	-	2.12E-01	-	-	2.35E-03	-	-	2.12E-01
2112	573000.00	4172500.00	WORKER	-	-	3.07E-01	-	-	2.17E-03	-	-	3.07E-01
2113	573000.00	4172250.00	WORKER	-	-	2.92E-01	-	-	1.91E-03	-	-	2.92E-01
2114	573000.00	4172000.00	WORKER	-	-	3.00E-01	-	-	1.68E-03	-	-	3.00E-01
2115	573000.00	4171750.00	RECREATIONAL	-	-	2.87E-01	-	-	1.47E-03	-	-	2.87E-01
2116	573000.00	4171500.00	RECREATIONAL	-	-	2.55E-01	-	-	1.41E-03	-	-	2.55E-01
2117	573000.00	4171250.00	RECREATIONAL	-	-	2.17E-01	-	-	1.31E-03	-	-	2.17E-01
2118	573000.00	4171000.00	RECREATIONAL	-	-	1.34E-01	-	-	1.21E-03	-	-	1.34E-01
2119	573000.00	4170750.00	RECREATIONAL	-	-	1.15E-01	-	-	1.27E-03	-	-	1.15E-01
2121	573250.00	4178000.00	RESIDENTIAL	1.53E-01	-	-	1.46E-03	-	-	1.53E-01	-	-
2122	573250.00	4177750.00	RESIDENTIAL	1.15E-01	-	-	1.58E-03	-	-	1.15E-01	-	-
2123	573250.00	4177500.00	RESIDENTIAL	1.46E-01	-	-	2.10E-03	-	-	1.46E-01	-	-
2124	573250.00	4177250.00	RESIDENTIAL	1.58E-01	-	-	2.32E-03	-	-	1.58E-01	-	-
2125	573250.00	4177000.00	RESIDENTIAL	1.61E-01	-	-	1.97E-03	-	-	1.61E-01	-	-
2126	573250.00	4176750.00	RESIDENTIAL	1.40E-01	-	-	2.04E-03	-	-	1.40E-01	-	-
2127	573250.00	4176500.00	RESIDENTIAL	1.61E-01	-	-	2.42E-03	-	-	1.61E-01	-	-
2128	573250.00	4176250.00	RESIDENTIAL	1.28E-01	-	-	2.15E-03	-	-	1.28E-01	-	-
2129	573250.00	4176000.00	RESIDENTIAL	7.22E-02	-	-	2.71E-03	-	-	7.22E-02	-	-
2130	573250.00	4175750.00	RESIDENTIAL	1.37E-01	-	-	2.62E-03	-	-	1.37E-01	-	-
2131	573250.00	4175500.00	RESIDENTIAL	1.72E-01	-	-	2.59E-03	-	-	1.72E-01	-	-
2132	573250.00	4175250.00	RESIDENTIAL	1.35E-01	-	-	2.47E-03	-	-	1.35E-01	-	-
2133	573250.00	4175000.00	RESIDENTIAL	1.52E-01	-	-	2.75E-03	-	-	1.52E-01	-	-
2134	573250.00	4174750.00	RESIDENTIAL	2.01E-01	-	-	2.23E-03	-	-	2.01E-01	-	-
2135	573250.00	4174500.00	SCHOOL	2.61E-01	2.61E-01	2.61E-01	1.99E-03	1.99E-03	1.99E-03	2.61E-01	2.61E-01	2.61E-01
2136	573250.00	4174250.00	RESIDENTIAL	1.71E-01	-	-	2.09E-03	-	-	1.71E-01	-	-
2137	573250.00	4174000.00	WORKER	-	-	1.74E-01	-	-	2.52E-03	-	-	1.74E-01
2138	573250.00	4173750.00	WORKER	-	-	1.33E-01	-	-	2.26E-03	-	-	1.33E-01
2139	573250.00	4173500.00	WORKER	-	-	1.47E-01	-	-	1.82E-03	-	-	1.47E-01
2140	573250.00	4173250.00	WORKER	-	-	1.13E-01	-	-	1.88E-03	-	-	1.13E-01
2141	573250.00	4173000.00	WORKER	-	-	9.79E-02	-	-	1.95E-03	-	-	9.79E-02
2142	573250.00	4172750.00	WORKER	-	-	1.44E-01	-	-	2.12E-03	-	-	1.44E-01
2143	573250.00	4172500.00	WORKER	-	-	2.64E-01	-	-	2.11E-03	-	-	2.64E-01
2144	573250.00	4172250.00	WORKER	-	-	2.92E-01	-	-	1.90E-03	-	-	2.92E-01
2145	573250.00	4172000.00	WORKER	-	-	2.78E-01	-	-	1.70E-03	-	-	2.78E-01

OAK Terminal Modernization  
 Table 2-26. Eight (8)-Hour Hazard Indices  
 Combined Construction & Operations

				Combined Construction + Operations			Construction Only			Operations Only		
				8-Hour Hazard Index			8-Hour Hazard Index			8-Hour Hazard Index		
Maximum->				5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
Minimum->				2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
Max ReclD->				1924	582	1281	1546	1879	3296	1924	582	1281
Exposure Years->				2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child	School Child	Adult Worker	Adult Resident & Child	School Child	Adult Worker	Adult Resident & Child	School Child	Adult Worker
2146	573250.00	4171750.00	RECREATIONAL	-	-	2.98E-01	-	-	1.47E-03	-	-	2.98E-01
2147	573250.00	4171500.00	RECREATIONAL	-	-	2.61E-01	-	-	1.33E-03	-	-	2.61E-01
2148	573250.00	4171250.00	RECREATIONAL	-	-	2.31E-01	-	-	1.28E-03	-	-	2.31E-01
2149	573250.00	4171000.00	RECREATIONAL	-	-	1.78E-01	-	-	1.20E-03	-	-	1.78E-01
2150	573250.00	4170750.00	RECREATIONAL	-	-	1.23E-01	-	-	1.12E-03	-	-	1.23E-01
2151	573250.00	4170500.00	RECREATIONAL	-	-	1.07E-01	-	-	1.13E-03	-	-	1.07E-01
2152	573500.00	4178000.00	RESIDENTIAL	1.19E-01	-	-	1.41E-03	-	-	1.19E-01	-	-
2153	573500.00	4177750.00	RESIDENTIAL	1.22E-01	-	-	1.78E-03	-	-	1.22E-01	-	-
2154	573500.00	4177500.00	RESIDENTIAL	1.46E-01	-	-	2.12E-03	-	-	1.46E-01	-	-
2155	573500.00	4177250.00	RESIDENTIAL	1.44E-01	-	-	1.91E-03	-	-	1.44E-01	-	-
2156	573500.00	4177000.00	RESIDENTIAL	1.31E-01	-	-	1.83E-03	-	-	1.31E-01	-	-
2157	573500.00	4176750.00	RESIDENTIAL	1.40E-01	-	-	2.18E-03	-	-	1.40E-01	-	-
2158	573500.00	4176500.00	RESIDENTIAL	1.32E-01	-	-	2.24E-03	-	-	1.32E-01	-	-
2159	573500.00	4176250.00	WORKER	-	-	7.22E-02	-	-	2.08E-03	-	-	7.22E-02
2160	573500.00	4176000.00	WORKER	-	-	7.46E-02	-	-	2.56E-03	-	-	7.46E-02
2161	573500.00	4175750.00	RESIDENTIAL	1.38E-01	-	-	2.46E-03	-	-	1.38E-01	-	-
2162	573500.00	4175500.00	RESIDENTIAL	1.54E-01	-	-	2.39E-03	-	-	1.54E-01	-	-
2163	573500.00	4175250.00	RESIDENTIAL	1.47E-01	-	-	2.34E-03	-	-	1.47E-01	-	-
2164	573500.00	4175000.00	RESIDENTIAL	1.40E-01	-	-	2.50E-03	-	-	1.40E-01	-	-
2165	573500.00	4174750.00	RESIDENTIAL	2.06E-01	-	-	2.04E-03	-	-	2.06E-01	-	-
2166	573500.00	4174500.00	RESIDENTIAL	2.48E-01	-	-	1.80E-03	-	-	2.48E-01	-	-
2167	573500.00	4174250.00	RESIDENTIAL	1.62E-01	-	-	1.77E-03	-	-	1.62E-01	-	-
2168	573500.00	4174000.00	ROAD	-	-	1.55E-01	-	-	2.29E-03	-	-	1.55E-01
2169	573500.00	4173750.00	WORKER	-	-	1.13E-01	-	-	2.22E-03	-	-	1.13E-01
2170	573500.00	4173500.00	WORKER	-	-	1.36E-01	-	-	1.84E-03	-	-	1.36E-01
2171	573500.00	4173250.00	WORKER	-	-	9.62E-02	-	-	1.73E-03	-	-	9.62E-02
2172	573500.00	4173000.00	WORKER	-	-	9.80E-02	-	-	1.76E-03	-	-	9.80E-02
2173	573500.00	4172750.00	WORKER	-	-	1.10E-01	-	-	1.81E-03	-	-	1.10E-01
2174	573500.00	4172500.00	WORKER	-	-	2.24E-01	-	-	1.98E-03	-	-	2.24E-01
2175	573500.00	4172250.00	WORKER	-	-	2.77E-01	-	-	1.88E-03	-	-	2.77E-01
2176	573500.00	4172000.00	WORKER	-	-	2.56E-01	-	-	1.66E-03	-	-	2.56E-01
2177	573500.00	4171750.00	RESIDENTIAL	2.79E-01	-	-	1.52E-03	-	-	2.79E-01	-	-
2178	573500.00	4171500.00	RECREATIONAL	-	-	2.72E-01	-	-	1.31E-03	-	-	2.72E-01
2179	573500.00	4171250.00	RECREATIONAL	-	-	2.36E-01	-	-	1.21E-03	-	-	2.36E-01
2180	573500.00	4171000.00	RECREATIONAL	-	-	1.99E-01	-	-	1.18E-03	-	-	1.99E-01
2181	573500.00	4170750.00	RECREATIONAL	-	-	1.43E-01	-	-	1.11E-03	-	-	1.43E-01
2182	573500.00	4170500.00	RECREATIONAL	-	-	1.14E-01	-	-	1.03E-03	-	-	1.14E-01
2508	565750.00	4176750.00	RESIDENTIAL	1.40E-01	-	-	1.71E-03	-	-	1.40E-01	-	-
2509	565750.00	4177000.00	RESIDENTIAL	1.36E-01	-	-	1.72E-03	-	-	1.36E-01	-	-
2510	565750.00	4177250.00	RESIDENTIAL	1.23E-01	-	-	1.56E-03	-	-	1.23E-01	-	-
2511	565750.00	4177500.00	RESIDENTIAL	1.25E-01	-	-	1.38E-03	-	-	1.25E-01	-	-
2512	565750.00	4177750.00	RESIDENTIAL	1.41E-01	-	-	1.22E-03	-	-	1.41E-01	-	-
2513	565750.00	4178000.00	RESIDENTIAL	1.31E-01	-	-	1.15E-03	-	-	1.31E-01	-	-
2517	565750.00	4179000.00	WORKER	-	-	1.26E-01	-	-	7.84E-04	-	-	1.26E-01
2518	565750.00	4179250.00	WORKER	-	-	1.42E-01	-	-	8.26E-04	-	-	1.42E-01
2519	565750.00	4179500.00	WORKER	-	-	1.49E-01	-	-	8.72E-04	-	-	1.49E-01
2520	565750.00	4179750.00	HOSPITAL	1.41E-01	-	1.41E-01	8.91E-04	-	8.91E-04	1.41E-01	-	1.41E-01
2521	565750.00	4180000.00	RESIDENTIAL	1.21E-01	-	-	9.73E-04	-	-	1.21E-01	-	-
2522	565750.00	4180250.00	RESIDENTIAL	1.30E-01	-	-	1.04E-03	-	-	1.30E-01	-	-
2523	565750.00	4180500.00	RESIDENTIAL	1.40E-01	-	-	1.07E-03	-	-	1.40E-01	-	-
2540	565500.00	4177000.00	RESIDENTIAL	1.14E-01	-	-	1.57E-03	-	-	1.14E-01	-	-
2541	565500.00	4177250.00	RESIDENTIAL	1.16E-01	-	-	1.52E-03	-	-	1.16E-01	-	-
2542	565500.00	4177500.00	RESIDENTIAL	1.07E-01	-	-	1.36E-03	-	-	1.07E-01	-	-
2543	565500.00	4177750.00	RESIDENTIAL	1.15E-01	-	-	1.21E-03	-	-	1.15E-01	-	-
2548	565500.00	4179000.00	RECREATIONAL	-	-	8.54E-02	-	-	7.51E-04	-	-	8.54E-02
2549	565500.00	4179250.00	RESIDENTIAL	1.08E-01	-	-	7.04E-04	-	-	1.08E-01	-	-
2550	565500.00	4179500.00	RESIDENTIAL	1.24E-01	-	-	7.42E-04	-	-	1.24E-01	-	-
2551	565500.00	4179750.00	RESIDENTIAL	1.34E-01	-	-	7.77E-04	-	-	1.34E-01	-	-
2552	565500.00	4180000.00	RESIDENTIAL	1.33E-01	-	-	8.05E-04	-	-	1.33E-01	-	-
2553	565500.00	4180250.00	RESIDENTIAL	1.24E-01	-	-	8.99E-04	-	-	1.24E-01	-	-
2554	565500.00	4180500.00	RESIDENTIAL	1.10E-01	-	-	9.38E-04	-	-	1.10E-01	-	-
2572	565250.00	4177250.00	RESIDENTIAL	9.37E-02	-	-	1.43E-03	-	-	9.37E-02	-	-
2573	565250.00	4177500.00	RESIDENTIAL	1.02E-01	-	-	1.34E-03	-	-	1.02E-01	-	-

OAK Terminal Modernization  
**Table 2-26. Eight (8)-Hour Hazard Indices**  
**Combined Construction & Operations**

				<u>Combined Construction + Operations</u>			<u>Construction Only</u>			<u>Operations Only</u>			
				<u>8-Hour Hazard Index</u>			<u>8-Hour Hazard Index</u>			<u>8-Hour Hazard Index</u>			
<b>Combined Construction &amp; Operations</b>				Maximum->	5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
				Minimum->	2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
				Max ReclD->	1924	582	1281	1546	1879	3296	1924	582	1281
				Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	
2580	565250.00	4179250.00	RESIDENTIAL	6.88E-02	-	-	6.94E-04	-	-	6.88E-02	-	-	
2581	565250.00	4179500.00	RESIDENTIAL	8.79E-02	-	-	6.48E-04	-	-	8.79E-02	-	-	
2582	565250.00	4179750.00	RESIDENTIAL	1.08E-01	-	-	6.68E-04	-	-	1.08E-01	-	-	
2583	565250.00	4180000.00	RESIDENTIAL	1.19E-01	-	-	6.94E-04	-	-	1.19E-01	-	-	
2584	565250.00	4180250.00	RESIDENTIAL	1.32E-01	-	-	8.16E-04	-	-	1.32E-01	-	-	
2585	565250.00	4180500.00	RESIDENTIAL	1.24E-01	-	-	8.39E-04	-	-	1.24E-01	-	-	
2611	565000.00	4179250.00	RECREATIONAL	-	-	4.93E-02	-	-	7.08E-04	-	-	4.93E-02	
2612	565000.00	4179500.00	SCHOOL	5.51E-02	5.51E-02	5.51E-02	6.43E-04	6.43E-04	6.43E-04	5.51E-02	5.51E-02	5.51E-02	
2613	565000.00	4179750.00	RESIDENTIAL	7.02E-02	-	-	6.06E-04	-	-	7.02E-02	-	-	
2614	565000.00	4180000.00	RESIDENTIAL	8.96E-02	-	-	6.05E-04	-	-	8.96E-02	-	-	
2615	565000.00	4180250.00	RESIDENTIAL	1.12E-01	-	-	7.04E-04	-	-	1.12E-01	-	-	
2616	565000.00	4180500.00	RESIDENTIAL	1.25E-01	-	-	7.75E-04	-	-	1.25E-01	-	-	
2643	564750.00	4179500.00	RESIDENTIAL	4.30E-02	-	-	6.56E-04	-	-	4.30E-02	-	-	
2644	564750.00	4179750.00	RESIDENTIAL	4.45E-02	-	-	5.98E-04	-	-	4.45E-02	-	-	
2645	564750.00	4180000.00	RESIDENTIAL	5.61E-02	-	-	5.67E-04	-	-	5.61E-02	-	-	
2646	564750.00	4180250.00	RESIDENTIAL	6.91E-02	-	-	6.46E-04	-	-	6.91E-02	-	-	
2647	564750.00	4180500.00	RESIDENTIAL	9.20E-02	-	-	6.69E-04	-	-	9.20E-02	-	-	
2674	564500.00	4179500.00	RECREATIONAL	-	-	7.60E-02	-	-	6.64E-04	-	-	7.60E-02	
2675	564500.00	4179750.00	RESIDENTIAL	4.75E-02	-	-	6.10E-04	-	-	4.75E-02	-	-	
2676	564500.00	4180000.00	RESIDENTIAL	3.68E-02	-	-	5.60E-04	-	-	3.68E-02	-	-	
2677	564500.00	4180250.00	RESIDENTIAL	4.51E-02	-	-	5.33E-04	-	-	4.51E-02	-	-	
2678	564500.00	4180500.00	RESIDENTIAL	5.19E-02	-	-	6.10E-04	-	-	5.19E-02	-	-	
2703	564250.00	4179000.00	RESIDENTIAL	7.69E-02	-	-	7.18E-04	-	-	7.69E-02	-	-	
2704	564250.00	4179250.00	RESIDENTIAL	8.68E-02	-	-	6.87E-04	-	-	8.68E-02	-	-	
2705	564250.00	4179500.00	RESIDENTIAL	8.90E-02	-	-	6.54E-04	-	-	8.90E-02	-	-	
2706	564250.00	4179750.00	RESIDENTIAL	7.57E-02	-	-	6.16E-04	-	-	7.57E-02	-	-	
2707	564250.00	4180000.00	RESIDENTIAL	5.13E-02	-	-	5.69E-04	-	-	5.13E-02	-	-	
2708	564250.00	4180250.00	RESIDENTIAL	3.07E-02	-	-	5.26E-04	-	-	3.07E-02	-	-	
2709	564250.00	4180500.00	RESIDENTIAL	2.56E-02	-	-	5.76E-04	-	-	2.56E-02	-	-	
2734	564000.00	4179000.00	RESIDENTIAL	6.51E-02	-	-	6.93E-04	-	-	6.51E-02	-	-	
2735	564000.00	4179250.00	RESIDENTIAL	7.20E-02	-	-	6.61E-04	-	-	7.20E-02	-	-	
2736	564000.00	4179500.00	RESIDENTIAL	8.18E-02	-	-	6.34E-04	-	-	8.18E-02	-	-	
2737	564000.00	4179750.00	RESIDENTIAL	8.41E-02	-	-	6.08E-04	-	-	8.41E-02	-	-	
2738	564000.00	4180000.00	RESIDENTIAL	7.55E-02	-	-	5.74E-04	-	-	7.55E-02	-	-	
2739	564000.00	4180250.00	RESIDENTIAL	5.42E-02	-	-	5.32E-04	-	-	5.42E-02	-	-	
2740	564000.00	4180500.00	RESIDENTIAL	2.99E-02	-	-	4.95E-04	-	-	2.99E-02	-	-	
2765	563750.00	4179000.00	RESIDENTIAL	6.25E-02	-	-	7.28E-04	-	-	6.25E-02	-	-	
2766	563750.00	4179250.00	RESIDENTIAL	6.22E-02	-	-	6.30E-04	-	-	6.22E-02	-	-	
2767	563750.00	4179500.00	RESIDENTIAL	6.80E-02	-	-	6.10E-04	-	-	6.80E-02	-	-	
2768	563750.00	4179750.00	RESIDENTIAL	7.73E-02	-	-	5.89E-04	-	-	7.73E-02	-	-	
2769	563750.00	4180000.00	RESIDENTIAL	7.95E-02	-	-	5.65E-04	-	-	7.95E-02	-	-	
2770	563750.00	4180250.00	RESIDENTIAL	7.72E-02	-	-	5.37E-04	-	-	7.72E-02	-	-	
2771	563750.00	4180500.00	RESIDENTIAL	5.72E-02	-	-	5.01E-04	-	-	5.72E-02	-	-	
2796	563500.00	4179000.00	RESIDENTIAL	5.93E-02	-	-	7.44E-04	-	-	5.93E-02	-	-	
2797	563500.00	4179250.00	RESIDENTIAL	5.76E-02	-	-	6.60E-04	-	-	5.76E-02	-	-	
2798	563500.00	4179500.00	RESIDENTIAL	5.95E-02	-	-	5.83E-04	-	-	5.95E-02	-	-	
2799	563500.00	4179750.00	RESIDENTIAL	6.50E-02	-	-	5.65E-04	-	-	6.50E-02	-	-	
2800	563500.00	4180000.00	RESIDENTIAL	7.31E-02	-	-	5.50E-04	-	-	7.31E-02	-	-	
2801	563500.00	4180250.00	RESIDENTIAL	7.54E-02	-	-	5.28E-04	-	-	7.54E-02	-	-	
2802	563500.00	4180500.00	RESIDENTIAL	7.39E-02	-	-	5.05E-04	-	-	7.39E-02	-	-	
2803	567000.00	4180750.00	WORKER	-	-	3.85E-02	-	-	1.00E-03	-	-	3.85E-02	
2805	567500.00	4180750.00	WORKER	-	-	7.35E-02	-	-	8.81E-04	-	-	7.35E-02	
2806	567750.00	4180750.00	WORKER	-	-	7.27E-02	-	-	8.56E-04	-	-	7.27E-02	
2807	568000.00	4180750.00	WORKER	-	-	7.39E-02	-	-	7.40E-04	-	-	7.39E-02	
2808	568250.00	4180750.00	WORKER	-	-	4.89E-02	-	-	6.31E-04	-	-	4.89E-02	
2809	568500.00	4180750.00	WORKER	-	-	4.99E-02	-	-	7.29E-04	-	-	4.99E-02	
2810	568750.00	4180750.00	WORKER	-	-	5.30E-02	-	-	8.00E-04	-	-	5.30E-02	
2811	569000.00	4180750.00	WORKER	-	-	5.32E-02	-	-	8.66E-04	-	-	5.32E-02	
2812	569250.00	4180750.00	WORKER	-	-	5.10E-02	-	-	7.99E-04	-	-	5.10E-02	
2813	569500.00	4180750.00	RESIDENTIAL	2.46E-02	-	-	9.37E-04	-	-	2.46E-02	-	-	
2814	569750.00	4180750.00	RESIDENTIAL	4.00E-02	-	-	9.70E-04	-	-	4.00E-02	-	-	
2815	570000.00	4180750.00	RESIDENTIAL	7.05E-02	-	-	9.57E-04	-	-	7.05E-02	-	-	
2816	570250.00	4180750.00	RESIDENTIAL	1.96E-01	-	-	1.12E-03	-	-	1.96E-01	-	-	

OAK Terminal Modernization

Table 2-26. Eight (8)-Hour Hazard Indices

Combined Construction & Operations

Combined Construction + Operations

8-Hour Hazard Index

Construction Only

8-Hour Hazard Index

Operations Only

8-Hour Hazard Index

ReclD	UTM X	UTM Y	Receptor Type	Combined Construction + Operations			Construction Only			Operations Only		
				Maximum->	Minimum->	Max ReclD->	Maximum->	Minimum->	Max ReclD->	Maximum->	Minimum->	Max ReclD->
				2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
				Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
2817	570500.00	4180750.00	RESIDENTIAL	2.27E-01	-	-	1.02E-03	-	-	2.27E-01	-	-
2818	570750.00	4180750.00	RESIDENTIAL	1.11E-01	-	-	1.03E-03	-	-	1.11E-01	-	-
2819	571000.00	4180750.00	RESIDENTIAL	3.88E-02	-	-	9.50E-04	-	-	3.88E-02	-	-
2820	571250.00	4180750.00	RESIDENTIAL	2.10E-02	-	-	9.00E-04	-	-	2.10E-02	-	-
2821	571500.00	4180750.00	RESIDENTIAL	7.13E-02	-	-	9.45E-04	-	-	7.13E-02	-	-
2822	571750.00	4180750.00	RESIDENTIAL	8.29E-02	-	-	9.28E-04	-	-	8.29E-02	-	-
2823	572000.00	4180750.00	RESIDENTIAL	8.06E-02	-	-	1.02E-03	-	-	8.06E-02	-	-
2824	572250.00	4180750.00	RESIDENTIAL	7.56E-02	-	-	1.19E-03	-	-	7.56E-02	-	-
2825	572500.00	4180750.00	RESIDENTIAL	1.07E-01	-	-	1.02E-03	-	-	1.07E-01	-	-
2826	572750.00	4180750.00	RESIDENTIAL	1.03E-01	-	-	9.19E-04	-	-	1.03E-01	-	-
2827	573000.00	4180750.00	RESIDENTIAL	4.62E-02	-	-	1.08E-03	-	-	4.62E-02	-	-
2828	573250.00	4180750.00	RESIDENTIAL	3.02E-02	-	-	8.05E-04	-	-	3.02E-02	-	-
2829	573500.00	4180750.00	RESIDENTIAL	5.16E-02	-	-	5.74E-04	-	-	5.16E-02	-	-
2830	567000.00	4181000.00	WORKER	-	-	3.48E-02	-	-	9.05E-04	-	-	3.48E-02
2831	567250.00	4181000.00	WORKER	-	-	6.74E-02	-	-	8.28E-04	-	-	6.74E-02
2832	567500.00	4181000.00	WORKER	-	-	6.95E-02	-	-	8.33E-04	-	-	6.95E-02
2833	567750.00	4181000.00	WORKER	-	-	6.63E-02	-	-	7.93E-04	-	-	6.63E-02
2834	568000.00	4181000.00	WORKER	-	-	6.34E-02	-	-	6.91E-04	-	-	6.34E-02
2835	568250.00	4181000.00	WORKER	-	-	4.41E-02	-	-	6.24E-04	-	-	4.41E-02
2836	568500.00	4181000.00	WORKER	-	-	4.72E-02	-	-	7.11E-04	-	-	4.72E-02
2837	568750.00	4181000.00	RESIDENTIAL	4.82E-02	-	-	8.01E-04	-	-	4.82E-02	-	-
2838	569000.00	4181000.00	WORKER	-	-	4.65E-02	-	-	8.47E-04	-	-	4.65E-02
2839	569250.00	4181000.00	RESIDENTIAL	5.30E-02	-	-	7.69E-04	-	-	5.30E-02	-	-
2840	569500.00	4181000.00	RESIDENTIAL	2.17E-02	-	-	9.13E-04	-	-	2.17E-02	-	-
2841	569750.00	4181000.00	RESIDENTIAL	4.23E-02	-	-	9.75E-04	-	-	4.23E-02	-	-
2842	570000.00	4181000.00	RESIDENTIAL	4.71E-02	-	-	9.32E-04	-	-	4.71E-02	-	-
2843	570250.00	4181000.00	RESIDENTIAL	1.77E-01	-	-	1.11E-03	-	-	1.77E-01	-	-
2844	570500.00	4181000.00	RESIDENTIAL	2.23E-01	-	-	1.03E-03	-	-	2.23E-01	-	-
2845	570750.00	4181000.00	RESIDENTIAL	1.31E-01	-	-	1.00E-03	-	-	1.31E-01	-	-
2846	571000.00	4181000.00	RESIDENTIAL	4.95E-02	-	-	8.99E-04	-	-	4.95E-02	-	-
2847	571250.00	4181000.00	RESIDENTIAL	1.77E-02	-	-	8.82E-04	-	-	1.77E-02	-	-
2848	571500.00	4181000.00	RESIDENTIAL	5.52E-02	-	-	8.58E-04	-	-	5.52E-02	-	-
2849	571750.00	4181000.00	RESIDENTIAL	7.33E-02	-	-	9.29E-04	-	-	7.33E-02	-	-
2850	572000.00	4181000.00	RESIDENTIAL	7.90E-02	-	-	8.85E-04	-	-	7.90E-02	-	-
2851	572250.00	4181000.00	RESIDENTIAL	7.31E-02	-	-	1.10E-03	-	-	7.31E-02	-	-
2852	572500.00	4181000.00	RESIDENTIAL	8.79E-02	-	-	1.08E-03	-	-	8.79E-02	-	-
2853	572750.00	4181000.00	RESIDENTIAL	1.03E-01	-	-	8.24E-04	-	-	1.03E-01	-	-
2854	573000.00	4181000.00	RESIDENTIAL	6.25E-02	-	-	6.32E-04	-	-	6.25E-02	-	-
2855	573250.00	4181000.00	RESIDENTIAL	4.15E-02	-	-	7.07E-04	-	-	4.15E-02	-	-
2856	573500.00	4181000.00	RESIDENTIAL	1.82E-02	-	-	6.22E-04	-	-	1.82E-02	-	-
2857	567000.00	4181250.00	WORKER	-	-	4.52E-02	-	-	8.14E-04	-	-	4.52E-02
2858	567250.00	4181250.00	WORKER	-	-	6.48E-02	-	-	7.90E-04	-	-	6.48E-02
2859	567500.00	4181250.00	RESIDENTIAL	6.45E-02	-	-	8.09E-04	-	-	6.45E-02	-	-
2860	567750.00	4181250.00	WORKER	-	-	6.53E-02	-	-	7.86E-04	-	-	6.53E-02
2861	568000.00	4181250.00	WORKER	-	-	5.23E-02	-	-	6.09E-04	-	-	5.23E-02
2862	568250.00	4181250.00	WORKER	-	-	4.42E-02	-	-	6.12E-04	-	-	4.42E-02
2863	568500.00	4181250.00	WORKER	-	-	4.42E-02	-	-	7.03E-04	-	-	4.42E-02
2864	568750.00	4181250.00	RESIDENTIAL	4.32E-02	-	-	8.10E-04	-	-	4.32E-02	-	-
2865	569000.00	4181250.00	RESIDENTIAL	4.05E-02	-	-	8.23E-04	-	-	4.05E-02	-	-
2866	569250.00	4181250.00	RESIDENTIAL	5.46E-02	-	-	7.36E-04	-	-	5.46E-02	-	-
2867	569500.00	4181250.00	RESIDENTIAL	1.82E-02	-	-	9.07E-04	-	-	1.82E-02	-	-
2868	569750.00	4181250.00	RESIDENTIAL	4.30E-02	-	-	9.60E-04	-	-	4.30E-02	-	-
2869	570000.00	4181250.00	RESIDENTIAL	2.66E-02	-	-	8.93E-04	-	-	2.66E-02	-	-
2870	570250.00	4181250.00	RESIDENTIAL	1.54E-01	-	-	1.10E-03	-	-	1.54E-01	-	-
2871	570500.00	4181250.00	RESIDENTIAL	2.09E-01	-	-	1.02E-03	-	-	2.09E-01	-	-
2872	570750.00	4181250.00	RESIDENTIAL	1.49E-01	-	-	9.67E-04	-	-	1.49E-01	-	-
2873	571000.00	4181250.00	RESIDENTIAL	5.55E-02	-	-	8.78E-04	-	-	5.55E-02	-	-
2874	571250.00	4181250.00	RESIDENTIAL	1.66E-02	-	-	8.66E-04	-	-	1.66E-02	-	-
2875	571500.00	4181250.00	RESIDENTIAL	2.09E-02	-	-	7.70E-04	-	-	2.09E-02	-	-
2876	571750.00	4181250.00	RESIDENTIAL	6.08E-02	-	-	9.00E-04	-	-	6.08E-02	-	-
2877	572000.00	4181250.00	RESIDENTIAL	7.39E-02	-	-	8.31E-04	-	-	7.39E-02	-	-
2878	572250.00	4181250.00	RESIDENTIAL	7.31E-02	-	-	9.74E-04	-	-	7.31E-02	-	-
2879	572500.00	4181250.00	RESIDENTIAL	6.05E-02	-	-	1.01E-03	-	-	6.05E-02	-	-

