

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

## **Preliminary Draft Staff Report Proposed Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants**

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### **Deputy Executive Officer**

Planning, Rule Development, and Area Sources  
Philip M. Fine, Ph.D.

### **Assistant Deputy Executive Officer**

Planning, Rule Development, and Area Sources  
Susan Nakamura

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Author: Uyen-Uyen Vo – Air Quality Specialist

Contributors: Ian MacMillan – Planning and Rules Manager  
Jillian Wong – Planning and Rules Manager  
Garrett Kakishita – Supervising Air Quality Inspector  
John Anderson – Air Quality Analysis and Compliance Supervisor  
Charles Tupac – Air Quality Analysis and Compliance Supervisor  
Amanda Sanders – Supervising Air Quality Inspector  
Angela Shibata – Senior Air Quality Engineer  
Melissa Sheffer – Air Quality Specialist  
Charlene Nguyen – Student Intern

Reviewed by: Michael Morris – Program Supervisor  
Megan Lorenz – Principal Deputy District Counsel  
Shahrzod Hanizavareh – Deputy District Counsel II

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WAYNE NASTRI

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## INTRODUCTION

The South Coast Air Quality Management District (SCAQMD) is the lead air pollution agency in the South Coast Air Basin (SCAB) and has jurisdiction over all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The SCAQMD performs inspections of more than 27,000 facilities in the Basin and Coachella Valley, in addition to responding to thousands of public complaints regarding air quality.

Soils with toxic air contaminants have the potential to become airborne during earth-moving activities such as excavation, grading, and stockpiling. The purpose of Proposed Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants (Proposed Rule 1466) is to minimize the amount of offsite fugitive dust emissions containing toxic air contaminants by establishing dust control measures that can be implemented during earth-moving activities at sites that contain certain toxic air contaminants. Proposed Rule 1466 will focus on the following toxic air contaminants: arsenic, asbestos, cadmium, hexavalent chromium, lead, mercury, nickel, and polychlorinated biphenyls. The provisions in Proposed Rule 1466 include PM<sub>10</sub> monitoring, dust control measures, notification, recordkeeping, and signage requirements.

## BACKGROUND

Proposed Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants will reduce fugitive non-volatile toxic air contaminant emissions from contaminated sites. It will apply to sites conducting earth-moving activities where soils contain specific toxic air contaminants as determined and designated by either U.S. EPA, DTSC, State Water Board, or Regional Water Board. Additionally, the proposal authorizes the Executive Officer to impose rule requirements at sites that contain soils with these specific toxic air contaminants that have not yet been designated by another regulatory agency. The proposal will establish a PM<sub>10</sub> ambient dust concentration limit and dust control measures at cleanup sites and will require notification to the Executive Officer when cleanup operations begin as well as when PM<sub>10</sub> emission limits are not met. Sites will be required to install and maintain signage to inform the community and discourage unauthorized access. Records of monitoring readings and other site activities will be maintained. The proposal will also include additional requirements for sites that are schools or early education centers.

The provisions in the proposed rule provide requirements for regulatory agencies and entities that are conducting soil cleanup activities at sites that contain high levels of arsenic, asbestos, cadmium, hexavalent chromium, lead, mercury, nickel, and polychlorinated biphenyls. The regulatory agencies that typically require these types of cleanup operations will normally require an action plan and the provisions in this proposed rule are designed to be incorporated into such plans. Proposed Rule 1466's PM<sub>10</sub> emission limit and best management practices are intended to be baseline requirements and do not preclude the designating agency from implementing more stringent limits or measures. In situations where additional regulatory flexibility is necessary, the proposed rule allows alternative dust control measures.

## **REGULATORY BACKGROUND**

SCAQMD has existing rules that address various aspects of fugitive dust (Rule 403 – Fugitive Dust) and volatile organic compounds (VOCs) contaminated soil (Rule 1166 – Volatile Organic Compound Emissions from Decontamination of Soil). However, these existing SCAQMD rules do not specifically address soils containing particulate toxic air contaminants.

