

BOARD MEETING DATE: June 3, 2022

AGENDA NO. 26

**PROPOSAL:** Determine That Proposed Rule 403.2 – Fugitive Dust from Large Roadway Projects, Is Exempt from CEQA; and Adopt Rule 403.2

**SYNOPSIS:** Proposed Rule 403.2 (PR 403.2) reduces potential fugitive dust impacts to communities near large roadway projects. PR 403.2 would prohibit certain large roadway project activities that generate dust and are in close proximity to sensitive receptors and areas of public exposure. PR 403.2 would also include additional requirements to control dust, notification to nearby receptors, project signage, and recordkeeping.

**COMMITTEE:** Stationary Source, March 18, April 15, and May 20, 2022, Reviewed

**RECOMMENDED ACTIONS:**

Adopt the attached Resolution:

1. Determining that Proposed Rule 403.2 – Fugitive Dust from Large Roadway Projects, is exempt from the requirements of the California Environmental Quality Act; and
2. Adopting Rule 403.2 – Fugitive Dust from Large Roadway Projects.

Wayne Natri  
Executive Officer

SR:IM:EK:HP:GW

---

**Background**

Construction and demolition activities from large roadway projects generate fugitive dust that can result in additional particulate matter (PM) exposure to nearby communities. South Coast AQMD has existing rules relating to the reduction of fugitive dust including Rule 403 – Fugitive Dust, Rule 1157 – PM10 Emissions Reductions from Aggregate and Related Operations, and Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants. However, these existing rules do not

specifically address dust control from large roadway projects that are conducted in close proximity to areas of public exposure or sensitive receptors. Communities that are adjacent to large roadways are already disproportionately impacted by tailpipe diesel PM emissions and other air contaminants. Proposed Rule 403.2 (PR 403.2) fills a regulatory gap in existing rules by focusing on fugitive dust impacts in communities located near large roadway projects.

### **Proposed Rule**

PR 403.2 will reduce air quality impacts to nearby residential and other land uses resulting from fugitive dust generated by construction and demolition activities of a large roadway, including any adjacent bridge, overpass, or onramp/offramp. A large roadway is defined by the proposed rule as any portion of a roadway that is designated as functional classification “Interstate” or “Other Freeway or Expressway” consistent with definitions by the Federal Highway Administration. Proposed requirements include prohibitions for aggregate crushing/grinding and maintenance of material piles (greater than eight feet in height) within 100 feet of an area of public exposure or 250 feet of a sensitive receptor unless certain operating conditions are met, and additional dust controls are implemented.

PR 403.2 includes additional requirements for a dust control supervisor, dust control measures, and project signage for rule-specified activities that are conducted within 500 feet of an area of public exposure, or within 1,000 feet of a sensitive receptor. Requirements for a dust control supervisor will ensure compliance with the proposed rule and provides an on-site contact for the public regarding dust issues and concerns. Additional control measures are proposed to reduce dust from construction roads and material piles which are currently only required for Large Operations under Rule 403. Project signage will require identification of the site or project name, in addition to contact information for the large roadway project and South Coast AQMD for dust-related concerns.

PR 403.2 also requires written notification to South Coast AQMD and areas of public exposure or sensitive receptors that are located within 1,000 feet of a large roadway project activity prior to the start of work. The proposed rule also includes recordkeeping requirements for compliance with proposed rule provisions, and exemptions for large roadway activities that are considered to have low potential for generating fugitive dust exposure to nearby communities. The requirements of PR 403.2 would become effective for any new large roadway project 6 months after the date of rule adoption.

### **Public Process**

The development of PR 403.2 was conducted through a public process. Staff has held four Working Group meetings (July 15, 2021, October 22, 2021, December 14, 2021, and January 20, 2022) with outreach to a broad range of stakeholders including the construction industry, contractors, industry associations, consultants, environmental and

community groups, and government agencies. Staff held a public workshop on March 2, 2022. All public meetings have been held virtually due to COVID-19.

### **Emission Reductions**

The provisions of PR 403.2 will reduce PM emissions that cannot be quantified. The objective of PR 403.2 is to establish proactive measures, best management practices, and public noticing to preempt and reduce potential fugitive dust exposure to nearby receptors generated by activities conducted for a large roadway project.

### **Key Issues**

Throughout the rulemaking process, staff has worked with stakeholders to address and resolve all issues. Some key issues have been resolved by including additional mitigation measure options to avoid prohibitions for aggregate crushing and grinding (e.g., water misting) and maintenance of material piles (e.g., pile covers), refining the definitions for large roadways and large roadway projects, modifying dust controls for several categories of activities, and adding exemptions for activities with low dust generating potential. Staff is not aware of any remaining key issues.

### **California Environmental Quality Act**

Pursuant to the California Environmental Quality Act (CEQA) Guidelines Sections 15002(k) and 15061, the proposed project (PR 403.2) is exempt from CEQA pursuant to CEQA Guidelines Sections 15061(b)(3) and 15308. Further, there is no substantial evidence indicating that any of the exceptions to the categorical exemption set forth in CEQA Guidelines Section 15300.2 apply to the proposed project. A Notice of Exemption has been prepared pursuant to CEQA Guidelines Section 15062 and is included as Attachment H to this Board letter. If PR 403.2 is approved, the Notice of Exemption will be filed for posting with the county clerks of Los Angeles, Orange, Riverside, and San Bernardino counties, and with the State Clearinghouse of the Governor's Office of Planning and Research.

### **Socioeconomic Analysis**

Based on the number of active large roadway projects published by Caltrans in 2022, staff conservatively estimates that approximately 50 large roadway projects annually in the South Coast AQMD jurisdiction could be subject to requirements of the proposed rule. The majority of the affected projects fall in the North American Industry Classification System (NAICS) construction industry (NAICS 23). Within the affected facility universe, a majority of the projects are under the authority of Caltrans and other publicly operated entities, however, most large roadway projects are contracted out to and conducted by privately owned and operated construction companies. Some of the project contractors subject to the requirements of PR 403.2 may be classified as small businesses. Of the currently identified active roadway projects potentially subject to PR 403.2, 17 are in Los Angeles County, 10 are in Orange County, 6 are in Riverside County, and 15 are in San Bernardino County.

The estimated average annual compliance cost for PR 403.2 is estimated at approximately \$1,024,649. A regional economic model was not used to simulate jobs and macroeconomic impacts since the resultant impacts would be too small relative to the baseline regional economy to reliably determine any impacts from the modeling analysis.

### **AQMP and Legal Mandates**

Under Health and Safety Code Section 40460(a), South Coast AQMD is required to adopt an Air Quality Management Plan (AQMP) demonstrating compliance with all federal regulations and standards. South Coast AQMD is required to adopt rules and regulations that carry out the objectives of the AQMP. PR 403.2 does not implement an AQMP control measure and will not be submitted to CARB and U.S. EPA for inclusion into the State Implementation Plan.

### **Resource Impacts**

Existing staff resources are adequate to implement the proposed rule.

### **Attachments**

- A. Summary of Proposal
- B. Key Issues and Responses
- C. Rule Development Process
- D. Key Contacts List
- E. Resolution
- F. Proposed Rule 403.2
- G. Final Staff Report with Socioeconomic Impact Assessment
- H. Notice of Exemption from CEQA
- I. Board Presentation



## ATTACHMENT A

### SUMMARY OF PROPOSAL

#### **Proposed Rule 403.2 Fugitive Dust from Large Roadway Projects**

##### Applicability

- Applies to any person who conducts activities, and/or authorizes the conducting of activities for a Large Roadway Project within rule-specified distances to an Area of Public Exposure or Sensitive Receptor

##### Requirements (effective 6 months after the date of adoption)

- Prohibit aggregate crushing and grinding (except for handheld equipment) and maintenance of material piles within 100 feet of an Area of Public Exposure or 250 feet of a Sensitive Receptor unless:
  - For aggregate crushing and grinding operations, a water misting dust control system is used to prevent visible dust emissions from exceeding 100 feet in length in any direction, and the materials being recycled are generated from the Large Roadway Project
  - For material piles, a material pile cover or equivalent method to control fugitive dust approved by the Executive Officer is used

##### Additional Requirements (effective 6 months after the date of adoption)

- Require the following for any rule-specified large roadway activities conducted within 500 feet of an Area of Public Exposure or 1,000 feet of a Sensitive Receptor:
  - Identify and designate a Dust Control Supervisor for the Large Roadway Project
  - Implement additional fugitive dust controls for construction (unpaved) roads and material piles (mirrors Rule 403 Large Operation requirements)
  - Project signage (minimum of two signs) identifying the site or project name, in addition to contact information for the Large Roadway Project and South Coast AQMD for dust-related concerns

### Notification

- At least five days before commencing activity, require written project notification to South Coast AQMD and all addresses for Sensitive Receptors and Areas of Public Exposure located within 1,000 feet of a Large Roadway Project activity, including project contact information, location, and estimated duration with start and end dates

### Recordkeeping

- Require daily records of the applicable fugitive dust control measures and notification requirements

### Exemptions

- From all rule provisions:
  - Emergency life-threatening situations
  - Essential service utilities
  - Linear trenching
  - Berms for stormwater management
  - Caltrans Roadside Vegetation Management (Fire Fuels Reduction)
- Minor maintenance activities from paragraph (e)(3) Signage and subdivision (f) Notification

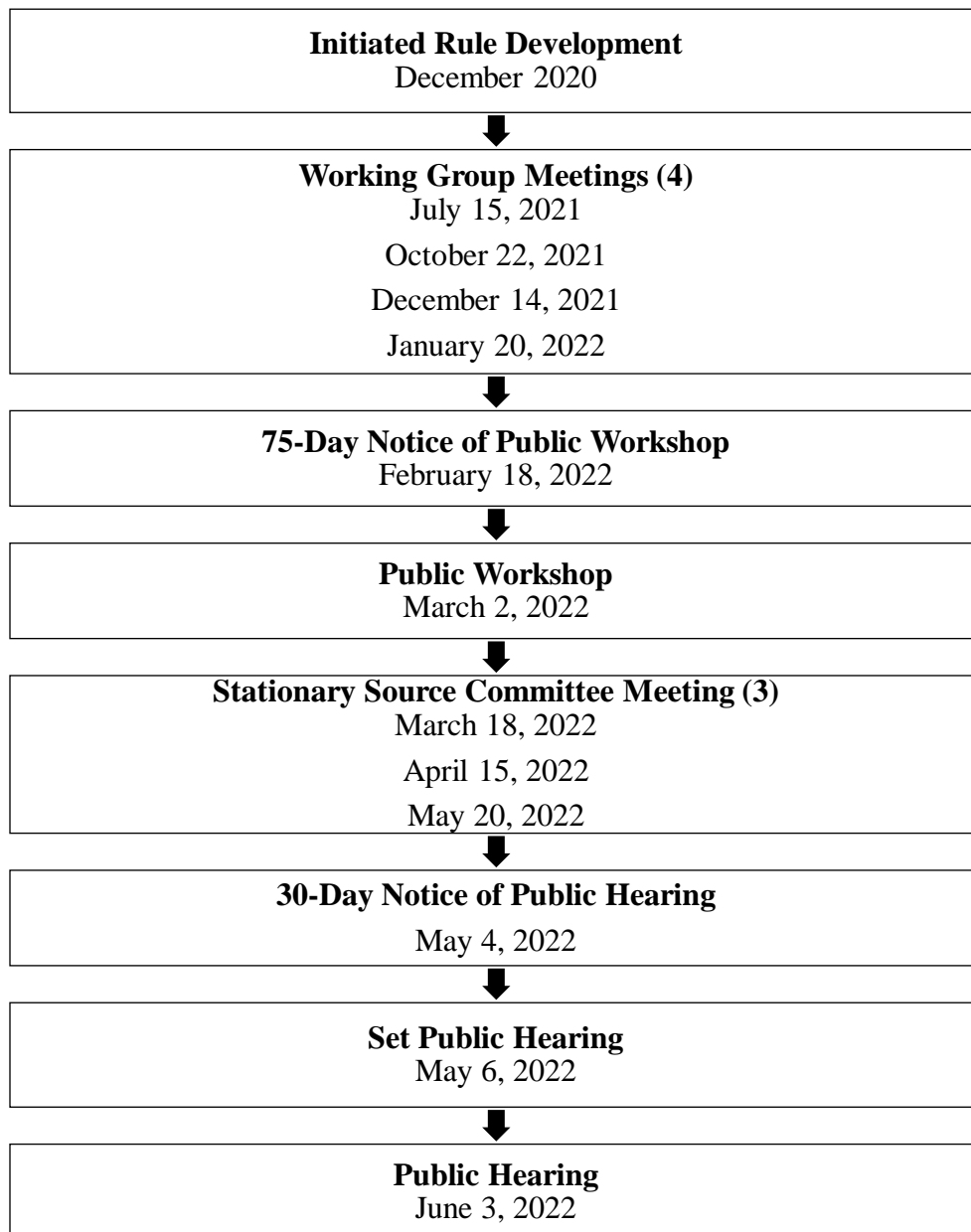
**ATTACHMENT B  
KEY ISSUES AND RESPONSES**

<b>Proposed Rule 403.2 – Fugitive Dust from Large Roadway Projects</b>
Staff has worked with stakeholders to resolve all issues. Staff is not aware of any remaining key issues.

Staff has worked with stakeholders to resolve all issues. Staff is not aware of any remaining key issues.

## **ATTACHMENT C RULE DEVELOPMENT PROCESS**

Proposed Rule 403.2 - Fugitive Dust from Large Roadway Projects



**Seventeen (17) months for rule development**

**One (1) Public Workshop**

**Three (3) Stationary Source Committee Meetings**

**Four (4) Working Group Meetings**

**ATTACHMENT D**  
**KEY CONTACTS LIST**

Proposed Rule 403.2 – Fugitive Dust from Large Roadway Projects  
*(listed alphabetically)*

AGC of California  
Ames Construction  
Associates Environmental  
Building Industry Association of Southern California  
California Asphalt Pavement Association  
California Construction and Industrial Materials Association  
Caltrans  
City of Corona  
City of Rancho Cucamonga  
City of Riverside  
Construction Industry Air Quality Coalition  
Eastern Municipal Water District  
Irvine Ranch Water District  
Los Angeles County Metropolitan Transportation Authority  
Los Angeles County Sanitation District  
Los Angeles Department of Water and Power  
Mesa Water District  
Metropolitan Water District of Southern California  
Orange County Sanitation District  
Orange County Transportation Authority  
Riverside County Transportation Commission  
San Bernardino County Transportation Authority  
Southern California Gas Company  
Southern California Alliance of Publicly Owned Treatment Works  
Southern California Contractors Association  
Southwest Concrete Pavement Association  
Sully-Miller  
Yorba Linda Water District  
Yorke Engineering

## **ATTACHMENT E**

### **RESOLUTION NO. 22-\_\_\_\_**

**A Resolution of the Governing Board of the South Coast Air Quality Management District (South Coast AQMD) determining that Proposed Rule 403.2 – Fugitive Dust from Large Roadway Projects is exempt from the requirements of the California Environmental Quality Act (CEQA).**

**A Resolution of the South Coast AQMD Governing Board adopting Rule 403.2 – Fugitive Dust from Large Roadway Projects.**

**WHEREAS**, the South Coast AQMD Governing Board finds and determines that Proposed Rule 403.2 is considered a “project” as defined by CEQA; and

**WHEREAS**, the South Coast AQMD has had its regulatory program certified pursuant to Public Resources Code Section 21080.5 and CEQA Guidelines Section 15251(l), and has conducted a CEQA review and analysis of Proposed Rule 403.2 pursuant to such program (South Coast AQMD Rule 110); and

**WHEREAS**, the South Coast AQMD Governing Board finds and determines that after conducting a review of the proposed project in accordance with CEQA Guidelines Section 15002(k) – General Concepts, the three-step process for deciding which document to prepare for a project subject to CEQA, and CEQA Guidelines Section 15061 – Review for Exemption, procedures for determining if a project is exempt from CEQA, that Proposed Rule 403.2 is exempt from CEQA; and

**WHEREAS**, the South Coast AQMD Governing Board finds and determines that, since the proposed project will ensure that activities associated with large roadway projects would be located at a prescribed distance from sensitive receptors so as to minimize exposure to fugitive dust emissions, it can be seen with certainty that implementing Proposed Rule 403.2 would not cause a significant adverse effect on the environment, and is therefore exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption; and

**WHEREAS**, the South Coast AQMD Governing Board finds and determines that the proposed project is also categorically exempt from CEQA pursuant to CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for the Protection of the Environment, because Proposed Rule 403.2 is designed to further protect or enhance the environment by reducing receptor exposure to fugitive dust; and

**WHEREAS**, the South Coast AQMD Governing Board has determined that there is no substantial evidence indicating that any of the exceptions to the categorical exemption apply to the proposed project pursuant to CEQA Guidelines Section 15300.2 – Exceptions; and

**WHEREAS**, the South Coast AQMD staff has prepared a Notice of Exemption for Proposed Rule 403.2 that is completed in compliance with CEQA Guidelines Section 15062 – Notice of Exemption; and

**WHEREAS**, Proposed Rule 403.2 and supporting documentation, including but not limited to, the Notice of Exemption and the Final Staff Report with Socioeconomic Impact Assessment, were presented to the South Coast AQMD Governing Board and the South Coast AQMD Governing Board has reviewed and considered this information, as well as has taken and considered staff testimony and public comment prior to approving the proposed project; and

**WHEREAS**, the South Coast AQMD Governing Board finds and determines, taking into consideration the factors in Section (d)(4)(D) of the Governing Board Procedures (codified as Section 30.5(4)(D)(i) of the Administrative Code), that the modifications to Proposed Rule 403.2 since the Notice of Public Hearing was published are clarifications that meet the same air quality objective and are not so substantial as to significantly affect the meaning of Proposed Rule 403.2 within the meaning of Health and Safety Code Section 40726 because the changes to paragraphs (d)(1) and (h)(7), are to clarify rule language to make the rule more easily understood by the persons directly affected by it, and: (a) the changes do not impact emission reductions, (b) the changes do not affect the number or type of sources regulated by the rule, (c) the changes are not inconsistent with the information contained in the Notice of Public Hearing, and (d) the consideration of the range of CEQA alternatives is not applicable because the proposed project is exempt from CEQA; and

**WHEREAS**, Proposed Rule 403.2 will not be submitted to the California Air Resources Board and the United States Environmental Protection Agency for inclusion into the State Implementation Plan; and

**WHEREAS**, Health and Safety Code Section 40727 requires that prior to adopting, amending, or repealing a rule or regulation, the South Coast AQMD 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 Final Staff Report; and

**WHEREAS**, the South Coast AQMD Governing Board has determined that a need exists to adopt Proposed Rule 403.2 to reduce fugitive dust generated by construction and demolition activities of a large roadway in close proximity to sensitive receptors and area of public exposure; and

**WHEREAS**, the South Coast AQMD Governing Board obtains its authority to adopt, amend, or repeal rules and regulations from Health and Safety Code Sections 39002, 40000, 40001, 40702, 40725 through 40728.5, 41508, 41700; and

**WHEREAS**, the South Coast AQMD Governing Board has determined that Proposed Rule 403.2 is written or displayed so that its meaning can be easily understood by the persons directly affected by it; and

**WHEREAS**, the South Coast AQMD Governing Board has determined that Proposed Rule 403.2 is in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or state or federal regulations; and

**WHEREAS**, the South Coast AQMD Governing Board has determined that Proposed Rule 403.2 does not impose the same requirements as any existing state or federal regulations, and the proposed rule is necessary and proper to execute the powers and duties granted to, and imposed upon, the South Coast AQMD; and

**WHEREAS**, the South Coast AQMD Governing Board, in adopting Rule 403.2, references Health and Safety Code Section 40702; and

**WHEREAS**, Health and Safety Code Section 40727.2 requires the South Coast AQMD to prepare a written analysis of existing federal air pollution control requirements applicable to the same source type being regulated whenever it adopts or amends a rule, and that the South Coast AQMD's comparative analysis of Proposed Rule 403.2 is included in the Final Staff Report; and

**WHEREAS**, the South Coast AQMD Governing Board has determined that the Socioeconomic Impact Assessment of Proposed Rule 403.2, as contained in the Final Staff Report, is consistent with the March 17, 1989 Governing Board Socioeconomic Resolution for rule adoption; and

**WHEREAS**, the South Coast AQMD Governing Board has determined that the Socioeconomic Impact Assessment, as contained in the Final Staff Report, is consistent with the provisions of Health and Safety Code Sections 40440.8, 40728.5, and 40920.6; and

**WHEREAS**, the South Coast AQMD Governing Board has determined that Proposed Rule 403.2 will result in increased costs to the affected industries, yet such costs are considered to be reasonable, with a total annualized cost as specified in the Socioeconomic Impact Assessment, as contained in the Final Staff Report; and

**WHEREAS**, the South Coast AQMD Governing Board has actively considered the Socioeconomic Impact Assessment, as contained in the Final Staff Report, and has made a good faith effort to minimize such impacts; and

**WHEREAS**, the South Coast AQMD staff conducted a public workshop regarding Proposed Rule 403.2 on March 2, 2022; and

**WHEREAS**, the public hearing has been properly noticed in accordance with the provisions of Health and Safety Code Sections 40725 and 40440.5; and



**WHEREAS**, the South Coast AQMD Governing Board has held a public hearing in accordance with all applicable provisions of state and federal law; and

**WHEREAS**, the South Coast AQMD specifies the Planning and Rules Manager of Proposed Rule 403.2 as the custodian of the documents or other materials which constitute the record of proceedings upon which the adoption of this proposed rule is based, which are located at the South Coast Air Quality Management District, 21865 Copley Drive, Diamond Bar, California; and

**NOW, THEREFORE BE IT RESOLVED**, that the South Coast AQMD Governing Board does hereby determine, pursuant to the authority granted by law, that Proposed Rule 403.2 is exempt from CEQA pursuant to CEQA Guidelines Sections 15061(b)(3) – Common Sense Exemption and 15308 – Actions by Regulatory Agencies for Protection of the Environment. No exceptions to the application of the categorical exemption set forth in CEQA Guidelines Section 15300.2 – Exceptions, apply to the proposed project. This information was presented to the South Coast AQMD Governing Board, whose members exercised their independent judgment and reviewed, considered, and approved the information therein prior to acting on Proposed Rule 403.2; and

**BE IT FURTHER RESOLVED**, that the South Coast AQMD Governing Board does hereby adopt, pursuant to the authority granted by law, Proposed Rule 403.2 as set forth in Attachment F, and incorporated herein by reference.

DATE: \_\_\_\_\_

\_\_\_\_\_  
CLERK OF THE BOARDS

## **ATTACHMENT F**

*[Date of Adoption]*

### **PROPOSED RULE 403.2 - FUGITIVE DUST FROM LARGE ROADWAY PROJECTS**

(a) Purpose

The purpose of this rule is to reduce potential air quality impacts to people who may be exposed to fugitive dust generated by large roadway projects.

(b) Applicability

This rule applies to any person who conducts activities, and/or authorizes the conducting of activities for a large roadway project. The provisions of this Rule are supplemental to requirements of Rules 403 and 403.1 and shall only apply when rule-specified activities for a large roadway project are conducted, or will be conducted, in close proximity to an area of public exposure or sensitive receptors near a large roadway, as defined in this Rule.

(c) Definitions

For the purposes of this rule:

- (1) **AGGREGATE CRUSHING AND GRINDING** means any activity that mechanically reduces the size of loose or stockpiled materials to produce sand, gravel, crushed stone, quarried rock, or other aggregate material (such as recycled concrete/asphalt).
- (2) **AREA OF PUBLIC EXPOSURE** means any area within the property line of any office, commercial or industrial property as well as any park, or open space/recreational facility, including associated structures and amenities specifically designated by a governmental agency or private entity for recreational purposes. Examples include amusement parks, hiking trails, athletic fields, and campgrounds. Undeveloped open space areas that are not designated for recreation are not considered areas of public exposure for purposes of this Rule.
- (3) **BULK MATERIAL** is sand, gravel, soil, and aggregate material (such as recycled concrete/asphalt) less than two inches in length or diameter, and other organic or inorganic particulate matter.
- (4) **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.

- (5) **CONSTRUCTION/DEMOLITION ACTIVITIES** means any 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 and unloading, cutting, grinding, milling, planing, shaping, or ground breaking.
- (6) **CONSTRUCTION VEHICLE** means graders, bulldozers, excavators, cranes, loaders, backhoes, tractors, haul trucks and other similar vehicles used at a large roadway project.
- (7) **CONTRACTOR** means any person who has a contractual arrangement to establish or conduct activities at a large roadway project for another person.
- (8) **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.
- (9) **DUST CONTROL SUPERVISOR** means a person with the authority to expeditiously employ sufficient dust mitigation measures to ensure compliance with all requirements of this Rule.
- (10) **DUST SUPPRESSANT** means water, hygroscopic materials, or non-toxic chemical stabilizers used as a treatment material to reduce fugitive dust emissions.
- (11) **EARTH-MOVING ACTIVITIES** means the use of equipment for any activity where soil is being moved or uncovered including, but not limited

to the following: grading, earth cutting and filling operations, loading or unloading of dirt or bulk materials, adding to or removing from material piles of bulk materials.

- (12) 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.
- (13) LARGE ROADWAY means any roadway that is designated as functional classification “Interstate” (FC1) or “Other Freeway or Expressway” (FC2) pursuant to the Federal Highway Administration.
- (14) LARGE ROADWAY PROJECT means onsite activities associated with the construction/demolition a large roadway, including any adjacent bridge, overpass, or onramp/offramp.
- (15) MATERIAL PILE means any accumulation of bulk materials, construction/demolition debris, excavated material, or typical roadway material which is greater than eight feet in height.
- (16) MATERIAL PILE COVER means plastic sheeting at least 10 mil thick that overlaps a minimum of 24 inches and is anchored and secured so that no portion of the material pile is exposed to the atmosphere.
- (17) PARTICULATE MATTER means any material, except uncombined water, which exists in a finely divided form as a liquid or solid at standard conditions.
- (18) PERSON means any individual, firm, association, organization, partnership, business trust, corporation, company, contractor, supplier, installer, user or owner, or any state or local governmental agency or public district or any other officer or employee thereof.
- (19) SCHOOL means any public or private education center, including juvenile detention facilities with classrooms, used for the education of more than 12 children at the education center in kindergarten through grade 12. A school also includes an Early Learning and Developmental Program by the U.S. Department of Education or any state or local early learning and development programs such as preschools, Early Head Starts, Head Start, First Five, and Child Development Centers. A school does not include any private education center in which education is primarily conducted in private homes. A school includes any building or structure, playground, athletic field, or other area of school property.

- (20) SENSITIVE RECEPTOR means a residence including private homes, condominiums, apartments, and living quarters, schools, preschools, daycare centers and health facilities such as hospitals or retirement and nursing homes. A sensitive receptor includes long term care hospitals, hospices, prisons, and dormitories or similar live-in housing.
- (21) STABILIZED SURFACE means any previously disturbed surface area or material 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.
- (22) 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.
- (23) 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.

(d) Requirements

- (1) Beginning [six (6) months after Date of Adoption] for any new Large Roadway Project, no person shall conduct aggregate crushing and grinding operations (excluding operations utilizing handheld equipment), or maintain a material pile, ~~unless a material pile cover or equivalent method to control fugitive dust approved by the Executive Officer is used, at a large roadway project within a distance of 100 feet of an area of public exposure or 250 feet of a sensitive receptor unless:-~~
  - (A) For aggregate crushing and grinding operations, a water misting dust control system is used to prevent visible dust emissions from exceeding 100 feet in length in any direction, and the materials being recycled are generated from the large roadway project.
  - (B) For material piles, a material pile cover or equivalent method to control fugitive dust approved by the Executive Officer is used.

Distances shall be measured from the nearest edge or perimeter of the specified activity or material pile for the large roadway project to the closest location within an area of public exposure that is designated for use by the public, or point of the property line of the nearest sensitive receptor.

- (2) Beginning [six (6) months after Date of Adoption] for any new large roadway project, a person conducting any of the following activities at a large roadway project that is located within 500 feet of an area of public exposure, or 1,000 feet of a sensitive receptor, shall comply with the provisions of subdivision (e) Additional Requirements, and subdivision (f) Recordkeeping:

- (A) Aggregate crushing and grinding operations;
- (B) Construction/demolition activities;
- (C) Earth-moving or any other mechanical activity that results in disturbed surface areas;
- (D) Movement of construction vehicles over unpaved roads; or
- (E) Maintenance of material piles.

Distances shall be measured from the nearest edge or perimeter of the specified activity or material pile for the large roadway project to the closest location within an area of public exposure that is designated for use by the public, or point of the property line of the nearest sensitive receptor.

(e) **Additional Requirements**

Any person who conducts or authorizes the conducting of activities for a large roadway project subject to paragraph (d)(2) shall comply with the requirements specified in paragraphs (e)(1) through (e)(3):

(1) **Dust Control Supervisor**

Identify and designate a dust control supervisor that:

- (A) is employed by or contracted with the property owner, developer, or other persons responsible for the large roadway project;
- (B) is on the site or available onsite within 30 minutes during working hours;
- (C) has completed South Coast AQMD Fugitive Dust Control Class and holds a valid Certificate of Completion for the class; and

(D) is responsible for responding to air quality issue inquiries regarding the large roadway project.

(2) Control Measures

Use the following applicable control measures, in addition to all other applicable control measures as required in other applicable dust rules (such as Rules 403, 403.1, 1157), to prevent fugitive dust/visible emissions:

**Table 1 – Large Roadway Project Control Measures**

Dust from Construction Roads	<p>Restrict vehicle speeds to 15 miles per hour for all unpaved roads used for any construction vehicular traffic and implement one or more of the following control measures, as needed, to ensure fugitive dust control:</p> <p>Water all unpaved roads within the project perimeter used for construction vehicular traffic at least once per every two hours of active operations [3 times per normal 8-hour workday]; or</p> <p>Apply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface.</p>
Material Piles	<p>Shall not exceed a height of 30 feet and additionally implement one or more of the following control measures, as needed, to ensure fugitive dust control:</p> <p>Apply dust suppressant as necessary to maintain a stabilized surface and prevent visible emissions from extending farther than 100 feet as measured from the nearest edge or perimeter of the material pile; or</p> <p>Install temporary coverings; or</p> <p>Install a material pile cover; or</p> <p>Install an enclosure with a minimum of three sides (the open side of which will face farthest from potentially impacted areas) and walls with a maximum porosity of 50 percent and a minimum height equal to the highest point of the material pile.</p>

## (3) Signage

Prior to commencement of activities for a large roadway project pursuant to paragraph (d)(2), install and maintain project signage that, at a minimum, meets the following:

- (A) Signage must be located within 50 feet of each project site entrance; a minimum of two signs are required per large roadway project, with at least one of those signs installed such that the content of the sign face is visible in the direction of the closest area of public exposure or sensitive receptor unless it is directly facing traffic;
- (B) One sign is sufficient for multiple site entrances located within 300 yards of each other;
- (C) Signage shall be 1 inch A/C laminated plywood board or similar strength and durability material with dimensions of 48 inches by 96 inches;
- (D) Sign background must contrast with lettering, typically black text with white background;
- (E) The lower edge of the sign board must be a minimum of 6 feet and a maximum of 7 feet above grade;
- (F) The telephone number listed for the dust control supervisor or project contact must be a local or a toll-free number and shall be accessible 24 hours per day; and
- (G) At a minimum, each sign shall include the following information, with text height as shown on the right side of the sign template below:

**Table 2 – Text Height for Signage**

<b>Sign Content</b>	<b>Height (inches)</b>
Site or Project Name	4
IF YOU SEE DUST COMING FROM THIS PROJECT CALL	4
Name, Phone Number (###) ###-####	6
If you do not receive a response, please call South Coast AQMD at 1-800-CUT-SMOG	3



**(f) Notification**

At least 5 business days prior to commencement of activities for a large roadway project, the dust control supervisor or other responsible person(s) shall provide written notification to South Coast AQMD and all addresses of sensitive receptors and areas of public exposure within 1,000 feet of the large roadway activity. For non-residential properties with a property manager/administrator (such as hospitals, schools, or hotels), notification to the property manager/administrator is sufficient. Notification shall include, at a minimum, the following information:

- (1) Large roadway project dust control supervisor contact information including contact name, company/agency name, address, telephone number, and e-mail address; and
- (2) Location of the large roadway project, including address and/or coordinates, and a map depicting the location of the site; and
- (3) Estimated duration of the project including commencement and completion dates.

**(g) Recordkeeping**

- (1) The responsible person(s) for the large roadway project shall maintain daily records of the required fugitive dust control measures pursuant to paragraph (e)(2) for a large roadway project documenting:
  - (A) Each type of activity conducted and the associated permitted powered equipment with the potential to generate fugitive dust.
  - (B) The specific fugitive dust control measures implemented for each activity or equipment.
  - (C) The frequency of fugitive dust control measures implemented. If dust suppressant is used as the control measure for material piles, record the time and duration that the dust suppressant was applied, including the location of the material pile.
  - (D) Purchase records or invoices for dust suppressants used for the large roadway project.
- (2) The responsible person(s) for the large roadway project shall maintain records demonstrating compliance with the notification requirements of subdivision (f), including:
  - (A) A copy of the notification letter and a list of addresses notified;

- (B) Notification method used such as hand delivery, mail, electronic mail, or other electronic means; and
    - (C) Proof of any mailed notification such as certificate of mailing, return receipts, invoices for mail services, and emails.
  - (3) Records shall be retained for a minimum of three years by the responsible person for the large roadway project and shall be made available to the Executive Officer upon request.
- (h) Exemptions
- (1) Any activities for a large roadway project conducted during emergency life-threatening situations, where a sudden, unexpected occurrence that poses a clear and imminent danger, requiring immediate action to prevent or mitigate the loss of impairment of life, health, property, or essential public service, or in conjunction with any officially declared disaster or state of emergency as declared by an authorized health officer, agricultural commissioner, fire protection officer, or other authorized health officer shall be exempt from all requirements of this Rule. The Executive Officer shall be notified electronically no later than 48 hours following such emergency activities for a large roadway project.
  - (2) Any activity for a large roadway project conducted by essential service utilities to provide electricity, natural gas, telephone, water, or sewer during periods of service outages and emergency shall be exempt from all requirements of this Rule. The Executive Officer shall be notified electronically no later than 48 hours following such activities for a large roadway project.
  - (3) Linear trenching activity for natural gas, power, sewer, water, and other utility projects that are not associated with a large roadway project shall be exempt from all requirements of this Rule.
  - (4) Maintenance of berms and other best management practices essential for stormwater management pursuant to the requirements of the California Water Boards (State Resources Water Control Board) shall be exempt from all requirements of this Rule.

- (5) Diamond grinding or other texture planing of roadway surfaces where the grinder has self-contained fugitive dust controls shall be exempt from all requirements of this Rule.
- (6) The following minor maintenance activities shall be exempt from the provisions of paragraph (e)(3) Signage and subdivision (f) Notification: pothole repair, pavement crack sealing, pavement digouts, concrete slab repair/replacement, shoulder backing repair, sidewalk repair/replacement, curb/dike replacement, sign repair/replacement, guardrail repair/replacement, concrete barrier repair/replacement, bridge repair, slope repair, water pollution control repair/replacement, pavement delineation repair/replacement, and electrical systems repair.
- (7) Roadside Fire Fuels Reduction activities implemented by Caltrans ~~Fire Safety~~ Vegetation Management Crews shall be exempt from all requirements of this Rule.

## **ATTACHMENT G**

### **SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

---

#### **Final Staff Report**

#### **Proposed Rule 403.2 – Fugitive Dust from Large Roadway Projects**

**June 3, 2022**

##### **Deputy Executive Officer**

Planning, Rule Development, and Area Sources  
Sarah L. Rees, Ph.D.

##### **Assistant Deputy Executive Officer**

Planning, Rule Development, and Area Sources  
Ian MacMillan

##### **Planning and Rules Manager**

Planning, Rule Development, and Area Sources  
Eugene Kang

---

##### Authors:

George Wu – Air Quality Specialist  
Henry Pourzand – Program Supervisor

##### Contributors:

Angela Shibata – Supervising AQ Engineer  
Barbara Radlein – Program Supervisor  
Brian Vlasich – AQ Specialist  
Elaine Shen, Ph.D. – Planning & Rules Manager  
Erwin dela Cruz – Supervising AQ Engineer  
Fredrick Gonzalez – AQ Analysis & Compliance Supervisor  
Jason Aspell – Deputy Executive Officer  
Jillian Wong, Ph.D. – Assistant Deputy Executive Officer  
Kathleen Linson – Supervising AQ Inspector  
Kevin Ni – AQ Specialist  
Kevin Orellana – Senior Enforcement Manager  
Ranil Dhammapala Ph.D. – Senior Meteorologist  
Ryan Banuelos – Air Quality Specialist  
Sarai Rios – AQ Engineer I  
Scott Epstein, Ph.D. – Program Supervisor  
Shah Dabirian, Ph.D. – Program Supervisor  
Shawn Bennage – Supervising AQ Inspector  
Stephen Boggs – AQ Engineer II  
Todd Iwata – Senior AQ Engineer

##### Reviewed By:

Kathryn Roberts, Esq. – Senior Deputy District Counsel

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
GOVERNING BOARD**

Chair: BEN BENOIT  
Mayor, Wildomar  
Cities of Riverside County

Vice Chair: VANESSA DELGADO  
Senator (Ret.)  
Senate Rules Committee Appointee

**MEMBERS:**

MICHAEL A. CACCIOTTI  
Mayor, South Pasadena  
Cities of Los Angeles County/Eastern Region

ANDREW DO  
Supervisor, First District  
County of Orange

GIDEON KRACOV  
Governor's Appointee

SHEILA KUEHL  
Supervisor, Third District  
County of Los Angeles

LARRY MCCALLON  
Mayor, Highland  
Cities of San Bernardino County

VERONICA PADILLA-CAMPOS  
Speaker of the Assembly Appointee

V. MANUEL PEREZ  
Supervisor, Fourth District  
County of Riverside

NITHYA RAMAN  
Council Member, Fourth District  
City of Los Angeles Representative

REX RICHARDSON  
Vice Mayor, City of Long Beach  
Cities of Los Angeles County/Western Region

CARLOS RODRIGUEZ  
Mayor, Yorba Linda  
Cities of Orange County

JANICE RUTHERFORD  
Supervisor, Second District  
County of San Bernardino

**EXECUTIVE OFFICER:**

WAYNE NASTRI

## **TABLE OF CONTENTS**

### **CHAPTER 1: BACKGROUND**

INTRODUCTION .....	1-1
REGULATORY BACKGROUND.....	1-2
ROADWAY PROJECT ACTIVITIES.....	1-3
EXISTING AIR QUALITY & HEALTH IMPACTS TO COMMUNITIES NEAR LARGE ROADWAYS .....	1-9
ANALYSIS OF A HYPOTHETICAL LARGE ROADWAY PROJECT .....	1-11
FUGITIVE DUST COMPLAINTS FROM ROADWAY PROJECTS .....	1-13
NEED FOR PROPOSED RULE 403.2 .....	1-14
PUBLIC PROCESS .....	1-14

### **CHAPTER 2: SUMMARY OF PROPOSAL**

INTRODUCTION .....	2-1
PROPOSED RULE 403.2.....	2-1

### **CHAPTER 3: IMPACT ASSESSMENT**

AFFECTED SOURCES .....	3-1
EMISSIONS IMPACT FROM RELOCATING MATERIAL PILES .....	3-1
POTENTIAL COST IMPACT FROM RELOCATING MATERIAL PILES .....	3-6
POTENTIAL COST IMPACT FROM WATER MISTING DUST CONTROL SYSTEMS FOR ONSITE MATERIAL RECYCLING.....	3-8
SOCIOECONOMIC IMPACT ASSESSMENT.....	3-9
CALIFORNIA ENVIRONMENTAL QUALITY ACT.....	3-12
DRAFT FINDINGS UNDER CALIFORNIA HEALTH AND SAFETY CODE SECTION 40727 .....	3-12
COMPARATIVE ANALYSIS .....	3-13

### **List of Figures in Main Document**

FIGURE 1-1	COMMON ROADWAY PROJECT ACTIVITIES
FIGURE 1-2	CRUSHING AND GRINDING ACTIVITIES AT ROADWAY PROJECT
FIGURE 1-3	EARTH-MOVING AND EXCAVATION ACTIVITIES
FIGURE 1-4	CONSTRUCTION VEHICLES ON UNPAVED ROADS
FIGURE 1-5	MATERIAL PILES AT LARGE ROADWAY PROJECTS
FIGURE 1-6	MATERIAL PILES AT LARGE ROADWAY PROJECTS

FIGURE 1-7 MATES V INHALATION CANCER RISK FROM DPM  
FIGURE 1-8 IMPACTS OF UNHEALTHY AIR QUALITY ON CHILDREN'S HEALTH  
FIGURE 1-9 LARGE ROADWAY PROJECT PM10 IMPACTS TO COMMUNITIES  
FIGURE 2-1 DISTANCE FOR AN AREA OF PUBLIC EXPOSURE  
FIGURE 2-2 CONCEPTUAL MAP SHOWING 100,000 AADT  
FIGURE 2-3 CALTRANS FC1 AND FC2 DESIGNATED HIGHWAYS IN SCAQMD  
FIGURE 2-4 DETERMINATION OF REQUIREMENTS OF SUBDIVISION (D)  
FIGURE 2-5 WATER NOZZLES ON TEXTURE PLANER  
FIGURE 2-6 SLURRY RECOVERY VACUUM ON TEXTURE PLANER

### **List of Tables in Main Document**

TABLE 1-1 CALEEMOD INPUT DATA FOR HYPOTHETICAL LARGE ROADWAY PROJECT  
TABLE 2-1 PR 403.2 CONTROL REQUIREMENTS  
TABLE 3-1 COMPARATIVE ANALYSIS OF EXISTING RULES TO PR403.2

### **Appendices**

APPENDIX I – HYPOTHETICAL LRP FUGITIVE DUST MODEL INPUTS  
APPENDIX II – ROADWAY DUST COMPLAINTS (6/25/19 – 2/16/22)  
APPENDIX III – HYPOTHETICAL PR403.2 APPLICABILITY SCENARIOS  
APPENDIX IV – CITY OF SAN BERNARDINO RESOLUTION NO. 2020-265  
APPENDIX V – L.A. METRO GREEN CONSTRUCTION POLICY  
APPENDIX VI – SAMPLE RULE 403.2 NOTIFICATION FORM (RECEPTOR)  
APPENDIX VII – SAMPLE RULE 403.2 NOTIFICATION FORM (SCAQMD)  
APPENDIX VIII – SAMPLE RULE 403.2 RECORDKEEPING FORM  
APPENDIX IX – EMISSIONS ANALYSIS OF RELOCATING MATERIAL PILES  
APPENDIX X – COMMENTS AND RESPONSES

## **CHAPTER 1: BACKGROUND**

---

**INTRODUCTION**

**REGULATORY BACKGROUND**

**ROADWAY PROJECT ACTIVITIES**

**EXISTING AIR QUALITY AND HEALTH IMPACTS TO COMMUNITIES NEAR  
LARGE ROADWAYS**

**ANALYSIS OF HYPOTHETICAL LARGE ROADWAY PROJECT**

**FUGITIVE DUST COMPLAINTS FROM ROADWAY PROJECTS**

**NEED FOR PROPOSED RULE 403.2**

**PUBLIC PROCESS**



## **INTRODUCTION**

Fugitive dust from a large roadway project (~~LRP~~) can become airborne during construction and demolition and can result in additional particulate matter (PM) exposure to near roadway communities. South Coast Air Quality Management District (South Coast AQMD) has existing rules relating to the reduction of fugitive dust including Rule 403 – Fugitive Dust, Rule 403.1 – Supplemental Fugitive Dust Control Requirements for Coachella Valley Sources, Rule 1157 – PM10 Emission Reductions from Aggregate and Related Operations, and Rule 1466 – Control of Particulate Emissions From Soils with Toxic Air Contaminants.

However, these existing rules do not specifically address dust control from large roadway projects that are conducted in close proximity to areas of public exposure or sensitive receptors, which are already disproportionately impacted by tailpipe diesel particulate matter emissions and other air contaminants including toxics, with associated increases to inhalation cancer risk. Rule 403 applies broadly to sources with the potential to generate fugitive dust. Rule 403.1 was established as a supplemental rule for Coachella Valley fugitive dust sources. Rule 1157 controls PM10 emissions from aggregate and related operations and focuses on aggregate facilities. Rule 1466 minimizes the amount of off-site fugitive dust emissions containing toxic air contaminants by reducing particulate emissions in the ambient air as a result of earth-moving activities. In addition, these existing South Coast AQMD rules do not have specific preemptive measures to prevent additional cumulative near road community exposure to fugitive dust.

Proposed Rule (PR) 403.2 would apply to any person who conducts activities or authorizes the conducting of activities for a large roadway project. PR 403.2 prohibits aggregate crushing and grinding operations (unless for recycling of materials generated onsite and using a water misting dust control system to prevent visible emissions from extending 100 feet in any direction) and material piles, (unless a material pile cover or equivalent method to control fugitive dust approved by the Executive Officer is used,) within 100 feet of an area of public exposure or 250 feet of a sensitive receptor. Additional requirements are triggered if large roadway project activities are located within 500 feet of an area of public exposure or 1,000 feet of a sensitive receptor. PR 403.2 also establishes requirements for advance notification to South Coast AQMD and any of the abovementioned receptors located within 1,000 feet of large roadway project activities five days prior to commencement of work, additional fugitive dust controls, project signage, recordkeeping of dust controls measures implemented, and the appointment of a dust control supervisor who would be the first point of contact for dust related issues and responsible for ensuring rule compliance. The proposed rule would not establish any new emissions limits, require any additional permitting of equipment or plan submission, or require the use of any new control method or materials. However, detailed records of both the type and frequency of controls undertaken must be maintained evidencing active implementation of all aspects of rule requirements.

## **REGULATORY BACKGROUND**

South Coast AQMD's regulatory structure relating to fugitive dust includes Rule 403 – Fugitive Dust; Rule 403.1 – Supplemental Fugitive Dust Control Requirements for Coachella Valley Sources; Rule 1157 – PM 10 Emission Reductions from Aggregate and Related Operations, and Rule 1466 – Control of Particulate Emissions From Soils With Toxic Air Contaminants.

### **Rule 403**

Rule 403 was first adopted on May 7, 1976 and has undergone numerous amendments to date. The purpose of Rule 403 is to reduce the amount of particulate matter (PM) entrained in the ambient air due to anthropogenic fugitive dust sources by requiring actions to prevent, reduce or mitigate fugitive dust emissions. Rule 403 limits PM concentrations, when monitored, and contains control measures to limit fugitive dust. Rule 403 provides a list of control guidance and options for the operator to select. Additional provisions are included for large operation (>50 acres) and for operations where fugitive dust concentrations exceed performance standards with more specific dust control measures and requirements. Rule 403 presents dust control measures in four tables. Table 1 provides best available control measures (BACMs). BACMs are the most stringent emission limitations or control techniques which are commercially available. Table 2 details dust control measures for Large Operations, which are defined as 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 5,000 cubic yards or more three times during the most recent 365-day period. Tables 3 and 4 display Contingency Control Measures for Large Operations and Conservation Management Practices for Confined Animal Facilities, respectively.

Currently, existing Rule 403 regulates any activity that generates fugitive dust and allows a choice of compliance options for general fugitive dust source categories. It is broadly applicable to sites with the potential to generate fugitive dust. Although existing Rule 403 has provisions for notification to South Coast AQMD, designation of a dust control supervisor, contract signage and recordkeeping on dust control action implemented, these are only required if the project meets the specifications for a Large Operation. Rule 403 does not require advance notification to the public or nearby communities.

### **Rule 403.1**

Rule 403.1 was first adopted on January 15, 1993, and subsequently amended on June 16, 2000 and April 2, 2004. It establishes special requirements for Coachella Valley fugitive dust sources and is applicable to active operations, open storage piles or disturbed surface areas, construction (earth-moving) activities that are not subject to local jurisdiction dust control ordinance requirements. Requirements include operational restrictions based on wind speeds; stabilization, control actions specified in Table 2 of Rule 403, restrictions on earth-moving activities, fugitive dust control plans, signage, wind monitoring, and recordkeeping.

**Rule 1157**

Rule 1157 was first adopted on January 7, 2005 to reduce PM10 emissions from aggregate and related operations as part of 2003 AQMP Control Measure BCM-08 – Further Emission Reductions from Aggregate and Cement Manufacturing Operations. The rule is mostly applicable to aggregate material facilities and was last amended on September 8, 2006 to simplify and streamline the implementation of the high wind exemption provision.

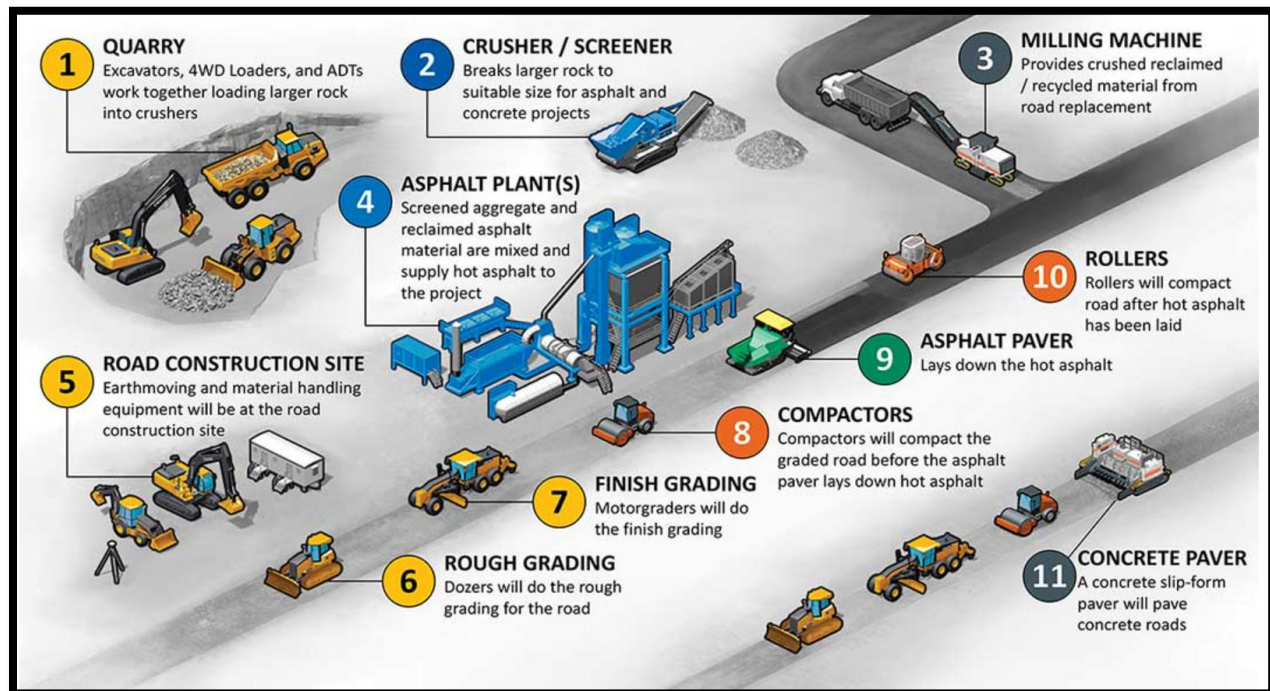
**Rule 1466**

Rule 1466 was adopted in July 2017 and filled a regulatory gap in controlling fugitive dust from soil containing non-VOC toxic air contaminants, requiring continuous ambient dust monitoring and implementation of enhanced dust control measures. The rule was amended in December 2017 to expand the list of applicable toxic air contaminants to include pesticides, herbicides, other metals, persistent bio-accumulative toxics, and semi-volatile organic compounds. The amendment also expanded the rule’s applicability to other government designated sites and clarified existing provisions. A subsequent amendment clarified existing requirements for enforceability and added enhanced monitoring requirements.

**ROADWAY PROJECT ACTIVITIES**

Roadway projects include many types of activities and equipment. For the purposes of PR 403.2, five broad categories of roadway project activities and associated equipment were evaluated for their potential to generate ambient particulate matter. These are a subset of the same activity categories found in the current version of Rule 403, that are more specific to roadway projects. These categories are based on aggregate crushing and grinding, construction and demolition, and earth moving activities, potential dust entrainment caused by the movement of construction vehicles on unpaved roads, and maintenance of material piles. These activities would only be applicable to PR 403.2 if the roadway project involved the construction and demolition of a large roadway which the rule defines as any roadway that is designated as functional classification “Interstate” (FC1) or “Other Freeway or Expressway” (FC2) pursuant to the Federal Highway Administration.

Figure 1-1 shows an overview of the typical activities that occur and the associated equipment types at roadway projects. Note that for the purposes of PR 403.2, both “Step 1 Quarry” and “Step 4 Asphalt Plants” would not be considered part of a large roadway project unless these activities were conducted onsite. Note also that the following is only intended to be a general discussion of the types of roadway project activities/equipment for general background purposes. Except for entrainment of dust from construction vehicles and material piles, additional controls beyond those currently in existing dust control rules would not be required in PR 403.2. With the exception of the dust from construction roads and material pile categories, existing requirements in other fugitive dust rules, primarily Rule 403, already require sufficient controls for large roadway projects.

**Figure 1-1: Common Roadway Project Activities**

### Aggregate Crushing and Grinding

Aggregate crushing and grinding is a physical, mechanical activity that reduces the size of a material. Many varieties and models of equipment exist for both of these types of activity, but the process is similar. Crushing is typically achieved by forcefully driving pieces of material against each other and metal plates inside the crusher, resulting in the material being broken down into smaller pieces. Grinding typically reduces the size of a material by abrasion of the surface of a material with a grinder to remove layers of a material. One machine typically performs both the activities of crushing and grinding of material. Figure 1-2 shows a typical portable crusher at a roadway project site which is used to crush demolition materials into smaller sized recycled aggregate for reuse at the job site. Recycling of demolition materials is an important objective of the crushing and grinding operation. However, demolition materials are also routinely trucked in from other project sites. If the material is not immediately needed for the project, large piles of demolition materials are established until the material is needed and then are crushed and ground up on site to produce recycled aggregate for use at the roadway project site. Aggregate crushing and recycling for the purpose of PR 403.2 only includes the activity of reducing the size of demolition materials and the associated crusher(s). It does not include other grinding activities such as cold planing which is categorized as construction/demolition.

**Figure 1-2: Crushing and Grinding Activities at Roadway Project**

### **Construction/Demolition Activities**

Roadway construction and demolition activities cover one of the broadest ranges of activities and associated equipment types. In addition to alteration of existing roadways (for example to accommodate a light rail thoroughfare or expand the number of lanes on an existing freeway) this category includes construction/demolition of associated infrastructure, specifically for the purposes of PR 403.2, bridges, overpasses and onramps/offramps. Fugitive dust may be generated by the demolition of existing structures associated with the roadway such as bridges and overpasses. Work on a roadway to cut, grind, resurface, plane (cold plane), and mill also qualifies as a construction/demolition activity. These activities typically consist of breaking up and removing material, after which the recycled construction material is reused to reconstruct the existing roadway. This is commonly achieved by using a milling machine as shown in Step #3 of Figure 1-1. Many roadway projects seek to recycle all of the products of demolition, either generated onsite or trucked in at the project, and reuse them as construction material, however, demolition materials from other sites may also be trucked in for crushing/grinding onsite. In general, a roadway activity that does not fit in any of the other defined roadway project categories as described in the proposed rule is either a construction or demolition activity, if not exempted from rule applicability.

### **Earth-Moving Activities**

Earth-moving (soil) activities occur in new roadway construction, as well as trenching or other excavation work to gain access to underground utilities such as sewer and water pipelines.