OAK Terminal Modernization  
 Table 2-26. Eight (8)-Hour Hazard Indices  
 Combined Construction & Operations

				Combined Construction + Operations			Construction Only			Operations Only		
				8-Hour Hazard Index			8-Hour Hazard Index			8-Hour Hazard Index		
Maximum->				5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
Minimum->				2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
Max ReclD->				1924	582	1281	1546	1879	3296	1924	582	1281
Exposure Years->				2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
2880	572750.00	4181250.00	RESIDENTIAL	6.17E-02	-	-	5.79E-04	-	-	6.17E-02	-	-
2881	573000.00	4181250.00	RESIDENTIAL	6.88E-02	-	-	5.93E-04	-	-	6.88E-02	-	-
2882	573250.00	4181250.00	RESIDENTIAL	5.84E-02	-	-	7.24E-04	-	-	5.84E-02	-	-
2883	573500.00	4181250.00	RESIDENTIAL	3.17E-02	-	-	6.83E-04	-	-	3.17E-02	-	-
2884	567000.00	4181500.00	WORKER	-	-	5.47E-02	-	-	7.38E-04	-	-	5.47E-02
2885	567250.00	4181500.00	WORKER	-	-	6.38E-02	-	-	7.49E-04	-	-	6.38E-02
2886	567500.00	4181500.00	WORKER	-	-	5.93E-02	-	-	7.98E-04	-	-	5.93E-02
2887	567750.00	4181500.00	WORKER	-	-	6.40E-02	-	-	7.04E-04	-	-	6.40E-02
2888	568000.00	4181500.00	WORKER	-	-	4.60E-02	-	-	5.82E-04	-	-	4.60E-02
2889	568250.00	4181500.00	WORKER	-	-	4.39E-02	-	-	6.05E-04	-	-	4.39E-02
2890	568500.00	4181500.00	RESIDENTIAL	4.12E-02	-	-	6.89E-04	-	-	4.12E-02	-	-
2891	568750.00	4181500.00	RESIDENTIAL	3.87E-02	-	-	8.09E-04	-	-	3.87E-02	-	-
2892	569000.00	4181500.00	RESIDENTIAL	3.87E-02	-	-	8.04E-04	-	-	3.87E-02	-	-
2893	569250.00	4181500.00	RESIDENTIAL	6.51E-02	-	-	7.44E-04	-	-	6.51E-02	-	-
2894	569500.00	4181500.00	RESIDENTIAL	1.29E-02	-	-	9.02E-04	-	-	1.29E-02	-	-
2895	569750.00	4181500.00	RESIDENTIAL	4.01E-02	-	-	9.24E-04	-	-	4.01E-02	-	-
2896	570000.00	4181500.00	RESIDENTIAL	2.39E-02	-	-	8.54E-04	-	-	2.39E-02	-	-
2897	570250.00	4181500.00	RESIDENTIAL	1.24E-01	-	-	1.06E-03	-	-	1.24E-01	-	-
2898	570500.00	4181500.00	RESIDENTIAL	2.00E-01	-	-	9.86E-04	-	-	2.00E-01	-	-
2899	570750.00	4181500.00	RESIDENTIAL	1.56E-01	-	-	8.91E-04	-	-	1.56E-01	-	-
2900	571000.00	4181500.00	RESIDENTIAL	5.73E-02	-	-	8.28E-04	-	-	5.73E-02	-	-
2901	571250.00	4181500.00	RESIDENTIAL	1.69E-02	-	-	8.20E-04	-	-	1.69E-02	-	-
2902	571500.00	4181500.00	RESIDENTIAL	3.18E-03	-	-	7.60E-04	-	-	3.18E-03	-	-
2903	571750.00	4181500.00	RESIDENTIAL	4.72E-02	-	-	8.18E-04	-	-	4.72E-02	-	-
2904	572000.00	4181500.00	RESIDENTIAL	6.50E-02	-	-	8.29E-04	-	-	6.50E-02	-	-
2905	572250.00	4181500.00	RESIDENTIAL	6.63E-02	-	-	7.29E-04	-	-	6.63E-02	-	-
2906	572500.00	4181500.00	RESIDENTIAL	5.70E-02	-	-	7.44E-04	-	-	5.70E-02	-	-
2907	572750.00	4181500.00	RESIDENTIAL	5.72E-02	-	-	7.30E-04	-	-	5.72E-02	-	-
2908	573000.00	4181500.00	RESIDENTIAL	8.03E-02	-	-	6.36E-04	-	-	8.03E-02	-	-
2909	573250.00	4181500.00	RESIDENTIAL	6.22E-02	-	-	6.25E-04	-	-	6.22E-02	-	-
2910	573500.00	4181500.00	RESIDENTIAL	4.47E-02	-	-	6.54E-04	-	-	4.47E-02	-	-
2911	567000.00	4181750.00	WORKER	-	-	5.84E-02	-	-	7.11E-04	-	-	5.84E-02
2912	567250.00	4181750.00	WORKER	-	-	6.04E-02	-	-	7.50E-04	-	-	6.04E-02
2913	567500.00	4181750.00	WORKER	-	-	5.95E-02	-	-	7.43E-04	-	-	5.95E-02
2914	567750.00	4181750.00	RESIDENTIAL	5.82E-02	-	-	6.24E-04	-	-	5.82E-02	-	-
2915	568000.00	4181750.00	RESIDENTIAL	4.25E-02	-	-	5.47E-04	-	-	4.25E-02	-	-
2916	568250.00	4181750.00	RESIDENTIAL	4.30E-02	-	-	6.01E-04	-	-	4.30E-02	-	-
2917	568500.00	4181750.00	RESIDENTIAL	3.82E-02	-	-	6.75E-04	-	-	3.82E-02	-	-
2918	568750.00	4181750.00	RESIDENTIAL	3.45E-02	-	-	8.03E-04	-	-	3.45E-02	-	-
2919	569000.00	4181750.00	RESIDENTIAL	4.02E-02	-	-	7.92E-04	-	-	4.02E-02	-	-
2920	569250.00	4181750.00	RESIDENTIAL	6.81E-02	-	-	7.23E-04	-	-	6.81E-02	-	-
2921	569500.00	4181750.00	RESIDENTIAL	1.09E-02	-	-	8.69E-04	-	-	1.09E-02	-	-
2922	569750.00	4181750.00	RESIDENTIAL	4.04E-02	-	-	9.03E-04	-	-	4.04E-02	-	-
2923	570000.00	4181750.00	RESIDENTIAL	2.79E-02	-	-	8.06E-04	-	-	2.79E-02	-	-
2924	570250.00	4181750.00	RESIDENTIAL	8.94E-02	-	-	9.72E-04	-	-	8.94E-02	-	-
2925	570500.00	4181750.00	RESIDENTIAL	1.85E-01	-	-	9.24E-04	-	-	1.85E-01	-	-
2926	570750.00	4181750.00	RESIDENTIAL	1.59E-01	-	-	7.92E-04	-	-	1.59E-01	-	-
2927	571000.00	4181750.00	RESIDENTIAL	5.82E-02	-	-	7.59E-04	-	-	5.82E-02	-	-
2928	571250.00	4181750.00	RESIDENTIAL	1.98E-02	-	-	7.15E-04	-	-	1.98E-02	-	-
2929	571500.00	4181750.00	RESIDENTIAL	7.04E-04	-	-	7.04E-04	-	-	-4.41E-03	-	-
2930	571750.00	4181750.00	RESIDENTIAL	4.89E-03	-	-	6.72E-04	-	-	4.89E-03	-	-
2931	572000.00	4181750.00	RESIDENTIAL	5.26E-02	-	-	8.20E-04	-	-	5.26E-02	-	-
2932	572250.00	4181750.00	RESIDENTIAL	6.56E-02	-	-	7.33E-04	-	-	6.56E-02	-	-
2933	572500.00	4181750.00	RESIDENTIAL	6.49E-02	-	-	7.88E-04	-	-	6.49E-02	-	-
2934	572750.00	4181750.00	RESIDENTIAL	4.53E-02	-	-	7.70E-04	-	-	4.53E-02	-	-
2935	573000.00	4181750.00	RESIDENTIAL	5.89E-02	-	-	5.11E-04	-	-	5.89E-02	-	-
2936	573250.00	4181750.00	RESIDENTIAL	5.82E-02	-	-	4.75E-04	-	-	5.82E-02	-	-
2937	573500.00	4181750.00	RESIDENTIAL	4.62E-02	-	-	5.39E-04	-	-	4.62E-02	-	-
2938	567000.00	4182000.00	WORKER	-	-	5.69E-02	-	-	6.80E-04	-	-	5.69E-02
2939	567250.00	4182000.00	WORKER	-	-	5.63E-02	-	-	6.77E-04	-	-	5.63E-02
2940	567500.00	4182000.00	RESIDENTIAL	6.19E-02	-	-	6.84E-04	-	-	6.19E-02	-	-
2941	567750.00	4182000.00	RESIDENTIAL	5.23E-02	-	-	5.47E-04	-	-	5.23E-02	-	-
2942	568000.00	4182000.00	RESIDENTIAL	3.93E-02	-	-	5.23E-04	-	-	3.93E-02	-	-

OAK Terminal Modernization  
 Table 2-26. Eight (8)-Hour Hazard Indices  
 Combined Construction & Operations

				Combined Construction + Operations			Construction Only			Operations Only			
				8-Hour Hazard Index			8-Hour Hazard Index			8-Hour Hazard Index			
				Maximum->	5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
				Minimum->	2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
				Max ReclD->	1924	582	1281	1546	1879	3296	1924	582	1281
				Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	
2943	568250.00	4182000.00	RESIDENTIAL	4.14E-02	-	-	5.96E-04	-	-	4.14E-02	-	-	
2944	568500.00	4182000.00	RESIDENTIAL	3.50E-02	-	-	6.62E-04	-	-	3.50E-02	-	-	
2945	568750.00	4182000.00	RESIDENTIAL	3.78E-02	-	-	7.98E-04	-	-	3.78E-02	-	-	
2946	569000.00	4182000.00	RESIDENTIAL	4.40E-02	-	-	8.21E-04	-	-	4.40E-02	-	-	
2947	569250.00	4182000.00	RESIDENTIAL	6.74E-02	-	-	6.98E-04	-	-	6.74E-02	-	-	
2948	569500.00	4182000.00	RESIDENTIAL	6.91E-03	-	-	8.11E-04	-	-	6.91E-03	-	-	
2949	569750.00	4182000.00	RESIDENTIAL	3.65E-02	-	-	8.46E-04	-	-	3.65E-02	-	-	
2950	570000.00	4182000.00	RESIDENTIAL	3.02E-02	-	-	7.75E-04	-	-	3.02E-02	-	-	
2951	570250.00	4182000.00	RESIDENTIAL	8.10E-02	-	-	9.64E-04	-	-	8.10E-02	-	-	
2952	570500.00	4182000.00	RESIDENTIAL	1.98E-01	-	-	9.50E-04	-	-	1.98E-01	-	-	
2953	570750.00	4182000.00	RESIDENTIAL	1.41E-01	-	-	6.67E-04	-	-	1.41E-01	-	-	
2954	571000.00	4182000.00	RESIDENTIAL	5.84E-02	-	-	6.74E-04	-	-	5.84E-02	-	-	
2955	571250.00	4182000.00	RESIDENTIAL	2.36E-02	-	-	6.07E-04	-	-	2.36E-02	-	-	
2956	571500.00	4182000.00	RESIDENTIAL	4.61E-03	-	-	7.18E-04	-	-	4.61E-03	-	-	
2957	571750.00	4182000.00	RESIDENTIAL	3.86E-03	-	-	6.55E-04	-	-	3.86E-03	-	-	
2958	572000.00	4182000.00	RESIDENTIAL	4.05E-02	-	-	7.81E-04	-	-	4.05E-02	-	-	
2959	572250.00	4182000.00	RESIDENTIAL	5.70E-02	-	-	7.06E-04	-	-	5.70E-02	-	-	
2960	572500.00	4182000.00	RESIDENTIAL	5.99E-02	-	-	6.43E-04	-	-	5.99E-02	-	-	
2961	572750.00	4182000.00	RESIDENTIAL	5.19E-02	-	-	6.71E-04	-	-	5.19E-02	-	-	
2962	573000.00	4182000.00	RESIDENTIAL	4.09E-02	-	-	5.06E-04	-	-	4.09E-02	-	-	
2963	573250.00	4182000.00	RESIDENTIAL	5.96E-02	-	-	4.56E-04	-	-	5.96E-02	-	-	
2964	573500.00	4182000.00	RESIDENTIAL	4.36E-02	-	-	4.68E-04	-	-	4.36E-02	-	-	
2965	567000.00	4182250.00	SCHOOL	5.59E-02	5.59E-02	5.59E-02	6.55E-04	6.55E-04	6.55E-04	5.59E-02	5.59E-02	5.59E-02	
2966	567250.00	4182250.00	RESIDENTIAL	5.17E-02	-	-	6.88E-04	-	-	5.17E-02	-	-	
2967	567500.00	4182250.00	RESIDENTIAL	6.36E-02	-	-	6.22E-04	-	-	6.36E-02	-	-	
2968	567750.00	4182250.00	RESIDENTIAL	4.57E-02	-	-	5.14E-04	-	-	4.57E-02	-	-	
2969	568000.00	4182250.00	RESIDENTIAL	3.79E-02	-	-	5.08E-04	-	-	3.79E-02	-	-	
2970	568250.00	4182250.00	RESIDENTIAL	3.90E-02	-	-	5.86E-04	-	-	3.90E-02	-	-	
2971	568500.00	4182250.00	RESIDENTIAL	3.20E-02	-	-	6.70E-04	-	-	3.20E-02	-	-	
2972	568750.00	4182250.00	RESIDENTIAL	4.38E-02	-	-	8.05E-04	-	-	4.38E-02	-	-	
2973	569000.00	4182250.00	RESIDENTIAL	4.18E-02	-	-	7.68E-04	-	-	4.18E-02	-	-	
2974	569250.00	4182250.00	RESIDENTIAL	6.55E-02	-	-	6.73E-04	-	-	6.55E-02	-	-	
2975	569500.00	4182250.00	RESIDENTIAL	6.26E-03	-	-	7.96E-04	-	-	6.26E-03	-	-	
2976	569750.00	4182250.00	RESIDENTIAL	3.23E-02	-	-	8.41E-04	-	-	3.23E-02	-	-	
2977	570000.00	4182250.00	RESIDENTIAL	3.24E-02	-	-	7.36E-04	-	-	3.24E-02	-	-	
2978	570250.00	4182250.00	RESIDENTIAL	5.56E-02	-	-	9.15E-04	-	-	5.56E-02	-	-	
2979	570500.00	4182250.00	RESIDENTIAL	1.81E-01	-	-	9.19E-04	-	-	1.81E-01	-	-	
2980	570750.00	4182250.00	RESIDENTIAL	1.72E-01	-	-	7.41E-04	-	-	1.72E-01	-	-	
2981	571000.00	4182250.00	RESIDENTIAL	7.50E-02	-	-	6.87E-04	-	-	7.50E-02	-	-	
2982	571250.00	4182250.00	RESIDENTIAL	4.43E-02	-	-	6.56E-04	-	-	4.43E-02	-	-	
2983	571500.00	4182250.00	RESIDENTIAL	1.00E-02	-	-	7.05E-04	-	-	1.00E-02	-	-	
2984	571750.00	4182250.00	RESIDENTIAL	6.06E-04	-	-	6.06E-04	-	-	-4.40E-03	-	-	
2985	572000.00	4182250.00	RESIDENTIAL	1.94E-02	-	-	6.37E-04	-	-	1.94E-02	-	-	
2986	572250.00	4182250.00	RESIDENTIAL	4.54E-02	-	-	6.60E-04	-	-	4.54E-02	-	-	
2987	572500.00	4182250.00	RESIDENTIAL	4.93E-02	-	-	4.93E-04	-	-	4.93E-02	-	-	
2988	572750.00	4182250.00	RESIDENTIAL	4.98E-02	-	-	5.83E-04	-	-	4.98E-02	-	-	
2989	573000.00	4182250.00	RESIDENTIAL	3.04E-02	-	-	5.32E-04	-	-	3.04E-02	-	-	
2990	573250.00	4182250.00	RESIDENTIAL	5.11E-02	-	-	4.27E-04	-	-	5.11E-02	-	-	
2991	573500.00	4182250.00	RESIDENTIAL	5.70E-02	-	-	4.46E-04	-	-	5.70E-02	-	-	
2992	567000.00	4182500.00	RESIDENTIAL	5.32E-02	-	-	7.11E-04	-	-	5.32E-02	-	-	
2993	567250.00	4182500.00	RESIDENTIAL	6.06E-02	-	-	6.97E-04	-	-	6.06E-02	-	-	
2994	567500.00	4182500.00	RESIDENTIAL	6.13E-02	-	-	5.73E-04	-	-	6.13E-02	-	-	
2995	567750.00	4182500.00	RESIDENTIAL	4.11E-02	-	-	4.93E-04	-	-	4.11E-02	-	-	
2996	568000.00	4182500.00	RESIDENTIAL	4.00E-02	-	-	5.23E-04	-	-	4.00E-02	-	-	
2997	568250.00	4182500.00	RESIDENTIAL	3.73E-02	-	-	5.91E-04	-	-	3.73E-02	-	-	
2998	568500.00	4182500.00	RESIDENTIAL	2.84E-02	-	-	6.75E-04	-	-	2.84E-02	-	-	
2999	568750.00	4182500.00	RESIDENTIAL	4.90E-02	-	-	8.13E-04	-	-	4.90E-02	-	-	
3000	569000.00	4182500.00	RESIDENTIAL	4.18E-02	-	-	7.43E-04	-	-	4.18E-02	-	-	
3001	569250.00	4182500.00	RESIDENTIAL	6.62E-02	-	-	6.52E-04	-	-	6.62E-02	-	-	
3002	569500.00	4182500.00	RESIDENTIAL	8.26E-03	-	-	7.77E-04	-	-	8.26E-03	-	-	
3003	569750.00	4182500.00	RESIDENTIAL	2.80E-02	-	-	8.13E-04	-	-	2.80E-02	-	-	
3004	570000.00	4182500.00	RESIDENTIAL	3.39E-02	-	-	6.97E-04	-	-	3.39E-02	-	-	
3005	570250.00	4182500.00	RESIDENTIAL	2.98E-02	-	-	8.56E-04	-	-	2.98E-02	-	-	

**OAK Terminal Modernization**  
**Table 2-26. Eight (8)-Hour Hazard Indices**  
**Combined Construction & Operations**

				<u>Combined Construction + Operations</u>			<u>Construction Only</u>			<u>Operations Only</u>			
				<u>8-Hour Hazard Index</u>			<u>8-Hour Hazard Index</u>			<u>8-Hour Hazard Index</u>			
				Maximum->	5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
				Minimum->	2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
				Max ReclD->	1924	582	1281	1546	1879	3296	1924	582	1281
				Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	
3006	570500.00	4182500.00	RESIDENTIAL	1.61E-01	-	-	8.95E-04	-	-	1.61E-01	-	-	
3007	570750.00	4182500.00	RESIDENTIAL	1.70E-01	-	-	7.23E-04	-	-	1.70E-01	-	-	
3008	571000.00	4182500.00	RESIDENTIAL	1.14E-01	-	-	7.31E-04	-	-	1.14E-01	-	-	
3009	571250.00	4182500.00	RESIDENTIAL	4.51E-02	-	-	6.03E-04	-	-	4.51E-02	-	-	
3010	571500.00	4182500.00	RESIDENTIAL	9.65E-03	-	-	6.40E-04	-	-	9.65E-03	-	-	
3011	571750.00	4182500.00	RESIDENTIAL	5.54E-04	-	-	5.54E-04	-	-	-1.21E-02	-	-	
3012	572000.00	4182500.00	RESIDENTIAL	4.64E-04	-	-	4.64E-04	-	-	-1.93E-02	-	-	
3013	572250.00	4182500.00	RESIDENTIAL	3.37E-02	-	-	6.30E-04	-	-	3.37E-02	-	-	
3014	572500.00	4182500.00	RESIDENTIAL	4.41E-02	-	-	5.24E-04	-	-	4.41E-02	-	-	
3015	572750.00	4182500.00	RESIDENTIAL	3.95E-02	-	-	4.97E-04	-	-	3.95E-02	-	-	
3016	573000.00	4182500.00	RESIDENTIAL	3.37E-02	-	-	5.37E-04	-	-	3.37E-02	-	-	
3017	573250.00	4182500.00	RESIDENTIAL	3.96E-02	-	-	4.34E-04	-	-	3.96E-02	-	-	
3018	573500.00	4182500.00	RESIDENTIAL	5.75E-02	-	-	4.20E-04	-	-	5.75E-02	-	-	
3019	567000.00	4182750.00	RESIDENTIAL	4.81E-02	-	-	7.03E-04	-	-	4.81E-02	-	-	
3020	567250.00	4182750.00	RESIDENTIAL	6.71E-02	-	-	6.46E-04	-	-	6.71E-02	-	-	
3021	567500.00	4182750.00	RESIDENTIAL	5.51E-02	-	-	5.03E-04	-	-	5.51E-02	-	-	
3022	567750.00	4182750.00	RESIDENTIAL	3.73E-02	-	-	4.78E-04	-	-	3.73E-02	-	-	
3023	568000.00	4182750.00	RESIDENTIAL	4.15E-02	-	-	5.30E-04	-	-	4.15E-02	-	-	
3024	568250.00	4182750.00	RESIDENTIAL	3.44E-02	-	-	5.88E-04	-	-	3.44E-02	-	-	
3025	568500.00	4182750.00	RESIDENTIAL	3.23E-02	-	-	6.79E-04	-	-	3.23E-02	-	-	
3026	568750.00	4182750.00	RESIDENTIAL	4.73E-02	-	-	7.85E-04	-	-	4.73E-02	-	-	
3027	569000.00	4182750.00	RESIDENTIAL	4.35E-02	-	-	7.29E-04	-	-	4.35E-02	-	-	
3028	569250.00	4182750.00	RESIDENTIAL	6.51E-02	-	-	6.31E-04	-	-	6.51E-02	-	-	
3029	569500.00	4182750.00	RESIDENTIAL	1.45E-02	-	-	7.53E-04	-	-	1.45E-02	-	-	
3030	569750.00	4182750.00	RESIDENTIAL	2.38E-02	-	-	7.85E-04	-	-	2.38E-02	-	-	
3031	570000.00	4182750.00	RESIDENTIAL	3.48E-02	-	-	6.54E-04	-	-	3.48E-02	-	-	
3032	570250.00	4182750.00	RESIDENTIAL	9.25E-03	-	-	8.04E-04	-	-	9.25E-03	-	-	
3033	570500.00	4182750.00	RESIDENTIAL	1.39E-01	-	-	8.64E-04	-	-	1.39E-01	-	-	
3034	570750.00	4182750.00	RESIDENTIAL	1.68E-01	-	-	7.25E-04	-	-	1.68E-01	-	-	
3035	571000.00	4182750.00	RESIDENTIAL	1.27E-01	-	-	6.95E-04	-	-	1.27E-01	-	-	
3036	571250.00	4182750.00	RESIDENTIAL	5.06E-02	-	-	5.81E-04	-	-	5.06E-02	-	-	
3037	571500.00	4182750.00	RESIDENTIAL	1.91E-02	-	-	5.79E-04	-	-	1.91E-02	-	-	
3038	571750.00	4182750.00	RESIDENTIAL	4.86E-04	-	-	4.86E-04	-	-	-2.03E-02	-	-	
3039	572000.00	4182750.00	RESIDENTIAL	4.25E-04	-	-	4.25E-04	-	-	-2.22E-02	-	-	
3040	572250.00	4182750.00	RESIDENTIAL	2.40E-02	-	-	5.07E-04	-	-	2.40E-02	-	-	
3041	572500.00	4182750.00	RESIDENTIAL	2.58E-02	-	-	4.42E-04	-	-	2.58E-02	-	-	
3042	572750.00	4182750.00	RESIDENTIAL	3.10E-02	-	-	4.16E-04	-	-	3.10E-02	-	-	
3043	573000.00	4182750.00	RESIDENTIAL	4.02E-02	-	-	5.08E-04	-	-	4.02E-02	-	-	
3044	573250.00	4182750.00	RESIDENTIAL	2.88E-02	-	-	4.82E-04	-	-	2.88E-02	-	-	
3045	573500.00	4182750.00	RESIDENTIAL	4.86E-02	-	-	3.93E-04	-	-	4.86E-02	-	-	
3046	567000.00	4183000.00	RESIDENTIAL	4.33E-02	-	-	6.73E-04	-	-	4.33E-02	-	-	
3047	567250.00	4183000.00	RESIDENTIAL	6.70E-02	-	-	5.84E-04	-	-	6.70E-02	-	-	
3048	567500.00	4183000.00	RESIDENTIAL	4.61E-02	-	-	4.68E-04	-	-	4.61E-02	-	-	
3049	567750.00	4183000.00	RESIDENTIAL	3.18E-02	-	-	4.95E-04	-	-	3.18E-02	-	-	
3050	568000.00	4183000.00	RESIDENTIAL	4.05E-02	-	-	5.23E-04	-	-	4.05E-02	-	-	
3051	568250.00	4183000.00	RESIDENTIAL	3.04E-02	-	-	5.89E-04	-	-	3.04E-02	-	-	
3052	568500.00	4183000.00	RESIDENTIAL	3.75E-02	-	-	6.84E-04	-	-	3.75E-02	-	-	
3053	568750.00	4183000.00	RESIDENTIAL	4.56E-02	-	-	7.50E-04	-	-	4.56E-02	-	-	
3054	569000.00	4183000.00	RESIDENTIAL	4.32E-02	-	-	6.93E-04	-	-	4.32E-02	-	-	
3055	569250.00	4183000.00	RESIDENTIAL	6.80E-02	-	-	6.06E-04	-	-	6.80E-02	-	-	
3056	569500.00	4183000.00	RESIDENTIAL	2.35E-02	-	-	7.19E-04	-	-	2.35E-02	-	-	
3057	569750.00	4183000.00	RESIDENTIAL	2.04E-02	-	-	7.60E-04	-	-	2.04E-02	-	-	
3058	570000.00	4183000.00	RESIDENTIAL	3.48E-02	-	-	6.32E-04	-	-	3.48E-02	-	-	
3059	570250.00	4183000.00	RESIDENTIAL	6.54E-03	-	-	7.49E-04	-	-	6.54E-03	-	-	
3060	570500.00	4183000.00	RESIDENTIAL	1.18E-01	-	-	8.37E-04	-	-	1.18E-01	-	-	
3061	570750.00	4183000.00	RESIDENTIAL	1.63E-01	-	-	7.17E-04	-	-	1.63E-01	-	-	
3062	571000.00	4183000.00	RESIDENTIAL	1.36E-01	-	-	6.73E-04	-	-	1.36E-01	-	-	
3063	571250.00	4183000.00	RESIDENTIAL	6.40E-02	-	-	6.06E-04	-	-	6.40E-02	-	-	
3064	571500.00	4183000.00	RESIDENTIAL	2.46E-02	-	-	5.02E-04	-	-	2.46E-02	-	-	
3065	571750.00	4183000.00	RESIDENTIAL	4.34E-04	-	-	4.34E-04	-	-	-2.40E-02	-	-	
3066	572000.00	4183000.00	RESIDENTIAL	3.93E-04	-	-	3.93E-04	-	-	-2.59E-02	-	-	
3067	572250.00	4183000.00	RESIDENTIAL	4.67E-04	-	-	4.67E-04	-	-	-5.59E-04	-	-	
3068	572500.00	4183000.00	RESIDENTIAL	1.48E-02	-	-	3.98E-04	-	-	1.48E-02	-	-	