### **SCAQMD Rules**

Rule 1166 reduces VOC emissions, including toxic-VOCs, from contaminated soils. The rule includes provisions for mitigation plans to limit VOC emissions, notification and monitoring requirements, as well as measures to reduce VOCs during stockpiling and truck loading. Rule 403 limits particulate matter emissions from fugitive dust sources. The rule limits dust concentrations, when monitored, and contains best available control measures to limit fugitive dust. Rule 403 provides a menu of dust control guidance and options for the operator to select. Additional provisions, including more specific dust control measures, are included for large operations and for operations where fugitive dust concentrations exceed performance standards. Together, the existing regulatory structure addresses VOC emissions and ordinary dust caused by earth-moving activities, but does not address exposure to metal or other particulate toxic air contaminants caused by such activities.

In many cases where earth-moving activity occurs, Rule 1166 will not apply because there are no VOC contaminants of concern. Also, many of the sites are not large enough to be considered a large site under Rule 403 and thus those sites would not have to implement the additional measures required of large sites. Finally, ambient dust monitoring is not always required under Rule 403. But even when monitoring is required, the PM<sub>10</sub> ambient dust concentration limit may not be sufficiently health protective. Non-volatile toxic air contaminants such as arsenic, asbestos, cadmium, hexavalent chromium, lead, mercury, nickel, and polychlorinated biphenyls pose much greater health risks than ordinary dust. Fugitive non-volatile toxic air contaminants have the potential to settle in the neighborhoods around contaminated sites and expose nearby receptors for months or years afterwards. Therefore, additional provisions are necessary to minimize the re-entrainment of toxic particulates into the air from sites that contain soils with toxic air contaminants.

### **Oversight Agencies for Investigation and Clean-up of Hazardous Waste Sites**

In addition to SCAQMD rules, federal, state, and local regulatory agencies have programs that oversee the investigation and cleanup of hazardous waste sites. The U.S. Environmental Protection Agency's (U.S. EPA) program is referred to as the Federal Superfund National Priorities List. California's Department of Toxic Substances Control's (DTSC's) cleanup program is the Brownfields and Environmental Restoration Program. The State Water Resources Control Board (State Water Board) and Regional Water Quality Control Board (Regional Water Board) refer to their programs as Site Cleanup Programs. Investigations performed by oversight agencies typically begin with a preliminary assessment of the potentially contaminated site. A more detailed site assessment will be conducted if the preliminary assessment shows the possibility of contamination and threat to human health and/or the environment, which determines which sites are designated as requiring some type of cleanup activity. The designating agency will then require a remedial or removal action plan. The plans typically contain an introduction with the cleanup objective, background on the site with the description and geology, the contaminants of concern,

risk evaluation, an overview of the actions that will be taken to clean up the site, and the schedule for activities, among other topics. These cleanup actions often contain a dust mitigation component that includes selected measures from SCAQMD Rule 403 and Rule 1166. The cleanup sites implement the dust mitigation portion of the action plan by applying water or chemical stabilizers, limiting operations during high-wind conditions, and generally complying with the basic provisions of Rule 403. Cleanup actions are generally completed within two to three months, but may take one year or longer on larger sites.

## **PUBLIC PROCESS**

Development of Proposed Rule 1466 is being conducted through a public process. SCAQMD has held two working group meetings at the SCAQMD Headquarters in Diamond Bar on March 16, 2017, and April 13, 2017. The Working Group is composed of representatives from businesses, environmental groups, public agencies, and consultants. The purpose of the working group meetings is to discuss proposed concepts and to work through the details of staff's proposal. In addition, a Public Workshop is scheduled for May 10, 2017.

## **PROPOSED RULE 1466**

### **Purpose (Subdivision (a))**

The purpose of Proposed Rule 1466 is to minimize the amount of offsite fugitive dust emissions containing arsenic, asbestos, cadmium, hexavalent chromium, lead, mercury, nickel, and polychlorinated biphenyls. Offsite fugitive dust emissions will be minimized by reducing particulate emissions as a result of earth-moving activities of soils that contain these toxic air contaminants from sites that meet the applicability requirements.

