Appendix L

Soil Management Plan



December 20, 2019

OUR LADY OF MT. LEBANON - ST. PETER MARONITE CATHOLIC CATHEDRAL

333 S. San Vicente Boulevard Los Angeles, California 90048

C/O

Olivier Theard

SHEPPARD, MULLIN, RICHTER & HAMPTON LLP

333 South Hope Street, 43rd Floor Los Angeles, California 90071

Re: CITADEL Project No. 1234.1003.0

Soil Management Plan

333 South San Vicente Boulevard Los Angeles, California 90048

Dear Mr. Theard:

Citadel EHS is pleased to provide you with this Soil Management Plan for the above-referenced location. The Soil Management Plan was completed for Our Lady of Mt. Lebanon – St. Peter Maronite Catholic Cathedral (Client) for use during onsite development activities, in accordance with Citadel's proposal 1234.1003.P.

If, after your review, you have any questions or require additional information, please do not hesitate to telephone me at (818) 246-2707.

Sincerely,

CITADEL EHS

Mark

Drollinger

Digitally signed by Mark Drollinger DN: cn=Mark Drollinger, o=Citadel Environmental Services, ou,

email=mdrollinger@citadelenvironmental.

Date: 2019.12.20 10:16:53 -08'00'

Mark Drollinger M. Eng., CSP, CHMM, EiT

Principal, Engineering and Environmental Sciences

Enclosure



Our Lady of Mt. Lebanon – St. Peter Maronite Catholic Cathedral 333 South San Vicente Boulevard Los Angeles, California 90048

Sheppard, Mullin, Richter & Hampton LLP 333 South Hope Street, 43rd Floor Los Angeles, California 90071

Soil Management Plan

December 20, 2019

Citadel Project Number 1234.1003.0

333 S. San Vicente Boulevard Los Angeles, California 90048

www.CitadelEHS.com



Table of Contents

1.0	INTRODUCTION	1
	1.1 BACKGROUND	
	1.2 OBJECTIVE AND PURPOSE	
	1.3 HEALTH AND SAFETY PLAN	
	1.4 STORM WATER POLLUTION PREVENTION	2
	1.5 TEMPORARY FENCING AND SIGNAGE	
	1.6 SITE SECURITY	
2.0	GEOLOGY/HYDROGEOLOGY	
3.0	POTENTIAL AREAS OF CONCERN SUBJECT TO SMP REQUIREMENTS	
	3.1 UNDERGROUND STORAGE TANKS	
	3.2 CONSTRUCTION DEBRIS	
	3.3 HISTORICAL SITE USE	
4.0	PRELIMINARY SOIL CHARACTERIZATION	
5.0	UNKNOWN SUBSURFACE STRUCTURES	
6.0	SOIL DISTURBANCE MONITORING	
	6.1 VOCs MONITORING (SCAQMD RULE 1166 PERMIT, AS NEEDED)	
	6.2 SOIL MONITORING - SCAQMD RULE 402	
	6.3 DUST MONITORING – SCAQMD Rule 403	
	6.4 AIR MONITORING DURING EXCAVATION	
	6.5 SOIL SAMPLING AND LABORATORY ANALYSIS	
	6.6 COMPARATIVE ANALYSIS	£
	6.7 CONFIRMATION SOIL SAMPLING	t
7.0	CONTAMINATED SOIL MANAGEMENT	<i>(</i>
	7.1 HANDLING AND STORAGE	θ
	7.2 AIR MONITORING DURING SOIL STAGING	
	7.4 CONTAINERIZING	
	7.5 SWPPP BMPS	
	7.6 DECONTAMINATION MEASURES	8
	7.7 DISPOSAL	8
	7.8 TRANSPORTATION	8
8.0	REPORTING	
9.0	SIGNATURES	1(

FIGURES

- 1 Site Location Map
- 2 Site Map

APPENDICES

Appendix A	Site Environmental History
Appendix B	SCAQMD Rule 1166, Volatile Organic Compound Emissions from Decontamination of Soil
Appendix C	SCAQMD Rule 402, Nuisance
Appendix D	SCAQMD Rule 403, Fugitive Dust
Appendix E	Site Geology and Hydrogeology
Appendix F	SCAQMD Rule 1166 Permit Compliance Procedures
Appendix G	SCAQMD Rule 403 Compliance Procedures
Appendix H	SWPPP BMPs Implementation



1.0 INTRODUCTION

This Soil Management Plan (SMP) sets forth requirements for the management and disposal of soils generated during excavation, grading and other construction activities that may disturb potentially contaminated soil at Our Lady of Mt. Lebanon – St. Peter Maronite Catholic Cathedral and church grounds located at 333 S. San Vicente Boulevard in the City of Los Angeles, California (Site). The Site is approximately 42,500 square feet (SF) in area and the Assessor's Parcel Number (APN) associated with the Site is 4334-009-161. Please refer to Figures 1 and 2 for the Site Location Map and Site Map, respectively.

This SMP has been prepared due to the proximity of the former Merry Go Round Cleaners site located at 8550 W. Third Street, Los Angeles, California, which is the subject of an open environmental case with the Los Angeles Regional Water Quality Control Board (LARWQCB). This site is located approximately 250 feet northwest of the Site. Chemicals most likely associated with the Merry Go Round Cleaners site have been detected in groundwater, soil vapor and soil at the Site. This SMP will address management of potentially impacted soils and monitoring of vapors and groundwater during excavation activities.

1.1 BACKGROUND

Citadel understands that the Site will be redeveloped with a residential tower, ancillary church facilities and a five-level subterranean parking structure, while the existing cathedral building will be retained and rehabilitated.

To provide context for the SMP, Appendix A provides a brief summary of prior investigations of soil, soil vapor and groundwater at the Site.

1.2 OBJECTIVE AND PURPOSE

The objective of this SMP is to establish policy and requirements for the management and disposal of soils generated during excavation, grading, construction, maintenance, and other activities that might disturb potentially contaminated soil.

The purpose of this SMP is to describe specific soil-handling controls required for complying with local, state and federal oversight agencies, prevent unacceptable exposure to contaminated soil and soil vapors, and prevent the improper disposal of contaminated soils. This SMP applies to soil-disturbing activities performed at the Site, which include; excavation, grading, trenching, utility installation or repair, and any other human activities that could potentially bring contaminated soil to the surface. The plan applies to such work regardless of who is performing the work.

The following personnel/entities will have authority over the various aspects of the planned onsite activities:

Organization	Personnel	Responsibilities
Owner	Our Lady of Mt. Lebanon – St. Peter Maronite Catholic Cathedral	Overall Site Management and Control
Environmental Consultant	To Be Determined	SMP Implementation, SCAQMD Rules 402 and 403; and 1166 permit and monitoring of contaminated soil areas and potential soil vapors (if encountered)



Organization	Personnel	Responsibilities
Onsite	General Contractor/Grading	Oversight of contractor personnel, trucks,
Manager	Contractor	general site security

Information related to South Coast Air Quality Management District (SCAQMD) Rule 1166 is included in this SMP (Appendix B) in the event that VOCs or an underground storage tank (UST) or other subsurface structures are encountered during soil removal activities.

1.3 HEALTH AND SAFETY PLAN

A site-specific health and safety plan (HASP) will be prepared prior to on-site activities. The HASP shall be approved and stamped by a Certified Industrial Hygienist or Certified Safety Professional. The HASP will identify existing and potential hazards for workers at the Site during re-development activities and provide emergency procedures and identification of emergency facilities.

The contractors conducting the work will be responsible for preparing their own HASPs and for operating in accordance with the most current Occupational Safety and Health Administration (OSHA) regulations, including 29 CFR 1910.120, Hazardous Waste Operations and Emergency Response and 29 CFR 1926, Construction Industry Standards as well as other applicable Federal, State and local laws and regulations.

1.4 STORM WATER POLLUTION PREVENTION

A Storm Water Pollution Prevention Plan (SWPPP) will be developed by a Qualified SWPPP Developer and implemented by a Qualified SWPPP Practitioner on behalf of the Owner. The Owner will apply for the permit and submit the SWPPP to the Regional Water Quality Control Board through the SMARTS system prior to the initiation of redevelopment activities.

1.5 TEMPORARY FENCING AND SIGNAGE

Fencing with windscreen shall be installed around the perimeter of the Site to minimize wind-blown transport of soil and potential contaminants during earthwork activities. Access to the Site shall be restricted to work personnel, and Site gates shall be locked and secured when Site personnel are not present. Daily logs shall be recorded by the General Contractor to monitor personnel entering and leaving the Site. Appropriate warning signs regarding the ongoing construction shall be posted on the fence. A sign providing the South Coast Air Quality Management District (SCAQMD) telephone number for air quality complaints shall also be posted. The signs shall be written in English and Spanish.

1.6 SITE SECURITY

The general contractor shall be responsible for overall Site security, including controlling Site access, and restricting access by anyone other than work personnel. The Site perimeter shall have a fence to prevent unauthorized entry, Site gates shall be monitored during work hours and locked when Site personnel are not present or after working hours. The environmental consultant will be responsible for oversight of excavation and soil-disturbing activities in contaminated areas encountered, to ensure that all aspects of SCAQMD Rules 402 (Appendix C) and 403 (Appendix D) are duly followed.



2.0 GEOLOGY/HYDROGEOLOGY

The Site is located in the Beverly Grove neighborhood of the City of Los Angeles. Appendix E provides a summary of the Site Geology and Hydrogeology.

3.0 POTENTIAL AREAS OF CONCERN SUBJECT TO SMP REQUIREMENTS

This SMP applies to areas where contaminants of concern (COCs) could potentially be present in soil at the Site.

The environmental consultant will be called to the Site if unexpected subsurface structures or USTs are encountered in order to visually observe the subsurface conditions following removal and collect soil samples from the excavation depth and sidewalls as necessary to evaluate the soil for the presence of COCs.

The actual quantities of contaminated soil encountered during excavation will depend on the extent of contamination and the depth of excavation.

3.1 UNDERGROUND STORAGE TANKS

USTs are not known to be present at the Site. In the unlikely event that a UST is encountered during excavation activities, work should stop until the Environmental Consultant can inspect the Site and collect soil and content samples to determine the contents of the UST and regulatory requirements for the UST removal. If a UST is encountered, permitting for removal and reporting would be under the jurisdiction of the City of Los Angeles Fire Department (LAFD). Potential COCs include waste oil, volatile organic compounds (VOCs), petroleum hydrocarbons and metals.

3.2 CONSTRUCTION DEBRIS

According to the Los Angeles County Office of the Assessor's Property Assessment Information System, the existing cathedral building was constructed in 1937, the rectory was built in 1939, and another structure was built in 1969. It is likely that hazardous building materials, including asbestos and lead based paint, are present in those structures. If construction debris is encountered, it may need be evaluated for asbestos-containing materials or lead based paints.

3.3 HISTORICAL SITE USE

The Site currently contains four buildings and a surface parking lot. An environmental investigation was conducted in July 2019 and TPH and VOCs were not encountered, except for a single detection of PCE and TCE at concentrations of 0.064 milligrams per kilograms (mg/kg) and 0.018 mg/kg, respectively, at 25 feet bgs in boring B4 located on the northern boundary of the Site. The depth of this sample indicates that the detection likely came from groundwater migrating onto the Site and not from previous Site activities.

4.0 PRELIMINARY SOIL CHARACTERIZATION

As part of the redevelopment of the Site, soils will be excavated from to approximately 72.5 feet bgs. The import soil site or receiving landfill facilities will have specific waste acceptance limits for the COCs identified at the Site.



In the event impacted soils are identified by the Environmental Consultant during excavation activities (beyond those encountered in the July 2019 investigation), those soils will be segregated and sampled to determine the presence (or absence) of COCs. A waste characterization profile will be completed for impacted soils prior to the removal of any contaminated soil from the Site or transport of contaminated soil to disposal or treatment facilities.

