

PROPOSED RULE (PR) 403.2

FUGITIVE DUST FROM LARGE ROADWAY PROJECTS

Working Group Meeting #2
October 22, 2021



Proposed Rule 403.2 Background

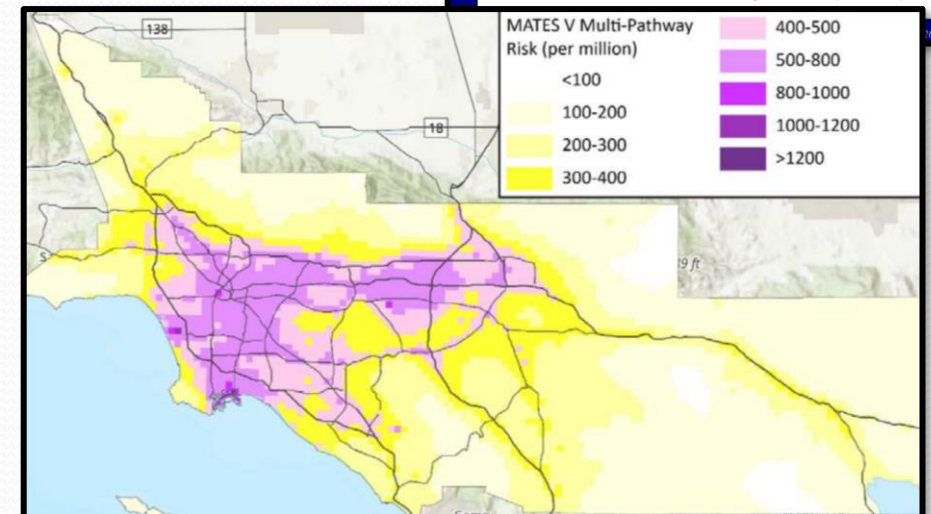
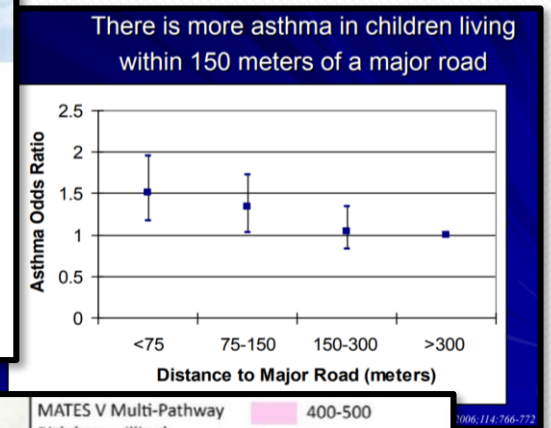
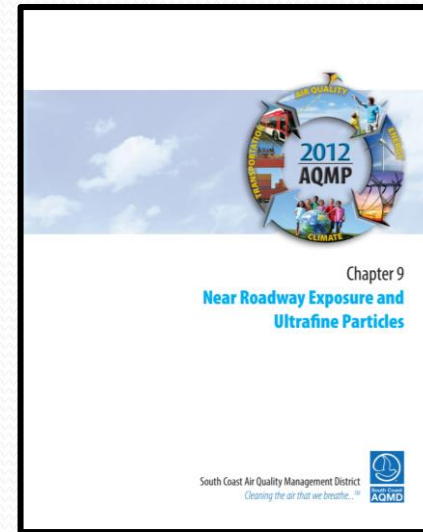
- Proposed rule number and title changed:
 - FROM: Proposed Rule (PR) 1157.1 – Control of PM From Large Demolition Piles
 - →TO: Proposed Rule (PR) 403.2 – Fugitive Dust From Road Construction Projects
- Previous rule focus was on all sites with large demolition piles
- Change better reflects current rule focus of preventing fugitive dust from larger road construction projects

Proposed Rule 403.2 Background (continued)

- Dust from large roadway construction projects continues to be problematic from some projects
 - Over 73 roadway construction/demolition dust related complaints in the last four years (2018 thru to the present)
 - Many road construction projects occur at any given time. Example: There are currently about 66 active/scheduled state and county road projects
- Rules 402, 403, and 1157 focus on broadly applicable public nuisance, broadly applicable fugitive dust controls, and more specific requirements for fugitive dust from aggregate operations
- Proposed Rule 403.2 would focus specifically on road construction projects

Unique Air Quality Considerations for Large Road Construction Projects – Near Road Health Risks

- Examples of previous South Coast AQMD efforts on near-road exposures
 - 2012 Air Quality Management Plan (Chapter 9 - Near Roadway Exposure and Ultrafine Particles)
 - 2013 Technology Forum on Near-Road Mitigation Measures and Technologies*
 - 2021 MATES V study continues to show that near-road environments have higher health risks than areas farther away