### **Applicability (Subdivision (b))**

The proposed rule will be applicable to any owner or operator conducting earth-moving activities at cleanup sites designated by the U.S. EPA, DTSC, State Water Board, or Regional Water Board that contain arsenic, asbestos, cadmium, hexavalent chromium, lead, mercury, nickel, and polychlorinated biphenyls. While many sites contain these compounds at background levels, only sites with these compounds listed as a contaminant of concern would be subject to the proposed rule. Sites may also be designated by the Executive Officer as being subject to the rule. The Executive Officer would make such a designation when a site has not yet been declared a cleanup site by another regulatory agency and has: cadmium, hexavalent chromium, lead, mercury, nickel, and/or polychlorinated biphenyls at concentrations greater than Office of Environmental Health Hazard Assessment's California Human Health Screening Level; arsenic in concentrations greater than 12 ppm; and/or asbestos in concentrations greater than 2,500 ppm. In such a case, the owner or operator of the site would be notified by the Executive Officer that Rule 1466 would apply. Once notified, the site must be in compliance with Rule 1466 and enforcement action can be taken.

In general, the dust control measures for the proposed rule are effective once earth-moving activities commence. For example, if a Superfund site identified perchloroethylene as a contaminant of concern, but soil samples showed arsenic present at 10 ppm, then Proposed Rule 1466 would not be applicable. Another example is the situation wherein a cleanup site certified by DTSC has remediated contaminated soil by capping the contaminated area. If the site wants to move forward with earth-moving activities on the clean soil above the cap, Proposed Rule 1466

would not apply because the activities would not disturb the contaminated area. Another example in which Proposed Rule 1466 would not apply is where a preliminary assessment by the Regional Water Board revealed that lead was present but determined that it was at concentrations below levels of concern. In such a case, no further action would be required.

**Definitions (Subdivision (c))**

Most of the definitions in the proposed rule are directly taken from Rules 403 and 1403 with slight modifications to maintain consistency and to address toxic air contaminants rather than dust or asbestos, respectively.

Rule 403

Bulk Material  
Chemical Stabilizers  
Contractor  
Disturbed Surface Area  
Dust Suppressant  
Earth-Moving Activities  
Fugitive Dust  
Paved Road  
Property Line  
Stabilized Surface  
Stockpile (Formerly "Open Storage Pile")  
Track-Out  
Wind-Driven Fugitive Dust  
Wind Gust

Rule 1403

Adequately Wet

Rule 102

Owner or Operator (Adapted from "Person")

New definitions are as follows:

Applicable Toxic Air Contaminants include: arsenic, asbestos, cadmium, hexavalent chromium, lead, mercury, nickel, and polychlorinated biphenyls. The applicable toxic air contaminants were selected from those commonly found at contaminated sites above background levels that have negative health effects.

Near Real-Time is used in this proposed rule when discussing continuous data logging and allows for the time delay for processing and transmission.

Soils with Applicable Toxic Air Contaminant(s) are soils that have been identified by: (1) the designating agency as containing an Applicable Toxic Air Contaminant or (2) the Executive Officer as containing cadmium, hexavalent chromium, lead, mercury, nickel, or polychlorinated biphenyls at concentrations greater than Office of Environmental Health Hazard Assessment's

California Human Health Screening Level (CHHSL), arsenic in concentrations greater than 12 ppm, and/or asbestos in concentrations greater than 2,500 ppm. The CHHSLs are routinely used to determine if a site is contaminated. The CHHSL for arsenic is below background level so DTSC's screening level of 12 ppm was used instead. Asbestos does not have a CHHSL and so a threshold of 0.25% (2,500 ppm) was used.

#### **Monitoring Requirements (Subdivision (d))**

Due to the toxic nature of the applicable toxic air contaminants, the requirements set forth in Proposed Rule 1466 are more stringent than the requirements contained in Rule 403. Under the proposed rule, the difference in ambient PM<sub>10</sub> concentrations between upwind and downwind monitors, averaged over an hour, must be 25 µg/m<sup>3</sup> or less as compared to Rule 403 where dust concentrations are limited to 50 µg/m<sup>3</sup> averaged over five hours. If the ambient dust concentration limit is exceeded, the owner or operator must immediately stop all earth-moving activities and apply dust suppressant to all fugitive dust sources or employ necessary dust control measures until the PM<sub>10</sub> concentration drops below 25 µg/m<sup>3</sup>, averaged over 30 minutes.