Analyses for soil samples may include the following:

- Total petroleum hydrocarbons (TPH full carbon-chain speciation, including gasoline, diesel, oil, and ethylene glycol – EPA Method 8015M)
- VOCs (EPA Method 8260B)
- Semi-VOCs (EPA Method 8270C)
- Pesticides (EPA Method 8081A)
- CAM 17 Metals (EPA Method 6010B)
- PCBs (If required by disposal facility)
- Asbestos (If required by disposal facility)

5.0 UNKNOWN SUBSURFACE STRUCTURES

Any building debris or materials will be separated for proper identification and disposal. If any unknown subsurface structures such as USTs, clarifiers, vaults, conduit or piping are encountered, the following procedure will take place:

- 1. All work will stop in the immediate vicinity of the encountered structure.
- 2. The Owner and Environmental Consultant (if not present onsite) will be immediately notified to observe if the structure is intact or has been damaged, potentially causing a release of contents into the subsurface.
- 3. The structure contents will then be sampled and analyzed for potential hazardous chemicals, followed by recommendations for proper disposal.
- 4. If any UST is discovered, the LAFD will be notified followed by the appropriate measures to remove the UST and residual contents.

6.0 SOIL DISTURBANCE MONITORING

6.1 VOCs MONITORING (SCAQMD RULE 1166 PERMIT, AS NEEDED)

The South Coast Air Quality Control Management District (SCAQMD) requires a Rule 1166 permit for the removal of VOC-impacted soil with continuous monitoring. This permit is required if the direct reading instrument detects 50 parts per million (ppm) or more during the soil removal activity¹, as measured with an organic vapor analyzer (OVA) calibrated to hexane. Please refer to Appendix B for SCAQMD Rule 1166.

Appendix F presents the actions to be performed if a SCAQMD Rule 1166 permit is required or if is necessary to evaluate odorous or discolored soils.

¹ Per South Coast Air Quality Management District (SCAQMD) Rule 1166, if VOC levels are detected exceeding 50 ppm, SCAQMD must be notified within 24 hours along with implementation of an SCAQMD approved Mitigation Plan.



6.2 SOIL MONITORING - SCAQMD RULE 402

SCAQMD Rule 402 prohibits the discharge, from any source, of air contaminants or other material that cause injuries, nuisance, or annoyance to the public and on-Site workers. This can include odor, vapors, smoke, particulates, or other contaminants. Please refer to Appendix C for SCAQMD Rule 402.

6.3 DUST MONITORING - SCAQMD Rule 403

SCAQMD requires that Rule 403 for Fugitive Dust be followed to reduce the amount of particulate matter entrained into ambient air as a result of normal construction activities. This rule is intended to limit the emissions of fugitive dust or particulate matter from a variety of activities and sources such as construction sites, bulk material hauling, unpaved parking lots, and disturbed soil in open areas and vacant lots; this rule applies to any activity or man-made condition capable of generating fugitive dust. Please refer to Appendix D for SCAQMD Rule 403.

Appendix G presents the actions to be performed for SCAQMD Rule 403 compliance.

6.4 AIR MONITORING DURING EXCAVATION

Based on the concentrations of VOCs observed in previous soil and soil vapor sampling, VOC releases to ambient air during excavation activities are not expected to exceed OSHA Permissible Exposure Limits (PELs). If elevated vapors are encountered during excavation activities, the Environmental Consultant will collect air samples to quantify the COCs and design a program to provide continuous (real-time) air monitoring at the Site during the excavation activities.

Collection of air samples may consist of SUMMA canisters, Tedlar bags, or full scan organic vapor monitoring badges. Air monitoring may consist of using handheld or stationary gas and dust meters (flame ionization detector [FID] and Dustrak) stationed at upwind and downwind locations to measure concentrations of particulates and total VOCs.

Air monitoring will include measuring the breathing zones which is defined as being approximately four to six feet above the ground surface elevation. Air monitoring will also be conducted continuously in onsite work zones, which include areas of excavation, stockpiling, and loading and transferring soil to trucks for removal from the Site.

Measurements of soil vapor and ambient air within the breathing zone will be noted on the daily logs.

6.5 SOIL SAMPLING AND LABORATORY ANALYSIS

Upon detection of VOC measurements in soil using a portable hand-held OVA of greater than 50 ppm, the soil will be segregated onsite for characterization and disposal determination. The number of soil samples to be collected is discussed in Section 7.4.

The soil samples will be placed into glass sampling jars, covered with a Teflon seal, and securely closed for transport. The soil samples will immediately be delivered via courier to a California certified environmental laboratory, in an iced cooler using proper chain of custody documentation. Laboratory results will be requested within a 24-hour turnaround time (TAT).

Soil samples may be analyzed for the following constituents. Additional analysis may be required by the disposal facility.



- Total petroleum hydrocarbons (TPH full carbon-chain speciation, including gasoline, diesel, oil and ethylene glycol – EPA Method 8015M)
- VOCs (EPA Method 8260B)
- Semi-VOCs (EPA Method 8270C)
- Pesticides (EPA Method 8081A)
- CAM 17 Metals (EPA Method 6010B)
- PCBs (If required by disposal facility)
- Asbestos (If required by disposal facility)

6.6 COMPARATIVE ANALYSIS

Reported chemical concentrations for soil will be compared to the SFBRWQCB ESLs. Reported metal concentrations will be compared to Hazardous Waste Criteria TTLC, STLC and Toxicity Characteristic Leaching Procedure (TCLP) Regulatory Limits.

6.7 CONFIRMATION SOIL SAMPLING

Soils encountered requiring removal due to the presence of contamination will be excavated and stored at a designated spoils location, or loaded directly onto trucks or transportation bins prior to removal from the Site. In order to assure all contaminated soils have successfully been removed, confirmation soil samples will be collected and analyzed for the appropriate constituents. Soil samples will be collected from each sidewall and the excavation bottom. The laboratory results will reveal concentrations below regulatory levels for residential soil in order to confirm sufficient removal.

7.0 CONTAMINATED SOIL MANAGEMENT

Methods for contaminated soil management will be determined based on the waste profiling method used. Pre-characterized soil can be directly loaded into trucks for disposal. If soil is not pre-characterized, it would be necessary to stockpile or containerize in bins onsite for sampling and characterization prior to offsite disposal. A combination of methods may be warranted if unanticipated conditions are encountered during excavation activities.

7.1 HANDLING AND STORAGE

Contaminated soil at the Site should be properly stored to minimize additional exposure to human receptors and the environment. During soil handling, dust generation should be minimized, which may require the application of water during excavating and loading activities. Care should be taken to not over apply water such that runoff will occur. Additionally, soil excavated from the deeper portions of the excavation may be wet and should be mixed with dryer soil prior to loading to prevent dripping soil. Soil that is wet such that dripping occurs will not be accepted by most disposal facilities and could result in releases of impacted water to roadways. Care should be taken to minimize or eliminate spillage of soil during loading activities. Soil spillage during loading should be promptly removed and placed in the appropriate truck, stockpile, or bin for disposal.



7.2 AIR MONITORING DURING SOIL STAGING

If supplemental soil analysis or field screening identifies VOC concentrations in excess of 50 ppm at a distance of three inches from the surface of stockpiled or containerized material, then the notification and monitoring requirements specified in Rule 1166 shall be implemented for stockpiled and containerized soil.

7.3 STOCKPILING

Soil material will be placed into roll-off containers or into managed and covered stockpiles if the material is identified as contaminated soil, and stockpiled if clean. If the soil needs to be temporarily stockpiled before being placed in trucks for offsite disposal, the contractor shall place soil on visqueen or another impervious surface and cover the stockpile with visqueen. The stockpile will be managed as to not allow storm water to come in contact with the soil and to not emit fugitive dust. The contractor shall implement best management practices (BMPs) for stockpile management in accordance with their approved construction SWPPP permit to eliminate runoff of sediment from the stockpile. This may include the use of plastic sheeting, sand or gravel bags and placement of straw wattles around the edge of the stockpile.

During stockpiling of soils, fugitive emissions will be mitigated by spraying the stockpiles with water or other suppressant and keeping the stockpiles covered when not in use. Additional control measures are listed in Table 1 of Rule 403 in Appendix D.

7.4 CONTAINERIZING

If the soil is temporarily containerized in roll-off bins before being transported offsite for disposal, the contractor should use plastic liners in the bins to prevent leakage of dust control water, retained groundwater, or other liquids. Additionally, the bins should be covered, either by rigid lids or plastic sheeting. The contractor should implement BMPs for container management in accordance with their approved construction SWPPP permit, if applicable.

For profiling of the soil for transportation and disposal, a minimum of four discrete soil samples will be collected, if collecting in-Situ samples, from eight 20 cubic yard roll-off bins.

If soil is segregated and stockpiled onsite prior to disposal, collect samples per the following guidelines:

- Up to 1,000 cubic yards (cy) one sample per 250 cy.
- 1,000 5,000 cy Four samples plus one sample per 500 cy.
- Greater than 5,000 cy 12 samples for the 1st 5,000 cy and one sample per 1,000 cy thereafter.

Once profiling is complete, no additional soil samples are necessary for disposal purposes. Additional samples may be collected per specific landfill requirements. Confirmation soil samples will be collected as necessary to confirm removal of the contaminated soils and will include a minimum of one from each sidewall and one from the bottom of the excavation.

7.5 SWPPP BMPS

Erosion Control, also referred to as soil stabilization, is a source control measure that is designed to prevent soil particles from detaching and becoming transported in the storm water runoff. Erosion Control BMPs protect the soil surface by covering and/or binding the soil particles.



Appendix H presents the actions to be performed for erosion control at the Site during construction activities.

7.6 DECONTAMINATION MEASURES

Personal Protective Equipment (PPE) and sampling equipment used, if at all, by onsite personnel when working with potentially contaminated soil shall be collected in appropriate storage containers for disposal in accordance with applicable regulatory guidelines. These may include PPE such as gloves, ear plugs, or disposable face masks; and sampling equipment such as glass/polyethylene jars, and Encore samplers.

Tracking Control BMPs are an additional form of decontamination, as they prevent uncontrolled removal of potentially contaminated soil from the Site and shall be implemented at all access (ingress/egress) points to the Site where equipment or trucks laden with contaminated soil may track sediment from the Site onto public or private roadways.

7.7 DISPOSAL

At this time, it is assumed that the excavated soil is to be transferred by the contractor to a clean soil landfill for re-use. If contaminated soil is encountered, and following appropriate laboratory analysis, the impacted soil will be re-directed to an approved landfill. The following facilities are approved for non-hazardous VOC or hydrocarbon laden soil.

- Chiquita Canyon Landfill located at 29201 Henry Mayo Drive, Castaic, California 91384
- Waste Management Simi Valley Landfill, 2801 N. Madera Road, Simi Valley, California 93065
- Soil Safe of California located at 12328 Hibiscus Rd, Adelanto, CA 92301

Upon receipt of laboratory results during onsite monitoring, treatment/disposal revised options will be presented to the Owner and Contractor if required.

Soil shall not be transported offsite prior to completion of waste profiling and execution of proper waste manifests in accordance with Department of Transport (DOT) regulations. Waste profiling may occur prior to excavation using in-situ soil data, may be based on soil samples collected from stockpiled or containerized soil, or a combination of methods. Manifests will require signature by an authorized representative of the generator.

7.8 TRANSPORTATION

A loading and staging area shall be identified to facilitate the loading of trucks, and/or for staging stockpiles and/or roll-off bins for storing potentially contaminated soil. Ingress and egress routes for delivering bins to the specific staging areas will be defined by the construction contractor when the staging area is identified. Ingress and egress routes will be provided to the waste hauler by the construction Contractor to allow for efficient delivery of trucks and roll-off bins to the staging area and removal of trucks and bins.

During transport, trucks and roll-off bins containing soil shall be covered per DOT regulations. The loaded trucks will proceed directly to the designated disposal facility. For contaminated soils, the transportation company will be responsible for having proof of valid hauler registration with the California Environmental Protection Agency (EPA) and shall ensure that all vehicles are properly registered, operated, and placarded in compliance with local, state, and federal requirements. Loading and transporting of soil shall be conducted in such a manner that the generation of dust is minimized. Dust suppression will be managed through the application of water spray and/or





suspending loading activities. If at any time, dust emissions are observed to be causing adverse effects off-site, the Contractor's Project Manager (PM) will suspend field activities until the problem is corrected.