Common equipment types include scrappers, graders, excavators, and bulldozers (such as in Figure 1-1, steps 5, 6 and 7) and as shown in Figure 1-3. It is also possible that the same equipment could also be classified as construction demolition equipment (e.g., rollers and graders), depending on the project. Note that excavation of an existing roadway is a demolition activity since it involves breaking through an existing roadway.



**Figure 1-3: Earth-Moving and Excavation Activities**

### **Movement of Construction Vehicles over Unpaved Roads**

Movement of all construction vehicle types within the boundaries of a roadway project can cause road dust to be re-entrained, which then could potentially lead to off-site fugitive dust impacts to areas of public exposure and sensitive receptors. This includes both off-road and on-road vehicles (as shown in Figure 1-4) operating on unpaved roads at a job site. In addition to the off-road construction equipment, this would also include on-road trucks while they are shuttling around within the boundaries of the roadway project. Rule 403 Large Operations provisions apply to active operations on project sites which involve 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. Large Operations are typically projects with large footprints that do not necessarily follow the course of a roadway and may have many unpaved roads within the perimeter of the job site. Most large roadway projects subject to the proposed rule will likely not have this type of footprint with limited amounts of unpaved roads subject to the provisions of the rule. The rule is not intended to include roads that are outside the project perimeter. Regarding paved roads, California Vehicle Code Section 23114(a) currently prohibits roadway material contents of a vehicle from “dropping, sifting, leaking, blowing, spilling, or otherwise escaping from the vehicle”.<sup>1</sup>

**Figure 1-4: Construction Vehicles on Unpaved Roads**



### **Material Piles**

Typical material piles at roadway projects consist of post-demolition and pre-construction recycled concrete/asphalt. Material piles are formed from demolition material (e.g., existing concrete or asphalt road that is torn out) and also from piles of material generated after crushing and grinding to produce recycled aggregate material. Other pre-crushed materials at roadway projects include concrete and stone from demolition of structures (e.g., bridges or overpasses associated with the roadway). Figures 1-5 and 1-6 below show the potential for how high material piles can reach at a large roadway project.

<sup>1</sup> [https://leginfo.ca.gov/faces/codes\\_displaySection.xhtml?lawCode=VEH&sectionNum=23114](https://leginfo.ca.gov/faces/codes_displaySection.xhtml?lawCode=VEH&sectionNum=23114)



**Figures 1-5 & 1-6: Material Piles at Large Roadway Projects**



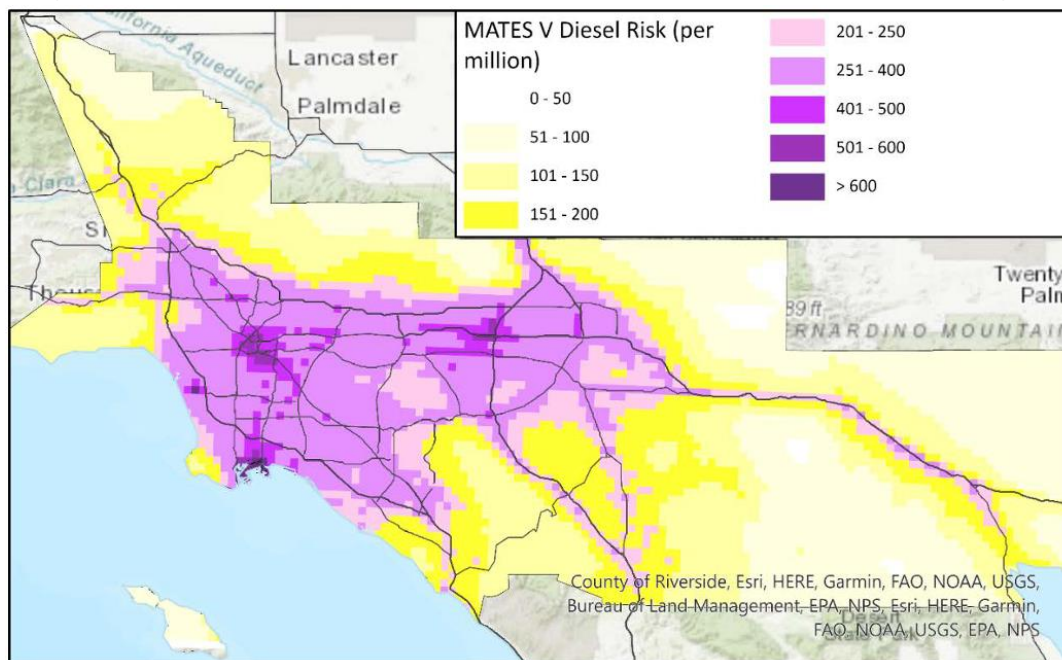


## **EXISTING AIR QUALITY & HEALTH IMPACTS TO COMMUNITIES NEAR LARGE ROADWAYS**

This section describes existing air quality and health impacts to communities near large roadways that are not attributed to construction/demolition projects for a large roadway. Data and studies below specifically reflect air quality and health impacts resulting from diesel particulate matter emissions and other toxics from mobile sources and re-entrainment of road dust.

Health studies have shown a significant association between exposure to particulate pollution and health risks, including premature death. Appendix I of the 2016 Air Quality Management Plan (AQMP)<sup>2</sup> describes in more detail the health effects of fine particulates based on numerous studies including data on increased hospital admissions, emergency room and physician office visits and school absences. In addition to increased mortality other health effects include the exacerbation of respiratory and cardiovascular diseases (asthma and non-fatal myocardial infarction) and effects on lung function as well as lung morphology. Studies have shown an association with changes in the brain leading to both memory and cognitive decline, and also to the development of benign and malignant brain tumors.<sup>3</sup>

**Figure 1-7: MATES V Inhalation Cancer Risk from Diesel PM from All Categories**



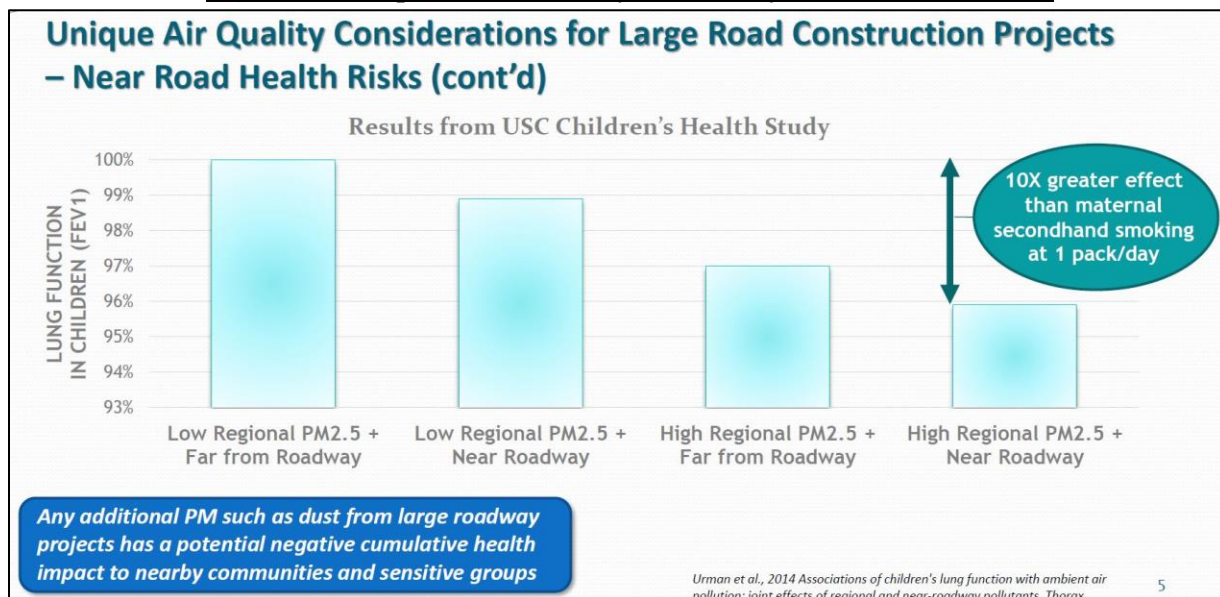
<sup>2</sup> <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/appendix-i.pdf>

<sup>3</sup> <https://www.aqmd.gov/nav/about/groups-committees/bltap-foundation/bltap-6th-annual-report>

As shown in South Coast AQMD's MATES V study (see Figure 1-7)<sup>4</sup>, communities located near large roadways are already disproportionately impacted by air pollution due to diesel exhaust and other toxic pollutants from fossil fueled vehicles such as large trucks, cars and buses. Many studies have shown that large roadway-related pollution is found in much higher concentrations within the first few hundred feet of the roadway.<sup>5</sup> These elevated pollutant levels are also strongly associated with human health effects, as discussed in Chapter 9 of the 2012 AQMP.<sup>6</sup>

Figure 1-8 presents an example of the impacts of unhealthy air quality on children's health in near roadway communities. PR 403.2 is intended to reduce any additional cumulative impacts of fugitive dust exposure from a large roadway project to near road communities.

**Figure 1-8: Impacts of Unhealthy Air Quality on Children's Health**



Exposure to traffic-related pollution is linked to asthma and other respiratory symptoms, development of childhood asthma, and cardiovascular disease and death (SCAQMD AQMP, 2016). Perez et al. (2012) estimated that 8% of childhood asthma cases in Los Angeles County, California, could be partly attributed to living close to a major road (Perez et al., 2012). Living near a major road also has been associated with decreased lung function in adults with asthma (Balmes et al., 2009).

<sup>4</sup> [http://www.aqmd.gov/docs/default-source/planning/mates-v/appendix\\_x\\_final.pdf](http://www.aqmd.gov/docs/default-source/planning/mates-v/appendix_x_final.pdf)

<sup>5</sup> [http://www.aqmd.gov/docs/default-source/technology-research/Technology-Forums/near-road-mitigation-measures/near\\_road\\_mitigation-agenda-presentations.pdf](http://www.aqmd.gov/docs/default-source/technology-research/Technology-Forums/near-road-mitigation-measures/near_road_mitigation-agenda-presentations.pdf)

<sup>6</sup> [http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2012-air-quality-management-plan/final-2012-aqmp-\(february-2013\)/chapter-9-final-2012.pdf](http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2012-air-quality-management-plan/final-2012-aqmp-(february-2013)/chapter-9-final-2012.pdf)

## **ANALYSIS OF A HYPOTHETICAL LARGE ROADWAY PROJECT**

Large roadway projects range from smaller to large whole freeway construction projects, with numerous types of projects that vary in the types of equipment utilized, project goals, project duration and other factors. Large roadways and associated activities/equipment are typically located close to receptors (near roadway communities) due to existing land use. Near roadway communities are also already disproportionately impacted by higher levels of existing vehicular traffic tailpipe emissions. Any additional source of air pollution, including non-tailpipe fugitive dust only adds to this already disproportionate air pollution impact on near-road communities. Due to close proximity any additional type of air pollution, including large road project non-tailpipe emissions and exposure to fugitive dust, results in an increased cumulative air pollution burden on near road communities. Therefore, there is a very small margin of error for fugitive dust impacts to near road areas of public exposure and sensitive receptors.

As discussed in the above sections, air pollution at large roadways is overwhelmingly caused by on-road vehicle tailpipe emissions (e.g., passenger cars and on-road trucks). Exposure to non-tailpipe fugitive dust emissions from construction and demolition activities would further negatively impact air quality in these communities. Staff conducted an analysis of a hypothetical large roadway project. Table 1-1 shows the input data for a hypothetical large roadway project using standard inputs from the California Emissions Estimator Model (CalEEMod)<sup>7</sup> for a hypothetical 10-acre road construction large roadway project (also see Appendix I for additional details uncontrolled emissions factors and emission amounts). Since controlled activities/equipment should not result in significant if any fugitive dust emissions, uncontrolled standard model inputs were used to simulate and assess potential air quality impacts when fugitive dust is generated. Model inputs used from CalEEMod were for the type of off-road construction vehicles, average number of vehicles per day by type of vehicle, and the number of hours per day that the vehicles are utilized organized by construction vehicle type. Also, results of a study of several California Department of Transportation (Caltrans) roadway projects conducted by UC Berkeley in 2008 were used as the inputs for the number of days that the vehicles were used.<sup>8</sup> Some additional activities/equipment that were not included in this model would add to fugitive dust air pollution include potential dust that could be re-entrained by service vehicles at the project site and smaller equipment such as concrete saws.

---

<sup>7</sup> [https://www.caleemod.com/documents/handbook/appendices/appendix\\_c.pdf](https://www.caleemod.com/documents/handbook/appendices/appendix_c.pdf)

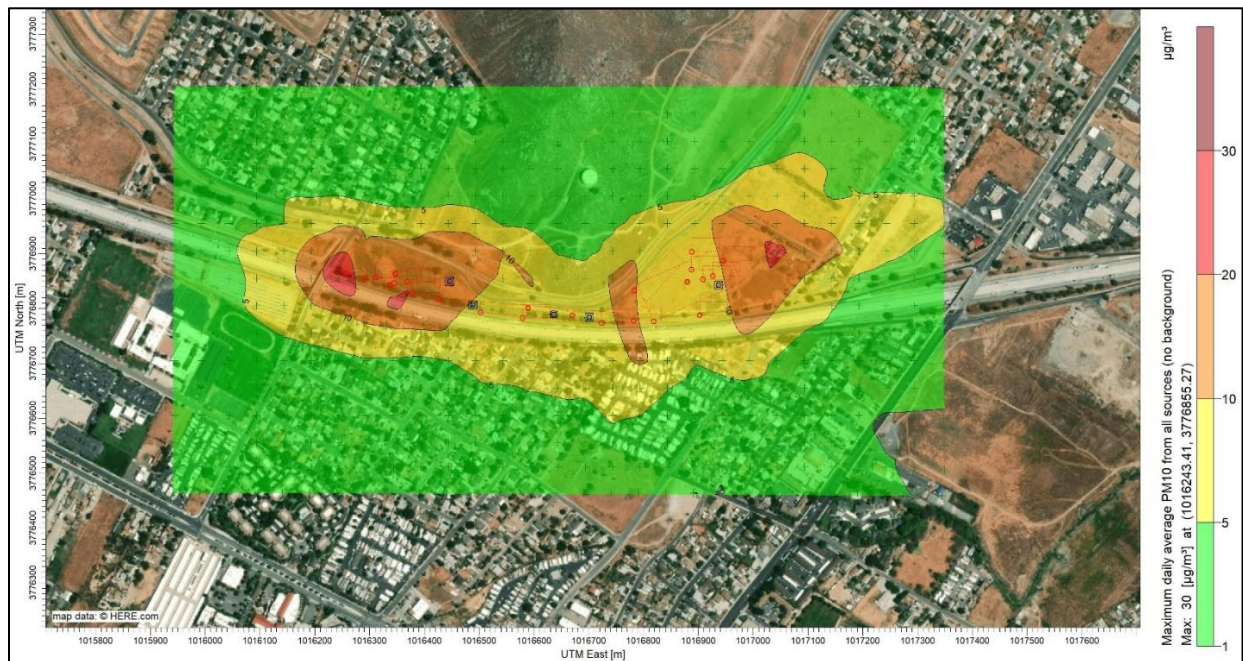
<sup>8</sup> <https://escholarship.org/uc/item/3zw7s1fk>

**Table 1-1: CalEEMod Input Data for Hypothetical Large Roadway Project**

<b>10 Acre Site</b>	<b>Vehicle/Equipment Type</b>	<b>Average Number of Vehicles</b>	<b>Hours per Day</b>	<b>Days per Vehicle</b>	<b>Total Hours of Vehicle Type Activity</b>	<b>Estimated Total Vehicle Day per Type</b>
<b>Demolition</b>						
	Rubber Tired Dozer	2	8	2	32	4
	Concrete Saw	1	8	n/a	n/a	n/a
	Excavator	3	8	n/a	n/a	n/a
<b>Grading</b>						
	Rubber Tired Dozer	1	8	2	17	2
	Excavator	1	8	n/a	n/a	n/a
	Grader	1	8	4	34	4
	Tractor/Loader/Backhoe	3	8	33	801	100
<b>Construction</b>						
	Crane	1	7	2	17	2
	Tractor/Loader/Backhoe	3	7	33	701	100
<b>Site Prep</b>						
	Bulldozer	3	8	2	48	6
	Tractor/Loader/Backhoe	4	8	33	1068	134

These estimated emissions were used as inputs for a dispersion modeling exercise using the EPA-approved AERMOD model. Emissions sources were geographically grouped and located in relation to an example location with adjacent homes and open space areas in order to illustrate potential impacts, however this specific location is not specifically associated with any large roadway project. The resulting model output for PM<sub>10</sub> fugitive emissions is shown in Figure 1-9 as a contour map with 24-hour average PM<sub>10</sub> concentrations shown in the area contained within each contour boundary. While the model is hypothetical and represents a typical smaller project, the graphic shows that the modeled large roadway project can result in ambient PM<sub>10</sub> emissions which decrease with distance from the project activity. As such, distance-based requirements from areas of public exposure or sensitive receptors are a way to reduce the impacts of PM from a large roadway project on near roadway communities.



**Figure 1-9: Large Roadway Project PM<sub>10</sub> Impacts to Communities**

### **FUGITIVE DUST COMPLAINTS FROM ROADWAY PROJECTS**

In addition to the cumulative air quality impacts to receptors in close proximity to large roadway projects, South Coast AQMD regularly receives complaints from the public regarding fugitive dust from roadway projects. Appendix II of this report shows that there have been 89 roadway fugitive dust related complaints from 6/25/2019 through 2/16/2022, and that fugitive dust continues to be problematic for some larger roadway construction projects. However, Appendix II provides the following information for these complaints: Complaint Received Date, Complaint Number, Alleged Source Name, Alleged Source Location, Alleged City and Complaint Description. Staff seeks to reduce such incidents with a more targeted rule (PR 403.2) that focuses on preventing large roadway fugitive dust issues. Also, while the actual number fluctuates, there are numerous roadway projects, ongoing or planned, any of which might at any given time potentially result in fugitive dust complaints. As of March 23, 2022, the California Department of Transportation (Caltrans) website showed that within the jurisdiction of South Coast AQMD, there were a total of 57 roadway projects.<sup>9</sup> While Rules 403 and 1157 focus broadly on fugitive dust controls and more specific requirements for fugitive dust from aggregate operations, respectively, PR 403.2 would focus specifically on large roadway projects with the goal of preempting situations of exposure to excess fugitive dust.

<sup>9</sup> <https://dot.ca.gov/programs/asset-management/caltrans-project-portal> parts of District 7 and 8, and District 12.

### **NEED FOR PROPOSED RULE 403.2**

PR 403.2 is needed to further reduce fugitive dust exposure to areas of public exposure and sensitive receptors in close proximity to a large roadway project by prohibiting aggregate crushing and grinding operations (unless for recycling of materials generated onsite and using a water misting dust control system to prevent visible emissions from extending 100 feet in any direction) and maintenance of material piles; (unless a material pile cover or equivalent method to control fugitive dust approved by the Executive Officer is used;) within 100 feet of an area of public exposure, or 250 feet of a sensitive receptor. In order to ensure that South Coast AQMD and the surrounding community is aware of these projects ahead of time, the proposed rule also requires advance notification to both the South Coast AQMD as well as the abovementioned receptors within 1,000 feet of large roadway project activities prior to start of work. PR 403.2 also includes additional or increased fugitive dust controls, project signage with contact information for dust related issues, recordkeeping of dust control measures and notification, and designation of a dust control supervisor responsible for ensuring rule compliance.

### **PUBLIC PROCESS**

PR 403.2 was developed through a public process. South Coast AQMD has held four working group meetings remotely (July 15, 2021, October 22, 2021, December 14, 2021, and January 20, 2022). The working group is comprised of representatives from industry, environmental groups, public agencies, and consultants. The purpose of the working group meetings was to discuss the proposed rule and allow stakeholders the opportunity to provide input during the rule development process. In addition, staff has held 35 meetings remotely with different stakeholders since July 2021. The Public Workshop was held on March 2, 2022, with close of comments on March 16, 2022. Staff has continued to take comments and respond to stakeholders beyond the official close of comments. Proposals and updates were also presented at Stationary Source Committee meetings held on March 18, 2022, ~~and~~ April 15, 2022, ~~and~~ May 20, 2022. Below is a log of stakeholder meeting with staff as of this writing. See Appendix X for responses to comments received.

<b>Date</b>	<b>Stakeholder(s)</b>
<u>5/17/22</u>	<u>California Construction and Industrial Materials Association</u>
<u>5/13/22</u>	<u>Caltrans</u>
<u>5/11/22</u>	<u>Caltrans</u>
3/31/22	California Construction and Industrial Materials Association
3/31/22	Southern California Alliance of POTWs
3/31/22	Construction Industry Air Quality Coalition
3/30/22	Caltrans
3/24/22	Caltrans
3/17/22	Construction Industry Air Quality Coalition

<b>Date</b>	<b>Stakeholder(s)</b>
3/16/22	California Construction and Industrial Materials Association
3/15/22	Southern California Alliance of POTWs
3/11/22	Southern California Gas Company
3/9/22	Caltrans
3/2/22	California Construction and Industrial Materials Association
3/1/22	Caltrans
2/24/22	California Construction and Industrial Materials Association
2/22/22	Caltrans
2/16/22	Construction Industry Air Quality Coalition
2/10/22	Caltrans
2/3/22	Metropolitan Water District
2/1/22	Southern California Gas Company
1/28/22	Construction Industry Air Quality Coalition, Cal Asphalt Pavement Association, AGC of California, SCCA
1/26/22	L.A. County Sanitation Districts, Metropolitan Water District, Southern California Alliance of POTWs, Irvine Ranch Water District and Eastern Municipal Water District
1/13/22	Caltrans
12/16/21	Southwest Concrete Pavement Association
12/9/21	California Construction and Industrial Materials Association
11/5/21	Southern California Association of Governments
9/23/21	Caltrans
9/2/21	L.A. Metro
8/19/21	Caltrans
8/4/21	Caltrans
7/30/21	California Construction and Industrial Materials Association
7/28/21	L.A. Metro
7/23/21	Mesa Water, Cal Asphalt Pavement Association, Yorke Engineering
7/22/21	Caltrans
7/15/21	Construction Industry Air Quality Coalition
7/13/21	California Construction and Industrial Materials Association

## **CHAPTER 2: SUMMARY OF PROPOSAL**

---

**INTRODUCTION**

**PROPOSED RULE 403.2**



## **INTRODUCTION**

PR 403.2 will supplement existing regulatory measures in Rule 403 by establishing requirements to reduce air quality impacts to nearby receptors resulting from fugitive dust generated by construction and demolition activities of a large roadway, including any adjacent bridge, overpass, or onramp/offramp. The proposed rule would prohibit certain large roadway project activities that generate dust and are conducted in close proximity to sensitive receptors and areas of public exposure. PR 403.2 would also include additional requirements to control dust, notification to nearby receptors, project signage, dust control supervisor, and recordkeeping. The requirements of PR 403.2 would become effective for new projects 6 months after the date of adoption.

## **PROPOSED RULE 403.2**

### **(a) Purpose**

The purpose of PR 403.2 is to reduce potential air quality impacts to people who may be exposed to fugitive dust generated by large roadway projects.

### **(b) Applicability**

PR 403.2 applies to any person who conducts activities, and/or authorizes the conducting of activities for a large roadway project. The provisions of PR 403.2 would supplement existing requirements pursuant to Rules 403 and 403.1. PR 403.2 is only applicable to rule-specified activities at a large roadway project in close proximity to an area of public exposure or sensitive receptor as defined in the rule.

### **(c) Definitions**

For clarity and consistency, PR 403.2 includes several existing definitions found in Rule 403 with minor modifications for large roadway purposes. Other definitions are new or from other South Coast AQMD rules applicable to fugitive dust.

*(c)(1): AGGREGATE CRUSHING AND GRINDING* means any activity that mechanically reduces the size of loose or stockpiled material to produce sand, gravel, crushed stone, quarried rock, or other aggregate material (such as recycled concrete/asphalt). [*new definition*]

Aggregate crushing is typically a mechanical process for physically reducing larger sized materials (typically from demolition activities) into smaller recycled aggregate material. Grinding also reduces the amount of crushed material from the substrate, however, it is typically accomplished by friction between surfaces where one surface wears down the other. Grinding of roadways is not considered to be a grinding activity of the purposes of PR 403.2.

*(c)(2): AREA OF PUBLIC EXPOSURE* means any area within the property line of any office, commercial or industrial property as well as any park, or open space/recreational facility, including associated structures and amenities specifically designated by a governmental agency or private entity for recreational purposes. Examples include amusement parks, hiking trails, athletic fields, and campgrounds. Undeveloped open space areas that are not designated for recreation are not considered areas of public exposure for purposes of this Rule. [*new definition*]

For open space/recreational facilities, such as state or county parks, locations within the property line that are not designated for public or staff use are excluded. For example, the buffer between a large roadway project and a park would begin at a trail, assuming no other designated uses for any land between the trail and the large roadway as shown in Figure 2-1 (also see Example 1 in Appendix III of this report). For developed properties like office buildings the converse is true. Although a building may be set back a distance inside of the property line, distances are measured to the property line and not to the structure/building.

**Figure 2-1: Distance for an Area of Public Exposure**



(c)(3): *BULK MATERIAL* is sand, gravel, soil, and aggregate material (such as recycled concrete/asphalt) less than two inches in length or diameter, and other organic or inorganic particulate matter. [existing Rule 403 definition]

(c)(4): *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 used of a non-toxic chemical stabilizer shall be of sufficient concentration and application frequency to maintain a stabilized surface. [existing Rule 403 definition]

(c)(5): *CONSTRUCTION/DEMOLITION ACTIVITIES* means any 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 and unloading, cutting, grinding, milling, planing, shaping, or ground breaking. [existing Rule 403 definition]

(c)(6): *CONSTRUCTION VEHICLE* means graders, bulldozers, excavators, cranes, loaders, backhoes, tractors, haul trucks and other similar vehicles used at a large roadway project. [existing Rule 403 definition]

(c)(7): *CONTRACTOR* means any person who has a contractual arrangement to establish or conduct activities at a large roadway project for another person. [modified Rule 403 definition]

This definition was modified from Rule 403 to only apply to contractors associated with a large roadway project.

(c)(8): *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. [existing Rule 403 definition]

(c)(9): *DUST CONTROL SUPERVISOR* means a person with the authority to expeditiously employ sufficient dust mitigation measures to ensure compliance with all requirements of this Rule. [existing Rule 403 definition]

(c)(10): *DUST SUPPRESSANT* means water, hygroscopic materials, or non-toxic chemical stabilizers used as a treatment material to reduce fugitive dust emissions. [existing Rule 403 definition]

This definition for dust suppressant includes water as well as chemical stabilizers.

(c)(11): *EARTH-MOVING ACTIVITIES* means the use of equipment for any activity where soil is being moved or uncovered including, but is not limited to the following: grading, earth cutting and filling operations, loading or unloading of dirt or bulk materials, and adding to or removing from open storage and material piles. [new definition]

(c)(12): *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. [existing Rule 403 definition]

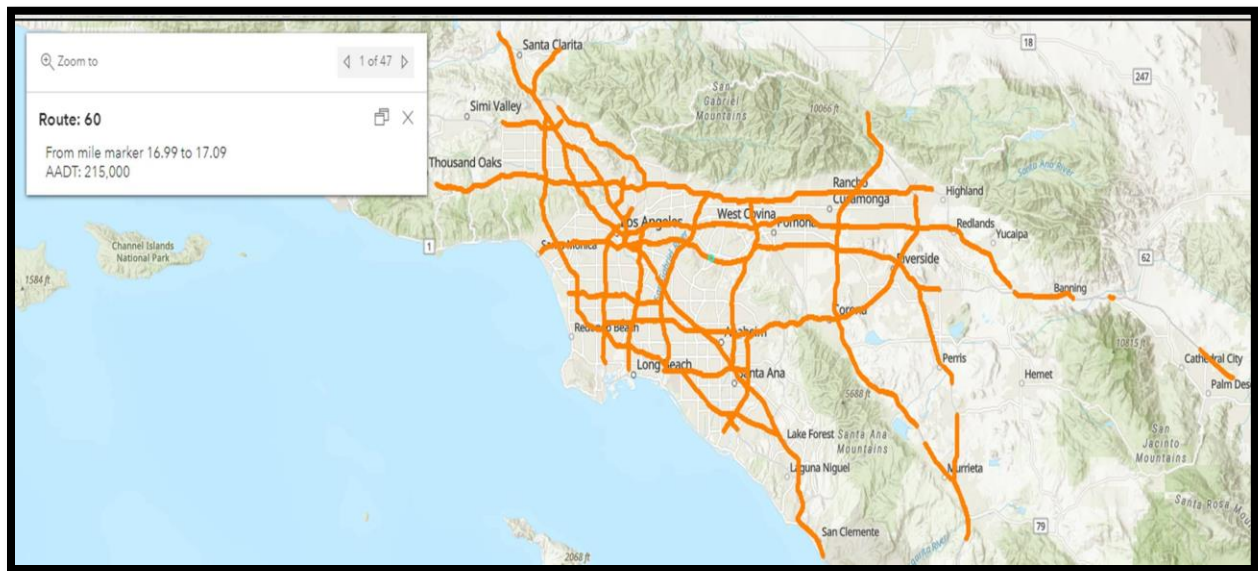
(c)(13): *LARGE ROADWAY* means any roadway that is designated as functional classification “Interstate” (FC1) or “Other Freeway or Expressway” (FC2) pursuant to the Federal Highway Administration. [*new definition*]

During the public process for developing concepts for PR 403.2, staff had requested stakeholder feedback on how to best define a large roadway. Several approaches to defining a large roadway for the purposes of rule applicability were evaluated, which included the throughput of materials for the project, project/activity duration, type of equipment used, and the number of roadway lanes. Each of these approaches carried benefits and drawbacks. Determining a material throughput or project duration threshold is problematic since a lower throughput or shorter duration is not necessarily indicative of a lower potential for fugitive dust. This can be better determined by the level of best practices and work management for the project. Also, there are some roadways with fewer lanes, but a higher volume of traffic than roadways with more lanes, such as Route 110 in Los Angeles which has fewer lanes than some sections of Route 10 running through less densely, rural portions of Riverside County. Since roadways that are used more intensively will typically also require more repair, maintenance and other roadway project activities, a metric that measures the volume of traffic on a roadway is most appropriate and representative. A widely used metric for traffic volume is the Average Annual Daily Traffic (AADT).

California Air Resources Board (CARB) defines large urban roadways and large rural roadways as those with a 100,000 and 50,000 AADT, respectively<sup>10</sup>. Conceptual preliminary draft language presented at a working group meeting in December 2020 simplified the definition of a large roadway to strictly 100,000 AADT, especially given the predominantly urban nature of the South Coast AQMD region. The preliminary draft of PR 403.2 defined large roadways broadly with the entire length of a roadway being considered applicable if any portion of it exceeded 100,000 AADT. Staff considered the possibility of communicating this information through a weblink or utility. Figure 2-2 below shows a map displaying large roadways using this conceptual interactive tool.

---

10 <https://ww3.arb.ca.gov/ch/handbook.pdf>; [https://ww2.arb.ca.gov/sites/default/files/2017-10/rd\\_technical\\_advisory\\_final.pdf](https://ww2.arb.ca.gov/sites/default/files/2017-10/rd_technical_advisory_final.pdf)

**Figure 2-2: Conceptual Map Showing 100,000 AADT**

Complexities and practical issues were raised regarding the development and use of such a tool for both staff and the end-user, including resource demands for data integrity, ongoing maintenance and updates to utility information. Stakeholders requested that staff provide simpler approaches to equivalently determine roads with 100,000 AADT and recommended using readily available tools such as the California Department of Transportation (Caltrans) Functional Classification System (as determined by the Federal Highway Administration) to evaluate already established categories of roadways as an alternative. The Federal Highway Administration (FHWA) is an agency within the federal U.S. Department of Transportation that supports state and local governments in the design, construction, and maintenance of the nation's highway system (Federal Aid Highway Program) and various federally and tribal owned lands (Federal Lands Highway Program).<sup>11</sup> FHWA also classifies roadways and maintains data on traffic volumes.<sup>12</sup>

Staff evaluation of roadways under Functional Classification (FC)1 “Interstates” and FC2 “Freeways and Other Expressways” (blue and brown shown respectively in Figure 2-3<sup>13</sup>; all other colors/classifications are not to be considered) revealed minimal differences compared to large roadways identified under the initial proposed definition (Figure 2-2), with the exception that there are some sections of roadways in more rural and less populated areas of Riverside and San Bernardino counties that are less than 100,000 AADT. These areas, however, are unlikely to have projects within proximities of an area of public exposure or sensitive receptor that would make the large roadway project subject to PR 403.2. Effectively there is a minimal difference to the actual number of projects that would be subject to the rule using either approach to define a large roadway. Staff and stakeholders agreed with the clearer definition and approach to use the

<sup>11</sup> <https://highways.dot.gov/>

<sup>12</sup> [https://geo.dot.gov/server/rest/services/Hosted/HPMS\\_FULL\\_CA\\_202/FeatureServer/0](https://geo.dot.gov/server/rest/services/Hosted/HPMS_FULL_CA_202/FeatureServer/0)

<sup>13</sup> See Functional Classification for Highway Classifications: <https://dot.ca.gov/programs/research-innovation-system-information/highway-performance-monitoring-system/functional-classification>



established FC1 and FC2 designations to define a large roadway for the purposes of the proposed rule.

**Figure 2-3: Caltrans FC1 and FC2 Designated Highways in South Coast AQMD**



(c)(14): *LARGE ROADWAY PROJECT* means onsite activities associated with the construction/demolition of a large roadway, including any adjacent bridge, overpass, or onramp/offramp. [new definition]

Activities conducted offsite, including facilities such as permitted batch plants supplying material for the project, would be excluded from rule applicability. Facilities are typically located far away from the roadway project and are not exclusively supplying materials for a specific large roadway project, but rather generally provide services and materials for multiple uses, contractors, and projects for the construction industry. While distant sources that supply materials in support of a roadway project are exempt, any materials delivered to the project site and then stored or further processed onsite are not excluded from rule applicability.

(c)(15): *MATERIAL PILE* means any accumulation of bulk materials, construction/demolition debris, excavated material, or typical roadway material which is greater than eight feet. [modified Rule 403 definition]

This definition was modified from the Rule 403 definition for “open storage pile” in order to better characterize the type of materials that a storage pile would consist of for a roadway project. The applicable height of greater than eight feet is based on the height at which Rules 403 and 1157 identify as a height of concern where additional dust controls are needed.

(c)(16): *MATERIAL PILE COVER* means plastic sheeting at least 10 mil thick that overlaps a minimum of 24 inches and is anchored and secured so that no portion of the material pile is exposed to the atmosphere. [new definition based on Rule 1466 requirements for cover]

(c)(17): *PARTICULATE MATTER* means any material, except uncombined water, which exists in a finely divided form as a liquid or solid at standard conditions. [existing Rule 403 definition]

(c)(18): *PERSON* means any individual, firm, association, organization, partnership, business trust, corporation, company, contractor, supplier, install, user or owner, or any state or local governmental agency or public district or any other officer or employee thereof. [existing Rule 102 definition]

(c)(19): *SCHOOL* means any public or private education center, including juvenile detention facilities with classrooms, used for the education of more than 12 children at the education center in kindergarten through grade 12. A school also includes an Early Learning and Developmental Program by the U.S. Department of Education or any state of local early learning and developmental programs such as preschools, Early Head Starts, Head Start, First Five, and Child Development Centers. A school does not include any private education center in which education is primarily conducted in private homes. A school includes any building or structure, playground, athletic field, or other area of school property. [existing Rule 1466 definition]

(c)(20): *SENSITIVE RECEPTOR* means a residence including private homes, condominiums, apartments, and living quarters, schools, preschools, daycare centers and health facilities such as hospitals or retirement and nursing homes. A sensitive receptor includes long term care hospitals, hospices, prisons, and dormitories or similar live-in housing. [existing Rule 1470 definition]

(c)(21): *STABILIZED SURFACE* means any previously disturbed surface area or material 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. [existing Rule 403 definition]

(c)(22): *TYPICAL ROADWAY MATERIALS* means concrete, asphaltic concrete, recycled asphalt, or any other material of equivalent performance as determined by the Executive Officer. [existing Rule 403 definition]

(c)(23): *UNPAVED ROAD* 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. [existing Rule 403 definition]

#### **(d) Requirements**

Provisions of PR 403.2 are proposed to be effective for any new projects that begin active operations six months after the date of rule adoption. This would allow sufficient time for

stakeholders that have requested lead time to update contracts and other internal specifications and guidance documents to reflect rule requirements. This approach would also make the proposed rule more straightforward to implement (such as not having to determine when a multi-year project began). Also, it provides clarity, with a simple and equitable approach that treats all projects on an equal footing. Caltrans is currently conducting a pilot project that incorporates project specifications which proactively implement provisions of PR 403.2 for select roadway projects.

Paragraph (d)(1), barring an emergency or an applicable exemption, includes a prohibition of aggregate crushing and grinding activities (portable crushing units) or maintenance of material piles, ~~unless a material pile cover or equivalent method approved by the Executive Officer to control fugitive dust is used~~, within 100 feet of an area of public exposure or within 250 feet of a sensitive receptor. Aggregate crushing and grinding that is conducted onsite to recycle materials generated from the large roadway project is allowed in the prohibition buffers if it uses a water misting dust control system that prevents visible emissions from extending 100 feet in length in any direction. Additionally, material piles are allowed in the prohibition buffers if it is covered using a material pile cover, as defined in the rule, or an equivalent method to control fugitive dust as approved by the Executive Officer. Other activities in other large roadway project categories such as construction/demolition are not prohibited within 100 feet of an area of public exposure or 250 feet of a sensitive receptor and must comply with any other applicable requirements of PR 403.2. Handheld equipment with a relatively lower potential of creating fugitive dust is allowed in the 100 and 250 feet prohibited zones. The distance of 250 feet for sensitive receptors is similar to the distance of 300 feet in Rules 403 and 1157 at which additional dust controls are needed for open storage piles. PR 403.2 would be more stringent in that the 250 feet “buffer zone” between source and receptor is an absolute prohibition (unless additional requirements mentioned above are met) in order to provide prevent or minimize the chances for fugitive dust exposure. As shown through the modeling in Chapter 1, it is primarily the proximity of the activity to the receptor that determines exposure to PM concentrations (from both tailpipe and fugitive dust sources).

The 100-foot prohibition for an area of public exposure remains unchanged from the initial proposed rule language since staff estimates that such areas are generally more transiently occupied (such as walking paths or recreational venues such as theme parks) and this distance will likely provide a sufficient buffer for any potential fugitive dust exposure at such locations. The chances of potential fugitive dust are also further minimized by additional dust controls measures for material piles in the proposed rule (currently only required for Rule 403 Large Operations) which specifically require frequent application of dust suppressants and/or pile enclosures.

Paragraph (d)(2) specifies requirements for large roadway project activities listed below that are conducted within 500 feet of an area of public exposure, or 1,000 feet of a sensitive receptor:

- (A) Aggregate crushing and grinding operations;
- (B) Construction/demolition activities;
- (C) Earth-moving or any other mechanical activity that results in disturbed surface area;
- (D) Movement of vehicles over unpaved roads; or

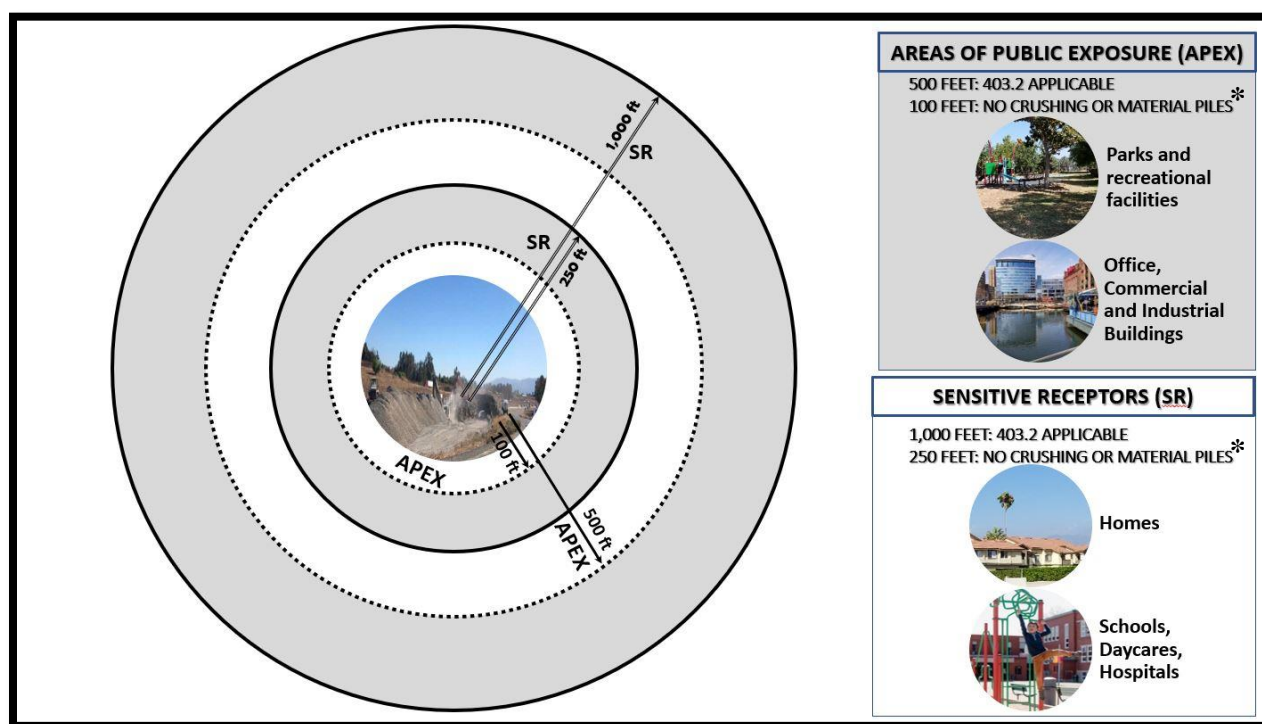


## (E) Maintenance of material piles.

No person shall conduct the above activities at a large roadway project at the specified distances unless in compliance with the provisions of subdivision (e) Additional Requirements, subdivision (f) Notification, and subdivision (g) Recordkeeping.

Distances shall be measured from the nearest edge or perimeter of the specified activity or material pile for the large roadway project to the closest location within an area of public exposure that is designated for use by the public, or point of the property line of the nearest sensitive receptor. Figure 2-3 below shows the distances and requirements of Subdivision (d).

**Figure 2-4**  
**Determination of Requirements of Subdivision (d)**



**\*unless material pile is covered and crusher has water misting dust control system**

For the purpose of this rule, the 500- and 1,000-foot distances were based on research of policies established by several public agencies. The City of San Bernardino adopted resolution #2020-265 on 10/21/2020 to prohibit crushing/grinding on or within 1,000 feet of residential zoned lots, and only allows finished materials ready for grading or construction to be stockpiled (see Appendix IV). L.A. Metro established the Green Construction Policy on July 11, 2011, which requires a minimum of 1,000 feet between truck traffic and sensitive receptors (see Appendix V). It also required notification if construction activities are located within 1,000 feet of sensitive receptors. Additionally, the Los Angeles County Department of Regional Planning has a Green Zones Public Draft Ordinance 20210617 indicating that any construction and demolition debris or inert debris processing facility sites shall be located outside a 500-foot buffer of a lot that contains a sensitive

use. In addition, any construction and demolition debris processing facility or inert debris processing facility located between a 501-1,000-foot buffer of a lot that contains a sensitive use shall conduct all operations, including storage and equipment use, within completely enclosed buildings.<sup>14</sup>

**(e) Additional Requirements**

Additional requirements of subdivision (e) are separated into three paragraphs outlining requirements for (1) a Dust Control Supervisor, (2) Control Measures, and (3) Signage.

**(1) Dust Control Supervisor**

Paragraph (e)(1) requires that a person responsible for a large roadway project identifies and designates a Dust Control Supervisor, as defined by the Rule, that:

- (A) is employed by or contracted with the property owner, developer, or other persons responsible for the large roadway project;
- (B) is on the site or available onsite within 30 minutes during working hours;
- (C) has completed South Coast AQMD Fugitive Dust Control Class and holds a valid Certificate of Completion for the class; and
- (D) is responsible for responding to air quality issue inquiries regarding the large roadway project.

PR 403.2 would require the dust control supervisor to be responsible for generating/maintaining daily records during the term of the large roadway project pursuant to subdivision (g) and make them available to the Executive Officer upon request. After project completion the person (as defined in this rule) responsible for the project (e.g., project proponent or dust control supervisor) shall keep records for a minimum of three years and make such records available to the Executive Office upon request.

**(2) Control Measures**

Paragraph (e)(2) requires the use of the additional applicable control measures for two categories of large roadway project activities: “Dust from Construction Roads” and “Material Piles” to further prevent fugitive dust and visible emissions. These control measures would be supplemental and in addition to “base” control measures already required in other dust rules such as Rules 403, 403.1, 1157, 1466.

Existing Rule 403(d)(1)(A) broadly requires that no person shall cause or allow the emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area such that the dust remains visible in the atmosphere beyond the property line of the emission source. In addition to this general prohibition on fugitive dust, Rule 403 also has best management/housekeeping practices, dust control requirements, for a variety of activities and equipment. Table 1 of Rule 403 lists control measures and implementation guidance for a number of specific categories:

---

<sup>14</sup> [https://planning.lacounty.gov/assets/upl/project/greenzones\\_public-draft-ordinance-20210617.pdf](https://planning.lacounty.gov/assets/upl/project/greenzones_public-draft-ordinance-20210617.pdf)

Backfilling, Clearing and Grubbing, Clearing Forms, Cut and Fill, Landscaping, Trenching, Turf Overseeding, and Vacant Land. Table 1 also, has minimum control requirements for potential PR 403.2 activities and equipment specifically within the categories of: Crushing, Demolition – Mechanical/Manual, Disturbed Soil, Earth-Moving Activities, Importing/Exporting of Bulk Materials, Road Shoulder Maintenance, Screening, Staging Areas, Stockpiles/Bulk Material Handling, Truck Loading, Traffic Areas For Construction Activities, and Unpaved Roads/Parking Lots.

Table 1 controls and guidance are robust and comprehensive. However, since the primary goal of PR 403.2 is to be proactive and preemptive in terms of the highest possible efforts in preventing fugitive dust, additional controls where feasible are required. Rule 403, Tables 2 and 3, provide additional controls for certain categories of activities and equipment for Large Operations (over 50 acres in size and/or with higher project material throughputs). Where applicable, and as feasible the additional controls for PR 403 Tables 2 and 3, are applied to the specific activities and equipment subject to PR 403.2 to provide an additional level of preemption for potential fugitive dust issues.

The two PR 403.2 supplemental control category requirements listed below are based on and mirror Table 2 of Rule 403 “Dust Control Measures for Large Operations” and Table 3 “Contingency Control Measures for Large Operations”. The intent of adding these control requirements to the proposed rule is to extend the most stringent best housekeeping/management practices available for dust control to large roadway projects due to the existing disproportionate air quality impacts to near road communities. Controls do not establish new permitting/permit conditions, plan submittal, or new compliant product use requirements. As shown in Table 2-1 below, vehicle speed is limited to a maximum of 15 miles per hour at the job site (this includes construction and on-road vehicles traveling onsite) and application of a either water twice per hour or other dust suppressant. Material piles must not exceed a maximum height of 30 feet, and a dust suppressant must be applied twice per hour to prevent visible dust from extending farther than 100 feet from the activity. Alternatives to dust suppressant application include installing a temporary cover that fully covers the pile, or installation of an enclosure meeting the rule-required specifications.

**Table 2-1: PR 403.2 Control Requirements**

Category	Control
Dust from Construction Roads	Restrict vehicle speeds to 15 miles per hour for all unpaved roads used for any vehicular traffic and implement one or more_of the following control measures, as needed, to ensure fugitive dust control:

Category	Control
	<p>Water all unpaved roads within the project perimeter used for vehicular traffic at least once per every two hours of active operations [3 times per normal 8-hour workday]; or</p> <p>Apply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface.</p>
Material Piles	<p>Shall not exceed a height of 30 feet; and additionally implement one or more of the following control measures, as needed, to ensure fugitive dust control:</p> <p>Apply dust suppressant as necessary to maintain a stabilized surface and prevent visible emissions from extending farther than 100 feet as measured from the nearest edge or perimeter of the material pile; or</p> <p>Install temporary coverings; or</p> <p>Install a material pile cover; or</p> <p>Install an enclosure with a minimum of three sides (the open side of which will face farthest from potentially impacted areas) and walls with a maximum porosity of 50 percent and a minimum height equal to the highest point of the material pile.</p>

### **(3) Signage**

Signage for a large roadway project is intended to provide the public with information to access the dust control supervisor as the first point of contact regarding questions and potential fugitive dust issues. Dimensions and other requirements are intended to make the signs more visible to the public. The format and requirements for the sign is similar to that required for Large Operations pursuant to Rule 403.

1. Signage must be located within 50 feet of each project site entrance; A minimum of two signs are required per large roadway project with at least one of those signs installed such that the content of the sign face is visible in the direction of the closest area of public exposure or sensitive receptor unless it is directly facing traffic;
2. One sign is sufficient for multiple site entrances located within 300 yards of each other;

3. Signage shall be 1 inch A/C laminated plywood board or similar strength and durability material with dimensions of 48 inches by 96 inches;
4. Sign background must contrast with lettering, typically black text with white background;
5. The lower edge of the sign board must be a minimum of 6 feet and a maximum of 7 feet above grade;
6. The telephone number listed for the dust control supervisor contact must be a local or a toll-free number and shall be accessible 24 hours per day; and
7. At a minimum, each sign shall include the following information, with text height as shown on the right side of the sign template below:

<b>Sign Content</b>	<b>Height (inches)</b>
Site or Project Name	4
IF YOU SEE DUST COMING FROM THIS PROJECT CALL	4
Name, Phone Number (###) ###-####	6
If you do not receive a response, please call South Coast AQMD at 1-800-CUT-SMOG	3

#### **(f) Notification**

Notification is required to all areas of public exposure or sensitive receptors within 1,000 feet of a large roadway project activity. At least 5 business days prior to commencement of activities for a large roadway project, the dust control supervisor or other responsible person(s) shall provide written notification to both South Coast AQMD and all addresses of sensitive receptors and areas of public exposure within 1,000 feet of the large roadway project activity. The notification requirement will help to provide awareness to potentially affected members of the community regarding potential dust generating activities conducted nearby. It will also provide information on who to contact for questions and issues regarding the project. For non-residential properties with a property manager/administrator (such as hospitals, schools, or hotels), notification to the property manager/administrator is sufficient. Notification shall include, at a minimum, the following information:

- (1) Large roadway project dust control supervisor contact information including contact name, company/agency name, address, telephone number, and e-mail address; and

- (2) Location of the large roadway project, including address and/or coordinates, and a map depicting the location of the site; and
- (3) Estimated duration of the project including commencement and completion dates.

See Appendix VI and VII for sample notification forms. These forms are intended to be examples and other notification forms may be used as long as the minimum required information is included.

**(g) Recordkeeping**

PR 403.2 recordkeeping is consistent with requirements for Rule 403 Large Project requirements. The dust control supervisor or other responsible person for the large roadway project shall maintain daily records of the controls applied pursuant to PR 403.2(e)(2), documenting:

- (A) Each type of activity conducted and the associated permitted powered equipment with the potential to generate fugitive dust;
- (B) The specific fugitive dust control measures implemented for each activity or equipment;
- (C) The frequency of fugitive dust control measures implemented. If dust suppressant is used as the control measure for material piles, record the time and duration that the dust suppressant was applied, including the location of the material pile.
- (D) Purchase records or invoices for dust suppressants used for the large roadway project.

Typically, the only type of permit required at a large roadway project will be those issued by South Coast AQMD and CARB's Portable Equipment Registration Program associated with large portable equipment such as aggregate (recycled concrete/asphalt) crushing equipment. Recordkeeping is needed to keep track of all equipment with the potential of generating dust significant enough to impact rule-specified receptors. Furthermore, it is needed to provide a log of the type and frequency of control measures undertaken to prevent fugitive dust issues. Staff anticipates that in practice the dust control supervisor, as the ultimate onsite staff responsible for dust control, will most likely oversee the generation and maintenance of daily records. However, in all cases the responsible person, as defined in PR 403.2, for the large roadway project is ultimately responsible for ensuring that daily records are generated, maintained, and archived for a minimum of three years and also that they are made available to the Executive Officer upon request during this time. See Appendix VIII for a sample daily recordkeeping form. This form is intended to be an example and other notification language may be used as long as the minimum required information specified in subdivision (g) is included.

In addition, to daily records of fugitive dust control activities undertaken, records verifying compliance with the notification requirements in PR 403.2(f) to rule-specified receptors within 1,000 feet of a large roadway activity must be retained. At a minimum the following shall be kept:

- (A) A copy of the notification letter and a list of addresses notified;
- (B) Notification method used such as hand delivery, mail, electronic mail, or other electronic means; and
- (C) Proof of any mailed notification such as certificate of mailing, return receipts, invoices for mail services, and emails.

All records shall be maintained and made available to the South Coast AQMD for a minimum of three years after the completion of the large roadway project activity.

#### **(h) Exemptions**

The following activities would be either wholly or partially exempt from the provisions of PR 403.2:

- (h)(1) **Emergency Life-Threatening Situations:** Any activities conducted for a large roadway project conducted during emergency life-threatening situations, where a sudden, unexpected occurrence that poses a clear and imminent danger, requiring immediate action to prevent or mitigate the loss of impairment of life, health, property, or essential public service, or in conjunction with any officially declared disaster or state of emergency as declared by an authorized health officer, agricultural commissioner, fire protection officer, or other authorized health officer shall be exempt from all requirements of this Rule. The Executive Officer shall be notified electronically (by email) no later than 48 hours following such emergency activities for a large roadway project.
- (h)(2) **Essential Utility Services:** Any activity for a large roadway project conducted by essential service utilities to provide electricity, natural gas, telephone, water, or sewer during periods of service outages and emergency disruptions shall be exempt from all requirements of this Rule. The Executive Officer shall be notified electronically no later than 48 hours following such activities for a large roadway project.
- (h)(3) **Liner Trenching:** Liner trenching for natural gas, power, sewer, water, and other utility projects that are not associated with a large roadway project shall be exempt from all requirements of this Rule.
- (h)(4) **Maintenance of berms and other best management practices essential for stormwater management** pursuant to the requirements of the California Water Boards (State Resources Water Control Board) shall be exempt from all requirements of this Rule. Berms are large soil piles that are established on the sides of a roadway to control stormwater runoff and also to provide sound proofing between construction equipment and receptors.
- (h)(5) **Texture planing activity**, such as diamond grinding, where roadway bumps or scallops that cause poor ride quality are removed restoring roadway surface texture, and improving overall friction for better driving safety and vehicle fuel efficiency shall be exempt from all requirements of this Rule. Diamond grinding activities utilize highly specialized equipment with self-contained fugitive dust controls.<sup>15</sup> Diamond grinding removes a thin layer of pavement typically 1/4" resulting in a smoother road surface. The diamond grinder

---

<sup>15</sup> <https://dot.ca.gov/-/media/dot-media/programs/maintenance/documents/correcting-finish-hma-surfaces-casey-holloway-a11y.pdf>

involved in the diamond grinding activities has a closed loop control consisting of a shroud, water spray nozzles and a slurry recovery system. The water spray nozzles situated within the shroud spray water onto the grinding blades as shown in Figure 2-5. Grinding heads are enclosed inside the shroud. The water is sprayed on to and distributed across the grinding head during grinding to cool the blades and prevent fugitive dust.

