



# Proposed Rule 1466: Control of Particulate Emissions from Soils with Toxic Air Contaminants

WORKING GROUP #2

APRIL 13, 2017

# Background

- ▶ Soils with toxic air contaminants can become airborne during excavation, grading, stockpiling, removal, and similar activities and can result in exposure to toxic air contaminants
- ▶ SCAQMD's existing regulatory structure addresses:
  - ▶ Volatile organic compound contaminated soil (Rule 1166)
  - ▶ Toxic emissions from equipment used for on-site remediation (Rule 1401)
  - ▶ Fugitive dust (Rule 403)
  - ▶ Public nuisance (Rule 402)
- ▶ Currently, existing regulatory structure does not address earth-moving activities that may result in exposure to metal or other particulate toxic air contaminants

## Objectives of Proposed Rule 1466

- ▶ Establish basic requirements to minimize offsite fugitive dust emissions that contain toxic air contaminants during earth-moving activities
- ▶ Requirements intended to be incorporated in other agencies' cleanup plans
- ▶ Do not want to impede cleanup activities, but ensure basic measures are in place to minimize offsite fugitive dust emissions
- ▶ Approach does not preclude a cleanup agency from imposing more stringent limits or measures

# Rule Structure

- ▶ Applicability
- ▶ PM<sub>10</sub> Emissions and Monitoring Requirements
- ▶ Requirements to Minimize Fugitive Dust Emissions
- ▶ Notification Requirements
- ▶ Signage Requirements
- ▶ Recordkeeping Requirements
- ▶ Additional Requirements

# Applicability

- ▶ Applies to any person conducting earth-moving activities of soils that contain specific toxics air contaminants (next slide) at a site that has been designated by:
  - ▶ U.S. Environmental Protection Agency as a Superfund National Priorities List site;
  - ▶ Department of Toxic Substances Control as Brownfield or Cleanup Program site;
  - ▶ State Water Resources Control Board or Regional Water Quality Board as a Site Cleanup Program site; or
  - ▶ Executive Officer that a site contains soils with applicable toxic air contaminant(s) in concentrations above the Office of Environmental Health Hazard Assessment's California Human Health Screening Level

# Applicable Toxic Air Contaminants

- ▶ Arsenic
- ▶ Asbestos
- ▶ Cadmium
- ▶ Hexavalent chromium
- ▶ Lead
- ▶ Mercury
- ▶ Nickel
- ▶ Polychlorinated biphenyls

# PM<sub>10</sub> Emissions and Monitoring Requirements

- ▶ Owner or operator must conduct continuous ambient monitoring of PM<sub>10</sub> concentrations when conducting earth-moving activities
  - ▶ Earth-moving activities are any activity where soil is being moved or uncovered, and includes, but not be limited to the following: excavating, grading, earth cutting and filling operations, loading or unloading, and adding to or removing from stockpiles
- ▶ If the PM<sub>10</sub> concentration exceeds 25 µg/m<sup>3</sup>, averaged over one-hour, the owner or operator must:
  - ▶ Cease earth-moving activities
  - ▶ Adequately water or stabilize fugitive dust sources
  - ▶ Cannot resume earth-moving activities until the PM<sub>10</sub> concentration is equal to or below 25 µg/m<sup>3</sup>
- ▶ Seeking comments on PM concentration limit and approach

# PM<sub>10</sub> Emissions and Monitoring Requirements *(Continued)*

- ▶ The owner or operator must monitor PM<sub>10</sub> concentrations by simultaneous sampling, as the difference between upwind and downwind samples collected in accordance with a U.S. EPA-approved equivalent method for PM<sub>10</sub> monitoring. Samplers must be:
  - ▶ 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 PM<sub>10</sub>;
  - ▶ 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; and
  - ▶ Relocated, as necessary, to accommodate changes in wind direction as determined by wind monitoring
- ▶ The owner or operator shall monitor wind direction and speed as specified in *SCAQMD Rule 403 Fugitive Dust Implementation Handbook*



# Dust Control Measures – General

- ▶ Surround perimeter with fencing and windscreens
- ▶ While conducting earth-moving activities:
  - ▶ Adequately wet to the depth of earth-moving activity and allow time for penetration; and
  - ▶ Adequately wet at frequencies to prevent the generation of visible dust plumes
- ▶ Stop all operations if wind gusts exceed 15 mph or instantaneous wind speed of 25 mph
- ▶ On-site compliance supervisor required to be onsite
  - ▶ Must be asbestos trained, if asbestos is contaminant of concern
- ▶ Stabilize potential fugitive dust sources if earth-moving activities will not occur for three or more days
- ▶ Alternative dust control measures allowed