The transportation contractor will be required to follow Spill Response Guidelines in compliance with Federal regulations 49 CFR 172.602. The transportation contractor will ensure that each driver is equipped with an Emergency Response Guidebook and is properly trained to respond to an emergency. The onsite PM will observe the contaminated soil loading and other related activities and will follow the requirements of the HASP. The excavation contractor will be responsible for ensuring that transportation activities are in accordance with this SMP and their Health and Safety Program.

8.0 REPORTING

If soil monitoring is required during soil disturbance, a daily log will be maintained to document the field screening activity along with results from the direct reading instrument. This log will be provided at the end of each day to the Owner and Contractor, as directed by the Owner.

A brief summary report will be submitted to the Owner each Friday, when soil disturbance has been conducted during that week. The summary report will include documentation of the week's daily activities and the results of daily screening of the soil.

At the completion of the field screening of soil, a final report will be submitted to the Owner to close out that portion of the project.





9.0 SIGNATURES

Plan Prepared by:

Rafael Macedo Digitally signed by Rafael Macedo DN: cn=Rafael Macedo, o=Citadel EHS, ou=Engineering & Environmental

email=rmacedo@citadelehs.com, c=US Date: 2019.12.20 10:17:28 -08'00'

Rafael Macedo Project Engineer

Plan Reviewed by:

T. Michael

Digitally signed by T. Michael Pendergrass DN: cn=T. Michael Pendergrass, o=Citadel Environmental Services, Inc., ou=Engineering & Environmental Sciences,

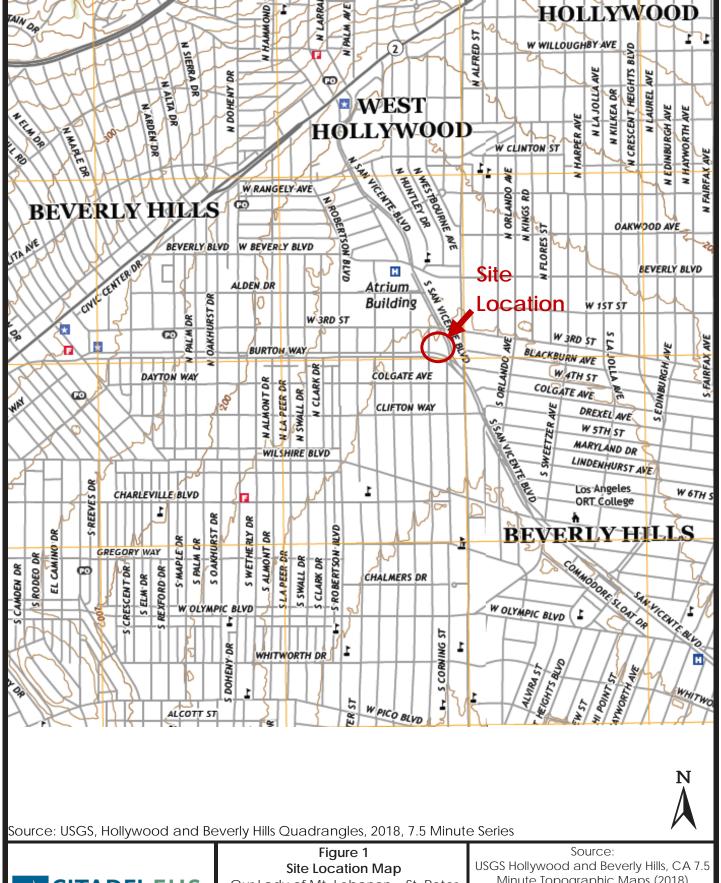
Pendergrass email=mpendergrass@citadelenvironment al.com, c=US Date: 2019.112.20 10:17:55 -08'00'

T. Michael Pendergrass, PG 5685 Senior Project Geologist





Figures





Our Lady of Mt. Lebanon - St. Peter Maronite Catholic Cathedral 333 South San Vicente Boulevard Los Angeles, California 90048

Minute Topographic Maps (2018)

Site Location Map





SITE BOUNDARIES



Source: Google Maps

CITADEL EHS

SHEPPARD, MULLIN, RICHTER, & HAMPTON, LLP

Our Lady of Mt. Lebanon – St. Peter Maronite Catholic Cathedral 333 South San Vicente Boulevard Los Angeles, California 90048 Figure 2

PROJECT NO.: 1234.1003.0

DATE: SEPTEMBER 2019

Site Map



Appendix A
Site Environmental History



SOIL MANAGEMENT PLAN - APPENDICES 333 SOUTH SAN VICENTE BOULEVARD LOS ANGELES, CALIFORNIA DECEMBER 20, 2019

Appendix A

Site Environmental History

To provide context for the SMP, below is a brief summary of prior investigations of soil vapor and groundwater at the Site.

As set forth in a Phase I Environmental Site Assessment Report (Phase I ESA) dated June 28, 2017, prepared by Citadel (Citadel, 2017a). Dry cleaners that operated at this property included Norge Village Cleaners between 1967 and 1969; Norge Village Cleaning Center between 1969 and 1978; Merry Go Round Cleaners between 1978 and 2006 and Perfect Cleaners since 2006. The Merry Go Round Cleaners was previously operated at 8550 W. Third Street, approximately 257 feet northwest of the Site. According to information provided by GeoTracker (a reporting repository managed by the California Water Resources Control Board), that dry cleaner site is an open case with the LARWQCB. Various investigations have taken place for the dry cleaner site and includes soil and groundwater assessment and remediation.

Groundwater Investigations

The owner of the Merry Go Round dry cleaner site was ordered to, and did, install several groundwater monitoring wells in the vicinity of their site. Two off-site groundwater monitoring wells are located in close proximity to the Site. Groundwater monitoring wells MW-13 and MW-14 are adjacent to the Site in Holt Street on the west and San Vicente Boulevard on the east, respectively. Groundwater was encountered at approximately 17 feet below ground surface (bgs) in both wells during installation (Reynolds Group, 2012). Groundwater pump and treat has been conducted at the dry cleaner site from 2005 to present for the purpose of groundwater remediation and groundwater plume control.

Groundwater monitoring well MW-13 was last monitored in December 2018. Tetrachloroethylene (PCE) and trichloroethylene (TCE) were not detected above the laboratory detection limit in the upper groundwater zone and the lower groundwater zone had concentrations of 17.90 μ g/L and 9.32 μ g/L, respectively. Groundwater monitoring well MW-14 was last monitored in December 2013. PCE and TCE were detected in the upper zone at concentrations of 7.32 μ g/L and 1.41 μ g/L, respectively. These chemicals were not detected in the lower groundwater zone.

In the Phase I ESA, Citadel recommended a limited Phase II subsurface investigation to assess if the subsurface has been impacted by the contaminated groundwater. Citadel subsequently prepared a Limited Phase II Subsurface Investigation (Phase II ESA) dated March 9, 2018 for further analysis of potential groundwater contamination (as well as potential soil vapor contamination, as discussed below). As part of the Phase II ESA, on February 15, 2018, Citadel collected groundwater samples from three locations at the Site parking lot. Groundwater samples were collected from the first encountered groundwater which is equivalent to the upper groundwater zone referenced for the dry cleaner site. PCE, TCE, and cis-1,2-dichloroethylene (cis-1,2-DCE), were detected in one or more groundwater samples at maximum concentrations of 50.6 µg/L, 32.2 µg/L and 8.96 µg/L, respectively. All PCE detections in groundwater were above the maximum contaminant level (MCL) for drinking water. TCE and cis-1,2-DCE were reported above their respective MCLs in groundwater samples collected from GW2 and GW3. Other volatile organic compounds (VOCs) were reported below their regulatory thresholds (Citadel, 2018).

Soil Vapor Investigations

Soil vapor and groundwater remediation has been performed at the Merry Go Round dry cleaner site from 2005 to present. Soil vapor extraction at the dry cleaner site operated between 2005 and



SOIL MANAGEMENT PLAN - APPENDICES 333 SOUTH SAN VICENTE BOULEVARD LOS ANGELES, CALIFORNIA DECEMBER 20, 2019

2014 and has resulted in the removal of approximately 2,000 pounds of volatile organic compounds from the subsurface soils, primarily PCE and TCE. Soil vapor extraction activities were suspended in 2014 due to low influent concentrations. Groundwater pump and treat activities continue to this date.

As part of the Phase II ESA, on February 15, 2018, Citadel collected soil vapor samples from three locations on the Site. PCE and TCE were detected in one or more soil vapor samples, and cis-1,2-DCE was not reported in any vapor samples above laboratory detection limits. PCE and TCE were detected in soil vapor samples above their respective San Francisco Bay Regional Water Quality Control Board's (SFBRWQCB) environmental screening levels (ESLs) for commercial/industrial use. Maximum concentrations observed for PCE and TCE were 651 µg/m³ and 248 µg/m³, respectively. No other VOCs were detected in the soil vapor samples (Citadel, 2018).

On June 14, 2017, Citadel installed and monitored three soil borings with methane gas probes installed at five, 10 and 13 feet below ground surface (bgs). Methane was detected at a maximum concentration of 1.3% or 13,000 parts per million by volume (ppmv) and a maximum pressure of 43 inches of water column. Based on these results, the Site is considered Design Level V and requires an impervious membrane and active venting system (Citadel, 2017b).

Soil Investigations

On July 16-18, 2019 Citadel performed a supplemental subsurface investigation for the purpose of in-situ profiling of the subsurface soils to determine if any historical operations on nearby properties have impacted soil to the proposed excavation limits and for waste profiling. The results of that investigation are summarized here.

Citadel collected 72 soil samples from six borings across the Site, identified as Boring 1 (B1) through B6. From each boring, two samples were chosen to be analyzed for total petroleum hydrocarbons (TPH) and Title 22 Metals; and 35 samples were chosen for analysis of VOCs.

The results from the soil sampling were as follows:

- TPHg, TPHd and TPHo were not detected above laboratory reporting limits in any of the samples with the exception of TPHo in B3 at 60 feet bgs at 6.9 mg/kg which is well below the ESL.
- No VOCs were detected above laboratory reporting limits in 34 of the 35 samples analyzed. In boring B4 at 25 feet bgs, within or below the capillary fringe, tetrachloroethene (PCE) and trichloroethene (TCE) were detected above the laboratory reporting limits but below the ESLs for soil at residential properties. No VOCs were detected above the laboratory reporting limits in any of the other sample depths analyzed.
- No Title 22 Metals were detected above the Total Threshold Limit Concentrations (TTLC) limits or the Soluble Threshold Limit Concentration (STLC) trigger concentrations in any of the twelve analyzed samples.
- Arsenic exceeded the Southern California background concentration in both samples analyzed from boring B1 but were below the TTLC limits and STLC trigger concentrations.

The results indicated generally clean soil on Site which may be accepted at a clean soil import site or disposed of at a Class III Landfill. Citadel recommended the preparation of a Soil Management Plan for use during excavation activities as a guidance document to assist with soil and soil vapor monitoring and soil disposal (Citadel, 2019).



SOIL MANAGEMENT PLAN - APPENDICES 333 SOUTH SAN VICENTE BOULEVARD LOS ANGELES, CALIFORNIA DECEMBER 20, 2019

References:

California State Water Resources Control Board, GeoTracker. (http://geotracker.waterboards.ca.gov/).

- Citadel Environmental Services, Inc., 2017a. Phase I Environmental Site Assessment Report, Our Lady of Mt. Lebanon St. Peter Maronite Catholic Cathedral Los Angeles Real Estate Trust, 333 South San Vicente Boulevard, Los Angeles, California 90048, June 28.
- Citadel Environmental Services, Inc., 2017b. Methane Testing Report, Our Lady of Mt. Lebanon St. Peter Maronite Catholic Cathedral Real Estate Trust, 333 South San Vicente Boulevard, Los Angeles, California 90048, July 10.
- Citadel Environmental Services, Inc., 2018. Limited Phase II Subsurface Investigation Report, 333 South San Vicente Boulevard Los Angeles, California 90048, June 28.
- Citadel EHS, 2019. Soil Characterization Report, 333 South San Vicente Boulevard Los Angeles, California 90048, September 16.
- The Reynolds Group, 2012. Site Conceptual Model, Former Merry Go Round Dry Cleaners, 8550 W. Third Street, Los Angeles, California. April 13, 2012.