OAK Terminal Modernization  
 Table 2-26. Eight (8)-Hour Hazard Indices  
 Combined Construction & Operations

				Combined Construction + Operations			Construction Only			Operations Only		
				8-Hour Hazard Index			8-Hour Hazard Index			8-Hour Hazard Index		
Maximum->				5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
Minimum->				2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
Max ReclD->				1924	582	1281	1546	1879	3296	1924	582	1281
Exposure Years->				2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
3069	572750.00	4183000.00	RESIDENTIAL	2.38E-02	-	-	4.14E-04	-	-	2.38E-02	-	-
3070	573000.00	4183000.00	RESIDENTIAL	3.82E-02	-	-	4.82E-04	-	-	3.82E-02	-	-
3071	573250.00	4183000.00	RESIDENTIAL	2.93E-02	-	-	5.00E-04	-	-	2.93E-02	-	-
3072	573500.00	4183000.00	RESIDENTIAL	3.81E-02	-	-	3.79E-04	-	-	3.81E-02	-	-
3073	567000.00	4183250.00	RESIDENTIAL	4.61E-02	-	-	5.98E-04	-	-	4.61E-02	-	-
3074	567250.00	4183250.00	RESIDENTIAL	6.28E-02	-	-	5.20E-04	-	-	6.28E-02	-	-
3075	567500.00	4183250.00	RESIDENTIAL	3.73E-02	-	-	4.45E-04	-	-	3.73E-02	-	-
3076	567750.00	4183250.00	RESIDENTIAL	3.09E-02	-	-	4.99E-04	-	-	3.09E-02	-	-
3077	568000.00	4183250.00	RESIDENTIAL	3.95E-02	-	-	4.95E-04	-	-	3.95E-02	-	-
3078	568250.00	4183250.00	RESIDENTIAL	2.65E-02	-	-	5.78E-04	-	-	2.65E-02	-	-
3079	568500.00	4183250.00	RESIDENTIAL	4.33E-02	-	-	6.75E-04	-	-	4.33E-02	-	-
3080	568750.00	4183250.00	RESIDENTIAL	4.37E-02	-	-	7.30E-04	-	-	4.37E-02	-	-
3081	569000.00	4183250.00	RESIDENTIAL	4.23E-02	-	-	6.55E-04	-	-	4.23E-02	-	-
3082	569250.00	4183250.00	RESIDENTIAL	6.87E-02	-	-	5.75E-04	-	-	6.87E-02	-	-
3083	569500.00	4183250.00	RESIDENTIAL	2.93E-02	-	-	7.00E-04	-	-	2.93E-02	-	-
3084	569750.00	4183250.00	RESIDENTIAL	1.73E-02	-	-	7.34E-04	-	-	1.73E-02	-	-
3085	570000.00	4183250.00	RESIDENTIAL	3.42E-02	-	-	6.06E-04	-	-	3.42E-02	-	-
3086	570250.00	4183250.00	RESIDENTIAL	8.47E-03	-	-	6.84E-04	-	-	8.47E-03	-	-
3087	570500.00	4183250.00	RESIDENTIAL	9.55E-02	-	-	7.98E-04	-	-	9.55E-02	-	-
3088	570750.00	4183250.00	RESIDENTIAL	1.53E-01	-	-	6.91E-04	-	-	1.53E-01	-	-
3089	571000.00	4183250.00	RESIDENTIAL	1.26E-01	-	-	5.97E-04	-	-	1.26E-01	-	-
3090	571250.00	4183250.00	RESIDENTIAL	5.93E-02	-	-	5.12E-04	-	-	5.93E-02	-	-
3091	571500.00	4183250.00	RESIDENTIAL	1.83E-02	-	-	3.77E-04	-	-	1.83E-02	-	-
3092	571750.00	4183250.00	RESIDENTIAL	4.05E-04	-	-	4.05E-04	-	-	-1.44E-02	-	-
3093	572000.00	4183250.00	RESIDENTIAL	4.01E-04	-	-	4.01E-04	-	-	-2.32E-02	-	-
3094	572250.00	4183250.00	RESIDENTIAL	3.99E-04	-	-	3.99E-04	-	-	-1.12E-02	-	-
3095	572500.00	4183250.00	RESIDENTIAL	1.39E-02	-	-	3.99E-04	-	-	1.39E-02	-	-
3096	572750.00	4183250.00	RESIDENTIAL	1.78E-02	-	-	4.00E-04	-	-	1.78E-02	-	-
3097	573000.00	4183250.00	RESIDENTIAL	3.20E-02	-	-	4.19E-04	-	-	3.20E-02	-	-
3098	573250.00	4183250.00	RESIDENTIAL	3.84E-02	-	-	4.80E-04	-	-	3.84E-02	-	-
3099	573500.00	4183250.00	RESIDENTIAL	2.73E-02	-	-	4.33E-04	-	-	2.73E-02	-	-
3100	567000.00	4183500.00	RESIDENTIAL	5.48E-02	-	-	5.78E-04	-	-	5.48E-02	-	-
3101	567250.00	4183500.00	RESIDENTIAL	5.81E-02	-	-	4.62E-04	-	-	5.81E-02	-	-
3102	567500.00	4183500.00	RESIDENTIAL	3.85E-02	-	-	4.18E-04	-	-	3.85E-02	-	-
3103	567750.00	4183500.00	RESIDENTIAL	3.26E-02	-	-	4.85E-04	-	-	3.26E-02	-	-
3104	568000.00	4183500.00	RESIDENTIAL	3.71E-02	-	-	4.69E-04	-	-	3.71E-02	-	-
3105	568250.00	4183500.00	RESIDENTIAL	2.29E-02	-	-	5.65E-04	-	-	2.29E-02	-	-
3106	568500.00	4183500.00	RESIDENTIAL	4.31E-02	-	-	6.65E-04	-	-	4.31E-02	-	-
3107	568750.00	4183500.00	RESIDENTIAL	4.12E-02	-	-	7.07E-04	-	-	4.12E-02	-	-
3108	569000.00	4183500.00	RESIDENTIAL	4.07E-02	-	-	6.19E-04	-	-	4.07E-02	-	-
3109	569250.00	4183500.00	RESIDENTIAL	6.80E-02	-	-	5.50E-04	-	-	6.80E-02	-	-
3110	569500.00	4183500.00	RESIDENTIAL	3.39E-02	-	-	6.61E-04	-	-	3.39E-02	-	-
3111	569750.00	4183500.00	RESIDENTIAL	1.43E-02	-	-	7.01E-04	-	-	1.43E-02	-	-
3112	570000.00	4183500.00	RESIDENTIAL	3.28E-02	-	-	5.79E-04	-	-	3.28E-02	-	-
3113	570250.00	4183500.00	RESIDENTIAL	1.22E-02	-	-	6.49E-04	-	-	1.22E-02	-	-
3114	570500.00	4183500.00	RESIDENTIAL	7.56E-02	-	-	7.72E-04	-	-	7.56E-02	-	-
3115	570750.00	4183500.00	RESIDENTIAL	1.45E-01	-	-	6.66E-04	-	-	1.45E-01	-	-
3116	571000.00	4183500.00	RESIDENTIAL	1.17E-01	-	-	5.26E-04	-	-	1.17E-01	-	-
3117	571250.00	4183500.00	RESIDENTIAL	5.51E-02	-	-	4.43E-04	-	-	5.51E-02	-	-
3118	571500.00	4183500.00	RESIDENTIAL	2.38E-02	-	-	3.56E-04	-	-	2.38E-02	-	-
3119	571750.00	4183500.00	RESIDENTIAL	3.92E-04	-	-	3.92E-04	-	-	-3.03E-03	-	-
3120	572000.00	4183500.00	RESIDENTIAL	3.62E-04	-	-	3.62E-04	-	-	-2.76E-02	-	-
3121	572250.00	4183500.00	RESIDENTIAL	3.39E-04	-	-	3.39E-04	-	-	-1.01E-02	-	-
3122	572500.00	4183500.00	RESIDENTIAL	1.33E-02	-	-	3.68E-04	-	-	1.33E-02	-	-
3123	572750.00	4183500.00	RESIDENTIAL	1.19E-02	-	-	3.74E-04	-	-	1.19E-02	-	-
3124	573000.00	4183500.00	RESIDENTIAL	2.43E-02	-	-	3.73E-04	-	-	2.43E-02	-	-
3125	573250.00	4183500.00	RESIDENTIAL	4.03E-02	-	-	4.60E-04	-	-	4.03E-02	-	-
3126	573500.00	4183500.00	RESIDENTIAL	2.54E-02	-	-	4.60E-04	-	-	2.54E-02	-	-
3127	567000.00	4183750.00	RESIDENTIAL	6.10E-02	-	-	5.28E-04	-	-	6.10E-02	-	-
3128	567250.00	4183750.00	RESIDENTIAL	5.12E-02	-	-	4.14E-04	-	-	5.12E-02	-	-
3129	567500.00	4183750.00	RESIDENTIAL	3.77E-02	-	-	4.40E-04	-	-	3.77E-02	-	-
3130	567750.00	4183750.00	RESIDENTIAL	3.43E-02	-	-	4.64E-04	-	-	3.43E-02	-	-
3131	568000.00	4183750.00	RESIDENTIAL	3.60E-02	-	-	4.81E-04	-	-	3.60E-02	-	-

OAK Terminal Modernization  
 Table 2-26. Eight (8)-Hour Hazard Indices  
 Combined Construction & Operations

				Combined Construction + Operations			Construction Only			Operations Only			
				8-Hour Hazard Index			8-Hour Hazard Index			8-Hour Hazard Index			
				Maximum->	5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
				Minimum->	2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
				Max ReclD->	1924	582	1281	1546	1879	3296	1924	582	1281
				Exposure Years->	2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	
3132	568250.00	4183750.00	RESIDENTIAL	2.05E-02	-	-	5.57E-04	-	-	2.05E-02	-	-	
3133	568500.00	4183750.00	RESIDENTIAL	4.33E-02	-	-	6.61E-04	-	-	4.33E-02	-	-	
3134	568750.00	4183750.00	RESIDENTIAL	3.79E-02	-	-	6.82E-04	-	-	3.79E-02	-	-	
3135	569000.00	4183750.00	RESIDENTIAL	4.04E-02	-	-	5.84E-04	-	-	4.04E-02	-	-	
3136	569250.00	4183750.00	RESIDENTIAL	6.56E-02	-	-	5.19E-04	-	-	6.56E-02	-	-	
3137	569500.00	4183750.00	RESIDENTIAL	3.41E-02	-	-	6.21E-04	-	-	3.41E-02	-	-	
3138	569750.00	4183750.00	RESIDENTIAL	1.11E-02	-	-	6.50E-04	-	-	1.11E-02	-	-	
3139	570000.00	4183750.00	RESIDENTIAL	3.08E-02	-	-	5.47E-04	-	-	3.08E-02	-	-	
3140	570250.00	4183750.00	RESIDENTIAL	1.35E-02	-	-	5.89E-04	-	-	1.35E-02	-	-	
3141	570500.00	4183750.00	RESIDENTIAL	4.81E-02	-	-	7.06E-04	-	-	4.81E-02	-	-	
3142	570750.00	4183750.00	RESIDENTIAL	1.33E-01	-	-	6.28E-04	-	-	1.33E-01	-	-	
3143	571000.00	4183750.00	RESIDENTIAL	9.99E-02	-	-	4.24E-04	-	-	9.99E-02	-	-	
3144	571250.00	4183750.00	RESIDENTIAL	6.01E-02	-	-	4.39E-04	-	-	6.01E-02	-	-	
3145	571500.00	4183750.00	RESIDENTIAL	3.20E-02	-	-	3.66E-04	-	-	3.20E-02	-	-	
3146	571750.00	4183750.00	RESIDENTIAL	6.35E-03	-	-	3.68E-04	-	-	6.35E-03	-	-	
3147	572000.00	4183750.00	RESIDENTIAL	3.45E-04	-	-	3.45E-04	-	-	-2.28E-02	-	-	
3148	572250.00	4183750.00	RESIDENTIAL	2.94E-04	-	-	2.94E-04	-	-	-4.71E-03	-	-	
3149	572500.00	4183750.00	RESIDENTIAL	1.56E-02	-	-	3.49E-04	-	-	1.56E-02	-	-	
3150	572750.00	4183750.00	RESIDENTIAL	9.11E-03	-	-	3.43E-04	-	-	9.11E-03	-	-	
3151	573000.00	4183750.00	RESIDENTIAL	1.66E-02	-	-	3.82E-04	-	-	1.66E-02	-	-	
3152	573250.00	4183750.00	RESIDENTIAL	3.48E-02	-	-	4.14E-04	-	-	3.48E-02	-	-	
3153	573500.00	4183750.00	RESIDENTIAL	3.49E-02	-	-	4.51E-04	-	-	3.49E-02	-	-	
3154	567000.00	4184000.00	RESIDENTIAL	6.14E-02	-	-	4.71E-04	-	-	6.14E-02	-	-	
3155	567250.00	4184000.00	RESIDENTIAL	3.67E-02	-	-	3.85E-04	-	-	3.67E-02	-	-	
3156	567500.00	4184000.00	RESIDENTIAL	4.01E-02	-	-	4.45E-04	-	-	4.01E-02	-	-	
3157	567750.00	4184000.00	RESIDENTIAL	3.53E-02	-	-	4.54E-04	-	-	3.53E-02	-	-	
3158	568000.00	4184000.00	RESIDENTIAL	3.34E-02	-	-	4.63E-04	-	-	3.34E-02	-	-	
3159	568250.00	4184000.00	RESIDENTIAL	1.88E-02	-	-	5.53E-04	-	-	1.88E-02	-	-	
3160	568500.00	4184000.00	RESIDENTIAL	4.30E-02	-	-	6.50E-04	-	-	4.30E-02	-	-	
3161	568750.00	4184000.00	RESIDENTIAL	3.56E-02	-	-	6.57E-04	-	-	3.56E-02	-	-	
3162	569000.00	4184000.00	RESIDENTIAL	4.00E-02	-	-	5.50E-04	-	-	4.00E-02	-	-	
3163	569250.00	4184000.00	RESIDENTIAL	6.16E-02	-	-	4.87E-04	-	-	6.16E-02	-	-	
3164	569500.00	4184000.00	RESIDENTIAL	3.37E-02	-	-	5.81E-04	-	-	3.37E-02	-	-	
3165	569750.00	4184000.00	RESIDENTIAL	8.61E-03	-	-	6.00E-04	-	-	8.61E-03	-	-	
3166	570000.00	4184000.00	RESIDENTIAL	2.77E-02	-	-	4.97E-04	-	-	2.77E-02	-	-	
3167	570250.00	4184000.00	RESIDENTIAL	1.61E-02	-	-	5.61E-04	-	-	1.61E-02	-	-	
3168	570500.00	4184000.00	RESIDENTIAL	2.63E-02	-	-	6.52E-04	-	-	2.63E-02	-	-	
3169	570750.00	4184000.00	RESIDENTIAL	1.22E-01	-	-	6.06E-04	-	-	1.22E-01	-	-	
3170	571000.00	4184000.00	RESIDENTIAL	1.01E-01	-	-	3.94E-04	-	-	1.01E-01	-	-	
3171	571250.00	4184000.00	RESIDENTIAL	6.78E-02	-	-	4.40E-04	-	-	6.78E-02	-	-	
3172	571500.00	4184000.00	RESIDENTIAL	3.87E-02	-	-	3.67E-04	-	-	3.87E-02	-	-	
3173	571750.00	4184000.00	RESIDENTIAL	1.03E-02	-	-	3.11E-04	-	-	1.03E-02	-	-	
3174	572000.00	4184000.00	RESIDENTIAL	3.17E-04	-	-	3.17E-04	-	-	-6.41E-03	-	-	
3175	572250.00	4184000.00	RESIDENTIAL	2.27E-03	-	-	2.89E-04	-	-	2.27E-03	-	-	
3176	572500.00	4184000.00	RESIDENTIAL	2.01E-02	-	-	3.21E-04	-	-	2.01E-02	-	-	
3177	572750.00	4184000.00	RESIDENTIAL	5.83E-03	-	-	3.26E-04	-	-	5.83E-03	-	-	
3178	573000.00	4184000.00	RESIDENTIAL	9.79E-03	-	-	3.68E-04	-	-	9.79E-03	-	-	
3179	573250.00	4184000.00	RESIDENTIAL	2.62E-02	-	-	3.46E-04	-	-	2.62E-02	-	-	
3180	573500.00	4184000.00	RESIDENTIAL	4.17E-02	-	-	4.35E-04	-	-	4.17E-02	-	-	
3181	573750.00	4176750.00	RESIDENTIAL	1.25E-01	-	-	2.06E-03	-	-	1.25E-01	-	-	
3182	574000.00	4176750.00	RESIDENTIAL	9.48E-02	-	-	1.92E-03	-	-	9.48E-02	-	-	
3183	574250.00	4176750.00	RESIDENTIAL	7.04E-02	-	-	1.71E-03	-	-	7.04E-02	-	-	
3184	574500.00	4176750.00	RESIDENTIAL	5.19E-02	-	-	1.44E-03	-	-	5.19E-02	-	-	
3185	574750.00	4176750.00	RESIDENTIAL	5.11E-02	-	-	1.34E-03	-	-	5.11E-02	-	-	
3186	575000.00	4176750.00	RESIDENTIAL	6.52E-02	-	-	1.48E-03	-	-	6.52E-02	-	-	
3187	573750.00	4177000.00	RESIDENTIAL	1.18E-01	-	-	1.77E-03	-	-	1.18E-01	-	-	
3188	574000.00	4177000.00	RESIDENTIAL	1.18E-01	-	-	1.87E-03	-	-	1.18E-01	-	-	
3189	574250.00	4177000.00	RESIDENTIAL	1.08E-01	-	-	1.79E-03	-	-	1.08E-01	-	-	
3190	574500.00	4177000.00	RESIDENTIAL	8.75E-02	-	-	1.66E-03	-	-	8.75E-02	-	-	
3191	574750.00	4177000.00	RESIDENTIAL	6.21E-02	-	-	1.53E-03	-	-	6.21E-02	-	-	
3192	575000.00	4177000.00	RESIDENTIAL	4.24E-02	-	-	1.35E-03	-	-	4.24E-02	-	-	
3193	573750.00	4177250.00	RESIDENTIAL	1.26E-01	-	-	1.71E-03	-	-	1.26E-01	-	-	
3194	574000.00	4177250.00	RESIDENTIAL	1.06E-01	-	-	1.55E-03	-	-	1.06E-01	-	-	

OAK Terminal Modernization  
 Table 2-26. Eight (8)-Hour Hazard Indices  
 Combined Construction & Operations

				Combined Construction + Operations			Construction Only			Operations Only		
				8-Hour Hazard Index			8-Hour Hazard Index			8-Hour Hazard Index		
Maximum->				5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
Minimum->				2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
Max ReclD->				1924	582	1281	1546	1879	3296	1924	582	1281
Exposure Years->				2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
3195	574250.00	4177250.00	RESIDENTIAL	9.50E-02	-	-	1.56E-03	-	-	9.50E-02	-	-
3196	574500.00	4177250.00	RESIDENTIAL	9.87E-02	-	-	1.64E-03	-	-	9.87E-02	-	-
3197	574750.00	4177250.00	RESIDENTIAL	9.53E-02	-	-	1.60E-03	-	-	9.53E-02	-	-
3198	575000.00	4177250.00	RESIDENTIAL	8.20E-02	-	-	1.47E-03	-	-	8.20E-02	-	-
3199	573750.00	4177500.00	RESIDENTIAL	1.27E-01	-	-	1.87E-03	-	-	1.27E-01	-	-
3200	574000.00	4177500.00	RESIDENTIAL	1.14E-01	-	-	1.52E-03	-	-	1.14E-01	-	-
3201	574250.00	4177500.00	RESIDENTIAL	9.84E-02	-	-	1.49E-03	-	-	9.84E-02	-	-
3202	574500.00	4177500.00	RESIDENTIAL	8.54E-02	-	-	1.33E-03	-	-	8.54E-02	-	-
3203	574750.00	4177500.00	RESIDENTIAL	8.03E-02	-	-	1.40E-03	-	-	8.03E-02	-	-
3204	575000.00	4177500.00	RESIDENTIAL	8.42E-02	-	-	1.48E-03	-	-	8.42E-02	-	-
3205	573750.00	4177750.00	RESIDENTIAL	1.29E-01	-	-	1.92E-03	-	-	1.29E-01	-	-
3206	574000.00	4177750.00	RESIDENTIAL	1.24E-01	-	-	1.80E-03	-	-	1.24E-01	-	-
3207	574250.00	4177750.00	RESIDENTIAL	1.11E-01	-	-	1.51E-03	-	-	1.11E-01	-	-
3208	574500.00	4177750.00	RESIDENTIAL	9.30E-02	-	-	1.38E-03	-	-	9.30E-02	-	-
3209	574750.00	4177750.00	RESIDENTIAL	7.82E-02	-	-	1.32E-03	-	-	7.82E-02	-	-
3210	575000.00	4177750.00	RESIDENTIAL	6.82E-02	-	-	1.19E-03	-	-	6.82E-02	-	-
3211	573750.00	4178000.00	RESIDENTIAL	1.02E-01	-	-	1.51E-03	-	-	1.02E-01	-	-
3212	574000.00	4178000.00	RESIDENTIAL	1.11E-01	-	-	1.72E-03	-	-	1.11E-01	-	-
3213	574250.00	4178000.00	RESIDENTIAL	1.19E-01	-	-	1.72E-03	-	-	1.19E-01	-	-
3214	574500.00	4178000.00	RESIDENTIAL	1.11E-01	-	-	1.45E-03	-	-	1.11E-01	-	-
3215	574750.00	4178000.00	RESIDENTIAL	1.00E-01	-	-	1.26E-03	-	-	1.00E-01	-	-
3216	575000.00	4178000.00	RESIDENTIAL	7.04E-02	-	-	1.23E-03	-	-	7.04E-02	-	-
3217	573750.00	4178250.00	RESIDENTIAL	1.22E-01	-	-	1.29E-03	-	-	1.22E-01	-	-
3218	574000.00	4178250.00	RESIDENTIAL	8.38E-02	-	-	1.30E-03	-	-	8.38E-02	-	-
3219	574250.00	4178250.00	RESIDENTIAL	8.72E-02	-	-	1.58E-03	-	-	8.72E-02	-	-
3220	574500.00	4178250.00	RESIDENTIAL	1.03E-01	-	-	1.44E-03	-	-	1.03E-01	-	-
3221	574750.00	4178250.00	RESIDENTIAL	1.12E-01	-	-	1.45E-03	-	-	1.12E-01	-	-
3222	575000.00	4178250.00	RESIDENTIAL	8.35E-02	-	-	1.01E-03	-	-	8.35E-02	-	-
3223	573750.00	4178500.00	RESIDENTIAL	1.50E-01	-	-	1.22E-03	-	-	1.50E-01	-	-
3224	574000.00	4178500.00	RESIDENTIAL	1.29E-01	-	-	1.25E-03	-	-	1.29E-01	-	-
3225	574250.00	4178500.00	RESIDENTIAL	6.54E-02	-	-	1.09E-03	-	-	6.54E-02	-	-
3226	574500.00	4178500.00	RESIDENTIAL	2.88E-02	-	-	9.54E-04	-	-	2.88E-02	-	-
3227	574750.00	4178500.00	RESIDENTIAL	8.34E-02	-	-	1.37E-03	-	-	8.34E-02	-	-
3228	575000.00	4178500.00	RESIDENTIAL	9.62E-02	-	-	1.14E-03	-	-	9.62E-02	-	-
3229	573750.00	4178750.00	RESIDENTIAL	1.01E-01	-	-	1.28E-03	-	-	1.01E-01	-	-
3230	574000.00	4178750.00	RESIDENTIAL	1.39E-01	-	-	1.14E-03	-	-	1.39E-01	-	-
3231	574250.00	4178750.00	RESIDENTIAL	1.20E-01	-	-	1.07E-03	-	-	1.20E-01	-	-
3232	574500.00	4178750.00	RESIDENTIAL	6.19E-02	-	-	8.72E-04	-	-	6.19E-02	-	-
3233	574750.00	4178750.00	RESIDENTIAL	3.00E-02	-	-	1.03E-03	-	-	3.00E-02	-	-
3234	575000.00	4178750.00	RESIDENTIAL	5.77E-02	-	-	1.21E-03	-	-	5.77E-02	-	-
3235	573750.00	4179000.00	RESIDENTIAL	4.04E-02	-	-	1.23E-03	-	-	4.04E-02	-	-
3236	574000.00	4179000.00	RESIDENTIAL	7.66E-02	-	-	1.22E-03	-	-	7.66E-02	-	-
3237	574250.00	4179000.00	RESIDENTIAL	6.63E-02	-	-	7.29E-04	-	-	6.63E-02	-	-
3238	574500.00	4179000.00	RESIDENTIAL	1.22E-01	-	-	1.02E-03	-	-	1.22E-01	-	-
3239	574750.00	4179000.00	RESIDENTIAL	8.04E-02	-	-	9.12E-04	-	-	8.04E-02	-	-
3240	575000.00	4179000.00	RESIDENTIAL	3.20E-02	-	-	8.07E-04	-	-	3.20E-02	-	-
3241	573750.00	4179250.00	RESIDENTIAL	3.91E-02	-	-	1.25E-03	-	-	3.91E-02	-	-
3242	574000.00	4179250.00	RESIDENTIAL	2.60E-02	-	-	9.67E-04	-	-	2.60E-02	-	-
3243	574250.00	4179250.00	RESIDENTIAL	3.63E-02	-	-	9.26E-04	-	-	3.63E-02	-	-
3244	574500.00	4179250.00	RESIDENTIAL	8.19E-02	-	-	8.61E-04	-	-	8.19E-02	-	-
3245	574750.00	4179250.00	RESIDENTIAL	7.34E-02	-	-	7.56E-04	-	-	7.34E-02	-	-
3246	575000.00	4179250.00	RESIDENTIAL	7.13E-02	-	-	7.29E-04	-	-	7.13E-02	-	-
3247	573750.00	4179500.00	RESIDENTIAL	7.08E-02	-	-	1.49E-03	-	-	7.08E-02	-	-
3248	574000.00	4179500.00	RESIDENTIAL	4.36E-02	-	-	1.06E-03	-	-	4.36E-02	-	-
3249	574250.00	4179500.00	RESIDENTIAL	2.20E-02	-	-	1.07E-03	-	-	2.20E-02	-	-
3250	574500.00	4179500.00	RESIDENTIAL	3.77E-02	-	-	8.64E-04	-	-	3.77E-02	-	-
3251	574750.00	4179500.00	RESIDENTIAL	3.55E-02	-	-	5.85E-04	-	-	3.55E-02	-	-
3252	575000.00	4179500.00	RESIDENTIAL	6.71E-02	-	-	7.40E-04	-	-	6.71E-02	-	-
3253	573750.00	4179750.00	RESIDENTIAL	7.04E-02	-	-	1.72E-03	-	-	7.04E-02	-	-
3254	574000.00	4179750.00	RESIDENTIAL	7.43E-02	-	-	1.28E-03	-	-	7.43E-02	-	-
3255	574250.00	4179750.00	RESIDENTIAL	4.02E-02	-	-	1.00E-03	-	-	4.02E-02	-	-
3256	574500.00	4179750.00	RESIDENTIAL	2.70E-02	-	-	6.52E-04	-	-	2.70E-02	-	-
3257	574750.00	4179750.00	RESIDENTIAL	3.39E-02	-	-	6.30E-04	-	-	3.39E-02	-	-

