CALCIMA
California Construction and Industrial Materials Association

February 18, 2022

George Wu / Henry Pourzand
South Coast Air Quality Management District
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Diamond Bar, CA 91765
gwu@aqmd.gov / hpourzand@aqmd.gov

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.

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.

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. .

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?

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 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) 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?

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.

5) How and what resources were used to identify the 66 projects?

6) How many of the 66 active/scheduled state and county road projects have received complaints?

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?

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.

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.

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?

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?

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?

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'.

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?"

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?

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?

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

B) <u>No data provided to support PR 403.2's shift in focus pursuant to the rule's purpose</u>

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."

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?

C) <u>Additional queries and requests for clarification pursuant to PR 403.2</u>

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.

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?

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."

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?

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?

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."

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.

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…"

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?

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.

Sincerely,

Suzanne Seivright-Sutherland
Director of Regional Governmental Affairs and Grassroots Operations

Rule component	Draft rule language comparison - *FOR DISCUSSION PURPOSES ONLY*			
	PR 403.2 - Fugitive Dust from Large Roadway Projects	**Rule 403 - Fugitive Dust**	**Rule 1157 - PM10 Emission Reductions from Aggregate and Related Operations**	**Rule 1466 - Control of Particulate Emissions from Soils with Toxic Air Contaminants**
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	Reduce PM10 emissions from aggregate and related operations	Minimize 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 including dredging, excavating, grading, earth-cutting and filling, loading, unloading, handling, mechanized land clearing, treating, stockpiling, transferring and removing of soil that contains applicable toxic air contaminants
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	All permanent and temporary aggregate and related operations unless otherwise exempt	Any owner or operator conducting earth-moving activities of soil with appliable toxic air contaminants
Requirements	Within 100 feet of area of public exposure or sensitive receptor prohibits aggregate operations, crushing and grinding operations, or maintain a pile at a large roadway project		Aggregate and related operations will follow these general performance standards: 1) Not discharge fugitive dust emissions exceeding 20% opacity from any activity, equipment, storage pile, or disturbed surface area based on an average of 12 consecutive readings, OR 2) 50% opacity from any activity, equipment, storage pile, or disturbed surface area based on five individual consecutive readings, OR 3) any visible fugitive dust plume from exceeding 100 feet in any direction from any activity, equipment, storage pile, or disturbed surface area.	
	Within 100-500 feet of an area of public exposure or 100-1000 feet of a sensitive receptor prohibits crushing and grinding aggregate operations (incl. concrete and asphalt recycling, construction/demo activities, earth moving or mechanical earth/soil disturbance, movement of heavy construction equipment over unpaved surface, or 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 operations will identify a dust control supervisor		
		Large operations will submit a dust control plan to be approved by AQMD		

Control measures listed below are used:				
	Crushing and grinding of aggregate operations: 1) Stabilize surfaces prior to operation, crushing/grinding, and 2) Stabilize aggregate material piles after crushing and grinding by applying water	Crushing: 1) Stabilize surface soils prior to operation of support equipment, 2) Stabilize material after crushing (Table 1)	Use baghouses to control PM10 emissions or dust suppressants (p.7)	
		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)	Screening equipment: use enclosed screening equipment hat is equipped with a baghouse or apply dust suppressant (p. 7)	
		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		Shall not conduct on-site earth-moving activities unless the area is surrounded with fencing that is a minimum of 6 feet tall and at least as tall as the height of the tallest stockpile, with a windscreen (p.9)
		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		While conducting on-site earth-moving activities shall wet the depth of earth-moving activity and wet at certain frequencies (p. 9)
		Disturbed soil: 1) Stabilize disturbed soil throughout the construction site, 2) Stabilize disturbed soil between structures (Table 1)		

			Earth moving activities, construction/demo, or disturbed surface area: Apply dust suppressant as necessary	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 act ivies are complete (Table 1)		
				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)		
				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.	Internal roads - Unpaved haul roads: apply chemical stabilizers on the internal unpaved haul roads, and post signs at the two ends of the internal unpaved haul roads stating that haul trucks shall use these roads unless traveling to the maintenance areas (p. 8)	
					Internal roads - unpaved non-haul roads and parking and staging areas: apply chemical stabilizers on such unpaved roads and parking and staging areas so that the surface is maintained in a stabilized condition or apply a gravel pad (p. 8)	
					Internal roads - Paved roads: the operator of a facility/operation with a minimum of 60 aggregate and/or mixer trucks exiting the facility on any day shall sweep the internal paved roads with a street sweeper by the end of each production work shift, or with less than 60 trucks exiting the facility shall sweep the internal paved roads with a street sweeper by the end of every other work day and apply water as necessary (p. 8)	

Large 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)		
Large 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)		
Large 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)		
Large 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 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 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 ceases, OR 4) Utilize any combination of control actions listed (Table 2)		
				No track-out to extend 25 feet or more and shall be removed at the conclusion of each workday or evening shift	To comply with Rule 403 rule track out threshold, install a gravel pad that contains one-inch or larger washed gravel maintained to a depth of six inches, has a geotextile lining underneath the washed gravel, and is flushed with water or completely replaced as necessary (p. 7)	An owner or operator that is moving vehicles on, within, or off a site shall 1) post signs at all entrances of the site to designate the speed limit at 15mpg, 2) stabilize the surface of all vehicle traffic and parking areas by applying gravel, paving, chemical stabilizers or dust suppressant, 3) not allow any track-out outside of the property line that is 25 feet or more in cumulative length and remove any track-out at a minimum frequency of once each day using a vacuum equipped with specified filters (pp. 9-10)