Appendix B
SCAQMD Rule 1166 - Volatile
Organic Compound Emissions from
Decontamination of Soil

RULE 1166. VOLATILE ORGANIC COMPOUND EMISSIONS FROM DECONTAMINATION OF SOIL

(a) Applicability

This rule sets requirements to control the emission of Volatile Organic Compounds (VOC) from excavating, grading, handling and treating VOC-contaminated soil as a result of leakage from storage or transfer operations, accidental spillage, or other deposition.

(b) Definitions

- (1) EXCAVATION is the process of digging out and removing materials, including any material necessary to that process such as the digging out and removal of asphalt or concrete necessary to expose, dig out and remove known VOC contaminated soil.
- (2) GRADING is the process of leveling off to produce a smooth surface including the removal of any material necessary to that process such as asphalt and concrete necessary to expose known VOC contaminated soil.
- (3) SOIL DECONTAMINATION MEASURE is any process approved by the Executive Officer to remediate, destroy, remove, or encapsulate VOC and VOC-contaminated soil.
- (4) UNDERGROUND STORAGE TANK means any one or combination of tanks, including pipes connected thereto, which is used for the storage of organic liquid which is more than 50% beneath the surface of the ground.
- (5) VOC CONTAMINATED SOIL is a soil which registers a concentration of 50 ppm or greater of Volatile Organic Compounds as measured before suppression materials have been applied and at a distance of no more than three inches from the surface of the excavated soil with an organic vapor analyzer calibrated with hexane.
- (6) VOC CONTAMINATED SOIL MITIGATION PLAN is a plan to minimize VOC emissions to the atmosphere during excavation and any subsequent handling of VOC-contaminated soil.

- (7) VOLATILE ORGANIC COMPOUND (VOC) is any volatile compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, and exempt compounds. Exempt compounds are defined in Rule 102—Definition Of Terms.
- (8) VOLATILE ORGANIC MATERIALS include gasoline, diesel, crude oil, lubricant, waste oil, adhesive, paint, stain, solvent, resin, monomer, and/or any other material containing VOC.

(c) Requirements

- (1) A person excavating an underground storage tank and/or transfer piping storing or previously storing VOC materials, or excavating or grading soil containing VOC materials shall:
 - (A) Apply for, obtain and operate pursuant to a mitigation plan approved by the Executive Officer prior to commencement of excavation or handling. The mitigation plan general requirement and application requirements are found in Attachment A to this rule. A copy of the approved plan must be on site during the entire excavation period.
 - (B) Notify the Executive Officer at least 24 hours prior to excavation using a form approved by the Executive Officer which is fully completed.
 - If the excavation does not commence on start date, renotification is required.
 - An alternative notification procedure may be authorized for multiple excavations within a single facility, with prior written approval from the Executive Officer.
 - (C) Monitor for VOC contamination pursuant to subdivision (e), at least once every 15 minutes commencing at the beginning of excavation or grading and record all VOC concentration readings in a format approved by the Executive Officer; and
 - (D) When VOC-contaminated soil is detected during excavation or grading:
 - (i) Implement the approved mitigation plan (Attachment A).
 - (ii) Notify the Executive Officer within 24 hours of detection of VOC-contaminated soil.

- (iii) Monitor and record VOC concentration readings as prescribed in the plan. Monitoring records must be kept available on site.
- (iv) Keep calibration records for all monitoring instruments available on site.
- (2) A person handling VOC-contaminated soil at or from an excavation or grading site shall:
 - (A) Segregate VOC-contaminated stockpiles from non-VOC contaminated stockpiles such that mixing of the stockpiles does not take place.
 - (B) Spray VOC-contaminated soil stockpiles with water and/or approved vapor suppressant and cover them with plastic sheeting for all periods of inactivity lasting more than one hour.
 - (C) Conduct a daily visual inspection of all covered VOC contaminated soil_stockpiles to ensure the integrity of the plastic covered surfaces. A daily inspection record must be maintained on site.
 - (D) Comply with the provisions in subparagraph (c) (1)(A) and clause (c)(1)(D)(i).
 - (E) Maintain a record of the identification and business addresses of the generator, transporter and storage/treatment facilities. Such record shall be signed by each party at the time custody is transferred.
 - (F) Treat or remove contaminated soil from an excavation or grading site within 30 days from the time of excavation.
- (3) If the VOC concentration in the excavated soil is measured at greater than 1000 ppm, spray the soil with water or vapor suppressant and:
 - (A) As soon as possible, but not more than 15 minutes, place the soil in sealed containers, or
 - (B) As soon as possible, but not more than 15 minutes, load into trucks, moisten with additional water, cover and transport off site, or
 - (C) Implement other alternative storage methods approved in writing by the Executive Officer.

- (4) A person treating VOC-contaminated soil shall:
 - (A) Obtain a permit to construct and operate treatment equipment, as applicable, from the Executive Officer, and
 - (B) Implement VOC-contaminated soil decontamination measures, as approved by the Executive Officer in writing, which result in Best Available Control Technology applied during all segments, and which include, but are not limited to, at least one of the following:
 - (i) Installation and operation of an underground VOC collection system and a disposal system prior to excavation.
 - (ii) Collection and disposal of the VOC from the excavated soil on-site using equipment approved by the Executive Officer.
 - (iii) Any equivalent VOC-contaminated soil control measure previously approved in writing by the Executive Officer.
- (5) A person shall not engage in or allow any on-site or off-site spreading, grading or screening of VOC-contaminated soil, which results in uncontrolled evaporation of VOC to the atmosphere.
- (6) Loading trucks for contaminated soil must meet the following:
 - (A) The truck and trailer shall be adequately tarped prior to leaving the site; no excavated materials shall extend above the sides or rear of the truck or trailer to prevent soil spillage during transport, and
 - (B) The exterior of the truck, trailer and tires shall be cleaned off prior to the truck leaving the site.

(d) Exemptions

- (1) The provisions of this rule shall not apply to the following:
 - (A) Excavation, handling, and treating of less than one (1) cubic yard of contaminated soil.
 - (B) Removal of soil for sampling purposes.
 - (C) Accidental spillage of five (5) gallons or less of VOC containing material.

(2) The provisions of paragraphs (c)(1) and (c)(2) shall not apply to soil excavation or handling as a result of an emergency as declared by an authorized health officer, agricultural commissioner, fire protection officer, or other authorized agency officer. Whenever possible, the Executive Officer shall be notified by telephone prior to commencing such excavation. The Executive Officer shall be notified in writing no later than 48 hours following such excavation. Written notification shall include written emergency declaration from the authorized officer.

(e) Test Methods

- (1) A person shall measure excavated soils for volatile organic compounds to determine contamination by:
 - (A) Using an organic vapor analyzer calibrated with hexane, complying with 40 CFR Part 60 Appendix A, EPA Reference Method 21 Section 3 or any equivalent method with prior approval in writing by the Executive Officer. If other calibrating gases are used, then the measured readings shall be correlated to and expressed as hexane.
 - (B) Placing the probe inlet at a distance of no more than three inches from the surface of the excavated soil and while slowly moving the probe across the soil surface, observe the instrument readout. If an increased meter reading is observed, continue to sample the excavated soil until the maximum meter reading is obtained. Leave the probe inlet at this maximum reading location for approximately double the instrument response time. If the maximum observed meter reading is greater than the 50 ppm standard in the regulation, record and report the results.
- (2) The presence of VOC in stored or spillage materials shall be determined by SCAQMD Method 313 [Determination of Presence of Volatile Organic Compounds (VOC) in Headspace] and/or Method 304 (Determination of Volatile Organic Compounds in Various Materials) contained in the SCAQMD "Laboratory Methods of Analysis for Enforcement Samples" manual.

(f) Enforcement

- (1) Violation of any provision of this rule or the violation of the approved mitigation plan shall be grounds for the Executive Officer to amend or revoke the mitigation plan, in addition to penalties provided by the Health & Safety Code.
- (2) If the owner or operator is served with a Notice of Violation for creating a public nuisance, the owner or operator shall suspend operation until the public nuisance is mitigated to the satisfaction of the Executive Officer.

ATTACHMENT A GENERAL MITIGATION PLANS REQUIREMENTS

VOC Contaminated Soil Mitigation Plans shall be written to minimize VOC emissions to the atmosphere during excavation, grading, handling and treatment of VOC contaminated soil. VOC Contaminated Soil Mitigation Plans shall consist of three types: Various Locations, Site Specific and Facility Treatment.

- (1) General Requirements
 - (A) A plan is not transferable.
 - (B) A person responsible for the excavation, grading or handling of VOC contaminated soil must be completely familiar with the plan and must adhere to the plan requirement. The Executive Officer may require that the plan be signed by the owner and/or operator.
 - (C) A plan may be amended upon renewal.
 - (D) Permission to excavate, grade or handle VOC contaminated soil may be withdrawn by the District upon a finding by the Executive Officer that the excavation, grading or handling of the VOC contaminated soil is causing a public nuisance or violating other AOMD rules or regulations.
- (2) Various Location Plans:
 - (A) Shall be limited to the excavation of 2000 cubic yards or less of VOC contaminated soil in any consecutive 12 month period at the same site.
 - (B) Shall not be used in conjunction with any other various location plan at the same site within a consecutive 12-month period.
 - (C) Shall expire after one year from issuance unless renewed.
 - (D) Shall not be issued for nor used for operations that involve grading, soil treatment or remediation, or landfills.
- (3) Site Specific Plans:
 - (A) Shall be for excavation of greater than 2000 cubic yards of VOC contaminated soil.
 - (B) Shall be issued for specific excavation or grading locations for a period not to exceed two years.
 - (C) Shall not be renewable.

- (4) Facility Treatment Plans:
 - (A) Shall be issued for a treatment facility at a permanent location.
 - (B) Shall expire after one year from issuance unless renewed.
- (5) Applications for Site Specific Plans shall contain as a minimum:
 - (A) Reasons for excavation or grading.
 - (B) Cause of VOC soil contamination and history of the site.
 - (C) Description of tanks or piping associated with the soil contamination.
 - (D) An estimate of the amount of contaminated soil.
 - (E) The operating schedule for excavation and removal.
 - (F) Description of how the excavation or grading will be conducted.
 - (G) Description of mitigation measures for dust, odors and VOC.
 - (H) Details of disposal of VOC contaminated soil, including the ultimate receptor.
 - (I) Description of monitoring equipment and techniques.
 - (J) A map showing the facility layout, property line, and surrounding area up to 2500 feet away, and including any schools, residential areas or other sensitive receptors such as hospitals or locations where children or elderly people live or work.
 - (K) Designation of a person who can conduct a site inspection with the Executive Officer prior to issuance of the plan.
- (6) Applications for Facility Treatment Plans shall at a minimum:
 - (A) Include a list of all AQMD permits to construct or operate which have been issued for that treatment and control equipment.
 - (B) Provide for the implementation of VOC-contaminated soil decontamination measures, as approved by the Executive Officer in writing, which result in Best Available Control Technology during all operations.
 - (C) Provide a map showing the facility layout including the location of all proposed VOC and non-VOC contaminated soil stockpiles.
 - (D) Specify the total amount of VOC contaminated soil proposed to be stockpiled on site.
 - (E) Provide for VOC contaminated soil stockpiles to be kept moist with water or suppressant and be covered to prevent fugitive emissions.