OAK Terminal Modernization  
 Table 2-26. Eight (8)-Hour Hazard Indices  
 Combined Construction & Operations

				Combined Construction + Operations			Construction Only			Operations Only		
				8-Hour Hazard Index			8-Hour Hazard Index			8-Hour Hazard Index		
Maximum->				5.47E-01	2.96E-01	9.58E-01	7.01E-03	5.32E-03	2.23E-02	5.47E-01	2.96E-01	9.58E-01
Minimum->				2.94E-04	5.51E-02	1.94E-02	2.89E-04	6.43E-04	5.82E-04	-2.76E-02	5.51E-02	1.94E-02
Max ReclD->				1924	582	1281	1546	1879	3296	1924	582	1281
Exposure Years->				2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
ReclD	UTM X	UTM Y	Receptor Type	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
3258	575000.00	4179750.00	RESIDENTIAL	4.35E-02	-	-	7.08E-04	-	-	4.35E-02	-	-
3259	573750.00	4180000.00	RESIDENTIAL	8.92E-02	-	-	1.62E-03	-	-	8.92E-02	-	-
3260	574000.00	4180000.00	RESIDENTIAL	5.41E-02	-	-	1.19E-03	-	-	5.41E-02	-	-
3261	574250.00	4180000.00	RESIDENTIAL	5.00E-02	-	-	8.40E-04	-	-	5.00E-02	-	-
3262	574500.00	4180000.00	RESIDENTIAL	3.24E-02	-	-	6.65E-04	-	-	3.24E-02	-	-
3263	574750.00	4180000.00	RESIDENTIAL	2.87E-02	-	-	6.38E-04	-	-	2.87E-02	-	-
3264	575000.00	4180000.00	RESIDENTIAL	4.08E-02	-	-	7.25E-04	-	-	4.08E-02	-	-
3265	573750.00	4180250.00	RESIDENTIAL	6.49E-02	-	-	1.09E-03	-	-	6.49E-02	-	-
3266	574000.00	4180250.00	RESIDENTIAL	6.13E-02	-	-	1.07E-03	-	-	6.13E-02	-	-
3267	574250.00	4180250.00	RESIDENTIAL	4.69E-02	-	-	8.82E-04	-	-	4.69E-02	-	-
3268	574500.00	4180250.00	RESIDENTIAL	5.01E-02	-	-	8.34E-04	-	-	5.01E-02	-	-
3269	574750.00	4180250.00	RESIDENTIAL	3.71E-02	-	-	6.59E-04	-	-	3.71E-02	-	-
3270	575000.00	4180250.00	RESIDENTIAL	2.90E-02	-	-	6.00E-04	-	-	2.90E-02	-	-
3271	573750.00	4180500.00	RESIDENTIAL	4.83E-02	-	-	7.23E-04	-	-	4.83E-02	-	-
3272	574000.00	4180500.00	RESIDENTIAL	4.50E-02	-	-	8.69E-04	-	-	4.50E-02	-	-
3273	574250.00	4180500.00	RESIDENTIAL	5.79E-02	-	-	1.05E-03	-	-	5.79E-02	-	-
3274	574500.00	4180500.00	RESIDENTIAL	4.67E-02	-	-	9.59E-04	-	-	4.67E-02	-	-
3275	574750.00	4180500.00	RESIDENTIAL	3.55E-02	-	-	7.04E-04	-	-	3.55E-02	-	-
3276	575000.00	4180500.00	RESIDENTIAL	3.78E-02	-	-	6.37E-04	-	-	3.78E-02	-	-
3277	573750.00	4180750.00	RESIDENTIAL	6.32E-02	-	-	6.83E-04	-	-	6.32E-02	-	-
3278	574000.00	4180750.00	RESIDENTIAL	4.38E-02	-	-	6.79E-04	-	-	4.38E-02	-	-
3279	574250.00	4180750.00	RESIDENTIAL	6.16E-02	-	-	9.81E-04	-	-	6.16E-02	-	-
3280	574500.00	4180750.00	RESIDENTIAL	5.90E-02	-	-	1.09E-03	-	-	5.90E-02	-	-
3281	574750.00	4180750.00	RESIDENTIAL	4.04E-02	-	-	7.29E-04	-	-	4.04E-02	-	-
3282	575000.00	4180750.00	RESIDENTIAL	4.09E-02	-	-	7.18E-04	-	-	4.09E-02	-	-
3283	573750.00	4181000.00	RESIDENTIAL	6.07E-02	-	-	6.04E-04	-	-	6.07E-02	-	-
3284	574000.00	4181000.00	RESIDENTIAL	6.90E-02	-	-	6.74E-04	-	-	6.90E-02	-	-
3285	574250.00	4181000.00	RESIDENTIAL	4.62E-02	-	-	7.87E-04	-	-	4.62E-02	-	-
3286	574500.00	4181000.00	RESIDENTIAL	6.01E-02	-	-	9.29E-04	-	-	6.01E-02	-	-
3287	574750.00	4181000.00	RESIDENTIAL	3.20E-02	-	-	8.17E-04	-	-	3.20E-02	-	-
3288	575000.00	4181000.00	RESIDENTIAL	3.78E-02	-	-	6.76E-04	-	-	3.78E-02	-	-
3289	573750.00	4181250.00	RESIDENTIAL	3.11E-02	-	-	5.48E-04	-	-	3.11E-02	-	-
3290	574000.00	4181250.00	RESIDENTIAL	6.29E-02	-	-	6.09E-04	-	-	6.29E-02	-	-
3291	574250.00	4181250.00	RESIDENTIAL	4.43E-02	-	-	5.99E-04	-	-	4.43E-02	-	-
3292	574500.00	4181250.00	RESIDENTIAL	3.27E-02	-	-	6.48E-04	-	-	3.27E-02	-	-
3293	574750.00	4181250.00	RESIDENTIAL	4.50E-02	-	-	8.11E-04	-	-	4.50E-02	-	-
3294	575000.00	4181250.00	RESIDENTIAL	3.28E-02	-	-	7.57E-04	-	-	3.28E-02	-	-
3295	570540.00	4175555.00	RECREATIONAL	-	-	4.27E-01	-	-	1.18E-02	-	-	4.27E-01
3296	570275.00	4174825.00	RECREATIONAL	-	-	7.31E-01	-	-	2.23E-02	-	-	7.31E-01
3297	570565.00	4174490.00	RECREATIONAL	-	-	5.36E-01	-	-	1.14E-02	-	-	5.36E-01
3298	571035.00	4175080.00	RECREATIONAL	-	-	4.62E-01	-	-	8.20E-03	-	-	4.62E-01
3299	570675.00	4175040.00	RECREATIONAL	-	-	4.32E-01	-	-	1.17E-02	-	-	4.32E-01

**OAK Terminal Modernization**

**Table 2-27. 8-Hour Hazard Indices**

**Combined Construction & Operations**

	<b>8-Hour Hazard Index</b>		
Maximum->	1.99E+00	7.29E-02	1.99E+00
Minimum->	2.33E-02	3.79E-03	-8.20E-01
Max ReclD->	4	3	4
Exposure Years->	2025-2038	2025-2030	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Worker Constructio & Operations	Adult Worker Construction Only	Adult Worker Operations Only
1	569712.76	4174275.96	ON-AIRPORT	0.02	0.02	-0.36
2	569483.17	4174092.29	ON-AIRPORT	0.03	0.03	-0.82
3	569283.43	4174257.59	ON-AIRPORT	0.07	0.07	-0.52
4	569074.50	4174009.64	ON-AIRPORT	1.99	0.03	1.99
5	568792.10	4174895.86	ON-AIRPORT	1.62	0.01	1.62
6	569167.77	4176928.00	ON-AIRPORT	0.45	0.00	0.45
7	569492.49	4176178.97	ON-AIRPORT	0.72	0.00	0.72
8	570228.53	4175725.23	ON-AIRPORT	0.24	0.02	0.24

## Attachment 3

### Acute Hazard Calculation Summaries

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Oakland International Airport Terminal Modernization & Development Project  
**Table 3-1. Acute Hazard Index - Adult Resident & Child Resident**

TAC	0.380 Maximum Acute Hazard Index																	Chronic Non-Cancer REL ( $\mu\text{g}/\text{m}^3$ )	
	0.003 Construction 0.378 Operations																		
	Project-Related Incremental Concentrations ( $\mu\text{g}/\text{m}^3$ ) at Location with Maximum Risk																		
	Construction						Incremental Operation												
	2025	2026	2027	2028	2029	2030	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038		
Maximum Impact Location:	1548	571000	4176500																
DPM	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
ammonia	5.91E-04	3.78E-04	1.84E-04	2.95E-04	1.12E-04	8.93E-05	-8.31E-03	-8.41E-03	-8.51E-03	-8.61E-03	-8.71E-03	-8.81E-03	-8.91E-03	-9.01E-03	-9.11E-03	-9.21E-03	-9.31E-03	3200	
arsenic	8.97E-07	9.05E-06	1.73E-06	8.71E-06	8.18E-07	6.62E-07	-1.14E-05	-1.13E-05	-1.13E-05	-1.12E-05	-1.12E-05	-1.11E-05	-1.11E-05	-1.10E-05	-1.10E-05	-1.09E-05	-1.09E-05	0.2	
cadmium	7.01E-06	1.77E-05	4.43E-06	1.64E-05	2.33E-06	1.88E-06	-9.86E-05	-9.98E-05	-1.01E-04	-1.02E-04	-1.04E-04	-1.05E-04	-1.06E-04	-1.07E-04	-1.08E-04	-1.10E-04	-1.11E-04	NA	
chlorine	2.96E-04	1.94E-03	5.27E-04	1.74E-03	1.87E-04	1.15E-04	-1.11E-02	-1.02E-02	-9.35E-03	-8.46E-03	-7.57E-03	-6.68E-03	-5.79E-03	-4.90E-03	-4.01E-03	-3.12E-03	-2.23E-03	210	
chromium	6.18E-06	1.01E-04	2.06E-05	9.59E-05	8.95E-06	6.42E-06	6.20E-05	9.47E-05	1.27E-04	1.60E-04	1.93E-04	2.25E-04	2.58E-04	2.91E-04	3.24E-04	3.56E-04	3.89E-04	0.48	
cobalt	3.51E-06	5.17E-05	1.04E-05	4.92E-05	4.40E-06	3.35E-06	-1.05E-04	-1.00E-04	-9.50E-05	-8.99E-05	-8.48E-05	-7.97E-05	-7.46E-05	-6.96E-05	-6.45E-05	-5.94E-05	-5.43E-05	NA	
copper	3.02E-05	9.60E-05	3.52E-05	7.55E-05	1.53E-05	5.94E-06	9.72E-04	1.22E-03	1.47E-03	1.71E-03	1.96E-03	2.21E-03	2.45E-03	2.70E-03	2.95E-03	3.19E-03	3.44E-03	100	
lead	7.69E-06	2.54E-04	4.49E-05	2.47E-04	2.05E-05	1.67E-05	-7.21E-04	-7.05E-04	-6.88E-04	-6.71E-04	-6.54E-04	-6.38E-04	-6.21E-04	-6.04E-04	-5.87E-04	-5.71E-04	-5.54E-04	NA	
manganese	1.22E-05	4.22E-04	7.69E-05	4.07E-04	3.44E-05	2.70E-05	3.35E-06	4.41E-05	8.48E-05	1.25E-04	1.66E-04	2.07E-04	2.48E-04	2.88E-04	3.29E-04	3.70E-04	4.10E-04	NA	
mercury	5.26E-06	9.98E-06	2.76E-06	9.08E-06	1.50E-06	1.21E-06	-7.39E-05	-7.48E-05	-7.58E-05	-7.67E-05	-7.76E-05	-7.86E-05	-7.95E-05	-8.04E-05	-8.13E-05	-8.23E-05	-8.32E-05	0.6	
nickel	6.33E-06	3.39E-05	8.69E-06	3.07E-05	3.67E-06	2.37E-06	-6.73E-05	-4.81E-05	-2.90E-05	-9.79E-06	9.38E-06	2.85E-05	4.77E-05	6.69E-05	8.60E-05	1.05E-04	1.24E-04	0.2	
selenium	1.82E-06	2.14E-06	7.67E-07	1.82E-06	4.30E-07	3.27E-07	-2.14E-05	-2.10E-05	-2.07E-05	-2.03E-05	-1.99E-05	-1.95E-05	-1.92E-05	-1.88E-05	-1.84E-05	-1.80E-05	-1.76E-05	NA	
silica, crystalline (respirable)	5.77E-04	8.73E-02	1.50E-02	8.50E-02	6.75E-03	5.50E-03	2.11E-04	1.54E-03	2.86E-03	4.19E-03	5.51E-03	6.84E-03	8.16E-03	9.49E-03	1.08E-02	1.21E-02	1.35E-02	NA	
sulfates	4.55E-03	6.24E-03	2.86E-03	4.78E-03	1.10E-03	6.49E-04	-1.10E-01	-1.05E-01	-9.98E-02	-9.48E-02	-8.97E-02	-8.46E-02	-7.96E-02	-7.45E-02	-6.94E-02	-6.44E-02	-5.93E-02	120	
vanadium (fume or dust)	6.44E-06	1.23E-04	2.29E-05	1.18E-04	1.05E-05	8.21E-06	-1.00E-05	2.56E-06	1.52E-05	2.78E-05	4.04E-05	5.30E-05	6.56E-05	7.81E-05	9.07E-05	1.03E-04	1.16E-04	30	
1,3-butadiene	1.08E-03	5.92E-04	3.32E-04	4.63E-04	9.28E-05	1.74E-04	3.05E-01	2.80E-01	2.56E-01	2.31E-01	2.07E-01	1.82E-01	1.58E-01	1.33E-01	1.09E-01	8.44E-02	5.99E-02	2	
acetaldehyde	4.02E-02	2.09E-02	1.11E-02	1.63E-02	3.30E-03	6.65E-03	7.14E-01	6.50E-01	5.85E-01	5.21E-01	4.56E-01	3.92E-01	3.27E-01	2.63E-01	1.98E-01	1.34E-01	6.96E-02	470	
acrolein	7.71E-07	9.61E-07	8.46E-07	7.71E-07	1.37E-07	4.50E-08	4.62E-01	4.28E-01	3.95E-01	3.61E-01	3.27E-01	2.93E-01	2.59E-01	2.25E-01	1.91E-01	1.57E-01	1.24E-01	2.5	
benzene	1.17E-02	8.69E-03	4.19E-03	5.60E-03	1.85E-03	1.87E-03	2.43E-02	-1.30E-02	-5.02E-02	-8.75E-02	-1.25E-01	-1.62E-01	-1.99E-01	-2.37E-01	-2.74E-01	-3.11E-01	-3.49E-01	27	
ethyl benzene	1.90E-03	4.28E-03	3.33E-03	3.53E-03	5.94E-04	3.16E-04	-4.29E-02	-4.88E-02	-5.47E-02	-6.07E-02	-6.66E-02	-7.26E-02	-7.85E-02	-8.44E-02	-9.04E-02	-9.63E-02	-1.02E-01	NA	
ethyl chloride (chloroethane)	0.00E+00	4.20E-03	7.03E-04	8.30E-04	1.67E-03	3.08E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA	
ethylene glycol	0.00E+00	3.52E-03	5.88E-04	6.94E-04	1.40E-03	2.58E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA	
formaldehyde	8.03E-02	4.17E-02	2.21E-02	3.26E-02	6.60E-03	1.33E-02	2.18E+00	2.00E+00	1.82E+00	1.64E+00	1.46E+00	1.28E+00	1.10E+00	9.16E-01	7.35E-01	5.55E-01	3.74E-01	55	
hexane	1.04E-03	6.59E-04	4.21E-04	5.19E-04	1.01E-04	1.54E-04	-6.07E-02	-6.35E-02	-6.63E-02	-6.91E-02	-7.19E-02	-7.47E-02	-7.76E-02	-8.04E-02	-8.32E-02	-8.60E-02	-8.88E-02	NA	
methanol	1.72E-04	9.54E-05	5.41E-05	7.47E-05	1.49E-05	2.76E-05	3.42E-01	3.16E-01	2.91E-01	2.65E-01	2.40E-01	2.14E-01	1.89E-01	1.63E-01	1.38E-01	1.12E-01	8.66E-02	28000	
methyl chloride (chloromethane)	0.00E+00	3.52E-03	5.88E-04	6.94E-04	1.40E-03	2.58E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA	
methyl ethyl ketone (2-butanone)	8.06E-03	4.17E-03	2.20E-03	3.26E-03	6.60E-04	1.34E-03	-1.01E-02	-1.06E-02	-1.11E-02	-1.16E-02	-1.20E-02	-1.25E-02	-1.30E-02	-1.35E-02	-1.39E-02	-1.44E-02	-1.49E-02	13000	
methyl tert-butyl ether	5.21E-05	6.51E-05	5.72E-05	5.21E-05	9.28E-06	3.04E-06	-1.87E-02	-1.95E-02	-2.04E-02	-2.12E-02	-2.21E-02	-2.30E-02	-2.38E-02	-2.47E-02	-2.56E-02	-2.64E-02	-2.73E-02	NA	
naphthalene	5.44E-04	3.21E-04	1.93E-04	2.52E-04	4.98E-05	8.45E-05	8.32E-02	7.47E-02	6.62E-02	5.77E-02	4.92E-02	4.07E-02	3.22E-02	2.37E-02	1.52E-02	6.71E-03	-1.79E-03	NA	
phenol	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-01	1.29E-01	1.18E-01	1.08E-01	9.80E-02	8.78E-02	7.76E-02	6.74E-02	5.72E-02	4.70E-02	3.68E-02	5800	
propylene	1.46E-02	7.86E-03	4.33E-03	6.15E-03	1.24E-03	2.37E-03	6.93E-01	6.22E-01	5.51E-01	4.79E-01	4.08E-01	3.37E-01	2.66E-01	1.95E-01	1.24E-01	5.25E-02	-1.86E-02	NA	
styrene	3.60E-04	2.11E-04	1.26E-04	1.66E-04	3.27E-05	5.62E-05	4.70E-02	4.21E-02	3.71E-02	3.22E-02	2.72E-02	2.23E-02	1.73E-02	1.24E-02	7.46E-03	2.51E-03	-2.43E-03	21000	
toluene	8.94E-03	1.40E-02	1.06E-02	1.15E-02	1.99E-03	1.45E-03	-2.20E-01	-2.45E-01	-2.70E-01	-2.95E-01	-3.20E-01	-3.44E-01	-3.69E-01	-3.94E-01	-4.19E-01	-4.44E-01	-4.69E-01	5000	
xylenes (mixed)	0.00E+00	1.16E-02	9.76E-03	9.75E-03	1.55E-03	8.65E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	22000	
<b>Total Acute Hazard Index by Year</b>	<b>2.62E-03</b>	<b>1.93E-03</b>	<b>8.76E-04</b>	<b>1.53E-03</b>	<b>2.97E-04</b>	<b>4.50E-04</b>	<b>3.78E-01</b>	<b>3.48E-01</b>	<b>3.17E-01</b>	<b>2.87E-01</b>	<b>2.56E-01</b>	<b>2.26E-01</b>	<b>1.96E-01</b>	<b>1.65E-01</b>	<b>1.35E-01</b>	<b>1.05E-01</b>	<b>7.41E-02</b>		

Oakland International Airport Terminal Modernization & Development Project

Table 3-2. Acute Hazard Index - School Child

TAC	0.327 Maximum Acute Hazard Index																	Chronic Non-Cancer REL (µg/m <sup>3</sup> )
	Construction			Incremental Operation														
	2025	2026	2027	2028	2029	2030	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	
Maximum Impact Location:	ReclD 1879	UTM X (m) 571250	UTM Y (m) 4176750	0.002 Construction 0.326 Operations														
Project-Related Incremental Concentrations (ug/m <sup>3</sup> ) at Location with Maximum Risk																		
DPM	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5
ammonia	4.93E-04	3.19E-04	1.59E-04	2.55E-04	9.67E-05	7.61E-05	-6.93E-03	-7.02E-03	-7.11E-03	-7.20E-03	-7.29E-03	-7.38E-03	-7.47E-03	-7.56E-03	-7.65E-03	-7.74E-03	-7.83E-03	200
arsenic	7.47E-07	7.80E-06	1.50E-06	7.31E-06	7.00E-07	5.59E-07	-9.66E-06	-9.63E-06	-9.60E-06	-9.56E-06	-9.53E-06	-9.50E-06	-9.47E-06	-9.43E-06	-9.40E-06	-9.37E-06	-9.34E-06	0.015
cadmium	5.85E-06	1.52E-05	3.84E-06	1.38E-05	2.01E-06	1.60E-06	-8.22E-05	-8.33E-05	-8.44E-05	-8.55E-05	-8.66E-05	-8.77E-05	-8.88E-05	-8.99E-05	-9.10E-05	-9.21E-05	-9.32E-05	0.02
chlorine	2.37E-04	1.64E-03	4.39E-04	1.44E-03	1.56E-04	9.64E-05	-6.19E-03	-5.47E-03	-4.75E-03	-4.04E-03	-3.32E-03	-2.60E-03	-1.89E-03	-1.17E-03	-4.51E-04	2.66E-04	9.83E-04	0.2
chromium	4.98E-06	8.69E-05	1.76E-05	8.02E-05	7.55E-06	5.40E-06	4.71E-05	7.52E-05	1.03E-04	1.31E-04	1.60E-04	1.88E-04	2.16E-04	2.44E-04	2.72E-04	3.00E-04	3.28E-04	0*
cobalt	2.86E-06	4.44E-05	8.93E-06	4.12E-05	3.74E-06	2.82E-06	-6.46E-05	-6.06E-05	-5.65E-05	-5.25E-05	-4.85E-05	-4.45E-05	-4.04E-05	-3.64E-05	-3.24E-05	-2.84E-05	-2.43E-05	NA
copper	2.41E-05	7.96E-05	2.86E-05	6.21E-05	1.24E-05	4.86E-06	6.34E-04	8.40E-04	1.05E-03	1.25E-03	1.46E-03	1.66E-03	1.87E-03	2.07E-03	2.28E-03	2.49E-03	2.69E-03	NA
lead	6.40E-06	2.19E-04	3.89E-05	2.07E-04	1.75E-05	1.40E-05	-7.10E-04	-6.80E-04	-6.50E-04	-6.20E-04	-5.90E-04	-5.60E-04	-5.30E-04	-4.99E-04	-4.69E-04	-4.39E-04	-4.09E-04	NA
manganese	9.97E-06	3.63E-04	6.63E-05	3.41E-04	2.93E-05	2.27E-05	-1.25E-05	2.21E-05	5.68E-05	9.14E-05	1.26E-04	1.61E-04	1.95E-04	2.30E-04	2.65E-04	2.99E-04	3.34E-04	0.09
mercury	4.39E-06	8.54E-06	2.39E-06	7.68E-06	1.29E-06	1.03E-06	-6.16E-05	-6.24E-05	-6.32E-05	-6.41E-05	-6.49E-05	-6.58E-05	-6.66E-05	-6.74E-05	-6.82E-05	-6.91E-05	-6.99E-05	0.03
nickel	5.15E-06	2.89E-05	7.30E-06	2.57E-05	3.08E-06	1.99E-06	-4.63E-05	-3.03E-05	-1.43E-05	1.64E-06	1.76E-05	3.36E-05	4.96E-05	6.56E-05	8.16E-05	9.76E-05	1.14E-04	0.014
selenium	1.52E-06	1.82E-06	6.60E-07	1.55E-06	3.69E-07	2.78E-07	-1.85E-05	-1.82E-05	-1.79E-05	-1.76E-05	-1.73E-05	-1.70E-05	-1.67E-05	-1.64E-05	-1.61E-05	-1.58E-05	-1.55E-05	20
silica, crystalline (respirable)	4.75E-04	7.53E-02	1.30E-02	7.12E-02	5.76E-03	4.63E-03	-9.86E-04	1.17E-04	1.22E-03	2.32E-03	3.43E-03	4.53E-03	5.63E-03	6.73E-03	7.84E-03	8.94E-03	1.00E-02	3
sulfates	3.73E-03	5.17E-03	2.36E-03	3.98E-03	9.21E-04	5.47E-04	-7.12E-02	-6.72E-02	-6.32E-02	-5.92E-02	-5.52E-02	-5.13E-02	-4.73E-02	-4.33E-02	-3.93E-02	-3.53E-02	-3.13E-02	NA
vanadium (fume or dust)	5.31E-06	1.06E-04	1.97E-05	9.91E-05	8.92E-06	6.92E-06	-1.91E-05	-8.66E-06	1.76E-06	1.22E-05	2.26E-05	3.30E-05	4.35E-05	5.39E-05	6.43E-05	7.47E-05	8.52E-05	NA
1,3-butadiene	9.00E-04	4.90E-04	2.83E-04	3.93E-04	7.95E-05	1.48E-04	2.62E-01	2.44E-01	2.26E-01	2.08E-01	1.91E-01	1.73E-01	1.55E-01	1.37E-01	1.19E-01	1.01E-01	8.30E-02	2
acetaldehyde	3.35E-02	1.74E-02	9.56E-03	1.39E-02	2.85E-03	5.66E-03	6.16E-01	5.69E-01	5.21E-01	4.73E-01	4.26E-01	3.78E-01	3.30E-01	2.83E-01	2.35E-01	1.87E-01	1.40E-01	140
acrolein	6.10E-07	7.61E-07	6.70E-07	6.10E-07	1.08E-07	3.56E-08	3.99E-01	3.74E-01	3.49E-01	3.25E-01	3.00E-01	2.75E-01	2.51E-01	2.26E-01	2.01E-01	1.77E-01	1.52E-01	0.35
benzene	9.72E-03	7.23E-03	3.56E-03	4.74E-03	1.59E-03	1.59E-03	2.44E-02	-4.83E-03	-3.41E-02	-6.34E-02	-9.26E-02	-1.22E-01	-1.51E-01	-1.80E-01	-2.10E-01	-2.39E-01	-2.68E-01	3
ethyl benzene	1.57E-03	3.54E-03	2.87E-03	3.01E-03	5.06E-04	2.68E-04	-3.51E-02	-4.00E-02	-4.50E-02	-4.99E-02	-5.49E-02	-5.99E-02	-6.48E-02	-6.98E-02	-7.47E-02	-7.97E-02	-8.46E-02	2000
ethyl chloride (chloroethane)	0.00E+00	3.58E-03	6.11E-04	7.11E-04	1.44E-03	2.59E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	30000
ethylene glycol	0.00E+00	2.99E-03	5.11E-04	5.95E-04	1.21E-03	2.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	400
formaldehyde	6.70E-02	3.46E-02	1.91E-02	2.78E-02	5.69E-03	1.13E-02	1.87E+00	1.74E+00	1.61E+00	1.48E+00	1.34E+00	1.21E+00	1.08E+00	9.47E-01	8.16E-01	6.84E-01	5.52E-01	9
hexane	8.59E-04	5.39E-04	3.50E-04	4.33E-04	8.51E-05	1.31E-04	-5.08E-02	-5.33E-02	-5.59E-02	-5.84E-02	-6.10E-02	-6.36E-02	-6.61E-02	-6.87E-02	-7.12E-02	-7.38E-02	-7.64E-02	7000
methanol	1.43E-04	7.88E-05	4.61E-05	6.33E-05	1.28E-05	2.35E-05	2.94E-01	2.75E-01	2.56E-01	2.38E-01	2.19E-01	2.01E-01	1.82E-01	1.64E-01	1.45E-01	1.27E-01	1.08E-01	4000
methyl chloride (chloromethane)	0.00E+00	2.99E-03	5.11E-04	5.95E-04	1.21E-03	2.17E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
methyl ethyl ketone (2-butanone)	6.73E-03	3.47E-03	1.90E-03	2.79E-03	5.70E-04	1.14E-03	-8.51E-03	-8.94E-03	-9.36E-03	-9.79E-03	-1.02E-02	-1.06E-02	-1.11E-02	-1.15E-02	-1.19E-02	-1.24E-02	-1.28E-02	NA
methyl tert-butyl ether	4.13E-05	5.15E-05	4.53E-05	4.13E-05	7.34E-06	2.41E-06	-1.56E-02	-1.63E-02	-1.71E-02	-1.79E-02	-1.87E-02	-1.95E-02	-2.03E-02	-2.11E-02	-2.19E-02	-2.27E-02	-2.35E-02	8000
naphthalene	4.52E-04	2.64E-04	1.63E-04	2.12E-04	4.23E-05	7.17E-05	7.19E-02	6.55E-02	5.92E-02	5.29E-02	4.65E-02	4.02E-02	3.39E-02	2.76E-02	2.12E-02	1.49E-02	8.57E-03	9
phenol	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-01	1.12E-01	1.04E-01	9.69E-02	8.95E-02	8.21E-02	7.47E-02	6.74E-02	6.00E-02	5.26E-02	4.52E-02	200
propylene	1.22E-02	6.51E-03	3.71E-03	5.23E-03	1.06E-03	2.02E-03	5.99E-01	5.46E-01	4.93E-01	4.40E-01	3.87E-01	3.34E-01	2.81E-01	2.28E-01	1.75E-01	1.22E-01	6.87E-02	3000
styrene	2.99E-04	1.74E-04	1.06E-04	1.39E-04	2.78E-05	4.77E-05	4.08E-02	3.71E-02	3.34E-02	2.97E-02	2.60E-02	2.22E-02	1.85E-02	1.48E-02	1.11E-02	7.39E-03	3.68E-03	900
toluene	7.42E-03	1.16E-02	9.08E-03	9.78E-03	1.69E-03	1.23E-03	-1.82E-01	-2.03E-01	-2.24E-01	-2.44E-01	-2.65E-01	-2.86E-01	-3.07E-01	-3.28E-01	-3.49E-01	-3.70E-01	-3.91E-01	420
xylenes (mixed)	0.00E+00	9.61E-03	8.47E-03	8.33E-03	1.32E-03	7.28E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	700
<b>Total Acute Hazard Index by Year</b>	<b>2.18E-03</b>	<b>1.62E-03</b>	<b>7.50E-04</b>	<b>1.30E-03</b>	<b>2.54E-04</b>	<b>3.82E-04</b>	<b>3.26E-01</b>	<b>3.04E-01</b>	<b>2.81E-01</b>	<b>2.59E-01</b>	<b>2.37E-01</b>	<b>2.15E-01</b>	<b>1.92E-01</b>	<b>1.70E-01</b>	<b>1.48E-01</b>	<b>1.26E-01</b>	<b>1.04E-01</b>	

