

NOTICE OF EXEMPTION

To: Office of Planning and Research
State Clearinghouse
P.O. Box 3044, 1400 Tenth Street, Room 212
Sacramento, California 95812-3044

From: Department of Toxic Substances Control
Site Mitigation and Restoration Branch
8800 Cal Center Drive
Sacramento, California 95826

Project Title: Rainbow Transport Tank Cleaners, Site-Wide Corrective Measures Study and Addendum		
Project Address: 21119 S. Wilmington Avenue	City: Carson	County: Los Angeles
Approval Action Under Consideration by DTSC:		
<input type="checkbox"/> Removal Action Workplan	<input type="checkbox"/> Initial Permit Issuance	<input type="checkbox"/> Permit Re-Issuance
<input checked="" type="checkbox"/> Corrective Measure Study/Statement of Basis	<input type="checkbox"/> Permit Modification	<input type="checkbox"/> Closure Plan
<input type="checkbox"/> Remedial Action Plan	<input type="checkbox"/> Regulations	<input type="checkbox"/> Interim Removal
<input type="checkbox"/> Other (specify):		
Statutory Authority:		
<input checked="" type="checkbox"/> California H&SC, Chap. 6.5 <input type="checkbox"/> California H&SC, Chap. 6.8 <input type="checkbox"/> Other (specify):		

Project Description: The project involves approval of the selected corrective action remedies presented in the Statement of Basis for the Rainbow LLC, Rainbow Transport Tank Cleaners (Rainbow) site located at 21119 S. Wilmington Avenue, Carson, California (hereafter referred to as “Rainbow”, “Facility”, or “site”). The Statement of Basis summarizes the investigation of the site and documents the selection of the remedies, which are based on the corrective measure alternatives identified in the Corrective Measures Study (CMS) to address volatile organic compounds (VOCs) in soil, soil gas, and groundwater and pesticide (Toxaphene) in soil at the site. The CMS activities are described in detail in the *Final Corrective Measures Study Report* dated December 23, 2015, and the *Final Addendum to the Final Corrective Measures Study Report*, dated January 24, 2020 (collectively referred to as CMS).

Background: The Rainbow site (formerly Chemical Rainbow Tank Cleaners) began operations in the early 1960s and continues to be used for purposes related to tanker truck washing, truck and trailer parking, vehicle storage, and automotive maintenance and repair. The site comprises approximately 10 acres and is zoned for light industrial use by the City of Carson. The site has frontage on both S. Wilmington Avenue and Water Street.

The tanker truck washing activities at the site generated hazardous waste streams including wastewater containing solvents. Presently, hazardous wastewater from tanker truck washing is treated on-site under Permit-By-Rule (PBR) authorization and discharged to the sanitary sewer. The PBR is a lower-level tiered permit for hazardous waste facilities that treat hazardous waste generated on-site. Facilities that treat hazardous waste are required to complete corrective action to determine if releases of hazardous waste or constituents occurred in the past and whether remediation is required. A CMS considers the final remedy for each affected area at a corrective action site, and the selected final remedies are documented in the Statement of Basis.

In 2004, Rainbow performed an evaluation similar to a Phase I/II Environmental Site Assessment and prepared a report called the Environmental Assessment Preliminary Site Characterization (EAPSC). The EAPSC report identified the following 11 solid waste management units (SWMUs) and two areas of concern (AOCs) at the site:

- SWMU # 1 – Northern Waste and Chemical Storage Area
- SWMU # 2 – Former UST K and Containment Area
- SWMU # 3 – Current Wash Rack
- SWMU # 4 – Former Waste Oil UST Q
- SWMU # 5 – Organic Waste Water Treatment Area
- SWMU # 6 – Waste and Auto Repair/Storage Area
- SWMU # 7 – Former Fuel UST R Area
- SWMU # 8 – Former (Old) Wash Rack
- SWMU # 9 – Pump Station Sumps
- SWMU # 10 – Former Truck Maintenance/Repair Facility
- SWMU # 11 – Tank K Over Excavation Stockpile Berm
- AOC # 1A – Tank Truck Staging Area (NW Corner of Site)
- AOC # 1B – Tanker Truck Staging Area - Along Del Amo School Boundary
- AOC # 2 – Former Agricultural Roadways Used by Farmer (Prior to Site Development)