- (F) Provide for VOC contaminated soil stockpiles to be segregated from non-VOC contaminated soil stockpiles.
- (G) Provide for maintenance of records for stockpiles according to the source name, address and dates of reception.
- (H) Provide for records of the generator, transporter and storage/treatment facilities and indicate their identification and business addresses. Such records shall be signed by each party at the time custody is transferred.
- (I) Provide a map showing the facility layout, property line, and surrounding area up to 2500 feet away, and including any schools, residential area or other sensitive receptors such as hospitals, or locations where children or elderly people live or work.
- (J) Designation of a person who can conduct a site inspection with the Executive Officer prior to issuance of the plan.
- (K) Specify the operating schedule and maximum amount of VOC-contaminated soil proposed to be remediated on a daily basis.
- (7) In approving a plan, the Executive Officer require reasonable conditions deemed necessary to ensure the operations comply with the plan and AQMD rules. The conditions may include, but shall not be limited to, procedures for ensuring responsibility for the implementation of the plan, accessibility to the site for AQMD staff, notification of actions required by the plan, identification of emission receptors, monitoring and testing, suppression and covering of stockpiles, prevention of public nuisance from VOC or dust emissions, prevention of fugitive emissions of VOC contaminated soil, loading of truck trailers, and disposal and treatment.
- (8) In approving a plan, the Executive Officer may require any records deemed necessary to be maintained by the operator to demonstrate compliance with the plan. Such records shall be retained for at least 2 years and be made available to the Executive officer upon request.



Appendix C SCAQMD Rule 402 - Nuisance

RULE 402. NUISANCE

A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.



Appendix D SCAQMD Rule 403 - Fugitive Dust (Adopted May 7, 1976) (Amended November 6, 1992) (Amended July 9, 1993) (Amended February 14, 1997) (Amended December 11, 1998)(Amended April 2, 2004) (Amended June 3, 2005)

RULE 403. FUGITIVE DUST

(a) Purpose

The purpose of this Rule is to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (man-made) fugitive dust sources by requiring actions to prevent, reduce or mitigate fugitive dust emissions.

(b) Applicability

The provisions of this Rule shall apply to any activity or man-made condition capable of generating fugitive dust.

(c) Definitions

- (1) ACTIVE OPERATIONS means any source capable of generating fugitive dust, including, but not limited to, earth-moving activities, construction/demolition activities, disturbed surface area, or heavy- and light-duty vehicular movement.
- (2) AGGREGATE-RELATED PLANTS are defined as facilities that produce and / or mix sand and gravel and crushed stone.
- (3) AGRICULTURAL HANDBOOK means the region-specific guidance document that has been approved by the Governing Board or hereafter approved by the Executive Officer and the U.S. EPA. For the South Coast Air Basin, the Board-approved region-specific guidance document is the Rule 403 Agricultural Handbook dated December 1998. For the Coachella Valley, the Board-approved region-specific guidance document is the Rule 403 Coachella Valley Agricultural Handbook dated April 2, 2004.
- (4) ANEMOMETERS are devices used to measure wind speed and direction in accordance with the performance standards, and maintenance and calibration criteria as contained in the most recent Rule 403 Implementation Handbook.
- (5) BEST AVAILABLE CONTROL MEASURES means fugitive dust control actions that are set forth in Table 1 of this Rule.

- (6) BULK MATERIAL is sand, gravel, soil, aggregate material less than two inches in length or diameter, and other organic or inorganic particulate matter.
- (7) CEMENT MANUFACTURING FACILITY is any facility that has a cement kiln at the facility.
- (8) CHEMICAL STABILIZERS are any non-toxic chemical dust suppressant which must not be used if prohibited for use by the Regional Water Quality Control Boards, the California Air Resources Board, the U.S. Environmental Protection Agency (U.S. EPA), or any applicable law, rule or regulation. The chemical stabilizers shall meet any specifications, criteria, or tests required by any federal, state, or local water agency. Unless otherwise indicated, the use of a non-toxic chemical stabilizer shall be of sufficient concentration and application frequency to maintain a stabilized surface.
- (9) COMMERCIAL POULTRY RANCH means any building, structure, enclosure, or premises where more than 100 fowl are kept or maintained for the primary purpose of producing eggs or meat for sale or other distribution.
- (10) CONFINED ANIMAL FACILITY means a source or group of sources of air pollution at an agricultural source for the raising of 3,360 or more fowl or 50 or more animals, including but not limited to, any structure, building, installation, farm, corral, coop, feed storage area, milking parlor, or system for the collection, storage, or distribution of solid and liquid manure; if domesticated animals, including horses, sheep, goats, swine, beef cattle, rabbits, chickens, turkeys, or ducks are corralled, penned, or otherwise caused to remain in restricted areas for commercial agricultural purposes and feeding is by means other than grazing.
- (11) CONSTRUCTION/DEMOLITION ACTIVITIES means any on-site mechanical activities conducted in preparation of, or related to, the building, alteration, rehabilitation, demolition or improvement of property, including, but not limited to the following activities: grading, excavation, loading, crushing, cutting, planing, shaping or ground breaking.
- (12) CONTRACTOR means any person who has a contractual arrangement to conduct an active operation for another person.
- (13) DAIRY FARM is an operation on a property, or set of properties that are contiguous or separated only by a public right-of-way, that raises cows or

- produces milk from cows for the purpose of making a profit or for a livelihood. Heifer and calf farms are dairy farms.
- (14) DISTURBED SURFACE AREA means a portion of the earth's surface which has been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed natural soil condition, thereby increasing the potential for emission of fugitive dust. This definition excludes those areas which have:
 - (A) been restored to a natural state, such that the vegetative ground cover and soil characteristics are similar to adjacent or nearby natural conditions;
 - (B) been paved or otherwise covered by a permanent structure; or
 - (C) sustained a vegetative ground cover of at least 70 percent of the native cover for a particular area for at least 30 days.
- (15) DUST SUPPRESSANTS are water, hygroscopic materials, or non-toxic chemical stabilizers used as a treatment material to reduce fugitive dust emissions.
- (16) EARTH-MOVING ACTIVITIES means the use of any equipment for any activity where soil is being moved or uncovered, and shall include, but not be limited to the following: grading, earth cutting and filling operations, loading or unloading of dirt or bulk materials, adding to or removing from open storage piles of bulk materials, landfill operations, weed abatement through disking, and soil mulching.
- (17) DUST CONTROL SUPERVISOR means a person with the authority to expeditiously employ sufficient dust mitigation measures to ensure compliance with all Rule 403 requirements at an active operation.
- (18) FUGITIVE DUST means any solid particulate matter that becomes airborne, other than that emitted from an exhaust stack, directly or indirectly as a result of the activities of any person.
- (19) HIGH WIND CONDITIONS means that instantaneous wind speeds exceed 25 miles per hour.
- (20) INACTIVE DISTURBED SURFACE AREA means any disturbed surface area upon which active operations have not occurred or are not expected to occur for a period of 20 consecutive days.
- (21) LARGE OPERATIONS means any active operations on property which contains 50 or more acres of disturbed surface area; or any earth-moving operation with a daily earth-moving or throughput volume of 3,850 cubic

- meters (5,000 cubic yards) or more three times during the most recent 365-day period.
- (22) OPEN STORAGE PILE is any accumulation of bulk material, which is not fully enclosed, covered or chemically stabilized, and which attains a height of three feet or more and a total surface area of 150 or more square feet.
- (23) PARTICULATE MATTER means any material, except uncombined water, which exists in a finely divided form as a liquid or solid at standard conditions.
- (24) PAVED ROAD means a public or private improved street, highway, alley, public way, or easement that is covered by typical roadway materials, but excluding access roadways that connect a facility with a public paved roadway and are not open to through traffic. Public paved roads are those open to public access and that are owned by any federal, state, county, municipal or any other governmental or quasi-governmental agencies. Private paved roads are any paved roads not defined as public.
- (25) PM₁₀ means particulate matter with an aerodynamic diameter smaller than or equal to 10 microns as measured by the applicable State and Federal reference test methods.
- (26) PROPERTY LINE means the boundaries of an area in which either a person causing the emission or a person allowing the emission has the legal use or possession of the property. Where such property is divided into one or more sub-tenancies, the property line(s) shall refer to the boundaries dividing the areas of all sub-tenancies.
- (27) RULE 403 IMPLEMENTATION HANDBOOK means a guidance document that has been approved by the Governing Board on April 2, 2004 or hereafter approved by the Executive Officer and the U.S. EPA.
- (28) SERVICE ROADS are paved or unpaved roads that are used by one or more public agencies for inspection or maintenance of infrastructure and which are not typically used for construction-related activity.
- (29) SIMULTANEOUS SAMPLING means the operation of two PM_{10} samplers in such a manner that one sampler is started within five minutes of the other, and each sampler is operated for a consecutive period which must be not less than 290 minutes and not more than 310 minutes.
- (30) SOUTH COAST AIR BASIN means the non-desert portions of Los Angeles, Riverside, and San Bernardino counties and all of Orange

- County as defined in California Code of Regulations, Title 17, Section 60104. The area is bounded on the west by the Pacific Ocean, on the north and east by the San Gabriel, San Bernardino, and San Jacinto Mountains, and on the south by the San Diego county line.
- (31) STABILIZED SURFACE means any previously disturbed surface area or open storage pile which, through the application of dust suppressants, shows visual or other evidence of surface crusting and is resistant to wind-driven fugitive dust and is demonstrated to be stabilized. Stabilization can be demonstrated by one or more of the applicable test methods contained in the Rule 403 Implementation Handbook.
- (32) TRACK-OUT means any bulk material that adheres to and agglomerates on the exterior surface of motor vehicles, haul trucks, and equipment (including tires) that have been released onto a paved road and can be removed by a vacuum sweeper or a broom sweeper under normal operating conditions.
- (33) TYPICAL ROADWAY MATERIALS means concrete, asphaltic concrete, recycled asphalt, asphalt, or any other material of equivalent performance as determined by the Executive Officer, and the U.S. EPA.
- (34) UNPAVED ROADS means any unsealed or unpaved roads, equipment paths, or travel ways that are not covered by typical roadway materials. Public unpaved roads are any unpaved roadway owned by federal, state, county, municipal or other governmental or quasi-governmental agencies. Private unpaved roads are all other unpaved roadways not defined as public.
- (35) VISIBLE ROADWAY DUST means any sand, soil, dirt, or other solid particulate matter which is visible upon paved road surfaces and which can be removed by a vacuum sweeper or a broom sweeper under normal operating conditions.
- (36) WIND-DRIVEN FUGITIVE DUST means visible emissions from any disturbed surface area which is generated by wind action alone.
- (37) WIND GUST is the maximum instantaneous wind speed as measured by an anemometer.

(d) Requirements

(1) No person shall cause or allow the emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area such that:

- (A) the dust remains visible in the atmosphere beyond the property line of the emission source; or
- (B) the dust emission exceeds 20 percent opacity (as determined by the appropriate test method included in the Rule 403 Implementation Handbook), if the dust emission is the result of movement of a motorized vehicle.
- (2) No person shall conduct active operations without utilizing the applicable best available control measures included in Table 1 of this Rule to minimize fugitive dust emissions from each fugitive dust source type within the active operation.
- (3) No person shall cause or allow PM_{10} levels to exceed 50 micrograms per cubic meter when determined, by simultaneous sampling, as the difference between upwind and downwind samples collected on high-volume particulate matter samplers or other U.S. EPA-approved equivalent method for PM_{10} monitoring. If sampling is conducted, samplers shall be:
 - (A) Operated, maintained, and calibrated in accordance with 40 Code of Federal Regulations (CFR), Part 50, Appendix J, or appropriate U.S. EPA-published documents for U.S. EPA-approved equivalent method(s) for PM₁₀.
 - (B) Reasonably placed upwind and downwind of key activity areas and as close to the property line as feasible, such that other sources of fugitive dust between the sampler and the property line are minimized.
- (4) No person shall allow track-out to extend 25 feet or more in cumulative length from the point of origin from an active operation. Notwithstanding the preceding, all track-out from an active operation shall be removed at the conclusion of each workday or evening shift.
- (5) No person shall conduct an active operation with a disturbed surface area of five or more acres, or with a daily import or export of 100 cubic yards or more of bulk material without utilizing at least one of the measures listed in subparagraphs (d)(5)(A) through (d)(5)(E) at each vehicle egress from the site to a paved public road.
 - (A) Install a pad consisting of washed gravel (minimum-size: one inch) maintained in a clean condition to a depth of at least six inches and extending at least 30 feet wide and at least 50 feet long.

