

Appendix FEIR-4

Health Risk Assessment

HEALTH RISK ASSESSMENT

Our Lady of Mt. Lebanon Project

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1.0 Executive Summary

1.1 Findings

This report provides an analysis of potential health risk impacts related to the proposed construction and operation of the Our Lady of Mt. Lebanon Project (Project) in the City of Los Angeles, California. The analysis identified the baseline condition around the Project and evaluated the incremental change in health risk concentration exposure from diesel exhaust/diesel particulate matter (DPM) emitted by heavy-duty construction equipment during construction and heavy duty delivery trucks during operation of the Project. The findings of the analysis are as follows:

- For carcinogenic exposures, the increase in risk is calculated to be 8.3 in one million, which is less than the applicable threshold of 10 in one million for sensitive receptors in close proximity to the Project Site, resulting in a less than significant impact.
- For chronic non-carcinogenic exposures, the increase in the respiratory hazard index was estimated to be less than the applicable threshold of one for sensitive receptors in close proximity to the Project Site, resulting in a less than significant impact.

2.0 Introduction

The Project includes the following components: (1) the development of multi-family residential units; (2) the deconstruction, off-site storage, reassembly, rehabilitation and limited alteration of the existing cathedral of Our Lady of Mt. Lebanon–St. Peter Maronite Catholic Cathedral (Applicant); and (3) the removal of three existing ancillary church buildings. To be clear, this is not the type of project that the regulatory agencies, or the applicable regulatory laws, at the time the Draft Environmental Impact Report (Draft EIR) was prepared, require to produce a Health Risk Assessment (HRA) for adequate disclosure of potential air quality impacts pursuant to the California Environmental Quality Act (CEQA).

The California Air Pollution Control Officers Association (CAPCOA) Guidance Document for Health Risk Assessments for Proposed Land Use Projects (2009) (CAPCOA HRA Guidance) provides lead agencies with guidance regarding when and how an HRA should be prepared. It bases the risk assessment methodology on the procedures developed by the California Office of Environmental Health Hazard Assessment (OEHHA) to meet the mandates of the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588). The CAPCOA HRA Guidance states that "[t]here are basically two types of land use projects that have the potential to cause long-term public health risk impacts: Type A—land use projects with toxic emissions that impact receptors; and Type B—land use projects that will place receptors in the vicinity of existing toxic sources. Type A project examples are combustion related power plants, gasoline dispensing facilities, asphalt batch plants, warehouse distribution centers, quarry operations, and other stationary sources that emit toxic substances. Type B project examples are stationary sources, high traffic roads, freeways, rail yards, and ports." Note that the Project does not qualify as either a Type A or Type B project. The Project does not contemplate any industrial uses, and is not being sited in the vicinity of existing toxic sources, including freeways, rail yards, or ports. The roadways adjacent to the Project Site are not high traffic roads.¹ Therefore, per the CAPCOA HRA Guidance in effect when the Draft EIR for the Project was prepared, the lead agency did not include an HRA in the Draft EIR. Accordingly, this HRA was done

¹ California Air Resources Board (CARB) recommends avoiding siting new sensitive land uses such as residences, schools, daycare centers, playgrounds, or medical facilities within 500 feet of a freeway, urban roads with traffic volumes exceeding 100,000 vehicles per day, or rural roads with volumes greater than 50,000 vehicles per day. CARB, *Air Quality and Land Use Handbook: a Community Health Perspective*, April 2005, p. 4, <https://ww3.arb.ca.gov/ch/handbook.pdf>.

voluntarily for informational purposes only to supplement the administrative record, and further demonstrates that even if an HRA was necessary (which it was not) the Project still would not have a significant air quality impact.

The OEHHA adopted the Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments (2003 Guidance Manual) in October of 2003. The Guidance Manual was developed by OEHHA, in conjunction with the California Air Resources Board (CARB), for use in implementing the Air Toxics “Hot Spots” Program (Health and Safety Code Section 44360 et. seq.). The Air Toxics “Hot Spots” Program requires stationary sources to report the types and quantities of certain substances routinely released into the air. The goals of the Air Toxics “Hot Spots” Program are to collect emission data, to identify facilities having localized impacts, to ascertain health risks, to notify nearby residents of significant risks, and to reduce those significant risks to acceptable levels.

OEHHA adopted a new version of the Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments (2015 Guidance Manual) in March of 2015.² CARB acknowledges that the Guidance Manual does not include guidance for CEQA and that it would be “handled by individual [Air Pollution Control] Districts.”³ The intent in developing the 2015 Guidance Manual was to provide HRA procedures for use in the Air Toxics Hot Spots Program or for the permitting of new or modified stationary sources. As noted above, the Project is not a new or modified stationary source that requires air quality permits to construct or operate. Air districts are to determine which facilities will prepare an HRA based on a prioritization process. The 2015 Guidance Manual provides recommendations related to cancer risk evaluation of short-term projects. As discussed in Section 8.2.10 of the 2015 Guidance Manual, “[t]he local air pollution control districts sometimes use the risk assessment guidelines for the Hot Spots program in permitting decisions for short-term projects such as construction or waste site remediation.” Thus, to be conservative, this HRA was prepared in part to analyze potential construction impacts, even though short-term projects that would require a permitting decision by South Coast Air Quality Management District (SCAQMD) typically would be limited to site remediation (e.g., stationary soil vapor extractors) and would not be applicable to the Project. The 2015 Guidance Manual does not provide specific recommendations for evaluation of short-term use of mobile sources (e.g., heavy-duty diesel construction equipment).

² *Office of Environmental Health Hazard Assessment, Air Toxicology and Epidemiology, Adoption of Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments, March 6, 2015, www.oehha.ca.gov/air/hot_spots/hotspots2015.html.*

³ *CARB, Risk Management Guidance for Stationary Sources of Air Toxics, July 23, 2015, p. 19, www.arb.ca.gov/toxics/rma/rmgssat.pdf.*

OEHHA's 2015 Guidance Manual provides Age Sensitivity Factors (ASFs) to account for potential increased sensitivity of early-in-life exposure to carcinogens. A review of relevant guidance was conducted to determine applicability of the use of early life exposure adjustments to identified carcinogens. For risk assessments conducted under the auspices of The Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, Connelly, Statutes of 1987; Health and Safety Code Section 44300 et seq.) a weighting factor is applied to all carcinogens regardless of purported mechanism of action. The use of these factors would not be applicable to this HRA as neither the Lead Agency nor SCAQMD have developed recommendations on whether these factors should be used for CEQA analyses of potential DPM construction impacts. For this assessment, the HRA relied upon United States Environmental Protection Agency (USEPA) guidance relating to the use of early life exposure adjustment factors (Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens, EPA/630/R-003F) whereby adjustment factors are only considered when carcinogens act "through the mutagenic mode of action." The USEPA has identified 19 compounds that elicit a mutagenic mode of action for carcinogenesis. For DPM, polycyclic aromatic hydrocarbons (PAHs) and their derivatives, which are known to exhibit a mutagenic mode of action, comprise less than one percent of the exhaust particulate mass. To date, the USEPA reports that whole diesel engine exhaust has not been shown to elicit a mutagenic mode of action. Therefore, early life exposure adjustments were not considered in this HRA.

In addition, the *L.A. City CEQA Thresholds Guide* (Thresholds Guide) states that "impacts from toxic air contaminants can occur during either the construction or operational phases of a project. During certain construction activities, potential releases of toxic air contaminants could occur during site remediation activities or during building demolition. Toxic air contaminants may also be released during industrial or manufacturing processes, or other activities that involve the use, storage, processing, or disposal of toxic materials."⁴ Importantly, note that, the Thresholds Guide does not specifically recommend an HRA for short-term DPM emissions from construction activities. The Thresholds Guide also sets forth the following factors for consideration on a case-by-case basis in making a determination of significance with regard to toxic air contaminants: the regulatory framework for the toxic material(s) and process(es) involved; the proximity of the toxic air contaminants to sensitive receptors; the quantity, volume, and toxicity of the contaminants expected to be emitted; the likelihood and potential level of exposure; and the degree to which project design will reduce the risk of exposure. Based on this information, the methodology utilized in the Draft EIR remains consistent with City of Los Angeles guidance, which indicates that preparation of an HRA was not required for the Project.

⁴ *City of Los Angeles, CEQA Thresholds Guide, 2006, p. B.3-2.*

Also, CARB has published and adopted the *Air Quality and Land Use Handbook: A Community Health Perspective*, which provides recommendations regarding the siting of new sensitive land uses near potential sources of air toxic emissions (e.g., freeways, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing facilities).⁵ SCAQMD adopted similar recommendations in its *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*.⁶ Together, the CARB and SCAQMD guidelines recommend siting distances for both the development of sensitive land uses in proximity to Toxic Air Contaminates (TAC) sources and the addition of new TAC sources in proximity to existing sensitive land uses. When considering potential air quality impacts under CEQA, consideration is given to the location of sensitive receptors within close proximity of land uses that emit TACs. Applied here, the Project does not site new sensitive land uses near existing sources of air toxic emissions.

The primary sources of potential air toxics associated with Project operations include DPM from delivery trucks (e.g., truck traffic on local streets and idling on adjacent streets). However, these activities, and the land uses associated with the Project, are not considered land uses that generate substantial TAC emissions based on review of the air toxic sources listed in SCAQMD's and CARB's guidelines. It should be noted that the SCAQMD recommends that HRAs be conducted for substantial individual sources of DPM (e.g., truck stops and warehouse distribution facilities that generate more than 100 trucks per day or more than 40 trucks with operating transport refrigeration units) and has provided guidance for analyzing mobile source diesel emissions.⁷ Based on this guidance, the Project is not considered one of these land uses and is not considered to be a substantial source of DPM warranting a refined HRA since daily truck trips to the Project Site would not exceed 100 trucks per day or more than 40 trucks with operating transport refrigeration units. In addition, the CARB-mandated ATCM limits diesel-fueled commercial vehicles (delivery trucks) to idle for no more than 5 minutes at any given time, which would further limit diesel particulate emissions.

Although a construction and operational HRA is not required for the reasons discussed above, for informational purposes only, this HRA has been prepared to provide a good faith and reasoned response to public comments and to provide the City with

⁵ CARB, *Air Quality and Land Use Handbook, a Community Health Perspective*, April 2005.

⁶ SCAQMD, *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*, May 6, 2005.

⁷ SCAQMD, *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis*, 2003.

additional substantial evidence that demonstrates that the Project would not create a significant health risk impact.

3.0 Health Risk Assessment

3.1 Project Description

The Project includes the following components: (1) the development of a 19-story, multi-family residential building with 153 residential units (2) the deconstruction, off-site storage, reassembly, rehabilitation and limited alteration of the existing cathedral of Our Lady of Mt. Lebanon–St. Peter Maronite Catholic Cathedral (Applicant); and (3) the removal of three existing ancillary church buildings, including the parish rectory, a building with offices and meeting rooms and a social hall, and their replacement with a new three-story building with ancillary church uses, including offices, meeting rooms and a multi-purpose room.

Certain activities would emit diesel particulate matter (DPM) from heavy-duty trucks and heavy-duty equipment used during construction and to a lesser extent heavy-duty delivery trucks accessing the Project Site during operation of the Project. CARB and OEHHA have classified DPM as a carcinogen. The area surrounding the Project Site is developed with a mix of commercial and residential uses. Existing nearby sensitive and uses consist of residential uses, including an 11-story residential condominium building to the north (across the alley), two and five-story, multi-family residential buildings to the south across Burton Way, and a five-story, multi-family residential building to the west across Holt Avenue. The City has approved entitlements to replace the three-story retail building and parking structure⁸ to the east across San Vicente Boulevard with a new mixed-use project with residential and retail uses (approved through Case No. CPC-2015-896-GPA-HD-MCUP-ZV-DB-SPR). The analysis conservatively assumed that this future use would be a sensitive land use.

3.2 The Assessment Process

The risk assessment process provided in OEHHA's 2003 Guidance Manual consists of four basic steps: (1) hazard identification; (2) exposure assessment; (3) dose-response assessment; and (4) risk characterization.⁹ In the first step, hazard identification involves

⁸ Based on approval of that case and associated Ordinance No. 184,720 (effective March 8, 2017), the zoning for this property is now (T)(Q)C2-2D-O with a General Commercial land use designation.

⁹ Office of Environmental Health Hazard Assessment, *The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*, August 2003, p. 1-6.

determining the potential health effect which may be associated with emitted pollutants. The purpose is to identify qualitatively whether a pollutant is a potential human carcinogen or is associated with other types of adverse health effects. Depending on the chemical, these health effects may include short-term ailments or chronic diseases. The dose-response assessment is designed to characterize the relationship between the amount or dose of a chemical and its toxicological effect on the human body. Responses to toxic chemicals will vary depending on the amount and length of exposure. For example, short-term exposure to low concentrations of chemicals may produce no noticeable effect, but continued exposure to the same levels of chemicals over a long period of time may eventually cause harm. The purpose of the exposure assessment is to estimate the extent of exposure to each substance for which risk will be evaluated. This involves emission quantification, modeling of environmental transport, identification of chemicals of concern, identification of exposure routes, identification of exposed populations, and estimation of long-term exposure levels. Risk characterization is an integration of the health effects and public exposure information developed for emitted pollutants to provide a quantitative probability of adverse health effects.

3.3 Source Identification and Characterization

3.3.1 Source Identification

As indicated above, the primary source of potential air toxics associated with the Project is DPM from heavy-duty trucks and heavy-duty construction equipment used during construction and to a lesser extent heavy-duty delivery trucks accessing the Project Site during operation of the Project. The SCAQMD recommends that an HRA be conducted for substantial sources of long-term DPM operational sources (e.g., truck stops and warehouse distribution facilities) and has provided guidance for analyzing mobile source diesel emissions.¹⁰ While Project construction would not represent a long-term source of DPM emissions,¹¹ the SCAQMD Guidance was used for purposes of modeling parameters and assumptions.

¹⁰ SCAQMD, *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions*, August 2003.

¹¹ *Project construction is short term—36 months. Moreover, the Project is residential, hotel, commercial, and office uses, none of which are associated with heavy-duty truck use or significant DPM emissions.*

3.3.2 Source Characterization

Construction

As described in detail in Section II, Project Description, of the Draft EIR, construction of the Project would commence with demolition of the existing rectory building, social hall building and church office building, followed by the deconstruction of the cathedral building. This would be followed by excavation for the subterranean parking garage, construction of the subterranean parking structure and construction of the new residential and ancillary church buildings. Upon completion of the subterranean parking structure and the partial construction of the residential and ancillary church buildings, the cathedral would be reassembled at its approximate current location. Building construction would continue, followed by paving/concrete and landscape installation. It is anticipated that project construction would commence in 2021 and be completed in 2024 (approximately 36 months). It is estimated that approximately 110,000 cubic yards of export material (e.g., concrete and asphalt surfaces) and soil would be hauled from the Project Site during the demolition and excavation phase.

Total DPM emissions over the duration of Project construction were calculated using the SCAQMD recommended California Emissions Estimator Model (CalEEMod) and consistent with the methodology for calculating criteria pollutant emissions provided in Section IV.A, Air Quality, of the Draft EIR. The calculations of the emissions generated during Project construction activities reflect the types and quantities of construction equipment and haul trucks that would be used to complete the proposed construction activities. As the assumptions used in the air quality analysis were developed to characterize a worst-case peak day of construction by phase, equipment usage assumptions were modified to reflect average daily use.

CalEEMod calculates annual emissions based on worst-case conditions occurring on a daily basis. This scenario would not represent real world conditions as construction activities and equipment would not be expected to operate at 100 percent on an average daily basis. Construction surveys prepared for CARB have documented that on a typical construction site, daily average equipment hours range from 2 to 7.5 hours depending on the type of equipment and construction phase.¹² The maximum daily to annual adjustment for construction activity is provided in Appendix A of this HRA.

As an example, the heavy-duty construction equipment mix provided in the air quality analysis for the foundation phase reflects all equipment needed for the largest

¹² CARB, *Characterization of the Off-Road Equipment Population*, December 2008.

concrete pour day. Thus, average daily DPM emissions from building foundation would be substantially less since maximum pour days would not occur every day during that phase.

The calculation of DPM emissions was based on the Mt. Lebanon Project Construction and Operational GHG CalEEMod output file provided in Appendix B, Air Quality and Greenhouse Gas Emissions, of the Draft EIR. It was assumed that all on-site (e.g., off-road equipment) equipment would be diesel and, therefore, on-site exhaust PM₁₀ emissions were included in this HRA as DPM. The CalEEMod output file is provided in Appendix A of this HRA.

Operation

A conservative estimate of the number of daily truck trips is provided below based on the National Cooperative Highway Research Program Truck Trip Generation Data.¹³

- Table D-2d of the NCHRP data (Trip Generation Summary—Daily Commercial Vehicle Trips per 1,000 sf of Building Space for Schools (assumed to be similar to church uses)) provides an average of 0.018 truck trips per 1,000 sf or approximately 0.6 truck trips per day for the Project's church uses. This assumes that all trucks would be diesel even though many of the truck deliveries are from smaller gasoline or alternative energy source trucks (e.g., UPS or FedEx).
- Table D-2e of the NCHRP data (Trip Generation Summary—Daily Commercial Vehicle Trips per 1,000 sf of Building Space for Other Land Uses (includes housing)) provides an average of 0.011 truck trips per 1,000 sf or approximately 1.6 truck trips per day for the Project's residential uses. It is conservatively assumed that all of these delivery trucks would be heavy-duty diesel trucks even though many residential truck deliveries are from smaller gasoline or alternative energy source trucks (e.g., UPS or FedEx).

Accordingly, the Project is estimated to conservatively generate approximately three trucks per day during operation. Emissions from delivery trucks travelling to and from the Project Site, as well as idling were estimated using the CARB EMFAC2021 model. Trucks travelling to/from the loading docks generate emissions through truck engine idling and travelling.

¹³ *National Cooperative Highway Research Program (NCHRP) Synthesis 298 Truck Trip Generation Data, 2001, http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_syn_298.pdf.*

Importantly, note that, with respect to truck emissions associated with the operation of projects, the SCAQMD recommends that HRAs be conducted for substantial sources of DPM for developments that include truck stops and warehouse distribution facilities that generate more than 100 trucks per day or more than 40 trucks with operating TRUs. In other words, SCAQMD has identified an amount of truck trips per day that could warrant conducting an HRA to analyze emissions and health risks. Projects with truck trips below the aforementioned amounts should not be considered a substantial source of DPM and HRAs are neither recommended nor required by the applicable regulatory documents.

Specifically, the Project is not considered to be a substantial source of operational DPM warranting an HRA because there are only three daily truck trips to the Project Site, which is far below the either more-than-100-trucks-per-day or more-than-40-TRU-trucks-per-day threshold that indicate when a project could be considered a substantial DPM source. Nonetheless, operational health risks from use of operational delivery trucks for the Project was evaluated for informational purposes and included in this HRA.

Note also that, based on SCAQMD guidance, there is no quantitative analysis required for future cancer risk within the vicinity of the Project because it is consistent with the recommendations regarding the siting of new sensitive land uses near potential sources of TAC emissions provided in the SCAQMD Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning.

3.3.3 Baseline and Identification of Chemicals of Concern

The Draft EIR identified the baseline of conditions around the Project Site and the ambient levels of TACs. The SCAQMD released the fourth round of its Basin-wide Multiple Air Toxics Exposure Study (MATES IV—Final Report) in May 2015.¹⁸ MATES IV estimated the cancer risk from TAC emissions throughout the Basin by conducting a monitoring program, an updated emissions inventory of TACs, and a modeling effort to characterize health risks in the air basin. As part of MATES IV, the SCAQMD prepared an interactive map that shows estimates of cancer risks in the Basin from ambient levels of TACs based on the modeling effort to provide insight into relative risks. The map reports estimated cancer risks for discrete 2-kilometer-by-2-kilometer grid cells. The cancer risk estimates reported there should not be interpreted as actual rates of disease in the exposed population, but rather as estimates of potential risk, based on a number of conservative assumptions. In general, MATES IV indicates that the highest cancer risks from TACs are found near shipping ports, goods movement sources, and near freeways and other transportation corridors. The Project Site falls in an estimated range of 1,016 cancer risks per one million. A figure in Appendix E to this HRA shows the MATES IV Total Cancer Risk around Project Site. Compared to previous studies of air toxics in the Basin, the MATES IV

study found decreasing air toxics exposure from the analysis done in the MATES III time period.

This HRA identifies the baseline condition and also identifies the actual additional risks due to certain emissions associated with the Project. Note that, as discussed above, the CAPCOA regulatory guidance adopted at the time the Draft EIR was prepared indicates that HRAs should assess Type A (toxic emissions) and Type B (placing receptors near existing toxic sources) projects with within the CEQA context. This HRA presents the incremental health risks analysis even though the Project does not squarely qualify as either a Type A or Type B project. Accordingly, this voluntary HRA analysis is informational, and further informs the public and decision makers, but is not required pursuant to the laws in effect when the Draft EIR was prepared. Nonetheless, this HRA quantitatively evaluated DPM as a chemical of concern for potential health effects in two categories, carcinogenic and non-carcinogenic.