Under Proposed Rule 1466, PM<sub>10</sub> monitoring must occur at all times when earth-moving activities are conducted and during any vehicle movement on the site. PM<sub>10</sub> monitoring must be continuous near real-time and the method must be a federal equivalent method or an Executive Officer approved method. There must be a minimum of one upwind and one downwind monitor. The upwind monitor(s) needs to be located in an area that is not generally influenced by any of the fugitive dust sources from the site and that is indicative of background PM<sub>10</sub> levels in the area. The downwind monitor(s) needs to be located as close to the property line as possible and in the predominant downwind direction of the earth-moving activity. The monitors must be operated, maintained, and calibrated. Also, the monitors must be equipped with a data acquisition system that is able to record near real-time continuous data, date, time, and PM<sub>10</sub> concentration in µg/m<sup>3</sup> every 10 minutes or less. There is also a requirement to monitor wind direction and speed as specified in *SCAQMD Rule 403 Fugitive Dust Implementation Handbook*.

PM<sub>10</sub> is calculated by taking the difference between the hourly average of the upwind and downwind monitors. The hourly average PM<sub>10</sub> concentration will start at the top of each hour. If there are multiple upwind monitors, the value for the hourly average upwind PM<sub>10</sub> concentration is the average of the hourly average PM<sub>10</sub> concentration of the all the upwind monitors. If there are multiple downwind monitors, the value for the hourly average downwind PM<sub>10</sub> concentration is the hourly average of the downwind monitor with the maximum PM<sub>10</sub> concentration. For example, if a site has two upwind monitors with hourly average PM<sub>10</sub> concentrations of 68 and 72 µg/m<sup>3</sup> and three downwind monitors with hourly average PM<sub>10</sub> concentrations of 83, 77, and 81 µg/m<sup>3</sup>, the upwind hourly average would be 70 µg/m<sup>3</sup> and the downwind hourly average would be 83 µg/m<sup>3</sup>, for a difference of 13 µg/m<sup>3</sup>.

#### **Requirements to Minimize Fugitive Dust Emissions (Subdivision (e))**

The dust control measures in Proposed Rule 1466 are primarily adaptations of measures from Rules 403, 1166, and 1403. Proposed Rule 1466 uses a more prescriptive approach of specifying the dust control measures to be taken in order to be more health protective since the soils contain toxic air contaminants. These dust control measures are to be performed only when earth-moving

activities occur where soils contain the applicable toxic air contaminants. The owner or operator may utilize alternative dust control measures provided they are approved by the Executive Officer.

#### Dust Control Measures

- A windscreen shall surround the area of the earth-moving activities to provide a wind break, act as containment, provide security, and limit access to unauthorized persons. The windscreen must be at least 6 feet tall and must be as tall as the highest stockpile and must have a porosity of 50%.
- All earth-moving activities on soil with toxic air contaminants, shall only be conducted when adequately wet. The wet soil will prevent the generation of visible dust plumes and limit fugitive dust.
- To minimize fugitive dust from vehicle movement, the site shall post signs at all entrances and limit vehicle speeds to 15 miles per hour and stabilize roads and parking areas by applying gravel, paving, chemical stabilizer, or water. The following measures prevent bulk material leaving the site. Prior to leaving the site, trucks must clean the bulk material from their trucks, including the trailer and tires. Each vehicle egress from the site to a paved public road shall employ at least one of the following measures: 1) install a pad that consists of washed gravel (minimum-size: one inch) to a depth of at least six inches, a width of at least 30 feet wide, and at length of at least 50 feet; 2) pave the surface so that it extends at least 100 feet from the property line and is at least 20 feet wide; 3) utilize a wheel shaker or wheel spreading device that consists of raised dividers (rails, pipe, or grates) at least 24 feet long and 10 feet wide; or 4) install and utilize a wheel washing system to remove bulk material from tires and vehicle undercarriages. Any track out created shall not extend more than 25 feet from the property line and must be removed using a HEPA vacuum at the end of each day.
- Several dust control measures are proposed for stockpiles containing soil with applicable toxic air contaminants. Those stockpiles shall be segregated from uncontaminated soil, labeled “SCAQMD Rule 1466 Contaminated Soil” with the applicable toxic air contaminants listed, and shaped so that there are no steep sides or faces that exceed the angle of repose. The stockpiles shall not be greater than 400 cubic yards or exceed the height of the perimeter fencing and windscreen. Stockpiles shall be kept adequately wet and/or chemically stabilized. At the end of the work day, the stockpiles must be chemically stabilized or completely covered. If the stockpile is being covered, the cover must be 10 mil thick plastic sheeting, the seams must have a minimum overlap of 24 inches, and the cover must be anchored and secured. Stabilized or covered contaminated stockpiles shall be inspected daily and immediately re-stabilized or repaired as necessary.
- When loading trucks with contaminated soil, the soil shall be adequately wet and emptied slowly with a minimal drop height so that no visible dust plumes are generated. When moving within the site, the trailer must maintain at least six inches of freeboard and shall be made completely covered with a tarp prior to leaving the site.
- When unloading of soil with applicable toxic air contaminants, the soil shall be adequately wet and emptied slowly so that no visible dust plumes are generated.
- All spills of soil containing applicable toxic air contaminants must be immediately cleaned up. This will ensure that all contaminated soil is handled appropriate and not left over on the site or vulnerable to become airborne.