**Fig. 2-5: Water Nozzles on Texture Planer**



**Figure 2-6: Slurry Recovery Vacuum on Texture Planer**

Figure 2-6 shows the slurry recovery system. Planed roadway material debris would be contained within the shroud housing the head which has the diamond tipped saws that accomplish the grinding. The water and debris are then recovered through a vacuum extraction process and deposited into slurry trucks for removal and disposal off the project site at regulated locations. Staff does not anticipate any fugitive dust to be generated by the diamond grinding activity.

(gh)(6) The following minor maintenance activities shall be exempt from the provisions of paragraph (e)(3) Signage and (e)(4) Notification: pothole repair, pavement crack sealing, pavement digouts, concrete slab repair/replacement, shoulder backing repair, sidewalk repair/replacement, curb/dike replacement, sign repair/replacement, guardrail



repair/replacement, concrete barrier repair/replacement, bridge repair, slope repair, water pollution control repair/replacement, pavement delineation repair/replacement, and electrical systems repair.

- (gh)(7) Roadside Fire Fuels Reduction activities implemented by Caltrans ~~Fire Safety~~ Vegetation Management Crews shall be exempt from all requirements of this Rule.

## **CHAPTER 3: IMPACT ASSESSMENT**

---

**AFFECTED SOURCES**

**EMISSIONS IMPACT FROM RELOCATING MATERIAL PILES**

**POTENTIAL COST IMPACT FROM RELOCATING MATERIAL PILES**

**POTENTIAL COST IMPACT FROM WATER MISTING DUST CONTROL  
SYSTEMS FOR ONSITE MATERIAL RECYCLING**

**SOCIOECONOMIC IMPACT ASSESSMENT**

**CALIFORNIA ENVIRONMENTAL QUALITY ACT**

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

**COMPARATIVE ANALYSIS**

## **AFFECTED SOURCES**

Affected sources are limited to entities that own or operate large roadways, in addition to industries that perform activities and operate equipment for a large roadway project. PR 403.2 defines a large roadway project as those that involve the construction/demolition, improvement, repair, or maintenance of a large roadway. As such, PR 403.2 would only be applicable to the responsible person for the large roadway project (public agencies such as state and county authorities) or contractors conducting the activities of the large roadway project. It is anticipated that the majority of projects subject to PR 403.2 will be state/interstate highways and other freeways or expressways due to the definition being based on FHWA FC1 and FC2 Designations. Roadways will either fall under the jurisdiction of Caltrans or the applicable county. South Coast AQMD has jurisdiction for stationary air quality control in the county of Orange and portions of the Los Angeles, Riverside and San Bernardino counties.<sup>16</sup>

Stakeholders have expressed concerns regarding cost and emission impacts associated with prohibitions for onsite aggregate crushing and grinding (material recycling) and relocating maintenance of material piles generated onsite due to prohibitions for maintaining piles within close proximity to receptors. Specifically, aggregate crushing and grinding and material piles (greater than 8 feet in height) are prohibited within a distance of 100 feet of an area of public exposure and 250 feet of a sensitive receptor. Stakeholders have argued that these distance prohibitions would prevent onsite material recycling to occur and necessitate material piles to be stockpiled/located at considerable distances from the project activity location, resulting in additional emissions due to material transport offsite. It should be noted that material piles that utilize material pile covers as defined by the rule, or other equivalent methods approved by Executive Officer to control fugitive dust, are not prohibited within the distances specified above. Additionally, the final proposed rule has been revised to allow aggregate crushing and grinding in the prohibition buffers if it is conducted to recycle materials generated from the large roadway project and uses a water misting dust control system that prevents visible emissions from extending 100 feet in length in any direction.

## **EMISSIONS IMPACT FROM RELOCATING MATERIAL PILES**

Stakeholders have also raised concerns about emissions impacts associated with relocating material piles generated on site due to prohibitions against material piles at a large roadway project. Stakeholders have expressed concerns that these additional truck trips would generate significant GHG and tailpipe emissions from the number of additional haul truck trips. It should be noted that material piles that utilize material pile covers as defined by the rule, or other equivalent methods approved by Executive Officer to control fugitive dust, are not prohibited within the rule-specified distances to receptors.

---

<sup>16</sup> <https://www.aqmd.gov/nav/about/jurisdiction>

Staff maintains the assertion that there is typically a quarter mile between freeway interchanges, and one-half to one mile between alternate locations at freeways where piles could be potentially relocated (see case study discussed further in this section) and that the majority of demolition materials are trucked-in from other construction/demolition jobsites as opposed to being generated and also used onsite. Relocating piles between a few thousand yards to a mile to an alternative site should not be burdensome when materials are already being trucked in over in some cases much longer distances.

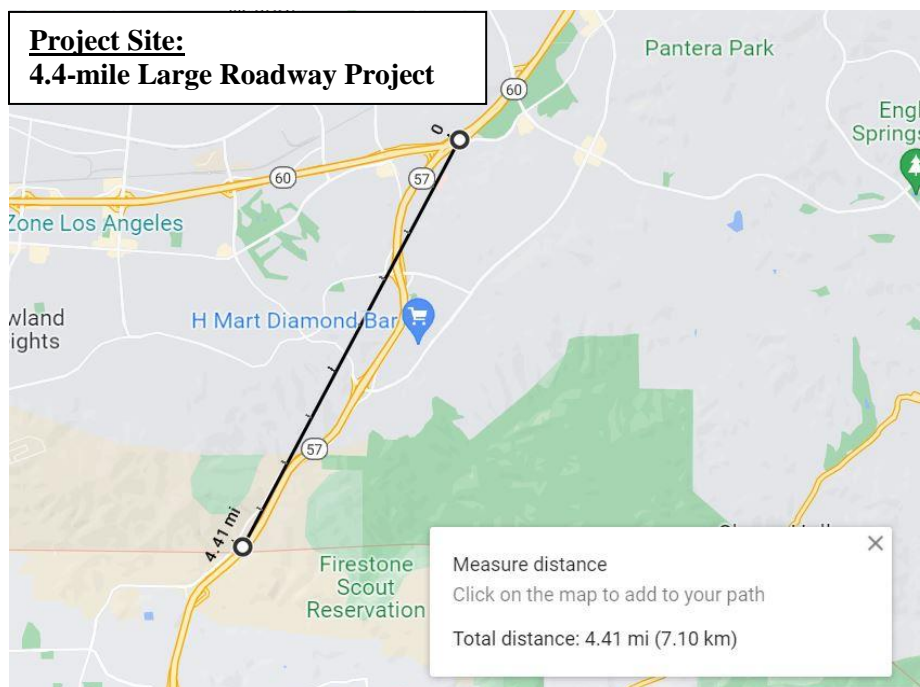
Staff conducted an analysis of this concern as shown in Appendix X that shows negligible emissions of both tailpipe and GHG emissions, which are well below exceedance thresholds. Different scenarios were estimated using between 100 to 1,000 daily haul truck trips. It is very unlikely that a project would need 1,000 haul truck trips let alone that amount on a daily basis. Staff analysis, however, indicates that even at 1,000 trucks per day, the emissions are insignificant and well below the South Coast AQMD air quality significance thresholds for criteria pollutants and GHGs.

For example, PM<sub>10</sub> emissions for 1,000 truck trips in a day, with each truck traveling 10 miles would generate  $(0.26229 \text{ pounds per mile}) / (1,000 \text{ truck trips} \times 10 \text{ miles})$  or 2.7 pounds PM<sub>10</sub> for the given day. Actual emissions are only 2% of the 150 pounds per day significance threshold.

Stakeholders have also expressed concerns regarding any net emissions increase from the incremental increase in haul truck trips versus emission reductions gained from PR 403.2. While it is unlikely that 1,000 truck trips would occur daily resulting in negligible emissions assessed above, the primary objective of PR 403.2 is to prevent fugitive dust exposure to nearby receptors by preempting the occurrence for these situations to happen. While a quantitative demonstration of the benefits of prohibiting material piles within close proximity to receptors is infeasible, it can be seen that while net emissions of tailpipe and GHG emissions from relocating piles are negligible the benefit of preempting fugitive dust exposure is significant for potentially impacted receptors.

#### ***Case Study – 57 and 60 Freeway Interchange Large Roadway Project***

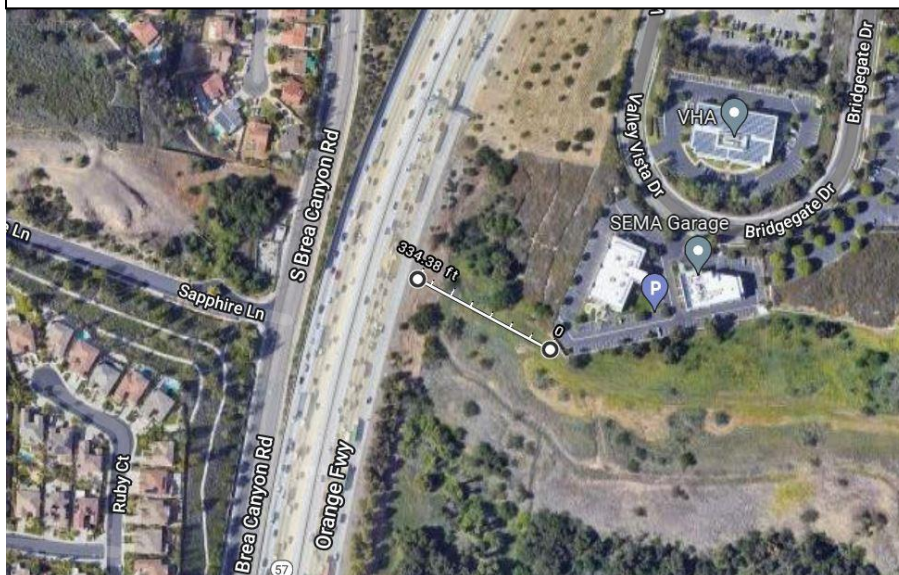
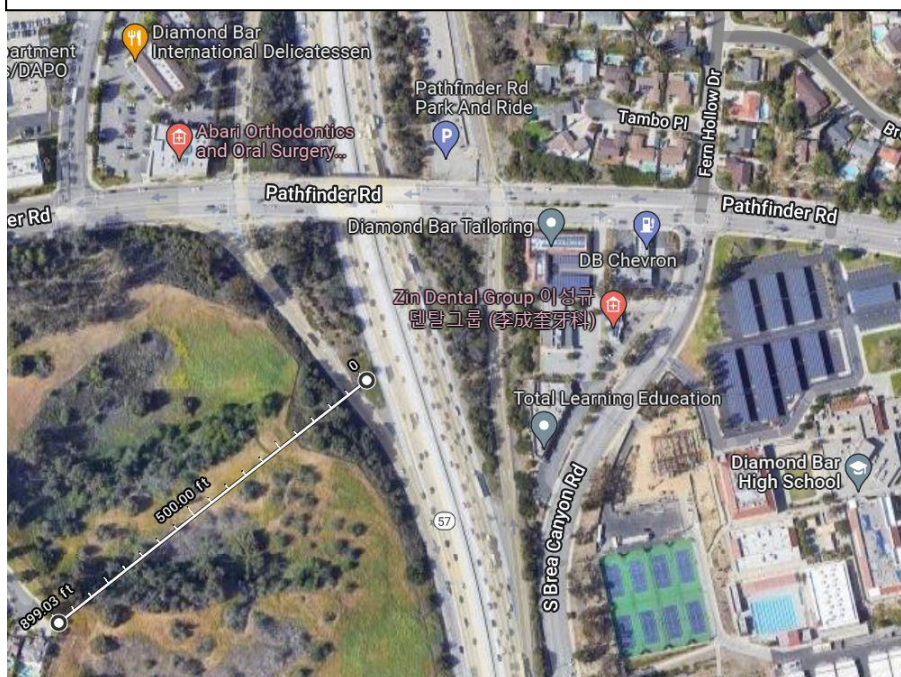
Staff evaluated an active ongoing large roadway project to determine the feasibility for compliance with prohibitions of PR 403.2 if relocating material piles. It should be noted that material piles that utilize material pile covers as defined by the rule, or other equivalent methods approved by Executive Officer to control fugitive dust, are not prohibited within the rule-specified distances to receptors. At the time of this writing, a large roadway project being conducted from the 57 and 60 freeway interchange in Los Angeles County south to the Orange County line for a total stretch of 4.4 miles as shown in the picture below.



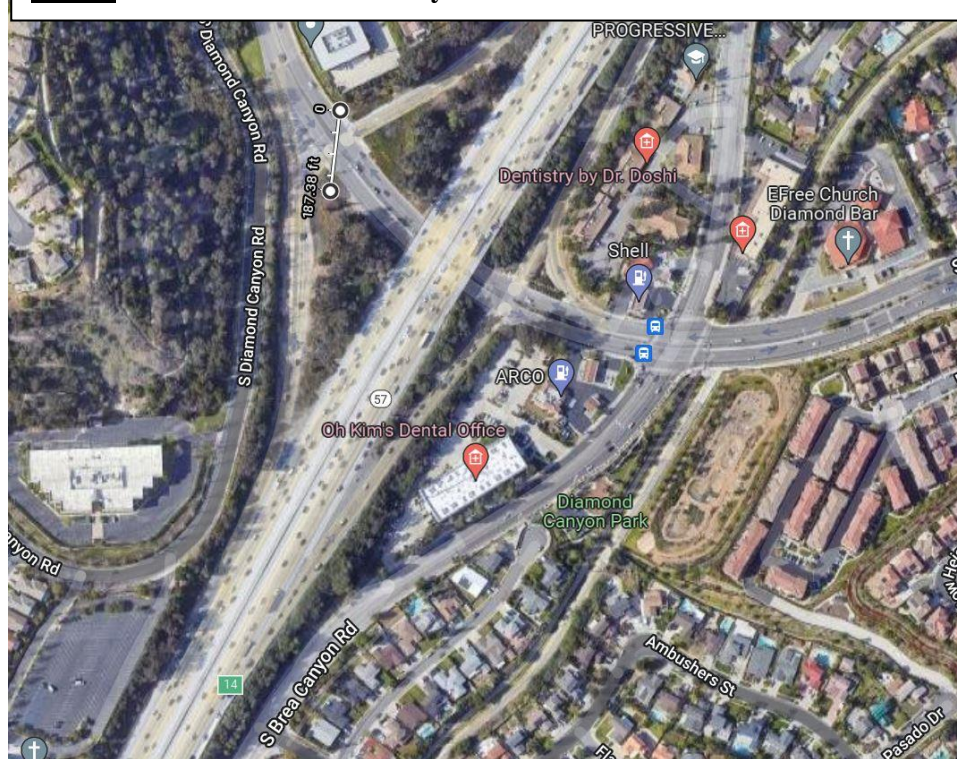
There are at least six viable sites (> 100 feet for areas of public exposure; and > 250 feet for sensitive receptors) for material piles and crushers to be located along this route starting at the 57/60 interchange area and moving towards the Orange County line:



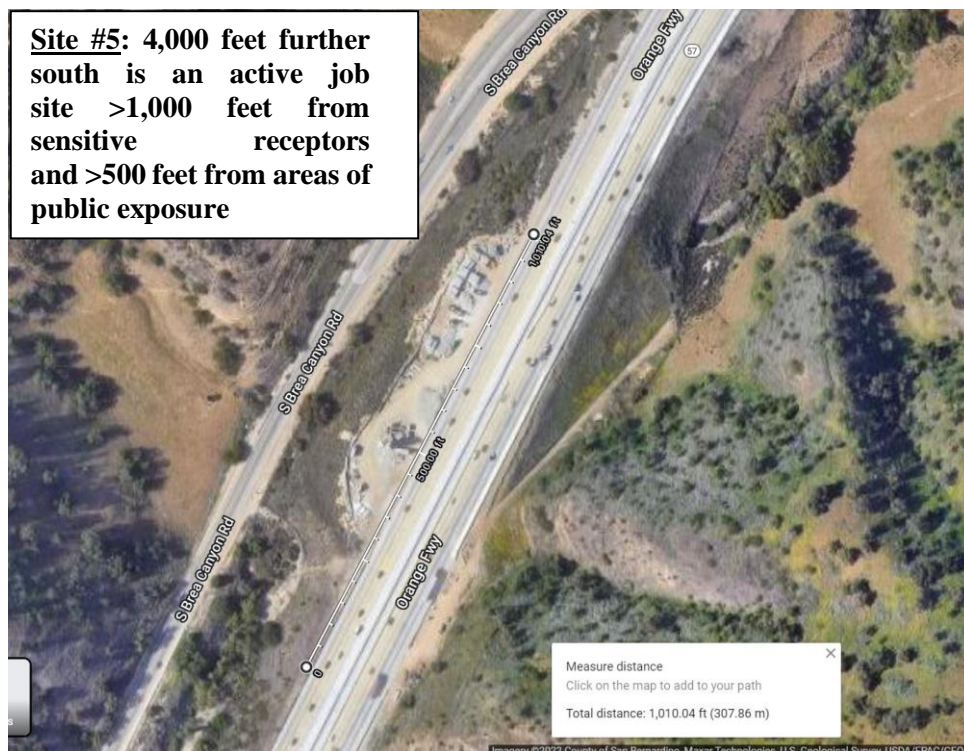


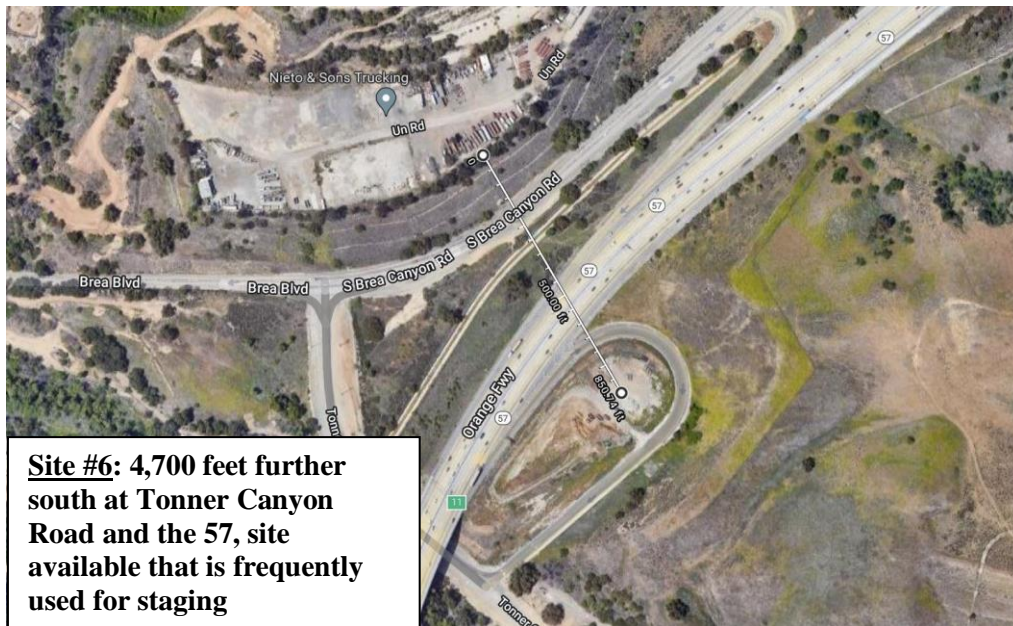
**Site #2: Alternate adjacent site close to Site #1 location****Site #3: ~3,000 feet further south of Site #2**



**Site #4: Diamond Bar/Brea Canyon ~1.2 miles south of Site #3**

**Site #5:** 4,000 feet further south is an active job site >1,000 feet from sensitive receptors and >500 feet from areas of public exposure





In conclusion, this case study shows that for an existing medium sized project there are multiple options for siting material piles and crushing equipment as well as other large roadway project equipment subject to PR 403.2. In some cases, distances at which equipment could be sited would not make the activity or material pile subject to PR 403.2 altogether.

### **POTENTIAL COST IMPACT FROM RELOCATING MATERIAL PILES**

Material piles that utilize material pile covers as defined by the rule, or other equivalent methods approved by Executive Officer to control fugitive dust, are not prohibited within the rule-specified distances to receptors. It is reasonable to assume that most material piles within the prohibition buffer would utilize a material pile cover versus relocation offsite. Nonetheless, staff evaluated stakeholder concerns by estimating possible costs associated with relocating piles using the United States Department of Agriculture (USDA) “Cost Estimating Guide for Road Construction”<sup>17</sup>. Specifically, this analysis looks at the incremental cost associated with moving materials that may have been stockpiled onsite to an alternate location and distance to be stockpiled. Note that in the case study presented in the section above, potential alternate qualifying sites for relocating material piles were observed at distances ranging from a few thousand feet to slightly over a mile away from the project activity location. Relocation distances (and associated cost), if necessary, would not be significant and typically located within the boundary of the project as a whole. Stakeholders have also advised staff that the majority of demolition materials to be recycled for use at a project are trucked in from other construction/demolition jobsites as opposed to being both generated and also used at the same site. As such, being required to relocate piles anywhere from a few feet yards to a mile as an alternative site would not be burdensome when materials are already, in some cases, being trucked-in over much longer distances.

<sup>17</sup> [https://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb5279284.pdf](https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5279284.pdf)



Assumptions for the estimate include:

1. Incremental cost is calculated as the Haul Cost for relocating material that would be stockpiled from the location at which it is generated to an alternate location that is in compliance with PR 403.2.
2. Due to the short distance for pile relocation road grade, alignment, road width, surface type, road condition, sight distance, turnout spacing, and other traffic using the road are not significant factors.
3. Belly/bottom dump haul trucks will be used. The cost factor for these is higher than end dump trucks and belly dumps are well suited to less challenging delivery routes.
4. Haul of material includes the fixed costs (for the truck only) of spotting, load, and turnaround (where there is less room than required for the haul truck to make a U-turn and extra time is needed to reverse direction for the next load) in addition to the variable "underway" cost while hauling equipment is moving.
5. Haul truck speed is limited to 15 miles per hour on the relocation route.
6. Distance is calculated as California unit cost for one lane at a length of one mile, or one lane-mile.
7. Fixed cost for an 18 cubic yard (CY) belly dump haul truck is \$2.48 per CY (adjusted to 2021 California cost from 2020 Idaho cost factor of \$2.09)<sup>18</sup>.
8. Variable Haul Cost Factor (VHCF) is based on the cost per CY to be relocated 1 mile. VHCF for a maximum speed limit of 15 mph is \$1.88 per cubic yard per mile (adjusted to 2021 California cost from 2020 Idaho cost factor of \$1.58).
9. Load Cubic Yards (LCY) is the number of cubic yards of material that is to be relocated for stockpiling.

Each mile of roadway work will generate a pile of roadway demolition material with a volume equivalent to:

Volume (1 mile – single lane) = 0.5 feet (depth) x 12 feet (width) x 5,280 ft (length)

---

<sup>18</sup> Based on an average of the material costs between Boise and Los Angeles and converting 2020 to 2021 dollars. Conversion factor is (ID>CA conversion factor) x (2021/2020 index), or 1.09156 x (1888.1/1736.4) = 1.187.

$$= 31,680 \text{ cubic feet}$$

$$= 1,173 \text{ CY}$$

**10. Total Haul Cost (per lane-mile) = Fixed Haul Cost + Variable Haul Cost**

$$= (\text{LCY} \times \$2.48) + (\text{Miles Hauled})(\text{VHCF})(\text{LCY})$$

$$= (1,173 \times \$2.48) + (1)(\$1.88)(1,173)$$

$$= \$2,909.04 + \$2,205.24$$

$$= \$5,114 \text{ per lane-mile}$$

11. The volume of material for a 30' (h) x 30' (r) conical material pile is approximately 1,047 cubic yards. It is assumed that 5 of these large material piles per large roadway project would be located within the prohibition distances to receptors for a total of 5,236 CY of material to be relocated, or 4.5 lane-miles per project (5,236 CY)/(1,173 CY/lane-mile).
12. Not all rehabilitated or constructed lane-miles for roadway projects undergo construction or demolition (minor maintenance or other rehabilitation), have nearby receptors located within rule-specified prohibition distances, or would have originally stockpiled materials onsite within prohibition buffers. It should also be noted that PR 403.2 allows material piles to be maintained within prohibition buffers if they are covered with material pile covers. However, for the purposes of this calculation, it was assumed that 5 material piles at the maximum height allowed by PR 403.2 (30'(h) x 30' (r)), which is equivalent to 4.5 lane-miles of material, could potentially be relocated if not otherwise covered with a material pile cover. This amount of haul off is also doubled to account for roundtrip costs of returning materials back to the project site, if needed. Based on these assumptions, the total annual haul cost for relocating material piles is estimated to be \$46,026 per project.

**POTENTIAL COST IMPACT FROM WATER MISTING DUST CONTROL SYSTEMS FOR ONSITE MATERIAL RECYCLING**

The prohibition for aggregate crushing and grinding in PR 403.2 has been revised to allow recycling of material generated from the large roadway project in the prohibition buffers if a water misting dust control system is used to prevent visible emissions from extending 100 feet in length in any direction. The incremental cost for this activity, in lieu of hauling the demolished material offsite for crushing is estimated as follows:

1. Based on stakeholder and staff discussions, the DB-60 water cannon (unit) was identified as one possible solution for a water misting dust control system.
2. Unit lease cost is \$13.61/hr.<sup>19</sup>

<sup>19</sup> State of California, California State Transportation Agency, Department of Transportation, Division of Construction Labor Surcharge and Equipment Rental Rates [https://dot.ca.gov/-/media/dot-media/programs/construction/documents/equipment-rental-rates-and-labor-surcharge/book\\_2022.pdf](https://dot.ca.gov/-/media/dot-media/programs/construction/documents/equipment-rental-rates-and-labor-surcharge/book_2022.pdf)

3. The unit has a direct power drive electric motor and can be plugged into the crusher (e.g., for the Barford 750J Jaw Crusher there is an option for an auxiliary power outlet). Incremental cost for diesel fuel to power the unit was estimated based on the manufacturer's optional package configuration for a genset. The genset has a 100-gallon tank and a manufacturer rated run time of 24 hours per tank, with a resulting fuel consumption rate of 4.17 gallons of diesel per hour. Diesel is estimated at 6.51 per gallon.<sup>20</sup>
4. The unit mists water at a maximum flow rate of 26.7 gal/min. Cost of water is assumed to be \$7.165 per 100 cubic feet.<sup>21</sup>
5. Assuming an 8-week project, with 5 working days per week and 6 hours of equipment operational run time per day results in a total of 240 hours of mister operation per project annually, and the following unit cost components and total:
6. (a) Lease = \$13.61/hr x 240 hr/project annually = \$3,266/project annually  
 (b) Fuel = \$6.51/gal x 4.17 gal/hr x 240 hr/project annually = \$6,510/project annually  
 (c) Water = \$7.165/100 cubic feet x 100 cubic feet/748 gal x \$1,602 gal/hr x 240 hr/project annually = \$3,683/project annually  
 (d) Total = \$13,459/project annually
7. From the 48 total LRP per year it is estimated that approximately 30 large roadway projects annually conduct onsite material recycling, eleven of which would need to locate a crusher in a prohibition buffer.<sup>22</sup> The estimated total cost of all eleven water misting dust control systems is \$148,049.
8. Adding the \$148,049 total annualized project cost for the eleven projects with a water misting dust control system to the 48 projects annualized costs of \$876,600 results in a total cost of \$1,024,649 for all 48 projects annually.

## **SOCIOECONOMIC IMPACT ASSESSMENT**

California Health & Safety Code §40440.8 requires a socioeconomic impact assessment for proposed and amended rules resulting in significant impacts to air quality or emission limitations. This assessment shall include affected industries, range of probable costs, cost effectiveness of control alternatives, and emission reduction potential.

Proposed Rule 403.2 – Fugitive Dust from Large Roadway Projects (PR 403.2) aims to reduce dust emissions from applicable large roadway projects that are within 500 feet of public exposure and 1,000 feet of a sensitive receptor. PR 403.2 builds on existing measures within Rule 403 to address specifically fugitive dust emissions from operations conducting crushing and grinding of material piles within 100 feet of the nearest property line of a sensitive receptor. The activities addressed in PR 403.2 would reduce fugitive dust emissions in such projects with enhanced notification of surrounding areas about activities with potential to emit fugitive dust, would require dust mitigation measures on the work site, and limit the ability to conduct certain dust-emitting activities within certain distances of the public and sensitive receptors.

<sup>20</sup> <https://gasprices.aaa.com/state-gas-price-averages>

<sup>21</sup> *Los Angeles Department of Water & Power – January-June 2022 Water Rates*  
 ([https://www.ladwp.com/ladwp/faces/wcnav\\_externalId/a-fr-schedul-c-comm-ind-gov?\\_adf.ctrl-state=mjqz8gk8p\\_4&\\_afLoop=1509794037961246](https://www.ladwp.com/ladwp/faces/wcnav_externalId/a-fr-schedul-c-comm-ind-gov?_adf.ctrl-state=mjqz8gk8p_4&_afLoop=1509794037961246))

<sup>22</sup> Caltrans discussion on 5/12/2022

***AFFECTED INDUSTRIES AND FACILITIES***

PR 403.2 potentially affects a number of currently active large roadway projects, and it is conservatively estimated that there are 48 active roadway projects in the South Coast AQMD jurisdiction that could be subject to the requirements of the proposed rule. The majority of the affected projects fall in the North American Industry Classification System (NAICS) construction industry (NAICS 23). Within the affected facility universe, a majority of them fall under California Department of Transportation (Caltrans) and other publicly operated entities, however, most large roadway projects are contracted out to and conducted by ~~but there are also~~ privately owned and operated construction ~~contracting~~ companies which will be subject to PR 403.2 rule requirements. Some of the project contractors subject to the requirements of PR 403.2 may be classified as small businesses<sup>23</sup>. Of the currently identified active roadway projects potentially subject to PR 403.2, 17 are in Los Angeles County, 10 are in Orange County, 6 are in Riverside County, and 15 are in San Bernardino County.

***COMPLIANCE COSTS AND ASSUMPTIONS OF THE SOCIOECONOMIC IMPACT ANALYSIS***

Paragraph (e)(2) specifies requirements for large roadway projects in the following categories of roadway activities:

- Aggregate Crushing and Grinding Operations
- Earth Moving Activities; Construction/Demolition; or Disturbed Surface Areas
- Dust From Construction Vehicles
- Material Piles

Incremental costs beyond those incurred for compliance with Rule 403 and other existing dust control rules were analyzed for the following categories pertaining to PR 403.2 requirements.

***Dust Suppressants (Water Usage)***

The use of water for stabilization of surfaces and material piles is likely the most practical method of mitigation of fugitive dust from large roadway projects, and such work sites already use water trucks for existing requirements for dust abatement. Rule 1466, which was most recently amended in 2017, assumed an incremental amount of \$2,598 (adjusted to 2021 from 2017 figure of \$2,218 dollars<sup>24</sup>) for 1,700 cubic feet of water per day, per site.

***On-Site Dust Control Supervisor***

The 2017 amendments to Rule 1466 estimated the salary of a dust control supervisor (DCS) at \$54,405 (adjust to 2021 from the 2017 figure of \$46,500). Staff's analysis accounted for one hour per day, 5 days per week, and 52 weeks per year, per site. The annual additional cost of DCS duties total \$6,807 per site.

---

<sup>23</sup> The U.S. Small Business Administration classifies a small business as [any] "independent business having fewer than 500 employees." [https://www.sba.gov/sites/default/files/advocacy/SB-FAQ-2016\\_WEB.pdf](https://www.sba.gov/sites/default/files/advocacy/SB-FAQ-2016_WEB.pdf)

<sup>24</sup> Based on the Marshall and Swift Equipment Cost Index.

### Signage

The signage requirement for PR 403.2 requires a minimum of two ~~and a maximum of four~~ signs per site. ~~As~~ Staff estimated four signs per site at a cost of about \$420 per sign (using signage cost from the 2017 amendments to Rule 1466, adjusted to 2021 dollars). The total annual cost of signage assuming four signs is \$1,686 per site.

### Notifications (certified mailing and flyer distribution within 1,000 feet of worksite)

PR 403.2 requires distribution of notifications to impacted locations surrounding the worksite within 1,000 feet. The estimated cost of certified mailing fees (certified mailing list, labels, and postage) at a flat rate of \$1,500. Assuming a lot size of 6,000 square feet per parcel within an area of 3,140,000 square feet results in 524 recipients per worksite. While there may be buildings with multiple tenants on a single lot that require service, there will likely also be larger lots such as hospitals and schools which only require one notification flyer needed to property management, therefore this estimate is considered reasonable. Design, printing and mailout is estimated at a cost of \$1.00 per flyer. The total cost of notifications for PR 403.2 requirements is \$2,024 annually per site.

### Water Misting Dust Control System for Aggregate Crushing & Grinding

PR 403.2 allows aggregate crushing and grinding of materials generated from the large roadway project within rule-specified prohibition distances to receptors if a water misting dust control system is used. Based on stakeholder input, an annual average of 30 projects potentially have material recycling conducted onsite, and staff assumed that eleven of those projects might be conducted within rule-specified prohibition distances to receptors due to limited space or access. A total cost of \$13,459 per project was estimated (\$148,049 annually for all 11 projects).

### Plastic Sheeting to Cover Material Piles

To comply with fugitive dust mitigation measures in PR 403.2, specifically with prohibitions to conduct maintain material piles within 100 feet of an area of public exposure or 250 feet of a sensitive receptor, staff assumes material storage piles (defined as greater than eight feet in height) would be covered with plastic sheeting. Staff assumed plastic sheeting needed to cover 5 material piles each with a 30-ft height and radius to calculate a conical material pile resulting in approximately 6,900 square feet of pile surface to cover. Allowing for 20% overlap of 10 mil plastic sheeting at a \$234 cost per roll, staff estimates 22 rolls needed for an average annual cost of \$5,148 per site in plastic sheeting.<sup>25</sup> Staff assumes all project sites would avoid material haul-off costs, which are higher at potentially \$46,026 per site, by maintaining material storage piles with plastic sheeting.

### Material Haul-off

Staff evaluated stakeholder concerns by estimating possible costs associated with relocating piles using the United States Department of Agriculture (USDA) *Cost Estimating Guide for Road Construction*.<sup>26</sup> When the figures were adjusted by the regional indices and present dollars (2021)

---

<sup>25</sup> Each 20 foot x 100 foot plastic sheet covers 2,000 square feet, however staff is assuming a 20% material overage requirement since 1,600 sq. ft. and costs \$234 per roll based on 2017 Rule 1466 estimates adjusted to 2021 dollars.

<sup>26</sup> [https://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb5279284.pdf](https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5279284.pdf)

based on *Marshall & Swift's Comparative Cost Indexes* (January 2022 release), it is estimated that the average cost of material haul off per site is \$46,026. Due to the option in most cases for site operators to opt for the on-site covered material pile storage as an alternative to material haul-off, this cost was not factored into staff's analysis of total project site costs related to PR 403.2.

### ***JOB IMPACTS***

The estimated total annual compliance costs for PR 403.2 amount to approximately ~~\$876,600~~1,024,649, ~~which is less than one million dollars annually~~. It has been a standard practice for South Coast AQMD's socioeconomic impact assessments that, when the annual compliance cost is less than or close to one million current U.S. dollars annually, the Regional Economic Models Inc. (REMI)'s Policy Insight Plus Model is not used to simulate jobs and macroeconomic impacts, as is the case here. This is because the resultant impacts would be too small relative to the baseline regional economy to reliably determine any impacts from the modeling analysis.

### **CALIFORNIA ENVIRONMENTAL QUALITY ACT**

Pursuant to the California Environmental Quality Act (CEQA) Guidelines Sections 15002(k) and 15061, the proposed project (Proposed Rule 403.2) is exempt from CEQA pursuant to CEQA Guidelines Sections 15061(b)(3) and 15308. Further, there is no substantial evidence indicating that any of the exceptions in CEQA Guidelines Section 15300.2 apply to the proposed project. A Notice of Exemption has been prepared pursuant to CEQA Guidelines Section 15062 and if Proposed Rule 403.2 is approved, the Notice of Exemption will be filed for posting with the county clerks of Los Angeles, Orange, Riverside, and San Bernardino counties, and with the State Clearinghouse of the Governor's Office of Planning and Research.

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

#### **Requirements to Make Findings**

California Health and Safety Code Sections 40727 and 40001(c) require that prior to adopting, amending or repealing a rule or regulation, the South Coast AQMD Governing Board shall make findings of necessity, authority, clarity, consistency, non-duplication, and reference, and the problem alleviated, respectively, based on relevant information presented at the public hearing, and in the staff report in the rulemaking record and presented at the hearing.

#### **Necessity**

Proposed Rule 403.2 is needed to address the air quality impact, including the cumulative burden of fugitive dust to areas of public exposure and sensitive receptors in close proximity to large roadways which requires more specific regulation than existing general regulation of fugitive dust.

#### **Authority**

The South Coast AQMD Governing Board has authority to adopt Proposed Rule 403.2 pursuant to the California Health and Safety Code Sections 39002, 40000, 40001, 40702, 40725 through 40728, and 41508.

**Clarity**

Proposed Rule 403.2 is written or displayed so that its meaning can be easily understood by the persons directly affected by it.

**Consistency**

Proposed Rule 403.2 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 403.2 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, South Coast AQMD. South Coast AQMD Rule 403 has some similar provisions for large operations, but there is minimal overlap between the two rules for large roadway projects of which only a small subset are also subject to Proposed Rule 403.2. Generally Proposed Rule 403.2 has more stringent provisions than Rule 403 for large roadway projects.

**Reference**

By adopting Proposed Rule 403.2, South Coast AQMD Governing Board will be implementing, interpreting or making specific the provisions of the California Health and Safety Code Section 39002 (air pollution from non-vehicular sources), ~~40001-40702 (rules to achieve ambient air quality standards necessary or proper to carry out powers and duties)~~ and 41508 (additional standards).

**COMPARATIVE ANALYSIS**

Under California Health and Safety Code Section 40727.2, South Coast AQMD is required to perform a comparative written analysis when adopting, amending, or repealing a rule or regulation. The comparative analysis is relative to existing federal requirements, existing or proposed South Coast AQMD rules and other air pollution control requirements and guidelines which are applicable large roadway projects. PR 403.2 would not conflict with existing Rules of South Coast AQMD regulating particulate matter, but in some instances would require more stringent limits than would be otherwise required under existing rules. PR 403.2 provides more stringent requirements for large roadway projects and generally prohibits some rule-specific activities to be conducted in close proximity to sensitive receptors that is not currently prohibited by existing rules. Existing Rule 403 regulates fugitive dust generally, but imposes equivalent signage, recordkeeping and similar dust control measures to PR 403.2 only for large operations and does not ~~prohibit operations require additional control measures~~ based on proximity to an area of public exposure or sensitive receptor. Additional dust control measures in PR 403.2 would be largely equivalent to dust control measures for large operations in Rule 403. Existing Rule 403.1 applies only to sources in the Coachella Valley area, and potentially has some overlap with PR 403.2 which would apply to large roadway projects in the Coachella Valley area. Control measures in PR 403.2 would be largely equivalent to control measures for large operations in Rule 403.1. Existing Rule 1157 applies only to aggregate and related operations. Existing Rule 1466

applies to earth-moving activities for toxic soils. Existing Rule 401 prohibit excess visible emissions. See Table 3-1 for a comparative analysis matrix.

**Table 3-1**  
**Comparative Analysis of Existing Rules to PR 403.2**

Rule / Statute	Source	Emission Reductions / Limits	Averaging Procedures (Units), Work Practices, Operating Provisions	Monitoring, Recordkeeping, Reporting, Test Methods	Notification Requirements
401	Any single source of emissions; including exhaust stack emissions.	Prohibits excess visible emissions. <sup>27</sup>	20 percent opacity cannot be exceeded three minutes in any hour, cumulatively.	Test method based on opacity as determined by Ringlemann chart or U.S. EPA Method 9.	None
403	Any active operation; Large operations of 50 acres or more	No visible emissions past property line / no greater than 20 percent opacity for vehicle emissions <sup>28</sup>	Best Available Control Measures Additional Control Measures / Contingency Control Measures (large operations) <sup>29</sup>	Daily recordkeeping of control measure implementation (large operations) <sup>30</sup>	Notice to South Coast AQMD annually (large operations) <sup>31</sup>
403.1	Active operations in Coachella Valley	None	Fugitive Dust Control Plan with BACM (operations >5000 sq ft) <sup>32</sup>	Windspeed recording Daily recordkeeping	None

<sup>27</sup> PR 403.2 provides a lower limit for visible emissions than Rule 401 within 100 feet of sensitive receptors. Rule 401 limits visible emissions to Number 1 Ringlemann or 20% opacity in excess of three minutes within any hour. PR 403.2 would prohibit aggregate operations unless specific criteria is met, or uncovered large roadway project material piles ~~larger higher than 450 sq. ft. 8 feet~~ within 100 feet of an area of public exposure or 250 feet of sensitive receptors.

<sup>28</sup> PR 403.2 would prohibit any emissions from large roadway project material piles ~~larger higher than 450 sq. ft. 8 ft.~~ within 100 feet of an area of public exposure or 250 feet of sensitive receptors, unless specifically exempted or covered. PR 403.2 would also prohibit visible dust emissions from extending beyond 100 feet from aggregate crushing and grinding operations that are allowed within the prohibition buffer. Rule 403 prohibition on emissions is more stringent in all other circumstances and would be in addition to other requirements in PR 403.2.

<sup>29</sup> PR 403.2 would require control measures which are in some instances more stringent than the BACM requirements of Rule 403, but which are equivalent to the control measures required of large operations under Rule 403. Some large roadway projects regulated by PR 403.2 would not meet the definition of large operation under Rule 403, and for those sources PR 403.2 would be more stringent than Rule 403.

<sup>30</sup> PR 403.2 would require daily recordkeeping for large roadway projects consistent with what Rule 403 requires for large operations. Some large roadway projects regulated by PR 403.2 would not meet the definition of large operation under Rule 403, and for those sources PR 403.2 would be more stringent than Rule 403.

<sup>31</sup> PR 403.2 would require advance notice to owner/occupants of nearby sensitive receptors and South Coast AQMD. Rule 403 requires notice of large operators within 7 days to South Coast AQMD.

<sup>32</sup> Rule 403.1 requires for operations > 5000 sq ft. a fugitive dust control plan with control measures, signage, and dust control supervisor consistent with and supplemental to Rule 403. PR 403.2 would impose similar signage, and dust control supervisor requirements, and in some instances more stringent control measures directly for large roadway projects.



<b>Rule / Statute</b>	<b>Source</b>	<b>Emission Reductions / Limits</b>	<b>Averaging Procedures (Units), Work Practices, Operating Provisions</b>	<b>Monitoring, Recordkeeping, Reporting, Test Methods</b>	<b>Notification Requirements</b>
404	Applicable to any source	Prohibits discharge of particulate matter in excess of certain rates. <sup>33</sup>	Based on grains per cubic foot of air stream.	None specified.	None
405	Any source	Prohibits discharge of particulate matter weight in excess of specified rates. <sup>34</sup>	Establishes maximum discharge rate (lbs./hr.) based on process weight per hour.	None specified.	None
1157	Applicable to aggregate and related operations	No visible plumes extending > 100 ft / no greater than 20 percent opacity <sup>35</sup>	Opacity Test Method No. 9B (12 reading avg) Work practice control measures <sup>36</sup>	Recordkeeping of work practice controls implemented	None
1466	Applicable to earth-moving activities of toxic soil	Reduce monitored PM <sub>10</sub> concentrations 25 microgram/m <sup>3</sup> averaged over 30 minutes.	Fencing for on-site earth-moving activities, dust control measures, stockpiles, speed limits, signage.	Monitor PM <sub>10</sub> concentrations, recordkeeping of work practice controls implemented.	Notification to District at least 72 hours before conducting earth-moving activities
CA Health & Safety Code 41701	Applicable to any source.	Prohibits discharge of excessive visible emissions.	40 percent opacity cannot be exceeded three minutes in any hour, cumulatively.	Test methods - Ringlemann chart or U.S. EPA Method 9.	None
Federal Regulation	No regulations identified.	No regulations identified.	No regulations identified.	No regulations identified.	No regulations identified.

<sup>33</sup> This Rule is used in conjunction with the South Coast AQMD's permitting system. Fugitive dust sources subject to PR 403.2 requirements are exempt from South Coast AQMD permits.

<sup>34</sup> This Rule is used in conjunction with South Coast AQMD's permitting system. Fugitive dust sources subject to PR 403.2 requirements are exempt from South Coast AQMD permits.

<sup>35</sup> PR 403.2 would prohibit any emissions from aggregate operations or uncovered large roadway project material piles larger than 8 feet in height within 100 feet of sensitive receptors. Rule 1157 prohibition on emissions is more stringent in all other circumstances and would be in addition to other requirements in PR 403.2 for aggregate operations.

<sup>36</sup> PR 403.2 would require control measures which are consistent with the work practice requirements of Rule 1157 and prohibit any visible emissions travelling more than 100 feet in any direction through application of dust suppressants.

## **APPENDICES**

## APPENDIX I – HYPOTHETICAL LARGE ROADWAY PROJECT MODEL INPUTS

	Estimate emissions using AP42 and CalEEmod			Project Size:	10	Acres								Construction Phase	Equipment	Total PM Emissions (lb)
Phase #	Construction Phase	Equipment	No. of Equip	Emission Factor (EF) equation	Emission Factor (EF)	EF unit	hr/day	days	tons	VMT (mile)	Total PM Emissions (lb)					
1	Demolition	Rubber Tired Dozers	2	Eq.1	0.752760759	lb/hr	8	4			48.18		Demolition	Rubber Tired Dozers		
1	Demolition	Concrete Saw	1	Eq.2	0.001090968	lb/ton	8		20395.173		22.25			Concrete Saw		
		Excavators												Excavators		92.68
1	Demolition	Excavators	3	Eq.2	0.001090968	lb/ton	8		20395.173		22.25		Site Preparation	Bulldozer		
														Tractors/Loaders/Backhoes		110.21
2	Site Preparation	Bulldozer	3	Eq.1	0.752760759	lb/hr	8	6			108.40		Grading	Rubber Tired Dozers		
2	Site Preparation	Tractors/Loaders/Backhoes	4	Eq.2	0.000088797	lb/ton	8		20395.173		1.81			Excavators		
														Graders		
														Tractors/Loaders/Backhoes		18.54
3	Grading	Rubber Tired Dozers	1	Eq.1	0.752760759	lb/hr	8	2			12.80		General Construction	Cranes		
3	Grading	Excavators	1	Eq.2	0.000088797	lb/ton	8		20395.173		1.81			Tractors/Loaders/Backhoes		
3	Grading	Graders	1	Eq. 3	1.542546	lb/VMT	8	4		1.375	2.12			Tertiary Crushing PM10 (uncontrolled)		
														Screen PM10 (uncontrolled)		229.60
3	Grading	Scrapers	0	Eq. 3		lb/VMT										
3	Grading	Tractors/Loaders/Backhoes	3	Eq. 2	0.000088797	lb/ton	8		20395.173		1.81					
4	General Construction	Cranes	1	Eq.2	0.000088797	lb/ton	7		20395.173		1.81					
4	General Construction	Excavators	0	Eq.2		lb/hr										
4	General Construction	Tractors/Loaders/Backhoes	3	Eq.2	0.000088797	lb/ton	7		20395.173		1.81					
													web link: https://www3.epa.gov/ttnchie1/ap42/ch11/final/c11s1902.pdf			
4	General Construction	Tertiary Crushing PM10 (uncontrolled)			0.00243	lb/ton			20395.173		49.56					
4	General Construction	Screen PM10 (uncontrolled)			0.00865	lb/ton			20395.173		176.42					
Total											451.03					

Eq.1	s= dry silt content %	6.9	web link:	<a href="https://www.epa.gov/sites/default/files/2020-10/documents/c11s09.pdf">https://www.epa.gov/sites/default/files/2020-10/documents/c11s09.pdf</a>
	M= Moisture content %	7.9		
	scaling factor (≤10µm)	0.75		
Eq.2	k= particle size multiplier (≤10µm)	0.35	web link:	<a href="https://www.epa.gov/sites/default/files/2020-10/documents/13.2.4_aggregate_handling_and_storage_piles.pdf">https://www.epa.gov/sites/default/files/2020-10/documents/13.2.4_aggregate_handling_and_storage_piles.pdf</a>
	U= mean wind speed (mph)	4.9		
	M= Moisture content %	12		
Eq.3	S= mean vehicle speed (mph)	7.1	web link:	<a href="https://www.epa.gov/sites/default/files/2020-10/documents/c11s09.pdf">https://www.epa.gov/sites/default/files/2020-10/documents/c11s09.pdf</a>
	scaling factor (≤10µm)	0.6		
Eq.1				
$\frac{1.0 (s)^{1.5}}{(M)^{1.4}}$				
Eq.2				
$= k(0.0032) \frac{\left(\frac{U}{5}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}} \text{ (pound [lb]/ton)}$				
Eq. 3				
$0.051 (S)^{2.0}$				
NOTE:				
1 Fugitive dust emissions (E)are calculated by multiplying the EF Eq.2 with throughput (TP) of material. E=EF x TP CalEEmod assumes 1.2641662 tons/cubic yard for loading process from Appx. A page 11. TP = Project acres x 1 feet x 1613.33 cubic yard/acre feet x 1.2641662 tons/cubic yard				
1 Acre feet =		1613.33	cubic yard	
TP =		20395.17255	tons	
2				
CalEEmod does not have crushing and screening equipment. Assumption is made using the same TP as in loading process for the pupose of estimating the emissions. Also assuming equipment is uncontrolled.				
3 Grading dust emissions (E)are calculated by multiplying EF Eq.3 with vehicle miles traveled (VMT) as follows:				
E= EF x VMT x number of days				
VMT= As/Wb x43,560 sqft/acre / 5,280 ft/mile				
As: acreage fo the grading site (acre), the grading rate for grader is 0.5 acres/8hr-day				
Wb: Blade width of the grading equipment. CalEEMod used default blade width of 12 ft based on Caterpillar's 140 Motor Grader				
VMT =		0.34375	miles/8hr-day	
4 Total emissions are based on uncontrolled emission factors. Total emission amounts will vary based on implementation of dust controls and other best management practices.				