3.4 Exposure Quantification

Consistent with SCAQMD's Localized Significance Threshold Methodology (LST Guidelines), this HRA used USEPA's Regulatory Model AERMOD to assess the downwind extent of DPM concentrations from proposed construction and operational activities.¹⁴ AERMOD accounts for a variety of refined, site-specific conditions that facilitate an accurate assessment of Project impacts. AERMOD's air dispersion algorithms are based upon a planetary boundary layer turbulence structure and scaling concepts, including the treatment of surface and elevated sources in simple and complex terrain.

Exhaust emissions from construction and operational equipment were treated as a set of side-by-side elevated volume sources. The release height was assumed to be 12 feet. This represents the mid-range of the expected plume rise from frequently used construction equipment and operational heavy-duty trucks during daytime atmospheric conditions. All construction exhaust emissions were assumed to take place over a 36-month (3-year) duration on weekdays between 7 A.M. to 3 P.M. (8-hour period). Operational exhaust emissions were assumed to take place 6-days per week between 7 A.M. to 3 P.M. (8-hour period) and included 15 minutes of idle time to account for ingress, egress, and travel on-site.¹⁵

¹⁴ SCAQMD, *Final-Localized Significance Threshold Methodology*, 2008.

¹⁵ SCAQMD, *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis*, 2003, www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis.

Air dispersion models require additional input parameters including local meteorology and receptors. Due to the sensitivity to individual meteorological parameters such as wind speed and direction, the USEPA recommends that meteorological data used as input into dispersion models be selected on the basis of relative spatial and temporal conditions that exist in the area of concern. In response to this recommendation, meteorological data from the SCAQMD Downtown Los Angeles monitoring station (Source Receptor Area 1) were used to represent local weather conditions and prevailing winds.

Cartesian receptor grids were used to represent adjacent and nearby sensitive land uses. The Cartesian receptor grids were placed at each sensitive use with a built in 10 meter spacing for the adjacent school and nearby residential uses. All receptors were placed at ground level, which is recommended by SCAQMD for AERMOD modeling. Elevations for both sources and receptors were provided by the U.S. Geological Survey (USGS) and included using the AERMOD terrain processor AERMAP.

DPM modeled concentrations were used to calculate cancer risk and chronic hazard index at each relevant receptor. A graphical representation of the source-receptor grid network is presented in Appendix C.

3.5 Risk Characterization

3.5.1 Carcinogenic Chemical Risk

Health risks associated with exposure to carcinogenic compounds at sensitive land uses in close proximity to the Project can be defined in terms of the probability of developing cancer as a result of exposure to a chemical at a given concentration. Under a deterministic approach (i.e., point estimate methodology), the cancer risk probability is determined by multiplying the chemical's annual concentration by its unit risk factor (URF). The URF is a measure of the carcinogenic potential of a chemical when a dose is received through the inhalation pathway. It represents an upper bound estimate of the probability of contracting cancer as a result of continuous exposure to an ambient concentration of one microgram per cubic meter ($\mu\text{g}/\text{m}^3$) over a 70-year lifetime. The SCAQMD recommends a threshold of ten in one million cancer risk for evaluating carcinogenic impacts at sensitive receptors.¹⁶

The equation used to calculate the potential excess cancer risk is:

¹⁶ SCAQMD, *Air Quality Significance Thresholds*, www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2.

$$\text{Risk}_i = C_i \times \text{CP}_i \times \text{DBR} \times \text{EVF}$$

Where:

Risk_i = Lifetime Excess Cancer Risk from exposure to chemical_i

C_i = Representative Air Concentration for chemical_i ($\mu\text{g}/\text{m}^3$)

CP_i = Cancer Potency_i ($\text{mg}/\text{kg}\text{-day}$)⁻¹

DBR = Daily Breathing Rate (L/kg body weight-day)

EVF = Exposure Value Factor (unitless)

An estimate of an individual's incremental excess cancer risk from exposure to Project construction and operational DPM emissions is calculated by summing the chemical-specific excess cancer risks. In addition, cancer risk is evaluated based on the duration on which a sensitive receptor is exposed to DPM (exposure duration). Based on OEHHA guidelines, it is recommended that cancer risk analyses assume an exposure duration of 70-years for residential receptors.¹⁷ The exposure duration takes into account the construction duration of 36 months during construction, and operational emissions occurring each year.

3.5.2 Non-Carcinogenic Chemical Risk

The potential for chronic non-carcinogenic health effects is evaluated by calculating the total hazard index (HI) for the Project construction and operational DPM emissions. This HI represents the sum of the hazard quotients (HQs) developed for each individual project-related chemical, where a HQ is the ratio of the representative air concentration of the chemical to the chemical specific non-cancer Reference Exposure Level (REL). The non-cancer RELs represent the daily average exposure concentration at (or below) which no adverse health effects are anticipated.

The equations used to calculate the chemical-specific HQs and HIs are:

$$\text{HQ}_i = C_i/\text{REL}_i$$

$$\text{HI} = \sum \text{HQ}_i$$

Where:

¹⁷ Office of Environmental Health and Hazard Assessment, *Air Toxics Hot Spots Program Risk Assessment Guidelines*, August 2003.

HQ_i = Hazard Quotient for chemical_i
C_i = Average Daily Air Concentration for chemical_i (µg/m³)
REL_i = Noncancer Reference Exposure Level for chemical_i (µg/m³)
HI = Hazard Index

The SCAQMD recommends that the non-carcinogenic hazards of toxic air contaminants should not exceed a hazard index of 1.0 for either chronic or acute effects.¹⁸ Acute effects are due to short-term exposure, while chronic effects are due to long-term exposure to a substance. For chronic and acute risks, the hazard index is calculated as the summation of the hazard quotients for all chemicals to which an individual would be exposed. The acute hazard index was not quantified since an inhalation REL has not been determined by the OEHHA for DPM at the time of preparation of this HRA or the Draft EIR.

3.6 Conclusions

The results from the health risk calculations provide an estimate of the potential risks and hazards to individuals through inhalation of Project construction DPM emissions over a 36-month duration. Consistent with OEHHA guidelines, health risk impacts from Project operational DPM emissions were assessed over a 70-year exposure duration for residential receptors. The estimated risks and hazards include: lifetime excess cancer risk estimates, and cumulative chronic HI estimates for the receptor locations of concern.

As shown in Appendix B and in Table 1 on page 16, the results of the HRA yields a maximum combined construction and operational off-site individual cancer risk of 8.3 in a million for residential uses located north of the Project site. The maximum chronic risk of 0.093 occurs within this same residential receptor area. As the Project would not emit carcinogenic or toxic air contaminants that result in impacts which exceed the maximum individual cancer risk of ten in one million or the chronic index of 1.0, Project-related toxic emission impacts would be less than significant.

¹⁸ SCAQMD, *Air Quality Significance Thresholds*, www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2.

**Table 1
Health Risk Assessment**

Risk	Significance Threshold	Calculated Risk			Significant Impact
		Construction	Operation	Combined	
Cancer Risk (Resident)	10 in 1 Million	8.26E-06 or 8.26 in one million	1.97E-8 or 0.01 in one million	8.27E-6 or 8.27 in one million	No
Non-Carcinogenic Risk (Maximum)	Chronic Index (HI) of 1.0	9.3E-02 or 0.093	9.9E-6 or 0.00001	Not Applicable (Based on Annual Concentration)	No

4.0 Uncertainty Assessment

Evaluating carcinogenic pollutant concentrations based on OEHHA methodology and SCAQMD Guidance has an implied uncertainty. These methodologies were developed to provide a conservative health risk estimate. The conservative nature of this methodology relies on a number of inputs designed to prevent an underestimation of risk. The following discusses the conservative nature of the risk assessment analysis assumptions utilized in this analysis.

The cancer risk from DPM occurs mainly through inhalation. Output from the dispersion analysis was used to estimate the DPM concentrations. The cancer risk estimate is then calculated based on those estimated DPM concentrations using the risk methodology promulgated by OEHHA. The risk assessment guidelines established by SCAQMD and included in the analysis are designed to produce conservative (high) estimates of the risk posed by DPM, due to the following factors:

- As a conservative measure, the SCAQMD does not recognize indoor adjustments for residential uses. However, studies have shown that the typical person spends approximately 87 percent of their time indoors, 5 percent of their time outdoors, and 7 percent of their time in vehicles. A DPM exposure assessment showed that an average indoor concentration was 2.0 $\mu\text{g}/\text{m}^3$, compared with an outdoor concentration of 3.0 $\mu\text{g}/\text{m}^3$.¹⁹
- OEHHA has a toxicity database that lists TACs and their URFs. A URF describes the cancer potency of a particular TAC and is used to estimate cancer risk.⁴ Most of these URFs are extrapolated from animal studies based on continuous exposure to particular toxin. This method can have some significant uncertainties. For example, a chemical that is carcinogenic by one route of exposure is considered to be carcinogenic for all routes of exposure at its maximum potency. Also, it is not realistic for a receptor to be exposed to a continuous concentration of TACs over time. In reality, receptors are exposed to constantly changing concentration levels that would expose receptors to lower levels of TACs over time than analyzed in this analysis.
- The use of the SCAQMD meteorological data set and conservative exposure assumptions (e.g., assumes receptor would be located outside in the same

¹⁹ SCAQMD, *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions*, 2002.

location 24 hours per day for the entire construction duration) amongst others, likely also lead to overestimated risks.

As such, uncertainty in the health risk analysis is conservative in nature and is designed to prevent undisclosed impacts to human health. Concentrations reported in this report represent a conservative scenario that is likely an over estimation of actual pollutant concentrations.

Appendices

Appendix A

Emission Calculations and CalEEMod Output File

Mt. Lebanon Project - South Coast Air Basin, Annual

Mt. Lebanon Project
South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	3.40	1000sqft	0.97	3,400.00	0
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0
Place of Worship	21.19	1000sqft	0.97	21,191.00	0
Enclosed Parking with Elevator	397.00	Space	3.57	158,800.00	0
Apartments High Rise	153.00	Dwelling Unit	0.97	148,641.00	398

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2024
Utility Company	Los Angeles Department of Water & Power				
CO2 Intensity (lb/MWhr)	647	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - LADWP SB100 Carbon Intensity (2024) - 647 lbs/MWh

Land Use - see project description

Construction Phase - see assumptions

Off-road Equipment -

Off-road Equipment - see assumptions

Off-road Equipment - see assumptions

Off-road Equipment - see assumptions

Off-road Equipment - see assumptions

Off-road Equipment - see assumptions

Off-road Equipment - see assumptions

Trips and VMT - Demolition and Haul trucks would be travelling to the Vulcan Sun Valley Landfill (~20 miles one-way) or Sunshine Canyon Landfill (~26 miles one-way)

Demolition -

Grading - see assumptions

Woodstoves - No Fireplaces

Energy Use - See parking garage ventilation and lighting calculations

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Energy Mitigation - Install high efficiency lighting

Water Mitigation - Consistent with CalGreen for water conservation (20%)

Waste Mitigation - Current City of LA Diversion Rates

Stationary Sources - Emergency Generators and Fire Pumps - 1 Emergency Generator (300 hp). Tested for 1 hour each month.

Area Mitigation -

Mt. Lebanon
Construction Annual Emissions

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	65.00
tblConstructionPhase	NumDays	230.00	2.00
tblConstructionPhase	NumDays	230.00	41.00
tblConstructionPhase	NumDays	230.00	478.00
tblConstructionPhase	NumDays	20.00	131.00
tblConstructionPhase	NumDays	20.00	129.00
tblConstructionPhase	NumDays	20.00	65.00
tblEnergyUse	LightingElect	1.75	2.33
tblEnergyUse	T24E	3.92	0.41
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	130.05	0.00
tblFireplaces	NumberWood	7.65	0.00
tblGrading	MaterialExported	0.00	110,000.00
tblLandUse	LandUseSquareFeet	21,190.00	21,191.00
tblLandUse	LandUseSquareFeet	153,000.00	148,641.00
tblLandUse	LotAcreage	0.08	0.97
tblLandUse	LotAcreage	0.49	0.97
tblLandUse	LotAcreage	2.47	0.97
tblLandUse	Population	438.00	398.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblProjectCharacteristics	CO2IntensityFactor	1227.89	647

Mt. Lebanon
Construction Annual Emissions

tblTripsAndVMT	HaulingTripLength	20.00	52.00
tblTripsAndVMT	HaulingTripLength	20.00	52.00
tblTripsAndVMT	HaulingTripNumber	56.00	2,620.00
tblTripsAndVMT	HaulingTripNumber	13,750.00	8,127.00
tblTripsAndVMT	VendorTripLength	6.90	13.80
tblTripsAndVMT	VendorTripNumber	0.00	5.00
tblTripsAndVMT	VendorTripNumber	46.00	348.00
tblTripsAndVMT	VendorTripNumber	46.00	64.00
tblTripsAndVMT	VendorTripNumber	46.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	5.00
tblTripsAndVMT	VendorVehicleClass	HDT_Mix	HHD
tblTripsAndVMT	WorkerTripNumber	8.00	50.00
tblTripsAndVMT	WorkerTripNumber	25.00	60.00
tblTripsAndVMT	WorkerTripNumber	187.00	60.00
tblTripsAndVMT	WorkerTripNumber	187.00	60.00
tblTripsAndVMT	WorkerTripNumber	187.00	350.00
tblTripsAndVMT	WorkerTripNumber	8.00	20.00
tblTripsAndVMT	WorkerTripNumber	37.00	0.00
tblVehicleTrips	CC_TL	8.40	5.71
tblVehicleTrips	CC_TTP	0.00	100.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	4.98	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	10.37	0.00
tblVehicleTrips	ST_TR	0.00	914.35
tblVehicleTrips	SU_TR	3.65	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	36.63	0.00
tblVehicleTrips	SU_TR	0.00	914.35
tblVehicleTrips	WD_TR	4.20	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	9.11	0.00
tblVehicleTrips	WD_TR	0.00	580.00
tblWoodstoves	NumberCatalytic	7.65	0.00
tblWoodstoves	NumberNoncatalytic	7.65	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Mt. Lebanon
Construction Annual Emissions

Year	tons/yr										MT/yr					
	2021	0.2362	3.4937	1.9330	9.8100e-003	0.3233	0.0747	0.3980	0.0791	0.0701	0.1492	0.0000	928.7075	928.7075	0.1155	0.0000
2022	0.4758	4.3463	4.0028	0.0132	0.5507	0.1453	0.6959	0.1400	0.1386	0.2786	0.0000	1,209.4424	1,209.4424	0.1393	0.0000	1,212.9246
2023	0.4722	2.9687	4.1221	0.0103	0.5156	0.1326	0.6482	0.1373	0.1270	0.2643	0.0000	910.5771	910.5771	0.0913	0.0000	912.8592
2024	0.7330	0.8553	1.2365	2.9700e-003	0.1371	0.0369	0.1740	0.0365	0.0352	0.0717	0.0000	262.5269	262.5269	0.0296	0.0000	263.2671
Maximum	0.7330	4.3463	4.1221	0.0132	0.5507	0.1453	0.6959	0.1400	0.1386	0.2786	0.0000	1,209.4424	1,209.4424	0.1393	0.0000	1,212.9246

Mitigated Construction

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
2021	0.2362	3.4937	1.9330	9.8100e-003	0.2949	0.0747	0.3696	0.0757	0.0701	0.1458	0.0000	928.7072	928.7072	0.1155	0.0000	931.5950
2022	0.4758	4.3463	4.0028	0.0132	0.5260	0.1453	0.6713	0.1372	0.1386	0.2758	0.0000	1,209.4419	1,209.4419	0.1393	0.0000	1,212.9241
2023	0.4722	2.9687	4.1221	0.0103	0.5156	0.1326	0.6482	0.1373	0.1270	0.2643	0.0000	910.5765	910.5765	0.0913	0.0000	912.8587
2024	0.7330	0.8553	1.2365	2.9700e-003	0.1371	0.0369	0.1740	0.0365	0.0352	0.0717	0.0000	262.5267	262.5267	0.0296	0.0000	263.2670
Maximum	0.7330	4.3463	4.1221	0.0132	0.5260	0.1453	0.6713	0.1373	0.1386	0.2758	0.0000	1,209.4419	1,209.4419	0.1393	0.0000	1,212.9241

Percent Reduction	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
	0.00	0.00	0.00	0.00	3.47	0.00	2.77	1.58	0.00	0.81	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
6	1-22-2021	4-21-2021	0.1492	0.1492
7	4-22-2021	7-21-2021	0.6463	0.6463
8	7-22-2021	10-21-2021	1.0443	1.0443
9	10-22-2021	1-21-2022	2.3026	2.3026
10	1-22-2022	4-21-2022	1.8186	1.8186
11	4-22-2022	7-21-2022	0.8641	0.8641
12	7-22-2022	10-21-2022	0.9521	0.9521
13	10-22-2022	1-21-2023	0.9385	0.9385
14	1-22-2023	4-21-2023	0.8524	0.8524
15	4-22-2023	7-21-2023	0.8567	0.8567
16	7-22-2023	10-21-2023	0.8677	0.8677
17	10-22-2023	1-21-2024	1.0410	1.0410
18	1-22-2024	4-21-2024	1.2243	1.2243
		Highest	2.3026	2.3026

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description

Mt. Lebanon
Construction Annual Emissions

1	Demolition	Demolition	4/1/2021	9/30/2021	5	131
2	Grading	Grading	10/1/2021	3/30/2022	5	129
3	Mat Foundation	Building Construction	4/1/2022	4/4/2022	5	2
4	Building Foundation	Building Construction	4/5/2022	5/31/2022	5	41
5	Building Construction	Building Construction	6/1/2022	3/31/2024	5	478
6	Paving	Paving	1/1/2024	3/31/2024	5	65
7	Architectural Coating	Architectural Coating	1/1/2024	3/31/2024	5	65

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 64.5

Acres of Paving: 3.57

Residential Indoor: 300,998; Residential Outdoor: 100,333; Non-Residential Indoor: 36,887; Non-Residential Outdoor: 12,296; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Rubber Tired Loaders	1	8.00	203	0.36
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Air Compressors	2	8.00	78	0.48
Grading	Bore/Drill Rigs	2	8.00	221	0.50
Grading	Cranes	1	8.00	231	0.29
Grading	Excavators	1	8.00	158	0.38
Grading	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Grading	Other Material Handling Equipment	1	8.00	168	0.40
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Mat Foundation	Cranes	1	8.00	231	0.29
Mat Foundation	Forklifts	1	8.00	89	0.20
Mat Foundation	Generator Sets	1	8.00	84	0.74
Mat Foundation	Pumps	4	8.00	84	0.74
Mat Foundation	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Mat Foundation	Welders	0	8.00	46	0.45
Building Foundation	Air Compressors	1	8.00	78	0.48
Building Foundation	Cranes	1	8.00	231	0.29
Building Foundation	Forklifts	1	8.00	89	0.20
Building Foundation	Generator Sets	0	8.00	84	0.74
Building Foundation	Plate Compactors	3	8.00	8	0.43
Building Foundation	Pumps	1	8.00	84	0.74
Building Foundation	Rubber Tired Loaders	1	8.00	203	0.36
Building Foundation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Foundation	Welders	0	8.00	46	0.45
Building Construction	Air Compressors	2	8.00	78	0.48
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20

Mt. Lebanon
Construction Annual Emissions

Building Construction	Generator Sets	03	8.00	84	0.74
Building Construction	Plate Compactors	23	8.00	8	0.43
Building Construction	Pumps	23	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Welders	03	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	03	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	03	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	3	50.00	0.00	2,620.00	14.70	6.90	52.00	LD_Mix	HDT_Mix	HHDT
Grading	10	60.00	5.00	8,127.00	14.70	6.90	52.00	LD_Mix	HDT_Mix	HHDT
Mat Foundation	7	60.00	348.00	0.00	14.70	13.80	20.00	LD_Mix	HHDT	HHDT
Building Foundation	9	60.00	64.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	11	350.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	20.00	5.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.0900e-003	0.0000	6.0900e-003	9.2000e-004	0.0000	9.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0497	0.5183	0.4671	9.5000e-004		0.0226	0.0226		0.0208	0.0208	0.0000	83.5643	83.5643	0.0270	0.0000	84.2399
Total	0.0497	0.5183	0.4671	9.5000e-004	6.0900e-003	0.0226	0.0287	9.2000e-004	0.0208	0.0217	0.0000	83.5643	83.5643	0.0270	0.0000	84.2399

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0228	0.7201	0.1742	2.3900e-003	0.0585	2.6900e-003	0.0612	0.0161	2.5700e-003	0.0186	0.0000	235.5411	235.5411	0.0151	0.0000	235.9177
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mt. Lebanon
Construction Annual Emissions

Worker	0.0136	0.0101	0.1143	3.5000e-004	0.0359	2.7000e-004	0.0362	9.5400e-003	2.5000e-004	9.7900e-003	0.0000	31.3304	31.3304	8.4000e-004	0.0000	31.3514
Total	0.0364	0.7302	0.2885	2.7400e-003	0.0944	2.9600e-003	0.0974	0.0256	2.8200e-003	0.0284	0.0000	266.8714	266.8714	0.0159	0.0000	267.2691