- If wind speeds exceed 25 miles per hour (mph) averaged over a 15-minute period or instantaneous wind speeds exceed 15 mph, all earth-moving activities of soils with applicable toxic air contaminants must stop. The high winds will create wind-driven fugitive dust, ceasing activity will ensure that the owner or operator is not adding the fugitive dust.
- All sites conducting earth-moving activity of soil with applicable toxic air contaminants must employ an onsite dust control supervisor. The onsite dust control supervisor must be on the site during working hours, ensure compliance with all Rule 1466 requirements, and have completed the AQMD Fugitive Dust Control Class with a valid Certificate of Completion. If one of the applicable toxic air contaminants is asbestos, the onsite dust control supervisor shall also be trained according to Rule 1403 requirements for the on-site representative. The onsite dust control supervisor will be responsible for keeping the site below  $25 \mu\text{g}/\text{m}^3$   $\text{PM}_{10}$  and will specify which dust control measures to employ if the site does exceed  $25 \mu\text{g}/\text{m}^3$   $\text{PM}_{10}$ .
- To prevent wind-driven fugitive dust, if a site will be inactive for three or more consecutive days, all potential sources of fugitive dust will need to be stabilized. The areas must be stabilized with water and chemical stabilizer in a concentration that is equal to 5% of what would be required to maintain a stabilized surface for six months.
- Additional requirements for sites that are on school grounds or early education centers include:
  - Not being allowed to conduct any earth-moving activities when school is in session or during a school sponsored activity; and
  - Requiring the soil to be placed in leak-tight containers, directly load into trucks and hauled off site, or any other alternative storage approved by the Executive Officer.

#### **Notification Requirements (Subdivision (f))**

These provisions allow compliance personnel to be present, if necessary, to ensure that the requirements are being followed.

#### Notification of Intent to Conduct Earth-Moving Activities

At least 72 hours, but no more than 30 days prior to commencement of earth-moving activities, the owner or operator must provide notification to the Executive Officer. The notification shall contain:

- Name, email, address and telephone number of the owner or operator
- Name and telephone number of the onsite dust control supervisor
- Project name and the project identification number from the designating agency (if applicable)
- Project location (address and/or coordinates)
- Identify whether the site is a school or early education center
- A map indicating the specific location(s) of each earth-moving activity and the concentrations of the applicable toxic air contaminant(s)
- A description of the earth-moving activities and a schedule that includes the anticipated start and completion dates of earth-moving activities
- Current and/or previous type of operation(s) and use(s) at the site

- An indication if the notice is a revised notification

#### Notification of Exceedance of PM<sub>10</sub> Limit

Additionally, an owner or operator must provide notification to the Executive Officer within 72 hours whenever the difference between the upwind and downwind ambient dust concentration exceeds 25 µg/m<sup>3</sup>. The notification for exceeding the ambient dust concentration limit must include:

- Name, email, address and telephone number of the owner/operator
- Name and telephone number of the onsite dust control supervisor
- Project name and the project identification number from the designating agency (if applicable)
- Project Location (address and/or coordinates)
- PM<sub>10</sub> monitoring results, including result, date, and time of: exceedance(s), 12 hours before first exceedance, and 12 hours after last exceedance
- Earth-moving activities occurring at the date and time of exceedance(s)
- Dust control measure(s) taken to mitigate fugitive dust