## **APPENDIX II – ROADWAY DUST COMPLAINTS (6/25/19 – 2/16/22)**

Complaint Received Date	Complaint Number	Alleged Source Name	Alleged Source Location	Alleged City	Complaint Description
6/25/2019	299791	UNKNOWN	15 FWY/6TH ST	NORCO	large plume of dust on the medium from construction.
6/25/2019	299815	CONSTRUCTION SITE ON FREEWAY	15 FWY 91/60	NORCO	EXCESSIVE DUST NO WATER TRUCK
6/26/2019	299876	FREEWAY CONSTRUCTION	15FWY/HIDDEN VALLEY PKWY/ 6TH	NORCO	FREEWAY CONSTRUCTION CAUSING ALOT OF DUST. BLOWING INTO HOUSES AND CAUSING TRAFFIC TO SLOW DOWN OF FREEWAY. PLS CONTACT.
6/27/2019	299887	UNKNOWN	15 FWY/6TH ST	NORCO	excessive dust.
7/1/2019	299976	FREEWAY	73 FREEWAY AND 55 FWY	COSTA MESA	STREET SWEEPER ON THE FREEWAY CAUSING EXCESSIVE DUST
7/12/2019	300343	CONSTRUCTION SITE	15FWY/91FWY/HIDDEN VALLEY	CORONA	excess amounts of dust. pls contact.
7/26/2019	300849	5 FWY	VALLEY VIEW	LA MIRADA	5FWY SOUTH OF THE VALLEY VIEW EXIT/ HEAVY MACHINERY CAUSING EXCESSIVE DUST
8/6/2019	301309	FREEWAY CONSTRUCTION	405FWY/22FWY	WESTMINSTER	Rock crushing activity 405fwy/22fwy at bolsa chica causing alot of dust. pls contact.
8/16/2019	301660	FREEWAY CONSTRUCTION	15FWY/HIDDEN VALLEY BRIDGE	CORONA	LOADING TRUCKS WITH CONCRETE CAUSING ALOT OF DUST. HAPPENING NOW.
8/16/2019	301694	SECURITY PAVING	15 FREEWAY SOUTH, HIDDEN VALLEY	ONTARIO	TRUCK GOING FAST IN CONSTRUCTION MEDIAN, KICKING UP WHITE DUST. ENOUGH TO MAKE TRAFFIC SLOW DOWN TILL THE TRUCK STOPPED MOVING.
8/16/2019	301695	SECURITY PAVING	15 FREEWAY SOUTH, HIDDEN VALLEY	ONTARIO	TRUCK GOING FAST IN CONSTRUCTION MEDIAN, KICKING UP WHITE DUST. ENOUGH TO MAKE TRAFFIC SLOW DOWN TILL THE TRUCK STOPPED MOVING.
9/10/2019	302508	CONSTRUCTION ON AN OVER PASS BRIDGE	405 FWY AND TALBERT BRIDGE	FOUNTAIN VALLEY	EXCESSIVE DUST DUE TO CONSTRUCTION. SEEN IT ON SUNDAY @2:00 AM. PLEASE CALL
9/10/2019	302527	OCTA	TALBER AVE. AND WARD ST.	FOUNTAIN VALLEY	DUST CLOUDS OVER NEIGHBORHOOD DURING TALBERT BRIDGE DEMOLITION. WORKERS NOT USING ANY BREATHING EQUIPMENT AND DUST CLOUD NOT HOSED DOWN WITH WATER. VERY TOXIC DUST OVER HOMES AND NO WARNING SIGNS ANYWHERE. CONCERNED ABOUT SILICA AND HEALTH EFFECTS IF EXPOSED.
9/12/2019	302655	ROAD CONSTRUCTION	405/BROOKHURST	FOUNTAIN VALLEY	REF BY CAL EPA (COMP 45958) LARGE DUST CLOUD FROM ROAD CONSTRUCTION. NO CITY LEFT ON COMPLAINT, HAD TO PUT DIAMOND BAR TO SAVE COMPLAINT.
9/13/2019	302729	FREEWAY CONSTRUCTION	15 FWY / CAJALCO	CORONA	NOT USING WATER DURING CONSTRUCTION CAUSING EXCESSIVE DUST.
9/15/2019	302858	UNKNOWN	405 FWY/BUSHARD	FOUNTAIN VALLEY	VM_dust cloud from bridge demo
9/19/2019	303025	CALTRANS WORK	605/ ROSE HILLS NORTH	PICO RIVERA	excess amounts of dust, has been happening for the last 3 days.
9/27/2019	303404	405 FWY	S. 405 FWY/BOLSA CHICA EXIT	WESTMINSTER	DUST COMING FROM 405 FWY EXPANSION PROJECT.
9/30/2019	303487	CAL TRANS SITE	710 FWY & VALLEY	ALHAMBRA	EXCESSIVE FUGITIVE DUST = CAL TRANS NOT USING WATER, PLEASE CALL
11/25/2019	306010	CAL TRANS ROAD CONSTRUCTION	FOOTHILL BL / MOUNTAIN	CLAREMONT	EXCESSIVE DUST FROM CONSTRUCTION
1/24/2020	307702	CALTRANS CONSTRUCTION SITE	10 AND 57 INTERSECTION	POMONA	Dust control failure at CalTrans construction site along 10 east bound freeway
2/3/2020	308027	CONSTRUCTION SITE	15 FWY AND HIDDEN VALLEY PKWY	NORCO	Large amount of dust coming from freeway construction site.
2/12/2020	308353	CONSTRUCTION SITE	15 FWY AND CAJALCO	CORONA	EXCESSIVE FUGITIVE DUST _ NO WATER BEING USED
2/14/2020	308455	UNKNOWN	5 FWY / CROWN VALLEY / ALICIA PKWY	MISSION VIEJO	excessive dust from construction of widening the freeway. pls call.
2/20/2020	308642	FREEWAY CONSTRUCTION SITE	73 N. BOUND/BRISTOL	COSTA MESA	CONCRETE DUST FROM A CONSTRUCTION SITE.
2/26/2020	308851	FREEWAY CONSTRUCTION	OSO / LA PAZ	MISSION VIEJO	EXCESSIVE DUST FROM CONSTRUCTION SITE



Complaint Received Date	Complaint Number	Alleged Source Name	Alleged Source Location	Alleged City	Complaint Description
3/2/2020	309045	CONSTRUCTION SITE	HIDDEN VALLEY/15 FWY	CORONA	DUST COMING FROM CONSTRUCTION SITE. THAT HAS PILES OF CONCRETE THAT ARE NOT COVERED. THIS IS NOT COVERED AND IS BLOWING EVERYWHERE. DUST IS SO FINE THAT IT GOES UNDER GARAGE DOOR ONTO HIS CAR.
3/3/2020	309106	UNK	91 FWY /15 FWY	NORCO	EXCESSIVE DUST COMING ACROSS THE FREEWAY
4/28/2020	310130	FREEWAY WIDENING PROJECT	BEACH BLVD AND 405 FWY	WESTMINSTER	Sandblasting from cleaning materials going on in freeway widening project
5/15/2020	311055	405 FWY PROJECT	MCFADDEN/CEDARWOOD/PACIFIC	HUNTINGTN BCH	excessive dust. pls call.
5/15/2020	311057	OCTA CONCRETE	405FWY/22FWY	WESTMINSTER	EXCESS AMOUNTS OF DUST. PLS CONTACT.
5/26/2020	311289	405 CONSTRUCTION SITE	MCFADDEN AND CEDARWOOD	WESTMINSTER	Fugitive dust coming from construction on 405 FWY
5/26/2020	311305	WILDOMAR TRAIL	15FWY S/WILDOMAR TRAIL/BAXTER	WILDOMAR	REF BY CAL EPA ( COMP_47902 ). transporting concrete from another location, dumping it and crushing it. They are operating mostly during the hours of 19:00HRS _ 3:00 AM. It seems as if they are trying to hide the large amount of dust.
6/3/2020	311499	UNKNOWN	15 FWY/WILDOMAR TRAILS/BAXTER	WILDOMAR	excessive dust from construction. pls call.
6/3/2020	311509	UNKNOWN	WILDOMAR TRAIL/ 15	WILDOMAR	CALTRANS IS GRINDING CONCRETE BLOCKS BEHIND MY HOUSE. CAUSING BIG PLUMES OF CONCRETE DUST COMING UP OVER THE WALL TO OUR HOME.
6/4/2020	311531	FREEWAY CONSTRUCTION	405 FWY/BEACH & GOLDEN WEST	WESTMINSTER	EXCESSIVE DUST AND EXHAUST FROM CONSTRUCTION EQUIPMENT WIDENING THE 405 FREEWAY. DUST IS CAUSING DAMAGE TO HIS COMPANY AND VEHICLES. NO WATER TRUCK ON SITE. PLEASE CONTACT.
6/9/2020	311629	CALTRANS	110 FREEWAY X EUCLID AVE	UPLAND	CONSTRUCTION ON THE I-10 FREEWAY AT EUCLID AVE IN UPLAND, CA. - MAJOR DUST BEING PRODUCED BY FREEWAY CONSTRUCTION WORK. IT WAS SO MUCH AND SO THICK IT LOOKED LIKE A FOG BANK. IT FILLED THE INSIDE OF MY CAR AS I DROVE THROUGH IT AND I COULDN'T BREATHE.
6/10/2020	311712	15 FWY CONSRUCTION	15 FWY/ WILDOMAR TRAIL	WILDOMAR	VM CONCRETE DUST BLOWING IN HER YARD FROM FWY CONSTRUCTION.
6/16/2020	311832	FREEWAY CONSTRUCTION	BEACH/GOLDEN WEST	WESTMINSTER	GIANT CLOUD OF DUST IS GOING INTO BUSINESS FROM 405 FWY CONSTRUCTION. GOING ONTO CARS AND MAKING IT HARD FOR HIS EMPLOYEES BREATHE. NO DUST CONTROL MEASURES BEING DONE. WORKED WITH KRAIG MORRIS IN THE PAST. ONGOING PROB. PLEASE CONTACT.
6/25/2020	312051	FREEWAY CONSTRUCTION	22 FWY / 405 FWY	WESTMINSTER	EXCESSIVE DUST FROM CONSTRUCTION MAKING IT HARD TO SEE
7/3/2020	312233	405 CONSTRUCTION	MCFADEN AND SUGAR ST	MIDWAY CITY	VM: construction on 405 FWY producing fugitive dust falling into residential area
7/9/2020	312381	CALTRANS FREEWAY EXPANSION	405 FWY / GOLDEN WEST	WESTMINSTER	CalTrans freeway expansion project is producing a lot of dust and dried vegetation caught fire a couple days ago which produced a lot of smoke and soot.
7/17/2020	312572	FREEWAY CONSTRUCTION	405 & BROOKHURST	FOUNTAIN VALLEY	EXCESSIVE DUST FROM FREEWAY CONSTRUCTION WORK FOR ALMOST A YEAR. PLEASE CALL COMPLAINANT
9/11/2020	314694	FREEWAY CONSTRUCTION SITE	405 FWY/BEACH/GOLDEN WEST	WESTMINSTER	DUST GOING INTO BUSINESS FROM FREEWAY CONSTRUCTION. ONGING PROBLEM. PLEASE CONTACT.
10/1/2020	315401	FREEWAY CONSTRUCTION	405 FWY FAIRVIEW	COSTA MESA	EXCESSIVE DUST FROM FREEWAY CONSTRUCTION MAKING IT HARD TO SEE WHEN DRIVING. NOT USING ANY WATER.
10/7/2020	315682	FREEWAY CONSTRUCTION	405FWY S/FAIRVIEW	COSTA MESA	excess amounts of dust to fly over freeway. pls contact.
10/13/2020	315862	FREEWAY CONSTRUCTION	405 FWY/FAIRVIEW	COSTA MESA	excessive dust. pls call.
10/29/2020	316383	FREEWAY CONSTRUCTION	15FWY/ WILDOMAR TRAILS	WILDOMAR	grinding concrete on freeway causing alot of dust. no watering .



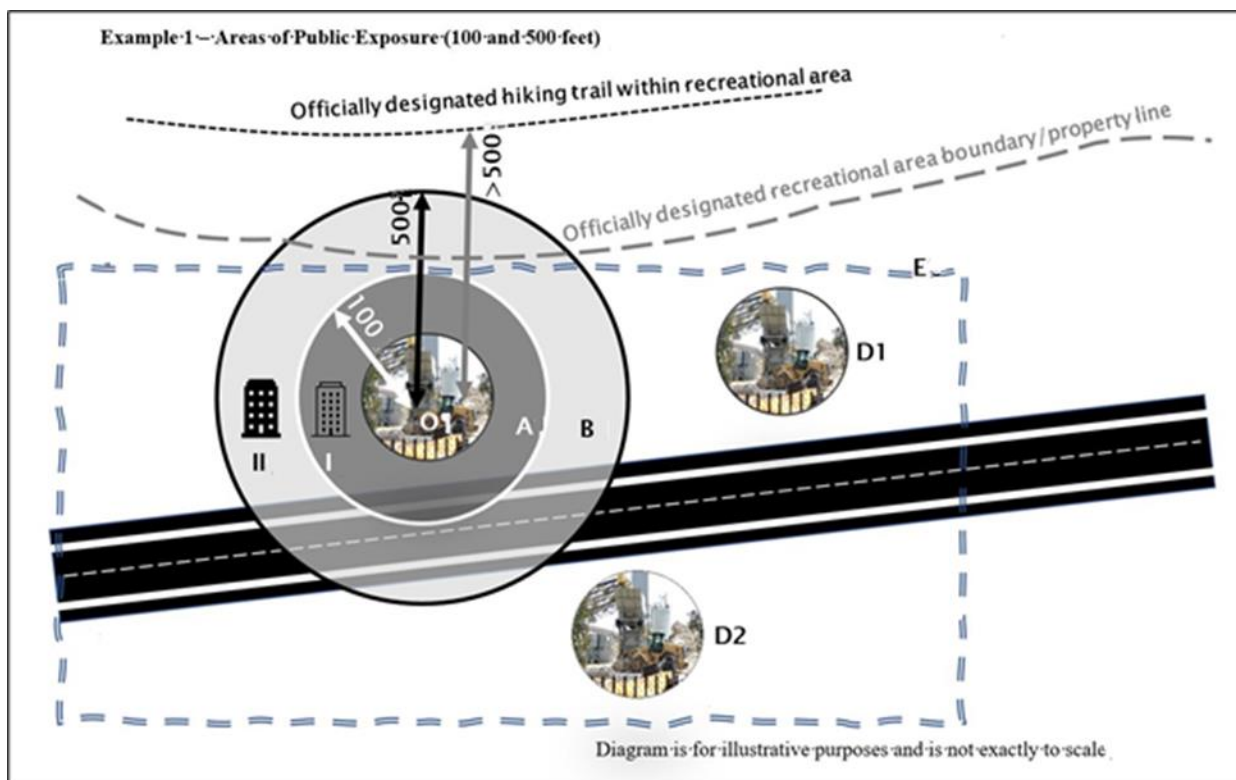
Complaint Received Date	Complaint Number	Alleged Source Name	Alleged Source Location	Alleged City	Complaint Description
10/29/2020	316386	UNKNOWN	15 FWY/WILDOMAR/BAXTER	WILDOMAR	excessive dust from concrete pile.
10/30/2020	316424	CONSTRUCTION SITE	15 FWY & BAXTER RD	WILDOMAR	EXCESSIVE FUGITIVE DUST please call
10/30/2020	316426	UNKNOWN	15 FWY/WILDOMAR TRAIL	WILDOMAR	excessive dust. pls call.
11/4/2020	316563	FREEWAY CONSTRUCTION	WILDOMAR TRAIL/15 FWY	WILDOMAR	██████████ GRINDING CONCRETE NO WATER TRUCK ON SITE. PLEASE CONTACT ██████████
11/17/2020	316947	CONSTRUCTION SITE CALTRANS	210 FWY / YARNEL TO WHEATLAND	SUNLAND	DUST FROM CONSTRUCTION IN THE MORNING AROUND 7:00 AM NO WATER BEING USED. PLEASE CALL
12/9/2020	317603	UNKNOWN	BAXTER RD	WILDOMAR	CRYSTALLINE SILICA EXPOSURE, THEY ARE GRINDING CONCRETE BEHIND MY HOUSE ON THE FREEWAY ON RAMP SHOULDER AND I HAVE BEEN CONCERNED ABOUT THIS FOR MY HEALTH FOR MONTHS.
12/10/2020	317637	405 FREEWAY CONSTRUCTION	FAIRWAY BRIDGE & 405 FREEWAY	COSTA MESA	EMAIL FROM ██████████ COMPLAINING OF EXCESSIVE DEBRIS FROM FREEWAY CONSTRUCTION.
12/11/2020	317661	CONCRETE PILES	15 S / WILDOMAR TRAIL	WILDOMAR	EXCESSIVE DUST FROM CONCRETE BREAKING OPERATION GOING ON FOR SEVERAL MONTHS. NOT USING WATER.
12/11/2020	317669	MIRANDA LOGISTICS	I15 AND BAXTER RD	WILDOMAR	Dust coming from crushing operation
12/21/2020	317901	CALTRANS PROJECT	WILDOMAR TRAIL / I 15	WILDOMAR	DUST COMING OFF THE CONCRETE CRUSH/GRINDING PROJECT AT WILDOMAR TRAIL ENTRANCE OF INTERSTATE 15. DUST EVERY DAY THEY ARE WORKING WAIFS THROUGH THE AIR OVER THE SURROUNDING HOMES. VERY EVIDENT THIS AM 12/21/2020 DUE TO CLEAR SKIES.
1/15/2021	318599	405 FREEWAY PROJECT	405 FWY/BOLSA CHICA	WESTMINSTER	excessive dust and debris from freeway construction. pls call.
1/19/2021	318736	CAL TRANS YARD	15FWY/WILDOMAR TRAIL	WILDOMAR	grinding causing alot of dust, going all across the freeway
2/9/2021	319284	FREEWAY CONSTRUCTION SITE	I 10 FWY/CENTRAL AVE/BENSON	MONTCLAIR	LOTS OF DUST FROM FREEWAY CONSTRUCTION SITE. PLEASE CONTACT.
2/18/2021	319487	FREEWAY	10 FWY/15 FWY UNDERPASS	ONTARIO	Wind is picking up dust and blowing it all over the wind is blowing about 50 miles per hour.
4/1/2021	320707	CAL TRANS	PAINTED HILLS/PEARSON	WHITE WATER	CAL TRANS IS DOING WORK AND NO WATER TRUCK IS ON SITE. CLOUD OF DUST. PLEASE CONTACT.
4/1/2021	320718	CALTRANS	10 FWY/ROSEMEAD	EL MONTE	excessive dust from sweeping. pls call.
4/5/2021	320867	CAL TRANS	STATE RT 62	WHITE WATER	excessive dust from grading the shoulders of the highway happening now
4/29/2021	321658	CAL TRANS CONSTRUCTION SITE	W. 91 FWY/15 FWY	CORONA	DUST COMING FROM CONSTRUCTION SITE.
4/29/2021	321661	FWY CONSTRUCTION	91 FWY/15 FWY	CORONA	CONSTRUCTION WITH LOTS OF DUST BLOWING UP LIKE CRAZY.
5/6/2021	321878	CONSTRUCTION	GREENRIVER/ 91FWY	CORONA	excess amounts of dust and dirt coming from construction site. trucks driving on dirt road to the site and kicking up dirt. pls contact.
5/21/2021	322357	CAL TRANS	UNK	DOWNEY	EXCESSIVE DUST ALL OVER THE NEIGHBORHOOD. PLEASE CALL
5/26/2021	322479	73 FWY	73 FWY MCARTHUR	NEWPORT BEACH	EXCESSIVE DUST FROM CUTTING CONCRETE.
7/29/2021	325385	CALTRANS AND THEIR CONTRACTORS	10 FREEWAY IN ONTARIO, CA.	ONTARIO	FREEWAY CONSTRUCTION OCCURRING AT NIGHT ON THE WEST BOUND 10 FREEWAY IN ONTARIO AT ARCHIBALD AVENUE CREATING SO MUCH DUST IT LOOKED LIKE A FOG BANK ON THE FREEWAY. NO DUST CONTROL OCCURRING. THIS IS HAPPENING A LOT ALONG THE 10 FWY.

Complaint Received Date	Complaint Number	Alleged Source Name	Alleged Source Location	Alleged City	Complaint Description
9/15/2021	328893	SECURITY PAVING COMPANY	BURBANK BOULEVARD AND I5	BURBANK	THERE HAS BEEN FREEWAY CONSTRUCTION AT THE INTERSTATE FIVE AND BURBANK OVERPASS FOR THE LAST 20 MONTHS. SECURITY PAVING IS THE CONTRACTOR THAT HAS A CONTRACT ON THIS 2 MILE STRETCH OF REMODELING THE FREEWAY AND REPLACING THE BURBANK BOULEVARD OVERPASS. SE
9/17/2021	329035	COMPANY	91FWY	CORONA	VM: MAKING A LOT OF DUST.
9/17/2021	329041	CALTRANS CONSTRUCTION	91FWY EAST/15FWY	CORONA	VM: EXCESS AMOUNTS OF DUST. THEY WORK ACROSS THE STREET.
9/23/2021	329332	FREEWAY PROJECT	91 AND 15 FREEWAYS	CORONA	VOICEMAIL_ EXCESSIVE FUGITIVE DUST COMING FROM A CONSTRUCTION SITE, NO WATER BEING USED
9/23/2021	329333	CONSTRUCTION SITE	91 FWY AND 15 FWY	CORONA	VOICEMAIL_ CLOUDS OF DUST NO WATER BEIN USED, EXCESSIVE
9/23/2021	329334	CONSTRUCTION SITE	91 FWY AND 15 FWY	CORONA	VOICEMAIL_ CALLING FROM HIS JOB, EXCESSIVE FUGITIVE DUST
9/23/2021	329335	CONSTRUCTION SITE	91 FWY AND 15 FWY	CORONA	VOICEMAIL_ CALLING FROM HIS JOB, EXCESSIVE DUST
9/23/2021	329338	CONSTRUCTION SITE	91 FWY	CORONA	VOICEMAIL_ CALLING FROM [REDACTED] EXCESSIVE DUST, NO WATER BEING USED, HE IS WORKING IN WAREHOUSE AFFECTING HIM
10/18/2021	333931	FREEWAY CONSTRUCTION	405 FWY & VAN NESS	TORRANCE	EXCESSIVE DUST FROM FREEWAY CONSTRUCTION HAPPENING
11/4/2021	335965	CONSTRUCTION SITE	15 FWY / TEMESCAL CYN	CORONA	HEAVY DUST CLOUD ON THE 15 FWY
11/15/2021	336641	CONSTRUCTION	1ST AND WEST OF HAMNER	NORCO	WATER
11/25/2021	337236	FREEWAY EXPANSION	60FWY WEST	MORENO VALLEY	VM: SUBSTANTIAL AMOUNT OF DUST. 60FWY IN THE BADLANDS, BETWEEN MORENO VALLEY AND BEAUMONT.
12/4/2021	337619	UNKNOWN	91 AND 15	CORONA	ON DECEMBER 1, THE CEMENT DUST CLOUD WAS SO LARGE THAT IT LOOKED LIKE FOG GOING ACROSS THE FREEWAY WITH ALMOST 0 VISIBILITY, WITH A VERY STRONG ODOR.
2/7/2022	339878	CONSTRUCTION SITE	5 FWY/CROWN VALLEY PARKWAY	MISSION VIEJO	HUGH DUST CLOUD FROM FREEWAY CONSTRUCTION.
2/7/2022	339879	CONSTRUCTION	5 FWY/CROWN VALLEY PARKWAY	MISSION VIEJO	LARGE PLUME OF DUST AT FREEWAY CONSTRUCTION SITE. IT WAS HARD TO SEE. SHE WAS DRIVING WHEN SHE NOTICED THIS.
2/8/2022	339951	OCTA'S SUBCONTRACTOR	5400 GARDEN GROVE	WESTMINSTER	OCTA'S SUBCONTRACTOR IS NOT CONTROLLING FUGITIVE DUST. IT'S BLOWING ONTO THE RAMP AND ONTO THE DDRV VEHICLE INVENTORY. SUBCONTRACTOR IS SUPPOSED TO BE USING DUST CONTROL MEASURES ON THE OFF RAMP ROAD SURFACE AND APPEARS TO NOT BE DOING SO.
2/9/2022	340005	OCTA	5400 GARDEN GROVE	WESTMINSTER	OCTA'S CONTRACTOR IS NOT USING THE DUST SUPPRESSION SPRINKLERS AND SPRAYING AT THE CRUSHER, ROCK PILE, AND LOADING AREAS. FURTHER, IT IS USING WATER TRUCK ONLY TO SPRAY SOME AREAS. IT IS NOT ADEQUATELY SPRAYING THE INGRESS/EGRESS POINTS OR RAMP.
2/16/2022	340243	OC405	405 FREEWAY	SEAL BEACH	FUGITIVE DUST, CO2 AND NOISE WITH REMOVAL OF THE SOUND WALL WE HAVE BEEN SUBJECT TO TOXINS IN THE AIR, PROPERTY AND VEGETATION HAS EXHAUST RESIDUE ETC



### **APPENDIX III – HYPOTHETICAL PR 403.2 APPLICABILITY SCENARIOS**

The examples below illustrate some hypothetical roadway project scenarios where PR 403.2 may apply. These hypothetical illustrative examples occur near large roadways and so qualify as large roadway projects, if specific distance criteria are met, otherwise PR 403.2 would not be applicable. The following hypothetical examples are purposely simplified in order to make them more easily understood. Assumptions made include that only the activities/equipment shown constitute the project, while projects typically have more and varied types of equipment on site simultaneously and also that there are not multiple areas of public exposure (APEX) or sensitive receptors (SR) with potential overlap besides the ones shown in the hypothetical examples below.

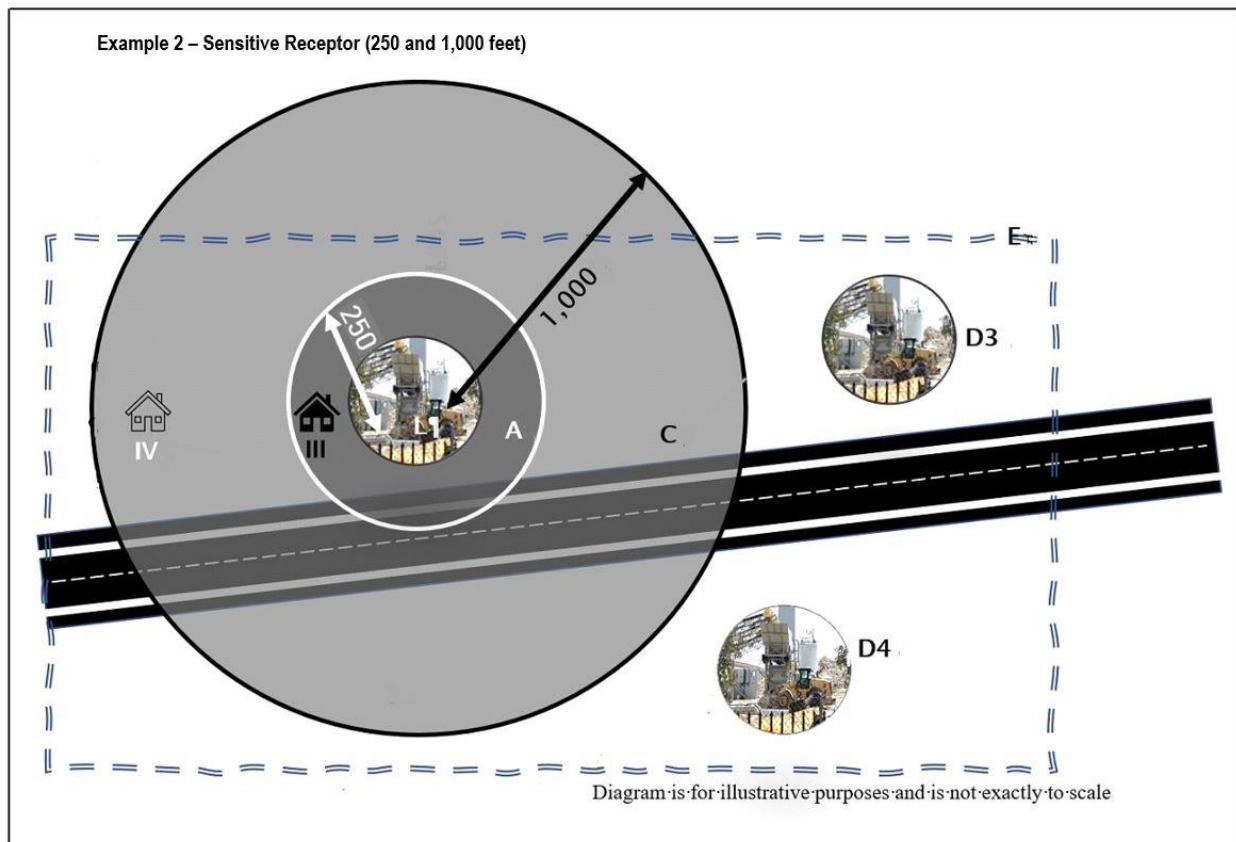


**Hypothetical Example 1** shows two APEX, office buildings (indicated by I and II) and an officially designated recreation area as defined in PR 403.2 (i.e., not vacant uninhabited land or non-recreation open space). Both the office buildings and recreational area are located near a large roadway as defined in PR 403.2 (and shown here as a black road with a white dashed median and rail guards/sound walls on either side of the road). In this example, aggregate (recycled concrete) crushing activity is being conducted with crushing equipment, located at O, immediately next to the large roadway, on the roadway right-of-way. The aggregate crushing equipment is both

adjacent (directly next) to and associated with the large roadway so that this project qualifies as a large roadway project. Area E, shown here as a wavy double line, encompasses the total area of the project on which the contractor has the authority to carry out aggregate crushing and other large roadway activities, or site/operate equipment.

Office building I in area A is within a radius of a 100 feet from the location perimeter of the aggregate crushing equipment, located at O. In Example 1, barring an emergency situation, aggregate crushing activities, except for covered material piles, at this large roadway project should not be sited and conducted at location O. Aggregate crushing activities/equipment could be located at O if an area of public exposure was located in area B (office building II), and not in area A, if the contractor is in compliance with all applicable requirements of PR 403.2. This is because area B is outside the prohibited radius of 100 feet from the APEX. If the large roadway project aggregate crushing activity/equipment is not located at O, say for example at D1 or D2 in area E, then the aggregate crushing activity/equipment would not be subject to the requirements of PR 403.2 because the crushing equipment/activity is not within the 500 feet distance from the area of public exposure. These prohibitions, regarding distances of the activity/equipment to APEX, are also applicable to uncovered material piles as defined in the PR 403.2.

Another type of potential area of public exposure as shown in this example is an officially designated recreation area (e.g., a county open space recreational area or county/city designated amusement park). Note that for the purposes of PR 403.2, the applicable distance is measured from the perimeter of the activity/equipment location to the boundary/property line of the office building or in the case of an officially designated recreational area, the closest area of officially designated recreational activity (e.g., a hiking trail as shown by the dotted line inside the recreational area). Therefore, an office building with a large setback from the curb or boundary/property line, for example with a large parking lot, may still be within a distance that requires compliance with the provisions of PR 403.2, even though the habitable structure is more than 500 feet away from location O. Conversely, locating the aggregate crushing equipment to a location in E, that is greater than 100 feet (for example location D1 or D2) would allow for the aggregate crushing activity, and if greater than 500 feet result in the equipment being exempt from the requirements of PR 403.2, since distance is measured from the perimeter of the activity/equipment, and not the perimeter of the area E. In this hypothetical example the officially designated recreation area property line is within 500 feet of the aggregate crushing activity/equipment, however the nearest officially designated recreation trail is more than 500 feet (>500) from the aggregate crushing activity/equipment and so this large roadway project is not subject to the requirements of PR 403.2. Note again that while activities/equipment/piles associated with large roadways tend to be near or adjacent to large roadways, it is not the proximity of the large roadway to a receptor but rather the proximity of the activity/equipment/pile associated with the large roadway to the area of public exposure that is the distance of applicability for rule purposes.



In **Hypothetical Example 2**, two residences (III and IV) are potentially located near a large roadway (as defined in PR 403.2 and shown here as a black road with a white dashed median and rail guards/sound walls on either side of the road). Typical residences are homes/dwellings and include single family homes, condominiums and other common interest developments such as apartments which are defined as sensitive receptors in PR 403.2. In this example, aggregate crushing activity is being conducted with crushing equipment, located at L, near the large roadway. The aggregate crushing activity/equipment is both adjacent (directly next) to and associated with the large roadway so that this project qualifies as a large roadway project, which may be subject to the applicable requirements of PR 403.2. Area E, shown in Example 2 as a wavy double line, encompasses the total area of the project on which the operator/contractor has the authority to carry out crushing and other large roadway activities, site/operate equipment, or establish material piles. Residence I, in area A and Residence II in area C are within the radii of 250 and 1,000 feet, respectively from the perimeter of the crushing equipment location. In Example 2, barring an emergency situation, aggregate crushing activities without a water misting dust control system, and uncovered material piles with except for covered material piles, could not be conducted sited in area A since residence III is less than 250 feet from the crushing activity/equipment and material piles. However, if residence III was not located in area A, but at the location shown for residence IV in area C, aggregate crushing activities could be conducted at location L provided that the activity/equipment is in compliance with all applicable requirements of PR 403.2. If the activity/equipment/pile is located further than 1,000 feet from either residence III or IV, for example at D3 or D4 in area E, the requirements of PR 403.2 would not be applicable. These prohibitions are also applicable to uncovered material piles. Note that for the purposes of PR 403.2

the applicable distance is measured from the perimeter of the activity/equipment location to the property line of the sensitive receptor (in this example the home/dwelling). Therefore, a home with a large setback from the curb or property line (e.g., on an oversized lot) may still be within a distance that requires compliance with the provisions of PR 403.2. Conversely, locating the aggregate crushing equipment to a location in E, that is greater than 250 feet (for example location D3 or D4) would allow for the aggregate crushing activity, and if greater than 1,000 feet would exempt the activity/equipment from the requirements of PR 403.2, since distance is measured from the perimeter of the activity/equipment, and not the perimeter of the area E. Note again that while activities/equipment/piles associated with large roadways tend to be near or adjacent to large roadways, it is not the proximity of the large roadway to a receptor but rather the proximity of the activity/equipment/pile associated with the large roadway that is the distance of interest for rule purposes.

**APPENDIX IV – CITY OF SAN BERNARDINO****RESOLUTION- NO. 2020-265**

Resolution No. 2020-265

**RESOLUTION NO. 2020-265****RESOLUTION OF THE MAYOR AND CITY COUNCIL OF  
THE CITY OF SAN BERNARDINO, CALIFORNIA,  
ESTABLISHING GUIDANCE RELATING TO THE  
ISSUANCE OF TEMPORARY USE PERMITS ALLOWING  
ON-SITE AND OFF-SITE CONTRACTORS'  
CONSTRUCTION YARDS FOR APPROVED  
DEVELOPMENT PROJECTS**

**WHEREAS**, in accordance with Chapter 19.70 of the San Bernardino Municipal Code (“SBMC”), the Director of Community and Economic Development is authorized to permit certain short-term activities through the issuance of a Temporary Use Permit (“TUP”); and

**WHEREAS**, SBMC section 19.70.020 (2), specifically permits the issuance of a TUP for “on- and off-site contractors’ construction yards in conjunction with an approved development project”; and

**WHEREAS**, pursuant to SBMC section 19.70.035 (B), such construction yards can “be operated only in conjunction with an approved building permit” and must “be removed immediately upon completion of the construction project”; and

**WHEREAS**, in recent weeks, the issuance of TUP 20-033 permitting the operation of such a yard at 6920 Palm Avenue in connection with Tentative Tract Map 16794 for the purposes of stock piling materials raised significant concerns among community members; and

**WHEREAS**, the concerns related to the hauling, stock piling, and eventual plan to grind materials at the site, which were occurring prior to the issuance of a grading permit; and

**WHEREAS**, while City staff established conditions for the TUP to protect the public interest (including hours of operation, covering requirements, and compliance with permit requirements such as for hauling and storm water), the need for additional guidance to clarify the purpose of SBMC section 19.70.020 (2) is clear.

**BE IT RESOLVED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF SAN BERNARDINO AS FOLLOWS:**

**SECTION 1.** The above recitals are true and correct and are incorporated herein by this reference.

**SECTION 2.** In order to provide guidance related to the issuance of temporary use permits under SBMC section 19.70.020 (2), the City Council hereby declares and directs staff as follows:

The purpose of SBMC section 19.70.020 (2) was to permit developers to use the site of an approved development project for temporary storage of finished construction materials in the immediate run up to and during the construction of the development project. It was not intended

## Resolution No. 2020-265

to permit the storage of construction materials at sites prior to the issuance of permits authorizing construction work to commence, e.g., the grading permit. In addition, it was not intended to permit more intensive temporary uses such as the crushing or grinding of raw materials than would otherwise be permitted in the applicable zone. For example, while the crushing and grinding of raw materials might be appropriate as a temporary use in an industrial or commercial zone, it is incompatible with residentially zoned property.

In light of the foregoing, in response to any future request for a TUP for “on- and off-site contractors’ construction yards in conjunction with an approved development project” under SBMC section 19.70.020 (2), City staff shall abide by the following guidance:

A. Stock piles of building materials shall only be permitted in conjunction with the issuance by the City of a grading permit or building permit.

B. Stock piles of building materials shall consist only of finished materials ready for grading or construction.

C. No TUP may be issued to permit the crushing or grinding of unfinished raw materials such as rock, concrete, or similar at a residentially-zoned site or in any other zone within 1,000 feet of a residentially-zoned property.

D. If a TUP is issued permitting the crushing or grinding of unfinished raw materials such as rock, concrete, or similar, City staff shall condition the TUP in such manner to address the public health, safety, and welfare. Such conditions shall, among others, address dust mitigation, noise mitigation, site security, and compliance with all applicable air quality and water quality standards.

**SECTION 3.** Staff is hereby directed to prepare a Development Code Amendment to clarify the purpose and requirements for issuance of a TUP under SBMC section 19.70.020 (2) in accordance with the guidance provided by this Resolution.

**SECTION 4.** Staff shall apply the same standards applicable to a TUP under Section 2 of this Resolution to all grading permits.

**SECTION 5.** The City Council finds this Resolution is not subject to the California Environmental Quality Act (CEQA) in that the activity is covered by the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Where it can be seen with certainty, as in this case, that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA.

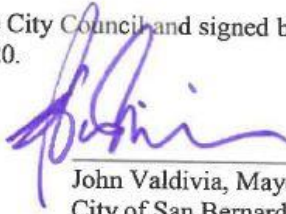
**SECTION 6.** Severability. If any provision of this Resolution or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications, and to this end the provisions of this Resolution are declared to be severable.

**SECTION 7.** Effective Date. This Resolution shall become effective immediately.


Resolution No. 2020-265  
October 21, 2020  
Page 2 of 4

Resolution No. 2020-265

**APPROVED** and **ADOPTED** by the City Council and signed by the Mayor and attested by the City Clerk this 21<sup>st</sup> day of October 2020.

  
\_\_\_\_\_  
John Valdivia, Mayor  
City of San Bernardino

Attest:

  
\_\_\_\_\_  
Genoveva Rocha, CMC, City Clerk

Approved as to form:

  
\_\_\_\_\_  
Sonia Carvalho, City Attorney

Resolution No. 2020-265  
October 21, 2020  
Page 3 of 4



Resolution No. 2020-265


**CERTIFICATION**

STATE OF CALIFORNIA )  
COUNTY OF SAN BERNARDINO) ss  
CITY OF SAN BERNARDINO )

I, Genoveva Rocha, CMC, City Clerk, hereby certify that the attached is a true copy of Resolution No. 2020-265, adopted at a regular meeting held on the 21<sup>st</sup> day of October 2020 by the following vote:

<u>Council Members:</u>	<u>AYES</u>	<u>NAYS</u>	<u>ABSTAIN</u>	<u>ABSENT</u>
SANCHEZ	_____	<u>X</u>	_____	_____
IBARRA	<u>X</u>	_____	_____	_____
FIGUEROA	<u>X</u>	_____	_____	_____
SHORETT	_____	<u>X</u>	_____	_____
NICKEL	<u>X</u>	_____	_____	_____
RICHARD	_____	_____	_____	<u>X</u>
MULVIHILL	<u>X</u>	_____	_____	_____

WITNESS my hand and official seal of the City of San Bernardino this 22<sup>nd</sup> day of October 2020.

  
Genoveva Rocha, CMC, City Clerk

Resolution No. 2020-265  
October 21, 2020  
Page 4 of 4



**APPENDIX V – L.A. METRO GREEN CONSTRUCTION POLICY****Metro**Los Angeles County  
Metropolitan Transportation AuthorityOne Gateway Plaza  
Los Angeles, CA 90012-2952**43****EXECUTIVE MANAGEMENT AND AUDIT COMMITTEE  
CONSTRUCTION COMMITTEE  
JULY 21, 2011****SUBJECT: GREEN CONSTRUCTION POLICY****ACTION: ADOPT GREEN CONSTRUCTION POLICY****RECOMMENDATION**

Adopt the Los Angeles County Metropolitan Transportation Authority (LACMTA) Green Construction Policy for implementation on construction projects conducted on LACMTA properties and rights-of-way. Phase the implementation of this policy, through a collaborative process, for implementation by other jurisdictions that receive/program LACMTA funding (in whole or in part) for construction projects.

**ISSUE**

Expediting the LACMTA's Measure R Initiative through the America Fast Forward Program will reduce overall emissions and get people out of their cars and onto transit sooner. However, the potential to create significant harmful emissions from traffic congestion and those associated with construction activities and existing non-mitigated legacy construction equipment usage remains high. This concern is echoed by the US Environmental Protection Agency (USEPA), the South Coast Air Quality Management District (SCAQMD), and various non-profit environmental organizations in the last few months through comment letters to LACMTA's environmental documents, or in public meetings. Specifically, the USEPA and the SCAQMD have recommended through those forums that the LACMTA either implement best management practices or require the use of cleaner on-road and off-road equipment to mitigate particulate matter (PM) and nitrogen oxide (NO<sub>x</sub>) compound emissions.

The development and implementation of a Green Construction Policy was advanced in a motion sponsored by Director Richard Katz and approved by the LACMTA Board of Directors on December 9, 2010. An LACMTA Board approved Green Construction Policy will facilitate agency-wide and uniform implementation of cost-effective solutions to this recognized air quality issue.

**DISCUSSION**

Staff presented a Draft Green Construction Policy during the March 2011 and June 2011 Executive Management and Audit Committee meetings. Additional guidance was given by our Board of Directors during those meetings to ensure the development of a comprehensive policy, consistent with the intent of Director Katz's December 2010 motion; but more importantly considers issues associated with the implementation of such a policy outside of the LACMTA jurisdiction. Additional considerations would include lessons learned from the policies, guidelines, or framework of other jurisdictions within our region specifically those of the Port of Los Angeles, Port of Long Beach, and Los Angeles World Airports (LAWA).

Over the course of four months, staff had conducted separate meetings with various stakeholders that included non-profit environmental organizations, construction contractors, manufacturers of retrofit equipment; as well as representatives of the South Coast Air Quality Management District, Port of Los Angeles, Port of Long Beach, and Los Angeles World Airports. The meetings were designed not only to develop a more comprehensive LACMTA Green Construction Policy but to gain consensus on language and provisions that should be included in the policy. Additional meetings were conducted in June and July to gain input from Metro's Technical Advisory Committee, Metro Streets and Freeways Sub-Committee, Metro Transit Business Advisory Council, Northern Corridor Cities Meeting, Antelope Valley Air Quality Management District, Los Angeles County Department of Public Works, and Small Business Outreach meeting to discuss the policy. After going through this extensive outreach, the Green Construction Policy included in Attachment A is attached for Board consideration. This policy includes a commitment for the immediate adoption of the policy on construction projects conducted on LACMTA properties and rights-of-way. The policy will be phased, through a collaborative process, for implementation by other jurisdictions that receive/program LACMTA funding (in whole or in part) for construction projects.

Staff's recommendation to adopt this LACMTA Green Construction Policy is in line with the clean construction requirements already existing in New York, Illinois (Cook Co.), and Rhode Island (Providence), among others. Locally, the Port of Los Angeles, Port of Long Beach, and LAWA have already incorporated clean construction requirements into their specifications.

From an informal survey of transit agencies nationwide [through the American Public Transportation Association (APTA)], it appears that only a handful of our peers have considered clean/green construction equipment requirements. There appears to be no transit agency at this time that has adopted such a policy. With the adoption of this policy, we will be the industry leader in the APTA community.

**FINANCIAL IMPACT**

LAWA and Port of Los Angeles staffs have been implementing clean construction requirements in their construction activities. Specifically to LAWA, they have indicated that the cost to implement these requirements in total, including the labor associated with contractor bid costs, an Independent Third Party Monitor, environmental management contractor staff, plus the cost for retrofitting the off-road construction vehicles with diesel emission control systems, is approximately 0.3% of the overall construction costs on one of their \$150 million projects. In LAWA staff's opinion, the costs to do the same level of effort would conservatively be around 0.5% on a typical construction project.

The Contractor or equipment owner (in cases where construction equipment is leased) is responsible for all costs of purchase, installation, and maintenance of retrofit device or any new construction equipment required by the policy. The Contractor shall also be responsible for any compliance costs to be incurred by any of their subcontractors. Finally, no Contractor shall be given a competitive advantage or disadvantage as a result of the policy. Costs for complying with the policy shall not be considered by LACMTA in evaluating bids.

As indicated in the policy, the LACMTA will provide information to the Contractor and their subcontractors in identifying and applying for grants and loans that are available for the greening of existing construction equipment or purchase of new green construction equipment.

**ALTERNATIVES CONSIDERED**

Rejection of the recommended Board action is inconsistent with the intent of the Board approved motion to develop this policy. Rejection of the staff recommendation is also inconsistent with the provisions of our Board adopted Environmental Policy that specifically commits to specific actions in mitigating environmental and human health impacts, while maintaining sustainable operations.

**NEXT STEPS**

After the proposed Green Construction Policy is adopted by the LACMTA Board, staff will incorporate the requirements of this policy in all future procurement contracts. It is not retroactive. Staff will encourage Contractors that work on existing construction projects in LACMTA properties or rights-of-way to implement the provisions of this policy to the greatest extent feasible. Staff will develop a collaborative process to phase the implementation of this policy in other jurisdictions that receive/program LACMTA funding (in whole or in part) for construction projects.

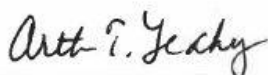
**ATTACHMENT****A. LACMTA Green Construction Policy**

Prepared by: Cris B. Liban, Environmental Compliance and Services Department  
Manager



---

Krishniah N. Murthy  
Executive Director, Project Transit Delivery



---

Arthur T. Leahy  
Chief Executive Officer

**ATTACHMENT A****LACMTA GREEN CONSTRUCTION POLICY****POLICY STATEMENT**

The Los Angeles County Metropolitan Transportation Authority (LACMTA) will only use greener, less polluting construction equipment and vehicles; and implement best practices to meet or exceed air quality emission standards in all construction projects performed on LACMTA properties and rights-of-way. Phase the implementation of this policy, through a collaborative process, for implementation by other jurisdictions that receive/program LACMTA funding (in whole or in part) for construction projects.

**PURPOSE**

This policy provides requirements for 1) identifying and mitigating air emission impacts on human health, environment, and climate of on-road and off-road construction equipment and generators used in our construction and development activities; 2) implementing appropriate Best Management Practices (BMP) to complement equipment mitigations; and 3) implementing strategies to ensure compliance with this policy.

This policy is effective and enforceable immediately upon adoption for all new construction projects. This policy is not retroactive. However, for all existing construction projects [i.e., where contracts have already been awarded], LACMTA will encourage all Contractors to implement the provisions of this policy to the greatest extent feasible. The intent of this policy is to reduce harmful air emissions (particularly particulate matter and nitrogen oxides) while minimizing any significant impact to cost and schedule in any existing construction project. Nothing in this policy shall require a retrofit that does not meet California OSHA standards.

**COMMITMENTS**

The LACMTA is an international leader in implementing environmental and sustainability principles in all of its planning, construction, operations, and procurement activities. The LACMTA commits to the following construction equipment requirements, construction BMPs, and implementation strategies for all of its construction projects performed on LACMTA properties or rights-of-way. The implementation of this policy will be phased, through a collaborative process, for implementation in other jurisdictions that receive/program LACMTA funding (in whole or in part) for construction projects.

**CONSTRUCTION EQUIPMENT**

Through this Green Construction Policy, the LACMTA commits to ensuring that all of the on-road and off-road equipment used in its construction activities are green and less-polluting as follows:

**Construction Equipment (excluding On-Road Equipment)**

- 1) Construction equipment shall incorporate, where feasible, emissions-reducing technology such as hybrid drives and specific fuel economy standards.
- 2) Idling shall be restricted to a maximum of 5 minutes, except as provided in the exceptions to the applicable CARB regulations regarding idling.
- 3) Equipment Engine Specifications:
  - a. **Prior to December 31, 2011:** All off-road diesel-powered construction equipment greater than 50 horsepower (hp) shall meet Tier-2 off-road emission standards at a minimum. In addition, all construction equipment greater than 50 hp shall be retrofitted with a CARB-verified Level 3 Diesel Emissions Control Device system (DECS).
  - b. **From January 1, 2012, to December 31, 2014:** All off-road diesel-powered construction equipment greater than 50 hp shall meet Tier-3 off-road emission standards at a minimum. In addition, all construction equipment greater than 50 hp shall be retrofitted with a CARB-verified Level 3 DECS. Any emissions control device used by the Contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.
  - c. **From January 1, 2015 and onwards:** All off-road diesel-powered construction equipment greater than 50 hp shall meet Tier-4 off-road emission standards at a minimum. In addition, if not already supplied with a factory-equipped diesel particulate filter, all construction equipment shall be outfitted with Best Available Control Technology (BACT) devices certified by CARB. Any emissions control device used by the Contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.

**On-Road Equipment**

- 1) Trucks or equipment hauling material such as debris or any fill material shall be fully covered while operating at, to and from the LACMTA construction project.



- 2) Idling shall be restricted to a maximum of 5 minutes, except as provided in the exceptions to the applicable CARB regulations regarding idling.
- 3) EPA Standards:
  - a) **Prior to December 31, 2013:** All on-road heavy-duty diesel trucks or equipment with a gross vehicle weight rating (GVWR) of 19,500 pounds or greater shall meet or exceed the EPA 2007 on-road emission standards for PM (0.01 g/bhp-hr); or shall be equipped with a CARB verified Level 3 diesel particulate filter.
  - b) **From January 1, 2014 and onwards:** All on-road heavy-duty diesel trucks or equipment with a GVWR of 19,500 pounds or greater shall comply with EPA 2007 on-road emission standards for PM and NO<sub>x</sub> (0.01 g/bhp-hr and at least 1.2 g/bhp-hr, respectively).

#### Generators

Every effort shall be made to utilize grid-based electric power at any construction site, where feasible. Where access to the power grid is not available, on-site generators must:

- 1) Meet a 0.01 gram per brake-horsepower-hour standard for PM, or
- 2) Be equipped with BACT for PM emissions reductions.

#### Exceptions

These on-road and off-road construction equipment and generator requirements shall apply unless any of the following circumstances exist and the Contractor provides a written finding consistent with project contract requirements that:

- 1) The Contractor intends to meet the requirements of this policy as to a particular vehicle or piece of equipment by leasing or short-term rental, and the Contractor has attempted in good faith and due diligence to lease the vehicle or equipment that would comply with this policy, but that vehicle or equipment is not available for lease or short-term rental within 200 miles of the project site, and the Contractor has submitted documentation to LACMTA showing that the requirements of this Exception provision apply.
- 2) The Contractor has been awarded funding by SCAQMD or another agency that would provide some or all of the cost to retrofit, repower, or purchase a piece of equipment or vehicle, but the funding has not yet been provided due to circumstances beyond the Contractor's control, and the Contractor has attempted in good faith and due diligence to lease or short-term rent the

equipment or vehicle that would comply with this policy, but that equipment or vehicle is not available for lease or short-term rental within 200 miles of the project site, and the Contractor has submitted documentation to LACMTA showing that the requirements of this Exception provision apply.

- 3) Contractor has ordered a piece of equipment or vehicle to be used on the construction project in compliance with this policy at least 60 days before that equipment or vehicle is needed at the project site, but that equipment or vehicle has not yet arrived due to circumstances beyond the Contractor's control, and the Contractor has attempted in good faith and due diligence to lease or short-term rent a piece of equipment or vehicle to meet the requirements of this policy, but that equipment or vehicle is not available for lease or short-term rental within 200 miles of the project, and the Contractor has submitted documentation to LACMTA showing that the requirements of this Exception provision apply.
- 4) Construction-related diesel equipment or vehicle will be used on an LACMTA construction project site for fewer than 10 calendar days per calendar year. The Contractor shall not consecutively use different equipment or vehicles that perform the same or a substantially similar function in an attempt to use this Exception to circumvent the intent of this policy.

In any of the situations described above, the Contractor shall provide the next cleanest piece of equipment or vehicle as provided by the step down schedules in Table A for Off-Road Equipment and Table B for On-Road Equipment.

**Table A. Off-Road Compliance Step Down Schedule\***

<b>Compliance Alternative</b>	<b>Engine Standard</b>	<b>CARB-verified DECS (VDECS)</b>
1	Tier 4	N/A**
2	Tier 3	Level 3
3	Tier 2	Level 3
4	Tier 1	Level 3
5	Tier 2	Level 2
6	Tier 2	Level 1
7	Tier 2	Uncontrolled
8	Tier 1	Level 2
Equipment less than Tier 1, Level 2 shall not be permitted.		

**Table B. On-Road Compliance Step Down Schedule\***

<b>Compliance Alternative</b>	<b>Engine Model Year</b>	<b>CARB-Verified DECS (VDECS)</b>
1	2010	N/A
2	2007	N/A**
3	2004	Level 3
4	1998	Level 3
5	2004	Uncontrolled
6	1998	Uncontrolled

*Equipment with a model year earlier than Model Year 1998 shall not be permitted.*

**\*How to use Table A and Table B:** For example, if Compliance Alternative #3 is required by this policy but a Contractor cannot obtain an off-road vehicle that meets the Tier 2 engine standard that is equipped with a Level 3 DECS (Compliance Alternative #3 in Table A) and meets one of the above exceptions, then the Contractor shall use a vehicle that meets the next compliance alternative (Compliance Alternative #4) which is a Tier 1 engine standard equipped with a Level 3 DECS. Should the Contractor not be able to supply a vehicle with a Tier 1 engine equipped with a Level 3 DECS in accordance with Compliance Alternative #4 and has satisfied the requirements of one of the above exceptions as to the Contractor's ability to obtain a vehicle meeting Compliance Alternative #4, the Contractor shall then supply a vehicle meeting the next compliance alternative (Compliance Alternative #5), and so on. If the Contractor is proposing an exemption for on-road equipment, the step down schedule in Table B should be used. A Contractor must demonstrate that it has satisfied one of the exceptions listed in the selected Compliance Alternative # before it can use a subsequent Compliance Alternative. The goal is to ensure that the Contractor has exercised due diligence in supplying the cleanest fleet available.

**\*\*Tier 4 or 2007 Model Year equipment not already supplied with a factory-equipped diesel particulate filter shall be outfitted with Level 3 VDECS.**

### **BEST MANAGEMENT PRACTICES**

In addition to equipment requirements, the Best Management Practices (BMPs) listed below are imposed on all construction projects that performed on LACMTA properties and rights-of-way.

BMPs shall include, at a minimum:

- 1) Use of diesel particulate traps or best available control technology, as feasible;
- 2) Maintain equipment according to manufacturers' specifications;
- 3) Restrict idling of construction equipment and on-road heavy-duty trucks to a maximum of 5 minutes when not in use, except as provided in the exceptions to the applicable CARB regulations regarding idling for off-road and on-road equipment;

- 4) Maintain a buffer zone that is a minimum of 1,000 feet between truck traffic and sensitive receptors, where feasible;
- 5) Where applicable and feasible, work with local jurisdictions to improve traffic flow by signal synchronization;
- 6) If feasible and as allowed by local jurisdictions, configure construction parking to minimize traffic interference;
- 7) Enforce truck parking restrictions, where applicable;
- 8) Prepare haul routes that conform to local requirements to minimize traversing through congested streets or near sensitive receptor areas;
- 9) Provide dedicated turn lanes for movement of construction trucks and equipment on- and off-site, as feasible;
- 10) Schedule construction activities that affect traffic flow on the arterial system to off-peak hours to the extent practicable;
- 11) Use electric power in lieu of diesel power where available; and
- 12) Traffic speeds on all unpaved roads to be 15 mph or less.

### **IMPLEMENTATION**

The following shall be incorporated to ensure proper compliance with this policy.

#### **Notification**

Contractors of construction activities that are located within 1,000 feet of sensitive receptors shall notify each of these sites in writing at least 30 days before construction activities begin. Notification shall include the name of the project, a description of the location, the acreage of the construction site, the type and quantity of equipment and vehicles that will be operating at or near the site, the start date and reasonably anticipated duration of the construction, and contact information for a LACMTA community liaison who can answer any questions.

#### **Enforcement**

Each solicitation by LACMTA for a construction project contract and each contract entered into as a result of such solicitation shall include provisions authorizing enforcement of the requirements of this policy.

Violations of any of the requirements of this policy shall be deemed to be a material breach of the Contractor agreement, and LACMTA shall have available

all remedies including warnings, fines, requirement to remove equipment, institution of special assessments, and termination of contract.

LACMTA shall conduct inspection of construction sites and affected off-road and on-road equipment and generator as well as compliance with air quality rules. These inspections will be conducted as part of existing LACMTA staff functions and without advance notice to the Contractor.

### Records

Prior to Notice to Proceed (NTP) to commence construction project and to be verified afterwards consistent with project contract requirements and through enforcement provisions above, the Contractor shall submit to LACMTA the following information for all construction equipment to be used in all construction projects on LACMTA properties or rights-of-way:

- 1) A certified statement that all construction equipment used conform to the requirements specified above;
- 2) A list of all the equipment and vehicles [i.e., for off-road equipment, include the CARB-issued Equipment Identification Number (EIN)] to be used;
- 3) A copy of each Contractor's certified EPA rating and applicable paperwork issued either by CARB, SCAQMD and any other jurisdiction that has oversight over the equipment; and
- 4) The name, business address, e-mail address, and phone number for the individual person responsible for each of the pieces of equipment and vehicles subject to this policy.

If an unanticipated need for the use of equipment or a vehicle arises after construction has commenced or after the Contractor has submitted the information required by the above subsections (1)–(4), the Contractor shall provide such information for the unanticipated equipment or vehicle within 14 days after an identified emergency or when the need arises and prior to the use of the equipment or vehicle.

### Quantification and Reporting of Emission Reductions

No later than 18 months after the date the LACMTA Board of Directors adopts this policy, and annually thereafter, LACMTA shall develop a summary report presented to the Board and available on the LACMTA website which shall include:

- 1) A description of the implementation of this policy;
- 2) Quantification of the resulting PM and NO<sub>x</sub> emission reductions;
- 3) A list and description of monitoring and enforcement actions;
- 4) A description of other appropriate measures of progress;
- 5) A description of the outreach of this policy in other jurisdictions that receive/program LACMTA funding (in whole or in part) for construction projects;
- 6) A description of implementation problems encountered and opportunities for additional reductions in emissions; and
- 7) Recommendations for any statutory or policy changes.

#### Implementation and Compliance Costs

The Contractor or equipment or vehicle owner (in cases where the equipment or vehicle is leased) is responsible for all costs of purchase, installation, and maintenance of retrofit devices or any new construction equipment required by this policy. The Contractor shall also be responsible for any compliance costs to be incurred by any of their subcontractors.

The LACMTA will provide information to the Contractor and their subcontractors to aid in the identification of and application for grants and loans that are available for the retrofit or repower of existing construction equipment or purchase of new green construction equipment.

No Contractor shall be given a competitive advantage or disadvantage as a result of this policy. Costs for complying with this policy is a part of the Contractor's bid and will not have any consideration in evaluating bids.

#### DEFINITIONS

*Best Available Control Technology (BACT)* is defined as technology, verified by CARB, for an off-road vehicle that achieves reductions in PM emissions at the highest applicable classification level for diesel emission control strategies. A summary of CARB-verified diesel emission control strategies may be found at <http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm>. Where this policy requires BACT, this requirement can be satisfied by a factory installed equivalent device, such as a diesel particulate filter.



*Classification Levels* are defined as levels of diesel emission control retrofit technologies, with Level 3 being the highest classification level, and the only level acceptable for a retrofit under this policy, except as provided for in this policy:

- Level 3 is defined as retrofit technology that reduces diesel PM emissions by 85 percent or greater or reduces engine emissions to less than or equal to 0.01 grams diesel PM per brake horsepower-hour;
- Level 2 is defined as retrofit technology that reduces diesel PM emissions by between 50 and 84 percent;
- Level 1 is defined as retrofit technology that reduces diesel PM emissions by between 25 and 49 percent.