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.3700e-003	0.0000	2.3700e-003	3.6000e-004	0.0000	3.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0497	0.5183	0.4671	9.5000e-004		0.0226	0.0226		0.0208	0.0208	0.0000	83.5642	83.5642	0.0270	0.0000	84.2398
Total	0.0497	0.5183	0.4671	9.5000e-004	2.3700e-003	0.0226	0.0250	3.6000e-004	0.0208	0.0212	0.0000	83.5642	83.5642	0.0270	0.0000	84.2398

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0228	0.7201	0.1742	2.3900e-003	0.0585	2.6900e-003	0.0612	0.0161	2.5700e-003	0.0186	0.0000	235.5411	235.5411	0.0151	0.0000	235.9177
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0136	0.0101	0.1143	3.5000e-004	0.0359	2.7000e-004	0.0362	9.5400e-003	2.5000e-004	9.7900e-003	0.0000	31.3304	31.3304	8.4000e-004	0.0000	31.3514
Total	0.0364	0.7302	0.2885	2.7400e-003	0.0944	2.9600e-003	0.0974	0.0256	2.8200e-003	0.0284	0.0000	266.8714	266.8714	0.0159	0.0000	267.2691

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0404	0.0000	0.0404	4.6300e-003	0.0000	4.6300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1053	1.0803	0.8279	2.0800e-003		0.0447	0.0447		0.0422	0.0422	0.0000	181.5148	181.5148	0.0479	0.0000	182.7123
Total	0.1053	1.0803	0.8279	2.0800e-003	0.0404	0.0447	0.0851	4.6300e-003	0.0422	0.0469	0.0000	181.5148	181.5148	0.0479	0.0000	182.7123

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

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Hauling	0.0361	1.1428	0.2764	3.7900e-003	0.1596	4.2600e-003	0.1639	0.0419	4.0800e-003	0.0459	0.0000	373.8091	373.8091	0.0239	0.0000	374.4068
Vendor	4.7000e-004	0.0161	4.0600e-003	4.0000e-005	1.0400e-003	3.0000e-005	1.0700e-003	3.0000e-004	3.0000e-005	3.3000e-004	0.0000	4.0063	4.0063	2.6000e-004	0.0000	4.0128
Worker	8.2300e-003	6.1100e-003	0.0691	2.1000e-004	0.0217	1.6000e-004	0.0219	5.7700e-003	1.5000e-004	5.9200e-003	0.0000	18.9417	18.9417	5.1000e-004	0.0000	18.9545
Total	0.0448	1.1649	0.3496	4.0400e-003	0.1824	4.4500e-003	0.1868	0.0479	4.2600e-003	0.0522	0.0000	396.7571	396.7571	0.0247	0.0000	397.3740

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0158	0.0000	0.0158	1.8100e-003	0.0000	1.8100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1053	1.0803	0.8279	2.0800e-003		0.0447	0.0447		0.0422	0.0422	0.0000	181.5146	181.5146	0.0479	0.0000	182.7121
Total	0.1053	1.0803	0.8279	2.0800e-003	0.0158	0.0447	0.0605	1.8100e-003	0.0422	0.0440	0.0000	181.5146	181.5146	0.0479	0.0000	182.7121

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0361	1.1428	0.2764	3.7900e-003	0.1596	4.2600e-003	0.1639	0.0419	4.0800e-003	0.0459	0.0000	373.8091	373.8091	0.0239	0.0000	374.4068
Vendor	4.7000e-004	0.0161	4.0600e-003	4.0000e-005	1.0400e-003	3.0000e-005	1.0700e-003	3.0000e-004	3.0000e-005	3.3000e-004	0.0000	4.0063	4.0063	2.6000e-004	0.0000	4.0128
Worker	8.2300e-003	6.1100e-003	0.0691	2.1000e-004	0.0217	1.6000e-004	0.0219	5.7700e-003	1.5000e-004	5.9200e-003	0.0000	18.9417	18.9417	5.1000e-004	0.0000	18.9545
Total	0.0448	1.1649	0.3496	4.0400e-003	0.1824	4.4500e-003	0.1868	0.0479	4.2600e-003	0.0522	0.0000	396.7571	396.7571	0.0247	0.0000	397.3740

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0404	0.0000	0.0404	4.6300e-003	0.0000	4.6300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0905	0.8727	0.7799	1.9800e-003		0.0366	0.0366		0.0346	0.0346	0.0000	173.3482	173.3482	0.0456	0.0000	174.4885
Total	0.0905	0.8727	0.7799	1.9800e-003	0.0404	0.0366	0.0770	4.6300e-003	0.0346	0.0392	0.0000	173.3482	173.3482	0.0456	0.0000	174.4885

Unmitigated Construction Off-Site

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0328	0.9959	0.2617	3.5700e-003	0.1586	3.5200e-003	0.1621	0.0415	3.3700e-003	0.0449	0.0000	352.4434	352.4434	0.0226	0.0000	353.0094
Vendor	4.2000e-004	0.0145	3.6700e-003	4.0000e-005	9.9000e-004	3.0000e-005	1.0200e-003	2.9000e-004	3.0000e-005	3.1000e-004	0.0000	3.7904	3.7904	2.4000e-004	0.0000	3.7964
Worker	7.3800e-003	5.2700e-003	0.0609	1.9000e-004	0.0207	1.5000e-004	0.0209	5.5100e-003	1.4000e-004	5.6500e-003	0.0000	17.4331	17.4331	4.4000e-004	0.0000	17.4441
Total	0.0406	1.0158	0.3262	3.8000e-003	0.1803	3.7000e-003	0.1840	0.0473	3.5400e-003	0.0508	0.0000	373.6669	373.6669	0.0233	0.0000	374.2499

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0158	0.0000	0.0158	1.8100e-003	0.0000	1.8100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0905	0.8727	0.7799	1.9800e-003		0.0366	0.0366		0.0346	0.0346	0.0000	173.3480	173.3480	0.0456	0.0000	174.4883
Total	0.0905	0.8727	0.7799	1.9800e-003	0.0158	0.0366	0.0523	1.8100e-003	0.0346	0.0364	0.0000	173.3480	173.3480	0.0456	0.0000	174.4883

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0328	0.9959	0.2617	3.5700e-003	0.1586	3.5200e-003	0.1621	0.0415	3.3700e-003	0.0449	0.0000	352.4434	352.4434	0.0226	0.0000	353.0094
Vendor	4.2000e-004	0.0145	3.6700e-003	4.0000e-005	9.9000e-004	3.0000e-005	1.0200e-003	2.9000e-004	3.0000e-005	3.1000e-004	0.0000	3.7904	3.7904	2.4000e-004	0.0000	3.7964
Worker	7.3800e-003	5.2700e-003	0.0609	1.9000e-004	0.0207	1.5000e-004	0.0209	5.5100e-003	1.4000e-004	5.6500e-003	0.0000	17.4331	17.4331	4.4000e-004	0.0000	17.4441
Total	0.0406	1.0158	0.3262	3.8000e-003	0.1803	3.7000e-003	0.1840	0.0473	3.5400e-003	0.0508	0.0000	373.6669	373.6669	0.0233	0.0000	374.2499

3.4 Mat Foundation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.2200e-003	0.0200	0.0217	4.0000e-005		1.0100e-003	1.0100e-003		9.9000e-004	9.9000e-004	0.0000	3.4673	3.4673	3.5000e-004	0.0000	3.4760
Total	2.2200e-003	0.0200	0.0217	4.0000e-005		1.0100e-003	1.0100e-003		9.9000e-004	9.9000e-004	0.0000	3.4673	3.4673	3.5000e-004	0.0000	3.4760

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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9200e-003	0.0689	0.0153	1.9000e-004	4.1300e-003	1.7000e-004	4.3000e-003	1.1300e-003	1.6000e-004	1.3000e-003	0.0000	18.8286	18.8286	1.4400e-003	0.0000	18.8647
Worker	2.3000e-004	1.7000e-004	1.9300e-003	1.0000e-005	6.6000e-004	0.0000	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.5534	0.5534	1.0000e-005	0.0000	0.5538
Total	2.1500e-003	0.0691	0.0172	2.0000e-004	4.7900e-003	1.7000e-004	4.9600e-003	1.3000e-003	1.6000e-004	1.4800e-003	0.0000	19.3820	19.3820	1.4500e-003	0.0000	19.4185

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.2200e-003	0.0200	0.0217	4.0000e-005		1.0100e-003	1.0100e-003		9.9000e-004	9.9000e-004	0.0000	3.4673	3.4673	3.5000e-004	0.0000	3.4760
Total	2.2200e-003	0.0200	0.0217	4.0000e-005		1.0100e-003	1.0100e-003		9.9000e-004	9.9000e-004	0.0000	3.4673	3.4673	3.5000e-004	0.0000	3.4760

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9200e-003	0.0689	0.0153	1.9000e-004	4.1300e-003	1.7000e-004	4.3000e-003	1.1300e-003	1.6000e-004	1.3000e-003	0.0000	18.8286	18.8286	1.4400e-003	0.0000	18.8647
Worker	2.3000e-004	1.7000e-004	1.9300e-003	1.0000e-005	6.6000e-004	0.0000	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.5534	0.5534	1.0000e-005	0.0000	0.5538
Total	2.1500e-003	0.0691	0.0172	2.0000e-004	4.7900e-003	1.7000e-004	4.9600e-003	1.3000e-003	1.6000e-004	1.4800e-003	0.0000	19.3820	19.3820	1.4500e-003	0.0000	19.4185

3.5 Building Foundation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0346	0.3186	0.2787	5.9000e-004		0.0150	0.0150		0.0142	0.0142	0.0000	50.5010	50.5010	0.0110	0.0000	50.7748
Total	0.0346	0.3186	0.2787	5.9000e-004		0.0150	0.0150		0.0142	0.0142	0.0000	50.5010	50.5010	0.0110	0.0000	50.7748

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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.5400e-003	0.1211	0.0305	3.2000e-004	8.2700e-003	2.3000e-004	8.4900e-003	2.3900e-003	2.2000e-004	2.6000e-003	0.0000	31.5748	31.5748	1.9800e-003	0.0000	31.6244
Worker	4.8000e-003	3.4300e-003	0.0396	1.3000e-004	0.0135	1.0000e-004	0.0136	3.5800e-003	9.0000e-005	3.6700e-003	0.0000	11.3454	11.3454	2.9000e-004	0.0000	11.3525
Total	8.3400e-003	0.1245	0.0702	4.5000e-004	0.0218	3.3000e-004	0.0221	5.9700e-003	3.1000e-004	6.2700e-003	0.0000	42.9202	42.9202	2.2700e-003	0.0000	42.9769

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0346	0.3186	0.2787	5.9000e-004		0.0150	0.0150		0.0142	0.0142	0.0000	50.5009	50.5009	0.0110	0.0000	50.7747
Total	0.0346	0.3186	0.2787	5.9000e-004		0.0150	0.0150		0.0142	0.0142	0.0000	50.5009	50.5009	0.0110	0.0000	50.7747

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.5400e-003	0.1211	0.0305	3.2000e-004	8.2700e-003	2.3000e-004	8.4900e-003	2.3900e-003	2.2000e-004	2.6000e-003	0.0000	31.5748	31.5748	1.9800e-003	0.0000	31.6244
Worker	4.8000e-003	3.4300e-003	0.0396	1.3000e-004	0.0135	1.0000e-004	0.0136	3.5800e-003	9.0000e-005	3.6700e-003	0.0000	11.3454	11.3454	2.9000e-004	0.0000	11.3525
Total	8.3400e-003	0.1245	0.0702	4.5000e-004	0.0218	3.3000e-004	0.0221	5.9700e-003	3.1000e-004	6.2700e-003	0.0000	42.9202	42.9202	2.2700e-003	0.0000	42.9769

3.6 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

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Off-Road	0.1888	1.7098	1.6104	3.0400e-003		0.0862	0.0862		0.0826	0.0826	0.0000	262.3665	262.3665	0.0468	0.0000	263.5364
Total	0.1888	1.7098	1.6104	3.0400e-003		0.0862	0.0862		0.0826	0.0826	0.0000	262.3665	262.3665	0.0468	0.0000	263.5364

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.1300e-003	0.1412	0.0356	3.8000e-004	9.6400e-003	2.6000e-004	9.9100e-003	2.7800e-003	2.5000e-004	3.0300e-003	0.0000	36.8212	36.8212	2.3100e-003	0.0000	36.8790
Worker	0.1045	0.0746	0.8629	2.7300e-003	0.2938	2.1500e-003	0.2959	0.0780	1.9800e-003	0.0800	0.0000	246.9691	246.9691	6.2300e-003	0.0000	247.1247
Total	0.1086	0.2158	0.8985	3.1100e-003	0.3034	2.4100e-003	0.3058	0.0808	2.2300e-003	0.0830	0.0000	283.7903	283.7903	8.5400e-003	0.0000	284.0037

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1888	1.7098	1.6104	3.0400e-003		0.0862	0.0862		0.0826	0.0826	0.0000	262.3662	262.3662	0.0468	0.0000	263.5360
Total	0.1888	1.7098	1.6104	3.0400e-003		0.0862	0.0862		0.0826	0.0826	0.0000	262.3662	262.3662	0.0468	0.0000	263.5360

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.1300e-003	0.1412	0.0356	3.8000e-004	9.6400e-003	2.6000e-004	9.9100e-003	2.7800e-003	2.5000e-004	3.0300e-003	0.0000	36.8212	36.8212	2.3100e-003	0.0000	36.8790
Worker	0.1045	0.0746	0.8629	2.7300e-003	0.2938	2.1500e-003	0.2959	0.0780	1.9800e-003	0.0800	0.0000	246.9691	246.9691	6.2300e-003	0.0000	247.1247
Total	0.1086	0.2158	0.8985	3.1100e-003	0.3034	2.4100e-003	0.3058	0.0808	2.2300e-003	0.0830	0.0000	283.7903	283.7903	8.5400e-003	0.0000	284.0037

3.6 Building Construction - 2023

Unmitigated Construction On-Site

Mt. Lebanon
Construction Annual Emissions

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2998	2.6740	2.7158	5.1700e-003		0.1289	0.1289		0.1235	0.1235	0.0000	445.8888	445.8888	0.0783	0.0000	447.8460
Total	0.2998	2.6740	2.7158	5.1700e-003		0.1289	0.1289		0.1235	0.1235	0.0000	445.8888	445.8888	0.0783	0.0000	447.8460

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.2100e-003	0.1800	0.0542	6.2000e-004	0.0164	2.1000e-004	0.0166	4.7300e-003	2.0000e-004	4.9300e-003	0.0000	60.6402	60.6402	3.4600e-003	0.0000	60.7268
Worker	0.1672	0.1147	1.3520	4.4700e-003	0.4992	3.5600e-003	0.5028	0.1326	3.2800e-003	0.1359	0.0000	404.0481	404.0481	9.5400e-003	0.0000	404.2864
Total	0.1724	0.2947	1.4062	5.0900e-003	0.5156	3.7700e-003	0.5194	0.1373	3.4800e-003	0.1408	0.0000	464.6883	464.6883	0.0130	0.0000	465.0132

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2998	2.6740	2.7158	5.1700e-003		0.1289	0.1289		0.1235	0.1235	0.0000	445.8883	445.8883	0.0783	0.0000	447.8454
Total	0.2998	2.6740	2.7158	5.1700e-003		0.1289	0.1289		0.1235	0.1235	0.0000	445.8883	445.8883	0.0783	0.0000	447.8454

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.2100e-003	0.1800	0.0542	6.2000e-004	0.0164	2.1000e-004	0.0166	4.7300e-003	2.0000e-004	4.9300e-003	0.0000	60.6402	60.6402	3.4600e-003	0.0000	60.7268
Worker	0.1672	0.1147	1.3520	4.4700e-003	0.4992	3.5600e-003	0.5028	0.1326	3.2800e-003	0.1359	0.0000	404.0481	404.0481	9.5400e-003	0.0000	404.2864
Total	0.1724	0.2947	1.4062	5.0900e-003	0.5156	3.7700e-003	0.5194	0.1373	3.4800e-003	0.1408	0.0000	464.6883	464.6883	0.0130	0.0000	465.0132

3.6 Building Construction - 2024

Mt. Lebanon
Construction Annual Emissions

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0705	0.6218	0.6744	1.2900e-003		0.0285	0.0285		0.0273	0.0273	0.0000	111.4771	111.4771	0.0194	0.0000	111.9629
Total	0.0705	0.6218	0.6744	1.2900e-003		0.0285	0.0285		0.0273	0.0273	0.0000	111.4771	111.4771	0.0194	0.0000	111.9629

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2700e-003	0.0449	0.0132	1.6000e-004	4.1000e-003	5.0000e-005	4.1500e-003	1.1800e-003	5.0000e-005	1.2300e-003	0.0000	15.1057	15.1057	8.5000e-004	0.0000	15.1270
Worker	0.0396	0.0261	0.3152	1.0800e-003	0.1248	8.8000e-004	0.1257	0.0331	8.1000e-004	0.0340	0.0000	97.6754	97.6754	2.1800e-003	0.0000	97.7299
Total	0.0409	0.0710	0.3283	1.2400e-003	0.1289	9.3000e-004	0.1298	0.0343	8.6000e-004	0.0352	0.0000	112.7811	112.7811	3.0300e-003	0.0000	112.8570

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0705	0.6218	0.6744	1.2900e-003		0.0285	0.0285		0.0273	0.0273	0.0000	111.4770	111.4770	0.0194	0.0000	111.9627
Total	0.0705	0.6218	0.6744	1.2900e-003		0.0285	0.0285		0.0273	0.0273	0.0000	111.4770	111.4770	0.0194	0.0000	111.9627

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2700e-003	0.0449	0.0132	1.6000e-004	4.1000e-003	5.0000e-005	4.1500e-003	1.1800e-003	5.0000e-005	1.2300e-003	0.0000	15.1057	15.1057	8.5000e-004	0.0000	15.1270
Worker	0.0396	0.0261	0.3152	1.0800e-003	0.1248	8.8000e-004	0.1257	0.0331	8.1000e-004	0.0340	0.0000	97.6754	97.6754	2.1800e-003	0.0000	97.7299

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Construction Annual Emissions

Total	0.0409	0.0710	0.3283	1.2400e-003	0.1289	9.3000e-004	0.1298	0.0343	8.6000e-004	0.0352	0.0000	112.7811	112.7811	3.0300e-003	0.0000	112.8570
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3.7 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0120	0.1101	0.1537	2.4000e-004		5.4400e-003	5.4400e-003		5.0400e-003	5.0400e-003	0.0000	20.6127	20.6127	6.3400e-003	0.0000	20.7712
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0120	0.1101	0.1537	2.4000e-004		5.4400e-003	5.4400e-003		5.0400e-003	5.0400e-003	0.0000	20.6127	20.6127	6.3400e-003	0.0000	20.7712

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.2000e-004	0.0112	3.2900e-003	4.0000e-005	1.0200e-003	1.0000e-005	1.0400e-003	3.0000e-004	1.0000e-005	3.1000e-004	0.0000	3.7764	3.7764	2.1000e-004	0.0000	3.7818
Worker	2.2600e-003	1.4900e-003	0.0180	6.0000e-005	7.1300e-003	5.0000e-005	7.1800e-003	1.8900e-003	5.0000e-005	1.9400e-003	0.0000	5.5815	5.5815	1.2000e-004	0.0000	5.5846
Total	2.5800e-003	0.0127	0.0213	1.0000e-004	8.1500e-003	6.0000e-005	8.2200e-003	2.1900e-003	6.0000e-005	2.2500e-003	0.0000	9.3579	9.3579	3.3000e-004	0.0000	9.3663

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0120	0.1101	0.1537	2.4000e-004		5.4400e-003	5.4400e-003		5.0400e-003	5.0400e-003	0.0000	20.6127	20.6127	6.3400e-003	0.0000	20.7712
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0120	0.1101	0.1537	2.4000e-004		5.4400e-003	5.4400e-003		5.0400e-003	5.0400e-003	0.0000	20.6127	20.6127	6.3400e-003	0.0000	20.7712

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mt. Lebanon
Construction Annual Emissions

Vendor	3.2000e-004	0.0112	3.2900e-003	4.0000e-005	1.0200e-003	1.0000e-005	1.0400e-003	3.0000e-004	1.0000e-005	3.1000e-004	0.0000	3.7764	3.7764	2.1000e-004	0.0000	3.7818
Worker	2.2600e-003	1.4900e-003	0.0180	6.0000e-005	7.1300e-003	5.0000e-005	7.1800e-003	1.8900e-003	5.0000e-005	1.9400e-003	0.0000	5.5815	5.5815	1.2000e-004	0.0000	5.5846
Total	2.5800e-003	0.0127	0.0213	1.0000e-004	8.1500e-003	6.0000e-005	8.2200e-003	2.1900e-003	6.0000e-005	2.2500e-003	0.0000	9.3579	9.3579	3.3000e-004	0.0000	9.3663

3.8 Architectural Coating - 2024
Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6011						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.8700e-003	0.0396	0.0588	1.0000e-004		1.9800e-003	1.9800e-003		1.9800e-003	1.9800e-003	0.0000	8.2981	8.2981	4.7000e-004	0.0000	8.3098
Total	0.6070	0.0396	0.0588	1.0000e-004		1.9800e-003	1.9800e-003		1.9800e-003	1.9800e-003	0.0000	8.2981	8.2981	4.7000e-004	0.0000	8.3098

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6011						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.8700e-003	0.0396	0.0588	1.0000e-004		1.9800e-003	1.9800e-003		1.9800e-003	1.9800e-003	0.0000	8.2981	8.2981	4.7000e-004	0.0000	8.3098
Total	0.6070	0.0396	0.0588	1.0000e-004		1.9800e-003	1.9800e-003		1.9800e-003	1.9800e-003	0.0000	8.2981	8.2981	4.7000e-004	0.0000	8.3098

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Mt. Lebanon
Construction Annual Emissions

Category	tons/yr										MT/yr					
	Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mt. Lebanon

Construction Emissions (Annual Diesel Particulate Matter)

CalEEMod Output (tons/year)

Phase No.	Phase	Year Mitigated	On/Off Site	Category	Exhaust PM10
2	Demolition	2021 Mitigated	On-site	Off-Road	0.0226
3	Grading	2021 Mitigated	On-site	Off-Road	0.0447
3	Grading	2022 Mitigated	On-site	Off-Road	0.0366
4	Mat Foundation	2022 Mitigated	On-site	Off-Road	0.00101
5	Building Foundation	2022 Mitigated	On-site	Off-Road	0.015
6	Building Construction	2022 Mitigated	On-site	Off-Road	0.0862
6	Building Construction	2023 Mitigated	On-site	Off-Road	0.1289
6	Building Construction	2024 Mitigated	On-site	Off-Road	0.0285
7	Paving	2024 Mitigated	On-site	Off-Road	0.00544
8	Architectural Coating	2024 Mitigated	On-site	Off-Road	0.00198

Annual Totals (tons)

Daily Max to Annual Ratio for Demolition	80%	Typical daily activity is reduced as peak day is representative of the removal of the three existing buildings and the deconstruction of the existing cathedral requires less equipment over the entire duration.
Daily Max to Annual Ratio for Excavation	100%	Typical daily activity is based on maximum daily activity for export in the reasonably shortest time.
Daily Max to Annual Ratio for Mat Foundation	100%	Represents two days of peak concrete pours
Daily Max to Annual Ratio for Building Foundation	60%	Reduced to account for average daily concrete pour days
Daily Max to Annual Ratio for Building Construction	60%	Typical daily activity is reduced as peak day is representative of overall of reassembling the cathedral and building construction. Mobile crane usage would diminish with use of electric tower cranes.
Daily Max to Annual Ratio for Paving	80%	Typical daily activity is reduced to account for prep days and paving operations would occur on a limited number of days.
Daily Max to Annual Ratio for Architectural Coatings	80%	Typical daily activity is reduced as peak painting operations would not be expected everyday at maximum daily activity.