In December 2004, Rainbow and DTSC entered into a Corrective Action Consent Agreement (Consent Agreement) for investigation of the SWMUs and AOCs. The environmental investigation at the site disclosed contamination of soil, soil gas

(vapor), and groundwater. The primary contaminants of concern at the site are VOCs including the chlorinated solvents tetrachloroethylene (PCE) and trichloroethylene (TCE). Site soils are also known to contain the pesticide Toxaphene which is thought to be associated with past use of the site for agriculture. The investigation of the site was completed in phases and the findings are documented in a Resource Conservation Recovery Act (RCRA) Facility Investigation (RFI) dated May 2010. The results of the investigation are briefly summarized below.

Site Investigation History (Groundwater):

The first encountered (shallow) groundwater below the site is perched and discontinuous. This groundwater zone is referred to as the “A” zone and is present intermittently across the site from approximately 15 feet below ground surface (ft bgs) to 45 to 50 ft bgs. The shallow groundwater zone is underlain by an approximately 10-foot-thick clay aquitard. A second groundwater zone (intermediate) is encountered below the aquitard is present from approximately 55 to 65 ft bgs. This intermediate groundwater zone is referred to as the “B” zone is underlain by a regional aquifer that has been interpreted as the Gage aquifer. There is no evidence that the Gage aquifer has been impacted by site operations.

A total of 39 groundwater monitoring wells and three piezometers (water level indicators) have been installed both on and off the site. Thirty-eight of the 39 groundwater monitoring wells are dual shallow zone (“A” zone) and intermediate zone (“B” zone) wells and the remaining well is screened in the shallow “A” zone. The most recent comprehensive groundwater sampling event occurred in November 2019, and select wells were also sampled in February 2020. Groundwater elevations were recorded, and samples were collected for laboratory analysis. Shallow groundwater (“A” zone) flows to the southeast. Intermediate (“B” zone) groundwater flows to the northeast.

As part of the RFI, numerous soil, soil gas, and groundwater samples were collected throughout the site to characterize the lateral and vertical extent of VOC impacts. Based on the results of the collective investigations and upon completion of the RFI, DTSC agreed that no further action was required at SWMUs #4, 7, 9, and 11; therefore, cleanup for these SWMUs was not required. Accordingly, an amendment to the Consent Agreement was signed in July 2010 that provides for the completion of a CMS at the remaining SWMUs and AOCs (SWMUs #1, 2, 3, 5, 6, 8, 10 and AOCs #1B and 2), which are the subject of this Notice of Exemption. The results at these remaining SWMUs and AOCs have been interpreted as presenting a potential risk or hazard. The potentially complete exposure pathways to contaminants include ingestion, dermal contact, and inhalation. There is no evidence that existing site employees or neighboring properties are being exposed to contaminants at levels that pose an unacceptable risk.

Prior to finalizing the CMS, two interim measures (IMs) were implemented at the site including soil vapor extraction (SVE) at AOC #1A in the north-west corner of the site and ozone injection at SWMU-8 in the southeastern section of the site. Each of these IMs is further discussed below.

SVE at AOC #1A

A SVE system operated at AOC #1A to address VOCs in the unsaturated zone. The SVE unit consisted of a manifold, a vapor/liquid separator (knockout tank) to collect condensate water, a positive-displacement extraction blower operated at a maximum 300 standard cubic feet per minute (scfm), two 1,000-pound granular activated carbon (GAC) vessels in series, and an exhaust stack. The SVE system consisted of an extraction field consisting of nine 2-inch diameter vertical vapor recovery wells, designated as SVE-1 through SVE-9. The SVE wells were screened from approximately 5 to 15 feet bgs with 2-inch diameter, flush threaded Schedule 40 polyvinyl chloride piping with factory-milled 0.020-inch slots. The SVE system operated from October 22, 2009, through October 21, 2010. Data generated from the SVE operation demonstrated that the SVE system was effective in significantly reducing VOCs at AOC #1A. However, vapor rebound sampling performed on the existing SVE wells and vapor probes showed increases in VOC concentrations, specifically PCE. Based on the soil gas sampling results, eight additional dual-nested vapor probes were installed on site and two dual-nested vapor probes were installed off site. The existing SVE system was expanded by installing and connecting four additional SVE wells. The expanded SVE system was re-started up for operation on August 26, 2013, and was shut down on February 3, 2015, to evaluate post-SVE vapor rebound. Soil gas sampling and evaluation upon completion demonstrated that the SVE was successful in remediating VOCs in the unsaturated zone at AOC #1A to levels below the residential (for the off-site locations) and commercial/industrial (for the on-site locations) cleanup goals for soil gas presented in the CMS. Based on the soil gas sampling results, a no further action (NFA) designation for AOC #1A was requested. Prior to receipt of the NFA, Rainbow will record a deed restriction for those parcel(s) of the site that are impacted by the residual VOC concentrations that exceed the residential cleanup level.