Oakland International Airport Terminal Modernization & Development Project  
 Table 3-3. Acute Hazard Index - Offsite Worker

0.687 Maximum Acute Hazard Index

ReclD UTM X (m) UTM Y (m)  
 Maximum Impact Location: 881 568096 4176500

0.002 Construction  
 0.687 Operations

TAC	Project-Related Incremental Concentrations (ug/m <sup>3</sup> ) at Location with Maximum Risk																	Chronic Non-Cancer REL (ug/m <sup>3</sup> )
	Construction						Incremental Operation											
	2025	2026	2027	2028	2029	2030	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	
DPM	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5
ammonia	3.46E-04	2.62E-04	1.56E-04	2.29E-04	1.10E-04	7.70E-05	-4.22E-03	-4.31E-03	-4.39E-03	-4.47E-03	-4.56E-03	-4.64E-03	-4.72E-03	-4.81E-03	-4.89E-03	-4.97E-03	-5.06E-03	200
arsenic	5.46E-07	5.51E-06	1.44E-06	5.50E-06	7.77E-07	3.82E-07	-6.14E-06	-6.25E-06	-6.35E-06	-6.46E-06	-6.57E-06	-6.68E-06	-6.79E-06	-6.90E-06	-7.00E-06	-7.11E-06	-7.22E-06	0.015
cadmium	4.10E-06	1.10E-05	3.68E-06	1.07E-05	2.24E-06	1.33E-06	-4.92E-05	-5.03E-05	-5.14E-05	-5.25E-05	-5.36E-05	-5.47E-05	-5.58E-05	-5.69E-05	-5.80E-05	-5.91E-05	-6.02E-05	0.02
chlorine	4.23E-04	1.57E-03	6.41E-04	1.32E-03	2.19E-04	7.46E-05	1.22E-02	1.28E-02	1.33E-02	1.39E-02	1.45E-02	1.50E-02	1.56E-02	1.62E-02	1.68E-02	1.73E-02	1.79E-02	0.2
chromium	7.97E-06	6.82E-05	2.03E-05	6.40E-05	9.41E-06	3.68E-06	1.03E-04	1.19E-04	1.34E-04	1.49E-04	1.64E-04	1.80E-04	1.95E-04	2.10E-04	2.26E-04	2.41E-04	2.56E-04	0*
cobalt	3.73E-06	3.39E-05	9.96E-06	3.24E-05	4.40E-06	1.87E-06	7.66E-05	8.03E-05	8.40E-05	8.77E-05	9.14E-05	9.51E-05	9.88E-05	1.02E-04	1.06E-04	1.10E-04	1.14E-04	NA
copper	4.52E-05	1.05E-04	5.01E-05	7.39E-05	2.20E-05	5.78E-06	7.80E-05	1.18E-04	1.57E-04	1.97E-04	2.37E-04	2.76E-04	3.16E-04	3.56E-04	3.96E-04	4.35E-04	4.75E-04	NA
lead	4.85E-06	1.53E-04	3.70E-05	1.54E-04	1.93E-05	8.79E-06	-2.21E-03	-1.97E-03	-1.72E-03	-1.48E-03	-1.23E-03	-9.90E-04	-7.46E-04	-5.01E-04	-2.57E-04	-1.20E-05	2.33E-04	NA
manganese	1.27E-05	2.63E-04	6.73E-05	2.59E-04	3.35E-05	1.44E-05	4.74E-05	5.75E-05	6.77E-05	7.78E-05	8.80E-05	9.81E-05	1.08E-04	1.18E-04	1.29E-04	1.39E-04	1.49E-04	0.09
mercury	3.07E-06	6.29E-06	2.30E-06	6.04E-06	1.45E-06	8.92E-07	-3.70E-05	-3.78E-05	-3.86E-05	-3.94E-05	-4.02E-05	-4.11E-05	-4.19E-05	-4.27E-05	-4.35E-05	-4.43E-05	-4.52E-05	0.03
nickel	6.90E-06	2.59E-05	9.71E-06	2.24E-05	4.17E-06	1.60E-06	4.26E-05	5.09E-05	5.91E-05	6.74E-05	7.57E-05	8.40E-05	9.23E-05	1.01E-04	1.09E-04	1.17E-04	1.25E-04	0.014
selenium	1.14E-06	1.51E-06	6.99E-07	1.34E-06	4.38E-07	2.67E-07	-1.22E-05	-1.24E-05	-1.26E-05	-1.28E-05	-1.29E-05	-1.31E-05	-1.33E-05	-1.35E-05	-1.37E-05	-1.38E-05	-1.40E-05	20
silica, crystalline (respirable)	4.87E-04	5.26E-02	1.24E-02	5.30E-02	6.34E-03	2.79E-03	-3.32E-03	-3.15E-03	-2.98E-03	-2.81E-03	-2.64E-03	-2.47E-03	-2.29E-03	-2.12E-03	-1.95E-03	-1.78E-03	-1.61E-03	3
sulfates	4.25E-03	6.53E-03	3.70E-03	4.74E-03	1.33E-03	5.78E-04	5.88E-02	6.21E-02	6.54E-02	6.87E-02	7.20E-02	7.53E-02	7.87E-02	8.20E-02	8.53E-02	8.86E-02	9.19E-02	NA
vanadium (fume or dust)	5.21E-06	7.64E-05	1.98E-05	7.53E-05	1.02E-05	4.53E-06	-3.51E-05	-3.40E-05	-3.28E-05	-3.16E-05	-3.05E-05	-2.93E-05	-2.82E-05	-2.70E-05	-2.58E-05	-2.47E-05	-2.35E-05	NA
1,3-butadiene	7.09E-04	4.72E-04	3.39E-04	4.16E-04	9.76E-05	1.55E-04	9.06E-02	1.36E-01	1.82E-01	2.27E-01	2.73E-01	3.18E-01	3.64E-01	4.09E-01	4.55E-01	5.01E-01	5.46E-01	2
acetaldehyde	2.48E-02	1.50E-02	1.02E-02	1.34E-02	3.30E-03	5.85E-03	2.12E-01	3.26E-01	4.40E-01	5.55E-01	6.69E-01	7.83E-01	8.97E-01	1.01E+00	1.13E+00	1.24E+00	1.35E+00	140
acrolein	1.27E-06	1.59E-06	1.40E-06	1.27E-06	2.26E-07	7.47E-08	1.39E-01	2.06E-01	2.72E-01	3.39E-01	4.06E-01	4.72E-01	5.39E-01	6.06E-01	6.72E-01	7.39E-01	8.06E-01	0.35
benzene	7.99E-03	6.82E-03	4.42E-03	5.27E-03	1.85E-03	1.67E-03	-1.32E-02	2.82E-02	6.97E-02	1.11E-01	1.53E-01	1.94E-01	2.36E-01	2.77E-01	3.19E-01	3.60E-01	4.02E-01	3
ethyl benzene	1.38E-03	3.21E-03	2.92E-03	3.26E-03	5.89E-04	2.78E-04	-1.83E-02	-1.46E-02	-1.09E-02	-7.27E-03	-3.58E-03	9.53E-05	3.78E-03	7.46E-03	1.11E-02	1.48E-02	1.85E-02	2000
ethyl chloride (chloroethane)	0.00E+00	2.44E-03	5.66E-04	7.61E-04	1.49E-03	1.54E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	30000
ethylene glycol	0.00E+00	2.04E-03	4.73E-04	6.36E-04	1.25E-03	1.29E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	400
formaldehyde	4.95E-02	2.97E-02	2.03E-02	2.68E-02	6.59E-03	1.17E-02	6.40E-01	9.72E-01	1.30E+00	1.64E+00	1.97E+00	2.30E+00	2.63E+00	2.97E+00	3.30E+00	3.63E+00	3.96E+00	9
hexane	8.10E-04	6.63E-04	5.19E-04	5.63E-04	1.20E-04	1.43E-04	-2.25E-02	-2.33E-02	-2.42E-02	-2.50E-02	-2.59E-02	-2.67E-02	-2.76E-02	-2.84E-02	-2.93E-02	-3.01E-02	-3.10E-02	7000
methanol	1.15E-04	7.77E-05	5.63E-05	6.83E-05	1.59E-05	2.47E-05	1.02E-01	1.51E-01	2.00E-01	2.49E-01	2.98E-01	3.47E-01	3.96E-01	4.45E-01	4.94E-01	5.43E-01	5.92E-01	4000
methyl chloride (chloromethane)	0.00E+00	2.04E-03	4.73E-04	6.36E-04	1.25E-03	1.29E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	NA
methyl ethyl ketone (2-butanone)	4.95E-03	2.95E-03	2.00E-03	2.66E-03	6.57E-04	1.18E-03	-3.76E-03	-3.91E-03	-4.05E-03	-4.19E-03	-4.33E-03	-4.48E-03	-4.62E-03	-4.76E-03	-4.90E-03	-5.05E-03	-5.19E-03	NA
methyl tert-butyl ether	8.61E-05	1.07E-04	9.45E-05	8.61E-05	1.53E-05	5.05E-06	-6.95E-03	-7.20E-03	-7.46E-03	-7.72E-03	-7.97E-03	-8.23E-03	-8.49E-03	-8.75E-03	-9.00E-03	-9.26E-03	-9.52E-03	8000
naphthalene	3.90E-04	2.91E-04	2.20E-04	2.51E-04	5.58E-05	7.67E-05	2.33E-02	3.77E-02	5.22E-02	6.66E-02	8.11E-02	9.55E-02	1.10E-01	1.24E-01	1.39E-01	1.53E-01	1.68E-01	9
phenol	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.19E-02	6.16E-02	8.13E-02	1.01E-01	1.21E-01	1.40E-01	1.60E-01	1.80E-01	1.99E-01	2.19E-01	2.39E-01	200
propylene	9.39E-03	6.06E-03	4.29E-03	5.37E-03	1.28E-03	2.11E-03	1.98E-01	3.18E-01	4.39E-01	5.60E-01	6.81E-01	8.01E-01	9.22E-01	1.04E+00	1.16E+00	1.28E+00	1.41E+00	3000
styrene	2.56E-04	1.88E-04	1.42E-04	1.63E-04	3.64E-05	5.09E-05	1.34E-02	2.16E-02	2.98E-02	3.80E-02	4.62E-02	5.44E-02	6.26E-02	7.08E-02	7.90E-02	8.72E-02	9.54E-02	900
toluene	6.45E-03	1.09E-02	9.58E-03	1.07E-02	2.01E-03	1.29E-03	-9.03E-02	-7.76E-02	-6.50E-02	-5.23E-02	-3.97E-02	-2.70E-02	-1.43E-02	-1.69E-03	1.10E-02	2.36E-02	3.63E-02	420
xylenes (mixed)	0.00E+00	8.01E-03	7.84E-03	8.72E-03	1.44E-03	4.37E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	700
<b>Total Acute Hazard Index by Year</b>	<b>1.70E-03</b>	<b>1.44E-03</b>	<b>8.63E-04</b>	<b>1.25E-03</b>	<b>3.04E-04</b>	<b>3.90E-04</b>	<b>1.13E-01</b>	<b>1.71E-01</b>	<b>2.28E-01</b>	<b>2.85E-01</b>	<b>3.43E-01</b>	<b>4.00E-01</b>	<b>4.58E-01</b>	<b>5.15E-01</b>	<b>5.72E-01</b>	<b>6.30E-01</b>	<b>6.87E-01</b>	



OAK Terminal Modernization  
Table 3-5. Acute Hazard Indices

Combined Construction & Operations

Combined Construction + Operations

One-Hour Hazard Index

Construction Only

One-Hour Hazard Index

Operations Only

One-Hour Hazard Index

RecID	UTM X	UTM Y	Receptor Type	Combined Construction + Operations			Construction Only			Operations Only		
				Maximum->	Minimum->	Max RecID->	Exposure Years->	Maximum->	Minimum->	Max RecID->	Exposure Years->	Maximum->
				Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
33	566000.00	4176300.00	ROAD	-	-	9.38E-02	-	-	7.81E-04	-	-	9.38E-02
34	566000.00	4176400.00	WORKER	-	-	9.68E-02	-	-	7.53E-04	-	-	9.68E-02
35	566000.00	4176500.00	WORKER	-	-	1.01E-01	-	-	7.52E-04	-	-	1.01E-01
36	566000.00	4176600.00	RESIDENTIAL	9.64E-02	-	-	7.64E-04	-	-	9.64E-02	-	-
37	566000.00	4176700.00	RESIDENTIAL	7.60E-02	-	-	7.80E-04	-	-	7.60E-02	-	-
38	566000.00	4176800.00	RESIDENTIAL	4.22E-02	-	-	7.90E-04	-	-	4.22E-02	-	-
39	566000.00	4176900.00	RESIDENTIAL	1.58E-02	-	-	7.84E-04	-	-	1.58E-02	-	-
40	566000.00	4177000.00	ROAD	-	-	3.32E-03	-	-	7.59E-04	-	-	3.32E-03
41	566000.00	4177100.00	RESIDENTIAL	6.19E-03	-	-	7.44E-04	-	-	6.19E-03	-	-
42	566000.00	4177200.00	RESIDENTIAL	1.97E-02	-	-	7.23E-04	-	-	1.97E-02	-	-
43	566000.00	4177300.00	RESIDENTIAL	3.44E-02	-	-	7.16E-04	-	-	3.44E-02	-	-
44	566000.00	4177400.00	RESIDENTIAL	4.77E-02	-	-	7.02E-04	-	-	4.77E-02	-	-
45	566000.00	4177500.00	RECREATIONAL	-	-	5.73E-02	-	-	6.80E-04	-	-	-
46	566000.00	4177600.00	SCHOOL	5.69E-02	5.69E-02	5.69E-02	6.74E-04	6.74E-04	6.74E-04	5.69E-02	5.69E-02	5.69E-02
47	566000.00	4177700.00	SCHOOL	5.11E-02	5.11E-02	5.11E-02	6.61E-04	6.61E-04	6.61E-04	5.11E-02	5.11E-02	5.11E-02
48	566000.00	4177800.00	RESIDENTIAL	4.48E-02	-	-	6.58E-04	-	-	4.48E-02	-	-
49	566000.00	4177900.00	RESIDENTIAL	4.82E-02	-	-	6.46E-04	-	-	4.82E-02	-	-
50	566000.00	4178000.00	RESIDENTIAL	5.78E-02	-	-	6.32E-04	-	-	5.78E-02	-	-
79	566100.00	4176200.00	RECREATIONAL	-	-	9.78E-02	-	-	8.19E-04	-	-	-
80	566100.00	4176300.00	RECREATIONAL	-	-	9.84E-02	-	-	7.98E-04	-	-	-
81	566100.00	4176400.00	RECREATIONAL	-	-	1.01E-01	-	-	7.79E-04	-	-	-
83	566100.00	4176600.00	RESIDENTIAL	8.60E-02	-	-	8.02E-04	-	-	8.60E-02	-	-
84	566100.00	4176700.00	RESIDENTIAL	4.83E-02	-	-	8.14E-04	-	-	4.83E-02	-	-
85	566100.00	4176800.00	RESIDENTIAL	1.39E-02	-	-	8.16E-04	-	-	1.39E-02	-	-
86	566100.00	4176900.00	RESIDENTIAL	8.20E-03	-	-	7.98E-04	-	-	8.20E-03	-	-
87	566100.00	4177000.00	RESIDENTIAL	4.37E-03	-	-	7.75E-04	-	-	4.37E-03	-	-
88	566100.00	4177100.00	RESIDENTIAL	1.91E-02	-	-	7.53E-04	-	-	1.91E-02	-	-
89	566100.00	4177200.00	RESIDENTIAL	3.36E-02	-	-	7.42E-04	-	-	3.36E-02	-	-
90	566100.00	4177300.00	RESIDENTIAL	4.77E-02	-	-	7.31E-04	-	-	4.77E-02	-	-
91	566100.00	4177400.00	RESIDENTIAL	6.05E-02	-	-	7.07E-04	-	-	6.05E-02	-	-
92	566100.00	4177500.00	RESIDENTIAL	5.73E-02	-	-	6.99E-04	-	-	5.73E-02	-	-
93	566100.00	4177600.00	RESIDENTIAL	5.02E-02	-	-	6.87E-04	-	-	5.02E-02	-	-
94	566100.00	4177700.00	RESIDENTIAL	4.53E-02	-	-	6.81E-04	-	-	4.53E-02	-	-
95	566100.00	4177800.00	RESIDENTIAL	5.24E-02	-	-	6.70E-04	-	-	5.24E-02	-	-
96	566100.00	4177900.00	RESIDENTIAL	6.32E-02	-	-	6.55E-04	-	-	6.32E-02	-	-
97	566100.00	4178000.00	RESIDENTIAL	6.93E-02	-	-	6.46E-04	-	-	6.93E-02	-	-
123	566200.00	4176100.00	ROAD	-	-	9.95E-02	-	-	8.53E-04	-	-	9.95E-02
124	566200.00	4176200.00	WORKER	-	-	1.02E-01	-	-	8.43E-04	-	-	1.02E-01
125	566200.00	4176300.00	WORKER	-	-	1.03E-01	-	-	8.11E-04	-	-	1.03E-01
127	566200.00	4176500.00	RESIDENTIAL	8.98E-02	-	-	8.21E-04	-	-	8.98E-02	-	-
128	566200.00	4176600.00	RESIDENTIAL	6.57E-02	-	-	8.36E-04	-	-	6.57E-02	-	-
129	566200.00	4176700.00	RESIDENTIAL	2.77E-02	-	-	8.46E-04	-	-	2.77E-02	-	-
130	566200.00	4176800.00	RESIDENTIAL	1.57E-02	-	-	8.35E-04	-	-	1.57E-02	-	-
131	566200.00	4176900.00	RESIDENTIAL	3.13E-03	-	-	8.07E-04	-	-	3.13E-03	-	-
132	566200.00	4177000.00	RESIDENTIAL	1.78E-02	-	-	7.89E-04	-	-	1.78E-02	-	-
133	566200.00	4177100.00	RESIDENTIAL	3.32E-02	-	-	7.70E-04	-	-	3.32E-02	-	-
134	566200.00	4177200.00	RESIDENTIAL	4.81E-02	-	-	7.62E-04	-	-	4.81E-02	-	-
135	566200.00	4177300.00	RESIDENTIAL	6.20E-02	-	-	7.39E-04	-	-	6.20E-02	-	-
136	566200.00	4177400.00	RESIDENTIAL	6.00E-02	-	-	7.25E-04	-	-	6.00E-02	-	-
137	566200.00	4177500.00	RESIDENTIAL	5.15E-02	-	-	7.14E-04	-	-	5.15E-02	-	-
138	566200.00	4177600.00	RESIDENTIAL	4.55E-02	-	-	7.06E-04	-	-	4.55E-02	-	-
139	566200.00	4177700.00	RESIDENTIAL	5.86E-02	-	-	6.95E-04	-	-	5.86E-02	-	-
140	566200.00	4177800.00	RESIDENTIAL	6.84E-02	-	-	6.79E-04	-	-	6.84E-02	-	-
141	566200.00	4177900.00	RESIDENTIAL	7.43E-02	-	-	6.70E-04	-	-	7.43E-02	-	-
142	566200.00	4178000.00	RESIDENTIAL	9.77E-02	-	-	6.54E-04	-	-	9.77E-02	-	-
166	566300.00	4176000.00	WORKER	-	-	1.02E-01	-	-	8.82E-04	-	-	1.02E-01
167	566300.00	4176100.00	WORKER	-	-	1.03E-01	-	-	8.83E-04	-	-	1.03E-01
168	566300.00	4176200.00	WORKER	-	-	1.06E-01	-	-	8.62E-04	-	-	1.06E-01
169	566300.00	4176300.00	WORKER	-	-	1.07E-01	-	-	8.38E-04	-	-	1.07E-01
170	566300.00	4176400.00	RESIDENTIAL	9.84E-02	-	-	8.37E-04	-	-	9.84E-02	-	-
171	566300.00	4176500.00	RESIDENTIAL	7.16E-02	-	-	8.62E-04	-	-	7.16E-02	-	-
172	566300.00	4176600.00	RESIDENTIAL	3.07E-02	-	-	8.75E-04	-	-	3.07E-02	-	-
173	566300.00	4176700.00	RESIDENTIAL	1.55E-02	-	-	8.73E-04	-	-	1.55E-02	-	-