Year	Totals (tons/year)
2021	0.0628
2022	0.0983
2023	0.0773
2024	0.0230
Total	0.2615

Construction Duration (years)	3
Hours per Day	8
Seconds per Day	28,800
Construction Duration (seconds)	31,536,000

Annual Average Emission Rate (g/s)	0.0075
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Mt Lebanon

Operational HRA - On-site Truck Emissions

Diesel Particulate Emission Factors - T7 Single Truck (EMFAC2014 - Year 2023)

Speed	g/mi
5	0.0100 <i>Idle emission factor</i>

Emissions Calculations (Loading Docks)

Land Use	TSF	Truck Trips/TSF	Truck Trips
Multi-Family (158 du)	148.641	0.011	1.6
Religious Institution	31.439	0.018	0.6
Total	180.08		2.2

National Cooperative Highway Research Program (NCHRP) Synthesis 298 Truck Trip Generation Data, 2001, http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_syn_298.pdf.

Parameter	Value	
Average Trucks per Day	3	
Days per Year	312	<i>6 days per week</i>
Trucks per Year	936	
Idle time per Truck (min)	15	<i>5 minutes x 3 (enter, loading, exit)</i>
Idle time per Truck (hrs)	0.25	
Idle time per year (hrs)	234	
Idle Emission Factor (g/hr)	0.0100	
Idle emissions per year (g)	2.33	
Annual Idle emission rate (g/s)	2.22E-07	<i>8-hour operation</i>
Total Emission Rate (g/s)	2.22E-07	<i>AERMOD Input - Idle + Travel + TRU</i>

Source: EMFAC2021 (v1.0.1) Emission Rates

Region Type: Air Basin

Region: South Coast

Calendar Year: 2023

Season: Annual

Vehicle Classification: EMFAC202x Categories

Units: miles/day for CVMT and EVMT, g/mile for RUNEX, PMBW and PMTW, mph for Speed

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	PM2.5_RUNEX	PM10_RUNEX
South Coast	2023	T7 Tractor Class 8	Aggregate		5 Diesel	0.010	0.010
South Coast	2023	T7 Tractor Class 8	Aggregate		15 Diesel	0.007	0.007

Appendix B

Carcinogenic and Non-Carcinogenic Risk Calculations

Mt. Lebanon - Construction and Operational Health Risk Assessment

Cancer Risk Calculations

Residential Receptor - 70 year Exposure Duration

Diesel Particulate Matter Emission Rate Calculation / Scaler

	Year -->	2021-2024	2024-2090
Average Annual Emission Rate (g/s) ^a		7.52E-03	2.22E-07
Scaler Concentration (ug/m3) ^b		61.78	223.5
Diesel Particulate Concentration (ug/m3)		0.465	5.0E-05

Cancer Risk Calculations - DPM

Parameter	2021-2023	2024-2090	Total
Breathing Rate	393	393	
Exposure Frequency (EF)	350	350	
Exposure Duration (ED) (years)	3.00	67.00	70
AT	25550	25550	
70-Year (Lifetime) Concentration (ug/m3)	4.65E-01	4.95E-05	
70-Year (Lifetime) Dose (mg/kg-d)	1.75E-04	1.87E-08	
Carcinogen Potency (CPF) (mg/kg-d) ⁻¹			
- Diesel Particulate Matter	1.1	1.1	
Cancer Risk	8.26E-06	1.97E-08	8.27E-06
Risk per Million (DPM)	8.3	0.02	8.3

^a Emissions based on a 36-month average

^b Scaler concentration based on an AERMOD emission rate of 1 g/s, 8-hours per day

Chronic Risk Calculations - DPM

Receptor	Annual Concentration (ug/m3)	Chronic Inhalation REL (ug/m3)	Chronic Risk (HI)
Residential	4.6E-01	5	9.3E-02

Appendix C

AERMOD Source-Receptor Configuration
Figures and Output File

PROJECT TITLE:


C:\AERMOD\MtLebanon\MtLebanon.isc



Terrain Contours

meters



COMMENTS: Mt Lebanon Source Receptor Diagram Construction	SOURCES: 2	COMPANY NAME:	
	RECEPTORS: 333	MODELER:	
	OUTPUT TYPE: Concentration	SCALE: 1:1,379 0  0.05 km	
	MAX: 61.8 ug/m^3	DATE: 10/27/2021	PROJECT NO.:

PROJECT TITLE:

C:\AERMOD\MtLebanon\MtLebanon.isc



Terrain Contours

meters



COMMENTS: Mt Lebanon Source Receptor Diagram Operations (Loading Dock)	SOURCES: 2	COMPANY NAME:	
	RECEPTORS: 333	MODELER:	
	OUTPUT TYPE: Concentration	SCALE: 1:1,379 0 0.05 km	
	MAX: 223 ug/m^3	DATE: 10/27/2021	PROJECT NO.:

Mt Lebanon HRA – AERMOD Output File

```

** Lakes Environmental AERMOD MPI
**
*****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 10.0.1
** Lakes Environmental Software Inc.
** Date: 10/27/2021
** File: C:\AERMOD\MtLebanon\MtLebanon.ADI
**
*****
**
**
*****
** AERMOD Control Pathway
*****
**
**
CO STARTING
TITLEONE C:\AERMOD\MtLebanon\MtLebanon.isc
MODELOPT DFAULT CONC
AVERTIME PERIOD
URBANOPT 9818605 Los_Angelos_County_Population
POLLUTID DPM
RUNORNOT RUN
ERRORFIL MtLebanon.err
CO FINISHED
**
*****
** AERMOD Source Pathway
*****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = LOADINGDOCK
** DESCRSRC Loading Dock
** PREFIX
** Length of Side = 5.00
** Configuration = Adjacent
** Emission Rate = 1.0
** Elevated
** Vertical Dimension = 5.00
** SZINIT = 1.16
** Nodes = 2
** 372858.862, 3771079.776, 48.44, 3.66, 0.61
** 372894.549, 3771079.525, 48.16, 3.66, 0.61
** -----
LOCATION L0002124 VOLUME 372861.362 3771079.758 48.40
LOCATION L0002125 VOLUME 372866.362 3771079.723 48.37
LOCATION L0002126 VOLUME 372871.362 3771079.688 48.34
LOCATION L0002127 VOLUME 372876.362 3771079.653 48.31
LOCATION L0002128 VOLUME 372881.362 3771079.617 48.28
LOCATION L0002129 VOLUME 372886.362 3771079.582 48.15
LOCATION L0002130 VOLUME 372891.361 3771079.547 48.01
** End of LINE VOLUME Source ID = LOADINGDOCK
** -----
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = CONST2
** DESCRSRC Construction 2
** PREFIX
** Length of Side = 5.00
** Configuration = Adjacent
** Emission Rate = 1.0
** Elevated
** Vertical Dimension = 5.00
** SZINIT = 1.16

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Mt Lebanon HRA – AERMOD Output File

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LOCATION L0005243	VOLUME	372850.884	3771055.861	47.91	LOCATION L0005313	VOLUME	372883.649	3771036.845	47.56
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LOCATION L0005247	VOLUME	372830.888	3771056.271	47.83	LOCATION L0005317	VOLUME	372863.698	3771038.235	47.43
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LOCATION L0005261	VOLUME	372856.003	3771051.574	47.79	LOCATION L0005331	VOLUME	372838.118	3771037.063	47.40
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LOCATION L0005267	VOLUME	372886.000	3771051.208	47.72	LOCATION L0005337	VOLUME	372868.032	3771034.785	47.41
LOCATION L0005268	VOLUME	372891.000	3771051.146	47.64	LOCATION L0005338	VOLUME	372873.017	3771034.405	47.46
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LOCATION L0005276	VOLUME	372877.630	3771046.169	47.71	LOCATION L0005346	VOLUME	372899.980	3771026.797	47.26
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LOCATION L0005287	VOLUME	372822.672	3771048.325	47.64	LOCATION L0005357	VOLUME	372862.321	3771031.127	47.32
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LOCATION L0005289	VOLUME	372812.680	3771048.717	47.62	LOCATION L0005359	VOLUME	372871.920	3771028.325	47.38
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Mt Lebanon HRA – AERMOD Output File

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** AERMOD Receptor Pathway

**
**
RE STARTING
INCLUDED MtLebanon.rou
RE FINISHED
**

** AERMOD Meteorology Pathway

**
**
ME STARTING
SURFFILE MetKSMO_v9.SFC
PROFFILE MetKSMO_v9.PFL
SURFDATA 93197 2012
UAIRDATA 3190 2012
PROFBASE 53.0 METERS
ME FINISHED
**

** AERMOD Output Pathway

**
**
OU STARTING
** Auto-Generated Plotfiles
PLOTFILE PERIOD LOADINGD MTLEBANON.AD\PE00G001.PLT 31
PLOTFILE PERIOD CONST2 MTLEBANON.AD\PE00G002.PLT 32
SUMMFILE MtLebanon.sum
OU FINISHED

*** Message Summary For AERMOD Model Setup ***

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
A Total of 2 Warning Message(s)
A Total of 0 Informational Message(s)

***** FATAL ERROR MESSAGES *****
*** NONE ***

***** WARNING MESSAGES *****
ME W186 1324 MEOPEN: THRESH_1MIN 1-min ASOS wind
speed threshold used 0.50
ME W187 1324 MEOPEN: ADJ_U* Option for Stable Low Winds
used in AERMET

*** SETUP Finishes Successfully ***

*** AERMOD - VERSION 21112 *** **
C:\AERMOD\MtLebanon\MtLebanon.isc ***
10/27/21
*** AERMET - VERSION 16216 *** **
*** 10:33:08

Mt Lebanon HRA – AERMOD Output File

PAGE 1

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** MODEL SETUP OPTIONS SUMMARY

**Model Is Setup For Calculation of Average CONCentration Values.

-- DEPOSITION LOGIC --
 **NO GAS DEPOSITION Data Provided.
 **NO PARTICLE DEPOSITION Data Provided.
 **Model Uses NO DRY DEPLETION. DRYDPLT = F
 **Model Uses NO WET DEPLETION. WETDPLT = F

 **Model Uses URBAN Dispersion Algorithm for the SBL for 195 Source(s),
 for Total of 1 Urban Area(s):
 Urban Population = 9818605.0 ; Urban Roughness Length = 1.000 m

**Model Uses Regulatory DEFAULT Options:
 1. Stack-tip Downwash.
 2. Model Accounts for ELEVated Terrain Effects.
 3. Use Calms Processing Routine.
 4. Use Missing Data Processing Routine.
 5. No Exponential Decay.
 6. Urban Roughness Length of 1.0 Meter Assumed.

**Other Options Specified:
 ADJ_U* - Use ADJ_U* option for SBL in AERMET
 CCVR_Sub - Meteorological data includes CCVR substitutions
 TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: DPM

**Model Calculates PERIOD Averages Only

**This Run Includes: 195 Source(s); 2 Source Group(s); and 333 Receptor(s)

with: 0 POINT(s), including
 0 POINTCAP(s) and 0 POINTHOR(s)
 and: 195 VOLUME source(s)
 and: 0 AREA type source(s)
 and: 0 LINE source(s)
 and: 0 RLINE/RLINEXT source(s)
 and: 0 OPENPIT source(s)
 and: 0 BUOYANT LINE source(s) with a total of 0 line(s)

**Model Set To Continue RUNNING After the Setup Testing.

**The AERMET Input Meteorological Data Version Date: 16216

**Output Options Selected:
 Model Outputs Tables of PERIOD Averages by Receptor
 Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
 Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours

m for Missing Hours

b for Both Calm and Missing

Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 53.00 ;
 Decay Coef. = 0.000 ; Rot. Angle = 0.0
 Emission Units = GRAMS/SEC ;
 Emission Rate Unit Factor = 0.10000E+07
 Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.7 MB of RAM.

**Input Runstream File: aermod.inp
 **Output Print File: aermod.out

**Detailed Error/Message File: MtLebanon.err
 **File for Summary of Results: MtLebanon.sum
 *** AERMOD - VERSION 21112 *** ***
 C:\AERMOD\MtLebanon\MtLebanon.isc ***
 10/27/21
 *** AERMET - VERSION 16216 *** ***
 *** 10:33:08

PAGE 2

*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

INIT.	INIT.	URBAN	EMISSION RATE	BASE	RELEASE	
SY	SZ	SOURCE	SCALAR VARY	X	Y	ELEV. HEIGHT
ID	CATS.	(METERS)	(METERS)	(METERS)	(METERS)	(METERS)
(METERS)	(METERS)	BY				
L0002124	0	0.14286E+00	372861.4	3771079.8	48.4	3.66
0.61	1.16	YES	HROFDY			
L0002125	0	0.14286E+00	372866.4	3771079.7	48.4	3.66
0.61	1.16	YES	HROFDY			
L0002126	0	0.14286E+00	372871.4	3771079.7	48.3	3.66
0.61	1.16	YES	HROFDY			
L0002127	0	0.14286E+00	372876.4	3771079.7	48.3	3.66
0.61	1.16	YES	HROFDY			
L0002128	0	0.14286E+00	372881.4	3771079.6	48.3	3.66
0.61	1.16	YES	HROFDY			
L0002129	0	0.14286E+00	372886.4	3771079.6	48.1	3.66
0.61	1.16	YES	HROFDY			
L0002130	0	0.14286E+00	372891.4	3771079.5	48.0	3.66
0.61	1.16	YES	HROFDY			
L0005176	0	0.53191E-02	372813.2	3771076.0	47.9	3.66
2.33	1.16	YES	HROFDY			
L0005177	0	0.53191E-02	372818.2	3771075.9	48.0	3.66
2.33	1.16	YES	HROFDY			
L0005178	0	0.53191E-02	372823.2	3771075.8	48.1	3.66
2.33	1.16	YES	HROFDY			
L0005179	0	0.53191E-02	372828.2	3771075.8	48.1	3.66
2.33	1.16	YES	HROFDY			
L0005180	0	0.53191E-02	372833.2	3771075.7	48.2	3.66
2.33	1.16	YES	HROFDY			
L0005181	0	0.53191E-02	372838.2	3771075.6	48.2	3.66
2.33	1.16	YES	HROFDY			
L0005182	0	0.53191E-02	372843.2	3771075.6	48.3	3.66
2.33	1.16	YES	HROFDY			
L0005183	0	0.53191E-02	372848.2	3771075.5	48.3	3.66
2.33	1.16	YES	HROFDY			
L0005184	0	0.53191E-02	372853.2	3771075.4	48.4	3.66
2.33	1.16	YES	HROFDY			

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L0005185  0 0.53191E-02 372858.2 3771075.3 48.4 3.66
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2.33 1.16 YES HROFDY
L0005187  0 0.53191E-02 372868.2 3771075.2 48.3 3.66
2.33 1.16 YES HROFDY
L0005188  0 0.53191E-02 372873.2 3771075.1 48.3 3.66
2.33 1.16 YES HROFDY
L0005189  0 0.53191E-02 372878.2 3771075.1 48.2 3.66
2.33 1.16 YES HROFDY
L0005190  0 0.53191E-02 372883.2 3771075.0 48.2 3.66
2.33 1.16 YES HROFDY
L0005191  0 0.53191E-02 372888.2 3771074.9 48.0 3.66
2.33 1.16 YES HROFDY
L0005192  0 0.53191E-02 372893.2 3771074.9 47.9 3.66
2.33 1.16 YES HROFDY
L0005193  0 0.53191E-02 372898.2 3771074.7 47.8 3.66
2.33 1.16 YES HROFDY
L0005194  0 0.53191E-02 372899.3 3771069.9 47.6 3.66
2.33 1.16 YES HROFDY
L0005195  0 0.53191E-02 372895.3 3771069.2 47.7 3.66
2.33 1.16 YES HROFDY
L0005196  0 0.53191E-02 372890.3 3771069.3 47.9 3.66
2.33 1.16 YES HROFDY
L0005197  0 0.53191E-02 372885.3 3771069.5 48.0 3.66
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L0005198  0 0.53191E-02 372880.3 3771069.6 48.1 3.66
2.33 1.16 YES HROFDY
L0005199  0 0.53191E-02 372875.3 3771069.7 48.1 3.66
2.33 1.16 YES HROFDY
L0005200  0 0.53191E-02 372870.3 3771069.8 48.2 3.66
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L0005201  0 0.53191E-02 372865.3 3771070.0 48.2 3.66
2.33 1.16 YES HROFDY
L0005202  0 0.53191E-02 372860.3 3771070.1 48.3 3.66
2.33 1.16 YES HROFDY
L0005203  0 0.53191E-02 372855.3 3771070.2 48.3 3.66
2.33 1.16 YES HROFDY
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L0005205  0 0.53191E-02 372845.3 3771070.5 48.2 3.66
2.33 1.16 YES HROFDY
L0005206  0 0.53191E-02 372840.3 3771070.6 48.2 3.66
2.33 1.16 YES HROFDY
L0005207  0 0.53191E-02 372835.3 3771070.7 48.1 3.66
2.33 1.16 YES HROFDY
L0005208  0 0.53191E-02 372830.3 3771070.8 48.1 3.66
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

NUMBER EMISSION RATE      BASE RELEASE
INIT.  INIT.  URBAN EMISSION RATE
SOURCE PART. (GRAMS/SEC)  X  Y  ELEV. HEIGHT
SY  SZ  SOURCE SCALAR VARY
ID  CATS. (METERS) (METERS) (METERS) (METERS)
(METERS) (METERS)      BY
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L0005211  0 0.53191E-02 372815.3 3771071.2 47.9 3.66
2.33 1.16 YES HROFDY
L0005212  0 0.53191E-02 372810.5 3771071.1 47.8 3.66
2.33 1.16 YES HROFDY
L0005213  0 0.53191E-02 372810.8 3771066.1 47.7 3.66
2.33 1.16 YES HROFDY
L0005214  0 0.53191E-02 372812.9 3771063.1 47.7 3.66
2.33 1.16 YES HROFDY
L0005215  0 0.53191E-02 372817.9 3771063.1 47.8 3.66
2.33 1.16 YES HROFDY
L0005216  0 0.53191E-02 372822.9 3771063.0 47.9 3.66
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L0005217  0 0.53191E-02 372827.9 3771063.0 47.9 3.66
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L0005218  0 0.53191E-02 372832.9 3771063.0 48.0 3.66
2.33 1.16 YES HROFDY
L0005219  0 0.53191E-02 372837.9 3771063.0 48.0 3.66
2.33 1.16 YES HROFDY
L0005220  0 0.53191E-02 372842.9 3771063.0 48.1 3.66
2.33 1.16 YES HROFDY
L0005221  0 0.53191E-02 372847.9 3771062.9 48.1 3.66
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L0005222  0 0.53191E-02 372852.9 3771062.9 48.1 3.66
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L0005223  0 0.53191E-02 372857.9 3771062.9 48.1 3.66
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L0005224  0 0.53191E-02 372862.9 3771062.9 48.1 3.66
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2.33 1.16 YES HROFDY
L0005227  0 0.53191E-02 372877.9 3771062.8 48.0 3.66
2.33 1.16 YES HROFDY
L0005228  0 0.53191E-02 372882.9 3771062.8 47.9 3.66
2.33 1.16 YES HROFDY
L0005229  0 0.53191E-02 372887.9 3771062.8 47.8 3.66
2.33 1.16 YES HROFDY
L0005230  0 0.53191E-02 372892.9 3771062.7 47.7 3.66
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L0005236  0 0.53191E-02 372885.9 3771055.1 47.8 3.66
2.33 1.16 YES HROFDY
L0005237  0 0.53191E-02 372880.9 3771055.2 47.9 3.66
2.33 1.16 YES HROFDY
L0005238  0 0.53191E-02 372875.9 3771055.3 47.9 3.66
2.33 1.16 YES HROFDY
L0005239  0 0.53191E-02 372870.9 3771055.5 47.9 3.66
2.33 1.16 YES HROFDY
L0005240  0 0.53191E-02 372865.9 3771055.6 47.9 3.66
2.33 1.16 YES HROFDY
L0005241  0 0.53191E-02 372860.9 3771055.7 47.9 3.66
2.33 1.16 YES HROFDY
L0005242  0 0.53191E-02 372855.9 3771055.8 47.9 3.66
2.33 1.16 YES HROFDY
L0005243  0 0.53191E-02 372850.9 3771055.9 47.9 3.66
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L0005244 0 0.53191E-02 372845.9 3771056.0 47.9 3.66
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 L0005245 0 0.53191E-02 372840.9 3771056.1 47.9 3.66
 2.33 1.16 YES HROFDY
 L0005246 0 0.53191E-02 372835.9 3771056.2 47.8 3.66
 2.33 1.16 YES HROFDY
 L0005247 0 0.53191E-02 372830.9 3771056.3 47.8 3.66
 2.33 1.16 YES HROFDY
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 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

NUMBER EMISSION RATE		BASE RELEASE	
INIT.	URBAN EMISSION RATE	X	Y
SY	SZ SOURCE SCALAR VARY	ELEV.	HEIGHT
ID	CATS. (METERS)	(METERS)	(METERS)
(METERS)	(METERS)	BY	

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 L0005250 0 0.53191E-02 372815.9 3771056.6 47.7 3.66
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 L0005251 0 0.53191E-02 372810.9 3771056.7 47.7 3.66
 2.33 1.16 YES HROFDY
 L0005252 0 0.53191E-02 372811.0 3771052.1 47.6 3.66
 2.33 1.16 YES HROFDY
 L0005253 0 0.53191E-02 372816.0 3771052.1 47.7 3.66
 2.33 1.16 YES HROFDY
 L0005254 0 0.53191E-02 372821.0 3771052.0 47.7 3.66
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 L0005255 0 0.53191E-02 372826.0 3771051.9 47.7 3.66
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 L0005256 0 0.53191E-02 372831.0 3771051.9 47.7 3.66
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 L0005257 0 0.53191E-02 372836.0 3771051.8 47.8 3.66
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 L0005258 0 0.53191E-02 372841.0 3771051.8 47.8 3.66
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 L0005259 0 0.53191E-02 372846.0 3771051.7 47.8 3.66
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 L0005260 0 0.53191E-02 372851.0 3771051.6 47.8 3.66
 2.33 1.16 YES HROFDY
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 L0005262 0 0.53191E-02 372861.0 3771051.5 47.8 3.66
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 L0005263 0 0.53191E-02 372866.0 3771051.5 47.8 3.66
 2.33 1.16 YES HROFDY
 L0005264 0 0.53191E-02 372871.0 3771051.4 47.8 3.66
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 L0005266 0 0.53191E-02 372881.0 3771051.3 47.8 3.66
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 L0005267 0 0.53191E-02 372886.0 3771051.2 47.7 3.66
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L0005268 0 0.53191E-02 372891.0 3771051.1 47.6 3.66
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 L0005271 0 0.53191E-02 372901.4 3771046.4 47.4 3.66
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 L0005272 0 0.53191E-02 372897.6 3771045.4 47.5 3.66
 2.33 1.16 YES HROFDY
 L0005273 0 0.53191E-02 372892.6 3771045.6 47.5 3.66
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 L0005275 0 0.53191E-02 372882.6 3771046.0 47.7 3.66
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 L0005276 0 0.53191E-02 372877.6 3771046.2 47.7 3.66
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 L0005277 0 0.53191E-02 372872.6 3771046.4 47.7 3.66
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 L0005278 0 0.53191E-02 372867.6 3771046.6 47.7 3.66
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 L0005279 0 0.53191E-02 372862.6 3771046.8 47.7 3.66
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 L0005282 0 0.53191E-02 372847.7 3771047.3 47.6 3.66
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 L0005283 0 0.53191E-02 372842.7 3771047.5 47.6 3.66
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 L0005287 0 0.53191E-02 372822.7 3771048.3 47.6 3.66
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 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

NUMBER EMISSION RATE		BASE RELEASE	
INIT.	URBAN EMISSION RATE	X	Y
SY	SZ SOURCE SCALAR VARY	ELEV.	HEIGHT
ID	CATS. (METERS)	(METERS)	(METERS)
(METERS)	(METERS)	BY	

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 2.33 1.16 YES HROFDY
 L0005291 0 0.53191E-02 372813.8 3771044.4 47.6 3.66
 2.33 1.16 YES HROFDY

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L0005292 0 0.53191E-02 372818.8 3771044.1 47.6 3.66
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 L0005294 0 0.53191E-02 372828.8 3771043.7 47.6 3.66
 2.33 1.16 YES HROFDY
 L0005295 0 0.53191E-02 372833.8 3771043.5 47.6 3.66
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 L0005296 0 0.53191E-02 372838.8 3771043.3 47.5 3.66
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 L0005297 0 0.53191E-02 372843.8 3771043.1 47.5 3.66
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 L0005298 0 0.53191E-02 372848.8 3771042.9 47.5 3.66
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 L0005299 0 0.53191E-02 372853.8 3771042.7 47.5 3.66
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 2.33 1.16 YES HROFDY
 L0005301 0 0.53191E-02 372863.8 3771042.3 47.5 3.66
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 L0005302 0 0.53191E-02 372868.8 3771042.1 47.6 3.66
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 L0005303 0 0.53191E-02 372873.8 3771041.9 47.6 3.66
 2.33 1.16 YES HROFDY
 L0005304 0 0.53191E-02 372878.8 3771041.7 47.6 3.66
 2.33 1.16 YES HROFDY
 L0005305 0 0.53191E-02 372883.8 3771041.5 47.6 3.66
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 L0005306 0 0.53191E-02 372888.8 3771041.3 47.6 3.66
 2.33 1.16 YES HROFDY
 L0005307 0 0.53191E-02 372893.8 3771041.1 47.5 3.66
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 L0005308 0 0.53191E-02 372898.8 3771040.9 47.4 3.66
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 L0005309 0 0.53191E-02 372901.1 3771038.1 47.4 3.66
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 L0005312 0 0.53191E-02 372888.6 3771036.5 47.5 3.66
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 L0005313 0 0.53191E-02 372883.6 3771036.8 47.6 3.66
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 L0005315 0 0.53191E-02 372873.7 3771037.5 47.5 3.66
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 L0005318 0 0.53191E-02 372858.7 3771038.6 47.4 3.66
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 L0005319 0 0.53191E-02 372853.7 3771038.9 47.4 3.66
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 L0005320 0 0.53191E-02 372848.7 3771039.3 47.4 3.66
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 L0005321 0 0.53191E-02 372843.7 3771039.6 47.4 3.66
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 L0005323 0 0.53191E-02 372833.8 3771040.3 47.5 3.66
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 *** AERMET - VERSION 16216 *** ***
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 *** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** VOLUME SOURCE DATA ***

INIT.	NUMBER	EMISSION	RATE	BASE	RELEASE	
SY	SOURCE	PART.	(GRAMS/SEC)	X	Y	
SY	SZ	SOURCE	SCALAR	VARY	ELEV.	HEIGHT
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(METERS)	(METERS)	BY				

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 2.33 1.16 YES HROFDY
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 2.33 1.16 YES HROFDY
 L0005336 0 0.53191E-02 372863.0 3771035.2 47.4 3.66
 2.33 1.16 YES HROFDY
 L0005337 0 0.53191E-02 372868.0 3771034.8 47.4 3.66
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 L0005338 0 0.53191E-02 372873.0 3771034.4 47.5 3.66
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 2.33 1.16 YES HROFDY
 L0005340 0 0.53191E-02 372883.0 3771033.6 47.5 3.66
 2.33 1.16 YES HROFDY
 L0005341 0 0.53191E-02 372888.0 3771033.3 47.5 3.66
 2.33 1.16 YES HROFDY
 L0005342 0 0.53191E-02 372893.0 3771032.9 47.4 3.66
 2.33 1.16 YES HROFDY
 L0005343 0 0.53191E-02 372897.9 3771032.5 47.3 3.66
 2.33 1.16 YES HROFDY
 L0005344 0 0.53191E-02 372902.8 3771031.6 47.3 3.66
 2.33 1.16 YES HROFDY
 L0005345 0 0.53191E-02 372903.7 3771027.6 47.2 3.66
 2.33 1.16 YES HROFDY
 L0005346 0 0.53191E-02 372900.0 3771026.8 47.3 3.66
 2.33 1.16 YES HROFDY
 L0005347 0 0.53191E-02 372895.0 3771027.5 47.3 3.66
 2.33 1.16 YES HROFDY
 L0005348 0 0.53191E-02 372890.1 3771028.2 47.4 3.66
 2.33 1.16 YES HROFDY
 L0005349 0 0.53191E-02 372885.1 3771029.0 47.4 3.66
 2.33 1.16 YES HROFDY
 L0005350 0 0.53191E-02 372880.2 3771029.7 47.5 3.66
 2.33 1.16 YES HROFDY

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L0005351 0 0.53191E-02 372875.2 3771030.4 47.4 3.66
 2.33 1.16 YES HROFDY
 L0005352 0 0.53191E-02 372870.3 3771031.2 47.4 3.66
 2.33 1.16 YES HROFDY
 L0005353 0 0.53191E-02 372865.4 3771031.9 47.3 3.66
 2.33 1.16 YES HROFDY
 L0005354 0 0.53191E-02 372860.4 3771032.6 47.3 3.66
 2.33 1.16 YES HROFDY
 L0005355 0 0.53191E-02 372855.5 3771033.3 47.3 3.66
 2.33 1.16 YES HROFDY
 L0005356 0 0.53191E-02 372857.5 3771032.5 47.3 3.66
 2.33 1.16 YES HROFDY
 L0005357 0 0.53191E-02 372862.3 3771031.1 47.3 3.66
 2.33 1.16 YES HROFDY
 L0005358 0 0.53191E-02 372867.1 3771029.7 47.3 3.66
 2.33 1.16 YES HROFDY
 L0005359 0 0.53191E-02 372871.9 3771028.3 47.4 3.66
 2.33 1.16 YES HROFDY
 L0005360 0 0.53191E-02 372876.7 3771026.9 47.4 3.66
 2.33 1.16 YES HROFDY
 L0005361 0 0.53191E-02 372881.5 3771025.6 47.4 3.66
 2.33 1.16 YES HROFDY
 L0005362 0 0.53191E-02 372886.3 3771024.2 47.3 3.66
 2.33 1.16 YES HROFDY
 L0005363 0 0.53191E-02 372891.1 3771022.8 47.3 3.66
 2.33 1.16 YES HROFDY
 *** AERMOD - VERSION 21112 *** ***
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 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE
 GROUPS ***

SRCGROUP ID	SOURCE IDs
-----	-----
LOADINGD	L0002124 , L0002125 , L0002126 , L0002127 , L0002128 , L0002129 , L0002130 ,
CONST2	L0005176 , L0005177 , L0005178 , L0005179 , L0005180 , L0005181 , L0005182 , L0005183 ,
	L0005184 , L0005185 , L0005186 , L0005187 , L0005188 , L0005189 , L0005190 , L0005191 ,
	L0005192 , L0005193 , L0005194 , L0005195 , L0005196 , L0005197 , L0005198 , L0005199 ,
	L0005200 , L0005201 , L0005202 , L0005203 , L0005204 , L0005205 , L0005206 , L0005207 ,
	L0005208 , L0005209 , L0005210 , L0005211 , L0005212 , L0005213 , L0005214 , L0005215 ,
	L0005216 , L0005217 , L0005218 , L0005219 , L0005220 , L0005221 , L0005222 , L0005223 ,
	L0005224 , L0005225 , L0005226 , L0005227 , L0005228 , L0005229 , L0005230 , L0005231 ,
	L0005232 , L0005233 , L0005234 , L0005235 , L0005236 , L0005237 , L0005238 , L0005239 ,

L0005240 , L0005241 , L0005242 , L0005243 ,
L0005244 , L0005245 , L0005246 , L0005247 ,
L0005248 , L0005249 , L0005250 , L0005251 ,
L0005252 , L0005253 , L0005254 , L0005255 ,
L0005256 , L0005257 , L0005258 , L0005259 ,
L0005260 , L0005261 , L0005262 , L0005263 ,
L0005264 , L0005265 , L0005266 , L0005267 ,
L0005268 , L0005269 , L0005270 , L0005271 ,
L0005272 , L0005273 , L0005274 , L0005275 ,
L0005276 , L0005277 , L0005278 , L0005279 ,
L0005280 , L0005281 , L0005282 , L0005283 ,
L0005284 , L0005285 , L0005286 , L0005287 ,
L0005288 , L0005289 , L0005290 , L0005291 ,
L0005292 , L0005293 , L0005294 , L0005295 ,
L0005296 , L0005297 , L0005298 , L0005299 ,
L0005300 , L0005301 , L0005302 , L0005303 ,
L0005304 , L0005305 , L0005306 , L0005307 ,
L0005308 , L0005309 , L0005310 , L0005311 ,
L0005312 , L0005313 , L0005314 , L0005315 ,
L0005316 , L0005317 , L0005318 , L0005319 ,
L0005320 , L0005321 , L0005322 , L0005323 ,
L0005324 , L0005325 , L0005326 , L0005327 ,
*** AERMOD - VERSION 21112 *** ***
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 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE
 GROUPS ***

SRCGROUP ID	SOURCE IDs
-----	-----
	L0005328 , L0005329 , L0005330 , L0005331 , L0005332 , L0005333 , L0005334 , L0005335 ,
	L0005336 , L0005337 , L0005338 , L0005339 , L0005340 , L0005341 , L0005342 , L0005343 ,
	L0005344 , L0005345 , L0005346 , L0005347 , L0005348 , L0005349 , L0005350 , L0005351 ,
	L0005352 , L0005353 , L0005354 , L0005355 , L0005356 , L0005357 , L0005358 , L0005359 ,
	L0005360 , L0005361 , L0005362 , L0005363 , *** AERMOD - VERSION 21112 *** *** C:\AERMOD\MtLebanon\MtLebanon.isc *** 10/27/21 *** AERMET - VERSION 16216 *** *** *** 10:33:08

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 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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SOURCES ***
 *** SOURCE IDs DEFINED AS URBAN

URBAN ID	URBAN POP	SOURCE IDs
9818605	L0002124 , L0002125 , L0002126 , L0002127 , L0002128 , L0002129 , L0002130 , L0005176 ,	
L0005177 , L0005178 , L0005179 , L0005180 , L0005181 , L0005182 , L0005183 , L0005184 ,		
L0005185 , L0005186 , L0005187 , L0005188 , L0005189 , L0005190 , L0005191 , L0005192 ,		
L0005193 , L0005194 , L0005195 , L0005196 , L0005197 , L0005198 , L0005199 , L0005200 ,		
L0005201 , L0005202 , L0005203 , L0005204 , L0005205 , L0005206 , L0005207 , L0005208 ,		
L0005209 , L0005210 , L0005211 , L0005212 , L0005213 , L0005214 , L0005215 , L0005216 ,		
L0005217 , L0005218 , L0005219 , L0005220 , L0005221 , L0005222 , L0005223 , L0005224 ,		
L0005225 , L0005226 , L0005227 , L0005228 , L0005229 , L0005230 , L0005231 , L0005232 ,		
L0005233 , L0005234 , L0005235 , L0005236 , L0005237 , L0005238 , L0005239 , L0005240 ,		
L0005241 , L0005242 , L0005243 , L0005244 , L0005245 , L0005246 , L0005247 , L0005248 ,		
L0005249 , L0005250 , L0005251 , L0005252 , L0005253 , L0005254 , L0005255 , L0005256 ,		
L0005257 , L0005258 , L0005259 , L0005260 , L0005261 , L0005262 , L0005263 , L0005264 ,		
L0005265 , L0005266 , L0005267 , L0005268 , L0005269 , L0005270 , L0005271 , L0005272 ,		
L0005273 , L0005274 , L0005275 , L0005276 , L0005277 , L0005278 , L0005279 , L0005280 ,		
L0005281 , L0005282 , L0005283 , L0005284 , L0005285 , L0005286 , L0005287 , L0005288 ,		
L0005289 , L0005290 , L0005291 , L0005292 , L0005293 , L0005294 , L0005295 , L0005296 ,		
L0005297 , L0005298 , L0005299 , L0005300 , L0005301 , L0005302 , L0005303 , L0005304 ,		
L0005305 , L0005306 , L0005307 , L0005308 , L0005309 , L0005310 , L0005311 , L0005312 ,		
L0005313 , L0005314 , L0005315 , L0005316 , L0005317 , L0005318 , L0005319 , L0005320 ,		
L0005321 , L0005322 , L0005323 , L0005324 , L0005325 , L0005326 , L0005327 , L0005328 ,		

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 *** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINED AS URBAN
 SOURCES ***

URBAN ID	URBAN POP	SOURCE IDs
L0005329 , L0005330 , L0005331 , L0005332 , L0005333 , L0005334 , L0005335 , L0005336 ,		
L0005337 , L0005338 , L0005339 , L0005340 , L0005341 , L0005342 , L0005343 , L0005344 ,		
L0005345 , L0005346 , L0005347 , L0005348 , L0005349 , L0005350 , L0005351 , L0005352 ,		
L0005353 , L0005354 , L0005355 , L0005356 , L0005357 , L0005358 , L0005359 , L0005360 ,		
L0005361 , L0005362 , L0005363 ,		

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 *** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HR	SCALAR	HR	SCALAR	HR	SCALAR
1	0.0000E+00	2	0.0000E+00	3	0.0000E+00
4	0.0000E+00	5	0.0000E+00	6	0.0000E+00
7	0.0000E+00	8	0.0000E+00	9	0.0000E+00
10	0.0000E+00	11	0.0000E+00	12	0.0000E+00
13	0.0000E+00	14	0.0000E+00	15	0.0000E+00
16	0.0000E+00	17	0.0000E+00	18	0.0000E+00
19	0.0000E+00	20	0.0000E+00	21	0.0000E+00
22	0.0000E+00	23	0.0000E+00	24	0.0000E+00

SOURCE ID = L0002124 ; SOURCE TYPE = VOLUME :
 1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00
 5 .00000E+00 6 .00000E+00 7 .00000E+00 8 .00000E+00 9 .10000E+01 10 .10000E+01
 11 .10000E+01 12 .10000E+01 13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .10000E+01
 17 .00000E+00 18 .00000E+00 19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00
 23 .00000E+00 24 .00000E+00

SOURCE ID = L0002125 ; SOURCE TYPE = VOLUME :
 1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00
 5 .00000E+00 6 .00000E+00 7 .00000E+00 8 .00000E+00 9 .10000E+01 10 .10000E+01
 11 .10000E+01 12 .10000E+01 13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .10000E+01
 17 .00000E+00 18 .00000E+00 19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00
 23 .00000E+00 24 .00000E+00

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SOURCE ID = L0002126 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0002127 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0002128 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

*** AERMOD - VERSION 21112 *** ***
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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY
FOR EACH HOUR OF THE DAY *

HOUR SCALAR HOUR SCALAR HOUR SCALAR
HOUR SCALAR HOUR SCALAR HOUR SCALAR

SOURCE ID = L0002129 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0002130 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005176 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005177 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005178 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

*** AERMOD - VERSION 21112 *** ***
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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY
FOR EACH HOUR OF THE DAY *

HOUR SCALAR HOUR SCALAR HOUR SCALAR
HOUR SCALAR HOUR SCALAR HOUR SCALAR

SOURCE ID = L0005179 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005180 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00

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7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005191 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005192 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005193 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

*** AERMOD - VERSION 21112 *** ***
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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY
FOR EACH HOUR OF THE DAY *

HOUR SCALAR HOUR SCALAR HOUR SCALAR
HOUR SCALAR HOUR SCALAR HOUR SCALAR

SOURCE ID = L0005194 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005195 ; SOURCE TYPE = VOLUME :

1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005196 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005197 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005198 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

*** AERMOD - VERSION 21112 *** ***
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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY
FOR EACH HOUR OF THE DAY *

HOUR SCALAR HOUR SCALAR HOUR SCALAR
HOUR SCALAR HOUR SCALAR HOUR SCALAR

SOURCE ID = L0005199 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

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13 .10000E+01 14 .10000E+01 15 .10000E+01 16
.10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22
.00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0005210 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4
.00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10
.10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16
.10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22
.00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0005211 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4
.00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10
.10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16
.10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22
.00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0005212 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4
.00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10
.10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16
.10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22
.00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0005213 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4
.00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10
.10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16
.10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22
.00000E+00 23 .00000E+00 24 .00000E+00

*** AERMOD - VERSION 21112 *** ***
C:\AERMOD\MtLebanon\MtLebanon.isc ***
10/27/21
*** AERMET - VERSION 16216 *** ***
*** 10:33:08

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY
FOR EACH HOUR OF THE DAY *

hour SCALAR hour SCALAR hour SCALAR
hour SCALAR hour SCALAR hour SCALAR

SOURCE ID = L0005214 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4
.00000E+00 5 .00000E+00 6 .00000E+00

7 .00000E+00 8 .00000E+00 9 .10000E+01 10
.10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16
.10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22
.00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0005215 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4
.00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10
.10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16
.10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22
.00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0005216 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4
.00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10
.10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16
.10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22
.00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0005217 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4
.00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10
.10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16
.10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22
.00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0005218 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4
.00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .00000E+00 9 .10000E+01 10
.10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16
.10000E+01 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22
.00000E+00 23 .00000E+00 24 .00000E+00

*** AERMOD - VERSION 21112 *** ***
C:\AERMOD\MtLebanon\MtLebanon.isc ***
10/27/21
*** AERMET - VERSION 16216 *** ***
*** 10:33:08

PAGE 21
*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY
FOR EACH HOUR OF THE DAY *

hour SCALAR hour SCALAR hour SCALAR
hour SCALAR hour SCALAR hour SCALAR

SOURCE ID = L0005219 ; SOURCE TYPE = VOLUME :

Mt Lebanon HRA – AERMOD Output File

1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

*** AERMOD - VERSION 21112 *** ***
C:\AERMOD\MtLebanon\MtLebanon.isc ***
10/27/21
*** AERMET - VERSION 16216 *** ***
*** 10:33:08

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*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY
FOR EACH HOUR OF THE DAY *

HOUR SCALAR HOUR SCALAR HOUR SCALAR
HOUR SCALAR HOUR SCALAR HOUR SCALAR

SOURCE ID = L0005279 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005280 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005281 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005282 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005283 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

*** AERMOD - VERSION 21112 *** ***
C:\AERMOD\MtLebanon\MtLebanon.isc ***
10/27/21
*** AERMET - VERSION 16216 *** ***
*** 10:33:08

PAGE 34
*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY
FOR EACH HOUR OF THE DAY *

HOUR SCALAR HOUR SCALAR HOUR SCALAR
HOUR SCALAR HOUR SCALAR HOUR SCALAR

SOURCE ID = L0005284 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005285 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005286 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005287 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00

Mt Lebanon HRA – AERMOD Output File

7 .0000E+00 8 .0000E+00 9 .1000E+01 10 .1000E+01 11 .1000E+01 12 .1000E+01 13 .1000E+01 14 .1000E+01 15 .1000E+01 16 .1000E+01 17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005298 ; SOURCE TYPE = VOLUME : 1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00 9 .1000E+01 10 .1000E+01 11 .1000E+01 12 .1000E+01 13 .1000E+01 14 .1000E+01 15 .1000E+01 16 .1000E+01 17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

*** AERMOD - VERSION 21112 *** *** C:\AERMOD\MtLebanon\MtLebanon.isc *** 10/27/21 *** AERMET - VERSION 16216 *** *** 10:33:08

PAGE 37 *** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

Hour Scalar Hour Scalar Hour Scalar Hour Scalar Hour Scalar

SOURCE ID = L0005299 ; SOURCE TYPE = VOLUME : 1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00 9 .1000E+01 10 .1000E+01 11 .1000E+01 12 .1000E+01 13 .1000E+01 14 .1000E+01 15 .1000E+01 16 .1000E+01 17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005300 ; SOURCE TYPE = VOLUME : 1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00 9 .1000E+01 10 .1000E+01 11 .1000E+01 12 .1000E+01 13 .1000E+01 14 .1000E+01 15 .1000E+01 16 .1000E+01 17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005301 ; SOURCE TYPE = VOLUME : 1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00 9 .1000E+01 10 .1000E+01 11 .1000E+01 12 .1000E+01 13 .1000E+01 14 .1000E+01 15 .1000E+01 16 .1000E+01 17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005302 ; SOURCE TYPE = VOLUME :

1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00 9 .1000E+01 10 .1000E+01 11 .1000E+01 12 .1000E+01 13 .1000E+01 14 .1000E+01 15 .1000E+01 16 .1000E+01 17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005303 ; SOURCE TYPE = VOLUME : 1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00 9 .1000E+01 10 .1000E+01 11 .1000E+01 12 .1000E+01 13 .1000E+01 14 .1000E+01 15 .1000E+01 16 .1000E+01 17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

*** AERMOD - VERSION 21112 *** *** C:\AERMOD\MtLebanon\MtLebanon.isc *** 10/27/21 *** AERMET - VERSION 16216 *** *** 10:33:08

PAGE 38 *** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

Hour Scalar Hour Scalar Hour Scalar Hour Scalar Hour Scalar

SOURCE ID = L0005304 ; SOURCE TYPE = VOLUME : 1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00 9 .1000E+01 10 .1000E+01 11 .1000E+01 12 .1000E+01 13 .1000E+01 14 .1000E+01 15 .1000E+01 16 .1000E+01 17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005305 ; SOURCE TYPE = VOLUME : 1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00 9 .1000E+01 10 .1000E+01 11 .1000E+01 12 .1000E+01 13 .1000E+01 14 .1000E+01 15 .1000E+01 16 .1000E+01 17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005306 ; SOURCE TYPE = VOLUME : 1 .0000E+00 2 .0000E+00 3 .0000E+00 4 .0000E+00 5 .0000E+00 6 .0000E+00 7 .0000E+00 8 .0000E+00 9 .1000E+01 10 .1000E+01 11 .1000E+01 12 .1000E+01 13 .1000E+01 14 .1000E+01 15 .1000E+01 16 .1000E+01 17 .0000E+00 18 .0000E+00 19 .0000E+00 20 .0000E+00 21 .0000E+00 22 .0000E+00 23 .0000E+00 24 .0000E+00

Mt Lebanon HRA – AERMOD Output File

1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005327 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005328 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

*** AERMOD - VERSION 21112 *** ***
C:\AERMOD\MtLebanon\MtLebanon.isc ***
10/27/21
*** AERMET - VERSION 16216 *** ***
*** 10:33:08

PAGE 43
*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY
FOR EACH HOUR OF THE DAY *

HOUR SCALAR HOUR SCALAR HOUR SCALAR
HOUR SCALAR HOUR SCALAR HOUR SCALAR

SOURCE ID = L0005329 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005330 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005331 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005332 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005333 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

*** AERMOD - VERSION 21112 *** ***
C:\AERMOD\MtLebanon\MtLebanon.isc ***
10/27/21
*** AERMET - VERSION 16216 *** ***
*** 10:33:08

PAGE 44
*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY
FOR EACH HOUR OF THE DAY *

HOUR SCALAR HOUR SCALAR HOUR SCALAR
HOUR SCALAR HOUR SCALAR HOUR SCALAR

SOURCE ID = L0005334 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00
19 .0000E+00 20 .0000E+00 21 .0000E+00 22
.0000E+00 23 .0000E+00 24 .0000E+00

SOURCE ID = L0005335 ; SOURCE TYPE = VOLUME :
1 .0000E+00 2 .0000E+00 3 .0000E+00 4
.0000E+00 5 .0000E+00 6 .0000E+00
7 .0000E+00 8 .0000E+00 9 .1000E+01 10
.1000E+01 11 .1000E+01 12 .1000E+01
13 .1000E+01 14 .1000E+01 15 .1000E+01 16
.1000E+01 17 .0000E+00 18 .0000E+00

Mt Lebanon HRA – AERMOD Output File

SOURCE ID = L0005355 ; SOURCE TYPE = VOLUME :
 1 .00000E+00 2 .00000E+00 3 .00000E+00 4
 .00000E+00 5 .00000E+00 6 .00000E+00
 7 .00000E+00 8 .00000E+00 9 .10000E+01 10
 .10000E+01 11 .10000E+01 12 .10000E+01
 13 .10000E+01 14 .10000E+01 15 .10000E+01 16
 .10000E+01 17 .00000E+00 18 .00000E+00
 19 .00000E+00 20 .00000E+00 21 .00000E+00 22
 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0005356 ; SOURCE TYPE = VOLUME :
 1 .00000E+00 2 .00000E+00 3 .00000E+00 4
 .00000E+00 5 .00000E+00 6 .00000E+00
 7 .00000E+00 8 .00000E+00 9 .10000E+01 10
 .10000E+01 11 .10000E+01 12 .10000E+01
 13 .10000E+01 14 .10000E+01 15 .10000E+01 16
 .10000E+01 17 .00000E+00 18 .00000E+00
 19 .00000E+00 20 .00000E+00 21 .00000E+00 22
 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0005357 ; SOURCE TYPE = VOLUME :
 1 .00000E+00 2 .00000E+00 3 .00000E+00 4
 .00000E+00 5 .00000E+00 6 .00000E+00
 7 .00000E+00 8 .00000E+00 9 .10000E+01 10
 .10000E+01 11 .10000E+01 12 .10000E+01
 13 .10000E+01 14 .10000E+01 15 .10000E+01 16
 .10000E+01 17 .00000E+00 18 .00000E+00
 19 .00000E+00 20 .00000E+00 21 .00000E+00 22
 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0005358 ; SOURCE TYPE = VOLUME :
 1 .00000E+00 2 .00000E+00 3 .00000E+00 4
 .00000E+00 5 .00000E+00 6 .00000E+00
 7 .00000E+00 8 .00000E+00 9 .10000E+01 10
 .10000E+01 11 .10000E+01 12 .10000E+01
 13 .10000E+01 14 .10000E+01 15 .10000E+01 16
 .10000E+01 17 .00000E+00 18 .00000E+00
 19 .00000E+00 20 .00000E+00 21 .00000E+00 22
 .00000E+00 23 .00000E+00 24 .00000E+00

*** AERMOD - VERSION 21112 *** ***
 C:\AERMOD\MtLebanon\MtLebanon.isc ***
 10/27/21
 *** AERMET - VERSION 16216 *** ***
 *** 10:33:08

PAGE 49
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

* SOURCE EMISSION RATE SCALARS WHICH VARY
 FOR EACH HOUR OF THE DAY *

 HOUR SCALAR HOUR SCALAR HOUR SCALAR
 HOUR SCALAR HOUR SCALAR HOUR SCALAR

SOURCE ID = L0005359 ; SOURCE TYPE = VOLUME :
 1 .00000E+00 2 .00000E+00 3 .00000E+00 4
 .00000E+00 5 .00000E+00 6 .00000E+00
 7 .00000E+00 8 .00000E+00 9 .10000E+01 10
 .10000E+01 11 .10000E+01 12 .10000E+01
 13 .10000E+01 14 .10000E+01 15 .10000E+01 16
 .10000E+01 17 .00000E+00 18 .00000E+00

19 .00000E+00 20 .00000E+00 21 .00000E+00 22
 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0005360 ; SOURCE TYPE = VOLUME :
 1 .00000E+00 2 .00000E+00 3 .00000E+00 4
 .00000E+00 5 .00000E+00 6 .00000E+00
 7 .00000E+00 8 .00000E+00 9 .10000E+01 10
 .10000E+01 11 .10000E+01 12 .10000E+01
 13 .10000E+01 14 .10000E+01 15 .10000E+01 16
 .10000E+01 17 .00000E+00 18 .00000E+00
 19 .00000E+00 20 .00000E+00 21 .00000E+00 22
 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0005361 ; SOURCE TYPE = VOLUME :
 1 .00000E+00 2 .00000E+00 3 .00000E+00 4
 .00000E+00 5 .00000E+00 6 .00000E+00
 7 .00000E+00 8 .00000E+00 9 .10000E+01 10
 .10000E+01 11 .10000E+01 12 .10000E+01
 13 .10000E+01 14 .10000E+01 15 .10000E+01 16
 .10000E+01 17 .00000E+00 18 .00000E+00
 19 .00000E+00 20 .00000E+00 21 .00000E+00 22
 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0005362 ; SOURCE TYPE = VOLUME :
 1 .00000E+00 2 .00000E+00 3 .00000E+00 4
 .00000E+00 5 .00000E+00 6 .00000E+00
 7 .00000E+00 8 .00000E+00 9 .10000E+01 10
 .10000E+01 11 .10000E+01 12 .10000E+01
 13 .10000E+01 14 .10000E+01 15 .10000E+01 16
 .10000E+01 17 .00000E+00 18 .00000E+00
 19 .00000E+00 20 .00000E+00 21 .00000E+00 22
 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = L0005363 ; SOURCE TYPE = VOLUME :
 1 .00000E+00 2 .00000E+00 3 .00000E+00 4
 .00000E+00 5 .00000E+00 6 .00000E+00
 7 .00000E+00 8 .00000E+00 9 .10000E+01 10
 .10000E+01 11 .10000E+01 12 .10000E+01
 13 .10000E+01 14 .10000E+01 15 .10000E+01 16
 .10000E+01 17 .00000E+00 18 .00000E+00
 19 .00000E+00 20 .00000E+00 21 .00000E+00 22
 .00000E+00 23 .00000E+00 24 .00000E+00

*** AERMOD - VERSION 21112 *** ***
 C:\AERMOD\MtLebanon\MtLebanon.isc ***
 10/27/21
 *** AERMET - VERSION 16216 *** ***
 *** 10:33:08

PAGE 50
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

 *** DISCRETE CARTESIAN RECEPTORS

 (X-COORD, Y-COORD, ZELEV, ZHILL,
 ZFLAG)
 (METERS)

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 (372770.0, 3770950.0, 47.6, 47.6, 0.0); (372780.0,
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Mt Lebanon HRA – AERMOD Output File

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( 372780.0, 3770960.0, 47.4, 47.4, 0.0); ( 372790.0, PAGE 51
3770960.0, 47.2, 47.2, 0.0); *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*
( 372800.0, 3770960.0, 47.0, 47.0, 0.0); ( 372810.0,
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Mt Lebanon HRA – AERMOD Output File

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*** AERMOD - VERSION 21112 *** ***
C:\AERMOD\MtLebanon\MtLebanon.isc ***
10/27/21
*** AERMET - VERSION 16216 *** ***
*** 10:33:08
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PAGE 53
*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** DISCRETE CARTESIAN RECEPTORS
***
(X-COORD, Y-COORD, ZELEV, ZHILL,
ZFLAG)
(METERS)
```