Ozone Injection at SWMU-8

Ozone injection is currently being implemented at SWMU-8 to prevent migration of the groundwater plume off-site. Ozone injection consists of an in-situ ozone oxidation sparging program designed to remediate VOCs in the Source Zone. Ozone sparging involves the injection of ozone and a carrier gas (usually compressed air) into the subsurface where the ozone may contact and destroy contaminants by oxidation. The oxidation products include carbon dioxide, water, and chloride ions. The feasibility of ozone sparging was tested during a pilot study that operated at the site between August 2012 and January 2013 under a General Waste Discharge Requirements Order No. R4-2007-0019, Series No. 189 (WDR), which was approved by the Los Angeles Regional Water Quality Control Board (RWQCB) on July 6, 2012. Ozone was injected into the subsurface at two paired shallow and intermediate sparge points. Groundwater quality was measured at regular

intervals at nearby monitoring wells to establish the effectiveness of the pilot study. The results of the pilot study demonstrate that ozone sparging can effectively remediate contaminants in groundwater at the site.

Based on the success of the pilot study, the installation of the full-scale ozone injection system began and included the installation of 38 injection wells screened within the shallow groundwater zone at approximately 45 feet bgs. Installation also included 53 injection wells screened within the intermediate groundwater zone at approximately 65 feet bgs. These injection wells were added to existing injection wells associated with the pilot study. The full-scale ozone system is a trailer-mounted unit that is manufactured by H2O Engineering and capable of generating up to 50 pounds of ozone per day. On March 12, 2014, the ozone system was turned on for full-scale injection at the site. Since the ozone system began operation, full-scale injection has been focused on the intermediate zone wells only, consistent with the approach outlined in ENVIRON's *OWR Ozone Sparging Interim Measures Implementation Work Plan*. Since the startup of the ozone injection system on March 12, 2014, through June 30, 2020, groundwater monitoring has generally shown significant decreases of concentrations of the primary chemicals of concern such as PCE and TCE in the intermediate zone. Based on the effectiveness of the ozone injection in treating the intermediate zone, ozone injection was retained as the final cleanup remedy for groundwater in SWMU #8.

Project Activities: The following section presents a summary of the proposed cleanup activities at each of the SWMUs and AOCs, as presented in the CMS and Statement of Basis. Corrective Measure Objectives (CMOs) are chemical and media-specific numerical goals, which can be used, among other purposes, as site remediation goals. The CMOs are established to ensure protection of public health and the environment. CMOs are health-based chemical-specific concentrations used to evaluate whether chemicals are present in a particular medium at a site at concentrations of concern. CMOs are calculated based on the carcinogenic and noncarcinogenic effects of individual chemicals for specific media, land-use and other relevant conditions at a site and provide information that may be used to determine remediation goals and to select appropriate remedial alternatives. For this project, CMOs were identified or calculated for potential future exposure pathways likely to contribute most of the potential risk: exposure to VOCs in soil gas and groundwater through vapor migration into indoor air, exposure to pesticide-impacted soil via the dermal contact, ingestion, ambient air particulate inhalation pathways, and exposure to VOCs in groundwater via the ingestion pathway. In addition, CMOs were calculated for the potential of VOCs to migrate from soil to groundwater.