*Construction Project* is defined as a project that is performed on LACMTA properties or rights-of-way. If the project is performed in collaboration with another agency or agencies or parties, including where the other agency or agencies or parties have the lead responsibility for construction, LACMTA shall discuss with those agencies or parties the incorporation of the provisions of this Green Construction policy into all agreements, including Memoranda of Understanding, between LACMTA and the other agency or agencies or parties. Until such time, provisions of this policy shall only be used as a guideline in performing construction projects that receive/program LACMTA funds in whole or in part.

*Sensitive Receptor Site* is defined as a site that is within the definition provided in the CARB Air Quality and Land Use Planning Guidelines (2005) ([www.arb.ca.gov/ch/landuse.htm](http://www.arb.ca.gov/ch/landuse.htm)) such as schools, daycares, playgrounds, and hospitals.



## **APPENDIX VI – SAMPLE NOTIFICATION LETTER**

Other format may be used if all information required in subdivision (f) Notification is included.

### **PUBLIC NOTIFICATION**

#### **SOUTH COAST AQMD RULE 403.2 – FUGITIVE DUST FROM LARGE ROADWAY PROJECTS**

Please be advised that **[contractor]** will be performing roadway project activities at **[address]** shown by the **[symbol]** in the map below.

**[MAP]**  
**[With a symbol marking the LRP activity area(s)]**

This project is scheduled to begin on **[begin date]** and end on **[end date]**.

Roadway construction activities are anticipated to begin at **[start time]** and end at **[end time]** **[each day, except for, or other alternative schedule]**.

The total duration of the project is anticipated to be **[number of days/weeks/months/years]**.

You are receiving this notification since you are within a distance of roadway construction activity that requires notification under South Coast AQMD Rule 403.2.

If you are affected by dust from this project or have questions, please contact the Dust Control Supervisor, **[Name]**, at **[Contact Info (phone number and email)]**.

If you are unable to resolve your air quality concern with the Dust Control Supervisor or have other air quality concerns, you can call the South Coast AQMD at 1-800-CUT-SMOG, or file a complaint online at <http://www.aqmd.gov/home/air-quality/complaints>.

**APPENDIX VII**  
**SAMPLE RULE 403.2 - LARGE ROADWAY PROJECT NOTIFICATION**  
**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
 21865 Copley Drive, Diamond Bar, CA 91765

**Please Print or Type**

Company or Agency Name:		Phone Number:	
Address:			
City:		State:	Zip:
List All Responsible Persons of Organization (including Dust Control Supervisor):			
Name:	Title:	Phone Number	Email Address
Project Address			
City:		State:	Zip:
Estimated Duration of the project:			
Anticipated Start Date:			
Anticipated Completion Date:			
Please add project coordinates and map depicting the location of the site:			
<b>In accordance with paragraph (e)(2) of Rule 403.2, I will ensure that the actions specified in Table 1 will be implemented on-site for each applicable fugitive dust source type and that records are maintained in accordance with Rule 403.2, subparagraph (eg). Further, I hereby certify that all information contained herein is true and correct.</b>			
SIGNATURE OF RESPONSIBLE PERSON OF ORGANIZATION		TITLE	DATE

## **APPENDIX VIII – SAMPLE RECORDKEEPING FORM**

Other format may be used if at a minimum all the information required in subdivision (g) Recordkeeping is included.

FUGITIVE DUST CONTROL DAILY RECORDS (South Coast AQMD Rule 403.2 Control Measures)		Instructions: 1. Place a check in the box for control measures used. 2. Place a number for time, frequency or duration. 3. Place a letter for the corresponding dust suppressant. 4. On a map, provide the location of the material pile(s) where a dust suppressant was applied. 5. Operator should initial daily. 6. Maintain purchase records or invoices for dust suppressants used.																														
Month: _____ Year: _____																																
Project Address/Location: _____																																
Fugitive Dust Source Category	Control Measures	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Dust from Construction Roads	Restrict vehicle speed to 15 miles per hour for all unpaved roads used for any construction vehicular traffic																															
	Water all unpaved roads within the project perimeter used for construction vehicular traffic at least once per every two hours of active operation [3 times per normal 8-hour workday]																															
	Apply chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface																															
Material Piles	Maintain below a height of 30 feet																															
	Apply dust suppressant as necessary to maintain a stabilized surface and prevent visible emissions																															
	Dust suppressant type: W = water H = hygroscopic material C = non-toxic chemical stabilizer																															
	Time, and duration in minutes, dust suppressant was applied																															
	Frequency dust suppressant is applied. Total gallons of water used per day																															
	Install temporary coverings																															
	Material pile cover																															
	Install an enclosure with a minimum of three sides (the open side of which will face farthest from potentially impacted areas) and walls with a maximum porosity of 50 percent and a minimum height equal to the highest point of the material pile																															
OPERATOR'S INITIALS:																																
List of associated permitted and unpermitted powered equipment with potential to generate dust:																																

## APPENDIX IX – EMISSIONS ANALYSIS OF RELOCATING MATERIAL PILES

EMFAC 2017 – Aggregated Emission Factors for  
Heavy-Heavy Duty Trucks in South Coast AQMD for  
Scenario Year: 2023

All model years in the range 1979 to 2024

HHDT-DSL  (pounds/mile)		1 mile per truck	Emissions in pounds/day						South Coast AQMD Air Quality Significance Thresholds for Criteria pollutants for Construction (lb/day)	Threshold Exceeded?
			100 trucks per day	200 trucks per day	300 trucks per day	400 trucks per day	500 trucks per day	1,000 trucks per day		
CO	0.001751	0.00175	0.175064	0.350128	0.525192	0.700256	0.87532	1.75064	550	NO
NOx	0.006889	0.00689	0.688914	1.377828	2.066742	2.755656	3.44457	6.88914	100	NO
ROG	0.000136	0.00014	0.013613	0.027226	0.040839	0.054452	0.068065	0.13613	75	NO
SOx	2.96E-05	3E-05	0.002957	0.005914	0.008871	0.011828	0.014785	0.02957	150	NO
PM10	0.000262	0.00026	0.026229	0.052458	0.078687	0.104916	0.131145	0.26229	150	NO
PM2.5	0.000123	0.00012	0.012296	0.024592	0.036888	0.049184	0.06148	0.12296	55	NO

HHDT-DSL  (pounds/mile)		1 mile per truck	Emissions in pounds/day						South Coast AQMD Air Quality Significance Thresholds for GHGs (Metric tons/year)	Threshold Exceeded?
			100 trucks per day	200 trucks per day	300 trucks per day	400 trucks per day	500 trucks per day	1,000 trucks per day		
CO2	3.130339	3.13034	313.0339	626.0678	939.1016	1252.136	1565.169	32868.56	1095.847	
CH4	2.61E-05	2.6E-05	0.002608	0.005216	0.007824	0.010432	0.01304	0.27384		
CO <sub>2</sub> e MT/yr = [ lb/yr CO <sub>2</sub> + (25* lb/yr CH <sub>4</sub> ) ] * [1 MT/2,205 lb] 1 metric ton (MT) = 2,205 pounds  *Note: GHGs from short-term construction activities are amortized over 30 years. To amortize GHGs from activities over a 30-year period (estimated life of the project/equipment), the amount of CO <sub>2</sub> e emissions during construction are calculated and then divided by 30. In addition, the GHGs are calculated based on 1 mile per truck per day multiplied times Z number of truck If the project lasts more than one day, then the GHG value in column I21 needs to be multiplied by the n in a year (e.g., 5 days/year, 20 days/year, etc).						Total GHGs as CO2e	in lbs/day	1095.847	10,000	NO
						Total GHGs as CO <sub>2</sub> e*	in MT/yr	0.496983		

## **APPENDIX X – COMMENTS AND RESPONSES**

### *Abbreviations Used in This Appendix*

Areas of Public Exposure (APEX)  
California Department of Transportation (Caltrans)  
California Air Resources Board (CARB)  
Dust Control Supervisor (DCS)  
Federal Highway Administration (FHWA)  
Proposed Rule 403.2 (PR 403.2)  
Large Roadway (LR)  
Large Roadway Project (LRP)  
Sensitive Receptor (SR)

## **Section 1**

### **Response to Comments**

#### **Comments Submitted Prior to the 3/2/22 Public Workshop**

**Comment Letter 1**

California Asphalt Pavement Association (CalAPA)- January 28, 2022

The California Asphalt Pavement Association (CalAPA) would like to take this opportunity to memorialize our comments and provide data to the South Coast Air Quality Management District (SCAQMD) regarding proposed Rule 403.2 on Fugitive Dust. Our industry has a long and proud history of implementing various technologies and best practices to dramatically reduce emissions and other impacts from our facilities in Southern California, and we appreciate the opportunity to once again engage with the Air District in a productive dialogue about furthering Air District goals with regards to highway construction projects in a manner that is both reasonable, achievable and quantifiable. It should also be noted that voters and taxpayers in Southern California and around the state have spoken loudly on this issue – demanding that our vital transportation infrastructure be repaired. This is a safety and quality-of-life issue that impacts all residents of California.

**1-1**

At the outset, we should note that we do not understand why the air district is proposing a separate rule related to road construction when the air district already has robust rules in place to deal with visible emissions (Rule 401) and public nuisances (Rule 402), as well as the existing fugitive dust regulations (Rule 403). This proposed rule is, therefore, redundant and adds additional complexity with no discernable way to determine if it will be enforceable or meet overall air district goals. We also believe this current rule-making process has been rushed and has not provided adequate time for organizations like ours to solicit input from our membership.

**1-2**

Specifically, as currently drafted, much of Proposed Rule 403.2 is far too vague for our industry to comply with. After three Working Group Meetings there remains significant ambiguity to the applicability of the rule. For example, there are few details on milling and grinding of pavement surfaces and the concern about dust from these activities prior to repaving. Many of our members have been milling miles of roads without an issue with air quality and there is no known technology that can be utilized in lieu of milling a surface course before laying an asphalt overlay. The current pile height threshold of 3' on a large linear roadway project is essentially unworkable. There are a number of activities on these projects that create material that would be over 3' but would not be considered a storage pile, but it is unclear at this time if this might be subject to additional control based on the information provided in the working group meetings.

**1-3**

The definitions of large roadways currently is dependent on average daily traffic counts, but in very few instances is that data ever captured and cataloged by Caltrans

**1-4**



or local public agencies in a centralized database. At this point it is unclear how this data would be obtained and verified. Also, there has been discussion of determination of sensitive receptors and impacts. More work on the potential impact of the rule is needed with regards to proximity to sensitive receptors. A distance of 500 feet appears arbitrary and will include many “large roadway” projects in urban areas, strictly limiting projects.

**1-4**  
(cont.)

The draft rule language also is unclear on how the air district proposes to measure the distance of road construction activity vis-à-vis proximity to nearby residents, and how the project boundaries will be defined. And how does the unique characteristics of a moving construction zone be factored in to this equation? The size of stockpiles also appears to be arbitrary and not connected to the reality of how road construction is done. There are already robust rules in place between public agencies and the contractor with regard to notification of nearby residents and businesses, as well as mitigating adverse impacts of construction activity. For the air district to impose regulations in this manner is stepping between legally binding contractual agreements between the project owner and the contractor.

**1-5**

Finally, we have recently been made aware of some innovative pilot projects by Caltrans District 8 (Riverside & San Bernardino counties) that we believe would be a better approach to targeting fugitive dust from road construction activities in a more real-world setting rather than with an overly broad and vague regulation.

**1-6**

We are requesting a clearer definition of the applicability of the rule and how it will be determined, so that work can begin on determining how to address the issues raised in this letter.

**1-7**

We thank you for the opportunity to provide our comments on this important matter. The California Asphalt Pavement Association, founded in 1953, is the only trade association that exclusively represents the asphalt pavement industry in California. Please feel free to contact me at (916) 791-5044 if you have any questions.

**1-8**

Sincerely,  
RUSSELL W. SNYDER, CAE  
Executive Director

### **Response to Comment 1-1**

Thank you for taking the time to review the proposed preliminary draft materials and providing feedback. We concur on all the points raised. We have the same goals to protect and enhance the quality of life for all persons in the South Coast AQMD and especially those in Environmental Justice and disadvantaged communities many of which are located near LRs.

### **Response to Comment 1-2**

As explained in the working group meetings as well as in the staff report, existing rules do not specifically address dust control from LRPs that are conducted in close proximity to near roadway communities. Existing Rule 403 applies broadly to sources with the potential to generate fugitive dust. Rule 401 only provides requirement for the opacity of the visible emissions. Rule 402 is limited in circumstances and can be applied only after the public nuisance has occurred. Proposed Rule 403.2 will supplement the existing regulatory measures of Rule 403 for projects and provide specific preemptive measures to further mitigate near roadway communities being exposed to fugitive dust.

Staff has had three working group meetings in 2021 (July 15, October 22, and November 16), and another working group meeting on January 20, 2022, including a public workshop on March 2, 2022. In addition, staff has been consistently available to respond to questions and comments during this time and at all times up to the adoption hearing for the rule. Staff has had over 20 meetings with various stakeholder groups during this time and have also spoken numerous times with a range of stakeholders regarding PR 403.2. Even after the public workshop official close of comments, staff has continued to meet with stakeholders individually and in groups to address proposed rule issues and to solicit input from all interested parties.

### **Response to Comment 1-3**

Milling and grinding of a pavement surface is covered under the definition of construction/demolition activities. This operation is not prohibited by the proposed rule. Within 500 feet of an APEX or 1,000 feet of a SR, no additional controls beyond those stipulated in Rule 403 would be required. The material pile height was originally based on the Rule 403 definition of Open Storage Pile. Staff has re-evaluated the height for material piles for the proposed rule and after considering many factors, increased the material pile height to greater than eight feet. Note that this height limit comes from the BACM in 403 and 1157 which distinguish material piles above/below this height. Furthermore, piles established for safety purposes such as Berms and Linear Trenching are completely exempt from the proposed rule. It should also be noted that material piles are allowed in the prohibition buffer if covered by a material pile cover (as defined in the rule), or equivalent control methods to prevent fugitive dust are used as approved by the Executive Officer.

### **Response to Comment 1-4**

Staff has ~~evaluated~~ evaluated different reliable sources of traffic information including FHWA, Caltrans and various counties. To clarify the rule applicability, staff has redefined LR in the draft rule. Instead of using an annual daily average number of vehicle trips in excess of 100,000, the draft rule language specifies interstates, freeways or expressways as LRs according to the functional classifications of roads identified by the FHWA and also used by Caltrans. A map will be included in the staff report as Figure 2-3 and updated information regarding LRs can be found at <https://dot.ca.gov/programs/research-innovation-system-information/highway-performance-monitoring-system/functional-classification>.

### **Response to Comment 1-5**

PR 403.2 would measure distances, for the purposes of rule compliance, from the nearest edge or perimeter of the specified activity or material pile at a LRP to the closest location within an APEX that is designated for use by the public, or point of the property line of the nearest SR. Activities or material piles may be located well within the perimeter of a large project job site, in which case distance is measured from the perimeter of the activity/material pile and not the project site. Conversely, the lot boundary or perimeter of a SR may contain a parking lot or other amenities apart from an office or other type of building; however, distance is measured to the lot boundary/perimeter that is closest to the activity/material pile. This is slightly different for APEX where distance would be measured from the perimeter of the activity/material pile to a location on the APEX, such as a designated hiking trail, some distance inside the APEX (See Figure 2-1). See Appendix III for additional examples. Since distances are measured from the activity/material piles within a LRP to any APEX or SR, those activities/material piles within distances that would make them subject to the rule need to comply with rule requirements. If the location of these activities/material piles changes within the LRP perimeter, such that they are no longer within distances prescribed in the rule, then these activities/material piles would not be subject to the rule.

The size of stockpiles (material piles/open storage piles) was initially defined as in Rule 403(c)(22) and Rule 1157(c)(28):

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.

After extensive stakeholder input, this definition in PR 403.2 was changed to match existing requirements in Rule 1157(d)(6)(C) that allows for a maximum 8-foot pile height within 300 feet of a receptor if dust controls are applied:

“The operator of a facility/operation shall not allow any open storage piles of materials to be greater than eight feet height if such piles are located within 300 feet of off-site occupied buildings or houses. Alternatively, the operator of a facility/operation shall operate a water irrigation system to maintain in a stabilized condition the entire surface of the piles.”

PR 403.2 modifies this requirement which is generally applicable to all types of open storage material piles to the specific situation of a LRP and specifically restricts piles greater than 8 feet in height within

100 feet of an APEX or within 250 feet of a SR, unless it is covered with a material pile cover or other equivalent control method to prevent fugitive dust as approved by the Executive Officer.

PR 403.2 would only apply to new LRPs that commence six months after the date of adoption. The intent of this provision is to exclude projects that have already started and to allow sufficient time for the requirements of Rule 403.2 to be incorporated into forward contracts. Note that commencement of the LRP occurs when any phase of the LRP is started, including staging of construction materials/equipment at the LRP. This is the soonest time that the potential for fugitive dust exists.

#### **Response to Comment 1-6**

Thank you for your comment. Staff is aware of the Caltrans pilot program and has been in contact with Caltrans on their progress. As the pilot program progresses, staff continues to evaluate the effectiveness of the program.

#### **Response to Comment 1-7**

Applicability language in PR 403.2 has been modified since the beginning of rule development efforts. The intent of PR 403.2 is to supplement the requirements of Rules 403 and 403.1 and other dust rules. PR 403.2 would only apply to onsite activities (defined in the rule) that are associated with the construction/demolition of a large roadway, including any adjacent bridge, overpass, or onramp/offramp. A large roadway is defined as a roadway designated as functional classification “Interstate” (FC1) or “Other Freeway or Expressway” (FC2). Prohibitions and additional requirements only apply when large roadway project activities are conducted within rule-specified distances to an APEX or SR. Staff has had numerous stakeholder and public meetings resulting in the refinement of rule language. Draft PR 403.2 was presented to the Stationary Source Committee on 3/18/22 and 4/15/22.

#### **Response to Comment 1-8**

Thank you for being an active participant in the public process for developing PR 403.2.

**Comment Letter 2**

Southern California Alliance of POTW (SCAP)- February 7, 2022

Summary of SCAP Concerns:

- |    |  |     |
|----|--|-----|
| 1) | Large Roadway Project definition-  | 2-1 |
|    | a) Agencies need a clear reliable resource for determining whether their project meets the “Large Roadway Project” definition.<br>b) “Adjacent location” is ambiguous regarding intent. It could affect facility projects that are not part of the roadway based on current wording.                         |     |
| 2) | Crushing/Grinding Operations applicability-  | 2-2 |
|    | a) Consider either expanding this definition or adding an exemption- Need to clarify the applicability of activities common to utility projects, such as saw cutting and grinding. These activities already use wet methods and are not part of an aggregate operation- “production” of a finished material. |     |
| 3) | Material pile Prohibition/Size Restrictions  | 2-3 |
|    | a) The prohibition in (d)(1) is problematic for essential public service utility projects, especially since it will prohibit material storage from project related storage/staging areas as well.  |     |
| 4) | Signage  | 2-4 |
|    | a) The proposed signage requirements in (d)(3)(C) require a large number of signs- Suggest that signage is capped similar to the Rule 403 Large Operations guidance- No more than 4 required per project.  |     |
|    | b) Suggest removal of posting signage every 300 feet along the project boundary-   |     |
|    | i) This is challenging for a project that is moving at a 100-300 feet per day Does this apply to both sides of the roadway? This is a large number of signs.   |     |
| 5) | Public Notification  | 2-5 |
|    | a) PR 403.2 (d)(3)(D)(i) Public Notification- These notification requirements are burdensome. We propose that SCAQMD remove and explore the feasibility of hosting the project information on their website or establish a listserv like their Dust Advisories, No Burn Alerts etc.                          |     |

- b) PR 403.2 (d)(3)(D)(ii) SCAQMD Notification-
- i) Suggest that these provisions are consistent with the notification procedures for Rule 403 Large Operations for consistency amongst rules.
  - ii) Suggest revision to Notification within 7 days (like Rule 403) and remove use of hours
  - iii) Use of term “establishing” is ambiguous
  - iv) Will SCAQMD provide a form or guidance on the required notification? For example, Rule 403 large operation notifications are typically submitted via email to a specific email group at AQMD.
- 6) Suggested Exemption from Rule for Essential Public Service Linear Trenching
- a) Because linear trenching for water, sewer, and other essential public services is limited in size of disturbed area, typically less than 2 feet – 16 feet wide, therefore dust generated during these projects is minimal.
  - b) Linear trenching projects are transitory in nature, with construction activities moving along the alignment at 100-300 feet per which avoids long term dust impacts to nearby residents.
  - c) Dust controls are already required in existing project specifications.
    - i) Attached are standard specifications governing work site maintenance, air pollution control, storage of equipment and materials at work sites and in public streets, excerpts of specifications from recent projects, and best management practices used for projects that disturb greater than 1 acre (implemented as part of Stormwater Pollution Prevention Plans – required by the SWRCB’s Construction General Permit for Stormwater Discharge).

**2-5**  
(cont.)

**2-6**

### [Response to Comment 2-1](#)

Thank you for taking the time to review the proposed preliminary draft materials and for providing feedback. Staff has evaluated many different reliable sources including the FHWA, State (California Department of Transportation or Caltrans) and various counties. To clarify, staff has redefined a LR in the draft rule. Instead of using an annual daily average number of vehicle trips in excess of 100,000, as initially conceived, the draft rule language has been changed to specify interstate (FHWA functional classification 1 or FC1) and other freeway or expressway (FHWA functional classification 2 or FC2) as a LR. This same functional classification of roadways is also used by Caltrans. This approach makes it much simpler for anyone to determine if a roadway project meets the applicability of PR 403.2 for a LRP by visiting the FHWA or Caltrans websites. Web addresses and a general map current at the time of publication are provided in the staff report. Staff also clarified the LRP definition in regards to adjacent property. Adjacent property has been redefined to specifically include only adjacent bridges, overpasses or onramp/offramps.

### **Response to Comment 2-2**

The prohibition against crushing and grinding was intended for onsite aggregate production. The definition of crushing and grinding has been modified such that Aggregate Crushing and Grinding includes only activities that mechanically reduce the size of loose or stockpiled materials.

### **Response to Comment 2-3**

The exemption for essential service utilities is in paragraph (h)(2). Furthermore, for applicable projects the definition for material pile height has been increased from 3 feet to greater than 8 feet.

### **Response to Comment 2-4**

Linear trenching that is not associated specifically with a LRP (necessary for natural gas, power, sewer, and water and other utility projects) would be exempt from the requirements of PR 403.2. Furthermore, for other types of applicable projects, a minimum of 2 signs are required. To be consistent with Rule 403 Large Operation, no more than 4 signs are required and the requirement for signage posting every 300 feet has been removed.

### **Response to Comment 2-5**

- a) It is essential to have public notification included in PR403.2 because near roadway communities need to be aware of LRP activities so that for example they can make necessary adjustments to their daily activities. Also, if the near roadway communities have any concern or issue, they would be able to easily contact the responsible person for the LRP (DCS). Public notification is the responsibility of the person who conducts activities or authorizes the conducting of activities for a LRP. The South Coast AQMD website does put out advisories and issues emergency notifications regarding air quality, however PR 403.2 ensures that the responsible person for the project will notify the community potentially impacted by that project as they are best suited to convey information about their own activities.
- b) South Coast AQMD Notification
  - (i) The sample of the notification for Rule 403.2N form was included in the preliminary draft staff report released on 2/18/2022, and in this draft report; and will be included in the Final Staff Report also. The notification procedure for PR 403.2 is consistent with existing Rule 403. Notification can be sent electronically to [rule403notifications@aqmd.gov](mailto:rule403notifications@aqmd.gov).
  - (ii) The 120 hours prior to commencement of activities has been modified to 5 days and is less than the notification time required for Large Operations under Rule 403 requirements..
  - (iii) The term “establishing” is no longer used in the preliminary draft rule released on 2/18/2022.
  - (iv) Please see (i) above.

### **Response to Comment 2-6**

Linear trenching activities for natural gas, power, sewer, water, and other utility projects that are not associated with a LRP are exempted in subdivision (h).



**Comment Letter 3**

Metropolitan Water District of Southern California (MWD)- February 11, 2022

Re: MWD Response to Discussion on SCAQMD PR 403.2

Good Afternoon Eugene & Henry,

We appreciated the informative discussion on Proposed Rule (PR) 403.2—Fugitive dust from Large Roadway Projects last week. As part of our conveyance and distribution system, the Metropolitan Water District of Southern California (Metropolitan) owns and operates an extensive network of pipelines throughout South Coast AQMD’s jurisdiction. As we explained, Metropolitan does not perform large public roadway infrastructure construction projects, however, some of our projects may be associated with large public roadways. Projects may involve wet saw-cutting of the roadway surface, excavation to the depth of the pipeline/vault, installation/maintenance/repair to the pipeline, backfilling and restoration of the roadway. Associated roadway projects predominantly do not entail daily active operations on the roadway, such as crushing, screening, grinding or grading that are common in roadway infrastructure projects. Additionally, Metropolitan’s maintenance & repair projects are often completed within a very short duration to minimize impacts to water deliveries. Photos of associated roadway projects for maintenance and repair activities to Metropolitan’s pipelines have been included in Attachment 1.

Our projects go through a rigorous California Environmental Quality Act (CEQA) review process by our Environmental Planning section to determine if mitigation measures are required for emissions including dust and particulate matter, in addition to permitting with the local agency that has oversight of the roadway. As South Coast AQMD identified in the October 22, 2021 Working Group Meeting presentation, local agencies oftentimes already require notice to sensitive receptors and prohibition of certain activities depending on distance to residential receptors. Providers of essential public services strive to maintain excellent relationships with the communities within which we are operating to ensure impacts are minimized to the greatest extent feasible. Maintaining compliance with the combined local agency/city requirements and existing SCAQMD Rule 403 fugitive dust requirements should largely address fugitive dust control from these types of

3-1

water conveyance projects that may occur on or adjacent to a large roadway.

However, for such projects located near receptors, it may be beneficial to build upon the Rule 403 language for Large Operations to further minimize fugitive dust the suggested control measures in PR403.2

As such, we would like to offer the following suggestions:

**Applicability:**

- (b) The provisions of this Rule shall apply to large roadway projects and associated large roadway projects with the potential of generating fugitive dust impact, located within 500 feet of areas of public exposure or 1,000 feet of sensitive receptors on near road communities, as defined in this Rule. The requirements of this Rule do not replace or supersede the requirements of any other applicable Rule.

**Definitions:**

- (3) ASSOCIATED LARGE ROADWAY PROJECT means a project located on or adjacent to a large roadway conducted by a provider of an essential public service related to the installation, maintenance and/or repair of infrastructure not directly associated with the roadway.
- (13) LARGE ROADWAY means any roadway, with an annual daily average number of vehicle trips in excess of 100,000, as listed in [insert reference].

**Control Measures:**

Material Piles—Apply dust suppressant as necessary, ~~but no less than twice per hour~~ to maintain a stabilized surface and prevent visible emissions; Install coverings; and Install an enclosure with a minimum of three sides (the open side of which will face farthest from potentially impacted areas) and walls with a maximum porosity of 50 percent and a minimum height equal to the ~~each other as measured from the closest edge of each pile shall be considered~~

**3-1**  
(cont.)

~~to be a single pile.~~

**Exemptions:**

(f)(2) The provisions of sections (d)(1), (d)(2), (d)(3)(A), (d)(3)(C), and (d)(3)(D) shall not apply to any associated large roadway projects.

highest point of the material pile. ~~Adjacent material piles within 25 feet of~~

While we do not anticipate that many of our projects will occur on large public roadways, we felt it was important to convey the very different type of work that is performed for installation, maintenance and repair activities conducted by essential public services compared to roadway infrastructure projects.

We appreciate the ongoing dialogue and SCAQMD's willingness to consider the practical implications for associated roadway construction projects. Please let us know if you have any follow-up questions.

Thank you,

Kiersten Melville  
Senior Environmental Specialist  
The Metropolitan Water District of Southern California  
700 N. Alameda Street  
Los Angeles, CA 90012  
[Kmelville@mwdh2o.com](mailto:Kmelville@mwdh2o.com)  
Office: (213) 217-7187



THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA

**3-1**  
(cont.)

**Response to Comment 3-1**

Thank you for taking the time to review the proposed preliminary materials and providing feedback. Essential utility services such as electricity, natural gas, telephone, water, or sewer during a period of service outage and/or emergency disruptions are exempt from the provisions of PR 403.2. Likewise, linear trenching activity for utility projects that does not include any portion of a LR is exempt. Furthermore, a list of minor roadway maintenance activities listed in the latest draft PR 403.2 subdivision (h) are also exempted.

**Comment Letter 4**

California Construction and Industrial Materials Association (CalCIMA)

February 18, 2022

Re: Feedback pursuant to ‘For Discussion Purposes Only - Proposed Rule 403.2 - Fugitive Dust from Large Roadway Projects’ draft rule language

Dear Mr. Wu / Mr. Pourzand,

California Construction and Industrial Materials Association (CalCIMA) appreciates the opportunity to provide feedback regarding the South Coast Air Quality Management District (South Coast AQMD) ‘For Discussion Purposes Only - Proposed Rule 403.2 – Fugitive Dust from Large Roadway Projects (PR 403.2)’ draft rule language.

CalCIMA is the statewide voice of the construction and industrial materials industry. With over 500 local plants and facilities throughout the state, producing aggregate, concrete, cement, asphalt, industrial minerals, and precast construction products, our members produce the materials that build our state’s infrastructure, including public roads, rail, and water projects; homes, schools and hospitals; assist in growing crops and feeding livestock; and play a key role in manufacturing consumer products as well, including roofing, paint, low-energy light bulbs, and battery technology for electric cars and windmills. The continued availability of our members' materials is vital to California’s economy, as well as ensuring California meets its renewable energy, affordable housing, and infrastructure goals.

CalCIMA writes to express concerns, provide feedback, and submit queries for South Coast AQMD staff response to better understand PR 403.2. Accordingly, we welcome the soonest opportunity to continue discussion with South Coast AQMD’s rulemaking team since South Coast AQMD’s current stride in moving quickly through the rulemaking process so far has lacked provision of rulemaking information requested by stakeholders leading up to the first public workshop. Please know that CalCIMA appreciated the opportunities to participate in the South Coast AQMD public workgroup meetings in addition to the South Coast AQMD / CalCIMA meetings regarding PR 403.2, however there continues to be several unresolved questions and concerns, many of which are detailed within this letter. This is to say that although some of the questions within this letter have been responded to, responses have lacked specificity or were not conclusive responses to the questions asked.

4-1

**A) Inconclusive data provided to justify need for development of PR 403.2**

The construction materials industry supports environmental rules that protect air making California a healthy and beautiful place to live; however, rules should ensure measurable benefits and should not exert excessive, conflicting, and overlapping requirements. As PR 403.2 is currently written and has been justified by South Coast AQMD staff, meaningful quantitative metrics have not been presented to demonstrate the proposed rule is necessary or will further reduce emissions. As it has been explained by South Coast AQMD staff, PR 403.2 aims to reduce the number of complaints received by the general public. It is the public's right to submit complaints to South Coast AQMD pursuant to any perceived rule violation. However, a rule should not be proposed to reduce the number of complaints received by the South Coast AQMD but should address a gap in existing rules related to emissions. Complaints may support South Coast AQMD to identify prospective rule gaps that can be further investigated. Thus far related to PR 403.2, South Coast AQMD staff have not demonstrated a 'gap' exists within current rules.

4-2

**a) AQMD staff assert that “dust from large roadway construction projects continues to be problematic from some projects (Workgroup #2 / Slide #3).” However, inconclusive data has been provided by AQMD staff to support this assertion during workgroup presentations via examples and discussion.**

The first example states, “over 73 roadway construction/demolition dust related complaints in the last four years (2018 thru to the present).” Although it has been requested, no information has been provided regarding how these complaints have been evaluated to validate merit, prospective emissions impacts, quantify how many projects or regions were impacted (this is to understand whether a majority of these complaints relate to a minority or majority of projects or regions), or provide clarity regarding whether any of these complaints resulted in a violation, and if a violation was issued, what existing rule(s) were violated. It has been explained by South Coast AQMD staff that provision of any further information related to the cited 73 complaints would breach legal prohibitions. However, it would be helpful to understand the specific legal prohibitions that would be breached given no personal or business specific information such as names regarding the complainers or possible violators has been requested or is required to relay this information.

4-3

- 1) Can information be provided regarding how the 73 roadway construction/demolition dust related complaints have been evaluated to validate merit, prospective emissions impacts, quantify how many projects or regions were impacted, and provide clarity regarding whether any of these complaints resulted in a violation? 1b) During the timeframe the 73 complaints were received, how many other unrelated complaints were also received? 1c) What large roadway projects and regions do these 73 complaints encompass? 1d) How many of the 73 complaints were repeat complaints?

4-4

2) a) If violations were issued, what existing rule(s) were violated?	4-5
b) Has South Coast AQMD staff evaluated the effectiveness and shortfalls of existing rules based on these violations?	
c) If yes, what was the outcome?	
d) Do the violators meet the definition of a ‘large operation’ from Rule 403 ‘Fugitive Dust’?	
e) How many of the 73 complaints would PR 403.2 capture and/or circumvent?	
3) What is South Coast AQMD’s process for receiving, managing, and responding to complaints?	4-6
4) What specific legal prohibitions are breached by responding to questions #1 and #2 if no personal or business specific information such as names regarding the complainers or possible violators is disclosed?	4-7
This information will also bring clarity whether PR 403.2 aims to increase requirements for a more significant majority of ‘good actors’ who operate in compliance with South Coast AQMD rules in order to address a minority of ‘bad actors’ who may or may not reform in response to receipt of South Coast AQMD violations.	
The second example states “Many road construction projects occur at any given time. Example: There are currently about 66 active/scheduled state and county road projects.” It would be helpful to understand how many of these 66 active/scheduled state and county road projects have received complaints, the nature of the prospective complaints, and what portion of these road projects would be applicable to PR 403.2.	4-8
5) How and what resources were used to identify the 66 projects?	4-9
6) How many of the 66 active/scheduled state and county road projects have received complaints?	4-10
7) If complaints exist, what is the nature of these complaints and what portion of these road projects would be applicable to PR 403.2?	4-11
<b>b) South Coast AQMD examples of previous efforts on near-road exposures do not discuss large roadway projects and focus on mobile source tailpipe emissions from vehicles driving on roadways which is not covered in PR 403.2’s purpose or applicability.</b>	4-12

Workgroup #2 / Slide #4 discusses ‘Unique air quality considerations for large road construction projects – near road health risks’. Three examples of previous South Coast AQMD efforts on near-road exposures are provided inclusive of 1) 2012 Air Quality Management Plan (Chapter 9 – Near Roadway Exposure and Ultrafine Particles), 2) 2013 Technology Forum on Near-Road Mitigation Measures and Technologies, and 3) 2021 MATES V study continues to show that near-road environments have higher health risks than areas farther away. After review of these documents, it is unclear how they specifically support the purpose and development of PR 403.2.

4-12  
(cont.)

8) The ‘2012 Air Quality Management Plan (Chapter 9 – Near Roadway Exposure and Ultrafine Particles) addresses potential health effects as caused by exposure for people living near major roadways to criteria pollutants and air toxics emitted from both gasoline and diesel vehicles and only addresses mobile source tailpipe emissions from vehicles driving on roadways. The conferred mitigation measures and emission control technologies do not discuss large roadway projects. How does this document support the purpose and development of PR 403.2?

4-13

9) The ‘2013 Technology Forum on Near-Road Mitigation Measures and Technologies’ slide deck presentations seem to only address mobile source tailpipe emissions from vehicles driving on roadways. How does this document support the purpose and development of PR 403.2?

4-14

10) Regarding the MATES V study that continues to show that near-road environments have higher health risks than areas farther away, are mobile source tailpipe emissions from vehicles driving on roadways differentiated from emissions caused by large roadway projects?

4-15

**c) PR 403.2’s purpose/applicability/requirements are redundant and overlapping of multiple existing South Coast AQMD rules making it unclear how/why PR 403.2 is necessary if existing South Coast AQMD rules are complied with, specifically Rule 403 ‘Fugitive Dust’, Rule 1157 ‘PM10 Emission Reductions from Aggregate and Related Operations’, and Rule 1466 ‘Control of Particulate Emissions from Soils with Toxic Air Contaminants’.**

4-16

Most, if not all CalCIMA members that engage in large roadway projects are required to comply with Rules 403 (many, if not all are ‘large operations’), 1157 and 1466. Attached please find a ‘Rule language comparison – FOR DISCUSSION PURPOSES ONLY’ for these rules, and related questions posted below.



11) Regarding the purpose of Rules 403, 1157, and 1466, how do these rules not undertake PR 403.2's purpose to "mitigate impacts to near road communities from large roadway project fugitive dust operations, activities, equipment and material piles?"

**4-16**  
(cont.)

12) Although it seems that terms such as 'area of public exposure' or 'sensitive receptor' were not coined phrases used during the timeframe Rules 403, 1157, and 1466 were drafted and adopted, it seems that Rules 403, 1157, and 1466 do encompass 'areas of public exposure' and 'sensitive receptors' in their applicability and goes beyond PR 403.2's. Why is this, or isn't this the case?

**4-17**

13) Some PR 403.2 requirements regarding signage, notification, and recordkeeping go beyond Rules 403, 1157, and 1466 requirements. However, Rule 403, 1157, and 1466 requirements that include establishment of a dust control supervisor and control measures go substantially beyond the scope of PR 403.2 requirements. If large roadway projects comply with Rule 403, 1157, and 1466 requirements related to establishment of a dust control supervisor and control measures, how does this impact the quantity of complaints South Coast AQMD would receive?

**4-18**

14) If Rules 402 'Nuisance', 403, and 1157 are appropriately enforced, would PR 403.2 be redundant?

**4-19**

**B) No data provided to support PR 403.2's shift in focus pursuant to the rule's purpose**

The purpose of PR 403.2 has shifted from addressing stockpiles to include additional activities such as crushing and grinding, earth moving, construction/demolition or disturbed surface areas, dust from construction vehicles. This shift in focus creates considerably more overlap with existing rules, with no data provided by South Coast AQMD staff to support this shift in purpose. Specifically, Workgroup #3 / Slide #2 states the "proposed rule first focused on construction demolition piles as a source of air quality impacts and resulting complaints" and "rulemaking is now focusing more on limited instances of large road construction project activities near heavily travelled roadways."

**4-20**

15) Would it be possible for South Coast AQMD to provide the specific data used to determine the initial and new focus of PR 403.2?

16) Workgroup #3 / Slide #2 follows that the new focus addresses “activities with highest potential for air quality impacts, on areas already exposed to poor air quality from near roadway environment.” Is there quantitative data that supports the reason for the shift in focus?

4-21

### **C) Additional queries and requests for clarification pursuant to PR 403.2**

#### **a) Analytical or algorithmic context for proposed stockpile pile size determination**

Workgroup #3 / Slide #17 explains that PR 403.2’s pile size aims to be consistent with Rule 403 and 1157. However, Rule 1157 and Rule 1466 each address a differing variety of materials and size of materials that could make up a stockpile. It is unclear what types of stockpiles PR 403.2 is targeting, if consideration for the varying types of stockpiles was implemented in coordination with distance to sensitive receptors and overlapping existing rule requirements that currently provide sensitive receptors with fugitive dust protections.

4-22

17) What analytical or algorithmic context is used to determine PR 403.2’s “material pile establishment that exceeds a height of 3 feet and a total surface area of 150 square feet”?

18) The size classification of this debris can significantly vary. 18b) Is a finished material brought onsite such as a large amount of decorative stone, cinderblock, or woody landscaping material covered?

4-23

#### **b) Definition of ‘large roadway’**

PR 403.2 defines ‘large roadway’ as “any roadway, with an annual daily average number of vehicle trips in excess of 100,000.”

4-24

19) How and why was a quantity of 100,000 vehicle trips selected?

20) Will it be the responsibility of operators/contractors to determine if a project’s roadway experiences over 100,000 vehicle trips per day? 20b) What is the metric for this determination and what data sources are acceptable? 20c) Is this a responsibility of the project owners rather than the contractor? 20d) Are Caltrans and other transportation officials aware of this measurement?

4-25

21) How would PR 403.2 apply to a roadway that has some portions that experience an excess of 100,000 vehicle trips and other portions that experience less than 100,000 vehicle trips?

4-26

#### c) Applicability / Exemptions

PR 403.2 states “On or after six (6) months from the date of rule adoption, no person shall conduct aggregate operations, crushing and grinding operations or maintain a material pile at a large roadway project that is located within a distance of 100 feet of any property line of an area of public exposure or sensitive receptor.”

4-27

22) In addition to exempting emergency situations, can consideration for exempting large roadway projects that remain in compliance with Rules 403, 1157, and 1466, as applicable’ be accommodated?

#### d) Signage

Regarding signage, PR 403.2 states “...and at a minimum every 100 yards along the large roadway project property line/boundary”; this is approximately 18 signs per mile. Accordingly, CalCIMA members have expressed concern regarding this prescription of signage to be intrusive on work areas, and/or hazardous to the public due to their proximity to these large roadways, and overbearing/expensive for contractors since sign prices can range between \$400-800 each.

4-28

23) What possible exemptions to signage requirements have been considered? 23b) Roadway projects can have several entrances. What considerations has South Coast AQMD made regarding signage at entrances?

#### e) Notification

Regarding ‘areas of public exposure’ and ‘sensitive receptors’, PR 403.2 states “...the dust control supervisor or other responsible person shall notify the owner(s)/occupant(s) of occupied buildings or open/space recreational facilities management as applicable, in writing...”

4-29

24) Pursuant to determining “owner(s)/occupant(s),” If near a residential apartment complex, for example, would the responsible party be required to notify each individual tenant of that complex, or would contractors have to double check to ensure the management has notified each individual residential tenant?

#### f) State stormwater programs

25) State stormwater program best management practices can conflict with PR 403.2 requirements. What considerations have been made regarding how PR 403.2 may impact operator compliance with the State’s stormwater programs?

4-30

CalCIMA and its members believe rule makers should strive not to create duplicate rules on stakeholders, and review proposed rules to ensure that accountably, they do not create punitive circumstances for a majority of ‘good acting’ operations as a result rule of limited enforcement challenges on a minority of ‘bad acting’ operations. Please contact me with any questions, concerns, or to further discuss PR 403.2 at (951) 941-7981 or at sseivright@calcima.org.

4-31

Sincerely,



Suzanne Seivright-Sutherland

Director of Regional Governmental Affairs and Grassroots Operations

#### [Response to Comment 4-1](#)

Thank you for taking the time to review the proposed preliminary draft materials and for providing feedback. Thank you also for providing background regarding CalCIMA and its members. South Coast AQMD appreciates the active involvement of CalCIMA in the rule development process for PR 403.2 and the numerous meetings with association members and yourself as we have worked to make the proposed rule relevant and specific to the intent of reducing and preventing potential fugitive dust issues at LRPs.

#### [Response to Comment 4-2](#)

PR 403.2 has been refined with extensive stakeholder input to ensure that the proposed rule does not contain, excessive, conflicting and/or overlapping requirements. For example, the control categories for Crushing and Grinding Operations, and for Demolition/Construction activities have been removed from the latest draft of the proposed rule. Staff agrees after analysis of comments received that sufficient controls already exist in Rule 403 for these activities. PR 403.2 has been refined such that requirements are now focused on specific activities at LRPs for which Rule 403 Large Operations has better management practices. These include material pile handling and construction vehicle traffic. Specifically, the proposed rule would require the same provisions as those reserved only for Large Operations pursuant to Rule 403 for all LRPs. The majority of the requirements for Large Operations are identical to those for non-Large Operation projects. As such, PR 403.2 fills the regulatory requirement gap for those categories (material piles and road construction vehicles) for LRPs, by requiring the additional controls and other provisions only applicable to Large Operations in Rule 403 to all LRP activities. As such PR 403.2 does not have provisions that are excessive, in conflict with or overlap provisions in other existing rules. The need for PR 403.2 is described in the staff report.

PR 403.2 is not intended to inhibit persons from filing a complaint, rather the proactive, preemptive requirements of the rule are aimed to decrease the need to do so. South Coast AQMD supports and encourages the rights of citizens to make air quality related complaints to the agency to report air quality issues. As such there is a robust response from compliance staff to all air quality complaints the agency ~~receives~~ receives. However, complaints cannot always be actively dispositioned due to time of day reported, travel time taken to reach the complaint location, duration of the activity causing the fugitive dust, and in some cases difficulty in being able to reach a responsible person for the project. As such there can be differences in the number of complaints reported and actual violations observed or documented. PR 403.2 is intended to be a proactive and preemptive rule designed with best management practices derived from larger projects to prevent the occurrence of air quality issues and impacts. This is in no way intended to limit the ability of any concerned party to call in an air quality complaint. In fact, one of the provisions of the proposed rule would require signage with contact information for both the DCS and the South Coast AQMD for timely reporting/resolving such issues. Furthermore, regarding quantifiable benefits - near road communities are already disproportionately impacted by poor air quality from on road vehicular tailpipe air contaminants, including PM2.5. While this impact is not significantly due to LRPs, the additional fugitive dust PM10 results in a cumulative impact that exacerbates the issue of already unhealthy air quality.

### **Response to Comment 4-3**

Additional complaint information is provided in Appendix II of this staff report. As discussed above, in Response to Comment 4-2 the number of notices issued is not necessarily an indicator of the number of legitimate air quality complaints.

There is no specific legal prohibition to providing non-confidential information about complaints made by members of the public to South Coast AQMD. South Coast AQMD has released information about the number, location, and timing of dust-related complaints alleged to be caused by entities which may be subject to Rule 403.2. (See Appendix II). This information was provided to give context of the scope of dust-related air quality concerns being reported by the public at large roadway projects across the South Coast AQMD's jurisdiction. South Coast AQMD does not release confidential information regarding complaints, including the name, address, contact or other personal identification information of complainants to protect personal privacy and maintain an anonymous complaint hotline. South Coast AQMD also does not release information relating to specific investigations, determination of violation of District Rules or the California Health and Safety Code or details regarding violations which have not been resolved. However, South Coast AQMD does maintain on its website a searchable database of Notices of Violation issued by the South Coast AQMD. (See the Public Inquiry System for Information About NOV and Notice to Comply at <https://www.aqmd.gov/home/rules-compliance/compliance/compliance-notices/public-inquiry-system-for-novs-and-ncs>).

However, apart from the need to maintain confidentiality and protect the integrity of ongoing investigations, not all information that can be made public is necessarily a part of the rulemaking file. California Health and Safety Code Section 40728 specifies the materials to be included in the file for each regulation adopted by the South Coast AQMD. Materials which are not relevant to the rulemaking, even though not otherwise confidential or subject to legal prohibition, are not

included. Information such as the number of unrelated (i.e. non-dust or non-large roadway project) complaints received by the South Coast AQMD, or the disposition of specific violations, are not relevant to this rulemaking.

#### **Response to Comment 4-4**

Additional complaint information is provided in Appendix II of this staff report, including repeat complaints and the regions of the South Coast AQMD for the complaint data. The majority of violations issued were for Rule 403 violations. PR 403.2 has been crafted with the goal of reducing LRP impacts so that complaint situations do not arise. PR 403.2 provisions are proactive and preemptive and require best management practices, signage, a DCS and notification not currently required for all roadway projects. These provisions will increase the effectiveness with which LRP are managed to preempt any compliance shortfalls. See Response to Comment 4-2 regarding why the number of notices/violations issued is not necessarily a good indicator of the number of legitimate air quality complaints. It is also infeasible/impractical to attempt quantification of emissions impacts from these air quality complaints, however example air quality impacts from this kind of activity are described in the staff report. See Response to Comment 4-3 regarding the scope of violations for rule development purposes. Most As discussed in the staff report any increase in any air quality contaminants can increase health impacts on already overburdened near-road communities.

#### **Response to Comment 4-5**

The majority of notices issued relating to dust complaints were for violations of Rule 403. Based on the latest version of PR 403.2 the majority of complaints would have been subject to the proposed rule. Also, roadway projects would be subject PR 403.2 based on their distance to receptors. Shortfalls in existing rules are largely due to the lack of preventative measures and the proposed rule addresses this issue. An operator for a project that meets the criteria for a large operation is required to notify South Coast AQMD. Roadway projects typically do not meet the criteria for large operations.

#### **Response to Comment 4-6**

The information is publicly available on our website at:

<http://www.aqmd.gov/home/air-quality/complaints/smoke-dust-odor>

<https://www.aqmd.gov/docs/default-source/publications/fact-sheets/report-a-complaint.pdf?sfvrsn=6>

#### **Response to Comment 4-7**

Please see Response to Comment 4-3 regarding the comment on breach of legal prohibitions.

As discussed above staff has provided a list of roadway dust related complaints on the agency website at <http://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book/proposed-rules/rule-403-2/complaint-data> with non-personal information. The same appears in Appendix II of this report. The goal of PR 403.2 is to use best management practices for fugitive dust as a proactive approach to prevent impacts to near road communities that are already disproportionately

impacted by poorer air quality. As such the rule seeks to create a level playing field for anyone carrying out a LRP.

#### **Response to Comment 4-8**

This information metric was provided as a reference point in time for the number of roadway projects that are planned or ongoing by Caltrans in regions of the four counties within the South Coast AQMD. The complaints data spans a period from 2019 through early 2022 and is provided in Appendix II. The 66 projects cited were for a point in time in the fall of 2021. As such the two data sets do not completely overlap. Active project numbers were designed to provide a scale or scope of on-going or planned roadway projects while complaint data was intended to provide information on dust related complaints specifically. The two types of data sets were not intended for one-to-one comparative analysis. The number of air quality complaints is not necessarily an indicator of the scale of air quality violations. Many people may not choose to file a complaint or know how to file one. However, the persistent pattern of complaints about these kinds of projects indicates that these kinds of projects can cause air quality issues. Since this comment was made, the focus of PR 403.2 has changed to only FHWA FC1 and FC2 roadways. At that time of release of this draft staff report there were an estimated 48 active or ongoing roadway projects in the South Coast AQMD based on the revised definition of a LR meaning roadways designated as FC1 and FC2 roadway classifications.

#### **Response to Comment 4-9**

This information was obtained from the Caltrans website and the official websites of each of the four counties located in the South Coast AQMD. As such this information is subject to change over time.

#### **Response to Comment 4-10**

See [response to comment 4-8](#)

#### **Response to Comment 4-11**

A list of complaints and additional information is provided in Appendix II. The definition of LRP has changed since the comment was made. The latest proposal is to use FHWA functional classifications 1 and 2; so the number of LRP would likely be those that are Caltrans active or proposed projects, that are located within 500 feet of an APEX or 1,000 feet of a SR. Sufficient details for each project are not readily available to determine applicability, however given the dense urban environment that most LRs traverse, most of the applicable LRPs are anticipated to be subject to at least some portions of PR 403.2.

#### **Response to Comment 4-12**

The three examples of previous South Coast AQMD efforts on near-road exposures from presentation slide #4 in Working Group Meeting #2 were to show that health studies indicate a significant association between exposure to fine particulate air pollution and increased health risks, in particular for near-road communities. Furthermore, South Coast AQMD's MATES V study showed that communities located near LRs are already disproportionately impacted by air



pollution due to other sources such as diesel exhaust and other toxic pollutants from fossil fueled vehicles such as large trucks, cars, and buses. These studies have shown the tailpipe emissions have air quality impacts on the near roadway communities. While construction equipment, especially diesel fueled vehicles, are also a source of tailpipe emissions, PR 403.2 is specifically focused on the fugitive dust (PM10) impacts of LRPs. PR 403.2 seeks to preemptively control the fugitive dust (PM10) component of LRP air pollution, since an increase in any air contaminant will add to the air quality impacts in near road communities. The purpose of PR403.2 is to reduce potential air quality impacts to people who may be exposed to fugitive dust generated by LRPs and thereby reduce the overall risk of impacts from poor air quality. PR403.2 can provide preemptive measures and protection to potentially more exposed near roadway communities.

#### **Response to Comment 4-13**

See [Response to Comment 4-12](#).

#### **Response to Comment 4-14**

See [Response to Comment 4-12](#).

#### **Response to Comment 4-15**

LRP emissions are not explicitly modeled in MATES V in the same way as tailpipe emissions from LRs, and therefore are not discernable in the MATES V modeling. The increase in health risk closer to roadways in the MATES V study is associated with emissions from vehicles on the roadway. As discussed in Response to Comment 4-12, this study shows the existing disproportionate health impacts these communities face before they are impacted by dust from LRPs.

#### **Response to Comment 4-16**

See [Response to Comment 4-2](#). The selected Large Operation provisions of Rule 403 would be applicable to all LRP not just those that also qualify as Large Operations. In addition, some aspects of the rule such as prohibitory distances for APEX and SRs are more stringent than requirements in other existing rules, and also include measures to prevent air quality impacts in case of non-compliance with existing rules.

#### **Response to Comment 4-17**

Existing rules do require controls within a certain distance of an APEX or SR (see [Comment to Response 1-5](#)) however they do not have prohibitory buffer distances between a LRP activity and either an APEX (100 feet) or a SR (250 feet.).

#### **Response to Comment 4-18**

Requirements to establish a dust control supervisor and additional control measures applicable to large roadway projects would help reduce the quantity of complaints South Coast AQMD would receive by proactively preventing fugitive dust exposure to nearby receptors. Establishing a dust control supervisor would provide onsite personnel

that could expeditiously implement dust controls as needed, and would act as a point of contact for the public (as provided in proposed requirements for signage and public notification) to address any dust issues or answer questions or concerns regarding dust from the project. Requiring additional control measures (currently only required for specific situations in other dust rules) to large roadway projects would better reduce occurrences for fugitive dust to be generated and also impact nearby receptors.

#### **Response to Comment 4-19**

South Coast AQMD staff do enforce rules (see Response to Comment 4-2 for an expanded discussion). PR 403.2 seeks to proactively control fugitive dust before it impacts an APEX or a SR. Rule 402 does not provide for any specific proactive controls, and provisions of Rule 403 and 1157 are further enhanced in PR 403.2 such as signage for all LRPs and prohibitory buffer zones.

#### **Response to Comment 4-20**

See [Response to Comments 4-2](#) and Chapter 1 of the staff report. The focus of the proposed rule has shifted due to near road community air quality health impacts, as well as information from air quality complaints and feedback from staff and external stakeholders. The latest version of the proposed rule only requires controls for dust from construction vehicles and material piles. As discussed above the provisions of Rule 403 Large Operations would apply to all LRPs in PR 403.2.

#### **Response to Comment 4-21**

See [Response to Comment 4-15](#) and Chapter 1 of the staff report.

#### **Response to Comment 4-22**

See [Response to Comment 1-5](#). The definition of material pile has been changed to mean one that is greater than 8 feet in height. Note that this height limit comes from the BACM in 403 and 1157 which distinguish material piles above/below this height. Discussions with contractor stakeholders have also identified this to be an appropriate height based on the dimensions of earth-moving construction equipment. In addition, maintenance of berms for stormwater prevention measures are exempt from the rule. It should also be noted that material piles within prohibition buffers are allowed if they are covered with a material pile cover, or other equivalent control methods to prevent fugitive dust as approved by the Executive Officer.

#### **Response to Comment 4-23**

PR 403.2 is intended to apply to material piles that have any accumulation of “construction/demolition debris, excavated material, or typical roadway material”, and typical roadway material (as defined and shown below) does not include decorative stone, cinderblock as a “material of equivalent performance”. Bulk material is restricted to fine aggregates that are less than two inches in length or diameter, and other organic or inorganic particulate matter. Woody landscape material that meets this definition of bulk material would be subject to the rule.