OAK Terminal Modernization  
Table 3-5. Acute Hazard Indices

Combined Construction & Operations

Combined Construction + Operations

One-Hour Hazard Index

Construction Only

One-Hour Hazard Index

Operations Only

One-Hour Hazard Index

ReclD	UTM X	UTM Y	Receptor Type	Combined Construction + Operations			Construction Only			Operations Only		
				Maximum->	Minimum->	Max ReclD->	Maximum->	Minimum->	Max ReclD->	Maximum->	Minimum->	Max ReclD->
				2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
				Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
174	566300.00	4176800.00	RESIDENTIAL	3.83E-03	-	-	8.48E-04	-	-	3.83E-03	-	-
175	566300.00	4176900.00	RESIDENTIAL	1.75E-02	-	-	8.26E-04	-	-	1.75E-02	-	-
176	566300.00	4177000.00	RESIDENTIAL	3.31E-02	-	-	8.00E-04	-	-	3.31E-02	-	-
177	566300.00	4177100.00	RESIDENTIAL	4.85E-02	-	-	7.94E-04	-	-	4.85E-02	-	-
178	566300.00	4177200.00	RESIDENTIAL	6.30E-02	-	-	7.74E-04	-	-	6.30E-02	-	-
179	566300.00	4177300.00	RESIDENTIAL	7.09E-02	-	-	7.51E-04	-	-	7.09E-02	-	-
180	566300.00	4177400.00	RESIDENTIAL	5.79E-02	-	-	7.43E-04	-	-	5.79E-02	-	-
181	566300.00	4177500.00	RESIDENTIAL	5.33E-02	-	-	7.32E-04	-	-	5.33E-02	-	-
182	566300.00	4177600.00	RESIDENTIAL	6.50E-02	-	-	7.22E-04	-	-	6.50E-02	-	-
183	566300.00	4177700.00	RESIDENTIAL	7.46E-02	-	-	7.05E-04	-	-	7.46E-02	-	-
184	566300.00	4177800.00	RESIDENTIAL	8.07E-02	-	-	6.96E-04	-	-	8.07E-02	-	-
185	566300.00	4177900.00	RESIDENTIAL	1.17E-01	-	-	6.78E-04	-	-	1.17E-01	-	-
186	566300.00	4178000.00	RESIDENTIAL	1.42E-01	-	-	6.64E-04	-	-	1.42E-01	-	-
210	566400.00	4175900.00	WORKER	-	-	1.05E-01	-	-	9.21E-04	-	-	1.05E-01
211	566400.00	4176000.00	WORKER	-	-	1.05E-01	-	-	9.18E-04	-	-	1.05E-01
212	566400.00	4176100.00	WORKER	-	-	1.07E-01	-	-	9.11E-04	-	-	1.07E-01
213	566400.00	4176200.00	WORKER	-	-	1.10E-01	-	-	8.78E-04	-	-	1.10E-01
214	566400.00	4176300.00	RESIDENTIAL	1.02E-01	-	-	8.69E-04	-	-	1.02E-01	-	-
215	566400.00	4176400.00	RESIDENTIAL	7.35E-02	-	-	8.86E-04	-	-	7.35E-02	-	-
216	566400.00	4176500.00	RESIDENTIAL	3.86E-02	-	-	9.01E-04	-	-	3.86E-02	-	-
217	566400.00	4176600.00	RESIDENTIAL	1.95E-02	-	-	9.09E-04	-	-	1.95E-02	-	-
218	566400.00	4176700.00	RESIDENTIAL	7.34E-03	-	-	8.92E-04	-	-	7.34E-03	-	-
219	566400.00	4176800.00	RESIDENTIAL	1.63E-02	-	-	8.63E-04	-	-	1.63E-02	-	-
220	566400.00	4176900.00	RESIDENTIAL	3.37E-02	-	-	8.37E-04	-	-	3.37E-02	-	-
221	566400.00	4177000.00	RESIDENTIAL	5.00E-02	-	-	8.27E-04	-	-	5.00E-02	-	-
222	566400.00	4177100.00	RESIDENTIAL	6.45E-02	-	-	8.10E-04	-	-	6.45E-02	-	-
223	566400.00	4177200.00	RESIDENTIAL	7.16E-02	-	-	7.80E-04	-	-	7.16E-02	-	-
224	566400.00	4177300.00	RESIDENTIAL	6.39E-02	-	-	7.74E-04	-	-	6.39E-02	-	-
225	566400.00	4177400.00	RESIDENTIAL	6.46E-02	-	-	7.59E-04	-	-	6.46E-02	-	-
226	566400.00	4177500.00	RESIDENTIAL	7.36E-02	-	-	7.51E-04	-	-	7.36E-02	-	-
227	566400.00	4177600.00	RESIDENTIAL	8.07E-02	-	-	7.31E-04	-	-	8.07E-02	-	-
228	566400.00	4177700.00	RESIDENTIAL	9.91E-02	-	-	7.23E-04	-	-	9.91E-02	-	-
229	566400.00	4177800.00	RESIDENTIAL	1.37E-01	-	-	7.05E-04	-	-	1.37E-01	-	-
230	566400.00	4177900.00	RESIDENTIAL	1.57E-01	-	-	6.90E-04	-	-	1.57E-01	-	-
231	566400.00	4178000.00	RESIDENTIAL	1.76E-01	-	-	6.84E-04	-	-	1.76E-01	-	-
254	566500.00	4175800.00	WORKER	-	-	1.09E-01	-	-	9.71E-04	-	-	1.09E-01
255	566500.00	4175900.00	WORKER	-	-	1.06E-01	-	-	9.50E-04	-	-	1.06E-01
256	566500.00	4176000.00	WORKER	-	-	1.09E-01	-	-	9.54E-04	-	-	1.09E-01
257	566500.00	4176100.00	WORKER	-	-	1.12E-01	-	-	9.34E-04	-	-	1.12E-01
258	566500.00	4176200.00	WORKER	-	-	9.60E-02	-	-	9.04E-04	-	-	9.60E-02
259	566500.00	4176300.00	WORKER	-	-	6.54E-02	-	-	9.06E-04	-	-	6.54E-02
260	566500.00	4176400.00	RESIDENTIAL	4.15E-02	-	-	9.31E-04	-	-	4.15E-02	-	-
261	566500.00	4176500.00	RESIDENTIAL	2.69E-02	-	-	9.43E-04	-	-	2.69E-02	-	-
262	566500.00	4176600.00	RESIDENTIAL	1.23E-02	-	-	9.36E-04	-	-	1.23E-02	-	-
263	566500.00	4176700.00	RESIDENTIAL	1.58E-02	-	-	9.03E-04	-	-	1.58E-02	-	-
264	566500.00	4176800.00	RESIDENTIAL	3.39E-02	-	-	8.81E-04	-	-	3.39E-02	-	-
265	566500.00	4176900.00	RESIDENTIAL	5.14E-02	-	-	8.60E-04	-	-	5.14E-02	-	-
266	566500.00	4177000.00	RESIDENTIAL	6.64E-02	-	-	8.48E-04	-	-	6.64E-02	-	-
267	566500.00	4177100.00	RESIDENTIAL	6.38E-02	-	-	8.17E-04	-	-	6.38E-02	-	-
268	566500.00	4177200.00	RESIDENTIAL	6.99E-02	-	-	8.06E-04	-	-	6.99E-02	-	-
269	566500.00	4177300.00	RESIDENTIAL	7.54E-02	-	-	7.89E-04	-	-	7.54E-02	-	-
270	566500.00	4177400.00	RESIDENTIAL	8.37E-02	-	-	7.82E-04	-	-	8.37E-02	-	-
271	566500.00	4177500.00	RESIDENTIAL	8.91E-02	-	-	7.61E-04	-	-	8.91E-02	-	-
272	566500.00	4177600.00	RESIDENTIAL	1.18E-01	-	-	7.52E-04	-	-	1.18E-01	-	-
273	566500.00	4177700.00	RESIDENTIAL	1.51E-01	-	-	7.33E-04	-	-	1.51E-01	-	-
274	566500.00	4177800.00	RESIDENTIAL	1.71E-01	-	-	7.16E-04	-	-	1.71E-01	-	-
275	566500.00	4177900.00	RESIDENTIAL	1.92E-01	-	-	7.10E-04	-	-	1.92E-01	-	-
276	566500.00	4178000.00	RESIDENTIAL	2.12E-01	-	-	6.94E-04	-	-	2.12E-01	-	-
297	566600.00	4175700.00	WORKER	-	-	1.13E-01	-	-	1.04E-03	-	-	1.13E-01
298	566600.00	4175800.00	WORKER	-	-	1.09E-01	-	-	1.00E-03	-	-	1.09E-01
299	566600.00	4175900.00	WORKER	-	-	1.09E-01	-	-	9.90E-04	-	-	1.09E-01
300	566600.00	4176000.00	WORKER	-	-	1.13E-01	-	-	9.87E-04	-	-	1.13E-01
301	566600.00	4176100.00	WORKER	-	-	9.59E-02	-	-	9.54E-04	-	-	9.59E-02

OAK Terminal Modernization  
Table 3-5. Acute Hazard Indices

Combined Construction & Operations

Combined Construction + Operations

One-Hour Hazard Index

Construction Only

One-Hour Hazard Index

Operations Only

One-Hour Hazard Index

RecID	UTM X	UTM Y	Receptor Type	Combined Construction + Operations			Construction Only			Operations Only					
				Maximum->	Minimum->	Max RecID->	Exposure Years->	Maximum->	Minimum->	Max RecID->	Exposure Years->	Maximum->	Minimum->	Max RecID->	Exposure Years->
				3.78E-01	3.26E-01	6.87E-01	2.85E-03	2.18E-03	8.87E-03	3.78E-01	3.26E-01	5.63E-01	2028-2038	2028-2038	2028-2038
				3.34E-04	1.54E-02	1.05E-03	3.17E-04	3.93E-04	3.93E-04	-1.60E-01	1.54E-02	-3.97E-01			
				1548	1879	881	1546	1879	3296	1548	1879	1292			
				2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038			
				Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker			
302	566600.00	4176200.00	WORKER	-	-	7.59E-02	-	-	9.39E-04	-	-	7.59E-02			
303	566600.00	4176300.00	RESIDENTIAL	5.13E-02	-	-	9.60E-04	-	-	5.13E-02	-	-			
304	566600.00	4176400.00	RESIDENTIAL	3.48E-02	-	-	9.76E-04	-	-	3.48E-02	-	-			
305	566600.00	4176500.00	RESIDENTIAL	1.84E-02	-	-	9.79E-04	-	-	1.84E-02	-	-			
306	566600.00	4176600.00	RESIDENTIAL	1.66E-02	-	-	9.54E-04	-	-	1.66E-02	-	-			
307	566600.00	4176700.00	RESIDENTIAL	3.53E-02	-	-	9.26E-04	-	-	3.53E-02	-	-			
308	566600.00	4176800.00	RESIDENTIAL	5.35E-02	-	-	8.94E-04	-	-	5.35E-02	-	-			
309	566600.00	4176900.00	RESIDENTIAL	6.88E-02	-	-	8.87E-04	-	-	6.88E-02	-	-			
310	566600.00	4177000.00	RESIDENTIAL	6.47E-02	-	-	8.59E-04	-	-	6.47E-02	-	-			
311	566600.00	4177100.00	RESIDENTIAL	6.79E-02	-	-	8.41E-04	-	-	6.79E-02	-	-			
312	566600.00	4177200.00	RESIDENTIAL	8.74E-02	-	-	8.23E-04	-	-	8.74E-02	-	-			
313	566600.00	4177300.00	RESIDENTIAL	9.64E-02	-	-	8.15E-04	-	-	9.64E-02	-	-			
314	566600.00	4177400.00	RESIDENTIAL	9.86E-02	-	-	7.94E-04	-	-	9.86E-02	-	-			
315	566600.00	4177500.00	RESIDENTIAL	1.36E-01	-	-	7.82E-04	-	-	1.36E-01	-	-			
316	566600.00	4177600.00	RESIDENTIAL	1.63E-01	-	-	7.64E-04	-	-	1.63E-01	-	-			
317	566600.00	4177700.00	RESIDENTIAL	1.86E-01	-	-	7.45E-04	-	-	1.86E-01	-	-			
318	566600.00	4177800.00	RESIDENTIAL	2.07E-01	-	-	7.38E-04	-	-	2.07E-01	-	-			
319	566600.00	4177900.00	RESIDENTIAL	2.29E-01	-	-	7.21E-04	-	-	2.29E-01	-	-			
320	566600.00	4178000.00	RESIDENTIAL	2.47E-01	-	-	7.02E-04	-	-	2.47E-01	-	-			
340	566700.00	4175600.00	ROAD	-	-	1.05E-01	-	-	1.11E-03	-	-	1.05E-01			
341	566700.00	4175700.00	WORKER	-	-	1.13E-01	-	-	1.07E-03	-	-	1.13E-01			
342	566700.00	4175800.00	WORKER	-	-	1.11E-01	-	-	1.04E-03	-	-	1.11E-01			
343	566700.00	4175900.00	WORKER	-	-	1.13E-01	-	-	1.03E-03	-	-	1.13E-01			
344	566700.00	4176000.00	WORKER	-	-	1.03E-01	-	-	1.02E-03	-	-	1.03E-01			
345	566700.00	4176100.00	WORKER	-	-	8.13E-02	-	-	9.81E-04	-	-	8.13E-02			
346	566700.00	4176200.00	WORKER	-	-	4.90E-02	-	-	9.85E-04	-	-	4.90E-02			
347	566700.00	4176300.00	RESIDENTIAL	4.54E-02	-	-	1.01E-03	-	-	4.54E-02	-	-			
348	566700.00	4176400.00	RESIDENTIAL	2.50E-02	-	-	1.02E-03	-	-	2.50E-02	-	-			
349	566700.00	4176500.00	RESIDENTIAL	1.97E-02	-	-	1.01E-03	-	-	1.97E-02	-	-			
350	566700.00	4176600.00	RESIDENTIAL	3.73E-02	-	-	9.72E-04	-	-	3.73E-02	-	-			
351	566700.00	4176700.00	RESIDENTIAL	5.58E-02	-	-	9.40E-04	-	-	5.58E-02	-	-			
352	566700.00	4176800.00	RESIDENTIAL	7.27E-02	-	-	9.28E-04	-	-	7.27E-02	-	-			
353	566700.00	4176900.00	RESIDENTIAL	6.69E-02	-	-	9.04E-04	-	-	6.69E-02	-	-			
354	566700.00	4177000.00	RESIDENTIAL	7.83E-02	-	-	8.77E-04	-	-	7.83E-02	-	-			
355	566700.00	4177100.00	RESIDENTIAL	9.79E-02	-	-	8.62E-04	-	-	9.79E-02	-	-			
356	566700.00	4177200.00	RESIDENTIAL	1.10E-01	-	-	8.50E-04	-	-	1.10E-01	-	-			
357	566700.00	4177300.00	RESIDENTIAL	1.15E-01	-	-	8.30E-04	-	-	1.15E-01	-	-			
358	566700.00	4177400.00	RESIDENTIAL	1.54E-01	-	-	8.15E-04	-	-	1.54E-01	-	-			
359	566700.00	4177500.00	RESIDENTIAL	1.77E-01	-	-	7.97E-04	-	-	1.77E-01	-	-			
360	566700.00	4177600.00	RESIDENTIAL	2.02E-01	-	-	7.76E-04	-	-	2.02E-01	-	-			
361	566700.00	4177700.00	RESIDENTIAL	2.24E-01	-	-	7.67E-04	-	-	2.24E-01	-	-			
362	566700.00	4177800.00	RESIDENTIAL	2.46E-01	-	-	7.48E-04	-	-	2.46E-01	-	-			
363	566700.00	4177900.00	RESIDENTIAL	2.62E-01	-	-	7.29E-04	-	-	2.62E-01	-	-			
364	566700.00	4178000.00	RESIDENTIAL	2.49E-01	-	-	7.21E-04	-	-	2.49E-01	-	-			
383	566800.00	4175500.00	WORKER	-	-	1.01E-01	-	-	1.15E-03	-	-	1.01E-01			
384	566800.00	4175600.00	ROAD	-	-	1.20E-01	-	-	1.15E-03	-	-	1.20E-01			
385	566800.00	4175700.00	WORKER	-	-	1.14E-01	-	-	1.10E-03	-	-	1.14E-01			
386	566800.00	4175800.00	WORKER	-	-	1.15E-01	-	-	1.07E-03	-	-	1.15E-01			
387	566800.00	4175900.00	WORKER	-	-	1.09E-01	-	-	1.07E-03	-	-	1.09E-01			
388	566800.00	4176000.00	WORKER	-	-	8.56E-02	-	-	1.04E-03	-	-	8.56E-02			
389	566800.00	4176100.00	WORKER	-	-	6.86E-02	-	-	1.02E-03	-	-	6.86E-02			
390	566800.00	4176200.00	RESIDENTIAL	5.77E-02	-	-	1.05E-03	-	-	5.77E-02	-	-			
391	566800.00	4176300.00	RESIDENTIAL	3.15E-02	-	-	1.06E-03	-	-	3.15E-02	-	-			
392	566800.00	4176400.00	RESIDENTIAL	2.32E-02	-	-	1.06E-03	-	-	2.32E-02	-	-			
393	566800.00	4176500.00	RESIDENTIAL	4.01E-02	-	-	1.02E-03	-	-	4.01E-02	-	-			
394	566800.00	4176600.00	RESIDENTIAL	5.99E-02	-	-	9.94E-04	-	-	5.99E-02	-	-			
395	566800.00	4176700.00	RESIDENTIAL	7.66E-02	-	-	9.71E-04	-	-	7.66E-02	-	-			
396	566800.00	4176800.00	RESIDENTIAL	7.21E-02	-	-	9.51E-04	-	-	7.21E-02	-	-			
397	566800.00	4176900.00	RESIDENTIAL	9.02E-02	-	-	9.16E-04	-	-	9.02E-02	-	-			
398	566800.00	4177000.00	RESIDENTIAL	1.09E-01	-	-	9.03E-04	-	-	1.09E-01	-	-			
399	566800.00	4177100.00	RESIDENTIAL	1.22E-01	-	-	8.88E-04	-	-	1.22E-01	-	-			
400	566800.00	4177200.00	RESIDENTIAL	1.43E-01	-	-	8.69E-04	-	-	1.43E-01	-	-			
401	566800.00	4177300.00	RESIDENTIAL	1.71E-01	-	-	8.50E-04	-	-	1.71E-01	-	-			



OAK Terminal Modernization  
Table 3-5. Acute Hazard Indices

Combined Construction & Operations

Combined Construction + Operations

One-Hour Hazard Index

Construction Only

One-Hour Hazard Index

Operations Only

One-Hour Hazard Index

RecID	UTM X	UTM Y	Receptor Type	Combined Construction + Operations			Construction Only			Operations Only		
				Maximum->	Minimum->	Max RecID->	Maximum->	Minimum->	Max RecID->	Maximum->	Minimum->	Max RecID->
				2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
				Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
513	567100.00	4175300.00	WORKER	-	-	1.05E-01	-	-	1.33E-03	-	-	1.05E-01
514	567100.00	4175400.00	WORKER	-	-	1.19E-01	-	-	1.33E-03	-	-	1.19E-01
515	567100.00	4175500.00	WORKER	-	-	1.24E-01	-	-	1.32E-03	-	-	1.24E-01
516	567100.00	4175600.00	WORKER	-	-	1.28E-01	-	-	1.26E-03	-	-	1.28E-01
517	567100.00	4175700.00	WORKER	-	-	1.21E-01	-	-	1.23E-03	-	-	1.21E-01
518	567100.00	4175800.00	WORKER	-	-	1.01E-01	-	-	1.22E-03	-	-	1.01E-01
519	567100.00	4175900.00	WORKER	-	-	9.20E-02	-	-	1.17E-03	-	-	9.20E-02
520	567100.00	4176000.00	RESIDENTIAL	6.74E-02	-	-	1.18E-03	-	-	6.74E-02	-	-
521	567100.00	4176100.00	RESIDENTIAL	3.59E-02	-	-	1.21E-03	-	-	3.59E-02	-	-
522	567100.00	4176200.00	RESIDENTIAL	6.24E-02	-	-	1.21E-03	-	-	6.24E-02	-	-
523	567100.00	4176300.00	RESIDENTIAL	8.52E-02	-	-	1.18E-03	-	-	8.52E-02	-	-
524	567100.00	4176400.00	RESIDENTIAL	8.76E-02	-	-	1.14E-03	-	-	8.76E-02	-	-
525	567100.00	4176500.00	RESIDENTIAL	1.06E-01	-	-	1.11E-03	-	-	1.06E-01	-	-
526	567100.00	4176600.00	RESIDENTIAL	1.36E-01	-	-	1.08E-03	-	-	1.36E-01	-	-
527	567100.00	4176700.00	RESIDENTIAL	1.54E-01	-	-	1.04E-03	-	-	1.54E-01	-	-
528	567100.00	4176800.00	RESIDENTIAL	1.76E-01	-	-	1.02E-03	-	-	1.76E-01	-	-
529	567100.00	4176900.00	RESIDENTIAL	2.05E-01	-	-	1.00E-03	-	-	2.05E-01	-	-
530	567100.00	4177000.00	RESIDENTIAL	2.38E-01	-	-	9.76E-04	-	-	2.38E-01	-	-
531	567100.00	4177100.00	RESIDENTIAL	2.65E-01	-	-	9.59E-04	-	-	2.65E-01	-	-
532	567100.00	4177200.00	RESIDENTIAL	2.89E-01	-	-	9.32E-04	-	-	2.89E-01	-	-
533	567100.00	4177300.00	RESIDENTIAL	3.14E-01	-	-	9.07E-04	-	-	3.14E-01	-	-
534	567100.00	4177400.00	RESIDENTIAL	2.97E-01	-	-	8.81E-04	-	-	2.97E-01	-	-
535	567100.00	4177500.00	RESIDENTIAL	2.65E-01	-	-	8.59E-04	-	-	2.65E-01	-	-
536	567100.00	4177600.00	RESIDENTIAL	2.34E-01	-	-	8.56E-04	-	-	2.34E-01	-	-
537	567100.00	4177700.00	RESIDENTIAL	2.14E-01	-	-	8.42E-04	-	-	2.14E-01	-	-
538	567100.00	4177800.00	RESIDENTIAL	1.86E-01	-	-	8.17E-04	-	-	1.86E-01	-	-
539	567100.00	4177900.00	RESIDENTIAL	1.52E-01	-	-	7.90E-04	-	-	1.52E-01	-	-
540	567100.00	4178000.00	RESIDENTIAL	1.47E-01	-	-	7.80E-04	-	-	1.47E-01	-	-
556	567200.00	4175200.00	WORKER	-	-	1.14E-01	-	-	1.43E-03	-	-	1.14E-01
557	567200.00	4175300.00	WORKER	-	-	9.59E-02	-	-	1.40E-03	-	-	9.59E-02
558	567200.00	4175400.00	WORKER	-	-	1.17E-01	-	-	1.39E-03	-	-	1.17E-01
559	567200.00	4175500.00	WORKER	-	-	1.18E-01	-	-	1.37E-03	-	-	1.18E-01
560	567200.00	4175600.00	WORKER	-	-	1.17E-01	-	-	1.30E-03	-	-	1.17E-01
561	567200.00	4175700.00	WORKER	-	-	1.11E-01	-	-	1.29E-03	-	-	1.11E-01
562	567200.00	4175800.00	WORKER	-	-	1.05E-01	-	-	1.26E-03	-	-	1.05E-01
563	567200.00	4175900.00	WORKER	-	-	8.70E-02	-	-	1.23E-03	-	-	8.70E-02
564	567200.00	4176000.00	RESIDENTIAL	4.10E-02	-	-	1.26E-03	-	-	4.10E-02	-	-
565	567200.00	4176100.00	RESIDENTIAL	7.29E-02	-	-	1.28E-03	-	-	7.29E-02	-	-
566	567200.00	4176200.00	RESIDENTIAL	9.82E-02	-	-	1.25E-03	-	-	9.82E-02	-	-
567	567200.00	4176300.00	RESIDENTIAL	1.01E-01	-	-	1.21E-03	-	-	1.01E-01	-	-
568	567200.00	4176400.00	RESIDENTIAL	1.25E-01	-	-	1.17E-03	-	-	1.25E-01	-	-
569	567200.00	4176500.00	RESIDENTIAL	1.55E-01	-	-	1.14E-03	-	-	1.55E-01	-	-
570	567200.00	4176600.00	RESIDENTIAL	1.71E-01	-	-	1.10E-03	-	-	1.71E-01	-	-
571	567200.00	4176700.00	RESIDENTIAL	1.98E-01	-	-	1.07E-03	-	-	1.98E-01	-	-
572	567200.00	4176800.00	RESIDENTIAL	2.29E-01	-	-	1.06E-03	-	-	2.29E-01	-	-
573	567200.00	4176900.00	RESIDENTIAL	2.63E-01	-	-	1.02E-03	-	-	2.63E-01	-	-
574	567200.00	4177000.00	RESIDENTIAL	2.96E-01	-	-	1.01E-03	-	-	2.96E-01	-	-
575	567200.00	4177100.00	RECREATIONAL	-	-	3.19E-01	-	-	9.79E-04	-	-	-
576	567200.00	4177200.00	RECREATIONAL	-	-	3.26E-01	-	-	9.51E-04	-	-	-
577	567200.00	4177300.00	RECREATIONAL	-	-	3.01E-01	-	-	9.20E-04	-	-	-
578	567200.00	4177400.00	RECREATIONAL	-	-	2.56E-01	-	-	8.99E-04	-	-	-
579	567200.00	4177500.00	RECREATIONAL	-	-	2.35E-01	-	-	8.95E-04	-	-	-
580	567200.00	4177600.00	RECREATIONAL	-	-	2.09E-01	-	-	8.78E-04	-	-	-
581	567200.00	4177700.00	ROAD	-	-	1.72E-01	-	-	8.49E-04	-	-	1.72E-01
582	567200.00	4177800.00	SCHOOL	1.58E-01	1.58E-01	1.58E-01	8.27E-04	8.27E-04	8.27E-04	1.58E-01	1.58E-01	1.58E-01
583	567200.00	4177900.00	RESIDENTIAL	1.84E-01	-	-	8.13E-04	-	-	1.84E-01	-	-
584	567200.00	4178000.00	RESIDENTIAL	2.05E-01	-	-	7.90E-04	-	-	2.05E-01	-	-
599	567300.00	4175100.00	WORKER	-	-	1.32E-01	-	-	1.51E-03	-	-	1.32E-01
600	567300.00	4175200.00	WORKER	-	-	8.27E-02	-	-	1.50E-03	-	-	8.27E-02
601	567300.00	4175300.00	WORKER	-	-	1.15E-01	-	-	1.48E-03	-	-	1.15E-01
602	567300.00	4175400.00	WORKER	-	-	1.14E-01	-	-	1.46E-03	-	-	1.14E-01
603	567300.00	4175500.00	WORKER	-	-	1.25E-01	-	-	1.42E-03	-	-	1.25E-01
604	567300.00	4175600.00	WORKER	-	-	1.14E-01	-	-	1.36E-03	-	-	1.14E-01























































OAK Terminal Modernization

Table 3-5. Acute Hazard Indices

Combined Construction & Operations

Combined Construction + Operations

One-Hour Hazard Index

Construction Only

One-Hour Hazard Index

Operations Only

One-Hour Hazard Index

ReclD	UTM X	UTM Y	Receptor Type	Combined Construction + Operations			Construction Only			Operations Only		
				Maximum->	Minimum->	Max ReclD->	Maximum->	Minimum->	Max ReclD->	Maximum->	Minimum->	Max ReclD->
				2025-2038	2025-2038	2025-2038	2025-2030	2025-2030	2025-2030	2028-2038	2028-2038	2028-2038
				Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker	Adult Resident & Child Resident	School Child	Adult Worker
3258	575000.00	4179750.00	RESIDENTIAL	1.60E-02	-	-	8.55E-04	-	-	1.60E-02	-	-
3259	573750.00	4180000.00	RESIDENTIAL	7.05E-02	-	-	9.62E-04	-	-	7.05E-02	-	-
3260	574000.00	4180000.00	RESIDENTIAL	7.63E-02	-	-	8.82E-04	-	-	7.63E-02	-	-
3261	574250.00	4180000.00	RESIDENTIAL	7.45E-02	-	-	7.82E-04	-	-	7.45E-02	-	-
3262	574500.00	4180000.00	RESIDENTIAL	4.53E-02	-	-	6.92E-04	-	-	4.53E-02	-	-
3263	574750.00	4180000.00	RESIDENTIAL	6.35E-02	-	-	7.53E-04	-	-	6.35E-02	-	-
3264	575000.00	4180000.00	RESIDENTIAL	9.28E-02	-	-	8.17E-04	-	-	9.28E-02	-	-
3265	573750.00	4180250.00	RESIDENTIAL	8.15E-02	-	-	8.62E-04	-	-	8.15E-02	-	-
3266	574000.00	4180250.00	RESIDENTIAL	3.13E-02	-	-	7.21E-04	-	-	3.13E-02	-	-
3267	574250.00	4180250.00	RESIDENTIAL	6.39E-02	-	-	7.14E-04	-	-	6.39E-02	-	-
3268	574500.00	4180250.00	RESIDENTIAL	7.56E-02	-	-	7.48E-04	-	-	7.56E-02	-	-
3269	574750.00	4180250.00	RESIDENTIAL	6.32E-02	-	-	7.09E-04	-	-	6.32E-02	-	-
3270	575000.00	4180250.00	RESIDENTIAL	6.15E-02	-	-	7.15E-04	-	-	6.15E-02	-	-
3271	573750.00	4180500.00	RESIDENTIAL	9.37E-02	-	-	7.31E-04	-	-	9.37E-02	-	-
3272	574000.00	4180500.00	RESIDENTIAL	1.50E-02	-	-	6.47E-04	-	-	1.50E-02	-	-
3273	574250.00	4180500.00	RESIDENTIAL	3.68E-02	-	-	7.05E-04	-	-	3.68E-02	-	-
3274	574500.00	4180500.00	RESIDENTIAL	6.24E-02	-	-	7.80E-04	-	-	6.24E-02	-	-
3275	574750.00	4180500.00	RESIDENTIAL	4.52E-02	-	-	6.35E-04	-	-	4.52E-02	-	-
3276	575000.00	4180500.00	RESIDENTIAL	6.76E-02	-	-	6.95E-04	-	-	6.76E-02	-	-
3277	573750.00	4180750.00	RESIDENTIAL	1.44E-01	-	-	6.53E-04	-	-	1.44E-01	-	-
3278	574000.00	4180750.00	RESIDENTIAL	8.22E-02	-	-	6.96E-04	-	-	8.22E-02	-	-
3279	574250.00	4180750.00	RESIDENTIAL	3.05E-02	-	-	7.37E-04	-	-	3.05E-02	-	-
3280	574500.00	4180750.00	RESIDENTIAL	3.95E-02	-	-	7.29E-04	-	-	3.95E-02	-	-
3281	574750.00	4180750.00	RESIDENTIAL	5.35E-02	-	-	6.51E-04	-	-	5.35E-02	-	-
3282	575000.00	4180750.00	RESIDENTIAL	5.70E-02	-	-	6.27E-04	-	-	5.70E-02	-	-
3283	573750.00	4181000.00	RESIDENTIAL	1.49E-01	-	-	6.89E-04	-	-	1.49E-01	-	-
3284	574000.00	4181000.00	RESIDENTIAL	1.56E-01	-	-	6.70E-04	-	-	1.56E-01	-	-
3285	574250.00	4181000.00	RESIDENTIAL	9.91E-02	-	-	7.30E-04	-	-	9.91E-02	-	-
3286	574500.00	4181000.00	RESIDENTIAL	9.20E-03	-	-	6.79E-04	-	-	9.20E-03	-	-
3287	574750.00	4181000.00	RESIDENTIAL	3.38E-02	-	-	5.12E-04	-	-	3.38E-02	-	-
3288	575000.00	4181000.00	RESIDENTIAL	4.88E-02	-	-	6.31E-04	-	-	4.88E-02	-	-
3289	573750.00	4181250.00	RESIDENTIAL	9.65E-02	-	-	6.38E-04	-	-	9.65E-02	-	-
3290	574000.00	4181250.00	RESIDENTIAL	1.53E-01	-	-	6.57E-04	-	-	1.53E-01	-	-
3291	574250.00	4181250.00	RESIDENTIAL	1.09E-01	-	-	5.31E-04	-	-	1.09E-01	-	-
3292	574500.00	4181250.00	RESIDENTIAL	4.60E-02	-	-	4.97E-04	-	-	4.60E-02	-	-
3293	574750.00	4181250.00	RESIDENTIAL	4.58E-04	-	-	4.58E-04	-	-	-7.94E-04	-	-
3294	575000.00	4181250.00	RESIDENTIAL	3.58E-02	-	-	5.29E-04	-	-	3.58E-02	-	-
3295	570540.00	4175555.00	RECREATIONAL	-	-	3.35E-01	-	-	5.33E-03	-	-	-
3296	570275.00	4174825.00	RECREATIONAL	-	-	5.78E-01	-	-	8.87E-03	-	-	-
3297	570565.00	4174490.00	RECREATIONAL	-	-	4.12E-03	-	-	4.12E-03	-	-	-
3298	571035.00	4175080.00	RECREATIONAL	-	-	2.03E-01	-	-	4.13E-03	-	-	-
3299	570675.00	4175040.00	RECREATIONAL	-	-	3.91E-01	-	-	5.50E-03	-	-	-

**OAK Terminal Modernization**

**Table 3-6. Acute Hazard Indices**

**Combined Construction & Operations**

	<b>One-Hour Hazard Index</b>		
Maximum->	3.37E+00	1.72E-02	3.37E+00
Minimum->	2.09E-02	1.95E-03	2.09E-02
Max ReclD->	5	3	5
Exposure Years->	2025-2038	2025-2030	2028-2038

ReclD	UTM X	UTM Y	Receptor Type	Adult Worker Constructio & Operations	Adult Worker Construction Only	Adult Worker Operations Only
1	569712.76	4174275.96	ON-AIRPORT	4.49E-02	5.37E-03	4.49E-02
2	569483.17	4174092.29	ON-AIRPORT	2.76E-02	6.55E-03	2.76E-02
3	569283.43	4174257.59	ON-AIRPORT	2.09E-02	1.72E-02	2.09E-02
4	569074.50	4174009.64	ON-AIRPORT	9.38E-01	9.16E-03	9.38E-01
5	568792.10	4174895.86	ON-AIRPORT	3.37E+00	4.69E-03	3.37E+00
6	569167.77	4176928.00	ON-AIRPORT	5.38E-01	1.95E-03	5.38E-01
7	569492.49	4176178.97	ON-AIRPORT	8.91E-01	2.75E-03	8.91E-01
8	570228.53	4175725.23	ON-AIRPORT	1.00E-01	5.19E-03	1.00E-01



**PORT OF OAKLAND**

# **Oakland International Airport Terminal Modernization and Development Project**

FINAL  
Human Health Risk Assessment –  
Inhalation Pathway Modeling Protocol

January 6, 2023

**CDM  
Smith**

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# **Oakland International Airport**

## **Terminal Modernization and Development Project**

DRAFT  
Human Health Risk Assessment -  
Inhalation Pathway Modeling Protocol

January 6, 2023

*Prepared for:*

RS&H  
311 California Street, Suite 720  
San Francisco, CA 94104

and

Port of Oakland  
Oakland International Airport  
530 Water Street  
Oakland, CA 94607

*Prepared by:*

CDM Smith  
46 Discovery, Suite 250  
Irvine, California 92618

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# Section 1

## Human Health Risk Assessment General Approach

As owner and operator of Oakland International Airport (OAK or Airport), the Port of Oakland (Port) is the sponsor and Lead Agency of the Terminal Modernization and Development Project (Proposed Project) pursuant to the California Environmental Quality Act (CEQA) Section 21067. As required by CEQA, the Port is preparing an Environmental Impact Report (EIR) which will review and analyze potential air quality impacts resulting from the Proposed Project, including the Human Health Risk Assessment (HHRA).