#### **Signage Requirements (Subdivision (g))**

The signage around the property will inform the surrounding community that the site contains hazardous materials and let them know where to obtain more information or how to make a complaint. Unless the Executive Officer authorizes an alternative sign, signage shall follow these requirements:

- Installed at all entrances and at intervals of 1,000 feet or less along the perimeter of the site, with at least one sign along each side
- Located between 6 and 8 feet above grade from the bottom of the sign
- On 1 inch AC grade laminated plywood
- Measures at least 48 inches wide by 48 inches tall
- Displays lettering at least 4 inches tall with text contrasting with the sign background
- Displays the following information:
  - Local or toll-free phone number for the facility contact or pre-recorded notification center that is accessible 24 hours a day
  - Warning statement:

“THIS SITE CONTAINS SOILS THAT CONTAIN THE FOLLOWING  
CHEMICALS: [LIST SOIL TACS]  
TO REPORT ANY DUST PLEASE CALL [FACILITY CONTACT] OR  
THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AT  
1-800-CUT-SMOG”

#### **Recordkeeping Requirements (Subdivision (h))**

Records will allow compliance personnel to track the on-goings of a site without having to be present at all times. Records will be required to be made available to the Executive Officer upon request and must be maintained for at least three years. Daily records must include:

- Inspection of all covered or stabilized contaminated stockpiles
- Wind and PM<sub>10</sub> monitoring results, including calibration records

- Earth-moving activities conducted and the volume of soil with applicable toxic air contaminant
- Information regarding the transporter and receiving facility, and a copy of the shipping manifest
- Complaints called in, including the name of complainant and contact information, date and time, earth-moving activities occurring at the date and time, complaint, and action taken to mitigate the source of the complaint

**Exemptions (Subdivision (i))** The following situations are exempt from the rule:

- Earth-moving activities of less than 50 cubic yards of soil
- Removing soil for sampling purposes
- Earth-moving activities conducted during emergency life-threatening situations, or in conjunction with any officially declared disaster or state of emergency as declared by an authorized health officer, agricultural commissioner, or fire protection officer. The Executive Officer must be notified within 48 hours of emergency earth-moving activities and the notification must include a written emergency declaration from the authorized officer
- Earth-moving activities conducted by essential service utilities to provide electricity, natural gas, telephone, water or sewer during periods of service outages and emergency disruptions
- Any contractor subsequent to the time the contract ends, as long as the contractor implemented the required control measures during the contractual period

**POTENTIALLY IMPACTED SITES**

A review of notifications of hazardous site cleanup actions by responsible regulatory agencies between 2014 and 2016 indicates that approximately 25 sites would have been subject to Proposed Rule 1466 had it been in place during that time period. Table 1 below provides the facility usage, acreage, and contaminants of concern including the maximum concentration, when available, for each site.

**Table 1 – 2014-2016 Designated Sites with Applicable Contaminants of Concern**

Facility Usage	Contaminants of Concern (ppm)	Size (acres)
Military	Pb (not specified)	2
School	As (80), Pb (1,300), Ca (2)	9
Power Generation	Cr6 (50)	11
Metal Melting	Ca (8)	1
Metal Melting	As (154), Ca (10)	1
Metal Finishing	Ca (2,400), Cr6 (96), Ni (3,800), Pb (320)	1
School	Ar (91), Pb (124)	8
Waste Management	PCB (23)	9
Aerospace	Ca (5) Pb (236)	1
School*	PCBs (50)	1
Metal Finishing	As (33), Pb (189)	1

Facility Usage	Contaminants of Concern (ppm)	Size (acres)
Manufacturing and Trucking	As (8), Ca (25), Pb (613), PCB (<1)	21
Metal Finishing	Ca (980), Cr6 (6)	2
Chemicals	As (40), Pb (770)	4
School	As (90)	3
Railway	As (50)	2
Manufacturing	Cr6 (2), Pb (321)	3
Metal Melting	Cr6(1)	12
School	As (840), Pb (8,100)	1
Metal Finishing	Pb (unspecified), Cr6 (unspecified)	1
Vacant	PCB (0.9)	1
Manufacturing	As (120), Ca (69), Hg (116), Ni (19,000), Pb (60,000), PCB (130)	25
Military	PCBs (0.3)	62
School	Asbestos (35%)	1
Metal Melting	As (unspecified), Pb (unspecified)	15

Over the 2014-2016 period, the highest number of active sites at one time was six. The total size of the six facilities was 27 acres. Of those six sites, two were on school property. In terms of total acreage undergoing cleanup at any one time, the most active period of time had three sites performing cleanup over 88 acres. Preliminary indications estimate current water usage of roughly 1,000 gallons per acre per day to mitigate fugitive dust. Staff estimates that water usage would increase to 2,600 gallons per acre per day under the proposed rule. On a daily basis, the maximum water increase would be approximately 141,000 gallons.