SWMU # 1 – Northern Waste and Chemical Storage Area

The RFI process identified the localized presence of VOCs in soil and soil gas at this SWMU. The selected corrective measure consists of a SVE system to address VOC-impacted soil and soil gas. Prior to the SVE system installation, additional soil and soil gas sampling will be conducted to better define the VOC footprint, as further discussed below.

Soil and Soil Gas Sampling

The objective of the additional soil and soil gas sampling is to better define the VOC remedial footprint. This will be completed by advancing up to 10 borings to a maximum depth of 15 feet using direct push drilling techniques. Soil and soil gas samples will be collected from select depths in acetate sleeves and will be analyzed for VOCs.

SVE System

The objective of the SVE system is to meet the established soil and soil gas CMOs for the site presented in the CMS. Upon completion of the soil and soil gas sampling and data evaluation, the soil and soil gas VOC remedial footprint will be evaluated and revised, if needed. The proposed SVE system will be installed with five SVE wells using the Rainbow owned SVE unit (previously used to remediate AOC-1A) and four soil vapor probes for soil gas monitoring purposes. After completion of the soil gas probes and SVE wells, the SVE wells will be connected using above ground SVE piping, the manifold will be set up, the vessels will be filled with carbon (2,000 pounds). Finally, the SVE system will be wired and connected to the electricity before it is ready to be turned on. The SVE system is proposed to operate for a year, after which it will be shut off and soil gas will be monitored semi-annually for post SVE shut-off rebound testing.

SWMUs # 2 and 3 – Former UST K and Containment and Current Wash Rack

The RFI process identified the presence of VOCs in soil, soil gas, and shallow and intermediate zone groundwater. Groundwater impacts associated with SWMUs-2 and -3 have migrated under SWMU-1. The final cleanup remedy consists of ozone sparging to address shallow groundwater impacts in the Source Zone, SVE to address soil and soil gas impacts, and monitored natural attenuation (MNA) to address shallow and intermediate groundwater impacts. The shallow and intermediate groundwater zone portion of the MNA program will be implemented concurrently with the ozone sparging and SVE components of the corrective measure. Prior to the SVE system installation, additional soil and soil gas sampling will be conducted to better define the VOC footprint, as further discussed below.

Soil and Soil Gas Sampling

The objective of the additional soil and soil gas sampling is to better define the VOC remedial footprint. This will be completed by advancing up to 20 borings to a maximum depth of 15 feet using direct push drilling techniques. Soil and soil gas samples will be collected from select depths in acetate sleeves and will be analyzed for VOCs.

SVE System

The objective of the SVE system is to meet the established soil and soil gas CMOs for the site presented in the CMS. Upon completion of the soil and soil gas sampling and data evaluation, the soil and soil gas VOC remedial footprint will be evaluated and revised, if needed. The proposed SVE system will be installed with 10 SVE wells using the Rainbow owned

SVE unit and four soil vapor probes for soil gas monitoring purposes. After completion of the soil gas probes and SVE wells, the SVE wells will be connected using above ground SVE piping, the manifold will be set up, the vessels will be filled with carbon (2,000 pounds). Finally, the SVE system will be wired and connected to the electricity before it is ready to be turned on. The SVE system is proposed to operate for one year, after which it will be shut off and soil gas will be monitored semi-annually for post SVE shut-off rebound testing.

Shallow Groundwater Source Zone – Ozone Injection

This remedy includes installation of an ozone sparging system with approximately 30 shallow zone ozone injection wells. The sparge points will be linked by sub-surface piping to an ozone generator that will supply the ozone and compressed air carrier gas. All infrastructure, except the ozone generator, will be installed below grade. The sparge points will be installed at a depth of up to 45 feet bgs using a hollow stem auger. It is anticipated that sparge point installation may take 35 to 40 days to complete. The ozone generator will produce ozone at a rate of approximately 50 pounds per day at 3 to 4 percent by weight. The sparging of ozone will be pulsed (e.g., 24 hours on, 24 hours off). The periods of inactivity will allow opportunity for contaminants to diffuse out of low permeability soils such as clays. In addition, ozone sparging will be focused on areas where contaminated groundwater may migrate off-site and areas where the highest contaminant levels are present. The groundwater monitoring will be used to track the progress to site restoration and to confirm that mobilization of metals does not occur. In addition to groundwater monitoring, Rainbow will perform soil gas monitoring (as described above) to confirm that sparging does not lead to excessive VOC migration from the saturated zone to the vadose zone. The ozone system is assumed to operate for approximately one year.