The objective of this HHRA is to assess incremental changes to health impacts for people exposed to Toxic Air Contaminants (TACs) resulting from construction and operation associated with the Proposed Project. The results of the HHRA will indicate whether the Proposed Project would significantly<sup>1</sup> increase health risks for people living, working, or attending school near Oakland International Airport (OAK or Airport).

This HHRA protocol outlines the approach and methodologies that will be used to develop the HHRA analysis. The HHRA will focus on analysis of incremental human health risks and hazards associated with airborne releases of Toxic Air Contaminants (TACs) during construction and operation of the Proposed Project. Cancer risks, as well as chronic and acute non-cancer health hazard assessments depend on estimating potential exposure to incremental TACs associated with the Proposed Project.

This protocol is consistent with State of California statutes and regulations as well as U.S. Environmental Protection Agency (USEPA) risk assessment guidance.<sup>2,3,4,5,6,7</sup> It was also developed to be generally consistent with Bay Area Air Quality Management District

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<sup>1</sup> Thresholds of significance for health risks and hazards are presented in Section 6, Table 6-1 of this protocol.

<sup>2</sup> California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Information and Assessment Act of 1987*, Section 44300.

<sup>3</sup> California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments*, February 2015.

<sup>4</sup> California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program, Risk Assessment Guidelines, Technical Support Document for the Derivation of Noncancer Reference Exposure Levels*, June 2008 (with updates through July 2014).

<sup>5</sup> California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program, Risk Assessment Guidelines, Technical Support Document for Cancer Potency Factors: Methodologies for derivation, listing of available values, and adjustments to allow for early life stage exposures*, May 2009 (with updates through May 2019)

<sup>6</sup> California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program, Risk Assessment Guidelines, Technical Support Document for Exposure Assessment and Stochastic Analysis*, August 2012.

<sup>7</sup> U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation, *Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual (Part F, Supplemental Guidance for Inhalation Risk Assessment)*, Final. January 2009.

(BAAQMD) health risk assessment and modeling guidance.<sup>8,9,10</sup> This protocol describes the following four primary steps typically used to assess health risk:

- Selection of TACs of Concern - Identification of TACs that may be released in sufficient quantities to present a public health risk;
- Exposure Assessment - Analysis of ways in which people might be exposed to TACs;
- Toxicity Assessment - Evaluation of the toxicity of TACs that may present public health risks; and
- Risk Characterization - Characterization of the magnitude of health risks for the exposed individuals and populations, and of locations in the community where the greatest risks or hazards may be realized.

The remaining sections of this protocol describe the methodologies used to select the TACs of Concern, estimate exposure to Proposed Project-related TACs, evaluate TAC toxicity, and characterize the magnitude of potential risks.

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<sup>8</sup> Bay Area Air Quality Management District, *BAAQMD Air Toxics NSR Program Health Risk Assessment (HRA) Guidelines*, December 2016. Available at: [https://www.baaqmd.gov/~media/files/planning-and-research/permit-modeling/hra\\_guidelines\\_12\\_7\\_2016\\_clean-pdf.pdf](https://www.baaqmd.gov/~media/files/planning-and-research/permit-modeling/hra_guidelines_12_7_2016_clean-pdf.pdf).

<sup>9</sup> Bay Area Air Quality Management District, *BAAQMD Health Risk Assessment Modeling Protocol*, December 2020. Available at: [https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd\\_hra\\_modeling\\_protocol-pdf.pdf](https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol-pdf.pdf).

<sup>10</sup> Bay Area Air Quality Management District, *California Environmental Quality Act – Air Quality Guidelines*, May 2017. Available at: [https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa\\_guidelines\\_may2017-pdf.pdf?la=en](https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en).

## Section 2

### Selection of TACs of Concern

In general, TACs of concern selected for the HHRA are based on TACs identified under California Assembly Bill (AB) 2588 and for which the California Environmental Protection Agency (CalEPA), Office of Environmental Health Hazard Assessment (OEHHA) has developed cancer slope factors, chronic reference levels, and/or acute reference levels.

The method for identifying TACs of concern for the Proposed Project was based on the particulate matter and organic compound speciation profiles developed by the California Air Resources Board (CARB) applied to project-related source emissions of particulate matter less than or equal to 10 microns in diameter (PM<sub>10</sub>) and total organic gases (TOG)<sup>11</sup>. The speciation profiles that will be used in this analysis are presented in **Table 2-1**.

**Table 2-1. Speciation Profiles for PM and TOG**

Source Agency & PM Profile No.	PM Profile Source Description	Source Agency & TOG Profile No.	TOG Profile Source Description
CARB 400	Gasoline Vehicle Exhaust - Catalyzed	CARB 2303/2304	Gasoline Vehicle Stabilized Exhaust - Catalyzed (summer/winter), use average
CARB 425	Diesel Vehicle Exhaust	CARB 818	Diesel Vehicle Exhaust (Farm Equipment)
US Navy	Aircraft Jet A Fuel Trace Elements	CARB 5861	Aircraft Engine Exhaust - Turbofan, Turbojet, and Turboprop Engines
CARB 1415	General Aviation Engine Exhaust (AvGas Fueled Aircraft)	CARB 413	Gasoline Exhaust, Non-Catalyzed
CARB 420	Construction Dust	CARB 716	Paving
CARB 472	Tire Wear	CARB 717	Architectural Coatings
CARB 473	Brake Wear		

**Sources:** California Air Resources Board (CARB) 2022. Speciation Profiles Used in CARB Modeling. Available at:

<https://ww2.arb.ca.gov/speciation-profiles-used-carb-modeling>;

[https://ww2.arb.ca.gov/sites/default/files/2021-06/chem30apr21\\_2.xlsx](https://ww2.arb.ca.gov/sites/default/files/2021-06/chem30apr21_2.xlsx); .

<https://ww2.arb.ca.gov/sites/default/files/2021-11/webfraction03nov21.xlsx>;

<https://ww2.arb.ca.gov/sites/default/files/2021-06/orgprofile18dec20%20%281%29.xlsx>;

<https://ww2.arb.ca.gov/sites/default/files/2021-11/pmchemprofile03nov21.xlsx>.

U.S. Environmental Protection Agency/Federal Aviation Administration 2009. *Recommended Best Practice for Quantifying Speciated Organic Gas Emissions from Aircraft Equipped with Turbofan, Turbojet, and Turboprop Engines, Version 1.0*, EPA-420-R-09-901 (May).

U.S. Navy 2000. *Trace Element and Polycyclic Aromatic Hydrocarbon Analyses of Jet Engine Fuels: Jet A, JP5, and JP8*, Technical Report 1845 (December).

<sup>11</sup> Total organic gases (TOG) include all organic gases, while volatile organic compounds (VOC) are only those that react in the atmosphere to form ozone; therefore, VOCs are a subset of compounds included in TOG. VOCs will be calculated for the criteria pollutant emission inventories. TOGs will be estimated by multiplying the VOC emissions by appropriate factors to convert them to TOG emissions.

The list of individual compounds included in each of the speciation profiles noted in **Table 2-1** were cross-referenced with the TACs included in BAAQMD Regulation 2-5: New Source Review of Toxic Air Contaminants. Those compounds found on one or more speciation profiles AND in Regulation 2-5 will be included in the list of TACs of concern used in this HHRA. In addition, annual concentrations of particulate matter less than or equal to 2.5 microns in diameter (PM<sub>2.5</sub>) will be modeled under the health risk assessment for comparison to the BAAQMD health risk and health hazard CEQA significance thresholds for PM<sub>2.5</sub>. The resulting TACs of concern are presented in **Table 2-2**.

**Table 2-2. Toxic Air Contaminants (TAC) of Concern for the Human Health Risk Assessment**

Toxic Air Contaminant	Type	Toxic Air Contaminant	Type
Acetaldehyde	VOC	Arsenic	PM-Metal
Acrolein	VOC	Cadmium	PM-Metal
Benzene	VOC	Chromium VI	PM-Metal
1,3-Butadiene	VOC	Cobalt	PM-Metal
Ethylbenzene	VOC	Copper	PM-Metal
Ethyl chloride	VOC	Lead	PM-Metal
Ethylene glycol	VOC	Manganese	PM-Metal
Formaldehyde	VOC	Mercury	PM-Metal
n-Hexane	VOC	Nickel	PM-Metal
Methyl alcohol	VOC	Selenium	PM-Metal
Methyl ethyl ketone	VOC	Vanadium	PM-Metal
Methyl tert-butyl ether	VOC		
Methyl chloride	VOC	Ammonium Ion	PM-Inorganics
Phenol	VOC	Chlorine	PM-Inorganics
Propylene	VOC	Silicon (as crystalline Silica)	PM-Inorganics
Styrene	VOC	Sulfates	PM-Inorganics
Toluene	VOC		
Xylene (total)	VOC	Diesel PM	Diesel Exhaust
Naphthalene	PAH	Fine Particulate Matter	PM <sub>2.5</sub>

PAH = Polycyclic aromatic hydrocarbons

PM = Particulate matter

VOC = Volatile organic compounds

## Section 3

# Exposure Assessment

### 3.1 Exposure Populations

For the HHRA analysis of the existing conditions and future Proposed Project, the following receptor types will be evaluated: on-airport workers (both project and non-project workers), off-airport workers, off-airport adult residents, off-airport child residents, and off-airport school children. Each receptor represents a unique population and set of exposure conditions. As a whole, they cover a range of exposure scenarios for people who may be affected by OAK emissions to the greatest extent. Receptors for which exposure scenarios are prepared were selected to provide risks and hazards estimates for the maximally exposed individuals (MEI), and to demonstrate the range of risks and hazards in the vicinity of OAK. The final boundaries of the analysis will be defined by the 10 in 1-million cancer risk zone associated with Proposed Project TAC emissions, which is determined through the dispersion modeling and risk assessment analysis.

### 3.2 Exposure Pathways

Different receptors (e.g., off-site workers, school children) could be exposed to TACs through several exposure pathways. Exposure scenarios are developed for each receptor. Each scenario considers various pathways through which each receptor may be exposed to TACs.

An exposure pathway consists of four parts:

- A TAC source (e.g., construction equipment fuel combustion),
- A release mechanism (e.g., construction equipment engine exhaust),
- A means of transport from point of release to point of exposure (e.g., local winds), and
- A route of exposure (e.g., inhalation).

If any of these elements of an exposure pathway is absent, no exposure can take place and the pathway is considered incomplete. Incomplete pathways will not be evaluated in the HHRA.

The exposure pathways that will be analyzed are summarized in **Table 3-1**. The table also indicates the type of receptors that will be included for each pathway. These pathways are the mandatory pathways required under the BAAQMD Health Risk Assessment Modeling Protocol, dated December 2020.<sup>12</sup>

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<sup>12</sup> Bay Area Air Quality Management District, *BAAQMD Health Risk Assessment Modeling Protocol*, December 2020. Available at: [https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd\\_hra\\_modeling\\_protocol.pdf](https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol.pdf).

**Table 3-1 Exposure Pathways and Associated Receptor Types**

Inhalation	Resident Adult, Resident Child, School Child, and Offsite Worker
Soil Ingestion <sup>/a/</sup>	Resident Adult, Resident Child, School Child, and Offsite Worker
Dermal Exposure to Contaminated Soil	Resident Adult, Resident Child, School Child, and Offsite Worker
Breast Milk Consumption <sup>/b/</sup>	Resident Child

/a/ Cadmium and nickel, although subject to deposition, are only treated as carcinogenic by the inhalation route, although their oral route oral doses will still be estimated for calculation of noncancer hazards.

/b/ Due to the physical-chemical properties of chemicals, the breast milk ingestion exposure pathway is only applicable to lead, creosotes, polychlorinated biphenyls, dioxins and furans, and polycyclic aromatic hydrocarbons. Of these chemicals, only lead and naphthalene are included as a TAC for this project, thus only lead and naphthalene will be evaluated for this pathway.

### 3.3 Exposure Concentrations

The TAC project emission calculation methodology will follow the methods used for estimating criteria pollutant emissions. Completing the assessment of TAC emissions for dispersion modeling is described below.

#### 3.3.1 Air Dispersion Modeling to Estimate TAC Concentrations

Air dispersion modeling will be used to estimate incremental TAC concentrations between the Proposed Project and Existing Conditions. Three model runs will be conducted, one for the environmental baseline conditions, one for project construction, and one for operations after project completion. This Proposed Project-related contribution to ambient concentrations will be compared to the CEQA thresholds presented in **Section 6,**

##### **Table 6-1.**

As noted in **Section 2** above, at least 35 individual TACs, including diesel particulate matter (DPM), will be analyzed for health risk. In addition, PM<sub>2.5</sub> annual concentrations will be estimated for comparison to BAAQMD PM<sub>2.5</sub> health risk CEQA thresholds. The TACs are typically associated with either PM<sub>10</sub> or TOG. Therefore, PM<sub>10</sub> and TOG emissions from both construction and operational sources will be incorporated into the dispersion analysis to produce acute and chronic ground-level concentrations of PM<sub>10</sub> and TOG associated with each source type (e.g., construction dust, aircraft engine exhaust). DPM concentrations will be the dispersion results for PM<sub>10</sub> from diesel-powered vehicles and equipment. The risk parameters developed for DPM are based on exposure to whole diesel engine exhaust, thus do not need to be speciated for risk calculations. California or federal speciation profiles for each source type will be used to determine individual TAC ground level concentrations for each source. The individual source results for a given TAC are then summed across all sources to obtain the total TAC concentrations at each receptor. The speciation profiles allow the analysis of multiple TACs while requiring dispersion modeling of only two pollutants (PM<sub>10</sub> and TOG). The speciation profiles that will be used for this health risk assessment are summarized in **Table 2-1** in **Section 2** above. Note that temporal profiles to be used in the analyses are discussed in **Section 3.3.1.5**. Note

The air dispersion analysis will be performed in accordance with Federal Aviation Administration (FAA)<sup>13,14</sup> and BAAQMD<sup>15</sup> modeling guidelines. The air dispersion analysis requires the following: 1) selection of the dispersion model, 2) evaluation of potential terrain considerations, 3) selection of appropriate dispersion coefficients based on land use, 4) selection and/or preparation of meteorological data, 5) identification of source locations and modeling parameters, 6) selection of receptor locations, and 7) selection of appropriate averaging time periods. Each of these steps is described in greater detail in the sections that follow.

### 3.3.1.1 Model Selection

The first step in an air dispersion analysis is the selection of an applicable model. The required air dispersion model for analysis of air quality impacts at airports is FAA's AEDT program, which uses USEPA's AERMOD model for conducting the dispersion analysis. AEDT is also required by FAA to analyze airport noise impacts on the surrounding areas. The version of AEDT at the time when the analyses associated with this project were substantially underway was Version 3e. The current version of AERMOD at the time of the drafting of this protocol is Version 22112.

### 3.3.1.2 Coordinate System and Terrain

The coordinate system used in the dispersion modeling analysis will be the Universal Transverse Mercator (UTM) system, UTM Zone 10 North, referenced to World Geodetic System 1984 datum. Terrain data will be incorporated in the analysis using, in order of preference, National Elevation Dataset (NED) one-third arc-second data or NED one arc-second data available from the U.S. Geological Survey. The terrain data will be used to set the base elevation for each source and each receptor incorporated into the model.

### 3.3.1.3 Land Use

Another important consideration in an air dispersion modeling analysis is the selection of rural or urban dispersion coefficients. Auer's method<sup>16</sup> of classifying land use as either rural or urban has been used to analyze the surrounding region. This method calls for analysis of a 3-kilometer radius around a facility to determine if the majority of the land can be classified as either rural (i.e., undeveloped) or urban. The BAAQMD has developed a method that applies Auer's general approach with the land use data contained in the 2016 National Land Cover Database (NLCD\_2016) and summarizes categories of land use

<sup>13</sup> U.S. Department of Transportation, Federal Aviation Administration, *Aviation Emissions and Air Quality Handbook*, Version 3, Update 1, January 2015. Available: [https://www.faa.gov/regulations\\_policies/policy\\_guidance/envir\\_policy/airquality\\_handbook/media/Air\\_Quality\\_Handbook\\_Appendices.pdf](https://www.faa.gov/regulations_policies/policy_guidance/envir_policy/airquality_handbook/media/Air_Quality_Handbook_Appendices.pdf).

<sup>14</sup> U.S. Department of Transportation, Federal Aviation Administration, *Aviation Environmental Design Tool (AEDT)*. Available: <https://aedt.faa.gov/>.

<sup>15</sup> Bay Area Air Quality Management District, *BAAQMD Health Risk Assessment Modeling Protocol*, December 2020. Available at: [https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd\\_hra\\_modeling\\_protocol-pdf.pdf](https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol-pdf.pdf).

<sup>16</sup> Auer, A.H., Jr. 1978. "Correlation of Land Use and Cover with Meteorological Anomalies," *J. of Applied Meteorology*, **V.17**, pp. 636-643.

for specific locations using the USEPA's AERSURFACE program.<sup>17</sup> AERSURFACE Version 20060 (or later) will be used with NLCD\_2016 data to determine whether rural or urban dispersion coefficients will be used for OAK.

### 3.3.1.4 Meteorological Data

Meteorological data for OAK is available from the BAAQMD in post-processed form,<sup>18</sup> and from the National Oceanic and Atmospheric Administration's (NOAA) National Centers for Environmental Information (NCEI) and Earth System Research Laboratory (ESRL) Radiosonde Database in raw form. Because AEDT requires several intermediate files to be saved from the AERMET processor which are not kept in the BAAQMD meteorological online data sets, the most recent, available five years of surface and upper air data for OAK will be obtained from NOAA. This data will be processed through the AERMET pre-processor, and with AERMINUTE and AERSURFACE, to produce the intermediate as well as final meteorological data files for the AERMOD dispersion analysis.

### 3.3.1.5 Source Parameters

The following emission sources identified in the CEQA/NEPA air quality evaluation protocol will be modeled for dispersion: 1) aircraft engines, 2) auxiliary power units (APU) and ground support equipment (GSE), 3) ground access vehicles, 4) construction equipment and activities, and 5) new stationary combustion sources installed for the project (e.g., building space heaters, water heaters, and emergency generators). The location of the sources will be determined from the airport layout plan, maps, aerial photos and other information provided by the Port of Oakland (Port) for existing conditions, as well as plans for the Proposed Project scenarios. All sources require the identification of modeling source parameters, including any temporal variations in emissions. The identification of this information is described in greater detail in the following sections.

#### 3.3.1.5.1 Aircraft Engines

The dispersion of emissions from aircraft operations at the airport will be modeled as the area source types generated in AEDT 3e (or later version). Actively used taxiways, runways, and approach/ departure paths will be entered into AEDT. AEDT models all aircraft sources as series of area sources. While on the ground the release height is set to 12 meters, based on LIDAR studies conducted to assess plume rise from aircraft prior to takeoff. Takeoff, climb out and approach sources are modeled at higher elevations above ground, based on AEDT aircraft operating parameters for each aircraft.

Each aircraft operation (arrival or departure) will be grouped into combinations that represent the (i) aircraft type, (ii) starting or ending terminal (or gate or other aircraft parking area), and (iii) runway used for each scenario. The hour-of-day temporal profile for each of the aircraft/terminal/runway combinations will also be developed for each scenario. The day-of-week, and month-of-year temporal profiles will be developed from

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<sup>17</sup> Bay Area Air Quality Management District, *BAAQMD Health Risk Assessment Modeling Protocol*, December 2020. Available at: [https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd\\_hra\\_modeling\\_protocol-pdf.pdf](https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol-pdf.pdf).

<sup>18</sup> Bay Area Air Quality Management District, *BAAQMD Health Risk Assessment Modeling Protocol*, December 2020. Available at: [https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd\\_hra\\_modeling\\_protocol-pdf.pdf](https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol-pdf.pdf).

aircraft operational data for the existing conditions. These two temporal profiles will be applied to all scenarios.

#### *3.3.1.5.2 Ground Support Equipment/Auxiliary Power Units (GSE/APU)*

Pollutant emissions from GSE/APU operations will be modeled using the area source inputs generated by AEDT. GSE will be modeled as ground-based sources, and APU exhausts are modeled as elevated source since these units are located in the tail of the aircraft. The locations of GSE/APU sources are at the terminals and other aircraft parking areas. Pollutant emissions from GSE/APU sources vary throughout the day. The same temporal pattern for aircraft (noted above) will be applied to GSE/APU sources at the terminals and other aircraft parking areas.

#### *3.3.1.5.3 Ground Access Vehicles*

The locations of ground access sources (traffic and parking) will be determined from the airport layout plan, Proposed Project drawings and plans, and recent aerial photos. Roadways will be modeled as line volume sources in AERMOD. Parking lots used by airport passengers, employees, and tenants both within the Airport and outside of the Airport that would be affected by the Proposed Project will be modeled as area sources. The release heights for light duty vehicle travel on roadways and in parking lots will be 1.295 meters with a 2.6-meter initial vertical dimension. For trucks, the release height will be 3.4 meters with a 6.8-meter initial vertical dimension.

Temporal patterns (by hour-of-day) for traffic will be estimated from the traffic analysis. Day-of-week and month-of-year temporal profiles will be based on the aircraft profiles noted above in Section 3.3.1.5.1.

#### *3.3.1.5.4 Building Space and Water Heating, and Emergency Generators*

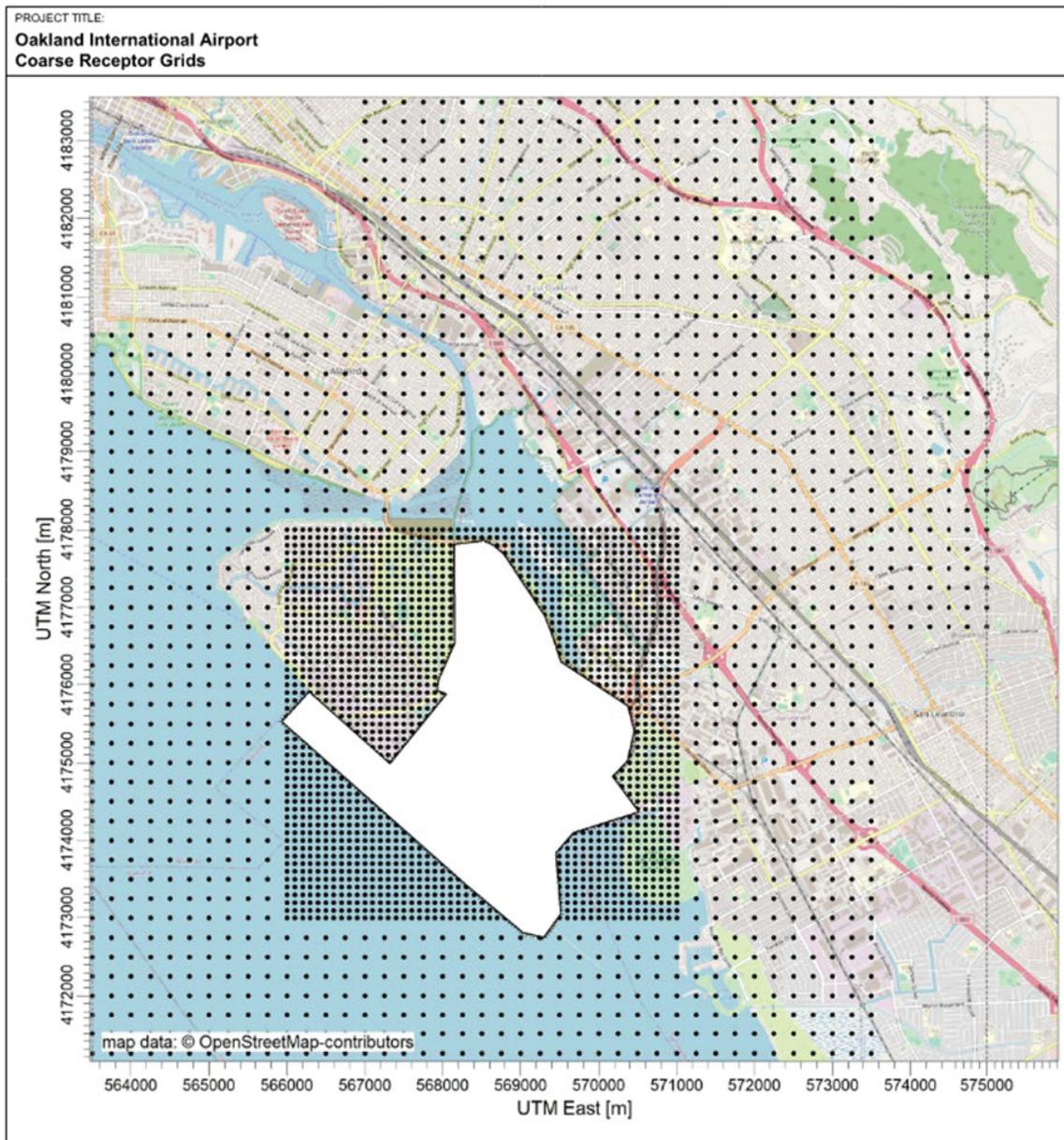
Heaters used to supply hot water and comfort space heating in new concourse or terminal areas are assumed to exhaust above the new facility rooflines. These heaters will be modeled as point sources (with rain caps) approximately 6 feet above the proposed roof elevation for each building. Emergency generator engines are assumed to exhaust from stacks discharging through the outside walls of these facilities. These engines will be modeled as point sources (with rain caps) at 10 feet above ground level.