## **SOCIOECONOMIC ASSESSMENT**

A socioeconomic assessment for Proposed Rule 1466 will be conducted and will be available to the public at least 30 days prior to the SCAQMD Governing Board Meeting anticipated for July 7, 2017.

## **CALIFORNIA ENVIRONMENTAL QUALITY ACT**

Pursuant to the California Environmental Quality Act (CEQA) and SCAQMD Rule 110, SCAQMD staff will evaluate the proposed project and make the appropriate CEQA determination. The public workshop meeting will also provide an opportunity to solicit public input on any potential environmental impacts from the proposed project. Comments received at the public workshop on any environmental impacts will be considered when making the CEQA determination.

## **DRAFT FINDINGS UNDER CALIFORNIA HEALTH AND SAFETY CODE SECTION 40727**

### **Requirements to Make Findings**

California Health and Safety Code Section 40727 requires that prior to adopting, amending or repealing a rule or regulation, the SCAQMD Governing Board shall make findings of necessity,

authority, clarity, consistency, non-duplication, and reference based on relevant information presented at the public hearing, and in the staff report.

**Necessity**

Proposed Rule 1466 is needed to address fugitive emissions of toxic air contaminants from cleanup activities at certain designated contaminated sites. The existing regulatory structure is not sufficiently protective of public health in the communities surrounding contaminated sites with applicable toxic air contaminants.

**Authority**

The AQMD Governing Board has authority to adopt Rule 1466 pursuant to the California Health and Safety Code Sections 39002, 39650 et. seq., 40000, 40001, 40440, 40441, 40702, 40725 through 40728, 41508, 41511, 41700, and 41706.

**Clarity**

Proposed Rule 1466 is written or displayed so that its meaning can be easily understood by the persons directly affected by it.

**Consistency**

Proposed Rule 1466 is in harmony with and not in conflict with or contradictory to, existing statutes, court decisions or state or federal regulations.

**Non-Duplication**

Proposed Rule 1466 will not impose the same requirements as any existing state or federal regulations. The proposed rule is necessary and proper to execute the powers and duties granted to, and imposed upon, the SCAQMD.

**Reference**

By adopting Proposed Rule 1466, the SCAQMD Governing Board will be implementing, interpreting or making specific the provisions of the California Health and Safety Code Section 41700 (nuisance), and Federal Clean Air Act Section 112 (Hazardous Air Pollutants), and Section 116 (Retention of State authority).

**Rule Adoption Relative to Cost-Effectiveness**

On October 14, 1994, the Governing Board adopted a resolution that requires staff to address whether rules being proposed for adoption are considered in the order of cost-effectiveness. The 2012 Air Quality Management Plan (AQMP) ranked, in the order of cost-effectiveness, all of the control measures for which costs were quantified. It is generally recommended that the most cost-effective actions be taken first. Proposed Rule 1466 is a control measure in the 2016 Air Quality Management Plan (AQMP) and, thus, will be ranked by cost-effectiveness relative to other AQMP control measures in the 2016 AQMP. However, cost-effectiveness defined as cost per ton of emission reductions is not meaningful for toxic risk since risk depends on several factors in addition to emission numbers such as geography, meteorology, and location of receptors.

**Incremental Cost-effectiveness**

Health and Safety Code Section 40920.6 requires an incremental cost effectiveness analysis for Best Available Retrofit Control Technology (BARCT) rules or emission reduction strategies when there is more than one control option which would achieve the emission reduction objective of the proposed amendments, relative to ozone, CO, SOx, NOx, and their precursors. Since the proposed amended rules apply to toxic air contaminants, the incremental cost effectiveness analysis requirement does not apply.