- (B) Pave the surface extending at least 100 feet and at least 20 feet wide.
- (C) Utilize a wheel shaker/wheel spreading device consisting of raised dividers (rails, pipe, or grates) at least 24 feet long and 10 feet wide to remove bulk material from tires and vehicle undercarriages before vehicles exit the site.
- (D) Install and utilize a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the site.
- (E) Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the actions specified in subparagraphs (d)(5)(A) through (d)(5)(D).
- (6) Beginning January 1, 2006, any person who operates or authorizes the operation of a confined animal facility subject to this Rule shall implement the applicable conservation management practices specified in Table 4 of this Rule.

(e) Additional Requirements for Large Operations

- (1) Any person who conducts or authorizes the conducting of a large operation subject to this Rule shall implement the applicable actions specified in Table 2 of this Rule at all times and shall implement the applicable actions specified in Table 3 of this Rule when the applicable performance standards can not be met through use of Table 2 actions; and shall:
 - submit a fully executed Large Operation Notification (Form 403
 to the Executive Officer within 7 days of qualifying as a large operation;
 - (B) include, as part of the notification, the name(s), address(es), and phone number(s) of the person(s) responsible for the submittal, and a description of the operation(s), including a map depicting the location of the site;
 - (C) maintain daily records to document the specific dust control actions taken, maintain such records for a period of not less than three years; and make such records available to the Executive Officer upon request;

- (D) install and maintain project signage with project contact signage that meets the minimum standards of the Rule 403 Implementation Handbook, prior to initiating any earthmoving activities;
- (E) identify a dust control supervisor that:
 - (i) is employed by or contracted with the property owner or developer;
 - (ii) is on the site or available on-site within 30 minutes during working hours;
 - (iii) has the authority to expeditiously employ sufficient dust mitigation measures to ensure compliance with all Rule requirements;
 - (iv) has completed the AQMD Fugitive Dust Control Class and has been issued a valid Certificate of Completion for the class; and
- (F) notify the Executive Officer in writing within 30 days after the site no longer qualifies as a large operation as defined by paragraph (c)(18).
- (2) Any Large Operation Notification submitted to the Executive Officer or AQMD-approved dust control plan shall be valid for a period of one year from the date of written acceptance by the Executive Officer. Any Large Operation Notification accepted pursuant to paragraph (e)(1), excluding those submitted by aggregate-related plants and cement manufacturing facilities must be resubmitted annually by the person who conducts or authorizes the conducting of a large operation, at least 30 days prior to the expiration date, or the submittal shall no longer be valid as of the expiration date. If all fugitive dust sources and corresponding control measures or special circumstances remain identical to those identified in the previously accepted submittal or in an AQMD-approved dust control plan, the resubmittal may be a simple statement of no-change (Form 403NC).

(f) Compliance Schedule

The newly amended provisions of this Rule shall become effective upon adoption. Pursuant to subdivision (e), any existing site that qualifies as a large operation will have 60 days from the date of Rule adoption to comply with the notification and recordkeeping requirements for large operations. Any Large Operation

Notification or AQMD-approved dust control plan which has been accepted prior to the date of adoption of these amendments shall remain in effect and the Large Operation Notification or AQMD-approved dust control plan annual resubmittal date shall be one year from adoption of this Rule amendment.

(g) Exemptions

- (1) The provisions of this Rule shall not apply to:
 - (A) Dairy farms.
 - (B) Confined animal facilities provided that the combined disturbed surface area within one continuous property line is one acre or less.
 - (C) Agricultural vegetative crop operations provided that the combined disturbed surface area within one continuous property line and not separated by a paved public road is 10 acres or less.
 - (D) Agricultural vegetative crop operations within the South Coast Air Basin, whose combined disturbed surface area includes more than 10 acres provided that the person responsible for such operations:
 - (i) voluntarily implements the conservation management practices contained in the Rule 403 Agricultural Handbook;
 - (ii) completes and maintains the self-monitoring form documenting sufficient conservation management practices, as described in the Rule 403 Agricultural Handbook; and
 - (iii) makes the completed self-monitoring form available to the Executive Officer upon request.
 - (E) Agricultural vegetative crop operations outside the South Coast Air Basin whose combined disturbed surface area includes more than 10 acres provided that the person responsible for such operations:
 - (i) voluntarily implements the conservation management practices contained in the Rule 403 Coachella Valley Agricultural Handbook; and
 - (ii) completes and maintains the self-monitoring form documenting sufficient conservation management practices, as described in the Rule 403 Coachella Valley Agricultural Handbook; and
 - (iii) makes the completed self-monitoring form available to the Executive Officer upon request.

- (F) Active operations conducted during emergency life-threatening situations, or in conjunction with any officially declared disaster or state of emergency.
- (G) Active operations conducted by essential service utilities to provide electricity, natural gas, telephone, water and sewer during periods of service outages and emergency disruptions.
- (H) Any contractor subsequent to the time the contract ends, provided that such contractor implemented the required control measures during the contractual period.
- (I) Any grading contractor, for a phase of active operations, subsequent to the contractual completion of that phase of earthmoving activities, provided that the required control measures have been implemented during the entire phase of earth-moving activities, through and including five days after the final grading inspection.
- (J) Weed abatement operations ordered by a county agricultural commissioner or any state, county, or municipal fire department, provided that:
 - (i) mowing, cutting or other similar process is used which maintains weed stubble at least three inches above the soil; and
 - (ii) any discing or similar operation which cuts into and disturbs the soil, where watering is used prior to initiation of these activities, and a determination is made by the agency issuing the weed abatement order that, due to fire hazard conditions, rocks, or other physical obstructions, it is not practical to meet the conditions specified in clause (g)(1)(H)(i). The provisions this clause shall not exempt the owner of any property from stabilizing, in accordance with paragraph (d)(2), disturbed surface areas which have been created as a result of the weed abatement actions.
- (K) sandblasting operations.
- (2) The provisions of paragraphs (d)(1) and (d)(3) shall not apply:
 - (A) When wind gusts exceed 25 miles per hour, provided that:

- (i) The required Table 3 contingency measures in this Rule are implemented for each applicable fugitive dust source type, and;
- (ii) records are maintained in accordance with subparagraph (e)(1)(C).
- (B) To unpaved roads, provided such roads:
 - (i) are used solely for the maintenance of wind-generating equipment; or
 - (ii) are unpaved public alleys as defined in Rule 1186; or
 - (iii) are service roads that meet all of the following criteria:
 - (a) are less than 50 feet in width at all points along the road;
 - (b) are within 25 feet of the property line; and
 - (c) have a traffic volume less than 20 vehicle-trips per day.
- (C) To any active operation, open storage pile, or disturbed surface area for which necessary fugitive dust preventive or mitigative actions are in conflict with the federal Endangered Species Act, as determined in writing by the State or federal agency responsible for making such determinations.
- (3) The provisions of (d)(2) shall not apply to any aggregate-related plant or cement manufacturing facility that implements the applicable actions specified in Table 2 of this Rule at all times and shall implement the applicable actions specified in Table 3 of this Rule when the applicable performance standards of paragraphs (d)(1) and (d)(3) can not be met through use of Table 2 actions.
- (4) The provisions of paragraphs (d)(1), (d)(2), and (d)(3) shall not apply to:
 - (A) Blasting operations which have been permitted by the California Division of Industrial Safety; and
 - (B) Motion picture, television, and video production activities when dust emissions are required for visual effects. In order to obtain this exemption, the Executive Officer must receive notification in writing at least 72 hours in advance of any such activity and no nuisance results from such activity.
- (5) The provisions of paragraph (d)(3) shall not apply if the dust control actions, as specified in Table 2, are implemented on a routine basis for

- each applicable fugitive dust source type. To qualify for this exemption, a person must maintain records in accordance with subparagraph (e)(1)(C).
- (6) The provisions of paragraph (d)(4) shall not apply to earth coverings of public paved roadways where such coverings are approved by a local government agency for the protection of the roadway, and where such coverings are used as roadway crossings for haul vehicles provided that such roadway is closed to through traffic and visible roadway dust is removed within one day following the cessation of activities.
- (7) The provisions of subdivision (e) shall not apply to:
 - (A) officially-designated public parks and recreational areas, including national parks, national monuments, national forests, state parks, state recreational areas, and county regional parks.
 - (B) any large operation which is required to submit a dust control plan to any city or county government which has adopted a District-approved dust control ordinance.
 - (C) any large operation subject to Rule 1158, which has an approved dust control plan pursuant to Rule 1158, provided that all sources of fugitive dust are included in the Rule 1158 plan.
- (8) The provisions of subparagraph (e)(1)(A) through (e)(1)(C) shall not apply to any large operation with an AQMD-approved fugitive dust control plan provided that there is no change to the sources and controls as identified in the AQMD-approved fugitive dust control plan.

(h) Fees

Any person conducting active operations for which the Executive Officer conducts upwind/downwind monitoring for PM_{10} pursuant to paragraph (d)(3) shall be assessed applicable Ambient Air Analysis Fees pursuant to Rule 304.1. Applicable fees shall be waived for any facility which is exempted from paragraph (d)(3) or meets the requirements of paragraph (d)(3).

Source Category	Control Measure	Guidance
Backfilling	 O1-1 Stabilize backfill material when not actively handling; and O1-2 Stabilize backfill material during handling; and O1-3 Stabilize soil at completion of activity. 	 ✓ Mix backfill soil with water prior to moving ✓ Dedicate water truck or high capacity hose to backfilling equipment ✓ Empty loader bucket slowly so that no dust plumes are generated ✓ Minimize drop height from loader bucket
Clearing and grubbing	 Maintain stability of soil through pre-watering of site prior to clearing and grubbing; and Stabilize soil during clearing and grubbing activities; and Stabilize soil immediately after clearing and grubbing activities. 	 ✓ Maintain live perennial vegetation where possible ✓ Apply water in sufficient quantity to prevent generation of dust plumes
Clearing forms	03-1 Use water spray to clear forms; or 03-2 Use sweeping and water spray to clear forms; or 03-3 Use vacuum system to clear forms.	✓ Use of high pressure air to clear forms may cause exceedance of Rule requirements
Crushing	 O4-1 Stabilize surface soils prior to operation of support equipment; and O4-2 Stabilize material after crushing. 	 ✓ Follow permit conditions for crushing equipment ✓ Pre-water material prior to loading into crusher ✓ Monitor crusher emissions opacity ✓ Apply water to crushed material to prevent dust plumes

Source Category	Control Measure	Guidance
Cut and fill	05-1 Pre-water soils prior to cut and fill activities; and05-2 Stabilize soil during and after cut and fill activities.	 ✓ For large sites, pre-water with sprinklers or water trucks and allow time for penetration ✓ Use water trucks/pulls to water soils to depth of cut prior to subsequent cuts
Demolition – mechanical/manual	 O6-1 Stabilize wind erodible surfaces to reduce dust; and O6-2 Stabilize surface soil where support equipment and vehicles will operate; and O6-3 Stabilize loose soil and demolition debris; and O6-4 Comply with AQMD Rule 1403. 	prevent the generation of visible dust plumes
Disturbed soil	07-1 Stabilize disturbed soil throughout the construction site; and 07-2 Stabilize disturbed soil between structures	 ✓ Limit vehicular traffic and disturbances on soils where possible ✓ If interior block walls are planned, install as early as possible ✓ Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes
Earth-moving activities	08-1 Pre-apply water to depth of proposed cuts; and 08-2 Re-apply water as necessary to maintain soils in a damp condition and to ensure that visible emissions do not exceed 100 feet in any direction; and 08-3 Stabilize soils once earth-moving activities are complete.	 ✓ Grade each project phase separately, timed to coincide with construction phase ✓ Upwind fencing can prevent material movement on site ✓ Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes

Source Category	Control Measure	Guidance
Importing/exporting of bulk materials	 O9-1 Stabilize material while loading to reduce fugitive dust emissions; and O9-2 Maintain at least six inches of freeboard on haul vehicles; and O9-3 Stabilize material while transporting to reduce fugitive dust emissions; and O9-4 Stabilize material while unloading to reduce fug dust emissions; and O9-5 Comply with Vehicle Code Section 23114. 	haul trucks ✓ Check belly-dump truck seals regularly and remove any trapped rocks to prevent spillage ✓ Comply with track-out prevention/mitigation requirements
Landscaping	10-1 Stabilize soils, materials, slopes	 ✓ Apply water to materials to stabilize ✓ Maintain materials in a crusted condition ✓ Maintain effective cover over materials ✓ Stabilize sloping surfaces using soil binders until vegetation or ground cover can effectively stabilize the slopes ✓ Hydroseed prior to rain season
Road shoulder maintenance	 11-1 Apply water to unpaved shoulders prior to clear and 11-2 Apply chemical dust suppressants and/or washed gravel to maintain a stabilized surface after completing road shoulder maintenance. 	shoulders can reduce recurring maintenance

Source Category	Control Measure	Guidance
Screening	 12-1 Pre-water material prior to screening; and 12-2 Limit fugitive dust emissions to opacity and plume length standards; and 12-3 Stabilize material immediately after screening. 	 ✓ Dedicate water truck or high capacity hose to screening operation ✓ Drop material through the screen slowly and minimize drop height ✓ Install wind barrier with a porosity of no more than 50% upwind of screen to the height of the drop point
Staging areas	13-1 Stabilize staging areas during use; and 13-2 Stabilize staging area soils at project completion.	✓ Limit size of staging area ✓ Limit vehicle speeds to 15 miles per hour ✓ Limit number and size of staging area entrances/exists
Stockpiles/ Bulk Material Handling	14-1 Stabilize stockpiled materials. 14-2 Stockpiles within 100 yards of off-site occupied buildings must not be greater than eight feet in height; or must have a road bladed to the top to allow water truck access or must have an operational water irrigation system that is capable of complete stockpile coverage.	 ✓ Add or remove material from the downwind portion of the storage pile ✓ Maintain storage piles to avoid steep sides or faces

Source Category	Control Measure	Guidance
Traffic areas for construction activities	 15-1 Stabilize all off-road traffic and parking areas; and 15-2 Stabilize all haul routes; and 15-3 Direct construction traffic over established haul routes. 	 ✓ Apply gravel/paving to all haul routes as soon as possible to all future roadway areas ✓ Barriers can be used to ensure vehicles are only used on established parking areas/haul routes
Trenching	 Stabilize surface soils where trencher or excavato and support equipment will operate; and Stabilize soils at the completion of trenching activities. 	 ✓ Pre-watering of soils prior to trenching is an effective preventive measure. For deep trenching activities, pre-trench to 18 inches soak soils via the pre-trench and resuming trenching ✓ Washing mud and soils from equipment at the conclusion of trenching activities can prevent crusting and drying of soil on equipment
Truck loading	17-1 Pre-water material prior to loading; and 17-2 Ensure that freeboard exceeds six inches (CVC 23114)	 ✓ Empty loader bucket such that no visible dust plumes are created ✓ Ensure that the loader bucket is close to the truck to minimize drop height while loading
Turf Overseeding	18-1 Apply sufficient water immediately prior to conducting turf vacuuming activities to meet opac and plume length standards; and	✓ Haul waste material immediately off-site
	18-2 Cover haul vehicles prior to exiting the site.	

Source Category	Control Measure	Guidance
Unpaved roads/parking lots	19-1 Stabilize soils to meet the applicable performance standards; and	✓ Restricting vehicular access to established unpaved travel paths and parking lots can
	19-2 Limit vehicular travel to established unpaved road (haul routes) and unpaved parking lots.	reduce stabilization requirements
Vacant land	20-1 In instances where vacant lots are 0.10 acre or larg and have a cumulative area of 500 square feet or more that are driven over and/or used by motor vehicles and/or off-road vehicles, prevent motor vehicle and/or off-road vehicle trespassing, parking and/or access by installing barriers, curbs, fences, gates, posts, signs, shrubs, trees or other effective control measures.	

Table 2
DUST CONTROL MEASURES FOR LARGE OPERATIONS

	1,122126	UKES FOR LANGE OF EKATIONS
FUGITIVE DUST SOURCE CATEGORY		CONTROL ACTIONS
Earth-moving (except construction cutting and filling areas, and mining operations)	(1a)	Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations each subsequent four-hour period of active operations; OR
	(1a-1)	For any earth-moving which is more than 100 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 100 feet in length in any direction.
Earth-moving: Construction fill areas:	(1b)	Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. For areas which have an optimum moisture content for compaction of less than 12 percent, as determined by ASTM Method 1557 or other equivalent method approved by the Executive Officer and the California Air Resources Board and the U.S. EPA, complete the compaction process as expeditiously as possible after achieving at least 70 percent of the optimum soil moisture content. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations during each subsequent four-hour period of active operations.

Table 2 (Continued)

		able 2 (Continued)
FUGITIVE DUST SOURCE CATEGORY		CONTROL ACTIONS
Earth-moving: Construction cut areas and mining operations:	(1c)	Conduct watering as necessary to prevent visible emissions from extending more than 100 feet beyond the active cut or mining area unless the area is inaccessible to watering vehicles due to slope conditions or other safety factors.
Disturbed surface areas (except completed grading areas)	(2a/b)	Apply dust suppression in sufficient quantity and frequency to maintain a stabilized surface. Any areas which cannot be stabilized, as evidenced by wind driven fugitive dust must have an application of water at least twice per day to at least 80 percent of the unstabilized area.
Disturbed surface areas: Completed grading areas	(2c)	Apply chemical stabilizers within five working days of grading completion; OR Take actions (3a) or (3c) specified for inactive disturbed surface areas.
Inactive disturbed surface areas	(3a) (3b) (3c) (3d)	Apply water to at least 80 percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind driven fugitive dust, excluding any areas which are inaccessible to watering vehicles due to excessive slope or other safety conditions; OR Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR Establish a vegetative ground cover within 21 days after active operations have ceased. Ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; OR Utilize any combination of control actions (3a), (3b), and (3c) such that, in total, these actions apply to all inactive disturbed surface areas.

Table 2 (Continued)

		ie 2 (Continueu)
FUGITIVE DUST SOURCE CATEGORY		CONTROL ACTIONS
Unpaved Roads	(4a)	Water all roads used for any vehicular traffic at least once per every two hours of active operations [3 times per normal 8 hour work day]; OR
	(4b)	Water all roads used for any vehicular traffic once daily and restrict vehicle speeds to 15 miles per hour; OR
	(4c)	Apply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface.
Open storage piles	(5a)	Apply chemical stabilizers; OR
	(5b)	Apply water to at least 80 percent of the surface area of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust; OR
	(5c)	Install temporary coverings; OR
	(5d)	Install a three-sided enclosure with walls with no more than 50 percent porosity which extend, at a minimum, to the top of the pile. This option may only be used at aggregate-related plants or at cement manufacturing facilities.
All Categories	(6a)	Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 2
		may be used.

TABLE 3
CONTINGENCY CONTROL MEASURES FOR LARGE OPERATIONS

		OL MEASURES FOR LANGE OF ERATIONS
FUGITIVE DUST		
SOURCE		CONTROL MEASURES
CATEGORY		
Earth-moving	(1A)	Cease all active operations; OR
	(2A)	Apply water to soil not more than 15 minutes prior to moving such soil.
Disturbed surface areas	(0B)	On the last day of active operations prior to a weekend, holiday, or any other period when active operations will not occur for not more than four consecutive days: apply water with a mixture of chemical stabilizer diluted to not less than 1/20 of the concentration required to maintain a stabilized surface for a period of six months; OR
	(1B)	Apply chemical stabilizers prior to wind event; OR
	(2B)	Apply water to all unstabilized disturbed areas 3 times per day. If there is any evidence of wind driven fugitive dust, watering frequency is increased to a minimum of four times per day; OR
	(3B)	Take the actions specified in Table 2, Item (3c); OR
	(4B)	Utilize any combination of control actions (1B), (2B), and (3B) such that, in total, these actions apply to all disturbed surface areas.
Unpaved roads	(1C)	Apply chemical stabilizers prior to wind event; OR
	(2C)	Apply water twice per hour during active operation; OR
	(3C)	Stop all vehicular traffic.
Open storage piles	(1D)	Apply water twice per hour; OR
	(2D)	Install temporary coverings.
Paved road track-out	(1E)	Cover all haul vehicles; OR
	(2E)	Comply with the vehicle freeboard requirements of Section 23114 of the California Vehicle Code for both public and private roads.
All Categories	(1F)	Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 3 may be used.

Table 4 (Conservation Management Practices for Confined Animal Facilities)

(Conscivation	IVIAII	agement Practices for Confined Animal Facilities)
SOURCE CATEGORY		CONSERVATION MANAGEMENT PRACTICES
Manure	(1a)	Cover manure prior to removing material off-site; AND
Handling	(1b)	Spread the manure before 11:00 AM and when wind conditions are less than 25 miles per hour; AND
(Only	(1c)	Utilize coning and drying manure management by removing
applicable to	(10)	manure at laying hen houses at least twice per year and maintain
Commercial		a base of no less than 6 inches of dry manure after clean out; or
Poultry		in lieu of complying with conservation management practice
Ranches)		(1c), comply with conservation management practice (1d).
Kanches)	(1d)	Utilize frequent manure removal by removing the manure from
	(14)	laying hen houses at least every seven days and immediately
		thin bed dry the material.
Feedstock	(2a)	Utilize a sock or boot on the feed truck auger when filling feed
Handling	(24)	storage bins.
Disturbed	(3a)	Maintain at least 70 percent vegetative cover on vacant portions
Surfaces	(34)	of the facility; OR
	(3b)	Utilize conservation tillage practices to manage the amount,
	(00)	orientation and distribution of crop and other plant residues on
		the soil surface year-round, while growing crops (if applicable)
		in narrow slots or tilled strips; OR
	(3c)	Apply dust suppressants in sufficient concentrations and
	, í	frequencies to maintain a stabilized surface.
Unpaved	(4a)	Restrict access to private unpaved roads either through signage
Roads		or physical access restrictions and control vehicular speeds to
		no more than 15 miles per hour through worker notifications,
		signage, or any other necessary means; OR
	(4b)	Cover frequently traveled unpaved roads with low silt content
		material (i.e., asphalt, concrete, recycled road base, or gravel to
	.	a minimum depth of four inches); OR
	(4c)	Treat unpaved roads with water, mulch, chemical dust
		suppressants or other cover to maintain a stabilized surface.
Equipment	(5a)	Apply dust suppressants in sufficient quantity and frequency to
Parking Areas		maintain a stabilized surface; OR
	(5b)	Apply material with low silt content (i.e., asphalt, concrete,
		recycled road base, or gravel to a depth of four inches).



Appendix E Site Geology and Hydrogeology



Appendix E

Site Geology and Hydrogeology

The Site is located in the Beverly Grove neighborhood of the City of Los Angeles. According to the Geologic Map of California, Los Angeles Sheet (1962), the surface geology is primarily Holocene aged surficial sediments (geological unit Qa). The sediments are described as alluvial gravel, sand, and silt-clay, derived mostly from Santa Monica Mountains and includes gravel and sand of stream channels. The Site also appears to be on the border of the San Vicente Oil and Salt Lake oil fields and is located in a City of Los Angeles methane zone. According to the United States Geological Survey (USGS) Hollywood and Beverly Hills Quadrangles topographic maps, the Site is situated approximately 150 feet above mean sea level, and slopes to the southeast.

According to the United States Department of Agriculture Soil Survey, the Site is underlain by soils referenced as Urban land- Biscailuz- Pico complex (zero to two percent slopes) primarily, which consist largely of loam with sandy layers.