Shallow and Intermediate Groundwater – MNA

In addition to the existing wells, up to three shallow groundwater wells will be installed downgradient and cross-gradient locations within the distal zone. The groundwater wells will be installed using hollow stem auger drilling techniques and will be included in the MNA groundwater monitoring program. The MNA groundwater monitoring program includes monitoring up to nine wells within the shallow groundwater and up to six wells within the intermediate groundwater. Groundwater will be analyzed for VOCs and MNA analysis, initially quarterly (2 years for the shallow groundwater and 1 year for the intermediate groundwater), then semi-annually (for three years – shallow groundwater only), after which the shallow groundwater sampling frequency will be on an annual basis for five years and finally on a biennial basis for 20 years. It is assumed that the intermediate groundwater zone portion of the MNA program will be implemented for approximately one year and the shallow groundwater zone portion will be implemented for up to 30 years.

SWMUs # 5 and 6 Organic Wastewater Treatment Area and Waste and Auto Repair/Storage Area

The RFI process identified the localized presence of VOCs in soil gas at these SWMUs. The final cleanup remedy consists of institutional controls (ICs) including deed restriction/soil management plan (SMP) to address the localized VOC-impacted soil gas.

SWMU # 8 – Former (Old) Wash Rack

The RFI process identified the presence of VOCs in soil, soil gas, and shallow/intermediate groundwater at this SWMU, including off-Site soil and soil gas impacts to the adjoining property at 21111 Wilmington Avenue. As mentioned previously, the ongoing IM at this SWMU has been retained to address VOC groundwater impacts in the Source Zone, designated as the areas with VOCs within the footprint exceeding approximately 1,000 micrograms per liter ($\mu\text{g/L}$). As a supplement to the existing IM, the corrective measure for groundwater consists of MNA to address the VOC-impacted Distal Zone groundwater, designated as the areas with VOC impacts in groundwater between 5 and 1,000 $\mu\text{g/L}$. The corrective measure for soil and soil gas consists of SVE with Site-wide Institutional Controls (ICs), including deed restriction/soil management plan (SMP) to address the localized VOC-impacted soil and soil gas within SWMU-8 at the Site and on the 21111 Wilmington Avenue property.

SVE System

The objective of the SVE system is to meet the established soil and soil gas CMOs for the site presented in the CMS. The proposed SVE system will be installed with 23 SVE wells using the Rainbow owned SVE unit and 11 soil vapor probes for soil gas monitoring purposes. After completion of the soil gas probes and SVE wells, the SVE wells will be connected using above ground SVE piping, the manifold will be set up, the vessels will be filled with carbon (2,000 pounds). Finally, the SVE system will be wired and connected to the electricity before it is ready to be turned on. The SVE system is proposed to operate for approximately 6 years, after which it will be shut off and soil gas will be monitored semi-annually for post SVE shut-off rebound testing.

Shallow and Intermediate Groundwater – MNA

In addition to the existing wells, up to three shallow groundwater wells will be installed downgradient and cross-gradient locations within the Distal Zone. The groundwater wells will be installed using hollow stem auger drilling techniques and will be included in the MNA groundwater monitoring program. The MNA groundwater monitoring program includes monitoring up to 10 wells within the shallow groundwater and up to 5 wells within the intermediate groundwater. Groundwater will be analyzed for VOCs and MNA analysis, initially quarterly (2 years), then semi-annually (for 3 years), after which the shallow

and intermediate groundwater sampling frequency will be on an annual basis for five year and finally on a biennial basis for 20 years. It is assumed that the shallow and intermediate groundwater MNA program will be implemented up to 30 years.

SWMU # 10 – Former Truck Maintenance/Repair Facility

The RFI process identified the presence of VOCs in soil, soil gas, and shallow groundwater at this SWMU. The preferred corrective measure alternative consists of ICs including deed restriction/SMP to address VOC-impacted soil and soil gas. Note that groundwater impacts at SWMU-10 are being addressed as part of SWMU-8.