#### *3.3.1.5.5 Construction Equipment and Activity*

Construction source dispersion will be modeled following the general methodologies presented in BAAQMD's Air Quality CEQA Guidelines. Area sources will be used to model construction areas and line volume sources will be used to model construction vehicle roadway travel. Modeled roadway widths will be based on 12 ft land widths and the number of lanes for each segment. Construction dust emissions will be modeled as a ground source with a zero (0) meter release height. Construction equipment exhaust emissions will be modeled as polygon area sources, based on the approximate size, shape and location of the construction element being modeled with a release height of 5.0 meters and initial vertical plume dimension of 1.4 meters. Construction truck exhaust emissions on roadways will be modeled with an approximate 3.4-meter release height with a plume height of 6.8 meters.

### 3.3.1.6 Receptor Locations

Locations of receptors will be determined such that peak ambient air pollutant impacts associated with the Proposed Project will be identified. OAK property line receptors and community receptors around OAK will be included in the analysis. Initial dispersion analyses will be conducted using coarse grids and receptor spacing. Receptor spacing along property lines will be 100 meters or less. Initial offsite receptors in within 2.5 kilometers of the Airport center will also have 100-meter spacings, and receptors from 2.5 to 5.0 kilometers will have 250 meter spacings. The initial coarse-grid receptors are shown in **Figure 3-1**. Refined receptors will be placed immediately around those coarse grid receptor(s) with the peak impact(s), using 20-meter spacing to verify that ultimate peaks have been identified. The receptor locations will be used to determine the type of receptor – resident, school child, or worker.



**Figure 3-1 Coarse Receptor Grid**

### 3.3.1.7 Dispersion Analysis Averaging Periods

The air dispersion analysis will need to provide both short-term and long-term ground level TAC concentrations to determine potential impacts to acute, chronic non-cancer, and cancer health risks. Acute reference exposure levels have been developed for 1-hour average exposure concentrations, and chronic non-cancer reference exposure levels have been developed for 8-hour and annual average exposure concentrations. Annual average concentrations or longer (potentially up to 5-year average concentrations if five years of meteorological data are used) are typically used to estimate cancer risks.

### 3.3.1.8 Deposition Rates

To assess non-inhalation pathway risks, deposition of TACs onto soil must be estimated. Initially, the deposition rates will be estimated using suggested default deposition velocities (in meters per second, m/s) from OEHAA and BAAQMD multiplied by the modeled pollutant concentration (in mg/m<sup>3</sup>) at each receptor point to obtain the TAC deposition rate as a flux in micrograms per square meter per second [mg/(m<sup>2</sup> s)]. OEHHA suggests using 0.02 m/s as the deposition velocity for internal combustion engines and other sources where the bulk of the deposited mass is less than 2.5 microns in diameter.<sup>19</sup> This would include diesel and gasoline-powered motor vehicles and equipment; and turbine and piston-powered aircraft. Other sources such as construction dust, tire wear, and brake wear would be modeled using 0.05 m/s per BAAQMD guidance.<sup>20</sup>

### 3.3.1.9 Averaging Periods

Analyses of both cancer and non-cancer chronic as well as acute exposures will be included in the exposure assessment for the receptors identified in Section 3.1. Chronic and acute exposure to TACs from Proposed Project-specific construction and airport-related operations will be estimated by:

- Estimation of construction and incremental operational source emissions for peak annual (for annual cancer and non-cancer chronic exposure) and for peak day (for 1-hour acute and 8-hour chronic exposure).
- Dispersion modeling of construction emissions over an area that consists of the Airport property and urban areas to the north, east, south, and west.
- Dispersion modeling of Proposed Project incremental operational concentrations over the same receptors as for the construction sources. Note that the Proposed Project incremental operational concentrations are the differences in concentrations between the Proposed Project for a given year and the Existing Condition concentrations for each TAC.<sup>21</sup>

<sup>19</sup> California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments*, February 2015.

<sup>20</sup> Bay Area Air Quality Management District, *BAAQMD Health Risk Assessment Modeling Protocol*, December 2020. Available at: [https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd\\_hra\\_modeling\\_protocol-pdf.pdf](https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol-pdf.pdf).

<sup>21</sup> The Existing Condition sources include the operational sources at the Airport in 2019. The Proposed Project sources include the operational sources at the Airport in the year of Project

- Estimation of deposition of TACs onto soil for evaluation of the non-inhalation pathways.

The highest modeled incremental TAC concentrations for each receptor type (e.g., residential) will be used to estimate project-related non-cancer chronic and acute human health hazards. These estimates will serve as the basis for significance determinations for the Proposed Project.

### 3.3.2 Exposure Concentrations (Dose)

To estimate cancer risks TAC exposure via inhalation for each receptor will be estimated. In February 2015, CalEPA OEHHA released the Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments.<sup>22</sup> Exposure equations and parameter values presented in this protocol come from that guidance, unless otherwise noted. The guidance recommends the use of a software program, Hot Spots Analysis and Reporting Program Version 2 (HARP2) developed by the California Air Resources Board (CARB), for calculating and presenting Health Risk Assessment (HRA) results for the Hot Spots Program. For this HHRA, the HARP2 equations and calculations were built into an Excel spreadsheet to allow for customization of the calculations to address project-specific criteria and for the ease of conducting multiple iterations of calculations.

The OEHHA and HARP2 equations for inhalation exposure recommend that the concentration of the chemical in air be used as the exposure metric resulting in the following formula for an exposure concentration:

$$EC_{inh} = CA \times (BR/BW) \times A \times EF \times 10^{-6}$$

Where:	$EC_{inh}$	=	inhalation exposure concentration (mg/kg-day)
	CA	=	chemical concentration in air ( $\mu\text{g}/\text{m}^3$ )
	(BR/BW)	=	daily breathing rate normalized to body weight (L/kg body weight – day)
	A	=	inhalation absorption factor (unitless)
	EF	=	exposure frequency (unitless), days/365 days
	$10^{-6}$	=	micrograms to milligrams conversion and liters to cubic meters conversion

Soil dermal exposure will be a function of the soil or dust loading of the exposed skin surface. As presented in the 2015 OEHHA guidance, the equations for dermal exposure concentration will be calculated using the following formulas:

$$EC_{derm} = ADL \times CS \times ABS \times 365 \times 10^{-9} \text{ (for cancer)}$$

$$EC_{derm} = ADL \times CS \times ABS \times 10^{-9} \times ED/AT \times (1/350) \text{ (for noncancer)}$$

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build-out (2028), and in the last year that forecasts for passenger enplanements and aircraft operations were developed (2038), as well as construction.

<sup>22</sup> California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments*, February 2015.

Where:	$EC_{\text{derm}}$	= dermal exposure concentration (mg/kg-day)
	ADL	= annual dermal load (mg soil/kg BW-yr), based on Table 5.11 and Table 5.12 a-d of the CalEPA Air Toxics Hot Spots Program Guidance.
	CS	= chemical concentration in soil ( $\mu\text{g}/\text{kg}$ ), calculated from CA and deposition velocity
	ABS	= fraction absorbed across skin (unitless), provided in Table 5.13 of the CalEPA Air Toxics Hot Spots Program Guidance.
	1/365	= conversion for ADL from years to days
	1/350	= conversion factor for ADL from yrs to days (Note: this conversion is needed to remove EF, expressed as 350 days/365 days, from the ADLs in Table 5.12a-d)
	ED	= exposure duration for specified age group (years): 2 yrs for 0<2, 14 yrs for 2<16, 54 yrs for 16-70
	AT	= averaging time for lifetime exposure, 70 yrs
	$10^{-9}$	= unit conversions: micrograms to milligrams and milligrams to kilograms

Soil ingestion exposure will be dependent on the annual average air concentration total deposition onto the soil. As presented in the 2015 OEHHA guidance, the equations for inadvertent soil ingestion exposure concentration will be calculated using the following formulas:

$$EC_{\text{soil}} = CS \times \text{GRAF} \times \text{SIR} \times \text{EF} \times 10^{-9} \text{ (for cancer)}$$

$$EC_{\text{soil}} = CS \times \text{GRAF} \times \text{SIR} \times (\text{ED}/\text{AT}) \times 10^{-9} \text{ (for noncancer)}$$

Where:	$EC_{\text{soil}}$	= soil ingestion exposure concentration (mg/kg BW-day)
	GRAF	= gastrointestinal relative absorption fraction, chemical-specific (unitless), provided in Table 5.2 of the CalEPA Air Toxics Hot Spots Program Guidance.
	CS	= chemical concentration in soil ( $\mu\text{g}/\text{kg}$ ), calculated from CA and deposition velocity
	SIR	= soil ingestion rate (mg/kg BW-day), provided in Table 5.14 of the CalEPA Air Toxics Hot Spots Program Guidance.
	EF	= exposure frequency (unitless), days/365 days
	ED	= exposure duration for specified age group (years): 2 yrs for 0<2, 14 yrs for 2<16, 54 yrs for 16-70
	AT	= averaging time for lifetime exposure, 70 yrs
	$10^{-9}$	= unit conversions: micrograms to milligrams and milligrams to kilograms

Exposure concentrations from ingestion of mother's milk will be calculated using the following formulas:

$$EC_{\text{milk}} = C_m \times BMI_{\text{bw}} \times EF \times 10^{-3} \text{ (for cancer)}$$

$$EC_{\text{milk}} = C_m \times BMI_{\text{bw}} \times 10^{-3} \text{ (for noncancer)}$$

Where:  $EC_{\text{milk}}$  = dose through ingestion of mother's milk (mg/kg BW-day)

$BMI_{\text{bw}}$  = daily breast-milk ingestion rate (g/kg BW-day)

$C_m$  = chemical concentration mother's milk (mg/kg milk).

$EF$  = exposure frequency (unitless), days/365 days

$10^{-3}$  = unit conversions: kilograms to grams

Assessment of potential human health impacts due to release of carcinogenic TACs associated with the Proposed Project assumes that receptors are exposed to concentrations of TACs over a 9<sup>23</sup>- and 30-year period for off-site residential receptors; a 12-year period for off-site school children, and a 25-year period for off-site workers. Because the construction period is shorter than the suggested averaging periods for estimating cancer risk, the risk analysis will include the combination of Proposed Project-related construction and operational impacts.

For the construction phase, the focus of construction activities is assumed to move as different portions of the Proposed Project are constructed throughout the approximate 4-year construction period (potentially 2024 to early 2028). To incorporate this variability into the model, construction emissions will be modeled separately for each year of construction. TAC concentrations for each receptor type will be calculated by grid point for each year of construction. For the portion of the receptors' exposure periods that are longer than the construction period, construction emissions will be set to zero; however, cancer risks for the years following construction were calculated using the TAC incremental concentrations from Proposed Project operations. Operational TAC incremental concentrations will be added to the construction TAC concentrations for all years after the start of construction, through the 2028 horizon year when Proposed Project operations are assumed to commence. Operational concentrations only will be estimated beyond the completion of construction. For receptor types whose exposure periods extend beyond the 2038 horizon year, the 2038 Proposed Project incremental TAC concentrations will be used for the remainder of their exposure period.

In addition to the receptor grids discussed above, discrete receptor locations will be selected to be representative of where construction impacts would likely to be greatest, including the nearest residential and/or offsite worker location in each wind direction from the Proposed Project construction sites. This approach typically overestimates risks for most people living, working, or attending school near OAK. This conservatism (protection) is built into the risk assessment developed for the Proposed Project to help provide a

<sup>23</sup> California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments*, February 2015. Nine (9) years of exposure represents the central tendency (or average) exposure duration (roughly the average time a person lives in one place). This value is provided as supplemental information.

buffer for any future changes in project construction that cannot now be anticipated quantitatively.

Exposure parameters used to calculate the risks and hazards for all receptors for the inhalation pathway are summarized in **Table 3-2**. Exposure parameters are based on CalEPA Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments<sup>24</sup> and USEPA Exposure Factors Handbook.<sup>25</sup>

**Table 3-2. Exposure Parameters**

Exposure Pathway Parameters for Inhalation of Particulates and Gases	Off-Airport Receptors			
	Off-Site Adult Resident	Off-Site Child Resident	Off-Site School Child	Off-Site Worker
Exposure Frequency (Fraction of Year) (unitless)	0.96 (350 days/365 days) <sup>a</sup>	0.96 <sup>a</sup>	0.49 (180 days/365 days) <sup>h</sup>	0.685 (250days/365 days) <sup>a</sup>
Exposure Duration (years)	30 <sup>a,b,f,g</sup>	9 <sup>a,f</sup>	12 <sup>c</sup>	25 <sup>a</sup>
Absorption Fraction	1 <sup>a</sup>	1 <sup>a</sup>	1 <sup>a</sup>	1 <sup>a</sup>
Fraction of Time at Home	0.73 <sup>a</sup>	1 <sup>a,e</sup>	1 <sup>a,e</sup>	0.73 <sup>a</sup>
Averaging Time - Cancer (days)	25,550 <sup>a,d</sup>	25,550 <sup>a,d</sup>	25,550 <sup>a,d</sup>	25,550 <sup>a,d</sup>

**Sources:**

<sup>a</sup> California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments*, February 2015.

<sup>b</sup> 30-year exposure duration will be used as basis for determining significance to the MEI resident.

<sup>c</sup> Professional judgment.

<sup>d</sup> U.S. Environmental Protection Agency, Office of Emergency and Remedial Response, *Risk Assessment Guidance for Superfund, Volume I, Human Health Evaluation Manual (Part A)*, USEPA/540/1-89/002, 1989.

<sup>e</sup> It was assumed that children attended school within the study area; thus the FAH = 1.

<sup>f</sup> Evaluation of 9-year and 30-year cancer risks will begin with exposure during the third trimester and will sum individual age group risks from that point forward.

<sup>g</sup> 30-year residential cancer risks will be calculated at residential locations, sensitive receptor locations (such as daycare), and school sites.

<sup>h</sup> BAAQMD, *Air Toxics NSR Program – Health Risk Assessment Guideline*, December 2016.

In addition to the exposure parameters presented in **Table 3-2**, some of the exposure parameters vary according to age groups to address the methodology, also detailed in the CalEPA Air Toxics Hot Spots Program Guidance. These exposure parameters are presented in **Table 3-3**.

<sup>24</sup> California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments*, February 2015.

<sup>25</sup> U.S. Environmental Protection Agency, *Exposure Factors Handbook*, EPA/600/R-09/052F, September 2011.

**Table 3-3. Exposure Parameters by Age Group**

Exposure Pathway Parameters for Inhalation of Particulates and Gases	Age Group					
	3rd Trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
Residential Daily Breathing Rate (L/kg-d)	361	1,090	631 <sup>a</sup>	572 <sup>/a/</sup>	261 <sup>/a/</sup>	233 <sup>/a/</sup>
Worker 8-hr Daily Breathing Rate (L/kg-d)	NA	NA	NA	NA	230 <sup>/a/</sup>	230
School Child 8-hr Daily Breathing Rate (L/kg-d)	NA	NA	640	520	240	NA
Age-adjustment Sensitivity Factor (unitless)	10	10	3	3	1	1
Fraction of Averaging Time (unitless)	0.25/70= 0.0036	2/70= 0.0286	7/70= 0.1	14/70= 0.2	14/70= 0.2	54/70= 0.7714

**Source:** California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments*, February 2015, unless otherwise noted.

<sup>/a/</sup> Value obtained from the BAAQMD, *Air Toxics NSR Program – Health Risk Assessment Guideline*, December 2016.

NA = not applicable

In addition, the following CalEPA Air Toxics Hot Spots Program Guidance tables will be used in the assessment of the non-inhalation pathways:

- Table 5.2a-b Substance-Specific Default Values for Multipathway Substances
- Table 5.11 Recommended Annual Dermal Load Point Estimates for Dermal Exposure
- Table 5.12 a-d Annual Dermal Load Distributions by Age Group and Climate for Stochastic Analysis
- Table 5.13 Dermal Absorption Fraction Factors (ABS) as Percent from Soil for Semi-Volatile and Solid Chemicals under the OEHHA “Hot Spots” Program
- Table 5.14 Recommended Soil Ingestion Rate (SIR) Estimates for Adults and Children
- Table 5.22 Default Point Estimates for Breast Milk Intake (BMIbw) for Breastfed Infants
- Table 5.23 Recommended Distribution of Breast Milk Intake Rates Among Breastfed Infants for Stochastic Assessment (Averaged Over an Individual’s First Year of Life)

## Section 4

# Toxicity Assessment

Risks from exposure to TACs will be calculated by combining estimates of potential exposure with chemical-specific toxicity criteria developed by CalEPA, USEPA, or both. The toxicity assessment will initially examine quantitative toxicity criteria for TACs as required under 22 Cal. Code Regs. Sections (§)69021(a), (b), and (c), as described in the *Toxicity Criteria for Human Health Risk Assessments, Screening Levels, and Remediation Goals* rule.<sup>26</sup>

Inhalation cancer unit risk factors, oral cancer slope factors, and inhalation and oral chronic RELs developed by the State of California will be used to characterize cancer risks and chronic non-cancer health hazards associated with longer-term inhalation of emissions from construction and operational activities and exposure through non-inhalation pathways (e.g., soil ingestion and dermal contact) from deposition of emissions from construction and operational activities. Both types of toxicity criteria are based on studies of chronic exposure in animals or, in some cases, to people.

Inhalation and oral acute RELs, developed by the State of California, will be used to characterize potential acute non-cancer health hazards associated with short-term exposure (usually from exposures on the order of 1-hour) associated with the Proposed Project. RELs are based on the most sensitive, relevant, adverse health effect reported in the medical and toxicological literature. Since margins of safety<sup>27</sup> are incorporated to address data gaps and uncertainties, exceeding an REL does not automatically indicate an adverse health impact. One acute REL is developed for each TAC and that REL value is applicable to all receptors, residents and workers, children, and adults.

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<sup>26</sup> California Department of Toxic Substances Control (DTSC) Human and Ecological Risk Office (HERO). *Human Health Risk Assessment (HHRA) Note Number 10, Toxicity Criteria*, February 25, 2019. Available at: <https://dtsc.ca.gov/wp-content/uploads/sites/31/2019/02/HHRA-Note-10-2019-02-25.pdf>.

<sup>27</sup> Margin of safety is a ratio of the no-observed-effect level to the estimated exposure dose. Margins of safety are incorporated in the development of toxicity values to account for differences in dose-response among individuals. For example, the same dose of alcohol may have a greater effect on a woman than a man, not only because a woman is smaller in body size but also because men and women metabolize alcohol at different rates.

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## Section 5

# Risk Characterization

Risk characterization combines information developed for exposure and for toxicity to produce quantitative estimates of health impacts to the receptors (residents, students, and offsite workers).

### 5.1 Methodology for Determining Project-Related Risks

The estimate of incremental Proposed Project health risks will be based in the difference in risks (cancer, chronic non-cancer, and acute) between the Future with Proposed Project risks and the Existing Conditions risks at each receptor. The Existing Conditions risks will be subtracted from the Future with Proposed Project risks to determine the Proposed Project-related risk values at each receptor. The maximum incremental results for each receptor type and risk type will be compared to the significance thresholds presented in **Section 6**.

The chronic non-cancer and acute risks will be based on the maximum incremental hazards calculated at each receptor for exposure periods of one year (chronic non-cancer risks) and 1-hour (acute risks). The incremental risks will be reported for the year or hour that produces the maximum incremental impacts.

Details on the methodologies used to calculate cancer, chronic non-cancer and acute risks are provided in the remaining portions of this section.

### 5.2 Methodology for Evaluating Cancer Risk and Non-Cancer Health Hazards

Concentrations of TAC of concern in air, locations of potentially exposed populations, including locations for MEI exposure scenarios (worker, resident, student), and toxicity criteria will be used to calculate incremental human health risks associated with the Proposed Project. Risks for people recreating near the Airport would be lower than those for workers, residents, and students at any given location because of much shorter times spent in recreational activities. No risks will be calculated for recreational receptors. Where risks are not significant for other receptor groups, risks for recreational visitors near OAK will also be considered insignificant.

Cancer risks will be estimated by multiplying exposure estimates for carcinogenic chemicals by corresponding cancer slope factors. Cancer risk results will be expressed as the odds of developing cancer over a lifetime for a given period of exposure. Cancer risks will be based on the exposure durations listed in **Table 3-2** relative to a 70-year lifetime<sup>28</sup>. The inhalation cancer risks will be estimated using cancer potency factor in the following equation:

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<sup>28</sup> California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments, February 2015.

$$\text{RISK}_{\text{inh}} = \text{EC}_{\text{inh}} \times \text{CPF}_{\text{inh}} \times \text{ASF} \times \text{ED}/\text{AT} \times \text{FAH}$$

Where:

- $\text{RISK}_{\text{inh}}$  = inhalation cancer risk
- $\text{EC}_{\text{inh}}$  = inhalation exposure concentration (mg/kg-day)
- $\text{CPF}_{\text{inh}}$  = inhalation cancer potency factor (mg/kg-day)<sup>-1</sup>
- ASF = age sensitivity factor for a specified age group (unitless)
- ED = exposure duration (in years) for a specified age group
- AT = averaging time for lifetime cancer risk (years)
- FAH = fraction of time spent at home/school/work (unitless)

The non-inhalation cancer risks (i.e., soil ingestion and dermal contact) will be estimated using cancer potency factor in the following equation:

$$\text{RISK}_{\text{non-inh}} = \text{EC} \times \text{CPF}_{\text{oral}} \times \text{ASF} \times \text{ED}/\text{AT}$$

Where:

- $\text{RISK}_{\text{non-inh}}$  = non-inhalation cancer risk
- EC = exposure concentration (mg/kg-day) – non-inhalation pathway
- $\text{CPF}_{\text{oral}}$  = oral cancer potency factor (mg/kg-day)<sup>-1</sup>
- ASF = age sensitivity factor for a specified age group (unitless)
- ED = exposure duration (in years) for a specified age group
- AT = averaging time for lifetime cancer risk (years)

To calculate a total risk, the cancer risks from the non-inhalation pathways will be summed along with the inhalation cancer risks to provide a total cancer risk for a single multipathway substance:

$$\text{Total Risk} = \text{Risk}_{\text{inh}} + \text{Risk}_{\text{non-inh}}$$

Chronic non-cancer health hazard estimates were calculated by dividing exposure estimates by RELs. RELs are estimates of highest exposure levels that would not cause adverse health effects even if exposures continue over a lifetime. The ratio of exposure concentration to reference concentration is termed the HQ. Risks or odds of adverse effects cannot be estimated using reference doses.

Impacts of exposure to multiple chemicals will be accounted for by adding cancer risk estimates for exposure to all carcinogenic chemicals, and by adding estimated HQs for non-carcinogenic chemicals that affect the same target organ or tissue in the body. Addition of HQs for TAC that produce effects in similar organs and tissues results in a Hazard Index (HI) that reflects possible total hazards.

### 5.3 Maximally Exposed Individuals (MEI)

For the Proposed Project, grid points will be analyzed along the Airport fence-line and within the study area. In addition, several on-airport grid points that are not within the project construction sites will also be modeled (for on-airport/off-site workers). Concentrations of each TAC at these grid points will be used in calculating cancer risk, and chronic and acute non-cancer health hazard estimates. These calculations will be used to identify locations with maximum cancer risks and maximum non-cancer health hazards and serve as the basis for significance determinations.

MEI estimates will be based on the land use for each receptor location. On-Airport locations will be identified as commercial and on-Airport worker locations for the operational scenario. For off-airport locations, land uses will be designated as either residential, school (including day-care and preschool), hospital (including elder care), and commercial/industrial based on internet web searches and reviews of receptor locations in Google Earth Pro. These land use identifications will be used to determine appropriate receptors (workers at commercial/industrial locations; adult and child residents and school children at residential locations; etc.). Locations of schools, hospitals, nursing homes, daycares, etc. will be identified as sensitive receptor locations and designated as residential/commercial so that these grid points will be evaluated for both worker (teachers and staff) and residential receptors (school children).

### 5.4 Methodology for Evaluating Acute Impacts

Acute non-cancer health risk estimates will be calculated by dividing estimated maximum 1-hour TAC concentrations in air by acute RELs. An acute REL is a concentration in air below which adverse effects are unlikely for people, including sensitive subgroups, exposed for a short time on an intermittent basis. RELs for acute non-cancer health hazards do not distinguish between adults and children. Since margins of safety are incorporated to address data gaps and uncertainties, exceeding the REL does not automatically indicate an adverse health impact. Most RELs have been developed for a 1-hour exposure duration. CalEPA's OEHHA has developed acute RELs for several of the TACs of concern identified for the Proposed Project.

Short-term concentrations for each TAC associated with the Proposed Project will be divided by acute RELs to determine an acute HQ. Impacts of exposure to multiple chemicals will be accounted for by adding estimated HQs for TACs that affect the same target organ or tissue in the body, generating an acute HI for each receptor. The resulting acute HIs will be compared to the BAAQMD CEQA TAC acute HI significance threshold of 1. HIs less than 1 suggests that adverse acute non-cancer health hazard impacts are not expected.

In accordance with CalEPA Air Toxics Hot Spots Program Guidance, non-inhalation routes of exposure are not assessed for acute exposure. It is anticipated that health effects from a single exposure via the oral route at concentrations resulting from deposition of air emissions would be insignificant relative to the inhalation route.

### 5.5 Methodology for Estimating Cumulative Risks

Impacts to health risk from past, present, or foreseeable future sources located within 1,000 feet of OAK fence lines will be added to the project incremental health risks to

determine total cumulative risks near the Airport. These results will be compared to the cumulative risk thresholds presented in **Section 6**.

The risks from these other sources located on or within 1,000 feet of the Airport will be obtained from existing risk assessment/analyses conducted for those sources. The reference documentation may be from previous CEQA documents, AB2588 reports, BAAQMD permit applications, or other appropriate documentation.

## Section 6

# HHRA Significance Thresholds

The BAAQMD has developed health risk and hazard significance thresholds for CEQA impact analyses. These thresholds are provided in **Table 6-1** and indicate impacts that are cumulatively considerable. Note that Project incremental health risk impacts for comparison to these thresholds will be determined by using the incremental risks estimated as described in **Section 5.1** (project incremental) and **Section 5.5** (cumulative).

**Table 6-1. Health Risk and Health Hazard Significance Thresholds**

Health Risk or Hazard	Project Incremental Significance Threshold	Cumulative Threshold <sup>/a/</sup>
Cancer Risk (MEI Resident or MEI Worker)	Maximum Incremental Cancer Risk > 10 in 1 million	Maximum Cumulative Cancer Risk >= 100 in 1 million
Chronic Non-Cancer Hazards	Chronic Hazard Index (HIc) > 1.0	Chronic Hazard Index (HIc) > 10.0
Acute Non-Cancer Hazards	Acute Hazard Index (HIa) > 1.0	N/A <sup>b</sup>
PM <sub>2.5</sub>	Annual Avg Conc. > 0.3 mg/m <sup>3</sup>	Annual Avg Conc. > 0.8 mg/m <sup>3</sup>

**Source:** Bay Area Air Quality Management District, *California Environmental Quality Act – Air Quality Guidelines*, May 2017.

/a/ Cumulative includes the total impacts from all past, present, and foreseeable future sources within a 1,000 foot radius from the fence line of a source plus contribution from the project.

/N/A = Not applicable.

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