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*** AERMOD - VERSION 21112 *** ***
C:\AERMOD\MtLebanon\MtLebanon.isc ***
10/27/21
*** AERMET - VERSION 16216 *** ***
*** 10:33:08
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PAGE 54
*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** METEOROLOGICAL DAYS SELECTED
FOR PROCESSING ***
(1=YES; 0=NO)

1111111111 1111111111 1111111111 111
11111111 11111111111
1111111111 11111111111 1111111111 111
11111111 11111111111
1111111111 11111111111 1111111111 111
11111111 11111111111
1111111111 11111111111 1111111111 111
11111111 11111111111
1111111111 11111111111 1111111111 111
11111111 11111111111
1111111111 11111111111 1111111111 111
11111111 11111111111
1111111111 11111111111 1111111111 111
11111111 11111111111
1111111111 111111
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

```
*** UPPER BOUND OF FIRST THROUGH FIFTH
WIND SPEED CATEGORIES ***
(METERS/SEC)
1.54, 3.09, 5.14, 8.23, 10.80,
*** AERMOD - VERSION 21112 *** ***
C:\AERMOD\MtLebanon\MtLebanon.isc ***
10/27/21
*** AERMET - VERSION 16216 *** ***
*** 10:33:08
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PAGE 55
*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*
```


Mt Lebanon HRA – AERMOD Output File

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: Met\KSMO_v9.SFC
 Met Version: 16216
 Profile file: Met\KSMO_v9.PFL
 Surface format: FREE
 Profile format: FREE
 Surface station no.: 93197 Upper air station no.: 3190
 Name: UNKNOWN Name: UNKNOWN
 Year: 2012 Year: 2012

First 24 hours of scalar data

YR	MO	DY	JDY	HR	HO	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	
20	12	01	01	01	1.00	1.26	131.	10.1	283.1	2.0	12.01	01	
ZO	BOWEN	ALBEDO	REF	WS	WD	HT	REF	TA	HT				
12.01.01	01	01	01	01	-6.6	0.113	-9.000	-9.000	-999.	91.	19.8	0.17	2.20
1.00	1.26	131.	10.1	283.1	2.0								
12.01.01	01	01	02	01	-7.6	0.121	-9.000	-9.000	-999.	101.	21.3	0.17	
2.20	1.00	1.35	232.	10.1	282.0	2.0							
12.01.01	01	01	03	01	-3.3	0.082	-9.000	-9.000	-999.	57.	15.3	0.17	2.20
1.00	0.86	46.	10.1	280.9	2.0								
12.01.01	01	01	04	01	-5.4	0.119	-9.000	-9.000	-999.	79.	17.9	0.17	2.20
1.00	1.14	82.	10.1	281.4	2.0								
12.01.01	01	01	05	01	-6.6	0.113	-9.000	-9.000	-999.	91.	19.8	0.17	2.20
1.00	1.26	205.	10.1	281.4	2.0								
12.01.01	01	01	06	01	-7.4	0.119	-9.000	-9.000	-999.	99.	20.9	0.17	2.20
1.00	1.33	254.	10.1	280.9	2.0								
12.01.01	01	01	07	01	-4.6	0.094	-9.000	-9.000	-999.	70.	16.6	0.17	2.20
1.00	1.04	39.	10.1	279.2	2.0								
12.01.01	01	01	08	01	-16.0	0.197	-9.000	-9.000	-999.	209.	43.0	0.17	
2.20	0.54	2.10	63.	10.1	282.0	2.0							
12.01.01	01	01	09	01	36.8	0.255	0.339	0.005	38.	309.	-40.8	0.17	2.20
0.31	2.27	33.	10.1	292.0	2.0								
12.01.01	01	01	10	01	102.6	0.234	0.691	0.006	117.	271.	-11.3	0.17	
2.20	0.23	1.79	204.	10.1	289.2	2.0							
12.01.01	01	01	11	01	154.6	0.178	1.118	0.005	327.	181.	-3.3	0.17	
2.20	0.20	1.11	119.	10.1	296.4	2.0							
12.01.01	01	01	12	01	182.0	0.295	1.459	0.005	618.	385.	-12.8	0.17	
2.20	0.19	2.30	76.	10.1	300.9	2.0							
12.01.01	01	01	13	01	175.0	0.355	1.686	0.005	991.	507.	-23.0	0.17	
2.20	0.19	2.98	179.	10.1	293.8	2.0							
12.01.01	01	01	14	01	148.1	0.374	1.737	0.005	1282.	549.	-31.9	0.17	
2.20	0.20	3.25	211.	10.1	292.0	2.0							
12.01.01	01	01	15	01	98.0	0.291	1.572	0.005	1436.	380.	-22.7	0.17	
2.20	0.23	2.44	231.	10.1	290.9	2.0							
12.01.01	01	01	16	01	28.2	0.303	1.044	0.005	1460.	400.	-89.0	0.17	
2.20	0.32	2.85	217.	10.1	289.2	2.0							
12.01.01	01	01	17	01	-22.4	0.259	-9.000	-9.000	-999.	317.	73.7	0.17	
2.20	0.58	2.73	226.	10.1	287.0	2.0							
12.01.01	01	01	18	01	-8.7	0.131	-9.000	-9.000	-999.	124.	23.3	0.17	
2.20	1.00	1.45	230.	10.1	286.4	2.0							
12.01.01	01	01	19	01	-13.2	0.163	-9.000	-9.000	-999.	157.	29.4	0.17	
2.20	1.00	1.77	225.	10.1	285.9	2.0							
12.01.01	01	01	20	01	-5.7	0.106	-9.000	-9.000	-999.	83.	18.6	0.17	2.20
1.00	1.18	182.	10.1	284.9	2.0								
12.01.01	01	01	21	01	-999.0	-9.000	-9.000	-9.000	-999.	-999.	-999999.0	0.17	
2.20	1.00	0.00	0.	10.1	284.2	2.0							
12.01.01	01	01	22	01	-7.3	0.119	-9.000	-9.000	-999.	99.	21.1	0.17	2.20
1.00	1.33	202.	10.1	285.4	2.0								
12.01.01	01	01	23	01	-6.0	0.108	-9.000	-9.000	-999.	86.	19.1	0.17	2.20
1.00	1.21	251.	10.1	284.9	2.0								
12.01.01	01	01	24	01	-5.4	0.102	-9.000	-9.000	-999.	78.	18.0	0.17	2.20
1.00	1.14	224.	10.1	284.2	2.0								