MATERIAL PILE means any accumulation of bulk materials, construction/demolition debris, excavated material, or typical roadway material which is greater than eight feet in height.

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

BULK MATERIAL is sand, gravel, soil, and aggregate material (such as recycled concrete/asphalt) less than two inches in length or diameter, and other organic or inorganic particulate matter.

#### **Response to Comment 4-24**

Staff initially selected this metric since CARB defines a large urban roadway as a roadway with 100,000 or more Average Annual Vehicle Miles Traveled (VMT). Staff has since modified this definition:

LARGE ROADWAY means any roadway that is designated as functional classification “Interstate” (FC1) or “Other Freeway or Expressway” (FC2) pursuant to the Federal Highway Administration.

See also [Response to Comment 1-4](#).

#### **Response to Comment 4-25**

The basis for the definition in PR 403.2 for a LR has been modified from annual average daily vehicle trips to the FHWA functional classification metric which is also used by Caltrans. See [Response to Comments 4-24](#) for the current definition. This revised definition and (rule language) was made available to the public on March 28, 2022. The revised definition is based on a well established and standard terminology under federal and state classifications for roadways based on traffic volume. Additional detailed information can be obtained on the FHWA website ([https://www.fhwa.dot.gov/planning/processes/statewide/related/highway\\_functional\\_classifications/fcauab.pdf](https://www.fhwa.dot.gov/planning/processes/statewide/related/highway_functional_classifications/fcauab.pdf)). Any person who conducts or authorizes the conducting of activities for a large roadway project would be responsible for determining whether the project is applicable to PR 403.2.

#### **Response to Comment 4-26**

See [Response to Comments 4-24](#). The revised proposed definition using the FHWA FC1 and FC2 roadway designations would not distinguish between sections of a roadway that have less than 100,000 AAVT and those that have higher traffic rates. However, in practice sections of roadway that have less than 100,000 AAVT tend to be in more rural areas where there are larger distances between roadwork activity and potential receptors so that it is less likely that rule would apply.

#### **Response to Comment 4-27**

The requirements of all other applicable rules and regulations must be complied with at all times. The provisions PR 403.2 do not substitute for the requirements of any other applicable rule or regulation and all rules must be complied with on their own. While there is no intended overlap in any rules or regulations, PR 403.2 is intended to apply enhanced best management practices to a specific subset of Rule 403 potential dust scenarios (LRPs). Furthermore PR 403.2 states:

“Use the following applicable control measures, in addition to all other applicable control measures as required in other dust rules (such as Rules 403, 403.1, 1157), to prevent fugitive dust/visible emissions:”

#### **Response to Comment 4-28**

Signage requirements have been changed to align with the same requirements for signage in Rule 403 for Large Operations. The commenter is correct that due to the nature of some LRPs there may not be a clearly definable entrance or the project may not have a fixed traditional site, if for example it is a milling operation. So, the rule requires a minimum of 2 signs ~~(and a maximum of 4 signs per Rule 403 Large Operation requirements)~~. and The intent is to have a sign on each side of the LRP activity facing potential receptors. Signs may be mobile as an alternative such as with the use of “Changeable Message Signs” as long as all rule-required information and text height requirements are met.

#### **Response to Comment 4-29**

Notification should be directly to all owners and tenants of property designated for residential use (e.g., single family homes, duplexes, condominiums and apartments). For all other properties, such as schools, hospitals, amusement parks, commercial buildings, the contractor need only notify the appropriate responsible management, and the contractor is not responsible for verifying if others persons on the property have then been notified. Proof of service whether to an individual or managing entity should be maintained and available if requested, pursuant to the recordkeeping requirements in PR 403.2.

#### **Response to Comment 4-30**

PR 403.2 makes specific allowances for and is not intended to be in conflict with any requirements for stormwater best management practices. For example the rule requires all dust suppressant to be non-toxic and approved and berms are specifically exempted from the requirements of the proposed rule.

#### **Response to Comment 4-31**

Staff agrees. As discussed above PR 403.2 is intended to enhance best management practices for a specific niche of (LRP) activities. As stated staff does not believe that provisions in PR 403.2 are duplicative of any existing rule provisions. In terms of creating “punitive circumstances” in fact PR 403.2 seeks to create a level playing field for the proactive prevention of potential fugitive dust incidents and as such is applicable to all LRPs equally.

**Comment Letter 5**California Department of Transportation- February 14, 2022**Purpose**

The purpose of this Rule is to mitigate air quality impacts to near road communities from large roadway project fugitive dust operations, activities, equipment and material piles. These include but are not limited to fugitive dust from aggregate ~~crushing and grinding~~production, construction/demolition activities and equipment, and material piles, at large roadway projects.

**Definitions**

(1) ~~AGGREGATE OPERATION means an operation that produces sand, gravel, crushed stone, and/or quarried rocks.~~

~~CRUSHING AND GRINDING~~AGGREGATE PRODUCTION means any activity solely intended for the production of aggregate that mechanically reduces the size of materials in an aggregate operation. Activities such as cold planing, cold in-place recycling (CIR), full-depth reclamation or recycling, pavement smoothness grinding, and concrete slab replacement are not considered aggregate production.

**Shaila Chowdhury**

This clarifies that cold planing, CIR and other efforts are covered under construction/demolition.

~~LARGE ROADWAY means any roadway, with an annual daily average number of vehicle trips in excess of 100,000.~~

LARGE ROADWAY PROJECT means a project that disturbs lanes carrying more than 100,000 AADT ~~the large roadway and/or adjacent location~~ at which sources capable of generating fugitive dust from crushing and grinding/earth moving/ construction/demolition activities, disturbed surface areas, heavy- and light-duty vehicular movement on paved or unpaved roads, or material piles are located. Routine maintenance activities are not considered large roadway projects.

**5-1****5-2**

FS

**Fredrickson, Scott M@DOT**

Example: This rule would not apply to a two-lane project on a 100,000 AADT highway which disturbs only one direction of travel. Often there are projects that only fix one or two lanes of a large multilane roadway.

5-2  
(cont.)

ROUTINE MAINTENANCE ACTIVITIES: Routine maintenance activities include efforts such as repairing potholes, incidental concrete slab replacements, chip seal repair, and pavement digouts.

5-3

EMERGENCY SITUATIONS: ‘Emergency,’ as used in California Public Contract Code (PCC), Section 1102, code, is a sudden, unexpected occurrence that poses a clear and imminent danger, requiring immediate action to prevent or mitigate the loss or impairment of life, health, property, or essential public services.

5-4

(20) TEMPORARY COVER means applying a geosynthetic and/or plastic sheeting complying with the “temporary cover” specifications and stockpile management best management practice (BMP) of a state, county or city department or agency located within the jurisdiction of the SCAQMD.

5-5

**Requirements**

(1) — On or after six (6) months from the date of Rule adoption, no person shall conduct aggregate operations, crushing and grinding operations or maintain a material pile at a large roadway project that is located within a distance of 100 feet of any property line of an area of public exposure or sensitive receptor.

5-6

FS

**Fredrickson, Scott M@DOT**

Regardless of the distance to any property line (0 to 1,000 feet), additional control measures will be required.



~~(2)(1)~~ On or after six (6) months from the date of Rule adoption, no person shall conduct the following activities at a large roadway project, that is located within 500 feet of an area of public exposure or 1,000 feet of a sensitive receptor, unless in compliance with the provisions of paragraph (d)(~~23~~) Additional Requirements, and subdivision (e) Record Keeping:

5-7

- (A) ~~Crushing and grinding~~ aggregate production operations ~~(including concrete and asphalt recycling);~~

### Control Measures

Use the following control measures as necessary/applicable to prevent fugitive dust/visible emissions ~~from extending farther than 100 feet as measured from the nearest edge or perimeter of the operation/material pile or equipment location within the large roadway project to the closest point of the property line of any area of public exposure or sensitive receptor; whichever is less:~~

<p><del>Crushing and Grinding;</del> <del>or</del> Aggregate <u>Production</u> Operations</p>	<p><del>Stabilize surfaces prior to operation of equipment (including construction vehicles such as for example bulldozers, cranes or backhoes) and prior to any crushing/grinding; and</del></p> <p>Stabilize aggregate material piles <del>after</del> <u>crushing</u> <del>and grinding</del> <u>production</u> by applying <u>a temporary cover or applying dust suppressant water</u> to prevent dust plumes.</p>
---	--

5-8

### Markup Area

FS

#### Fredrickson, Scott M@DOT

The control measures will apply to all projects within 500 feet of an area of public exposure or 1,000 feet of a sensitive receptor



Dust from Construction Vehicles  (All controls)	Apply dust suppressant as necessary to prevent visible emissions during vehicle <u>operation</u> ; Limit vehicle speed to 15 miles per hour on <u>roadway on unpaved roadways in active construction areas</u> ;
---	---

5-9

FS

Markup Area

**Fredrickson, Scott M@DOT**

Suggested revision to avoid the misunderstanding of the expected speed of vehicles driving on the public highway within the project limits

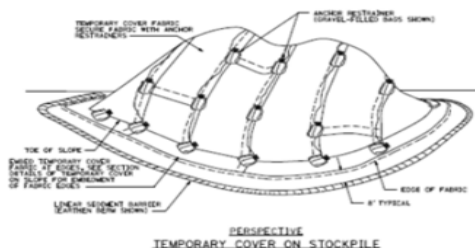
Material Piles  (Any combination of the required controls to ensure control)	Maximum Height of <u>20 feet</u>  Apply <u>a temporary cover or apply</u> dust suppressant as necessary, but no less than twice per hour to maintain a stabilized surface and prevent visible emissions; <del>Install coverings; and</del> <del>Install an enclosure with a minimum of three sides (the open side of</del>
--	--

5-10

FS

**Fredrickson, Scott M@DOT**

Temporary covers are more effective in controlling dust and easier to maintain when placed over a non-circular based pile.



FS

**Fredrickson, Scott M@DOT**

Stockpiling material is critical to our GHG reduction efforts. Without the ability to stockpile, materials must be hauled away and then returned for later use. A 100-foot prohibition from property lines will also force the material piles to be located much closer to the motorists and construction workers; this will be contrary to Caltrans Safety Goals.

**5-10**  
(cont.)

**(C) Signage**

Prior to project commencement, large roadway project contact information signage shall be posted/installed within 50 feet of each large roadway project public entrance including any frequently used work entrance, and at a minimum every 100 yards along the large roadway project property line/boundary. Signage shall be 1 inch A/C laminated plywood board or similar strength and durability material with dimensions of 48 inches by 96 inches. Signage background must contrast with lettering, typically black text with white background. The lower edge of the sign board must be a minimum of 6 feet and a maximum of 7 feet above grade. This signage must not be visible to any motorists traveling through the large roadway project. At a minimum, each sign shall include the following information, with text height as shown on the right side of the sign template below, and an accessible 24 hours per day local or a toll-free phone number for contacting the large roadway project responsible person(s) or dust control supervisor regarding fugitive dust issues:

**5-11**

FS

**Fredrickson, Scott M@DOT**

Comment from FHWA: the signs is very large. In addition, they include many lines of information, and do not conform to any existing sign format. As such, they would be difficult to read at highway speeds and would, then likely cause a distraction. As such, FHWA is not likely to support their use or approval of this specification.



**Fredrickson, Scott M@...** February 11, 2022

Added sentence only to address FHWA's comment above. Caltrans has not looked at the sign height or dimensions or reviewed this portion of the new rule from a safety perspective. Our pilot project specification requires a public notification letter be posted in public areas near the jobsite and sent to residences and businesses within 1000 feet of an area of public exposure to the dust source activity.

**5-11**  
(cont.)

- (D) A list of permitted ~~rock crushing and/or grinding~~ aggregate production equipment, and related large roadway project unpermitted, powered equipment with the potential to generate dust, including but not limited to equipment subject to California Air Resources Board (CARB) Portable Equipment Registration Program (PERP) equipment.

**5-12**

The provisions of this Rule shall not apply for the following activities:

- to ~~Large roadway projects or associated operations/activities/equipment undertaken during emergency situations, or in conjunction with any officially declared disaster or state of emergency.~~
- Routine maintenance activities.
- Large roadway projects advertised for construction on or before the rule adoption date.

**5-13**

### **Response to Comment 5-1**

Thank you for taking the time to review the proposed preliminary draft materials and providing feedback.

The definition of demolition/construction has been changed to include all forms of non-aggregate crushing and grinding production including milling. The definition of Crushing and Grinding Aggregate Production has been changed to "Aggregate Crushing and Grinding" which means any activity that mechanically reduces the size of loose or stockpiled materials to produce sand, gravel,

crushed stoned, quarried rock, or other aggregate material (such as recycled concrete/asphalt). Cold planing and other similar activities have been moved to definition for construction and demolition.

#### **Response to Comment 5-2**

Potential fugitive dust impacts would still exist regardless of which lane or roadway direction the activity takes place on. Larger roadways in general will have higher volumes of traffic and higher LRP activity rates. It should be noted that the definition of a large roadway project is one that involves the construction/demolition of a large roadway which is defined to be one that is designated as Functional Classification 1 and 2 (FC1 and FC2) as provided on the Caltrans website (established by FHWA). FC1 and FC2 roadways include all lanes in both directions.

#### **Response to Comment 5-3**

Maintenance activities are no longer a definition in PR 403.2 and instead lists these activities under the exemptions section under paragraph (h)(6). Other exemptions are also provided for activities such as emergency life-threatening situations, stormwater prevention practices, and utility service disruptions.

#### **Response to Comment 5-4**

See [Response to Comment 5-3](#). Emergencies are included in the exemptions in PR 403.2 (h)(1).

#### **Response to Comment 5-5**

PR 403.2 (e)(2) Table 1 allows for both temporary coverings and material pile covers (as defined in the rule). Coverings that demonstrate equivalent methods to control fugitive dust can be used as well so long as they are approved by the Executive Officer.

#### **Response to Comment 5-6**

Control measures will only be required if applicable activities subject to PR 403.2 are conducted within rule-specified distances. PR 403.2 is intended to be proactive rather than responsive and potential fugitive dust incidents at LRPs. The prohibition buffer of 100 feet for APEX and 250 feet for SRs, for aggregate crushing and grinding without a water misting dust control system or material piles without a material pile cover, provides an additional level of preventative best management practices for LRPs.

#### **Response to Comment 5-7**

PR 403.2 provides a definition for aggregate crushing and grinding which See [Response to Comment 5-1](#).

#### **Response to Comment 5-8**

This control category (Crushing and Grinding or Aggregate Production Operations) has been removed from the proposed rule.

### **Response to Comment 5-9**

The proposed rule would only apply to paved or unpaved roads within the project perimeter. Often paved roads within a project site are covered by a layer of dust from movement of vehicle back and forth across both the unpaved portions of the job site. A 15-mile per hour speed limit is conducive to minimizing any dust entrainment caused by vehicle tires on roads not accessible to the public. As a proactive best management practice preventative for fugitive dust all unpaved roads within the LRP site are required to be watered or chemically stabilized on a regular basis.

### **Response to Comment 5-10**

See [Response to Comment 5-5](#). Staff has seen no evidence that a prohibition buffer of 100 feet from an APEX or 250 feet from a SR will reduce the ability of contractors to crush or grind recycled materials to produce aggregate materials for re-use as construction materials. It should be noted that PR 403.2 has been revised to allow material piles within the prohibition zone if they are covered by a material pile cover as defined in the rule, or use equivalent methods to prevent fugitive dust as approved by the Executive Officer. Aggregate crushing and grinding for onsite recycling of material generated from the large roadway project is allowed if a water misting dust control system is used to prevent visible emissions from extending 100 feet in length in any direction. The commenter has also not provided evidence that the only location to place piles is closer to motorists and construction workers. Additional locations within Caltrans right-of-ways can be identified to place the piles if they need to be relocated.

### **Response to Comment 5-11**

Signs conform to the existing signage requirements for Rule 403 Large Operations. Many LRPs will likely also be Large Operations and would need to comply with the provisions of existing Rule 403. However, there may be instances when the LRP has no identifiable “project entrance” such as for example roadway milling activities. PR 403.2 requires a minimum of 2 signs in such situations instead of a maximum of 4 signs as prescribed under Rule 403 Large Operations. The intent of signage is not to inform drivers of vehicles on the roadway itself. Rather signage is to be placed such that the finished side of the plywood with contact information for the DCS and the South Coast AQMD are legible to persons in potential APEX or SRs. Vehicle traffic is transitory in nature and drivers are not the specific focus of PR 403.2. The majority of drivers do not necessarily work or reside within 1,000 of a specific APEX or SR, and for those that do the signage would be intended to provide them with contact information once they have arrived at their destination. A/C laminate by definition has a finished side (on which the contact information is placed) and an unfinished blank side that would face traffic when posted and so cannot be observed by drivers if placed correctly with the contact information facing potentially impacted receptors and not transitory vehicle drivers. As an alternative staff is evaluating the use of comparable signage such as “Changeable Message Signs” as long as they provide the same visibility as traditional signage. In addition, the number of lines of information required on signage has been reduced from 6 down to 4 lines and may possibly fit on 3 lines. Signage characters must be large enough to be clearly visible up to 1,000 feet away and contrast with their background to aid in legibility.

**Response to Comment 5-12**

These provisions have been modified and notification is no longer required, however recordkeeping is required for:

- (A) Each type of activity conducted and the associated permitted powered equipment with the potential to generate fugitive dust;
- (B) The specific fugitive dust control measures implemented for each activity or equipment; and
- (C) The frequency of fugitive dust control measures implemented. If dust suppressant is used as the control measure for material piles, record the time and duration that the dust suppressant was applied.
- (D) Purchase records or invoices for dust suppressants used for the LRP.

**Response to Comment 5-13**

PR 403.2 has been modified to incorporate the suggested changes in subdivision (h).

**Comment Letter 6**

California Department of Transportation- February 17, 2022

- (12) LARGE ROADWAY PROJECT means a project that disturbs lanes carrying more than 100,000 AADT the large roadway and/or adjacent location at which sources capable of generating fugitive dust from crushing and grinding/earth moving/ construction/demolition activities, disturbed surface areas, heavy- and light-duty vehicular movement on paved or unpaved roads, or material piles are located. RoutineMinor maintenance activities performed by maintenance staff are not considered large roadway projects providing the value does not exceed the total cost calculated pursuant to California Public Contract Code (PCC), Section 10105(b).
- (13) ROUTINEMINOR MAINTENANCE ACTIVITIES: RoutineMinor maintenance activities include efforts such as repairing potholes, incidental concrete slab replacements, chip seal repair, and pavement digouts.

6-1

**Response to Comment 6-1**

Thank you for taking the time to review the proposed preliminary draft materials and providing feedback. Changing routine maintenace to minor maintenance with the addition of total cost as a threshold has been discussed in the follow-up meeting on 2/22/2022. Total cost cannot be used as threshold due to the difficulty in quickly and effectively verifying/validating such information, particularly for field staff and especailly with a possible PR 403.2 incident ongoing. Maintenace activites are exempted under subdivision (h) of PR 403.2.



**Comment Letter 7**

California Department of Transportation- February 24, 2022

- (14) LARGE ROADWAY PROJECT means the construction/demolition, improvement, or repair, or maintenance of a large roadway, including any adjacent property associated with the large roadway such as a bridge, overpass, or onramp.

**Fredrickson, Scott M@DOT**  
Suggest deleting to avoid confusion.

(3)(4) Maintenance activities completed within one week at a field location.

7-1

---

**Response to Comment 7-1**

Thank you for taking the time to review the proposed preliminary draft materials and providing feedback. Duration of the maintenance activities was discussed in the follow-up meeting on 3/1/2022. A short project does not necessarily imply activities are less likely to cause potential fugitive dust issues, nor does a long duration project imply the converse. Therefore, it is not feasible to use duration as a threshold for exemption.

## **Section 2**

### **Response to Comments**

#### **Public Workshop**

#### **Formal Public Comment Period 3/2/22 – 3/16/22**

**Comment Letter 8**California Department of Transportation- March 3, 2022

- (14) LARGE ROADWAY PROJECT means the construction/demolition, improvement, or rehabilitation repair, or maintenance of a large roadway, including any adjacent property associated with the large roadway such as a bridge, overpass, or onramp.

**Fredrickson, Scott M@DOT**

Suggest using rehabilitation instead of repair.

8-1

**Fredrickson, Scott M@DOT**

Suggest deleting to avoid confusion.

- ~~3~~(4) Minor maintenance activities conducted for a large roadway. Work associated with such activities include but are not limited to pothole repair, pavement repair, pavement crack sealing, pavement digouts, concrete slab repair/replacement, shoulder backing repair, sidewalk repair/replacement, curb/dike repair/replacement, sign repair/replacement, guardrail repair/replacement, culvert/pipe repair/replacement, drainage inlet repair/replacement, bridge repair, concrete barrier repair/replacement, slope repair, mowing, trash removal, street sweeping, water pollution control repair/replacement, landscaping repair/replacement, fence repair/replacement, pavement delineation repair/replacement and electrical system repairs.

8-2

**Response to Comment 8-1**

Thank you for taking the time to review the proposed preliminary draft materials and providing feedback. The definition of LRP has been modified to only construction/demolition of a large roadway including any adjacent bridge, overpass, or onramp/offramp.

**Response to Comment 8-2**

The list of maintenance activities has been discussed in the follow-up meeting on 3/9/2022 and is included in the subdivision (h) Exemption.

**Comment Letter 9**City of Rancho Cucamonga- March 9, 2022

Hi Henry,

I forgot to include our initial comments based on the most recent proposed rule language. As we had discussed yesterday, unless the rule language drastically changes to include city and county jurisdictions, the rule as it stands, is not applicable to us. Nonetheless, I thought I'd still share these with you for additional insights/perspective.

**9-1****CITY OF RANCHO CUCAMONGA PRELIMINARY COMMENTS FOR SCAQMD PROPOSED RULE 403.2**

It appears that the majority of these requirements would only affect projects typically handled by Caltrans or SBCTA (in our area). Per the definition provided in Working Group #4, a large roadway carries 100,000 cars or more per day. In Rancho Cucamonga, this would only apply to freeways, as our arterials do not come close to that. One of our busiest roadways (Foothill Blvd./Day Creek Blvd.), sees around 55k vehicles per day.

However, if that definition changes, there here are our major concerns:

- 1) Maintain the definition of large roadway projects that includes a requirement that the regulations only apply to projects on roadways with average daily traffic (ADT) of greater than 100,000. Should that not be the case, the following comments/concerns apply:
  - a. Projects closer than 100 feet from the property line for residential, office, business, parks, etc., would include 100% of the project on City public streets, making them impossible to physically execute.
  - b. The exemption process would be overly burdensome on local agencies from a time, personnel, and cost standpoint.
  - c. It is critical that the dust control supervisor be allowed to be contracted and part of the contractor staff. Otherwise, inspection costs will overwhelm most project budgets.
  - d. 4' x 8' signs will not fit in the public right-of-way of many city streets without creating ADA compliance issues.
  - e. Written notification along with notification signs seems excessive and unnecessary.

**9-2**

Best,



## Clarence de Guzman

Management Analyst I

Community Development | City of Rancho Cucamonga

1-909-774-4024

10500 Civic Center Drive,  
Rancho Cucamonga, CA 91730

[www.CityofRC.us](http://www.CityofRC.us)



**9-2**  
(cont.)

### [Response to Comment 9-1](#)

Thank you for taking the time to review the proposed preliminary draft materials and providing feedback.

### [Response to Comment 9-2](#)

Your concerns will be taken for consideration if the definition of the LR changed.

**Comment Letter 10**California Asphalt Pavement Association (CalAPA)- March 11, 2022

Re: Proposed Rule 403.2 Fugitive Dust (Follow-up comment letter)

Dear Mr. Wu and Mr. Pourzand:

The California Asphalt Pavement Association (CalAPA) would like to take this opportunity to offer additional comments to the South Coast Air Quality Management District (SCAQMD) regarding proposed Rule 403.2 on Fugitive Dust. This letter is a follow-up to our Jan. 28, 2021 correspondence on this same topic and is informed by information presented by the SCAQMD at its March 2 workshop. As we have stated previously, our goal is to assist the air district in understanding the uniqueness of the asphalt pavement industry in the development of regulations that are reasonable, achievable and quantifiable in support of the overall air district goals.

10-1

After participating in the March 2 workshop on proposed Rule 403.2, we continue to be concerned with what we consider arbitrary limits placed on stockpiles in large transportation improvement project work zones. It is typical that the work area for such projects is very limited, and having smaller piles, taking up more of a footprint, could create hazards for the safe navigation of the work site by construction crews and equipment, as well as by the motoring public that may be nearby. Frequent moving or removal of smaller piles would also require additional truck trips, which would create additional emissions from trucks and equipment and therefore be an undesired and unintended consequence of this proposed rule.

10-2

The staff presentation during the March 2 workshop included photos in the slide presentation that are clearly misleading and we appreciate that the SCAQMD has acknowledged this and will endeavor to utilize photos that more accurately portray what happens on a roadway construction project in California. As was noted, and we have commented on previously, there are already robust procedures in place to mitigate impacts to nearby neighborhoods of transportation improvement projects. The California Department of Transportation and the contractors that perform Caltrans work, for example, operate under strict guidelines that we believe already are in alignment with the air quality goals the SCAQMD is championing to protect adjacent communities and therefore make a separate rule unnecessary.

10-3

One reference in the proposed Rule 403.2 presentation is that of a “short-term project.” All such projects are considered short-term, but it would be helpful to clarify this reference. We recommend that projects where active construction work is conducted adjacent to a neighborhood for 30 days or less be excluded from this proposed rule should it go forward.

10-4

There is also a reference to an exclusion for highway maintenance that we believe is needlessly vague. We recommend that this exclusion include language “such as projects that are part of, or similar to, the Caltrans Highway Maintenance (HM1) projects and operational safety projects that are included in the Caltrans State Highway Operations & Protection Program (SHOPP).” These projects are largely related to safety, repairs, preservation and emergency work.

10-5

With regard to notification provisions of PR 403.2, the air district should note that there are already robust neighborhood notification procedures in place for such projects and that additional requirements by the air district are duplicative.

10-6

As others have commented, we also have concerns about the graphic presented by air district staff with regard to pollution “plumes” near highway projects, with no additional detail or modeling to indicate what percentage of those plumes are directly related to construction activity. Furthermore, there also is a lack of transparency in the types of complaints the air district has received, including location and date, that supposedly are the justification for this rule. Information presented by the air district so far to justify this rule has been speculative and not based in science or serious analysis.

10-7

In summary, we believe that PR 403.2, as currently represented by the SCAQMD, is ill-conceived, unjustified and ambiguous, and if it moves forward is guaranteed to create confusion for all parties and also create safety issues and liability for transportation agencies and the contractors they hire to perform vitally needed work.

10-8

We thank you for the opportunity to provide our comments on this important matter. The California Asphalt Pavement Association, founded in 1953, is the only trade association that exclusively represents the asphalt pavement industry in California. Please feel free to contact me at (916) 791-5044 if you have any questions.

10-9

Sincerely,



RUSSELL W. SNYDER, CAE  
Executive Director



### **Response to Comment 10-1**

Thank you for taking the time to review the proposed preliminary draft materials and providing feedback

### **Response to Comment 10-2**

Staff has responded to stakeholder concerns by increasing the size of piles defined as material piles subject to PR 403.2 from 3 feet to greater than 8 feet in height. It should also be noted that PR 403.2 has been revised to allow material piles in the prohibition buffer if they are covered by a material pile cover (as defined in the Rule), or use equivalent methods to prevent fugitive dust as approved by the Executive Officer. Also, berms have been exempted and maximum pile height has been increased from 20 to 30 feet since this is the maximum working height for crushing machinery (conveyer belt height).

### **Response to Comment 10-3**

While the pictures presented are of actual real-world incidents, staff's intention was not to mislead by portraying industry wide non-compliance by all members of the California roadway construction industry. Staff used such images as examples of situations of non-compliance in various categories of activity and equipment. These images will be replaced by other applicable figures. As such they are intended to be more descriptive for the activity and equipment that would be subject to the proposed rule.

### **Response to Comment 10-4**

See [Response to Comment 7-1](#).

### **Response to Comment 10-5**

Caltrans Highway Maintenance HM1 activities/projects are not applicable to PR 403.2 as they do not involve the construction/demolition of a LR. Other minor maintenance and repair activities set forth in subdivision (h) of the proposed rule are exempt from PR 403.2.

### **Response to Comment 10-6**

Staff has not been provided any written stakeholder policies/procedures for LRP potential receptor noticing. If road construction entities already have policies for such notification, there should be no incremental resource burdens.

### **Response to Comment 10-7**

Table 1-1 shows the input data and Figure 1-9 shows the resulting PM<sub>10</sub> ambient concentration with distance from the activity for typical roadway project activities. Complaint data is presented in Appendix II.

### **Response to Comment 10-8**

Staff has met multiple times with stakeholders from the construction industry after receipt of this comment letter. Stakeholder meetings have helped staff to significantly revise the applicability and requirements for PR 403.2 to ensure that language is clear

to comply with, including revised language to eliminate safety issues and liability to agencies and contractors hired to perform work. The scope of the rule has been narrowly focused to only apply to onsite construction/demolition activities for a large roadway (as defined in the rule). The definition for material piles has also been revised to increase applicable pile heights that are greater than 8 feet in height (previously 3 feet). It should also be noted that material piles are allowed in the prohibition buffer if they are covered with material pile cover or other equivalent control method as approved by the Executive Officer. Exemptions were also added for other critically necessary work such as construction/demolition of large roadways during utility service disruptions and minor maintenance activities. Exemptions are also provided for the maintenance of berms and other best management practices essential for stormwater management. Please also see [Response to Comment 10-2](#).

#### **[Response to Comment 10-9](#)**

Staff welcomes your comments and appreciates the time you have taken to provide input on PR 403.2 on behalf of the California Asphalt Pavement Association.

**Comment Letter 11**

Associated General Contractors of California (AGC-CA)- March 15, 2022

RE: Comments and Request for Feedback on Proposed Rule 403.2 Fugitive Dust from Large Roadways

Dear George Wu & Henry Pourzand,

On behalf of the Associated General Contractors (AGC) of California, we are submitting comments to the South Coast Air Quality Management District (SCAQMD) in response to Proposed Rule 403.2 Fugitive Dust from Large Roadways.

AGC of California is a member-driven organization that statewide consists of over 950 companies. Our members provide commercial construction services on a broad range of projects within vertical building, highway & transportation, and utility. We believe the construction industry is vital to the success of California. Together, our members actively create opportunities to build and strengthen our state. We are passionate about shaping policy, improving industry relationships, and developing our workforce.

AGC of California appreciates the opportunities to participate in the SCAQMD public workgroup, workshop meetings, as well as the opportunity to submit a comment letter to address concerns and provide feedback. Additionally, we appreciate the strides that have been made to the updated draft language and staff report. However, there continues to be several unresolved questions and concerns, many of which are detailed in this letter. A summary of our concerns includes a lack of conclusive quantitative data justifying the implementation of PR 403.2, unclear understanding of various definitions, and requirements in the most up-to-date draft rule language. Please read below for more information.

**1. Lack of conclusive quantitative data justifying the need for PR 403.2.**

AGC of California recognizes and supports environmental rules that protect air which make California an even safer place to live. However, it is important that these rules ensure benefits that are measurable and that they do not exert excessive overlapping of other requirements. As PR 403.2 is currently written, meaningful quantitative measurements have not been presented to demonstrate that the proposed rule will *significantly* reduce emissions. Based on the explanations of SCAQMD staff, PR 403.2 attempts to reduce the number of complaints received by the general public. AGC of California asserts that it is the right of the public to submit their complaints to any perceived rule violation, however, it is important that these complaints are properly evaluated for authentic merit. Additionally, proposed rules should address gaps in existing rules related to emissions, as opposed to reducing the number of complaints received by SCAQMD.

11-1

11-2

**A. SCAQMD staff states that they regularly receive complaints from the public regarding fugitive dust projects (Public Workshop / Slide #3). However, SCAQMD has not provided conclusive data to support this statement.**

SCAQMD states in their Workgroup #2 presentation, Slide #3 that there were “over 73 roadway construction/demolition dust related complaints in the last four years (2018 thru to the present”. Additionally, SCAQMD provided an update on the number of complaints in their Public Workshop presentation, Slide #3, specifically expressing that the complaints have now increased to 78. This information indicates that there have been 5 more complaints within a 20-week period: this equals to approximately one complaint a month. Furthermore, it appears that the 78 complaints occurred over the course of a 50-month period: this equals to less than 2 complaints a month. AGC of California would like to request additional information on how these complaints were evaluated for authentic merit. Although it has been explained by staff during the Public Workshop meeting on March 3, 2022 that complaints are not the sole deciding factor to implement PR 403.2, answers to the following questions will provide essential insight into the decision-making process of SCAQMD.

11-3

Additionally, how many other unrelated complaints were also received between 2018 and now; and how many were repeat complaints?

Q1) Are one or two complaints a month significant to SCAQMD? If this number is significant, can additional information be shared regarding the statistical calculation of significance? Specifically, what is the scope of the calculation; what are the p-values; and what are the confidence intervals?

11-4

Q2) We understand that some of the 78 complaints are still under pending investigation, therefore, information regarding these pending investigations is unavailable to the public. However, it would be beneficial to receive information regarding the complaints are that *no longer being investigated*. How many of the 78 complaints are still pending investigation?

11-5

Q3) It has been explained by staff during the Public Workshop meeting that some violations occurred due to the 78 complaints received, however, additional information regarding these violations would be beneficial to the public. For instance, what existing rule(s) were violated? Have SCAQMD evaluated the effectiveness and shortcomings of existing rules based on violations? If so, how were these rules evaluated; and what was the outcome of this evaluation? Did the violators meet the definition of a ‘large operation’ from Rule 403? Lastly, how many of the 78 complaints would PR 403.2 capture?

11-6

Q4) What is SCAQMD's process for receiving, managing, and responding to complaints?

Answers to the above questions are essential in understanding the decision-making process behind PR 403.2. It will also provide clarity on whether PR 403.2 is truly essential to *significantly* lowering emissions of fugitive dust in Southern California regions.

Additionally, SCAQMD states in their Workgroup #2 presentation, Slide #3 that "[m]any road construction projects occur at any given time. Example: there are currently about 66 active/scheduled state and county road projects". It would be beneficial for the public to understand how many of these projects are related to the complaints mentioned above.

Q5) How many of the 66 active/scheduled projects received complaints; what is the nature of these complaints; and how many of these active/scheduled projects would be applicable to PR 403.2?

11-7

**B. PR 403.2 overlaps with existing SCAQMD rules which make the justification of the regulation unclear; specifically Rule 403 'Fugitive Dust', Rule 1157 'PM10 Emission Reductions from Aggregate and Related Operations', and Rule 1466 'Control of Particulate Emissions from Solis with Toxic Air Contaminants'.**

AGC of California appreciates the clarifications that were made during the Public Workshop meeting on March 3, 2022 to explain differences between the above-mentioned rules regarding applicability, requirements, and controls. SCAQMD states in their Public Workshop presentation / Slide #17 that there is a need for PR 403.2 because existing rules "have minimal requirements that are not adequately protective for large roadway projects". Additionally, SCAQMD states in Slide #17 that "[e]xisting rules do not require notice or information to be provided to the public regarding potential dust generating activities." However, there are still some unanswered questions. For the regulation to be clear and concise in which all stakeholders are adequately equipped to comply with AQMD regulations we would suggest potential changes to existing regulation. Supplemental regulations with inconsistent language causes confusion, which can lead to issues on-site. Regulations needs to be clear with consistent language to allow frontline leadership, such as our superintendents, foreman, and workers to understand specifics without multiple contradicting regulations.

11-8



**C. Areas of concern regarding the use of the USC Children’s Health Study to support the justification of PR 403.2.**

AGC of California encourages the proper use of sound scientific studies to support the justification of proposed regulations. Upon evaluating the USC Children’s Health Study, we agree that majority of the participants are within SCAQMD’s governing districts. Also, it appears that the study addressed many potential confounds that may otherwise explain the results. However, the dates in which data were collected is problematic for the justification of PR 403.2. Although the USC Children’s Health Study was published in 2013, data was collected between the years 2002-2003 and 2007-2008. Rule 403 was last amended in 2005; Rule 1157 was last amended in 2006; and Rule 1466 was last amended in 2021. Given that data was collected during or after the implementation of the above-mentioned rules, this study does not adequately reflect the current relationship between particulate matter and lung function. Therefore, this study cannot be used to justify the need to implement an additional rule targeting fugitive dust. AGC of California asserts the importance of conducting research that will reflect the *current* relationship because it will encompass the effects of the above-mentioned rules. We understand that scientific studies take time, therefore, we also urge that the adoption of this rule be extended until this information is collected and properly evaluated.

Upon evaluating a literature review, “Air pollution and lung function in children”, that evaluated the USC Children’s Health Study presented in the SCAQMD staff report, it is possible that the lower lung function in children were due to wildfires (Garcia, Rice, & Gold, 2021). They also mention knowledge gaps in research literature on this topic. Specifically, that “[l]ong-term consequences of air pollution on reduced lung function development in childhood are not fully understood” (pg 11).

**11-9****D. Request for additional time and cost-benefit analysis.**

As mentioned above, AGC of California urges that the adoption of this rule be extended until sufficient data is collected and properly evaluated. Implementing such a policy with large costs and impacts must be supported with conclusive quantitative data to justify it. Without conclusive evidence, imposing large costs and impacts may cause more harm than good. It would be beneficial for a thorough cost-benefit analysis to be conducted. However, simply providing the results of such an analysis would not be sufficient. It is important that the entire process of the cost-benefit analysis be made to the public to conduct a proper peer-review process to determine the merit, value, and generalizability of the study. This is standard scientific practice. If a governing body is using scientific evidence to support their justifications, then they must also be subjected to the scientific peer-review process. Refusing to be a part of the peer-review process is dangerous as it may result in decision-making that is unjustifiable. AGC of California asserts that extending the adoption hearing of PR 403.2 until sufficient data is collected *and* properly evaluated is essential; specifically, to reevaluate the need for PR 403.2 and to consider the potential impacts on the construction industry.

Lastly, we assert that this cost-benefit analysis be readily available to the public so that a proper peer-review process can be conducted.

**11-10**

**2. Additional queries and requests for clarification regarding PR 403.2.****A. Definition of ‘construction vehicle’**

As the language is currently written, construction vehicles are defined as “graders, bulldozers, excavators, cranes, loaders, backhoes, tractors, haul trucks, and other similar vehicles used at a large roadway project.” Our members express concern regarding the broadness of this definition. We encourage SCAQMD to exclude personally owned vehicles or vehicles otherwise not used as construction machinery.

**11-11****B. Definition of ‘dust suppressants’**

As the language is currently written, dust suppressants are defined as “water, hygroscopic materials, or non-toxic chemical stabilizers used as a treatment material to reduce fugitive dust emissions.” Our members express concern regarding the implementation of various dust suppressants. Project environments change by location. Depending on how county work is being conducted dust suppressants may be regulated. Specifically, water and hydrocarbon dust suppressants may not be easily accessible. Overuse of water may dry an area of their resources especially in dry, desert regions. AGC of California urges SCAQMD to evaluate the current Cal/OSHA regulation to ensure it is in alignment with state regulation. We encourage the language to be adjusted to incorporate ‘project acceptable’ dust suppressants in accordance with state regulation.

**11-12****C. Definition of ‘large roadway project’**

As the language is currently written, large roadway projects are defined as “any portion of roadway with an annual daily average number of vehicle trips in excess of 100,000 based on the most recent Federal Highway Administration (FHWA) Average Annual Daily Traffic (AADT) data available.” Our members have expressed concern regarding the use of the FHWA data to calculate estimates. Specifically, that there appears to be issues with their traffic count book, such as loop detectors malfunctioning. AGC of California recommends using a database that is state-specific as it may better reflect the needs of our unique state. As mentioned above regulation needs to be clear and concise. Specific resources need to be clearly outlined in the regulation for contractors to determine if they are covered under the regulation or not.

**11-13****D. Definition of ‘material piles’**

As the language is currently written, material piles are defined as “any accumulation of bulk materials, construction/demolition debris, excavated material, or typical roadway material which is not fully enclosed and attains a height of three feet or more and a total surface area of 150 or more square feet. Material piles located within 25 feet of each other as measured from the closest edge of each pile shall be considered a single material pile.” Our members

**11-14**



have expressed concern regarding the feasibility of this definition as it is currently written. Construction zones often have limited space available and are contained, therefore, reducing the size of the material piles may reduce the space available for construction crew members to maneuver. For example, the construction project on I-10 for lane extensions has extremely limited space to put material piles. AGC of California asserts that reducing the size of material piles may impose safety concerns. SCAQMD PR 403.2 aims to reduce emissions, however, this regulation may require additional laydown areas for stockpile material to comply with current language. This would require more machinery on-site and time to move material piles. Additionally, material piles often act as sound barriers to reduce noise pollution; reducing the size of material piles would conflict with existing regulation and would increase noise pollution. AGC of California believes the definition of material piles needs to be modified for it to be more feasible.

**11-14**  
(cont.)

#### **E. Additional Requirements**

Under one of the stipulations of the most recent preliminary draft rule, dust control supervisors are required to complete the "South Coast AQMD Fugitive Dust Control Class and holds a valid Certificate of Completion for the class." This class is held only once a month which may interfere with the timely implementation of a project. AGC of California asserts that this class be asynchronous to allow for more flexibility.

Additionally, SCAQMD provided Table 1 – Large Roadway Project Control Measures. AGC of California appreciates this table as it provides more clarity on control measures. However, there is expressed concern regarding the control measure for 'dust from construction vehicles'; specifically, the limit to vehicle speed of 15 miles per hour on roadways. Our members have expressed that limiting the speed of construction vehicles on roadways may not always be feasible in certain environments. Our members take pride in safety being a top priority. All employers have an obligation to provide a healthy and safe work environment for those on-site, and for the public. During the preconstruction phases contractors conduct numerous site-specific safety plans addressing a variety of potential hazards. Those site-specific safety plans address hazards and controls on-site that correlate into the commencement of a project. Speed of machinery is usually evaluated during the pre-construction safety analysis.

**11-15**

Additionally, SCAQMD added stipulations regarding material piles under Table 1. As the draft language is currently written material piles must "maintain below a maximum height of 20 feet; and apply dust suppressant as necessary, but no less than twice per hour to maintain a stabilized surface and prevent visible emissions from extending farther than 100 feet as measured from the nearest edge or perimeter of the operation/material pile or equipment location; or install coverings; or install an enclosure with a minimum of three sides (the open side of which will face farthest from potentially impacted areas) and walls." Our members have expressed concern with how this language is currently written. As expressed previously,

**11-16**

the height restriction will limit the amount of space available for a project which would have costly implications. Additionally, as previously stated on the material pile definition, limiting the size of material piles may increase truck time on the road to move materials to other locations which would increase emissions thereby causing more problems than this regulation would solve. AGC of California urges SCAQMD to reconsider their definition and requirements of material piles to be more closely aligned with Rule 403.

**11-16**  
(cont.)

AGC of California appreciates the changes made to the signage requirements as it now closely aligns with Rule 403.

**11-17**

SCAQMD states in their most recent preliminary draft rule language that notifications must include "[e]stimated duration of the large roadway project including commencement and completion dates." The nation's current state construction projects continue to be fluid in nature, perhaps more so than they have ever been. For this reason, we urge SCAQMD cut through (4)(A)(ii) as stated above.

**11-18**

In SCAQMD's most recent preliminary draft rule language, they outline the recordkeeping process that includes the following:

"The responsible person for the large roadway project shall maintain daily records of the required fugitive dust control measures pursuant to paragraph (e)(2) for a large roadway project documenting: A) Each type of activity conducted and the associated permitted powered equipment with the potential to generate fugitive dust; B) The specific fugitive dust control measures taken for each activity or equipment; and C) The frequency of fugitive dust control measures implemented. Records shall be retained for a minimum of three years by the responsible person for the large roadway project and shall be made available to the Executive Officer upon request."

**11-19**

All employers have an obligation to provide a healthy and safe work environment for those on-site, and for the public. During the preconstruction phases, contractors conduct numerous site-specific safety plans addressing a variety of potential hazards. Those site-specific safety plans address hazards and controls on-site that correlate into the commencement of a project. Recordkeeping and retention of safety documentation should be reevaluated as these documents are already executed by contractors.

## **F. Exemptions**

AGC of California appreciates the modifications that SCAQMD is currently considering, specifically the exemption for large roadway projects that occur for a short duration of time and exemption for minor maintenance activities. We urge SCAQMD to incorporate these exemptions into the regulation as it will promote flexibility and safety.

**11-20**

PR 403.2 states that the regulation will take effect beginning six months after the date of adoption for any large roadway project. AGC of California asserts that projects that have already been implemented be exempted from this regulation.

Additionally, subdivision (d)(1) states that there be “no aggregate crushing and grinding operations or maintenance of a material pile within 100 feet of an area of public exposure or sensitive receptor.” AGC of California urges SCAQMD to reconsider this stipulation. Taking this area away from workers may be detrimental to the implementation of a project simply because there is no other place to do crushing on-site.

**11-20**  
(cont.)

### Conclusion

AGC of California appreciates South Coast Air Quality Management District (SCAQMD) for allowing AGC of California to comment on Proposed Rule 403.2 ‘Fugitive Dust for Large Roadways’. We assert that SCAQMD provide conclusive quantitative data to support the justification of this regulation, address areas of concern, and to clarify the definitions described above. If you have any questions regarding the comments, please contact Manny Leon at (909) 289-1208 (email: [leonm@agc-ca.org](mailto:leonm@agc-ca.org)). We appreciate the opportunity to comment and hope these concerns are addressed.

**11-21**

Sincerely,



Manny Leon  
VP, Government Affairs  
Associated General Contractors of California

---

### [Response to Comment 11-1](#)

Thank you for taking the time to review the proposed preliminary draft materials. Staff welcomes your comments and appreciates your attendance, and input at working group meetings and at the public workshop and also for providing feedback regarding PR 403.2. Justification and data for PR 403.2 are included in the staff report.

### [Response to Comment 11-2](#)

See [Response to Comments 4-2](#).

### [Response to Comment 11-3](#)

See [Response to Comment 4-7](#).

#### **Response to Comment 11-4**

See [Response to Comment 4-7](#). Further, the commenter's suggested statistical analysis is not relevant to determining the need for the proposed rule. An air quality concern could be justified by a single complaint, or by no complaints if an actual air quality concern affects the public. Regardless, the persistent pattern of complaints about air quality impacts, verified by compliance staff witnessing dust from these activities from some large roadway construction projects indicates that existing rules are not sufficient to protect the public. PR 403.2 is designed to provide preventative measures to proactively reduce air quality impacts from these activities.

#### **Response to Comment 11-5**

See [Response to Comment 11-4](#). Relevant information about these complaints is contained in Appendix II of the staff report, and the need for the rule is described in Chapter 1. Some complaints continue to be under investigation, however sufficient information has been gathered about air quality impacts from this activity to justify the need for this proposed rule.

#### **Response to Comment 11-6**

See [Response to Comment 4-5](#). Also, it is not possible to definitively state which prior complaints regarding fugitive dust from LRP would have been resolved if PR 403.2 had been in effect at the time. This would be purely hypothetical as it is not possible to know what sources may have done differently or if they would have changed operating procedures at all. Going forward PR 403.2 is designed to require preemptive, enhanced dust controls, signage, notification and recordkeeping which if complied with would certainly reduce complaints.

#### **Response to Comment 11-7**

See [Response to Comments 4-6](#).

#### **Response to Comment 11-8**

PR 403.2 addresses a small but highly impactful subset of all potential dust generating activities subject to Rules 403, 403.1, 1157 and other dust control rules. See [Responses to Comments 4-12](#) and [4-15](#) for the necessity of better controlling by proactively minimizing fugitive dust impacts to near large roadway communities. PR 403.2 is designed to be compatible with these other rules, in terminology and control concepts, however it does not include overlapping, conflicting, or duplicative requirements.

#### **Response to Comment 11-9**

The USC Children's Health Study along with numerous other health studies in the published literature have clearly established the risk of increase health effects due to proximity to tailpipe emissions in near roadway communities. These studies explain the baseline impact that near roadway communities already experience disproportionately. Air quality impacts from large roadway projects would only add to this existing burden. Additional information on health effects of Nitrogen Oxides (NOx), Particulate Matter (PM and PM 2.5) and toxics from diesel particulate matter (DPM) can be found in Appendix I of the 2016 Air Quality Management Plan at <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/appendix-i.pdf?sfvrsn=14>.

Exposure to traffic-related pollution is linked to asthma and other respiratory symptoms, development of childhood asthma, and cardiovascular disease and death (SCAQMD AQMP, 2016). Perez et al. (2012) estimated that 8% of childhood asthma cases in Los Angeles County, California, could be partly attributed to living close to a major road (Perez et al., 2012). Living near a major road also has been associated with decreased lung function in adults with asthma (Balmes et al., 2009). No research has come forth that states that lower lung function near roadways is caused by wildfires and not automotive traffic. In the review article mentioned, Garcia et. al (2021) does not suggest that the lower lung function in children in the USC's Children's Health Study is due to wildfires. The review article states that few studies have evaluated wildfire impact on lung function in children and state that there is a need for more studies on the chronic effects of long-term and repeated exposure to wildfire smoke on child lung function level and lung function growth. Furthermore, it highlights the large number of studies that support a relation between early-life or long-term air pollution exposures and subsequent children's lung function level, with the most epidemiologic evidence for PM<sub>2.5</sub> and NO<sub>2</sub>. It does however state that associations with long-term exposures are more consistent for forced expiratory volume (FEV<sub>1</sub>) compared with for forced vital capacity (FVC), which may indicate greater impacts on airway caliber/airflow obstruction than overall lung size or growth. Forced expiratory volume (FEV) measures how much air a person can exhale during a forced breath. The amount of air exhaled may be measured during the first (FEV<sub>1</sub>), second (FEV<sub>2</sub>), and/or third seconds (FEV<sub>3</sub>) of the forced breath. Forced vital capacity (FVC) is the total amount of air exhaled during the FEV test. So given this information they state that long-term consequences of air pollution on reduced lung function development/growth/trajectories in childhood are not fully understood; And that studies need to investigate impacts of childhood exposures on lung function in adulthood as well as risk for later respiratory health, such as chronic obstructive pulmonary disease, emphysema, fibrosis, or pulmonary vascular disease. Furthermore, the review states that there is a need to further assess the toxicity of specific PM components and sources on lung function.

### **Response to Comment 11-10**

Chapter 3 in this draft staff report includes a socioeconomic analysis of the estimated incremental cost of compliance with PR 403.2. During the course of developing this rule, the potential costs of PR 403.2 have been reduced as additional flexibility has been added based on stakeholder feedback. The benefits of a rule like PR 403.2 are infeasible to quantify as it largely addresses nuisance fugitive dust that fluctuates in time, duration, scale, and location. Nonetheless, the need for the rule as described in Chapter 1 of the staff report justifies the proposed rule.

### **Response to Comment 11-11**

Personal vehicles still have the potential of generating entrained roadway fugitive dust if driven at high speeds with LRPs. The only requirement for personal/passenger vehicles is that they do not exceed 15 miles per hour while driving within the LRP. This is a standard established in several rules and in guidance for minimizing roadway fugitive dust.



**Response to Comment 11-12**

The definition for dust suppressants in the proposed rule is identical to the existing definition in Rule 403(c)(15). Since Rule 403 is applicable to all potential fugitive dust sources, the requirement for dust suppressants as defined is already in effect.

**Response to Comment 11-13**

See [Response to Comment 1-4](#).

**Response to Comment 11-14**

See [Response to Comment 1-5](#).

**Response to Comment 11-15**

Provisions of the PR 403.2 would be effective 6 months after the date of rule adoption and for new large roadway projects. Once a month DCS certification class should provide sufficient time for stakeholders to have the appropriate staff certified for upcoming LRPs. See also [Response to Comment 1-5](#).

Higher speed limits are associated with a higher safety risk or probability of accidents therefore limiting speed to 15 miles per hour should not be an issue. Stakeholders in the construction industry also agree that high vehicles speeds, especially on unpaved roads, is one of the largest factors potentially contributing to re-entrainment of road dust.

**Response to Comment 11-16**

See [Response to Comment 1-5](#). The current revised PR 403.2 definition for material piles is less stringent (greater than 8 feet height) than in the current Rule 403 definition for open storage piles (greater than 3 feet in height and a surface area not exceeding 150 square feet). Also, the PR 403.2 proposed limitation of piles to be greater than 25 feet apart has been removed. Material pile maximum height has been increased from 20 to 30 feet. Lastly, PR 403.2 has been revised to allow material piles in prohibition buffers that use a material pile cover (as defined in the rule), or other equivalent control methods to prevent fugitive dust as approved by the Executive Officer.

**Response to Comment 11-17**

Staff appreciates the feedback from the commenter.

**Response to Comment 11-18**

Staff appreciates AGC of California's concern regarding the estimated duration of a LRP. Rather than not providing this information at all, staff is seeking best efforts on estimating duration. There is no consequence from PR 403.2 provisions if the project runs over or under the anticipated duration.

**Response to Comment 11-19**

South Coast AQMD applauds and endorses any/all onsite studies, evaluations and safety plans implemented prior/during a LRP. Recordkeeping is at the core of many of South Coast AQMD

rules and regulations. However, in contrast to the preceding, daily recordkeeping represents an affirmation by persons responsible for a LRP that active daily dust mitigation measures are in fact being implemented (in compliance with rule requirements and potentially any other studies, evaluations and safety plans) to proactively prevent fugitive dust from LRP.

#### **Response to Comment 11-20**

South Coast AQMD is committed to working with stakeholders to address sensible workable solutions to issues regarding PR 403.2 that will not impact the intent of the rule in proactively preventing potential fugitive dust issues. As such the list of exemptions in PR 403.2(h) has been greatly expanded to include many unique situations. However, providing an exemption based on the duration of a roadway project is not feasible as duration may not in all cases correspond to the potential to cause fugitive dust. That is a project of shorter duration does not necessarily imply that the project is less likely to cause fugitive dust issues.

PR 403.2 has been changed so that only new LRPs, commencing 6 months after the date of PR 403.2 adoption will be subject to PR 403.2.

#### **Response to Comment 11-21**

South Coast AQMD appreciated input from AGC of California as an active participant in the development of PR 403.2 and is committed to working with stakeholders to address sensible workable solutions to issues with PR 403.2 that will not impact the intent of the rule in proactively preventing potential fugitive dust issues. Please see [Response to Comments 11-1](#) through [11-20](#) for specific details.



**Comment Letter 12**

Orange County Transportation Authority (OCTA)- March 16, 2022

Subject: Proposed Rule 403.2 – Fugitive Dust from Large Roadway Projects

Dear Mr. Bañuelos:

Thank you for providing the Orange County Transportation Authority (OCTA) the opportunity to comment on Proposed Rule (PR) 403.2 – Fugitive Dust from Large Roadway projects. The following comments are provided for your consideration:

- Existing Rule 403 has sufficiently reduced fugitive dust at large operation construction sites by requiring the implementation of the best available dust control measures.
  - For example, these measures include maintaining soil stability through site pre-watering prior to clearing and grubbing; stabilizing surface soil where support equipment and vehicles operate; and re-applying water to maintain soils in a damp condition and to ensure that visible emissions do not exceed 100 feet in any direction, etc.,
  - As standard operating procedures utilized during construction activities, OCTA has a robust public outreach process to inform the nearby residents of pending construction activities. This includes an estimated construction schedule on activities that could affect the residents. As construction activity timelines are confirmed, the OCTA outreach team further relays the information to the community and stakeholders, as appropriate.
  