**COMPARATIVE ANALYSIS**

Health and Safety Code section 40727.2 requires a comparative analysis of the proposed amended rule with any Federal or District rules and regulations applicable to the same source.

	<b>Proposed Rule 1466</b>	<b>Rule 403</b>	<b>Rule 1166</b>	<b>Rule 1157</b>	<b>Rule 1403</b>
<b>Purpose</b>	Control toxic air contaminants during earth-moving activities at contaminated sites	Reduce anthropogenic fugitive dust	Control of VOC emissions (including toxic VOCs) from earth-moving activities	Control PM10 emissions from aggregate activities	Limit asbestos emissions
<b>Applicability</b>	Designated contaminated sites with specified toxic air contaminants	Any activity or anthropogenic condition capable of generating dust	VOC contaminated soils	Sand, gravel, quarried rock operations	Building demolition and renovation activities
<b>Monitoring</b>	Hourly 25 ug/m3 differential limit for PM10 emission; Meteorological monitoring	Five-hour 50 ug/m3 differential limit for PM10 emission	Fifteen minute monitoring of VOC emissions	None	None
<b>General Controls</b>	Perimeter fencing and windscreen	Perimeter fencing and windscreen	None	None	Removal procedures
	Adequately wet during earth-moving activities	Adequately wet during earth-moving activities	None	None	Handling procedures
	Cease operations during high wind conditions	During high wind conditions some requirements do not apply	None	None	None
	On-site compliance supervisor	On-site compliance supervisor (large sites only)	None	None	On-site compliance supervisor
	Earth-moving activities not allowed during school hours when conducted on school grounds	None	None	None	None
<b>Vehicle Controls</b>	Vehicle speed limit	Vehicle speed limit (large sites only)	None	Vehicle speed limit	Vehicle marking
	Stabilize road and parking surfaces	Stabilize road and parking surfaces	None	Stabilize road and parking surfaces	None
	Clean departing vehicles	None	None	None	None
	Limited track out	Limited track out	None	Limited track out	None
	Vehicle egress	Vehicle egress	None	Vehicle egress	None

	<b>Proposed Rule 1466</b>	<b>Rule 403</b>	<b>Rule 1166</b>	<b>Rule 1157</b>	<b>Rule 1403</b>
<b>Stockpile Controls</b>	Limited size	None	None	Limited size	Leak-tight containers
	Adequately wet or chemically stabilized	Adequately wet or chemically stabilized	Adequately wet or chemically stabilized	Adequately wet or chemically stabilized	None
	Covered during inactivity	None	Covered during inactivity	Apply chemical stabilizer during inactivity	None
	Daily inspection	None	Daily inspection	None	None
	Segregate	None	Segregate	None	None
	Not allowed at schools	None	None	None	None
<b>Truck Loading Controls</b>	Adequately wet	Adequately wet	None	None	None
	Loading techniques	Loading techniques	None	None	None
	Cover loads	Cover loads (contingency only)	Cover loads	None	None
<b>Notification</b>	Prior to commencing earth-moving activities	Prior to commencing earth-moving activities (large sites only)	Prior to commencing earth-moving activities	None	Prior to commencing asbestos handling
	Exceedances of hourly PM10 limit	None	None	None	Changes in quantity or schedule
<b>Signage</b>	Entrances and along perimeter	Entrances and along perimeter (large sites only)	None	None	Entrances and along perimeter
<b>Recordkeeping</b>	Monitoring results, dust control actions taken, stockpile inspections, volume of soil removed, transport information, complaints	Dust control actions taken (large sites only)	VOC concentration readings; stockpile inspections, transport information	Dust control actions, transport information	Control actions, survey data, notifications, training information, transport information

## REFERENCES

“Determination of a Southern California Regional Background Arsenic Concentration in Soil”, G. Chernoff, W.Bosan, and D.Oudiz, California Department of Toxic Substances Control, <https://www.dtsc.ca.gov/upload/Background-Arsenic.pdf>, accessed April 14, 2017.

“Soil- and Soil-Gas Screening Numbers (California Human Health Screening Levels (CHHSLs))”, Office of Environmental Health Hazard Assessment, <https://oehha.ca.gov/chhsltable>, accessed April 14, 2017.

“Rule 403 Fugitive Dust Implementation Handbook”, South Coast Air Quality Management District, June 2007