First hour of profile data

YR MO DY HR HEIGHT F WDIR WSPD AMB_TMP sigmaA sigmaW
 sigmaMv
 12 01 01 01 10.1 1 131. 1.26 283.2 99.0 -99.00 -99.00

F indicates top of profile (=1) or below (=0)
 *** AERMOD - VERSION 21112 *** ***
 C:\AERMOD\MtLebanon\MtLebanon.isc ***
 10/27/21
 *** AERMET - VERSION 16216 *** ***
 *** 10:33:08

PAGE 56
 *** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*

*** THE PERIOD (43848 HRS) AVERAGE
 CONCENTRATION VALUES FOR SOURCE GROUP: LOADINGD ***
 INCLUDING SOURCE(S): L0002124 ,
 L0002125 , L0002126 , L0002127 , L0002128 ,
 L0002129 , L0002130 ,

*** DISCRETE CARTESIAN RECEPTOR
 POINTS ***
 ** CONC OF DPM IN MICROGRAMS/M**3

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)
372710.00	3770950.00	0.96852	372720.00
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3770950.00	1.23288		
372750.00	3770950.00	1.33597	372760.00
3770950.00	1.44678		
372770.00	3770950.00	1.56478	372780.00
3770950.00	1.68919		
372790.00	3770950.00	1.81893	372800.00
3770950.00	1.95122		
372810.00	3770950.00	2.08291	372820.00
3770950.00	2.21045		
372830.00	3770950.00	2.32913	372840.00
3770950.00	2.43338		
372850.00	3770950.00	2.51636	372860.00
3770950.00	2.57144		
372870.00	3770950.00	2.59301	372880.00
3770950.00	2.57751		
372890.00	3770950.00	2.52464	372710.00
3770960.00	1.04256		
372720.00	3770960.00	1.13629	372730.00
3770960.00	1.23952		
372740.00	3770960.00	1.35287	372750.00
3770960.00	1.47688		
372760.00	3770960.00	1.61206	372770.00
3770960.00	1.75815		
372780.00	3770960.00	1.91445	372790.00
3770960.00	2.07972		
372800.00	3770960.00	2.25099	372810.00
3770960.00	2.42451		
372820.00	3770960.00	2.59539	372830.00
3770960.00	2.75697		
372840.00	3770960.00	2.90103	372850.00
3770960.00	3.01762		
372860.00	3770960.00	3.09676	372870.00
3770960.00	3.12972		
372880.00	3770960.00	3.11102	372890.00
3770960.00	3.03955		
372710.00	3770970.00	1.11956	372720.00
3770970.00	1.22777		

Mt Lebanon HRA – AERMOD Output File

372730.00	3770970.00	1.34840	372740.00	372800.00	3770990.00	3.55692	372810.00
3770970.00	1.48259			3770990.00	3.98110		
372750.00	3770970.00	1.63149	372760.00	372820.00	3770990.00	4.42922	372830.00
3770970.00	1.79638			3770990.00	4.88327		
372770.00	3770970.00	1.97748	372780.00	372840.00	3770990.00	5.31553	372850.00
3770970.00	2.17451			3770990.00	5.68981		
372790.00	3770970.00	2.38635	372800.00	372710.00	3771000.00	1.35719	372720.00
3770970.00	2.61010			3771000.00	1.51732		
372810.00	3770970.00	2.84136	372820.00	372730.00	3771000.00	1.70284	372740.00
3770970.00	3.07363			3771000.00	1.91838		
372830.00	3770970.00	3.29744	372840.00	372750.00	3771000.00	2.16929	372760.00
3770970.00	3.50041			3771000.00	2.46175		
372850.00	3770970.00	3.66777	372860.00	372770.00	3771000.00	2.80223	372780.00
3770970.00	3.78383			3771000.00	3.19730		
372870.00	3770970.00	3.83454	372880.00	372790.00	3771000.00	3.65282	372800.00
3770970.00	3.81132			3771000.00	4.17231		
372890.00	3770970.00	3.71344	372710.00	372810.00	3771000.00	4.75454	372710.00
3770980.00	1.19857			3771050.00	1.66255		
372720.00	3770980.00	1.32282	372730.00	372720.00	3771050.00	1.90755	372730.00
3770980.00	1.46309			3771050.00	2.20701		
372740.00	3770980.00	1.62131	372750.00	372740.00	3771050.00	2.57758	372750.00
3770980.00	1.79962			3771050.00	3.04258		
372760.00	3770980.00	2.00025	372770.00	372760.00	3771050.00	3.63552	372770.00
3770980.00	2.22460			3771050.00	4.40463		
372780.00	3770980.00	2.47337	372790.00	372780.00	3771050.00	5.42158	372790.00
3770980.00	2.74624			3771050.00	6.79543		
372800.00	3770980.00	3.04085	372810.00	372800.00	3771050.00	8.69490	372710.00
3770980.00	3.35247			3771060.00	1.69142		
372820.00	3770980.00	3.67279	372830.00	372720.00	3771060.00	1.94604	372730.00
3770980.00	3.98855			3771060.00	2.25914		
372840.00	3770980.00	4.28100	372850.00	372740.00	3771060.00	2.64937	372750.00
3770980.00	4.52754			3771060.00	3.14351		
372860.00	3770980.00	4.70262	372870.00	372760.00	3771060.00	3.78089	372770.00
3770980.00	4.78312			3771060.00	4.61974		
372880.00	3770980.00	4.75453	372710.00	372780.00	3771060.00	5.74977	372790.00
3770990.00	1.27836			3771060.00	7.31499		
372720.00	3770990.00	1.42002	372730.00	372800.00	3771060.00	9.55176	372710.00
3770990.00	1.58204			3771070.00	1.70565		
372740.00	3770990.00	1.76751	372750.00	372720.00	3771070.00	1.96573	372730.00
3770990.00	1.97989			3771070.00	2.28672		
*** AERMOD - VERSION 21112 *** **				372740.00	3771070.00	2.68862	372750.00
C:\AERMOD\MtLebanon\MtLebanon.isc		***		3771070.00	3.20046		
10/27/21				372760.00	3771070.00	3.86546	372770.00
*** AERMET - VERSION 16216 *** **				3771070.00	4.74871		
*** 10:33:08				372780.00	3771070.00	5.95331	372790.00
				3771070.00	7.64963		
PAGE 57				372800.00	3771070.00	10.12913	372710.00
*** MODELOPTs: RegDEFAULT CONC ELEV URBAN ADJ_U*				3771080.00	1.70449		
				372720.00	3771080.00	1.96571	372730.00
*** THE PERIOD (43848 HRS) AVERAGE				3771080.00	2.28851		
CONCENTRATION VALUES FOR SOURCE GROUP: LOADINGD ***				372740.00	3771080.00	2.69298	372750.00
INCLUDING SOURCE(S): L0002124 ,				3771080.00	3.20943		
L0002125 , L0002126 , L0002127 , L0002128 ,				372760.00	3771080.00	3.88201	372770.00
L0002129 , L0002130 ,				3771080.00	4.77792		
				372780.00	3771080.00	6.00494	372790.00
*** DISCRETE CARTESIAN RECEPTOR				3771080.00	7.74398		
POINTS ***				372800.00	3771080.00	10.30821	372710.00
				3771090.00	1.68818		
				372720.00	3771090.00	1.94592	372730.00
** ** CONC OF DPM IN MICROGRAMS/M**3				3771090.00	2.26398		
				372740.00	3771090.00	2.66171	372750.00
				3771090.00	3.16893		
				372760.00	3771090.00	3.82676	372770.00
				3771090.00	4.70145		
				372780.00	3771090.00	5.89467	372790.00
				3771090.00	7.57792		
				372800.00	3771090.00	10.03967	372710.00
				3771100.00	1.65740		
				372720.00	3771100.00	1.90729	372730.00
				3771100.00	2.21451		

Mt Lebanon HRA – AERMOD Output File

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372740.00 3771100.00 2.59679      372750.00      372780.00 3771140.00 3.87262      372790.00
3771100.00 3.08170
372760.00 3771100.00 3.70560      372770.00      372800.00 3771140.00 5.49742      372710.00
3771100.00 4.52673
372780.00 3771100.00 5.63269      372790.00      3771150.00 1.34413
3771100.00 7.17787
372720.00 3771150.00 1.51233      372730.00
3771150.00 1.71052
372740.00 3771150.00 1.94808      372750.00
3771150.00 2.22857
372760.00 3771150.00 2.56124      372770.00
3771150.00 2.95598
372780.00 3771150.00 3.42295      372790.00
3771150.00 3.99847
372800.00 3771150.00 4.68372      372910.00
3770890.00 0.98720
372920.00 3770890.00 0.95361      372930.00
3770890.00 0.91511
372940.00 3770890.00 0.87298      372950.00
3770890.00 0.82841
372960.00 3770890.00 0.78260      372970.00
3770890.00 0.73654
372910.00 3770900.00 1.11726      372920.00
3770900.00 1.07597
372930.00 3770900.00 1.02887      372940.00
3770900.00 0.97761
372950.00 3770900.00 0.92377      372960.00
3770900.00 0.86881
372970.00 3770900.00 0.81399      372910.00
3770910.00 1.27259
372920.00 3770910.00 1.22132      372930.00
3770910.00 1.16312
372940.00 3770910.00 1.10019      372950.00
3770910.00 1.03461
372960.00 3770910.00 0.96822      372910.00
3770920.00 1.45983
372920.00 3770920.00 1.39540      372930.00
3770920.00 1.32271
372940.00 3770920.00 1.24469      372950.00
3770920.00 1.16409
372910.00 3770930.00 1.68781      372920.00
3770930.00 1.60577
372930.00 3770930.00 1.51388      372940.00
3770930.00 1.41615
*** AERMOD - VERSION 21112 *** ***
C:\AERMOD\MtLebanon\MtLebanon.isc ***
10/27/21
*** AERMET - VERSION 16216 *** ***
*** 10:33:08

PAGE 58
*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE PERIOD ( 43848 HRS) AVERAGE
CONCENTRATION VALUES FOR SOURCE GROUP: LOADINGD ***
INCLUDING SOURCE(S): L0002124 ,
L0002125 , L0002126 , L0002127 , L0002128 ,
L0002129 , L0002130 ,

*** DISCRETE CARTESIAN RECEPTOR
POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3

X-COORD (M) Y-COORD (M) CONC X-COORD
(M) Y-COORD (M) CONC
-----
372800.00 3771100.00 9.37867 372710.00
3771110.00 1.61339
372720.00 3771110.00 1.85155 372730.00
3771110.00 2.14282
372740.00 3771110.00 2.50322 372750.00
3771110.00 2.95569
372760.00 3771110.00 3.53187 372770.00
3771110.00 4.27976
372780.00 3771110.00 5.26171 372790.00
3771110.00 6.60724
372800.00 3771110.00 8.46005 372710.00
3771120.00 1.55809
372720.00 3771120.00 1.78144 372730.00
3771120.00 2.05264
372740.00 3771120.00 2.38566 372750.00
3771120.00 2.79891
372760.00 3771120.00 3.31638 372770.00
3771120.00 3.97402
372780.00 3771120.00 4.81868 372790.00
3771120.00 5.94405
372800.00 3771120.00 7.43633 372710.00
3771130.00 1.49376
372720.00 3771130.00 1.69994 372730.00
3771130.00 1.94828
372740.00 3771130.00 2.25047 372750.00
3771130.00 2.61989
372760.00 3771130.00 3.07427 372770.00
3771130.00 3.63907
372780.00 3771130.00 4.34599 372790.00
3771130.00 5.25910
372800.00 3771130.00 6.42582 372710.00
3771140.00 1.42193
372720.00 3771140.00 1.60995 372730.00
3771140.00 1.83358
372740.00 3771140.00 2.10160 372750.00
3771140.00 2.42558
372760.00 3771140.00 2.81706 372770.00
3771140.00 3.29414

*** DISCRETE CARTESIAN RECEPTOR
POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3

X-COORD (M) Y-COORD (M) CONC X-COORD
(M) Y-COORD (M) CONC
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372910.00 3770940.00 1.96851 372920.00
3770940.00 1.86248

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Mt Lebanon HRA – AERMOD Output File

372930.00	3770940.00	1.74478	372910.00	372965.00	3771055.00	6.99026	372935.00
3770950.00	2.31856			3771065.00	20.07550		
372920.00	3770950.00	2.17936	372840.00	372945.00	3771065.00	14.98686	372955.00
3771092.11	50.01684			3771065.00	11.54058		
372850.00	3771092.11	87.28152	372860.00	372965.00	3771065.00	9.10515	372935.00
3771092.11	143.35648			3771075.00	29.30272		
372870.00	3771092.11	223.48246	372840.00	372945.00	3771075.00	21.07837	372955.00
3771102.11	37.18134			3771075.00	15.74560		
372850.00	3771102.11	56.34272	372860.00	*** AERMOD - VERSION 21112 *** **			
3771102.11	83.07761			C:\AERMOD\MtLebanon\MtLebanon.isc ***			
372870.00	3771102.11	119.82170	372840.00	10/27/21			
3771112.11	26.60824			*** AERMET - VERSION 16216 *** **			
372850.00	3771112.11	36.39521	372860.00	*** 10:33:08			
3771112.11	49.36917			PAGE 60			
372870.00	3771112.11	67.03626	372840.00	*** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*			
3771122.11	19.20528			*** THE PERIOD (43848 HRS) AVERAGE			
372850.00	3771122.11	24.60656	372860.00	CONCENTRATION VALUES FOR SOURCE GROUP: LOADINGD ***			
3771122.11	31.63842			INCLUDING SOURCE(S): L0002124 ,			
372870.00	3771122.11	41.13664	372840.00	L0002125 ,L0002126 ,L0002127 ,L0002128 ,			
3771132.11	14.20599			L0002129 ,L0002130 ,			
372850.00	3771132.11	17.45457	372860.00	*** DISCRETE CARTESIAN RECEPTOR			
3771132.11	21.64370			POINTS ***			
372870.00	3771132.11	27.22800	372840.00	** CONC OF DPM IN MICROGRAMS/M**3			
3771142.11	10.80314			**			
372850.00	3771142.11	12.91251	372860.00	X-COORD (M)	Y-COORD (M)	CONC	X-COORD
3771142.11	15.59093			(M)	Y-COORD (M)	CONC	
372870.00	3771142.11	19.09442	372810.00	-----			
3771182.11	3.09615			372965.00	3771075.00	12.12172	372935.00
372820.00	3771182.11	3.50088	372830.00	3771085.00	40.88617		
3771182.11	3.96307			372945.00	3771085.00	28.53648	372955.00
372840.00	3771182.11	4.45012	372850.00	3771085.00	20.82953		
3771182.11	5.02348			372965.00	3771085.00	15.74216	372935.00
372860.00	3771182.11	5.72295	372870.00	3771095.00	49.38094		
3771182.11	6.58305			372945.00	3771095.00	34.84230	372955.00
372880.00	3771182.11	7.61935	372890.00	3771095.00	25.51040		
3771182.11	8.82788			372965.00	3771095.00	19.26398	372935.00
372900.00	3771182.11	10.10803	372910.00	3771105.00	51.42552		
3771182.11	11.32804			372945.00	3771105.00	37.94454	372955.00
372810.00	3771192.11	2.62879	372820.00	3771105.00	28.55806		
3771192.11	2.95046			372965.00	3771105.00	21.93507	
372830.00	3771192.11	3.32664	372840.00	*** AERMOD - VERSION 21112 *** **			
3771192.11	3.71069			C:\AERMOD\MtLebanon\MtLebanon.isc ***			
372850.00	3771192.11	4.15311	372860.00	10/27/21			
3771192.11	4.68895			*** AERMET - VERSION 16216 *** **			
372870.00	3771192.11	5.33222	372880.00	*** 10:33:08			
3771192.11	6.10299			PAGE 61			
372890.00	3771192.11	7.01909	372900.00	*** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*			
3771192.11	8.02189			*** THE PERIOD (43848 HRS) AVERAGE			
372910.00	3771192.11	9.00726	372955.00	CONCENTRATION VALUES FOR SOURCE GROUP: CONST2 ***			
3770995.00	3.09963			INCLUDING SOURCE(S): L0005176 ,			
372965.00	3770995.00	2.67302	372945.00	L0005177 ,L0005178 ,L0005179 ,L0005180 ,			
3771005.00	4.26574			L0005181 ,L0005182 ,L0005183 ,L0005184 ,			
372955.00	3771005.00	3.61502	372965.00	L0005185 ,L0005186 ,L0005187 ,L0005188 ,			
3771015.00	3771015.00	5.08857	372955.00	L0005189 ,L0005190 ,L0005191 ,L0005192 ,			
372965.00	3771015.00	3.52828	372945.00	L0005193 ,L0005194 ,L0005195 ,L0005196 ,			
3771025.00	6.09062			L0005197 ,L0005198 ,L0005199 ,L0005200 ,			
372955.00	3771025.00	4.95248	372965.00	L0005201 ,L0005202 ,L0005203 , . . . ,			
3771025.00	4.06838			*** DISCRETE CARTESIAN RECEPTOR			
372945.00	3771035.00	7.31680	372955.00	POINTS ***			
3771035.00	5.83532						
372965.00	3771035.00	4.73278	372935.00				
3771045.00	11.59277						
372945.00	3771045.00	8.88732	372955.00				
3771045.00	6.99440						
372965.00	3771045.00	5.63205	372935.00				
3771055.00	14.76605						
372945.00	3771055.00	11.17113	372955.00				
3771055.00	8.73105						

Mt Lebanon HRA – AERMOD Output File

** CONC OF DPM IN MICROGRAMS/M**3							
X-COORD (M)	Y-COORD (M)	CONC	X-COORD				
(M)	Y-COORD (M)	CONC					
372710.00	3770950.00	1.44839	372720.00	372760.00	3770980.00	3.62869	372770.00
3770950.00	1.60281			3770980.00	4.20127		
372730.00	3770950.00	1.77599	372740.00	372780.00	3770980.00	4.86359	372790.00
3770950.00	1.96944			3770980.00	5.61353		
372750.00	3770950.00	2.18430	372760.00	372800.00	3770980.00	6.43624	372810.00
3770950.00	2.42116			3770980.00	7.30397		
372770.00	3770950.00	2.67898	372780.00	372820.00	3770980.00	8.17237	372830.00
3770950.00	2.95523			3770980.00	8.98538		
372790.00	3770950.00	3.24559	372800.00	372840.00	3770980.00	9.68241	372850.00
3770950.00	3.54078			3770980.00	10.20856		
372810.00	3770950.00	3.82936	372820.00	372860.00	3770980.00	10.50040	372870.00
3770950.00	4.09820			3770980.00	10.49524		
372830.00	3770950.00	4.33194	372840.00	372880.00	3770980.00	10.15009	372710.00
3770950.00	4.51536			3770990.00	1.96276		
372850.00	3770950.00	4.63312	372860.00	372720.00	3770990.00	2.25126	372730.00
3770950.00	4.67276			3770990.00	2.59859		
372870.00	3770950.00	4.62613	372880.00	372740.00	3770990.00	3.01884	372750.00
3770950.00	4.49114			3770990.00	3.52929		
372890.00	3770950.00	4.27399	372710.00	*** AERMOD - VERSION 21112 *** **			
3770960.00	1.57263			C:\AERMOD\MtLebanon\MtLebanon.isc ***			
372720.00	3770960.00	1.75505	372730.00	10/27/21			
3770960.00	1.96293			*** AERMET - VERSION 16216 *** **			
372740.00	3770960.00	2.19921	372750.00	*** 10:33:08			
3770960.00	2.46671			PAGE 62			
372760.00	3770960.00	2.76762	372770.00	*** MODELOPTs: RegDFault CONC ELEV URBAN ADJ_U*			
3770960.00	3.10220			*** THE PERIOD (43848 HRS) AVERAGE			
372780.00	3770960.00	3.46850	372790.00	CONCENTRATION VALUES FOR SOURCE GROUP: CONST2 ***			
3770960.00	3.86131			INCLUDING SOURCE(S): L0005176 ,			
372800.00	3770960.00	4.26924	372810.00	L0005177 ,L0005178 ,L0005179 ,L0005180 ,			
3770960.00	4.67717			L0005181 ,L0005182 ,L0005183 ,L0005184 ,			
372820.00	3770960.00	5.06567	372830.00	L0005185 ,L0005186 ,L0005187 ,L0005188 ,			
3770960.00	5.41126			L0005189 ,L0005190 ,L0005191 ,L0005192 ,			
372840.00	3770960.00	5.68992	372850.00	L0005193 ,L0005194 ,L0005195 ,L0005196 ,			
3770960.00	5.87799			L0005197 ,L0005198 ,L0005199 ,L0005200 ,			
372860.00	3770960.00	5.95470	372870.00	L0005201 ,L0005202 ,L0005203 , . . . ,			
3770960.00	5.90466			*** DISCRETE CARTESIAN RECEPTOR			
372880.00	3770960.00	5.72193	372890.00	POINTS ***			
3770960.00	5.41265			** CONC OF DPM IN MICROGRAMS/M**3			
372710.00	3770970.00	1.70158	372720.00	**			
3770970.00	1.91588			X-COORD (M)	Y-COORD (M)	CONC	X-COORD
372730.00	3770970.00	2.16435	372740.00	(M)	CONC		
3770970.00	2.45225			-----			
372750.00	3770970.00	2.78516	372760.00	372760.00	3770990.00	4.15022	372770.00
3770970.00	3.16841			3770990.00	4.90266		
372770.00	3770970.00	3.60513	372780.00	372780.00	3770990.00	5.80515	372790.00
3770970.00	4.09541			3770990.00	6.86650		
372790.00	3770970.00	4.63414	372800.00	372800.00	3770990.00	8.07480	372810.00
3770970.00	5.20778			3770990.00	9.39091		
372810.00	3770970.00	5.79600	372820.00	372820.00	3770990.00	10.74276	372830.00
3770970.00	6.36985			3770990.00	12.04015		
372830.00	3770970.00	6.89313	372840.00	372840.00	3770990.00	13.19585	372850.00
3770970.00	7.32753			3770990.00	14.13037		
372850.00	3770970.00	7.63656	372860.00	372710.00	3771000.00	2.08705	372720.00
3770970.00	7.78416			3771000.00	2.41588		
372870.00	3770970.00	7.73954	372880.00	372730.00	3771000.00	2.81948	372740.00
3770970.00	7.48746			3771000.00	3.31925		
372890.00	3770970.00	7.03724	372710.00	372750.00	3771000.00	3.94326	372760.00
3770980.00	1.83274			3771000.00	4.72741		
372720.00	3770980.00	2.08263	372730.00	372770.00	3771000.00	5.71501	372780.00
3770980.00	2.37776			3771000.00	6.95336		
372740.00	3770980.00	2.72693	372750.00	372790.00	3771000.00	8.48277	372800.00
3770980.00	3.14030			3771000.00	10.31096		
				372810.00	3771000.00	12.38126	372710.00
				3771050.00	2.43450		