- PR 403.2 states that it would “...prohibit aggregate operations, crushing and grinding operations and material piles to be located at a large roadway project that is within 100 feet of any property line...of an area of public exposure...or a sensitive receptor...”
  - Whenever feasible, OCTA recycles excavated materials on-site to minimize impacts to the environment. It is not clear what implications this PR 403.2 would have on agencies' desire to reuse materials on-site. For example, would an agency be required to export the materials at an off-site location, and then reimport it to the construction site, or forego reusing existing materials?

12-1

12-2

- Off-site aggregate operation and import of materials will be more costly and lead to additional truck trips that would increase vehicle miles traveled and emissions. In most urbanized areas, this would require the import of materials from remote areas resulting in significant diesel vehicular and greenhouse gas emissions.
- The majority of roadway projects are publicly funded. This PR would increase project costs and construction schedule delays, thereby increasing the cost to taxpayers and construction-related disruptions to the local communities.

**12-2**  
(cont.)

Throughout the development of this project, we encourage communication with OCTA on any matters discussed herein. If you have any questions or comments, please contact me at (714)-560-5907 or at [dphu@octa.net](mailto:dphu@octa.net).

Sincerely,



Dan Phu  
Manager, Environmental Programs

---

### **Response to Comment 12-1**

Thank you for taking the time to review the proposed preliminary draft materials and providing feedback. As explained in the working group meetings as well as in the preliminary staff report, our existing Rules do not specifically address dust control from LRPs that are conducted in close proximity at the near roadway communities. Existing Rule 403 applies broadly to sources with potential to generate fugitive dust. Proposed Rule 403.1 will supplement the existing regulatory measures of Rule 403 for large roadway projects and provide specific preemptive measures to prevent near roadway communities exposure to fugitive dust.

Notification to the public proposed in PR 403.2 would be to APEX and SR within 1,000 feet of large roadway project activities. Other outreach-related requirements aside from notification to the near roadway communities includes requirements for project signage, DCS and recordkeeping.

### **Response to Comment 12-2**

South Coast AQMD encourages recycling of excavated materials on site. The rule only prohibits aggregate crushing and grinding and material piles within 100 feet of an APEX or 250 feet of a SR. Material piles are allowed in the prohibition buffer if it is covered using a material pile cover, or other equivalent control methods to prevent fugitive dust as approved by the Executive Officer. Aggregate crushing and grinding is allowed if it is for recycling materials generated from the large

roadway project and uses a water misting dust control system that prevents visible emissions from extending 100 feet in length in any direction.

**Comment Letter 13**California Construction and Industrial Materials Association (CalCIMA)- March 16, 2022

Re: Comments regarding Proposed Rule 403.2 – ‘Fugitive Dust from Large Roadway Projects’

Dear Mr. Wu / Mr. Pourzand,

California Construction and Industrial Materials Association (CalCIMA) appreciates the opportunity to provide comment regarding the South Coast Air Quality Management District (South Coast AQMD) Proposed Rule 403.2 – ‘Fugitive Dust from Large Roadway Projects (PR 403.2)’.

CalCIMA is the statewide voice of the construction and industrial materials industry. With over 500 local plants and facilities throughout the state, producing aggregate, concrete, cement, asphalt, industrial minerals, and precast construction products, our members produce the materials that build our state’s infrastructure, including public roads, rail, and water projects; homes, schools and hospitals; assist in growing crops and feeding livestock; and play a key role in manufacturing consumer products as well, including roofing, paint, low-energy light bulbs, and battery technology for electric cars and windmills. The continued availability of our members’ materials is vital to California’s economy, as well as ensuring California meets its renewable energy, affordable housing, and infrastructure goals.

CalCIMA has expressed concerns, provided feedback, and submitted queries for South Coast AQMD staff response on multiple occasions over the last eight months of the rulemaking process to better understand the proposed rule dynamics. Although CalCIMA appreciated the opportunities to participate in the South Coast AQMD public workgroup meetings in addition to the South Coast AQMD / CalCIMA meetings regarding PR 403.2, there continues to be several unresolved questions and concerns, many of which are detailed within this letter. This is to say that although some of the questions within this letter have been responded to, several responses have lacked specificity, were not conclusive responses to the questions asked, or are still fully pending a response from South Coast AQMD’s rulemaking team. The lack of meaningful responses to our queries prior to the comment deadline creates significant concern related to transparency, and stakeholder equity/fairness related to this rulemaking process. This experience aligns with South Coast AQMD’s rulemaking team description of this process as a “moving target” which has made stakeholder engagement of this rule promulgation received as negligible and makes CalCIMA’s overarching goal to submit purposeful comments for meaningful consideration and discussion with South Coast AQMD’s rulemaking team unattainable.

Comments regarding the preliminary draft staff report ‘Proposed Rule 403.2 – Fugitive Dust from Large Roadway Projects (PR 403.2 Staff Report)’ are compiled below. To avoid redundancy, we kindly request that all comments made pursuant to the PR 403.2 Staff Report be carried over to PR 403.2 as applicable.

**Introduction**

The introduction states “these existing Rules [403, 403.1, 1157, 1466, and 402] do not specifically address dust control from large roadway projects that are conducted in close proximity to a sensitive receptor or area of public concern, which are already disproportionately impacted by diesel particulate matter and other air toxics, in addition to the associated increases in inhalation cancer risk (p. 1-1).” This statement incorrectly implies that although terms such as ‘areas of public exposure’ or ‘sensitive receptor’ were not coined phrases used during the timeframe Rules 403, 1157, and 1466 were drafted

**13-1****13-2****13-3**

and adopted, these rules do not prevent community exposure to fugitive dust. Context should be added to this section discussing specifically how and why this is or is not the case, and should clarify how Rule 403's prohibition of emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area that remains visible in the atmosphere beyond the property line of the emissions source does not protect 'areas of public exposure' or 'sensitive receptors' increased fugitive dust inhalation cancer risk if Rule 403 is complied with.

**13-3**  
(cont.)

#### Regulatory Background

Context should be included in this section to discuss why the purpose of PR 403.2 has shifted from addressing stockpiles to include additional activities such as crushing and grinding, earth moving, construction/demolition or disturbed surface areas, dust from construction vehicles. This shift in focus creates considerably more overlap with existing rules, with no data provided by South Coast AQMD staff to support this shift in purpose.

**13-4**

#### Roadway Project Activities

This section states that "PR 403.2 classifies roadway project activities and equipment into categories based on their potential to generate ambient particulate matter. These are the same activity categories found in the current version of Rule 403 (p. 1-3)." This is an inaccurate statement because PR 403.2 classification of "roadway project activities and equipment" is not a direct overlap of the activity categories found in the current version of Rule 403 making compliance with this prospective rule highly confusing. Activity categories for both rules are posted below. It should be noted that PR 403.2 addresses construction vehicles in two sections, 'Aggregate crushing and grinding operations' and 'Dust from construction vehicles'. Because each section of both rules has its own list of controls, having inconsistent grouping terms between PR 403.2 and Rule 403 make compliance perplexing.

Rule 403 activity categories from Table 1 that apply to all facilities:	
Backfilling	Earth-moving activities
Clearing and grubbing	Traffic areas for construction activities
Clearing forms	Trenching
Crushing	Truck loading
Cut and fill	Turf overseeding
Demolition – mechanical/manual	Unpaved roads / parking lots
Disturbed soil	Vacant land

**13-5**

Rule 403.2 activity categories from Table 1	
Aggregate crushing and grinding operations	Dust from construction vehicles
Earth moving activities; construction / demolition; or disturbed surface areas	Material piles

Additionally, South Coast AQMD staff have explained that the controls listed in PR 403.2 are carried over from Rule 403 Large Entity Operation controls. However, after detailed review of both rules, this explanation is fully unclear. It is recommended that the PR 403.2 staff report include a table or other language to substantiate this South Coast AQMD staff explanation. Attached please find a table 'Rule 403 Any Active Operation / Rule 403 Large Entity Operation / PR 4303.2 Language Comparison – For Discussion Purposes Only' that show CalCIMA's findings. We are open to receiving additional perspective related to our findings from South Coast AQMD staff.

**13-6**



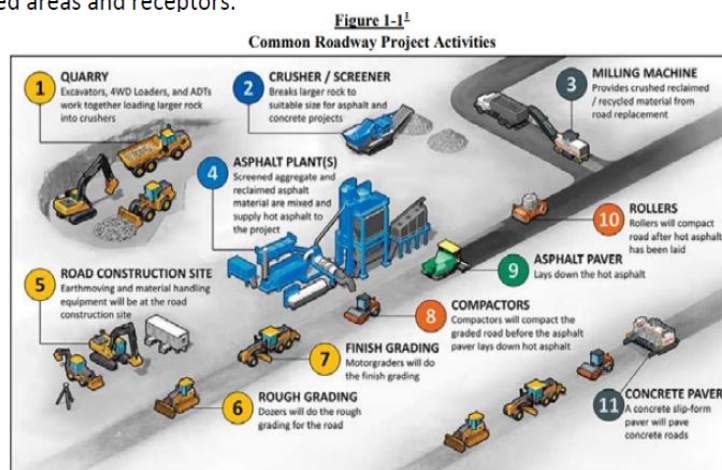
This section states “In addition, PR 403.2 would apply to potential dust entrainment caused by the movement of heavy- and light-duty construction vehicles at the large roadway project site and maintenance of material piles (p. 1-3).” This statement compares PR 403.2 to Rule 403, but should also include discussion comparing PR 403.2 to other rules that address material piles.

13-7

This section states in relation to Figure 1-1 ‘Common Roadway Project Activities’ that “Note that “Step 1 Quarry” and “Step 4 Asphalt Plants” would most likely not be part of the large roadway project for the purposes of PR 403.2 (unless it is immediately adjacent to the roadway project and associated solely with providing materials to the specific roadway project) (p. 1-3).”

CalCIMA members operate asphalt plants at large roadway projects to minimize California’s infrastructure’s carbon footprint. The construction materials that build roadway projects all depend on large quantities of construction aggregates transported to job sites by heavy-duty trucks. Reducing the distances these trucks travel is a key strategy in reducing greenhouse gases in addition to other tailpipe emissions. In order to more clearly and quantifiably understand how prohibiting asphalt plants used at roadway projects within 100 feet of an area of public exposure or sensitive receptor, it is recommended that modeling be included within this staff report to provide perspective. It is recommended that this modeling consider impacts to ‘areas of public exposure’ and ‘sensitive receptors’ that address both vehicular emissions and fugitive dust, how compliance with existing rules weigh in, and include discussion related to vehicular emissions and fugitive dust dissipation in correlation with specified distances to impacted areas and receptors.

13-8



Four of the six images used to describe general types of roadway project activities seems to show activities that are clearly in violation of Rule 403 which is not representative of the population of activities that occur within South Coast AQMD’s jurisdiction. These images seem to misleadingly show these activities in a discrepant light particularly because the staff report does not include quantifiable data related to Rule 403 enforcement issues, although this information has also been requested on multiple occasions. Posted below are the four photos and correlating control measures from Rule 403 that is applied to any active operation.

13-9

The staff report includes a photo of a portable recycling crusher and states “Figures 1-2 shows a typical portable crusher which is used to crush concrete/asphalt/stone demolition materials into smaller sized recycled aggregate for re-use (p. 1-4)”.

**Figure 1-2**  
**Portable Recycling Crusher**



**13-9**  
(cont.)

Rule 403 control measures (p. 403-13):

Source Category	Control Measure	Guidance
Crushing	04-1 Stabilize surface soils prior to operation of support equipment; and 04-2 Stabilize material after crushing.	<ul style="list-style-type: none"> <li>- Follow permit conditions for crushing equipment</li> <li>- Pre-water material prior to loading into crusher</li> <li>- Monitor crusher emissions opacity</li> <li>- Apply water to crushed material to prevent dust plumes</li> </ul>

Rule 403 requirement (p. 403-5 to 403-6):

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

(A) the dust remains visible in the atmosphere beyond the property line of the emission source

The staff report shows a portable crusher at a roadway project near a receptor in Figure 1-3 (p. 1-5). It is questionable whether this photo is being used to make the implication that a violation occurred with this pictured equipment that impacted an 'area of public exposure' or 'sensitive receptor'. Accordingly, context should be added to clarify whether a violation did or did not occur. If appropriate controls were used it would be helpful to understand if fugitive dust did or did not cross the property line.

**Figure 1-3**  
**Portable Crusher at Roadway Project Near a Receptor**



**13-10**



The staff report states that “Many large roadway projects seek to recycle all of the products of demolition, on-site at the project and reuse them as construction material (p. 1-5).” Context should include an environmental discussion regarding the benefits and risks related to this construction strategy.

**13-10**  
(cont.)

Figure 1-4 ‘Bridge Demolition Activity Over a Large Roadway (P. 1-6)’ seems to show the operation is out of compliance with current requirements. Language should be added to clarify whether this image is representative of how South Coast AQMD understands the majority of this type of activity to be carried out, or if this is a photo of a violation. The staff report states “Specifically, fugitive dust may be generated by the demolition of existing structures such as bridges, overpasses, sound and retaining walls (see Figure 1-4) (p. 1-5).” Because this staff report is focused on PR 403.2, it would be helpful to understand how this type of activity is currently proposed to be mitigated complementary of existing rule requirements.

**Figure 1-4**  
**Bridge Demolition Activity Over a Large Roadway**



**13-11**

Rule 403 Table 1 controls (p. 403-14):

<u>Source Category</u>	<u>Control Measure</u>	<u>Guidance</u>
Demolition – mechanical/manual	06-1 Stabilize wind erodible surfaces to reduce dust; and 06-2 Stabilize surface soil where support equipment and vehicles will operate; 06-3 Stabilize loose soil and demolition debris; and 06-4 Comply with AQMD Rule 1403 ‘Asbestos Demolition’.	- Apply water in sufficient quantities to prevent the generation of visible dust plumes.

The staff report shows “Figure 1-5 shows a variety of earth-moving equipment (for example, dozers and dump trucks) used in grading roadways (p.1-6).” Context should be added as to whether this activity is or isn’t in violation of existing rules.

**Figure 1-5**  
**Earth-Moving Activities and Associated Fugitive Dust**



**13-12**

<u>Source Category</u>	<u>Control Measure</u>	<u>Guidance</u>
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.	<ul style="list-style-type: none"> <li>- Grade each project phase separately, timed to coincide with construction phase</li> <li>- Upwind fencing can prevent material movement on site</li> <li>- Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes</li> </ul>

The staff report states “Movement of all construction vehicle types within the boundaries of a roadway project can cause road dust to be re-entrained, which then could potentially lead to off-site fugitive dust impacts to areas of public exposure and sensitive receptors. This includes both off-road (see Figure 1-6) and on-road vehicles operating on paved and unpaved roads at the job site. In addition to the off-road construction equipment, this would also include on-road trucks while they are shuttling around within the boundaries of the roadway project (p. 1-7).” Discussion should be included regarding existing rules that mitigate this specific type of fugitive dust and clarify that the equipment below is operating in violation of current rule requirements.

**13-13**

**Figure 1-6 Fugitive Dust from Off-Road Hauler**

Rule 403 p. 403-17

<u>Source Category</u>	<u>Control Measure</u>	<u>Guidance</u>
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

**13-13**  
(cont.)

Rule 403 p. 403-18

<u>Source Category</u>	<u>Control Measure</u>	<u>Guidance</u>
Unpaved roads/parking lots	19-1 Stabilize soils to meet the applicable performance standards; and 19-2 Limit vehicular travel to established unpaved roads (haul routes and unpaved parking lots.	- Restricting vehicular access to established unpaved travel paths and parking lots can reduce stabilization requirements

CalCIMA has offered to provide South Coast AQMD staff support related to participation in site visits that show how the abovementioned activities are more commonly carried out, and would look forward to still providing this support.

**13-14****Air Quality & Health Impacts**

South Coast AQMD examples of previous efforts on near-road exposures do not discuss large roadway projects and focus on mobile source tailpipe emissions from vehicles driving on roadways which is not covered in PR 403.2's purpose or applicability. Examples of previous South Coast AQMD efforts on near-road exposures are provided include 1) 2012 Air Quality Management Plan (Chapter 9 – Near Roadway Exposure and Ultrafine Particles), and 2) 2021 MATES V study continues to show that near-road environments have higher health risks than areas farther away. After review of these documents, it is unclear how they specifically support the purpose and development of PR 403.2 (p. 1-8 to 1-10).

**13-15**

- 1) The '2012 Air Quality Management Plan (Chapter 9 – Near Roadway Exposure and Ultrafine Particles) addresses potential health effects as caused by exposure for people living near major roadways to criteria pollutants and air toxics emitted from both gasoline and diesel vehicles and only addresses mobile source tailpipe emissions from vehicles driving on roadways. The conferred mitigation measures and emission control technologies do not discuss large roadway projects.
- 2) Regarding the MATES V study, mobile source tailpipe emissions from vehicles driving on roadways are not differentiated from emissions caused by large roadway projects.

**13-15**  
(cont.)

#### **Analysis of Hypothetical Large Roadway Project**

This section states "Table 1-1 shows the input data for a hypothetical large roadway project using standard inputs from the California Emissions Estimator Model (CAIEEMod) for a hypothetical 10-acre road construction large roadway project. Since controlled activities/equipment should not result in significant if any fugitive dust emissions, uncontrolled standard model inputs were used to simulate and assess impacts when fugitive dust is generated (p. 1-10)." And, goes on to state that "As such, distance-based requirements from an area of public exposure or sensitive receptor are a way to reduce the impacts of PM from large roadway projects on near roadway communities (p. 1-12)." In order to circumvent depicting a false impression of large roadway project impacts to communities, Figure 1-10 should clearly state within the title that the impacts showcased are from 'uncontrolled' emissions. Additionally, to provide a more 'real' and 'accurate' impression of the nature of large roadway project impacts, a model should be included that showcases 'controlled' emissions in correlation with existing rule requirements, and a separate model showcasing how PR 403.2 emission impacts would look.

**13-16**

#### **Fugitive Dust Complaints from Roadway Projects**







This section states: "In addition to the cumulative air quality impacts to receptors in close proximity to large roadway projects, South Coast AQMD regularly receives complaints from the public regarding fugitive dust from roadway projects. There have been over 78 roadway fugitive dust related complaints since 2018, and fugitive dust from roadway construction projects continues to be problematic for some larger projects. Specific details of these complaints and their disposition or on-going review are confidential, however, staff seeks to reduce such incidents with a more targeted rule (PR 403.2) that focuses on large roadway fugitive dust issues. Also, while the actual number fluctuates there are numerous roadway projects, on-going or planned, at any given time that could potentially result in fugitive dust complaints (p. 1-12)."

Although it has been requested, no information has been provided regarding how these complaints have been evaluated to validate merit, prospective emissions impacts, quantify how many projects or regions were impacted (this is to understand whether a majority of these complaints relate to a minority or majority of projects or regions), or provide clarity regarding whether any of these complaints resulted in a violation, and if a violation was issued, what existing rule(s) were violated. Initially, it has been explained by South Coast AQMD staff that provision of any further information related to the cited complaints would breach legal prohibitions, and later CalCIMA was advised to submit a public records request for this information although enough time to evaluate feedback was infeasible in relation to the rulemaking comment deadline. Nonetheless, it would be helpful to understand the specific legal prohibitions that would be breached given no personal or business specific information such as names regarding the complainers or possible violators has been requested or is required to relay this information.

**13-17**



Specifically, it is recommended that the staff report provide responses to the questions posted below

- |  |   |                     |
|--|---|---------------------|
| <p>1) Can information be provided regarding how the roadway construction/demolition dust related complaints have been evaluated to validate merit, prospective emissions impacts, quantify how many projects or regions were impacted, and provide clarity regarding whether any of these complaints resulted in a violation? 1b) During the timeframe the complaints were received, how many other unrelated complaints were also received? 1c) What large roadway projects and regions do these complaints encompass? 1d) How many of the complaints were repeat complaints?</p> |    | <p><b>13-18</b></p> |
| <p>2) If violations were issued, what existing rule(s) were violated? 2b) Has South Coast AQMD staff evaluated the effectiveness and shortfalls of existing rules based on these violations? 2c) If yes, what was the outcome? 2d) Do the violators meet the definition of a 'large operation' from Rule 403 'Fugitive Dust'? 2e) How many of the complaints would PR 403.2 capture and/or circumvent?</p>   |    | <p><b>13-19</b></p> |
| <p>3) What is South Coast AQMD's process for receiving, managing, and responding to complaints?</p>  |    | <p><b>13-20</b></p> |
| <p>4) What specific legal prohibitions are breached by responding to questions #1 and #2 if no personal or business specific information such as names regarding the complainers or possible violators is disclosed?</p>   |    | <p><b>13-21</b></p> |
| <p>5) How many violations occurred within the 100 foot threshold of an 'area of public exposure' or 'sensitive receptor'?</p> <p>This information will bring clarity whether PR 403.2 aims to increase requirements for a more significant majority of 'good actors' who operate in compliance with South Coast AQMD rules in order to address a minority of 'bad actors' who may or may not reform in response to receipt of South Coast AQMD violations.</p>   |  | <p><b>13-22</b></p> |
| <p>This section states that "In a recent search staff identified about 66 active/scheduled state and county road projects in the jurisdiction of South Coast AQMD (p. 1-12)." It would be helpful to understand how many of these 66 active/scheduled state and county road projects have received complaints, the nature of the prospective complaints, and what portion of these road projects would be applicable to PR 403.2 in addition to responses to the questions below:</p>  |   |                     |
| <p>6) How and what resources were used to identify the 66 projects?</p>  |  | <p><b>13-23</b></p> |
| <p>7) How many of the 66 active/scheduled state and county road projects have received complaints?</p>   |   |                     |
| <p>8) If complaints exist, what is the nature of these complaints and what portion of these road projects would be applicable to PR 403.2?</p>   |   |                     |

**Need for Proposed Rule 403.2 (p. 1-13)**

The construction materials industry supports environmental rules that protect air making California a healthy and beautiful place to live; however, rules should ensure measurable benefits and should not exert excessive, conflicting, and overlapping requirements. As PR 403.2 is currently written and has been justified by South Coast AQMD staff, meaningful quantitative metrics have not been presented to demonstrate the proposed rule is necessary or will further reduce emissions. As it has been explained by South Coast AQMD staff, PR 403.2 aims to reduce the number of complaints received by the general public. It is the public's right to submit complaints to South Coast AQMD pursuant to any *perceived* rule violation. However, a rule should not be proposed to reduce the number of complaints received by the South Coast AQMD but should address a gap in existing rules related to emissions. Complaints may support South Coast AQMD to identify prospective rule gaps that can be further investigated. Thus far related to PR 403.2, South Coast AQMD staff have not demonstrated a 'gap' exists within current rules.

13-24

Additionally, PR 403.2's purpose/applicability/requirements are redundant and overlapping of multiple existing South Coast AQMD rules making it unclear how/why PR 403.2 is necessary if existing South Coast AQMD rules are complied with, specifically Rule 403 'Fugitive Dust', Rule 1157 'PM10 Emission Reductions from Aggregate and Related Operations', and Rule 1466 'Control of Particulate Emissions from Soils with Toxic Air Contaminants'. It is recommended that discussion regarding the purpose of Rules 403, 1157, and 1466 be included specific to how do these rules not undertake PR 403.2's purpose to mitigate impacts to near road communities from large roadway project fugitive dust operations, activities, equipment and material piles.

**Public Process (p. 1-13 to 1-14)**

CalCIMA has strong concerns related to the current rulemaking timeline. Several pertinent questions have not been responded to prior to formal comment deadline making it questionable what information will be provided within the formal rulemaking package that will be release to South Coast AQMD's Governing Board and to the public.

13-25

**Proposed Rule 403.2**

Regarding pile discussion, additional context should be added regarding the What analytical or algorithmic context is used to determine PR 403.2's material pile establishment that exceeds a height of 3 feet and a total surface area of 150 square feet. And should address size classification of debris that can significantly vary, and address whether a finished material brought onsite such as a large amount of decorative stone, cinderblock, or woody landscaping material is covered.

13-26

**Controls (p. 2-9 to 2-10)**

Regarding controls, please reference the attachment 'Rule 403 Any Active Operation / Rule 403 Large Operation / PR 403.2 Language Comparison – *For Discussion Purposes Only*' that includes inquiries and discussion.

13-27

**Notification (p. 2-11 to 2-12)**

This section should include discussion regarding determination of “owner(s)/occupant(s)” if near an ‘area of public exposure’ or ‘sensitive receptor’. A residential apartment complex for example, would the responsible party be required to notify each individual tenant of that complex, or would contractors have to double check to ensure the management has notified each individual residential tenant?

13-28

**Compliance Costs**

The report states “Staff anticipates minimal cost incurred for compliance with the proposed rule. Compliance activities associated with costs include requirements for notification, signage, recordkeeping, and additional dust controls that have not already been implemented in accordance with existing South Coast AQMD rules and requirements for dust control. Cost details will be provided in the draft staff report (p. 3-1).” CalCIMA kindly requests additional information pursuant to these cost details to be disclosed as soon as possible for discussion.

13-29

**Comparative Analysis**

This section states “Under California Health and Safety Code Section 40727.2, South Coast AQMD is required to perform a comparative written analysis when adopting, amending, or repealing a rule or regulation. The comparative analysis is relative to existing federal requirements, existing or proposed South Coast AQMD rules and other air pollution control requirements and guidelines which are applicable to large roadway projects (p. 3-2 to 3-3).” CalCIMA suggests the Rule/Statute 403 be better addressed by differentiated controls for any active operation or for large entity operations to make clear how PR 403.2 aligns with existing rules. Please defer to the attachment ‘Rule 403 Any Active Operation / Rule 403 Large Operation / PR 403.2 Language Comparison – *For Discussion Purposes Only*’ which includes some addition suggestions for context to be added.

13-30

CalCIMA and its members believe rule makers should strive not to create duplicate rules on stakeholders, and review proposed rules to ensure that accountably, they do not create punitive circumstances for a majority of ‘good acting’ operations as a result rule of limited enforcement challenges on a minority of ‘bad acting’ operations. Please contact me with any questions, concerns, or to further discuss PR 403.2 at (951) 941-7981 or at [sseivright@calcima.org](mailto:sseivright@calcima.org).

13-31

Sincerely,



Suzanne Seivright-Sutherland  
Director of Regional Governmental Affairs and Grassroots Operations

Attachment:

1. Rule 403 Any Active Operation / Rule 403 Large Operation / PR 403.2 Language Comparison – *For Discussion Purposes Only*.



Rule component	Rule 403 Any Active Operation / Rule 403 Large Entity Operation / PR 403.2 Language Comparison --For Discussion Purposes Only		
	PR 403.2 - Fugitive Dust from Large Roadway Projects	Rule 403 - Fugitive Dust, Any Active Operation	Rule 403 - Fugitive Dust, Large Entity Operation
Purpose	Mitigate impacts to near road communities from large roadway project fugitive dust operations, activities, equipment, and material piles	Reduce amount of particulate matter entrained in the ambient air by preventing, reducing, or mitigating fugitive dust	
Applicability	Large roadway projects with potential dust impacts on near road communities within 500 feet of an area of public exposure or 1000 feet of a sensitive receptor	Any activity or man-made condition capable of generating fugitive dust	
Requirements	Within 100 feet of area of public exposure or sensitive receptor prohibits aggregate crushing and grinding operations or maintenance of pile at a large roadway project		
	Within 100-500 feet of an area of public exposure or 100-1000 feet of a sensitive receptor prohibits aggregate crushing and grinding operations, construction / demolition activities, earth-moving or any other mechanical activity that results in disturbed surface areas, movement of construction vehicles over paved and unpaved roads, or maintenance of material piles exceeding 3 feet and a total surface area of 150 feet unless:		
		No emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area that remains visible in atmosphere beyond the property line of the emissions source, or exceeds 20% opacity if a result of movement of a motorized vehicle; some leniency when wind gusts exceed 25 mph	
	Dust control supervisor designated		Large entity operations will identify a dust control supervisor
			Large entity operations will submit a dust control plan to be approved by AQMD
	Control measures listed below are used:		
	Aggregate crushing and grinding operations: 1) Stabilize surfaces prior to operation of equipment (including construction vehicles such as bulldozers, cranes or backhoes) and prior to any crushing and grinding, and 2) Stabilize aggregate material piles after crushing and grinding by applying a dust suppressant to prevent dust plumes from extending farther than 100 feet as measured from the nearest edge or perimeter of the operation/material pile or equipment location within the large roadway project.	Crushing: 1) Stabilize surface soils prior to operation of support equipment, 2) Stabilize material after crushing (Table 1)	
	Comments: 1) Explain why construction vehicles are discussed in this control section and in the 'Dust from Construction Vehicles' control section and clarify why this would not be confusing in relation to compliance since construction vehicles would have controls prescribed in three sections between Rule 403.2 and Rule 403 pursuant to any active operation. 2) Explain how these controls go beyond Rule 403 'any active operation' controls. 3) Explain the difference between 'aggregate crushing and grinding operations' in PR 403.2 and 'crushing' in Rule 403.	Screening: 1) Pre-water material prior to screening, 2) Limit fugitive dust emissions to opacity and plume length standards, 3) Stabilize material immediately after screening (Table 1)	

	<p>Earth moving activities, construction/demo, or disturbed surface area: Apply dust suppressant as necessary to maintain stabilized surface and to prevent visible emissions from extending farther than 100 feet as measured from the nearest edge or perimeter of the operation/material pile or equipment location within the large roadway project.</p> <p>Comments: 1) Explain why this is listed as a control when Rule 403 'Any Active Operation' goes well beyond in relation to controls that are currently required.</p>	<p>No active operation with a disturbed surface area of 5+ acres or with a daily report or export of 100 cubic yards or more of bulk material without utilizing at least one of the measures at each vehicle egress from the site to a paved public road: 1) Install a pad consisting of washed gravel w/ minimum 1" size maintained in clean condition to a minimum depth of 6" and extending a minimum of 30' wide and 50' long. 2) Pave the surface extending at least 100' and 20' wide. 3) Utilize a wheel shaker/wheel spreading device consisting of raised dividers at least 24' long and 10' wide to remove bulk material from tires and vehicle undercarriages before vehicles exit the site, 4) Utilize a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the site</p> <p>Demolition - mechanical/manual controls: 1) stabilize wind erodible surfaces to reduce dust, 2) Stabilize surface soil where support equipment and vehicles will operate, 3) Stabilize loose soil and demolition debris, 4) Comply with AQMD Rule 1403</p> <p>Disturbed soil: 1) Stabilize disturbed soil throughout the construction site, 2) Stabilize disturbed soil between structures (Table 1)</p> <p>Earth moving activities: 1) Pre-apply water to depth of proposed cuts, 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, 3) Stabilize soils once earth-moving activities are complete (Table 1)</p> <p>Road shoulder maintenance: 1) Apply water to unpaved shoulders prior to clearing, 2) Apply chemical dust suppressants and/or washed gravel to maintain a stabilized surface after completing road shoulder maintenance (Table 1)</p> <p>Unpaved roads / parking lots: 1) Stabilize soils to meet the applicable performance standards, 2) Limit vehicular travel to established unpaved roads (haul routes) and unpaved parking lots.</p> <p>Large entity operation earth moving (except construction cutting and filling areas, and mining operations): 1) Maintain soil moisture content at a minimum of 12%, two soil moisture evaluations must be conducted during the first 3 hours of active operations during a calendar day, and two such evaluations each subsequent four-hour period of active operations, 2) 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 (Table 2)</p> <p>Large entity operation earth moving construction fill areas: 1) Maintain soil moisture content at a minimum of 12%, complete compaction process as expeditiously as possible after achieving at least 70% 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)</p> <p>Large entity operation earth moving - construction cut areas and mining operation: 1) 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 (Table 2)</p>
--	---	---

		Large entity operation disturbed surface areas (except completed grading areas): 1) 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% of the unstabilized area (Table 2)
		Large entity operation disturbed surface areas - completed grading areas: 1) Apply chemical stabilizers within five working days of grading completion, OR 2) use Table 3 methods (Table 2)
		Large entity operation inactive disturbed surface areas: 1) Apply water to at least 80% 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 2) Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface, OR 3) Establish a vegetative ground cover within 21 days after active operations have ceased, OR 4) Utilize any combination of control actions listed (Table 2)
<p>Dust from construction vehicles (implement all controls): 1) Apply dust suppressant as necessary to prevent visible emissions during vehicle operation, and 2) Limit vehicle speed to 15 mph on roadways, and 3) Cover frequently traveled unpaved roads and unpaved parking areas w/ low silt content material (i.e., asphalt, concrete, recycled road base, or gravel to a minimum depth of four inches), and 4) Treat unpaved roads w/ dust suppressant, mulch, or other cover to maintain a stabilized surface, and 5) Remove dust from paved roadways and construction vehicles as required to prevent track out or entrained dust by washing, vacuum sweeping, broom sweeping or any other mechanical means that does not generate fugitive dust.</p> <p>Comments: 1) Explain why the Rule 403 Large Entity control to limit vehicle speed is required and the other Rule 403 Large Entity control options pursuant to unpaved roads are omitted. 2) Explain why covering frequently traveled roads and unpaved parking areas with low silt content material and treating unpaved roads w/ dust suppressant, mulch, or other cover go beyond Rule 403 Any Active Operation controls that require no track-out to extend 25 feet or more and shall be removed at the conclusion of each workday or evening shift, and Rule 403 Any Active Operation controls for construction activities. 3) Explain the difference between PR 403.2 control to apply dust suppressant as necessary and Rule 403 Any Active Operation control for traffic areas for construction activities to stabilize all off-road traffic and parking areas.</p>	No track-out to extend 25 feet or more and shall be removed at the conclusion of each workday or evening shift	
	Importing/exporting of bulk materials: 1) Stabilize material while loading to reduce fugitive dust emissions, 2) Maintain at least six inches of freeboard on haul vehicles, 3) Stabilize material while transporting to reduce fugitive dust emission, 4) Stabilize material while unloading to reduce fugitive dust emissions, 5) comply with Vehicle Code Section 2314 (Table 1)	
	Traffic areas for construction activities: 1) stabilize all off-road traffic and parking areas, 2) Stabilize all haul routes, 3) Direct construction traffic over established haul routes (Table 1)	
	Trenching: 1) Stabilize surface soils where trencher or excavator and support equipment will operate, 3) Stabilize soils at the completion of trenching activities (Table 1)	
	Truck loading: 1) Pre-water material prior to loading, 2) Ensure that freeboard exceeds six inches (CVC 23114) (Table 1)	
		Large entity operation unpaved roads: 1) Water all roads used for any vehicular traffic at least once per every two hours of active operations, OR 2) Water all roads used for any vehicular traffic once daily and restrict vehicle speeds to 15 mph, OR 3) Apply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface (Table 2)

	Material piles (one or more control measures, as needed, to ensure fugitive dust control): 1) Maintain below a maximum height of 20 feet; and 2) Apply dust suppressant as necessary but no less than twice per hour to maintain a stabilized surface and prevent visible emissions from extending farther than 100 feet as measured from the nearest edge or perimeter of the operation/ material pile or equipment location; or 3) Install coverings, or 4) Install an enclosure within a minimum of three sides (the open side of which will face farthest from potentially impacted areas) and walls with a maximum porosity of 50 percent and minimum height equal to the highest point of the material pile	Stockpiles/bulk material handling: 1) Stabilize stockpiled materials, 2) Stockpiles within 200 yards of off-site occupied buildings must not be greater than eight feet in height; or must have a road laded to the top to allow water truck access or must have an operational water irrigation system that is capable of complete stockpile coverage (Table 1)	
		Large entity operation open storage piles: 1) Apply chemical stabilizers, OR 2) Apply water to at least 80% of the surface area of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust, OR 3) Install temporary coverings, OR 4) Install a three-sided enclosure with walls with no more than 50% porosity which extend, at a minimum, to the top of the pile (only for aggregate-related plants for cement manufacturing facilities) (Table 2)	
		PM10 level monitoring in coordination with wind	
		Backfilling controls (Table 1)	
		Clearing and grubbing controls (Table 1)	
		Clearing forms controls (Table 1)	
		Cut and fill controls (Table 1)	
		Landscaping controls (Table 1)	
		Staging area controls (Table 1)	
		Turf overseeding controls (Table 1)	
		Vacant lot controls (Table 1)	
Signage			
	1) Signage must be located within 50 feet of each project site entrance; 2) A maximum of four signs are required per large roadway project; 3) One sign is sufficient for multiple site entrances located within 300 yards of each other; 4) Signage shall be 1 inch A/C laminated plywood board or similar strength and durability material with dimensions of 48 inches by 96 inches. 5) Sign background must contrast with lettering, typically black text with white background; 6) The lower edge of the sign board must be a minimum of 6 feet and a maximum of 7 feet above grade; 7) The telephone listed for the contact must be a local or a toll-free number and shall be accessible 24 hours per day; 8) At a minimum, each sign shall include the following information, with text height as shown on the right side of the sign template below, and an accessible 24 hours per day local or toll-free phone number for contacting the large roadway project responsible person(s) or dust control supervisor regarding fugitive dust issues		Large entity operations will install and maintain project signage with project contact signage meeting 'Rule 403 Implementation Handbook' (p 3-4) - Within 50 feet of each public site entrance and other frequently-used work entrances, no more than 4 signs are required per site/facility. One sign is sufficient for multiple site entrances located within 300 yards of each other.

	Notification		
	Requirements for areas of public exposure and sensitive receptors: At least 120 hours prior to commencement of activities for a large roadway project the dust control supervisor or other responsible person shall notify the owner(s) or occupant(s) of occupied buildings or open space / recreational facility management as applicable, in writing and include 1) Large roadway project dust control supervisor contact information including contact name, company/agency name, address, telephone number, and email address; and 2) Est. duration of project with commencement and completion dates, 3) Location of the large roadway project including address and/or coordinates and a map depicting the location of the site		Large entity operations submit a Large Operation Notification to the Executive Officer within 7 days of qualifying as a large operation including names, address(es), phone numbers of the persons responsible for the submittal, a description of the operation(s) including map for depicting the location of the site and inform the Executive Officer in writing after the site no longer qualifies as a large operation
	South Coast AQMD: At least 120 hours prior to establishing a large roadway project the dust control supervisor or other responsible person shall notify the Executive Officer in writing and include 1) Large roadway project contact information including name, company/agency name, address, telephone number, and email address of all responsible persons including the dust control supervisor, 2) Location of project, 3) Estimated duration of project, 4) List of permitted rock crushing and/or grinding equipment and related un-permitted, powered equipment w/ potential to generate dust, including but not limited to CARB PERP equipment		
	Comments: 1) Explain why this control exceeds Rule 403 Large Entity controls. 2) Explain the specific shortcomings of the Rule 403 Large Entity controls and include discussion as to proportionately, how these shortcomings quantifiably relate to South Coast AQMD validated complaints perhaps via percentage or number of violations. 3) Explain why permitted equipment is included in context of violations or other documented adverse experiences that resulted in fugitive dust exceeding a property line.		
Recordkeeping			
	The dust control supervisor shall be responsible for maintaining daily records of the required control measures documenting: 1) Each type of operation/activity conducted and the associated permitted and unpermitted powered equipment w/ potential to generate dust, 2) The specific dust control measures taken for each activity or equipment, and 3) The frequency of dust control measures.		Large entity operations will maintain daily records to document the specific dust control actions taken
Exemptions	Does not apply to emergency situations; essential service utilities; or material resulting from linear trenching for natural gas, power, sewer, and water projects on large roadways	Dairies, confined animal facilities, agricultural crop operations, operations conducted during an emergency, operations conducted by essential service utilities during outages, weed abatement operations, and sandblasting operations. Selected exemptions provided for motion picture, television and video production activities.	

### Response to Comment 13-1

Thank you for taking the time to review the proposed preliminary draft materials and providing feedback. The “moving target” statement by staff refers to the fact that over the course of four working group meetings and a public workshop meeting, staff has collaborated with stakeholders on their input to develop the most reasonable and effective provisions for PR 403.2. The focus and scope of the rule has been narrowed, initially beginning with a consideration of all projects to the current focus only on LRPs. Prohibitions regarding crushing/grinding and material piles have been modified to be less restrictive and exemptions for a large number of niche activities have been increased (including the exclusion of berms and trenching unrelated to a LRPs). Staff continues to work diligently to refine the current rule based on stakeholder inputs and concerns.

### Response to Comment 13-2

Staff has and will continue to review suggestions and where feasible will make requested changes that do not impact the purpose of PR 403.2.

### Response to Comment 13-3

See [Comment to Response to Comment 4-2](#). Furthermore, Rule 403 and other applicable rule provisions are preventative of potential fugitive dust if complied with and carried out without any deviation from the requirements. This may however not always be the case. PR 403.2 consists of enhanced best practices proactive measures that will decrease the likelihood of fugitive dust from LRPs and also provides, via signage and noticing a means for the rapid resolution of any fugitive dust incidents.

#### **Response to Comment 13-4**

PR 403.2 control provisions now focus only on additional measures for fugitive dust from “material piles” and dust from construction roadways. It is correct that there was some overlap/redundancy with some requirements being reiterated in PR 403.2 that were already covered in Rule 403. However, the intent was to address comments from stakeholders who wished to have a PR 403.2 that would encapsulate all requirements in the rule – in one place. Staff agrees that while encapsulating all requirements would be helpful, only provisions that go beyond the requirements of Rule 403 (and are not therefore duplicative of provisions in other rules) should be set forth in PR 403.2 to avoid any confusion. Changes have been made to remove duplicative provisions of PR 403.2, for example by removing all control measures in PR 403.2 except for material piles and roadway dust where the additional control strategies for Large Operations in Rule 403 have been adopted for all PR 403.2 LRPs.

#### **Response to Comment 13-5**

See [Response to Comment 13-3](#). Activities for which control measures are already required pursuant to Rule 403 and are duplicative have been removed from PR 403.2. Therefore, the number of activities/equipment that would be subject to PR 403.2 is reduced from earlier drafts.

#### **Response to Comment 13-6**

See [Response to Comment 13-4](#).

#### **Response to Comment 13-7**

Rule 403 covers situations where road dust is re-entrained by vehicles at LRPs. The control measure in PR 403.2, limiting vehicle speeds to 15 mph, is taken from Rule 403 Large Operations requirements. Material piles under PR 403.2 have been redefined to be those that are greater than 8 feet in height. This height aligns with the BACMs in 403 and 1157 which distinguish material piles above/below this height and requirements if located within 100 yards of a receptor.

#### **Response to Comment 13-8**

The note regarding “off-site” aggregate plants being exempt from the rule is a clarification that only operations/activities immediately next to and serving specifically the associated LRP would be subject to PR 403.2. It is difficult to estimate the impact of additional truck trips, if any, that might be required due to PR 403.2 since recycled material may be brought onto the jobsite from another project. If there is an offsite aggregate plant option along the route from the demo material to the LRP where the material is intended for use, then there would be no additional impact. If not, regardless of whether the demolition material is transported to or alternatively generated at the LRP, PR 403.2 only requires that aggregate crushing/grinding operations/equipment be sited 100 feet (for APEX) and 250 feet (SR) with fugitive dust controls already required pursuant to Rule 403. In addition, aggregate crushing and grinding equipment can be done within 100 feet of APEX or 250 feet of a SR if the material for crushing and grinding is generated from the large roadway project and uses a water misting dust control system to prevent visible emissions from extending 100 feet in length in any direction. Alternatively, an LRP operation/activity may be sited more than 1,000 from an APEX or SR and would not be subject to PR 403.2 at all. See the case study in Chapter 3 for a discussion of an actual LRP with several potential equipment sites which are greater

than the required distances in PR 403.2. In addition, a conceptual model for a LRP scenario is provided in Figure 1-10 of this staff report with a discussion of the associated assumptions and outcomes for the model. The model shows that increased PM10 (fugitive dust) decreases as the distance from a LRP activity to a potential receptor increases and would be negligible at a distance of about 1,000 feet and beyond. As such the incremental mileage of vehicles moving/siting piles at or near LRPs is negligible. There is likely more of an impact from trucks hauling demolition material for recycling from remote locations to a LRP for crushing/grinding as opposed to demolishing and crushing and grinding at the same LRP. Staff has made many attempts to stakeholders to receive pertinent, quantifiable and verifiable information related to LRPs to better estimate the impacts of PR 403.2. Despite receiving sufficient data needed, staff has made a best effort attempt with published information available on agency websites to estimate both the potential emissions and cost impacts of relocating and covering material piles. See Chapter 3 and Appendix IX for details. It should also be noted that material piles are allowed in prohibition buffers if covered with material pile covers, or other equivalent methods to prevent fugitive dust as approved by the Executive Officer. This allowance could be used instead of relocating piles.

#### **Response to Comment 13-9**

Staff had been previously asked to provide actual images of activities and equipment specifically germane to LRPs and specifically demonstrating the need for PR 403.2. While staff has observed activities that would be a violation of PR 403.2, staff is not implying that these images are “representative of the population of activities that occur within the South Coast AQMD”. Staff will clarify the issue in this staff report. The pictures were chosen for their detail in illustrating the typical types of activities and equipment at LRPs and that would be covered under PR 403.2. The crushing category has been removed from PR 403.2 controls since as stated correctly this activity/equipment is already covered under PR 403. The image in Figure 1-2 is merely used to illustrate portable crushing equipment. Staff has replaced several of the pictures with ones provided by the commenter.

#### **Response to Comment 13-10**

Figure 1-3 as referenced by the commenter has been removed from the staff report. For benefits and risks to construction strategy, please see [Response to Comment 13-8](#).

#### **Response to Comment 13-11**

This figure has been removed from the staff report.

#### **Response to Comment 13-12**

This figure has been removed from the staff report.

#### **Response to Comment 13-13**

This figure has been removed from the staff report.



**Response to Comment 13-14**

South Coast AQMD appreciates the offer from CalCIMA to tour some typical roadway project sites. Staff is familiar with typical activities at roadway projects. In addition to consulting with our compliance field staff on various aspects of roadway projects, there is a 4.4-mile roadway rehabilitation project between the 57/60 freeways and the Orange County line. Another project is underway on the 60 freeway near the Ontario convention center/airport areas. Both these projects showcase many roadway project activities. At the present time due to the South Coast AQMD “Stay-At-Home” directive and the continued pressure on resources in general that the Covid-19 pandemic has placed on staff it would not be feasible. However, we look forward to a time when that might be possible.

**Response to Comment 13-15**

See [Response to Comments 4-2 and 4-12](#). MATES and AQMP data show that near roadway communities are already disproportionately impacted by air pollution from mobile sources. Any other source of air pollution, such as activities at a LRP, cumulatively increases the overall air pollution and health impact to nearby receptors for which PR 403.2 seeks to prevent.

**Response to Comment 13-16**

Uncontrolled emissions were used to represent fugitive dust conditions and the impacts of such an air pollution scenario in near road communities that are already overburdened with air quality concerns. Controlled emissions would indicate a scenario in which all equipment is functioning optimally and there is no fugitive dust in which no dust rules would be required. Appendix I of the staff report includes a note that emission totals would vary based on the implementation of dust controls applied.

**Response to Comment 13-17**

See [Responses to Comments 4-3 through 4-8](#).

**Response to Comment 13-18**

See [Responses to Comments 4-2 and 4-3](#).

**Response to Comment 13-19**

See [Response to Comment 4-2, 4-3, and 4-5](#).

**Response to Comment 13-20**

See [Response to Comment 4-6](#).

**Response to Comment 13-21**

See [Responses to Comments 4-3 through 4-8](#).

**Response to Comment 13-22**

See [Responses to Comments 4-3 through 4-8](#).

**Response to Comment 13-23**

See [Responses to Comments 4-3](#) through [4-8](#).

**Response to Comment 13-24**

See [Response to Comment 13-4](#).

**Response to Comment 13-25**

Staff has and continues to meet with multiple stakeholder groups to solicit and incorporate pertinent modifications to PR 403.2. Committee Members at the 3/18/2022 Stationary Source Committee Meeting delayed proposal of PR 403.2 to the June 2022 Governing Board meeting in order to allow staff to address remaining issues and changes to the rule language and staff report.

**Response to Comment 13-26**

See Response to Comments 4-22 and 4-23.

**Response to Comment 13-27**

The scope of this previously released document has been greatly reduced. Only two control measures applicable to Rule 403 Large Operations, specifically material piles and dust from construction roads are applicable to PR 403.2 LRP activities and equipment.

**Response to Comment 13-28**

See [Response to Comment 4-29](#).

**Response to Comment 13-29**

See Chapter 3 for potential cost impacts from relocating material piles in addition to the Socioeconomic Assessment.

**Response to Comment 13-30**

Staff has conducted a detailed comparative analysis as required pursuant to California Health and Safety Code Section 40727.2. Staff has determined as presented in this report that PR 403.2 would not conflict with existing Rules of South Coast AQMD regulating particulate matter, but in some instances would require more stringent limits than would be otherwise required under existing rules. PR 403.2 provides more stringent requirements for large roadway projects and prohibits rule-specific activities to be conducted in close proximity to sensitive receptors that is not currently prohibited by existing rules. As such the proposed rule is not redundant or duplicative. Staff has analyzed differentiated controls for active operations in other dust rules relative to PR 403.2, and the result is the remaining control measures listed in Table 1 of the rule under paragraph (e)(2). These are controls are currently only required for Large Operations in Rule 403, but are proposed to be extended to large roadway project activities for material piles and dust from construction roads.

**[Response to Comment 13-31](#)**

See [Response to Comment 4-31](#).

**Comment Letter 14**Construction Industry Air Quality Coalition (CIAQC)- March 16, 2022

Re: Proposed Rule 403.2 Fugitive Dust From Large Roadway Projects

The Construction Industry Air Quality Coalition (CIAQC) would like to submit the following comments about February 18th draft of Proposed rule 403.2 and the accompanying draft staff report. We appreciate the time the staff has spent with members of our industry to understand the impacts of this rule and the practices of the industry when construction and maintaining freeway projects is the South Coast Air Quality Management District.

All of the stakeholders are concerned that this matter is being “rushed” by a May deadline to get to the Board whether or not the rule is finished. We have made considerable progress since the initial concept last summer. We hope you would take a few more weeks if necessary to get this right rather than to get it done, but incomplete.

**14-1**

We believe that rule 403 already covers all of the activities of concern in rule 403.2 and would be better managed if the proposed actions were included as a part of rule 403 rather than a stand-alone rule. Our industry goal is to achieve rules and regulations that are easily understandable and can be implemented in the field by workers who are trying to maintain a construction schedule while complying with a myriad of rules from OSHA, AQMD, Regional Water Quality Control and the project owner, to name a few. The simpler we make it the more likely it will be properly implemented and achieve the district’s goals.

Storing materials on-site for use or reuse is an important way to reduce emissions from hauling-away and returning the items to the site and meets the societal goal of maximizing recycling when providing much needed infrastructure.

CIAQC has been working closely with CALCIMA, CALAPA and Caltrans to provide comprehensive comments on the variety of activities that take place on a large roadway project to assist AQMD staff in better focusing the rule. We support the comments submitted by each of those organizations.

**14-2**

We appreciate that the staff has already aligned the definitions and terminology in 403.2 to be consistent with those in rule 403, 403.1, 1157, and 1466. This will avoid confusion and violations based on dueling rule language.

We believe that the current definition of a large roadway project defined as a roadway exceeding 100,000 AADT (Average Annual Daily Traffic) vehicle count is too broad and will include many arterial highways where it would be impossible to maintain the distance requirements in the rule. The definition needs to be narrowed to include right-of-way width, number of lanes, or even in much higher AADT count. Maybe a definition used by Caltrans for their own projects would be more appropriate.

**14-3**

We are also concerned that routine maintenance activities will be limited by this rule and important safety items such as cold-plaining, asphalt replacement/recycling, and overnight pavement replacement should be exempted from the rule. These activities are already conducted with district permitted equipment. We would recommend that any project with less than a 30-day completion be exempted from the rule. These activities do not involve the creation of storage piles which could be the source of fugitive dust targeted by this rule. They are also typically performed during limited hours, on the roadway surface itself and the total project may only last a few days.

14-4

Limiting storage piles to three feet is unrealistic. The material involved is usually large and it is easier to control dust from a large pile rather than one that is short and spread out over a large area. In fact, in most cases, the area for these storage piles is limited and a higher pile is the only way to accommodate all the material on one site. Proper dust controls will control dust from a large pile just as effectively as from a small one. The smaller the surface area, the lower the opportunity for dust creation.

14-5

We are still anxious to see the complaint data that is being used as the basis for this rule. While 70+ complaints in a three-year period may seem like a lot there are hundreds of roadway projects underway in the South Coast Air Basin. Further we don't know if all these complaints were about seventy different projects or 70 complaints about one project. That information would be very helpful in crafting a rule that addresses a real problem if there really is such a problem.

14-6

The notification requirements for adjacent owners and tenants are still too vague. More detail on the method of notification would be helpful. Is a flyer adequate. Can it be delivered by hand, mail or text message? Are tenants sufficient? What about an absentee landlord? Are visitors included in the case of a hotel, park, or hospital? We want to avoid a long subjective argument about whether or not a notice was sufficient and complete.

14-7

Finally, we are aware that the staff is developing changes to the rule, and we are limited in our ability to comment since no language has been proposed at this point. We will continue to work with the staff on refining the proposal to make it as effective as possible. We appreciate the continued communication and look forward to seeing the next draft of the rule.

14-8

Sincerely,



Michael W. Lewis,  
Senior Vice President

**Response to Comment 14-1**

Thank you for taking the time to review the proposed preliminary draft materials and providing feedback. South Coast AQMD Stationary Source Committee approved a 1-month delay in the rule moving the Public Hearing from May 6 to June 3, 2020 to allow staff to provide revised rule language and receive input from stakeholders. See also [Response to Comment 1-2](#).

We appreciate stakeholder interaction and constructive input so as to craft the best rule. In response to stakeholder input staff has aligned existing rule definitions with those in PR 403.2 to the extent practical, and nominal adjustments for applicability to PR 403.2.

**Response to Comment 14-2**

See [Response to Comment 12-2](#).

**Response to Comment 14-3**

See [Response to Comment 1-4](#).

**Response to Comment 14-4**

PR 403.2 exempts minor maintenance activities in subdivision (h). Cold planing is a demolition/construction activity which is not prohibited at any distance to a receptor, with applicable controls implemented. Also see [Response to Comment 7-1](#).

**Response to Comment 14-5**

See [Response to Comment 1-3](#).

**Response to Comment 14-6**

See [Response to Comment 11-5](#).

**Response to Comment 14-7**

Staff has provided clarification in the rule and staff report. Non-owner occupied classified properties (e.g., schools, hotels, office buildings, and recreational venues) where there is a management entity require notice to only the management. That is one communication (flyer/mailed/email) is sufficient. Properties designated as Residential will require notification to each resident/tenant/owner. Most forms of notification are acceptable with proof of service. A sample notification form is provided in Appendix VI.

**Response to Comment 14-8**

Staff appreciates CIAQC input and will continued to solicit input in group and one-on-one meeting even after the public workshop meeting.



**Comment Letter 15**

California Department of Transportation (Caltrans)- March 16, 2022

Subject: Comment Letter – Proposed Rule 403.2, “Fugitive Dust from Large Roadway Projects”

Dear Mr. Wu and Mr. Pourzand:

The California Department of Transportation (Caltrans) is appreciative of our ongoing engagement with the South Coast Air Quality Management District (SCAQMD) concerning proposed rule 403.2. As you know, our collaboration with you led to Caltrans developing pilot project dust control specifications that include many of the requirements of proposed rule 403.2. That collaboration also led to mutually beneficial revisions that have been reflected in the February 18th version of the proposed rule.

On February 23, 2022, Caltrans issued the attached addendum for Contract 08-1M1104, a pilot project located on I-215 in the City of San Bernardino. This addendum reflects our commitment to partner with SCAQMD and to proactively evaluate the effectiveness of enhanced dust control requirements on Caltrans projects. As this project is also located in part within the Air Protection Community (AB 617) community boundary of “San Bernardino, Muscoy,” the addendum also requires the Contractor to use Tier 4 off-road diesel equipment during construction, which will reduce oxides of nitrogen (NOx) and diesel particulate matter (DPM) emissions when compared to the use of lower tiered off-road diesel equipment.