AOC # 1B – Tanker Truck Staging Area - Along Del Amo School Boundary

The RFI process identified the presence of VOCs in soil gas at AOC-1B. The selected corrective measure consists of SVE to address VOC-impacted soil and soil gas.

SVE System

The objective of the SVE system is to meet the established soil and soil gas CMOs for the site presented in the CMS. The proposed SVE system will be installed with 7 SVE wells using the Rainbow-owned SVE unit and 3 soil vapor probes for soil gas monitoring purposes. After completion of the soil gas probes and SVE wells, the SVE wells will be connected using above ground SVE piping, the manifold will be set setup, the vessels will be filled with carbon (2,000 pounds). Finally, the SVE system will be wired and connected to the electricity before it is ready to be turned on. The SVE system is proposed to operate for approximately 1 year, after which it will be shut off and soil gas will be monitored semi-annually for post SVE shut-off rebound testing.

AOC # 2 – Former Agricultural Roadways Used by Farmer (Prior to Site Development)

The RFI process identified the presence of pesticides, most notably Toxaphene, in shallow soil at the site. The corrective measure consists of ICs including deed restriction/SMP for the entire site to address pesticide-impacted soil.

Additional Environmental Considerations: Drilling and trenching activities will disturb the subsurface and generate fugitive dust. Project controls have been incorporated into the project such as spray misting to limit the formation of dust per South Coast Air Quality Management District (SCAQMD) Rule 403. In addition, all roll-off bins of soil will be covered to limit dust formation. The project will require five truck trips to the site per day during the implementation of the construction phase of the CMS. Primary access to the site is provided by Wilmington Avenue which is a major arterial route in the City of Carson and five additional trips per day will not cause congestion or delays along Wilmington Avenue.

Name of Public Agency Approving Project: Department of Toxic Substances Control

Name of Person or Agency Carrying Out Project: Rainbow, Inc. (formerly Rainbow, LLC)

Exempt Status: (check one)

- Ministerial [PRC, Sec. 21080(b)(1); CCR, Sec. 15268]
 Declared Emergency [PRC, Sec. 21080(b)(3); CCR, Sec. 15269(a)]
 Emergency Project [PRC, Sec. 21080(b)(4); CCR, Sec. 15269(b)(c)]
 Categorical Exemption: [CCR Title 14, Sec. 15330]
 Statutory Exemptions: [State Code Section Number]
 Common Sense Exemption [CCR, Sec. 15061(b)(3)]

Exemption Title: Minor Actions Taken to Prevent, Minimize, Stabilize, Mitigate, or Eliminate the Release or Threat of Release of Hazardous Waste or Hazardous Substance.

Reasons Why Project is Exempt:

1. The project is a minor cleanup action to be taken to prevent, minimize, stabilize, mitigate, or eliminate the release or threat of release of a hazardous waste and substance.
2. The project is a removal action costing \$1 million or less.
3. The project will not have a significant effect on the environment due to unusual circumstances.
4. The project will not result in damage to scenic resources, including but not limited to, trees, historic buildings, rock outcroppings, or similar resources, within a highway officially designated as a state scenic highway.
5. The project will not cause a substantial adverse change in the significance of a historical resource.
6. The project will not require onsite use of a hazardous waste incinerator or thermal treatment unit.
7. The project will not require the relocation of residences or businesses.
8. The project will not involve the potential release into the air of volatile organic compounds as defined in Health and Safety Code section 25123.6. (Permits for the SVE system will be obtained from SCAQMD).
9. The cumulative impact of successive projects of the same type on the same place, over time, if there are any, will not be significant.
10. The project will be consistent with applicable State and local environmental permitting requirements.

Evidence to support the above reasons is documented in the project file record, available for inspection at:

Department of Toxic Substances Control
Site Mitigation and Restoration Branch
8800 Cal Center Drive
Sacramento, California 95826

DTSC EnviroStor website: https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=80001649

<u>Katherine Henry</u> Project Manager	<u>Senior Environmental Scientist</u> Title	<u>(510) 589-2981</u> Phone No.
<u>Branch Chief's Signature</u>		<u>March 20, 2023</u> Date
<u>Ed Walker</u> Branch Chief	<u>Supervising Hazardous Substances Engineer</u> Title	<u>(916) 255-3676</u> Phone No.

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