			Dust from construction vehicles: 1) Apply dust suppressant as necessary, 2) Limit vehicle speed to 15 mpg on roadways, 3) Cover frequently traveled unpaved roads and unpaved parking areas w/ low silt content material, 4) Treat unpaved roads w/ dust suppressant, mulch, or other cover, 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		Track-out: 1) take all reasonable steps to ensure that loads on aggregate trucks are leveled and maintained with at least 6 inches of freeboard and is stabilized by applying dust suppressants in sufficient quantities unless driver tarps or cover the load prior to entering paved public roads, 2) Post signs at the exits of the facility to require all loads to comply with the requirements, 3) Install and utilize a rumble grate, a wheel washer, or a truck washer, 4) Operator of new permanent facility/operation with land size in excess of 25 acres or with a designed daily throughput of 750 tons, and minimum of 60 aggregate and/or mixer trucks exiting the facility on any day shall install and utilize a rumble grate and a wheel washer 5) Provide the (pp. 9-10)	Clean the soil from the exterior of trucks, trailers, and tires prior to the truck leaving the site w/o the use of forced air (p.10)
				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)	Aggregate and related operations will follow these general performance standards: promptly remove any pile or material spillage on any internal paved roads or maintain in a stabilized condition	Utilize control measures at each vehicle egress from the site to a public road (p.10)
				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)	Aggregate and related operations will - loading, unloading, and transferring: permanent or temporary facility/operation shall use dust suppressants or other dust control methods at each emission source during loading, unloading, or transferring activities of materials as necessary (p. 7)	An owner or operator conducting truck and trailer loading activities of soil containing applicable toxic air contaminant(s) shall 1) apply dust suppressant to material prior to loading, 2) Empty the loader bucket slowly so that no visible dust plumes are generated, 3) Minimize the drop height from the loader bucket, 4) Maintain at least 6 inches of space between the soil and the top of the truck bed and trailer while transporting within a site, 5) Completely cover the truck bed and tailer prior to leaving the site (pp. 10-11)
			Large 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 to use any combination of the following controls: 1) Apply dust suppressant as necessary but no less than twice per hour, 2) Install coverings, and 3) Install an enclosure within a minimum of three sides and walls with a maximum porosity of 50 percent and	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)	Storage piles: Maintain in a stabilized condition the entire surface areas of the open storage piles of materials except for areas of the piles that are actively disturbed during the loading and/or unloading activities, or 1) store materials in a silo OR bunker, 2) maintain at least two feet of freeboard from the highest portion of the piles, AND 3) for the bunker, stabilize the sides of the pile that are not shielded by non-porous walls (p.8)	Stockpiles with any soil applicable to toxic air contaminants be: 1) segregated from non-contaminated piles, 2) labelled, 3) maintained to avoid steep sides or faces that exceed the angle of repose, 4) no more than 400 cubic yards of soil, 5) Maintained by applying chemical stabilizers, 6) OR covered (p. 10)

		minimum height equal to the highest point of the material pile; adjacent material piles within 25 feet of each other as measured from the closest edge of each pile shall be considered a single pile	Large 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)		
				Conveyor controls (p.7)	
					Monitoring requirements (pp. 4-9)
	Signage				
		Posted/installed within 50 feet of each large roadway project public entrance including any frequently used work entrance and at minimum every 100 yards along the large roadway project property line/boundary	Large 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.		

		Style: 1) 1 inch A/C laminated plywood board or similar strength and durability material with dimensions of 48 inches by 96 inches, 2) Background must contrast with lettering, typically black text w/ white background, 3) Lower edge of sign board must be minimum 6 feet and a maximum of 7 feet above grade, and 4) include accessible 24 hours per day local or a toll-free phone number for contacting the large roadway project responsible person or dust control supervisor regarding fugitive dust issues			

Notification				
	Areas of public exposure and sensitive receptors: At least 120 hours prior to establishing a large roadway project dust control supervisor or other responsible person shall notify the owner(s)/occupants(s) of occupied buildings or open/space recreational facility management as applicable, in writing and include 1) Dust control supervisor contact information including contact name, company/agency name, address, telephone number and email address, 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			
	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	Large 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		

		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 operations will maintain daily records to document the specific dust control actions taken		
Exemptions			Does not apply to emergency situations	Dairies, confined animal facilities, agricultural crop operations, operations conducted during an emergency, operations conducted by essential service utilities during outages, week abatement operations, and sandblasting operations. Selected exemptions provided for motion picture, television and video production activities.	Equipment start-up, selected requirements during high winds, scalping screens, chemical stabilizers that violate Water Quality Control Board, carry-back that is generated by the tunnel feed, truck trimming areas, facilities where aggregate trucks are not used to carry aggregate or related materials to and off the facility property (pp. 14-15)	