# Dust Control Measures – Vehicles

- ▶ Speed Limit = 15 mph
- ▶ Stabilize all surfaces used for vehicular traffic and parking
- ▶ Clean trucks, trailers, and tires prior to leaving site
- ▶ Track-out shall not extend beyond 25 feet of the property line
  - ▶ Remove track-out daily using a vacuum equipped with a filter
- ▶ Employ at least one vehicle egress measure:
  - ▶ Install a pad consisting of washed gravel
  - ▶ Pave the surface
  - ▶ Utilize a wheel shaker/wheel spreading device
  - ▶ Install and utilize a wheel washing system

# Dust Control Measures – TAC Contaminated Stockpiles

- ▶ Segregate contaminated soil stockpiles from non-contaminated soil stockpiles
  - ▶ Label contaminated stockpiles “SCAQMD Rule 1466 Contaminated Soil” and list the applicable toxic air contaminants
- ▶ Stockpiles must not exceed 400 cubic yards or eight feet
- ▶ Adequately wet/stabilize stockpiles
- ▶ Completely cover stockpile with 10 mL thick plastic sheeting which overlap a minimum of twenty-four inches at the end of each working day
- ▶ Inspect covered stockpiles daily and repair cover as necessary

# Dust Control Measures – Truck Loading

- ▶ Loading and unloading TAC-contaminated materials
  - ▶ Water or stabilize material prior to moving
  - ▶ Empty loader bucket slowly so that no dust plumes are generated
  - ▶ Minimize drop height from loader bucket
- ▶ Truck and trailer shall be completely tarped before leaving the site

# Notification of Intent to Conduct Earth-Moving Activities

- ▶ At least 72 hours and no more than 30 days prior to conducting any earth-moving activities, the owner or operator must e-mail a notification to the Executive Officer
- ▶ Notification must include
  - ▶ Owner or operator information
  - ▶ Project name and identification number from designating agency
  - ▶ Project location
  - ▶ Name and location schools and early education centers within 1,000 feet
  - ▶ Identify if site is a school, early education center, or park
  - ▶ Map of site which indicates locations of earth-moving activities and concentrations of applicable toxic air contaminants
  - ▶ Anticipated project start and end date
  - ▶ Current and/or previous site operations and uses

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

- ▶ Within 24 hours of exceedance of daily average limit, the owner or operator must email a notification to the Executive Officer
- ▶ Notification must include
  - ▶ Owner or operator information
  - ▶ Project name and identification number from designating agency
  - ▶ Project location
  - ▶ PM<sub>10</sub> monitoring results, including date and time of
    - ▶ Exceedance(s)
    - ▶ 12 hours before first exceedance
    - ▶ 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

- ▶ The owner or operator must install and maintain a sign in accordance with the following requirements, unless otherwise approved in writing by the Executive Officer:
  - ▶ Installed at all entrances and at intervals of 1,000 feet or less along the property line or perimeter of the site, with a minimum of one 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 that states:

“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

- ▶ Records must be maintained for at least three years and made available upon Executive Officer request
- ▶ Maintain records of:
  - ▶ Covered stockpile inspections
  - ▶ PM<sub>10</sub> and wind monitoring results, including calibration records
  - ▶ Earth-moving activities conducted and corresponding volume of contaminated soil
  - ▶ Names and addresses of transporter and receiving facility of soils with applicable toxic air contaminants and a copy of the shipping manifests
  - ▶ 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



# Additional Requirements

- ▶ Sites within 1,000 feet of schools and early education centers must not conduct earth-moving activities while school is in session or during school sponsored activities
- ▶ Sites that are schools or early education centers must not stockpile any contaminated soil and must:
  - ▶ Immediately place contaminated soil in sealed containers;
  - ▶ Directly load contaminated soils into trucks and hauled off site; or
  - ▶ Handle as approved by the Executive Officer

# Tentative Schedule

- ▶ May 3, 2017 Working Group Meeting #3
- ▶ May 10, 2017 Public Workshop
- ▶ May 19, 2017 Stationary Source Committee
- ▶ June 2, 2017 Set Hearing
- ▶ July 7, 2017 Public Hearing

# SCAQMD Contacts

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## General Questions

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