15-1

We look forward to continuing engagement with you on pilot projects and Caltrans’ concerns with the proposed rule. We recommend the following modifications to the proposed rule to address concerns:

1. Material Pile (Stockpiling) Prohibition: On-site stockpiling of material, such as aggregate base and reclaimed asphalt pavement, is critical to our GHG reduction efforts. In many urban areas, a 100-foot prohibition from property lines will require materials, which are usually stockpiled on-site, to be hauled away and later returned to the project site; thereby increasing GHG emissions and increasing diesel emissions in communities located en route to and from off-site stockpiling locations. We suggest control measures that prohibit stockpiles greater than 20 feet in height and requiring a temporary cover or requiring the application of dust suppressants is adequate to control fugitive dust from stockpiles located within 100 feet of a property line. We also have safety concerns related to the placement of stockpiles near the roadway.

15-2

2. Cold Central Plant Recycling (CCPR): Caltrans and the Federal Highway Administration (FHWA) have been championing increased use of CCPR to a) reduce greenhouse gas emissions, b) reuse and conserve non-renewable natural resources, c)

15-3

reduce construction duration and 3) reduce construction cost. As mobile plants associated with CCPR reuse existing pavement material and do not require crushing of large virgin aggregates, we suggest that section “(d) Requirements (1)” be revised to read “Beginning [six (6) months after Date of Adoption] for any Large Roadway Project, no person shall conduct virgin aggregate crushing and grinding operations at a large roadway project within a distance of 100 feet of an area of public exposure or sensitive receptor. Distances shall be measured from the nearest edge of the virgin aggregate crushing and grinding operation for the large roadway project to the closest point of the property line of the nearest sensitive receptor, or location within an area of public exposure that is officially designated for use by the public.

**15-3**  
(cont.)

3. Minor Maintenance Exemption: To avoid delays in performing necessary minor maintenance and addressing related safety concerns, we suggest the following minor maintenance activities be exempt from the proposed rule: pothole repair, pavement repair, pavement crack sealing, pavement digouts, concrete slab repair/replacement, shoulder backing repair, sidewalk repair/replacement, curb/dike repair/replacement, sign repair/replacement, guardrail repair/replacement, culvert/pipe repair/replacement, drainage inlet repair/replacement, bridge repair, concrete barrier repair/replacement, slope repair, mowing, trash removal, street sweeping, water pollution control repair/replacement, landscaping repair/replacement, fence repair/replacement, pavement delineation repair/replacement and electrical system repairs.

**15-4**

4. Exemption for projects funded under the following Highway Maintenance (HM) Programs: HM-1 (Pavement) and HM-3 (Bridges). The HM-1 and HM-3 Programs fund short term projects to implement minor repairs and enhance safety of the State Highway System.

**15-5**

5. Signage: The four-foot by eight-foot (4' x 8') signage required by the proposed rule contains excessive lines of information which would be difficult to read at highway speeds, and would be distracting to motorists traveling through the project location causing potential safety concerns. Due to sound walls and other lateral clearance limitations, placement of such large signage along the right of way will not be feasible in many areas. In addition, placement of signs on any public roadway must conform to the California Manual on Uniform Traffic Control Devices (CA-MUTCD) as governed by federal regulation (23 CFR 655) and State statutes (Section 21400, California Vehicle Code). We suggest addressing public outreach as indicated in the attached pilot project specifications.

**15-6**

6. Large Roadway: Based upon our recent discussions, we understand that the proposed rule will be further revised in April 2022, so that the rule will only apply to Class 1 (Interstates) and Class 2 (Freeway or Expressway) functional classification roadways rather than portions of roadways with an annual daily average number of vehicle trips in excess of 100,000. As we don't favor eliminating traffic volumes in

**15-7**

the applicability of the proposed rule, we suggest the definition retain the traffic volume threshold included in the February 18 version of the proposed rule by revising the rule as follows, “LARGE ROADWAY means any portion of a Class 1 (Interstate) or Class 2 (Freeway or Expressway) functional classification roadway with an annual average daily traffic (AADT) in excess of 100,000 based on the most recent (AADT) data available at the following Caltrans’ website:

<https://dot.ca.gov/programs/traffic-operations/census>.” limitations, placement of such large signage along the right of way will not be feasible in many areas. In addition, placement of signs on any public roadway must conform to

**15-7**  
(cont.)

We look forward to partnering with the SCAQMD on the enhanced dust control pilot projects that Caltrans has proactively implemented and jointly evaluating prudent strategies to address fugitive dust concerns. We respectfully request the proposed rulemaking be delayed for a few months to allow Caltrans and SCAQMD to evaluate the outcomes of the pilot projects. We thank you for the opportunity to provide these comments and look forward to ongoing engagement to address fugitive dust. If you have any questions, please do not hesitate to contact Shaila Chowdhury, Chief Environmental Engineer at (916) 275-2948 or Scott Fredrickson at (916) 275-2926.

**15-8**

Sincerely,



Ramon L. Hopkins, P.E.  
(Acting) Chief, Division of Environmental Analysis  
Attachment: Addendum No. 1 for Contract 08-1M1104

Attachment: Addendum No. 1 for Contract 08-1M1104

STATE OF CALIFORNIA-CALIFORNIA STATE TRANSPORTATION AGENCY

GAVIN NEWSOM, Governor

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

OFFICE ENGINEER

1727 30<sup>th</sup> Street MS-43

P.O. BOX 168041

SACRAMENTO, CA 95816-8041

FAX (916) 227-6214

<http://ppmoe.dot.ca.gov/des/oe/>*Making Conservation  
a California Way of Life.*

February 23, 2022

08-SBd-215-10.0/17.2

08-1M1104

Project ID 0821000078

Addendum No. 1

Dear Contractor:

This addendum is being issued to the contract for CONSTRUCTION ON STATE HIGHWAY IN SAN BERNARDINO COUNTY FROM 0.1 MILE NORTH OF 27TH STREET TO 0.1 MILE SOUTH OF DEVORE ROAD to revise the *Notice to Bidders and Special Provisions*.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened on Tuesday, March 1, 2022.

In the *Notice to Bidders and Special Provisions*, in the "SPECIAL NOTICES," the following Special Notices are added as follows:

- See sections 5-1.33 and 7-1.02C for using tier 4 interim or tier 4 final off road diesel-fueled equipment requirements.
- See section 10-5 for dust control requirements of a Public Safety Plan."

In the Special Provisions, Section 5-1.33 is added as attached.

In the Special Provisions, Section 7-1.02C is added as attached.

In the Special Provisions, Section 10-5 is added as attached.

To *Bid* book holders:

Inquiries or questions about this addendum must be communicated as a bidder inquiry and must be made as noted in the *Notice to Bidders* section of the *Notice to Bidders and Special Provisions*.

Submit the *Bid* book as described in the *Electronic Bidding Guide* at the Bidders' Exchange website:

**<http://ppmoe.dot.ca.gov/des/oe/electronic-bidding.html>**

Inform subcontractors and suppliers as necessary.

*"Provide a safe and reliable transportation network that serves all people and respects the environment"*

Addendum No. 1  
Page 2  
February 23, 2022

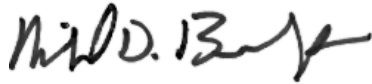
08-SBd-215-10.0/17.2  
08-1M1104  
Project ID 0821000078

This addendum and its attachments are available for the Contractors download on the website:

**<http://ppmoe.dot.ca.gov/des/oe/weekly-ads/addendum.php?id=08-1M1104>**

If you are not a *Bid* book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,



MICHAEL D. BEAUCHAMP  
District 8 Director

Attachments

*"Provide a safe and reliable transportation network that serves all people and respects the environment"*



**Add to the end of section 5-1.33:**

You must use tier 4 interim or tier 4 final engines for off-road diesel-fueled vehicles subject to 13 CA Code of Regs § 2449 instead of the use of lowered tiered engines. However, the requirement to use tier 4 interim or tier 4 final engines does not apply to vehicles registered to operate on public roads when those vehicles are used solely to deliver materials or supplies to the job site.

For off-road diesel-fueled vehicles subject to 13 CA Code of Regs § 2449:

1. At least 15 days before use of vehicles submit an inventory list to the Engineer and tier4@dot.ca.gov for authorization. The list must include the following information for each vehicle:
  - 1.1. Diesel off-road on-line reporting system (DOORS) identification number issued to the vehicle owner by the California Air Resources Board
  - 1.2. Company or agency name associated with the DOORS identification number
  - 1.3. California Air Resources Board issued equipment identification number for the vehicle
  - 1.4. Vehicle product identification number as listed in DOORS
  - 1.5. Corresponding identifying number required in this section
  - 1.6. Serial number
  - 1.7. Vehicle type
  - 1.8. Vehicle manufacturer, model number and model year
  - 1.9. Number of engines as indicated in DOORS
  - 1.10. For each engine:
    - 1.10.1. Serial number
    - 1.10.2. Manufacturer name, model, and model year
    - 1.10.3. Maximum horsepower
    - 1.10.4. EPA issued engine family name
    - 1.10.5. Engine displacement in liters
    - 1.10.6. California Air Resources Board issue executive order for the engine family from the off-road certification database. For the database go to the California Air Resources Board website: <https://www.arb.ca.gov/msprog/offroad/cert/cert.php>
    - 1.10.7. Emission standard category for the engine family, such as tier 4 interim or tier 4 final
    - 1.10.8. Photograph of the engine label
2. Submit an updated inventory list at least 5 business days before using a vehicle not on the list or replacing a vehicle on the list for authorization. Allow 5 business days for review.

Flexibility engines certified under the California Air Resources Board's flexibility program provisions are noncompliant engines unless a previously issued executive order for that engine family indicates the emission standard category is tier 4 interim. You may access these executive orders at the California Air Resources Board website: <https://www.arb.ca.gov/msprog/offroad/cert/cert.php> For example:

Executive Order U-R-002-0747 was issued on March 16, 2020, for Flexibility Program Engine Family Name "DCEXL15.0AAK," a Cummins Inc. 2020 model engine. Executive Order U-R-002-0592-2 issued on December 30, 2013, for Engine Family DCEXL15.0AAK indicates the "Emission Standard Category" is tier 4 interim. Use of Engine Family "DCEXL 15.0AAK is compliant.

If you operate a vehicle that is noncompliant with these requirements, the Department deducts a \$2000 penalty for each noncompliant engine for each day of operation.

CONTRACT NO. 08-1M1104  
ADDED PER ADDENDUM NO. 1 DATED FEBRUARY 23, 2022

**Replace the paragraphs of section 7-1.02C with:**

Submit to the Department the following certifications before performing the work:

I am aware of the emissions reduction regulations being mandated by the California Air Resources Board. I will comply with such regulations before commencing the performance of the work and maintain compliance throughout the duration of this Contract.

I am aware of the requirements to use tier 4 interim or tier 4 final engines under section 5-1.33 and I will comply with the requirements. I am aware that the Department deducts a \$2,000 penalty for each noncompliant engine for each day of operation.

Contract signing constitutes submittal of these certifications.

CONTRACT NO. 08-1M1104  
ADDED PER ADDENDUM NO. 1 DATED FEBRUARY 23, 2022

**Replace section 10-5 with:  
10-5 DUST CONTROL**

**10-5.01A GENERAL****10-5.01A(1) Summary**

Section 10-5 includes specifications for controlling dust resulting from the work.

Prevent and alleviate dust by:

1. Applying a dust palliative under section 18
2. Applying temporary soil stabilization under section 13-5
3. Managing material stockpiles under section 13-4.03C(3)

You must have a South Coast Air Quality Management District (SCAQMD) certified dust control supervisor oversee your dust control management. The dust control supervisor must be available:

1. Within 30 minutes of the jobsite during regular work hours
2. On the jobsite when dust producing activities are being conducted

**10-5.01A(2) Definitions**

**material pile:** An accumulation of bulk material, construction or demolition debris, excavated material or stockpile

**sensitive receptor:** Any residence, office, commercial or industrial building, school (kindergarten through grade 12), licensed daycare center, hospital, clinic, convalescent home, park, hiking trail or campground

**10-5.01A(3) Notification****10-5.01A(3)(a) Public Notification**

Deliver copies of the public notification letter to residences and businesses within 1000 feet of an area of public exposure to the dust source activity at least 21 days before starting activities that may generate dust.

**10-5.01A(3)(b) SCAQMD Notification**

Notify the SCAQMD Executive Officer by mail with the SCAQMD notification letter certificate at least 14 days before starting work that may generate dust.

**10-5.01A(4) Submittals****10-5.01A(4)(a) Dust Control Certificate**

Submit your dust control supervisor's SCAQMD dust control class certificate at least 14 days before starting work as an informational submittal. The certificate must remain valid through the life of the contract.

**10-5.01A(4)(b) Public Notification Letter**

Submit a public notification letter for dust control signed by your dust control supervisor to the Engineer. Include a list of delivery addresses and posting locations. The letter must:

1. Describe the work to be performed that could generate dust
2. Include dust control supervisor name, Contractor name, phone number and email address where dust complaints can be filed
3. Estimated duration of the project including start and completion of construction
4. Location of the project including an address and map
5. Include language that their complaint will be addressed immediately and response provided within 24 hours
6. Include language "If the complaint is not adequately resolved contact South Coast Air Quality Management District at 1 (800) 288-7664"

CONTRACT NO. 08-1M1104  
ADDED PER ADDENDUM NO. 1 DATED FEBRUARY 23, 2022

**10-5.01A(4)(c) SCAQMD Notification Letter**

Submit a copy of the SCAQMD notification letter to the Engineer as an informational submittal at least 10 days before starting work.

The SCAQMD notification letter must include the following:

1. Contractor Name, address, telephone number, email address
2. Dust control supervisor Name
3. Location of construction project including a map
4. Duration of construction project including start date and anticipated completion date
5. List of rock crushing and grinding equipment
6. List of powered equipment with the potential to generate dust including CARB portable equipment registration program (PERP)

**10-5.01A(4)(d) Dust Control Monthly Report**

Submit a monthly report for dust complaints by the 5th of the following month.

**10-5.01A(3)(e) Dust Control Record Keeping**

Submit daily records documenting potential dust activities within 2 business days.

**10-5.01A(5) Quality Assurance**

The dust control supervisor must be certified by the SCAQMD compliance training class for dust control. class information is available at

<http://www.aqmd.gov/home/programs/business/training-403-403-1-fugitive-dust#>

**10-5.01B MATERIALS**

Not Used

**10-5.01C CONSTRUCTION****10-5.01C(1) General**

Post copies of the public notification letter at publicly accessible locations close to the jobsite 7 days before dust source activity begins.

**10-5.01C(2) Dust Control Supervisor Duties**

The dust control supervisor must oversee dust control management on the project. The dust control supervisor must provide a public notification letter and SCAQMD notification letter and ensure the following dust control measures are followed:

CONTRACT NO. 08-1M1104  
ADDED PER ADDENDUM NO. 1 DATED FEBRUARY 23, 2022

**10-5.01C(2)(a) Control Measures**

Use the following control measures to prevent fugitive dust or visible emissions in active work areas when the operation, material pile, or equipment location is located within 1,000 feet of a sensitive receptor:

Crushing or grinding; aggregate operations	Stabilize aggregate material piles after crushing and grinding by applying dust palliative or a temporary cover
Earth moving activities; construction demolition; disturbed surface areas	Apply dust palliative as necessary to prevent visible emissions during vehicle operation
Construction vehicle dust	<p>Apply dust palliative as necessary to prevent visible emissions during vehicle operation</p> <p>Limit vehicle speed to 15 miles per hour on jobsite roadways</p> <p>Cover frequently traveled unpaved roads and unpaved parking areas with low silt content material (asphalt, concrete) or gravel a minimum depth of 4 inches</p> <p>Treat unpaved roads with dust suppressant, mulch, or other cover to maintain a stabilized surface</p> <p>Remove dust from paved roadways and construction vehicles as required to prevent track out or entrained dust by washing, vacuum sweeping, broom sweeping or other mechanical methods that do not generate fugitive dust</p>
Material and waste piles	<p>Maximum height of 20 feet.</p> <p>Cover material piles with a temporary cover or apply dust suppressant not less than twice per hour to maintain a stabilized surface and prevent visible emissions</p>

**10-5.01C(2)(b) Dust Control Record Keeping**

Keep daily records documenting potential dust activities including:

1. Type of activity conducted and the associated permitted and unpermitted power equipment with potential to generate dust
2. Dust control measures taken for each activity or equipment
3. Frequency of dust control measures.

**10-5.01C(2)(c) Dust Control Monthly Report**

Keep daily records to include in the monthly report for dust complaints including:

1. Name and address of the complainant
2. Date, time, and nature of the complaint
3. Name of the person who received the complaint
4. Record of the complaint investigation
5. Actions taken in resolution of the complaint

**10-5.01D Payment**

The Department pays \$500 for each dust control monthly report.

The Department does not adjust the unit price for an increase or decrease in the dust control monthly report quantity.

CONTRACT NO. 08-1M1104  
ADDED PER ADDENDUM NO. 1 DATED FEBRUARY 23, 2022

**[Response to Comment 15-1](#)**

Thank you for your dust mitigation program efforts. Collaboration with your agency has also been beneficial for South Coast AQMD PR 403.2 rule development efforts. Also, we endorse the use of lowest emitting technologies such as your use of Tier 4 engines. Staff is always ready to assist in any way that will contribute to the success of Caltrans air pollution control projects.

**[Response to Comment 15-2](#)**

See [Response to Comment 12-2](#). Rule language has been modified to limit height of piles to 30 feet from the previous limit of 20 feet as requested by stakeholders (with no limit on berm height). Material piles are allowed in the prohibition buffer if they are covered using a material pile cover (as defined in the rule), or equivalent control methods to prevent fugitive dust are used as approved by the Executive Officer.

**[Response to Comment 15-3](#)**

See [Response to Comment 15-2](#).

**[Response to Comment 15-4](#)**

Staff has provided exemptions for minor maintenance activities as requested by Caltrans.

**[Response to Comment 15-5](#)**

See Response to Comment 10-5.

**[Response to Comment 15-6](#)**

See [Response to Comment 4-28](#).

**[Response to Comment 15-7](#)**

See [Response to Comment 1-4](#).

**[Response to Comment 15-8](#)**

Thank you for offering to partner with us on development of PR 403.2. South Coast AQMD likewise appreciates the cooperation on crafting the best possible rule. See also [Response to Comment 14-1](#).

### **Section 3**

#### **Response to Comments**

#### **After Close of Formal Public Comment Period**



**Comment Letter 16**California Construction and Industrial Materials Association (CalCIMA)March 25, 2022

Re: CalCIMA proposed language and questions pursuant to ‘Proposed Rule 403.2  
Fugitive Dust from Large Roadway Projects’ draft rule language

CalCIMA appreciates the opportunity to provide feedback to PR 403.2. Specific to PR 403.2 rule language, this email includes rule language recommendations we propose for inclusion within PR 403.2, in addition to a few questions for South Coast AQMD to respond to.

CalCIMA is the statewide voice of the construction and industrial materials industry. With over 500 local plants and facilities throughout the state, producing aggregate, concrete, cement, asphalt, industrial minerals, and precast construction products, our members produce the materials that build our state’s infrastructure, including public roads, rail, and water projects; homes, schools and hospitals; assist in growing crops and feeding livestock; and play a key role in manufacturing consumer products as well, including roofing, paint, low-energy light bulbs, and battery technology for electric cars and windmills. The continued availability of our members’ materials is vital to California’s economy, as well as ensuring California meets its renewable energy, affordable housing, and infrastructure goals.

**16-1**

1. ‘Material Piles’ definition – CalCIMA supports AGC of California’s 3/15 comments regarding this item that states “Construction zones often have limited space available and are contained, therefore, reducing the size of the material piles may reduce the space available for construction crew members to maneuver. For example, the construction project on I-10 for lane extensions has extremely limited space to put material piles. AGC of California asserts that reducing the size of material piles may impose safety concerns. SCAQMD PR 403.2 aims to reduce emissions, however, this regulation may require additional laydown areas for stockpile material to comply with current language. This would require more machinery on-site and time to move material piles. Additionally, material piles often act as sound barriers to reduce noise pollution; reducing the size of material piles would conflict with existing regulation and would increase noise pollution. AGC of California believes the definition of material piles needs to be modified for it to be more feasible.”

**16-2***(c) Definitions**For the purposes of this rule:*

...

*(c)(15) MATERIAL PILE means any accumulation of bulk materials, construction/demolition debris, excavated material, or typical roadway material which is not fully enclosed and attains a height of three feet or more and a total surface area of 150 or more square feet. Material piles located within 25 feet of each other as*

*measured from the closest edge of each pile shall be considered a single material pile (p. 2-3).*

**16-2**  
(cont.)

2. Material piles control measures – We are proposing for language requiring material piles to be maintained “below a maximum height of 20 feet” to be removed to allow for alternative controls to be implemented for the following reasons:

a. In order to keep piles under 20 feet, multiple piles may need to be created that can result in more material handling equating to additional fugitive dust emissions produced;

b. In order to keep piles under 20 feet, multiple piles may need to be created that may result in additional surface area to be maintained that create additional risk for fugitive dust emissions;

c. Additionally, implementation of multiple piles to keep piles under 20 feet will potentially force projects to be designed to take more space as a need to have supplemental areas around the piles to enable access to place and remove materials safely. Therefore, making pile configuration a mandatory component of roadway design projects could lead to projects having expanded footprints increasing traffic obstruction and increase adjacent community exposures opposed to limiting exposures which is an issue that should be analyzed; and

**16-3**

c. It may be practically infeasible to achieve this at sites that have limited capacity in relation to size, shape, and grade to accommodate multiple piles under 20 feet to meet this requirement while also accommodating right-of-way traffic, required shoulders, and area for equipment passage in order to perform roadway construction related operations.

We are proposing that language requiring material piles to have a dust suppressant applied “no less than twice per hour” be removed to allow for dust suppressants to be implemented as necessary for the following reasons:

d. Operational conditions may require suppressant be applied less frequently if rain or precipitation occurs, or if material is sourced from an area being dewatered;

e. Over application of dust suppressants in circumstances that involve rain, precipitation, or material sourced from areas being dewatered can create safety and/or stormwater management issues;

f. Over application of dust suppressants can adversely impact efforts to conserve water;

**16-4**

g. Over application of dust suppressants can increase the direct criteria and climate emissions of the asphalt plant as it takes more time to heat and dry the materials to the proper point to make asphalt;

h. Impacts that chemical (sodium chloride/magnesium chloride) or petroleum-based dust suppressants might have on the mechanical and chemical properties of aggregates being used in the production of hot mix asphalt. For example, when producing hot mix asphalt on the project site, the contractor may have several aggregate stockpiles that need to be treated with lime as an anti-strip preventative measure. This process only works when the dry lime or lime slurry has the ability to bond to the aggregate surface. The bonding between aggregates and the bitumen depends on the aggregate drying and their surface polarity. For example, an alternative to correct granite and gneiss acidity is to add hydrated lime originating from calcite. This process reverses the surface polarity of acidic aggregates and improves its ability to adhere to the bitumen, since it is slightly acidic. It's important to note, the need for the application of lime as an anti-strip agent is not limited to granite and gneiss aggregates. If the application of dust suppression material serves to obstruct the bonding capacity between the aggregate and lime, this would reduce or eliminate the antistripping properties of the lime treatment. This in turn, would result in hot mix asphalt that is susceptible to moisture damage (raveling and stripping) after being placed in the roadway. Further, applying a dust suppressant to aggregates that are required to marinate in lime slurry prior to use could disrupt the bonding process or moreover remove the slurry from the surface of the aggregates. There is also a possibility that the dust suppressant might have a negative impact on the asphalt binders' ability to bond to the surface of untreated aggregates which would also facilitate raveling and stripping of the hot mix asphalt pavement; and

i. Concerning water content of the dust suppressant, adding dust suppressant twice per hour will likely drive up the moisture content of the hot mix asphalt aggregates thus requiring additional drier capacity at the hot mix asphalt plant. This would drive up the Global Warming Potential (GWP) value in the Environmental Product Declaration (EPD) that the Federal Highway Administration is going to use as part of the acceptance criteria for hot mix asphalt on federal projects.

We need clarity regarding language that states "Apply dust suppressant as necessary, but no less than twice per hour to maintain a stabilized surface and prevent visible emission from extending farther than 100 feet as measured from the nearest edge or perimeter of the operation/material pile or equipment location," how would 100 feet be measured?

*(e) Additional Requirements*

**16-4**  
(cont.)

**16-5**

*Any person who conducts or authorizes the conducting of activities for a large roadway project to paragraph (d)(2) shall comply with the requirements specified in paragraphs (e)(1) through (e)(4): ...*

*(e)(2) Control Measures*

*Use the following applicable control measures to prevent fugitive dust/visible emissions:*

Material Piles (One or more controls measures, as needed, to ensure fugitive dust control)	<p><del>Maintain below a maximum height of 20 feet; and</del></p> <p>Apply dust suppressant as necessary, <del>but no less than twice per hour</del> to maintain a stabilized surface and prevent visible emissions from extending farther than 100 feet as measured from the nearest edge or perimeter of the operation/material pile or equipment location; or</p> <p>Install coverings; or</p> <p>Install an enclosure with a minimum of three sides (the open side of which will face farthest from potentially impacted areas) and walls with a maximum porosity of 50 percent and a minimum height equal to the highest point of the material pile.</p>
--	---

**16-5**  
(cont.)

3. ‘Aggregate Crushing and Grinding’ definition – Regarding the ‘Aggregate Crushing and Grinding’ definition that states the meaning “any activity that mechanically reduces the size of materials of loose or stockpiled to produce sand, gravel, crushed stone, quarried rock, or other aggregate material (such as recycled concrete/asphalt),” does ‘grinding’ refer to portable crushers or does it refer to asphalt pavement grinders that are mobile equipment?

**16-6**

4. Dust from construction vehicles control measures – We are proposing modifications to the following control: “apply dust suppressant as necessary to prevent visible emissions during vehicle operation,” to limit visible emissions exceeding 20 percent opacity during operations since it is highly difficult and, in more cases, than less it is unachievable to operate vehicles at zero fugitive dust emission levels. We are proposing language to post signage that limits vehicle speed to 15 miles per hour on roadways because in many cases roadway project operation entrances come right off of a freeway and it may be unsafe to immediately achieve a 15 mile per hour limit. We are proposing language to allow for one of the last three of five controls listed to be implemented to eliminate redundancy related to outcomes of these controls.

**16-7**

Dust from Construction Vehicles (Implement all controls)	<p>Apply dust suppressant as necessary to <del>prevent</del> <u>limit</u> visible emissions <u>exceeding 20 percent opacity</u> during vehicle operation; and</p> <p><u>Post signage that</u> <del>limit</del> vehicle speed to 15 miles per hour on <u>roadways</u>; <del>and</del> <u>or</u></p> <p>Cover frequently traveled unpaved roads and unpaved parking areas with low silt content material (i.e., asphalt, concrete, recycled road base, or gravel to a minimum depth of four inches); <del>and</del> <u>or</u></p> <p>Treat unpaved roads with a dust suppressant, mulch, or other cover to maintain a stabilized surface; <del>and</del> <u>or</u></p>
	<p>Remove dust from paved roadways and construction vehicles as required to prevent track out or entrained dust by washing, vacuum sweeping, broom sweeping or any other mechanical means that does not generate fugitive dust.</p>

**16-7**  
(cont.)

5. Signage – Regarding signage requirements, we are proposing language to make sections (A) and (B) more complementary as we believe the rule writer likely intended. We are also proposing language to remove sections (C) through (H) and replace with more concise language that achieves the same objectives.

### (3) Signage

*Prior to commencement of activities for a large roadway project pursuant to paragraph (d)(2), install and maintain project signage that, at a minimum, meets the following:*

*(A) Signage must be located within 50 feet of ~~each~~ a project site entrance, and a maximum of four signs and minimum of one sign are required per large roadway project.*

*~~(B) A maximum of four signs are required per large roadway project.~~*

*(B) install and maintain project signage with project contact signage that meets the minimum standards of the Rule 403 Implementation Handbook.*

*~~(C) One sign is sufficient for multiple site entrances located within 300 yards of each other.~~*

*~~(D) Signage shall be 1 inch A/C laminated plywood board or similar strength and durability material with dimensions of 48 inches by 96~~*

*~~inches. (E) Sign background must contrast with lettering, typically black text with white background.~~*

**16-8**

~~(F) The lower edge of the sign board must be a minimum of 6 feet and a maximum of 7 feet above grade.~~

~~(G) The telephone listed for the contact must be a local or a toll-free number and shall be accessible 24 hours per day.~~

~~(H) At a minimum, each sign shall include the following information, with text height as shown on the right side of the sign template below, and an accessible 24 hours per day local or toll-free phone number for contacting the large roadway project responsible person(s) or dust control supervisor regarding fugitive dust issues:”~~

**16-8**  
(cont.)

6. Notification – We are proposing to remove section (B)(iv) to harmonize this rule language with other existing rule requirements as permitted aggregate crushing and grinding equipment and equipment subject to the California Air Resources Board (CARB) Portable Equipment Registration Program (PERP) that already has their own notification requirements that require notification to local air districts.

*(4) Notification*

*The dust control supervisor or other responsible person for the large roadway project shall comply with the following notification requirement:*

*(A) Areas of Public Exposure and Sensitive Receptors At least 120 hours prior to commencement of activities for a large roadway project pursuant to paragraph (d)(2), the dust control supervisor or other responsible person shall notify the owner(s) or occupant(s) of occupied buildings or open space/recreational facility management as applicable, in writing, which shall at a minimum include the following information:*

- (i) Large roadway project dust control supervisor contact information including contact name, company/agency name, address, telephone number, and e-mail address; and*
- (ii) Estimated duration of the project including commencement and completion dates, and*
- (iii) Location of the large roadway project, including address and/or coordinates, and a map depicting the location of the site.*

**16-9**

*(B) South Coast AQMD*

*At least 120 hours prior to commencement of activities for a large roadway project pursuant to paragraph (d)(2), the dust control supervisor or other responsible person shall notify the Executive Officer in writing, and shall at a minimum include the following information:*

- (i) Large roadway project contact information including name, company/agency name, address, telephone number, and email address of all responsible persons including the dust control supervisor;*

- (ii) Location of the large roadway project, including address and/or coordinates, and a map depicting the location of the site;
- (iii) Estimated duration of the large roadway project including commencement and completion dates; and
- (iv) ~~A list of permitted aggregate crushing and grinding equipment, and equipment subject to the California Air Resources Board (CARB) Portable Equipment Registration Program (PERP).~~

**16-9**  
(cont.)

Again, thank you for your consideration and please feel free to contact me with any questions, concerns, or to further discuss at (951) 941-7981 or at [sseivright@calcima.org](mailto:sseivright@calcima.org).

Sincerely,



Suzanne Seivright-Sutherland  
Director of Regional Governmental Affairs and Grassroots Operations

---

### [Response to Comment 16-1](#)

Thank you for taking the time to review the proposed preliminary draft materials and providing feedback.

### [Response to Comment 16-2](#)

See [Response to Comment 1-3](#).

### [Response to Comment 16-3](#)

The 20-foot limit of material piles was originally established based on stakeholder input regarding what was feasible. Based on additional stakeholder input received, staff has revised the maximum pile height to be increased to 30 feet due to equipment typically used as large roadway projects. It should also be noted that the definition for material pile height has been revised from 3 feet to one that is greater than 8 feet. Also see [Responses to Comments 1-3](#), [1-5](#), [10-2](#), and [11-17](#).

### [Response to Comment 16-4](#)

This requested change has been made in the rule language.

### [Response to Comment 16-5](#)

See Responses to Comments [16-4](#) and [1-5](#).



**Response to Comment 16-6**

Crushing and grinding in PR 403.2 only applies to portable crushers used for aggregate recycling. Asphalt pavement grinders or other similar mobile grinding equipment with (dust control requirements) are defined as construction/demolition activities/equipment.

**Response to Comment 16-7**

Vehicle speed limit restrictions at project sites have been shown to be the most efficient way to control fugitive dust. Opacity readings require many observations and ideal positioning of the observer and as such are more appropriate for stationary sources of emissions, such as smoke stacks. In addition, the 15 miles per hour speed limit is an existing option for Rule 403 Large Operations and stakeholders have requested that Rule 403 provisions be as closely emulated in PR 403.2. The provision to limiting speeds to 15 miles per hour on roads has been revised, since receipt of the comment letter, to only apply to unpaved roads. As such, section(s) of the paved road could be used to isolate or cone off slow down lanes prior to entering the unpaved road.

**Response to Comment 16-8**

Except for the requirements of a minimum of two signs at each LRP and the elimination of 2 lines of sign information the requirements for signage are the same as for Rule 403 Large Operations. The majority of stakeholders have expressed a desire to have as much of the PR 403.2 rule provisions encapsulated within the rule itself.

**Response to Comment 16-9**

The requested change has been made and the provisions for notification have been changed. Thank you for your comments.

**Comment Letter 17**

AGC of California – May 19, 2022



**PRESIDENT**  
Dina Kimble  
Royal Electric Company

**PRESIDENT-ELECT**  
Steve Rule  
Turner Construction Company

**VICE PRESIDENT  
BUILDING**  
Brad Jeanneret  
Hensel Phelps

**VICE PRESIDENT  
HIGHWAY & TRANSPORTATION**  
Ural Yal  
Flatiron West, Inc.

**VICE PRESIDENT  
UTILITY & INFRASTRUCTURE**  
Jim Blois  
Blois Construction, Inc.

**VICE PRESIDENT  
SPECIALTY CONTRACTORS**  
Greg Timmerman  
ISEC, Inc.

**TREASURER**  
Pat Kelly  
Granite Construction Company

**IMMEDIATE PAST PRESIDENT**  
Mike Blach  
Blach Construction Company

**CEO**  
Peter Tateishi  
AGC of California

**HEADQUARTERS OFFICE**  
3095 Beacon Blvd.  
West Sacramento, CA 95691  
Office: 916.371.2422  
Fax: 916.371.2352  
member\_services@agc-ca.org

George Wu / Henry Pourzand  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765

Submitted electronically: [gwu@aqmd.gov](mailto:gwu@aqmd.gov) & [hpourzand@aqmd.gov](mailto:hpourzand@aqmd.gov)

May 19, 2022

**RE: Comments and Request for Feedback on Proposed Rule  
403.2 Fugitive Dust from Large Roadways**

Dear George Wu & Henry Pourzand,

On behalf of the Associated General Contractors (AGC) of California, we are submitting comments to the South Coast Air Quality Management District (SCAQMD) in response to Proposed Rule 403.2 Fugitive Dust from Large Roadways.

AGC of California is a member-driven organization that statewide consists of over 950 companies. Our members provide commercial construction services on a broad range of projects within vertical building, highway & transportation, and utility. We believe the construction industry is vital to the success of California. Together, our members actively create opportunities to build and strengthen our state. We are passionate about shaping policy, improving industry relationships, and developing our workforce.

AGC of California appreciates the opportunities to participate in the SCAQMD public workgroup, workshop meetings, as well as the opportunity to submit a comment letter to address concerns and provide feedback. We appreciate the strides that have been made to the updated draft language and staff report. Specifically, the changes implemented to the definitions of Large Roadway, Large Roadway Project, and Material Piles. Additionally, we appreciate and support the changes allowing aggregate crushing and grinding operations within the prohibition zone under specific conditions. However, there continues to be several unresolved questions and concerns, many of which are detailed in this letter. A summary of our concerns includes drought conditions and material pile covers as the language is currently written. Please read below for more information.

17-1





## 1. Dust from Construction Roads Control Measure.

AGC of California recognizes and supports environmental rules that protect air which make California an even safer place to live. However, it is important that the regulations imposed by the SCAQMD are practical for the construction industry. Dust from Construction Roads found in Table 1 - Large Roadway Project Control Measures of the updated draft language states "[w]ater all unpaved roads within the project perimeter used for construction vehicular traffic at least once per every two hours of active operations [3 times per normal 8-hour workday]". While the State of California is experiencing increasing drought concerns, the availability of water decreases.

On April 21, 2021 Governor Gavin Newsome declared a drought state of emergency in Mendocino and Sonoma counties due to severe drought conditions in the Russian River Watershed calling for increased conservative efforts. Although the emergency regulation will expire July 12, 2022, the State Water Board plans to adopt a 2022 emergency regulation which would renew specific drought sections passed in 2021 with amendments and refinements. The notice released May 11, 2022 states that "persistent dry conditions require immediate action to extend the State Water Board's emergency authority in 2022 to most effectively administer water rights, ensure adequate reliable water supplies for minimum human health and safety needs, and prevent the unreasonable use of water in the Russian River watershed". We understand that the Russian River Watershed is outside the jurisdiction of SCAQMD, however, this demonstrates that the drought is a state-wide issue and should be taken under consideration.

Furthermore, the counties within SCAQMD jurisdiction are experiencing moderate, severe, and extreme drought conditions according to the drought.gov website. Specifically, majority of San Bernadino County is experiencing extreme drought conditions: 17<sup>th</sup> driest April and 3<sup>rd</sup> driest year on record, over the past 128 years. Los Angeles county is experiencing severe and extreme drought conditions: 35<sup>th</sup> driest April and 4<sup>th</sup> driest year on record, over the past 128 years. Riverside county is experiencing moderate, severe, and extreme drought conditions: 25<sup>th</sup> driest April and 3<sup>rd</sup> driest year on record, over the past 128 years. Lastly, Orange County is experiencing moderate and severe drought conditions: 39<sup>th</sup> driest April and 4<sup>th</sup> driest year on record, over the past 128 years. This demonstrates that the drought is affecting the entire state of California, including the counties under SCAQMD jurisdiction.

Q1: Can SCAQMD ensure that there will be enough water to meet the needs of complying with PR 403.2?

Lastly, we understand that an alternative would be to "[a]pply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface". However, our members have expressed concern regarding the implementation of various dust suppressants. Project environments change by location. Depending on how county work is being conducted dust suppressants may be regulated. Specifically, water and hydrocarbon dust suppressants may not be easily accessible.

## 2. Definition of Material Pile Cover.

As the language is currently written, material pile covers refer to "plastic sheeting at least 10 mil thick that overlaps a minimum of 24 inches and is anchored and secured so that no portion of the

17-2

17-3





material pile is exposed to the atmosphere". While AGC of California appreciates an additional alternative in controlling dust from material piles, our members have expressed concerns with the thickness of the cover. For instance, 20' by 100' rolls of 10 mil are approximately 95 pounds which may not be practical or feasible for construction crew members to carry up the slope of a material stockpile. However, in comparison, 20' by 100' rolls of 6 mil are approximately 58 pounds each. We encourage the SCAQMD to change the language of material pile covers from "at least 10 mil thick" to "at least 6 mil thick". AGC of California asserts the need to protect the safety of construction crew members.

17-3  
(cont)

### 3. Additional queries and requests for clarification regarding PR 403.2.

#### A. Definition of 'construction vehicle'

As the language is currently written, construction vehicles are defined as "graders, bulldozers, excavators, cranes, loaders, backhoes, tractors, haul trucks, and other similar vehicles used at a large roadway project." Our members express concern regarding the broadness of this definition. We encourage SCAQMD to exclude personally owned vehicles or vehicles otherwise not used as construction machinery.

17-4

#### B. Definition of 'dust suppressants'

As the language is currently written, dust suppressants are defined as "water, hygroscopic materials, or non-toxic chemical stabilizers used as a treatment material to reduce fugitive dust emissions." As mentioned previously, our members express concern regarding the implementation of various dust suppressants. Project environments change by location. Depending on how county work is being conducted dust suppressants may be regulated. Specifically, water and hydrocarbon dust suppressants may not be easily accessible. Additionally, overuse of water may dry an area of their resources especially in dry, desert regions. AGC of California urges SCAQMD to evaluate the current Cal/OSHA regulation to ensure it is in alignment with state regulation. We encourage the language to be adjusted to incorporate 'project acceptable' dust suppressants in accordance with state regulation.

17-5

#### C. Definition of 'large roadway project'

We support SCAQMD for adjusting the language of large roadway project, specifically for removing "with an annual daily average number of vehicle trips in excess of 100,000" due to our expressed concern regarding the use of the FHWA data to calculate estimates.

17-6

#### D. Definition of 'material piles'

Additionally, we support SCAQMD for adjusting the language of material piles, specifically for changing the height restriction from 3 feet to 8 feet due to the concerns expressed by the Construction Industry Air Quality Coalition (CIAQC).

17-7

#### E. Additional Requirements

Under one of the stipulations of the most recent preliminary draft rule, dust control supervisors are required to complete the "South Coast AQMD Fugitive Dust Control Class and holds a valid Certificate of Completion for the class." This class is held only once a month

17-8





which may interfere with the timely implementation of a project. AGC of California asserts that this class be asynchronous to allow for more flexibility.

17-8

(cont)

SCAQMD altered the most recent draft language of material piles, specifically, that they "[s]hall not exceed a height of 30 feet" as opposed to the original 20 feet. AGC of California supports this change as it will allow for the construction industry to comply with this regulation more easily.

17-9

SCAQMD states in their most recent preliminary draft rule language that notifications must include "[e]stimated duration of the large roadway project including commencement and completion dates." The nation's current state construction projects continue to be fluid in nature, perhaps more so than they have ever been. For this reason, we urge SCAQMD cut through (f)(3) as stated above. It is very difficult for contractors to estimate commencement and completion dates due to the fluid nature of most construction projects.

17-10

In SCAQMD's most recent preliminary draft rule language, they outline the recordkeeping process that includes the following:

"The responsible person(s) for the large roadway project shall maintain daily records of the required fugitive dust control measures pursuant to paragraph (e)(2) for a large roadway project documenting:

- (A) Each type of activity conducted and the associated permitted powered equipment with the potential to generate fugitive dust.
- (B) The specific fugitive dust control measures implemented for each activity or equipment.
- (C) The frequency of fugitive dust control measures implemented. If dust suppressant is used as the control measure for material piles, record the time and duration that the dust suppressant was applied, including the location of the material pile.
- (D) Purchase records or invoices for dust suppressants used for the large roadway project."

17-11

All employers have an obligation to provide a healthy and safe work environment for those on-site, and for the public. During the preconstruction phases, contractors conduct numerous site-specific safety plans addressing a variety of potential hazards. Those site-specific safety plans address hazards and controls on-site that correlate into the commencement of a project. Recordkeeping and retention of safety documentation should be reevaluated as these documents are already executed by contractors.

### Conclusion

AGC of California appreciates South Coast Air Quality Management District (SCAQMD) for allowing AGC of California to comment on Proposed Rule 403.2 'Fugitive Dust for Large Roadways'. We assert that SCAQMD consider the changes we have expressed above. If you have any questions regarding the comments, please contact Brian Mello at 603-770-9264 (email: [mellob@agc-ca.org](mailto:mellob@agc-ca.org)). We appreciate the opportunity to comment and hope these concerns are addressed.

17-12



*Brian Mello*

Brian Mello  
Associate Vice President of Engagement & Regulatory Affairs  
Associated General Contractors of California

---

THE VOICE OF THE CONSTRUCTION INDUSTRY  
THE ASSOCIATED GENERAL CONTRACTORS OF CALIFORNIA | AGC-CA.ORG

**Response to Comment 17-1**

Thank you for taking the time to review the draft (30 day) documents. Staff welcomes your comments and appreciates your attendance and input received at working group meetings and the public workshop. Staff has continued to engage with stakeholders on an ongoing basis after the public workshop and PR 403.2 has been modified based on constructive input. These include certain key definitions and revisions to prohibition language related to material piles and crushing operations within the prohibition/buffer zone (activities with 100 feet of an Area of Public Exposure and 250 feet of a Sensitive Receptor). A final version of PR 403.2 incorporating the latest changes is scheduled for release prior to the June Governing Board Meeting.

**Response to Comment 17-2**

Staff recognizes that a drought state of emergency exists and fully supports water conservation. PR 403.2 Table 1 lists watering as one of two possible dust control options for vehicular traffic on onsite unpaved roads for the large roadway project. Alternatively, a chemical stabilizer may be applied to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface. PR 403.2 (c)(4) also states that the chemical stabilizers are to be “non-toxic” and “must not be used if prohibited 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”. Water and chemical stabilizers are dust control solutions that are currently required for Rule 403 Large Operations. Some large roadway projects may also qualify as a Large Operation under Rule 403 in which case there would already be a need to comply with the control requirement to prevent entrainment of unpaved roadway dust in PR 403.2 (which mirrors 403 Large Operations requirement).

**Response to Comment 17-3**

A 10 mil thickness mirrors the required specification for pile covers in Rule 1466(e)(14). Staff has observed instances where plastic sheeting that is not as thick and less durable was used and has led to tears and bunching of the plastic cover resulting in decreased efficacy to control fugitive dust to the atmosphere. While plastic sheeting is typically sold in rolls of 20 feet by 100 feet, PR 403.2 does not require that whole rolls be used. The sheeting may be cut as needed to best fit the shape of a material pile and to meet the additional edge overlapping and anchoring requirements.

**Response to Comment 17-4**

Controls measures at Large Roadway Projects for preventing the re-entrainment of fugitive dust from roadways are not specific to vehicle type (off-road, on-road, construction or personal) since all of these vehicle types have the potential of kicking up unpaved roadway dust. Stakeholders have also commented that in many cases it is personal vehicles driven at high speeds at project sites that are problematic and responsible for generating re-entrainment of unpaved roadway dust.

**Response to Comment 17-5**

See Response to Comment 17-2.



**Response to Comment 17-6**

Staff appreciates AGC of California's support for the revisions to the PR 403.2 definition of a Large Roadway.

**Response to Comment 17-7**

Staff appreciates AGC of California's support for revisions to the PR 403.2 definition of a Material Pile.

**Response to Comment 17-8**

See Responses to Comments 1-5 and 11-15. PR 403.2 would not be effective until 6 months after the date of adoption. South Coast AQMD dust certification classes are 3 hours long and provided currently on a monthly basis. This should provide sufficient lead time to allow for the training and designation of new dust control supervisors, especially since there is typically significant lead time for planning and commencement of a large roadway project. For large roadway projects that are already Large Operations pursuant to Rule 403, there should already be an assigned dust control supervisor.

**Response to Comment 17-9**

Staff appreciates AGC of California's support for the current PR 403.2 definition changing the maximum pile height from 20 to 30 feet.

**Response to Comment 17-10**

See Response to Comment 11-18.

**Response to Comment 17-11**

See Response to Comment 11-19.

**Response to Comment 17-12**

Staff appreciates the input from AGC of California as an active participant in the development of PR 403.2 and is committed to working with stakeholders to address sensible, workable solutions that do not impact the intent of the rule to proactively prevent potential fugitive dust exposure.

**THIS PAGE IS INTENTIONALLY LEFT BLANK**

ATTACHMENT H



**South Coast  
Air Quality Management District**

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • [www.aqmd.gov](http://www.aqmd.gov)

**SUBJECT: NOTICE OF EXEMPTION FROM THE CALIFORNIA  
ENVIRONMENTAL QUALITY ACT**

**PROJECT TITLE: PROPOSED RULE 403.2 – FUGITIVE DUST FROM LARGE  
ROADWAY PROJECTS**

Pursuant to the California Environmental Quality Act (CEQA) Guidelines, the South Coast Air Quality Management District (South Coast AQMD), as Lead Agency, has prepared a Notice of Exemption pursuant to CEQA Guidelines Section 15062 – Notice of Exemption for the project identified above.

If the proposed project is approved, the Notice of Exemption will be filed for posting with the county clerks of Los Angeles, Orange, Riverside, and San Bernardino Counties. The Notice of Exemption will also be electronically filed with the State Clearinghouse of the Governor's Office of Planning and Research for posting on their CEQAnet Web Portal which may be accessed via the following weblink: <https://ceqanet.opr.ca.gov/search/recent>. In addition, the Notice of Exemption will be electronically posted on the South Coast AQMD's webpage which can be accessed via the following weblink: <http://www.aqmd.gov/nav/about/public-notices/ceqa-notices/notices-of-exemption/noe---year-2022>.

**NOTICE OF EXEMPTION FROM THE  
CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)**

---

**To:** County Clerks for the Counties of Los Angeles, Orange, Riverside and San Bernardino; and Governor's Office of Planning and Research – State Clearinghouse

**From:** South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765

---

**Project Title:** Proposed Rule 403.2 – Fugitive Dust From Large Roadway Projects

---

**Project Location:** The proposed project is located within the South Coast Air Quality Management District's (South Coast AQMD) jurisdiction, which includes the four-county South Coast Air Basin (all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties), and the Riverside County portion of the Salton Sea Air Basin and the non-Palo Verde, Riverside County portion of the Mojave Desert Air Basin.

---

**Description of Nature, Purpose, and Beneficiaries of Project:** Proposed Rule (PR) 403.2 has been developed to supplement the existing regulatory requirements in Rule 403 – Fugitive Dust, to reduce air quality impacts to nearby receptors resulting from fugitive dust generated by construction and demolition activities of a large roadway, including any adjacent bridge, overpass, or onramp. A large roadway is defined as any portion of a roadway that is designated as functional classification "Interstate" (FC1) or "Other Freeway or Expressway" (FC2) by the Federal Highway Administration, and most large roadway projects would be under the jurisdiction of California Department of Transportation or the authority of the local county in which the project is located. Specifically, PR 403.2 would not allow any person to conduct aggregate crushing and grinding operations or maintain a material pile within 100 feet of an area of public exposure or 250 feet of a sensitive receptor unless: 1) a water misting dust control system is used during aggregate crushing and grinding operations to prevent visible dust emissions from exceeding 100 feet in length in any direction, and the materials being recycled are generated from the large roadway project; and 2) for material piles, a material pile cover or equivalent method to control fugitive dust approved by Executive Officer is used. In addition, PR 403.2 would: 1) require the following for activities conducted within 500 feet of an area of public exposure or within 1,000 feet of a sensitive receptor: a) implementation of enhanced fugitive dust control measures as currently required for Rule 403 Large Projects, b) installation of signage around the project perimeter, and c) the appointment of a dust control supervisor responsible for ensuring rule compliance; 2) require advance notification prior to the commencement of work for activities conducted within 1,000 feet of an area of public exposure or sensitive receptor; and 3) exempt large roadway project activities conducted during emergency, life-threatening situations, or by essential service utilities to provide electricity, natural gas, telephone, water, or sewer during service outages and emergency disruptions. The requirements of PR 403.2 would become effective six months after the date of adoption.

---

**Public Agency Approving Project:**  
South Coast Air Quality Management District

**Agency Carrying Out Project:**  
South Coast Air Quality Management District

---

**Exempt Status:**

CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption

CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment

---

## NOTICE OF EXEMPTION FROM CEQA (concluded)

**Reasons why project is exempt:** South Coast AQMD, as Lead Agency, has reviewed the proposed project pursuant to: 1) CEQA Guidelines Section 15002(k) – General Concepts, the three-step process for deciding which document to prepare for a project subject to CEQA; and 2) CEQA Guidelines Section 15061 – Review for Exemption, procedures for determining if a project is exempt from CEQA. Implementation of PR 403.2 will ensure that the activities associated with large roadway projects would be located at a prescribed distance from specified receptors so as to minimize exposure to fugitive dust emissions. Thus, it can be seen with certainty that implementing the proposed project would not cause a significant adverse effect on the environment. Therefore, the proposed project is exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption. The proposed project is also categorically exempt from CEQA pursuant to CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment, because PR 403.2 is designed to further protect or enhance the environment by reducing receptor exposure to fugitive dust. Further, there is no substantial evidence indicating that any of the exceptions to the categorical exemption apply to the proposed project pursuant to CEQA Guidelines Section 15300.2 – Exceptions.

---

**Date When Project Will Be Considered for Approval (subject to change):**

South Coast AQMD Governing Board Public Hearing: May 6, 2022

---

<b>CEQA Contact Person:</b>	<b>Phone Number:</b>	<b>Email:</b>	<b>Fax:</b>
Kevin Ni	(909) 396-2462	<a href="mailto:kni@aqmd.gov">kni@aqmd.gov</a>	(909) 396-3982

---

<b>PR 403.2 Contact Person:</b>	<b>Phone Number:</b>	<b>Email:</b>	<b>Fax:</b>
George Wu	(909) 396-2533	<a href="mailto:gwu@aqmd.gov">gwu@aqmd.gov</a>	(909) 396-3982

---

**Date Received for Filing:** \_\_\_\_\_ **Signature:** (Signed and Dated Upon Board Approval)  
Barbara Radlein  
Program Supervisor, CEQA  
Planning, Rule Development, and  
Implementation



# PROPOSED RULE 403.2

## FUGITIVE DUST FROM LARGE ROADWAY PROJECTS

**BOARD MEETING**

**JUNE 3, 2022**



# BACKGROUND

- Some Large Roadway construction projects located close to near-road communities
- Dust measures needed to minimize fugitive dust impacts for communities near Large Roadway construction projects
- Existing rules do not include sufficient preventative measures for fugitive dust from most Large Roadway projects
- Proposed Rule 403.2 seeks to fill a regulatory gap to address these issues



Wildomar (I5 freeway)





# PUBLIC PROCESS



- 4 Working Group Meetings
- Public Workshop
- Multiple meetings with various stakeholders including the construction industry, contractors, industry associations, environmental and community groups, and government agencies
- Over 20 individual stakeholder meetings to discuss concepts and concerns

## PR 403.2 – APPLICABILITY

- Applicability – Large Roadway Project activities within 1,000 feet of rule-specified receptors
- Large Roadway Project – onsite activities for the construction/demolition of a large roadway, including an adjacent bridge, overpass, or onramp/offramp

Area of Public Exposure:  
Commercial, Industrial,  
Recreational Land Uses

Sensitive Receptor:  
Homes, Schools, Hospitals



- Large Roadway – “Interstates” or “Other Freeways or Expressways” per Federal Highway Administration

# GENERAL REQUIREMENTS

- Effective six months after rule adoption for new projects
- Within 100 feet of an Area of Public Exposure, or 250 feet of a Sensitive Receptor
  - NO Aggregate Crushing and Grinding unless:
    - Using a water misting dust control system; and
    - Materials crushed are generated onsite
  - NO Material Piles unless:
    - Using a Material Pile Cover; or
    - Equivalent method to control fugitive dust approved by the Executive Officer

## ADDITIONAL REQUIREMENTS

- Additional Requirements if conducted within 500 feet of an Area of Public Exposure, or 1,000 feet of a Sensitive Receptor for:
  - Aggregate crushing and grinding operations
  - Construction/demolition activities
  - Earth-moving or any other mechanical activity that results in disturbed surface areas
  - Movement of construction vehicles over unpaved roads
  - Maintenance of Material Piles

# ADDITIONAL REQUIREMENTS



# NOTIFICATION AND EXEMPTIONS

## ■ Notification

- Provide written notification to South Coast AQMD and all addresses of Sensitive Receptors and Areas of Public Exposure within 1,000 feet of the Large Roadway activity at least 5 days prior to start
- Must include project information for contacts, location, and duration of project

## ■ Exemptions

- Activities conducted during emergency life-threatening situations
- Activities by utilities during service outages and emergency disruptions
- Berms needed for best management practices for stormwater prevention or safety
- Additional exemptions for maintenance activities with low potential for significant fugitive dust generation (e.g., crack filling, pothole repair, etc.)



## STAFF RECOMMENDATIONS

- Staff recommendation to Adopt Resolution:
  - Determining that Proposed Rule 403.2 is exempt from the requirements of CEQA
  - Adopt Rule 403.2 – Fugitive Dust from Large Roadway Projects