Mt Lebanon HRA – AERMOD Output File

372720.00	3771050.00	2.90244	372730.00	INCLUDING SOURCE(S): L0005176 ,			
3771050.00	3.51641			L0005177 ,	L0005178 ,	L0005179 ,	L0005180 ,
372740.00	3771050.00	4.34433	372750.00	L0005181 ,	L0005182 ,	L0005183 ,	L0005184 ,
3771050.00	5.49980			L0005185 ,	L0005186 ,	L0005187 ,	L0005188 ,
372760.00	3771050.00	7.18665	372770.00	L0005189 ,	L0005190 ,	L0005191 ,	L0005192 ,
3771050.00	9.78999			L0005193 ,	L0005194 ,	L0005195 ,	L0005196 ,
372780.00	3771050.00	14.11401	372790.00	L0005197 ,	L0005198 ,	L0005199 ,	L0005200 ,
3771050.00	21.98419			L0005201 ,	L0005202 ,	L0005203 ,	...
372800.00	3771050.00	36.79989	372710.00	*** DISCRETE CARTESIAN RECEPTOR			
3771060.00	2.41916			POINTS ***			
372720.00	3771060.00	2.88360	372730.00	** CONC OF DPM IN MICROGRAMS/M**3			
3771060.00	3.49266			**			
372740.00	3771060.00	4.31205	372750.00	X-COORD (M)	Y-COORD (M)	CONC	X-COORD
3771060.00	5.45360			(M)	Y-COORD (M)	CONC	
372760.00	3771060.00	7.12960	372770.00	-----			
3771060.00	9.73118						
372780.00	3771060.00	14.06224	372790.00				
3771060.00	21.94720						
372800.00	3771060.00	36.52070	372710.00				
3771070.00	2.37235			372800.00	3771100.00	13.26890	372710.00
372720.00	3771070.00	2.82045	372730.00	3771110.00	1.94602		
3771070.00	3.40329			372720.00	3771110.00	2.25449	372730.00
372740.00	3771070.00	4.17811	372750.00	3771110.00	2.63317		
3771070.00	5.24245			372740.00	3771110.00	3.10047	372750.00
372760.00	3771070.00	6.79170	372770.00	3771110.00	3.68583		
3771070.00	9.16771			372760.00	3771110.00	4.40962	372770.00
372780.00	3771070.00	13.03431	372790.00	3771110.00	5.29342		
3771070.00	19.89816			372780.00	3771110.00	6.38403	372790.00
372800.00	3771070.00	32.08178	372710.00	3771110.00	7.94598		
3771080.00	2.29646			372800.00	3771110.00	9.93725	372710.00
372720.00	3771080.00	2.71804	372730.00	3771120.00	1.80743		
3771080.00	3.26150			372720.00	3771120.00	2.07713	372730.00
372740.00	3771080.00	3.96886	372750.00	3771120.00	2.40283		
3771080.00	4.91875			372740.00	3771120.00	2.79752	372750.00
372760.00	3771080.00	6.26836	372770.00	3771120.00	3.27480		
3771080.00	8.26653			372760.00	3771120.00	3.85500	372770.00
372780.00	3771080.00	11.34862	372790.00	3771120.00	4.53001		
3771080.00	16.56912			372780.00	3771120.00	5.27492	372790.00
372800.00	3771080.00	25.17599	372710.00	3771120.00	6.34922		
3771090.00	2.19655			372800.00	3771120.00	7.67268	372710.00
372720.00	3771090.00	2.58388	372730.00	3771130.00	1.66746		
3771090.00	3.07597			372720.00	3771130.00	1.90169	372730.00
372740.00	3771090.00	3.70028	372750.00	3771130.00	2.17946		
3771090.00	4.51096			372740.00	3771130.00	2.50706	372750.00
372760.00	3771090.00	5.62521	372770.00	3771130.00	2.89101		
3771090.00	7.20125			372760.00	3771130.00	3.34500	372770.00
372780.00	3771090.00	9.47362	372790.00	3771130.00	3.87113		
3771090.00	13.03561			372780.00	3771130.00	4.39769	372790.00
372800.00	3771090.00	18.30016	372710.00	3771130.00	5.15514		
3771100.00	2.07807			372800.00	3771130.00	6.06972	372710.00
372720.00	3771100.00	2.42661	372730.00	3771140.00	1.52848		
3771100.00	2.86166			372720.00	3771140.00	1.72315	372730.00
372740.00	3771100.00	3.39767	372750.00	3771140.00	1.95191		
3771100.00	4.07509			372740.00	3771140.00	2.22943	372750.00
372760.00	3771100.00	4.96680	372770.00	3771140.00	2.54538		
3771100.00	6.15928			372760.00	3771140.00	2.89993	372770.00
372780.00	3771100.00	7.75871	372790.00	3771140.00	3.28027		
3771100.00	10.10237			372780.00	3771140.00	3.68575	372790.00
*** AERMOD - VERSION 21112 *** **				3771140.00	4.24040		
C:\AERMOD\MtLebanon\MtLebanon.isc ***				372800.00	3771140.00	4.90216	372710.00
10/27/21				3771150.00	1.39548		
*** AERMET - VERSION 16216 *** **				372720.00	3771150.00	1.55519	372730.00
*** 10:33:08				3771150.00	1.73881		
				372740.00	3771150.00	1.96097	372750.00
PAGE 63				3771150.00	2.21613		
*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*				372760.00	3771150.00	2.49179	372770.00
				3771150.00	2.78680		
*** THE PERIOD (43848 HRS) AVERAGE				372780.00	3771150.00	3.11788	372790.00
CONCENTRATION VALUES FOR SOURCE GROUP: CONST2 ***				3771150.00	3.53558		

Mt Lebanon HRA – AERMOD Output File

372800.00	3771150.00	4.02624	372910.00	372850.00	3771102.11	36.53786	372860.00
3770890.00	1.35060			3771102.11	40.04539		
372920.00	3770890.00	1.27991	372930.00	372870.00	3771102.11	42.44338	372840.00
3770890.00	1.20447			3771112.11	21.52100		
372940.00	3770890.00	1.12674	372950.00	372850.00	3771112.11	24.94404	372860.00
3770890.00	1.04877			3771112.11	27.83941		
372960.00	3770890.00	0.97234	372970.00	372870.00	3771112.11	30.07640	372840.00
3770890.00	0.89877			3771122.11	15.19677		
372910.00	3770900.00	1.55431	372920.00	372850.00	3771122.11	17.68529	372860.00
3770900.00	1.46549			3771122.11	19.99244		
372930.00	3770900.00	1.37133	372940.00	372870.00	3771122.11	21.95103	372840.00
3770900.00	1.27506			3771132.11	11.19552		
372950.00	3770900.00	1.17942	372960.00	372850.00	3771132.11	13.00359	372860.00
3770900.00	1.08657			3771132.11	14.79346		
372970.00	3770900.00	0.99811	372910.00	372870.00	3771132.11	16.43370	372840.00
3770910.00	1.80392			3771142.11	8.56475		
372920.00	3770910.00	1.69082	372930.00	372850.00	3771142.11	9.89349	372860.00
3770910.00	1.57179			3771142.11	11.25781		
372940.00	3770910.00	1.45126	372950.00	372870.00	3771142.11	12.57688	372810.00
3770910.00	1.33278			3771182.11	2.55101		
372960.00	3770910.00	1.21910	372910.00	372820.00	3771182.11	2.86641	372830.00
3770920.00	2.11368			3771182.11	3.24059		
372920.00	3770920.00	1.96744	372930.00	372840.00	3771182.11	3.64794	372850.00
3770920.00	1.81492			3771182.11	4.10201		
372940.00	3770920.00	1.66211	372950.00	372860.00	3771182.11	4.60221	372870.00
3770920.00	1.51379			3771182.11	5.13229		
372910.00	3770930.00	2.50359	372920.00	372880.00	3771182.11	5.67708	372890.00
3770930.00	2.31116			3771182.11	6.22481		
372930.00	3770930.00	2.11261	372940.00	372900.00	3771182.11	6.74124	372910.00
3770930.00	1.91631			3771182.11	7.19975		
*** AERMOD - VERSION 21112 *** **							
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10/27/21							
*** AERMET - VERSION 16216 *** **							
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*							
*** THE PERIOD (43848 HRS) AVERAGE							
CONCENTRATION VALUES FOR SOURCE GROUP: CONST2 ***							
INCLUDING SOURCE(S): L0005176 ,							
L0005177 ,	L0005178 ,	L0005179 ,	L0005180 ,				
	L0005181 ,	L0005182 ,	L0005183 ,	L0005184 ,			
L0005185 ,	L0005186 ,	L0005187 ,	L0005188 ,				
	L0005189 ,	L0005190 ,	L0005191 ,	L0005192 ,			
L0005193 ,	L0005194 ,	L0005195 ,	L0005196 ,				
	L0005197 ,	L0005198 ,	L0005199 ,	L0005200 ,			
L0005201 ,	L0005202 ,	L0005203 ,	...				
*** DISCRETE CARTESIAN RECEPTOR							
POINTS ***							
** CONC OF DPM IN MICROGRAMS/M**3							
**							
X-COORD (M)	Y-COORD (M)	CONC	X-COORD				
(M)	Y-COORD (M)	CONC					

372910.00	3770940.00	3.00249	372920.00	372945.00	3771045.00	18.51571	372955.00
3770940.00	2.74409			3771045.00	13.71048		
372930.00	3770940.00	2.48096	372910.00	372965.00	3771045.00	10.49409	372935.00
3770950.00	3.65368			3771055.00	31.14559		
372920.00	3770950.00	3.29841	372840.00	372945.00	3771055.00	22.41741	372955.00
3771092.11	49.61696			3771055.00	16.69095		
372850.00	3771092.11	55.45825	372860.00	372965.00	3771055.00	12.78638	372935.00
3771092.11	59.45424			3771065.00	34.39683		
372870.00	3771092.11	61.77588	372840.00	372945.00	3771065.00	25.38783	372955.00
3771102.11	31.94800			3771065.00	19.21280		
				372965.00	3771065.00	14.87035	372935.00
				3771075.00	35.44090		
				372945.00	3771075.00	27.00109	372955.00
				3771075.00	20.91835		

Mt Lebanon HRA – AERMOD Output File

*** AERMOD - VERSION 21112 *** ***
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 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE PERIOD (43848 HRS) AVERAGE
 CONCENTRATION VALUES FOR SOURCE GROUP: CONST2 ***
 INCLUDING SOURCE(S): L0005176 ,
 L0005177 , L0005178 , L0005179 , L0005180 ,
 L0005181 , L0005182 , L0005183 , L0005184 ,
 L0005185 , L0005186 , L0005187 , L0005188 ,
 L0005189 , L0005190 , L0005191 , L0005192 ,
 L0005193 , L0005194 , L0005195 , L0005196 ,
 L0005197 , L0005198 , L0005199 , L0005200 ,
 L0005201 , L0005202 , L0005203 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR
 POINTS ***

** CONC OF DPM IN MICROGRAMS/M**3

X-COORD (M)	Y-COORD (M)	CONC	X-COORD
372965.00	3771075.00	16.46831	372935.00
3771085.00	34.27206		
372945.00	3771085.00	27.10521	372955.00
3771085.00	21.61512		
372965.00	3771085.00	17.39988	372935.00
3771095.00	31.47451		
372945.00	3771095.00	25.90733	372955.00
3771095.00	21.33760		
372965.00	3771095.00	17.62376	372935.00
3771105.00	27.80797		
372945.00	3771105.00	23.83913	372955.00
3771105.00	20.29220		
372965.00	3771105.00	17.22130	

*** AERMOD - VERSION 21112 *** ***
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 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE SUMMARY OF MAXIMUM PERIOD (43848 HRS) RESULTS ***

** CONC OF DPM IN MICROGRAMS/M**3

NETWORK GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG) OF TYPE GRID-ID

LOADINGD 1ST HIGHEST VALUE IS 223.48246 AT (372870.00,
 3771092.11, 48.54, 48.54, 0.00) DC
 2ND HIGHEST VALUE IS 143.35648 AT (372860.00,
 3771092.11, 48.56, 48.56, 0.00) DC

3RD HIGHEST VALUE IS 119.82170 AT (372870.00,
 3771102.11, 48.60, 48.60, 0.00) DC
 4TH HIGHEST VALUE IS 87.28152 AT (372850.00,
 3771092.11, 48.54, 48.54, 0.00) DC
 5TH HIGHEST VALUE IS 83.07761 AT (372860.00,
 3771102.11, 48.65, 48.65, 0.00) DC
 6TH HIGHEST VALUE IS 67.03626 AT (372870.00,
 3771112.11, 48.55, 48.55, 0.00) DC
 7TH HIGHEST VALUE IS 56.34272 AT (372850.00,
 3771102.11, 48.65, 48.65, 0.00) DC
 8TH HIGHEST VALUE IS 51.42552 AT (372935.00,
 3771105.00, 48.01, 48.01, 0.00) DC
 9TH HIGHEST VALUE IS 50.01684 AT (372840.00,
 3771092.11, 48.50, 48.50, 0.00) DC
 10TH HIGHEST VALUE IS 49.38094 AT (372935.00,
 3771095.00, 48.00, 48.00, 0.00) DC

CONST2 1ST HIGHEST VALUE IS 61.77588 AT (372870.00,
 3771092.11, 48.54, 48.54, 0.00) DC
 2ND HIGHEST VALUE IS 59.45424 AT (372860.00,
 3771092.11, 48.56, 48.56, 0.00) DC
 3RD HIGHEST VALUE IS 55.45825 AT (372850.00,
 3771092.11, 48.54, 48.54, 0.00) DC
 4TH HIGHEST VALUE IS 49.61696 AT (372840.00,
 3771092.11, 48.50, 48.50, 0.00) DC
 5TH HIGHEST VALUE IS 42.44338 AT (372870.00,
 3771102.11, 48.60, 48.60, 0.00) DC
 6TH HIGHEST VALUE IS 40.04539 AT (372860.00,
 3771102.11, 48.65, 48.65, 0.00) DC
 7TH HIGHEST VALUE IS 36.79989 AT (372800.00,
 3771050.00, 47.65, 47.65, 0.00) DC
 8TH HIGHEST VALUE IS 36.53786 AT (372850.00,
 3771102.11, 48.65, 48.65, 0.00) DC
 9TH HIGHEST VALUE IS 36.52070 AT (372800.00,
 3771060.00, 47.71, 47.71, 0.00) DC
 10TH HIGHEST VALUE IS 35.44090 AT (372935.00,
 3771075.00, 47.61, 47.61, 0.00) DC

*** RECEPTOR TYPES: GC = GRIDCART
 GP = GRIDPOLR
 DC = DISCCART
 DP = DISCPOLR

*** AERMOD - VERSION 21112 *** ***
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 *** AERMET - VERSION 16216 *** ***
 *** 10:33:08

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 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** Message Summary : AERMOD Model Execution ***

----- Summary of Total Messages -----

A Total of	0 Fatal Error Message(s)
A Total of	2 Warning Message(s)
A Total of	799 Informational Message(s)
A Total of	43848 Hours Were Processed
A Total of	455 Calm Hours Identified
A Total of	344 Missing Hours Identified (0.78 Percent)

***** FATAL ERROR MESSAGES *****
 *** NONE ***

Mt Lebanon HRA – AERMOD Output File

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***** WARNING MESSAGES *****  
ME W186 1324 MEOPEN: THRESH_1MIN 1-min ASOS wind  
speed threshold used 0.50  
ME W187 1324 MEOPEN: ADJ_U* Option for Stable Low Winds  
used in AERMET
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*****  
*** AERMOD Finishes Successfully ***  
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Appendix D

MATES IV Total Cancer Risk for Project Site
(Figure IV.A-2 of Draft EIR)

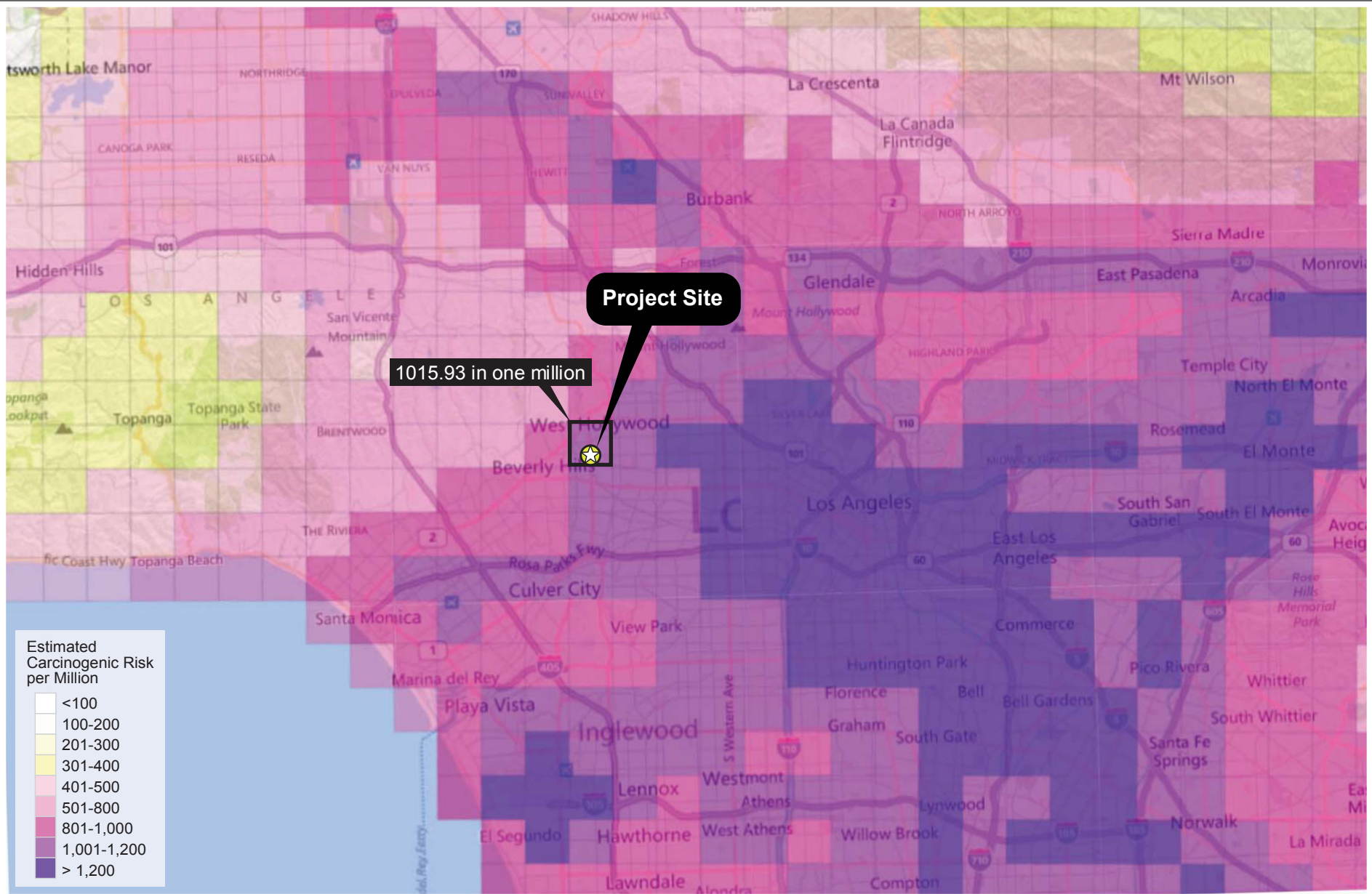


Figure IV.A-3
MATES IV Total Cancer Risk for Project Area