The Site is located within the Hollywood Basin on the Hollywood Piedmont Slope. The Hollywood Basin is located south of the Santa Monica Mountains and east of the Newport-Inglewood uplift. Deep aquifers beneath the Site include the Exposition and Gage Aquifers of the Lakewood Formation and the Jefferson, Lynwood, Silverado and Sunnyside aquifers of the San Pedro Formation (DWR, 1961).

Groundwater monitoring wells MW-13 and MW-14 are adjacent to the Site in Holt Street on the west and San Vicente Boulevard on the east, respectively. Groundwater was encountered at approximately 17 feet below ground surface (bgs) in both wells during installation. The boring log for MW-13 indicates clay and sandy clay from the surface to 17 feet bgs, gravelly and clayey sand from 17 feet to 26 feet bgs, clay from 26 feet to 30 feet bgs and gravel from 30 feet to 39 feet bgs. The boring log for MW-14 indicated road base and fill from surface to three feet bgs, sand from 3 feet to 12 feet bgs, clay from 12 feet to 18 feet bgs, gravelly sand from 18 feet to 25 feet bgs, clay from 25 feet to 30 feet bgs, and sand and gravel from 30 feet to 44 feet bgs. The upper groundwater zone corresponds to the gravelly sand encountered between approximately 17 feet and 25 feet bgs in both wells and the lower aquifer corresponds to the sands and gravels encountered between 30 feet and 40 feet bgs in both wells. An aquitard between approximately 25 and 30 feet bgs in both wells separates the two groundwater zones (Reynolds Group, 2012).

Current groundwater information for the former Merry Go Round Cleaners indicated groundwater elevation for the upper aquifer between 12.98 and 19.77 feet bgs in December 2017 (EnviroMonitoring, 2018). Due to an artificial groundwater gradient generated by the groundwater pump and treat (P&T) system currently operating at the dry cleaner site and dewatering activities at the Cedar-Sinai Medical Center located north of the dry cleaners, the upper aquifer gradient is highly variable. The historic upper aquifer gradient appears to be to the south and southeast but is influenced by the dewatering activities at the dry cleaner and the hospital sites. According to the recent data, the Site appears to be at the edge of the influence of the dewatering activities of the two sites to the north and the local gradient may be trending to the north, towards these sites.

Groundwater during Citadel's 2018 investigation was limited to the upper aquifer and was encountered at approximately 17 feet bgs.

During Citadel's 2019 investigation, the soil in each boring appeared to be primarily clay and silt initially, becoming clay with fine sand at approximately 15 feet depth, and then interspersed with layers of gravelly clay and fine to coarse sand down to approximately 55 feet depth, at which time



SOIL MANAGEMENT PLAN - APPENDICES 333 SOUTH SAN VICENTE BOULEVARD LOS ANGELES, CALIFORNIA

it became denser, silty clay. Groundwater was encountered at 23 feet bgs in B1, 28 feet bgs in B2, 29 feet bgs in B3 and B4, 33 feet bgs in B5, and 34 feet bgs in B6.

References:

California Department of Water Resources (DWR), 1961. Planned Utilization of the Ground Water Basins of the Coastal Plan of Los Angeles County, Bulleting No. 104, Appendix A, Ground Water Geology. June.

EnviroMonitoring Services, Inc. (EnviroMonitoring), 2018. Groundwater Monitoring Report, Second Semester 2017, Perfect Cleaners Facility, Former Merry Go Round Dry Cleaners, 8550 West Third Street, Los Angeles California, RWQCB Site ID No. 18468, January 16, 2018.

United States Geological Survey (USGS), Canoga Park Quadrangle, 7.5-minute topographic map, scale 1:24000, 2018.



Appendix F SCAQMD Rule 1166 -Permit Compliance Procedures



SOIL MANAGEMENT PLAN - APPENDICES 333 SOUTH SAN VICENTE BOULEVARD LOS ANGELES, CALIFORNIA DECEMBER 20, 2019

Appendix F

SCAQMD Rule 1166 Permit Compliance Procedures

If a SCAQMD 1166 permit is required or is necessary to evaluate odorous or discolored soils, a soil monitor will be present onsite to continuously monitor air emissions and record measurements at 15-minute intervals using a direct reading organic vapor analyzer (OVA), or equivalent if necessary. Soil monitoring is not necessary unless subsurface materials or potential contamination is encountered.

The following procedure will be conducted to comply with the Rule 1166 requirements, if and to the extent necessary:

- Prior to the start of soil disturbance, prepare a Site-specific Air and Particulate Monitoring and Mitigation Plan (Mitigation Plan - SCAQMD Forms 400-A and 400-CEQA) to be submitted to the SCAQMD for its approval.
- Submit a Rule 1166 notification to SCAQMD at least 24 hours prior to performing the activities covered in the Mitigation Plan.
- Perform monitoring and mitigation activities in compliance with the SCAQMD Rule 1166 requirements and the approved Site-specific Mitigation Plan. Make the required notifications to SCAQMD as necessary.
- After completion of the earthwork activities, prepare and submit a written report to SCAQMD that will document the monitoring and mitigation activities performed at the Site.
- An OVA will be onsite during excavation activities in the potential areas of concern. The OVA will be maintained in good working condition and calibrated by the manufacturer at least once every three months. Calibration of the OVA will be verified using certified calibration gas at the beginning of each working day with the procedures specified by the manufacturer. If a calibration gas other than hexane is used, each measured reading will be correlated to and expressed as hexane, using equivalency factors provided by the manufacturer. In the event that Inconsistent or erratic readings are experienced, or the OVA becomes otherwise inoperable, all excavation activities will cease until the OVA is repaired or replaced.
- All monitoring will be conducted at a distance no more than three inches above the soil surface using an OVA as described above. Monitoring will be initially conducted at a minimum frequency of one reading every 15 minutes. Upon detection of VOC contamination at or above 50 ppm, monitoring will be conducted at a minimum rate of one reading for every five cubic yards excavated. All readings will be taken no later than three minutes after each load of soil is excavated.
- Upon detection of VOC readings greater than 50 ppm, or stained and odorous soils, excavation activities in the immediate vicinity will stop. A representative soil sample will then be obtained by the environmental monitor for analysis. Due to potential limited staging areas, excavation activities may continue in another location until the laboratory analysis has been completed. If hazardous soil is encountered, the environmental consultant will alert the Owner and Contractor to the condition. Appropriate responses may include Personal Protective Equipment (PPE) revisions, work stoppage or additional testing.
- The SCAQMD will be notified within 24 hours of the first detection of VOC measurements over 50 ppm. The notification will be made by faxing the notification form to (909) 396-3342. A reference number will be faxed back or will be issued when the fax notification is



SOIL MANAGEMENT PLAN - APPENDICES 333 SOUTH SAN VICENTE BOULEVARD LOS ANGELES, CALIFORNIA

received. All fax notifications shall be followed by mailing the notification form to the district postmarked within 48 hours. The reference number will be retained as proof of compliance with this requirement.

- If soil is encountered visually or physically observed showing dark staining or strong odor, samples will be collected and analyzed.
- All VOC-contaminated soil removed from the site will be addressed as follows:
 - A. Such soil will be transported to an approved treatment/disposal facility. It will be the responsibility of the Contractor to ensure that the receiving treatment/disposal facility has received approval from the appropriate environmental oversight agencies to handle and treat contaminated soils.
 - B. When loading is completed and during transportation, no excavated material will extend above the sides or rear of the truck or trailer.
 - C. Prior to covering/tarping, loaded contaminated soil will be wetted by spraying with mist inhibitors.
 - D. The truck or trailer will be completely covered/tarped prior to leaving the site to prevent particulate emissions to the atmosphere.
 - E. The exterior of the trucks (including the tires) will be cleaned off prior to the trucks leaving the excavation site.
- Records of treatment/disposal will be maintained for all VOC-contaminated soil removed from this Site.



Appendix G SCAQMD Rule 403 -Compliance Procedures



SOIL MANAGEMENT PLAN - APPENDICES 333 SOUTH SAN VICENTE BOULEVARD LOS ANGELES, CALIFORNIA DECEMBER 20, 2019

Appendix G

SCAQMD Rule 403 Compliance Procedures

SCAQMD requires that Rule 403 for Fugitive Dust be followed to reduce the amount of particulate matter entrained into ambient air as a result of normal construction activities. This rule is intended to limit the emissions of fugitive dust or particulate matter from a variety of activities and sources such as construction sites, bulk material hauling, unpaved parking lots, and disturbed soil in open areas and vacant lots; this rule applies to any activity or man-made condition capable of generating fugitive dust. Please refer to Appendix F for SCAQMD Rule 403.

- Rule 403 requires that fugitive dust generated during any activity or man-made condition such as excavation, demolition, construction, and soil disturbance, shall be prevented, reduced or mitigated.
- As part of all earth moving and construction/demolition activities, disturbed surface area, or heavy and light duty vehicular movement, no person shall cause or allow the emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area such that:
 - o The dust remains visible in the atmosphere beyond the property line of the emission source: or
 - o The dust emission exceeds 20 percent opacity (as determined by the appropriate test method included in the Rule 403 Implementation Handbook), if the dust emission is the result of movement of a motorized vehicle.
- All onsite activities shall be conducted utilizing the best available control measures included in Table 1 of the rule, to minimize fugitive dust emissions from each dust source type, such as high-pressure water sprayers, fire hoses and water trucks where applicable.
- Track-out shall not extend to 25 feet or more in cumulative length from the point of origin of an active operation. Notwithstanding this, all track-out shall be removed at the conclusion of each workday or evening shift.
- No person shall conduct an active operation with a disturbed surface area of five or more
 acres, or with a daily import or export of 100 cubic yards or more of bulk material without
 utilizing at least one of the five measures listed in the rule at each vehicle egress from the
 Site to a public paved road.



Appendix H SWPPP BMPs Implementation



SOIL MANAGEMENT PLAN - APPENDICES 333 SOUTH SAN VICENTE BOULEVARD LOS ANGELES, CALIFORNIA DECEMBER 20, 2019

Appendix H

SWPPP BMPs Implementation

Erosion Control, also referred to as soil stabilization, is a source control measure that is designed to prevent soil particles from detaching and becoming transported in the storm water runoff. Erosion Control BMPs protect the soil surface by covering and/or binding the soil particles.

All inactive soil disturbed areas on the Site, and most active areas prior to the onset of rain, must be protected from erosion. Soil disturbed areas may include relatively flat areas as well as slopes. Inactive areas include areas of construction activity that have been disturbed but are not currently being worked on and are not scheduled to be re-disturbed for at least 14 days. In addition to the soil management practices described above, temporary erosion control/soil stabilization measures shall be implemented as needed, including installing perimeter sediment controls along the Site perimeter as at active drain inlets and sediment basins, and applying hydraulic mulch to graded slopes or pads that will be inactive for a long period of time. The objective of implementing these temporary measures is to prevent any potentially contaminated soil from entering in the storm water runoff.

Sediment controls are structural measures that are intended to complement and enhance the soil stabilization/erosion control measures and reduce sediment discharges from construction areas. Sediment controls are designed to intercept and filter out soil particles that have been detached and transported by the force of water. Temporary sediment control measures shall be implemented onsite as required. These may include sediment traps, check dams, fiber rolls, and gravel bag berms. Visible sediment tracking onto public and private streets from the Site shall be inspected and swept regularly and prior to a rain event, to prevent potentially contaminated soil from entering storm drains and receiving waters.

Tracking Control BMPs shall be implemented throughout the duration of the project, at all access (ingress/egress) points to the Site where equipment or trucks laden with contaminated soil may track sediment from the Site onto public or private roadways.

Wind erosion control BMPs shall be implemented throughout the duration of the project on all disturbed soils on the Site that are subject to wind erosion, and when significant wind and dry conditions are anticipated. The objective of wind controls is to prevent the transport of potentially contaminated soil from soil-disturbed areas of the Site, offsite by wind. Wind erosion control BMPs may include dust control measures such as construction watering, and wind screen fencing in the perimeter of the Site.