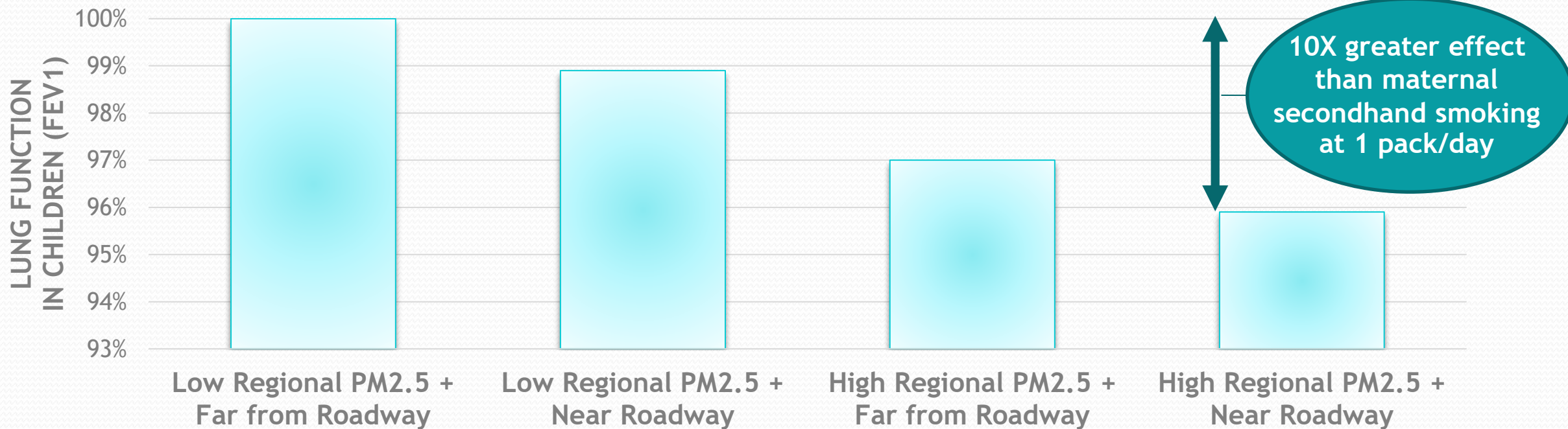


MATES V Study - Air Toxics Cancer Risk

* http://www.aqmd.gov/docs/default-source/technology-research/Technology-Forums/near-road-mitigation-measures/near_road_mitigation-agenda-presentations.pdf

Unique Air Quality Considerations for Large Road Construction Projects – Near Road Health Risks (cont'd)

Results from USC Children's Health Study



Any additional PM such as dust from large roadway projects has a potential negative cumulative health impact to nearby communities and sensitive groups

Near Road Environment & Dust from Road Construction Projects

- Many road construction projects are necessarily located close to sensitive receptors due to existing land use
- Close proximity results in very little margin for error for fugitive dust generation impacting nearby areas of public occupancy
- Temporary nature of construction/demolition can result in inconsistent application of fugitive dust controls compared to fixed sites
- Many complaints may not point to specific activity that generates the dust
 - Case studies point to specific sources of emissions from road construction projects affecting public nearby

Examples of Roadway Construction Dust Incidents – Inspectors Called Out

Date	Complaint	#	County
8/17/18	Large rubble pile. Bridge construction ongoing. Excessive fugitive dust.	2	LA
10/23/19	Bridge/Freeway construction. Materials crushing occurs at night. Dust problem.	1	LA
6/8/20 and 6/9/20	Large Road construction. Crushers/loaders/conveyers not using dust suppression. Water truck only watering roadway. Piles not being watered.	2	OR
Sept. – Oct. 2021	Large Road construction. 91 & 15 Interchange. Excessive dust from crushing and grinding. No water being used. Surfaces and piles not stabilized. Piles too high and too close to receptors (300 feet).	5	RIV

= number of complaints/calls/callouts

LA = Los Angeles; OR = Orange; RIV = Riverside; SB = San Bernardino; Multi = Multiple Counties

Examples of Roadway Construction Dust Incidents – Inspectors Called Out

Date	Complaint	#	County
5/6/20 to 1/19/21	Freeway demolition/construction dust.	14	RIV
2017 to 2020	Dust from portable crushing/grinding of recycled concrete and construction materials.	17	LA
1/20/18 – 9/17 /21	Freeway construction dust.	18	Multi

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Background for Rule 403.2 – State and Local Measures

- CalTrans
 - All projects and contracts require compliance with existing laws
 - Complaints regarding dust and other issues addressed on a case-by-case basis
 - Discretion used on some projects to pre-emptively apply dust control measures if concerns expected
 - Public notification typically only on larger projects, or if CEQA thresholds are triggered
 - Public notice commonly through the CEQA process, which could be years ahead of construction activity

Background for Rule 403.2 – State and Local Measures (cont'd)

- LA Metro Green Construction Policy
 - A **Minimum 1,000 ft buffer** between truck traffic and sensitive receptors where feasible
 - Written notice, to sensitive receptors within 1,000 ft, **minimum of 30 days prior to start**
 - Disclose location, acreage, type and number of equipment, start date and project duration
 - Community liaison must be available to answer questions/concerns

Background for Rule 403.2 – State and Local Measures (cont'd)

- City of San Bernardino (10/21/2020 City Council Adopted Resolution #2020-265):
 - Building materials stockpiles at project site only if grading/building permit already issued
 - Only finished materials ready for grading or construction can be stockpiled
 - No crushing/grinding on or within 1,000 ft of residential zoned lots
 - Any temporary permit issued for the crushing/grinding of unfinished raw materials such as rock, concrete, or similar materials shall be conditioned to address public health, safety, and welfare

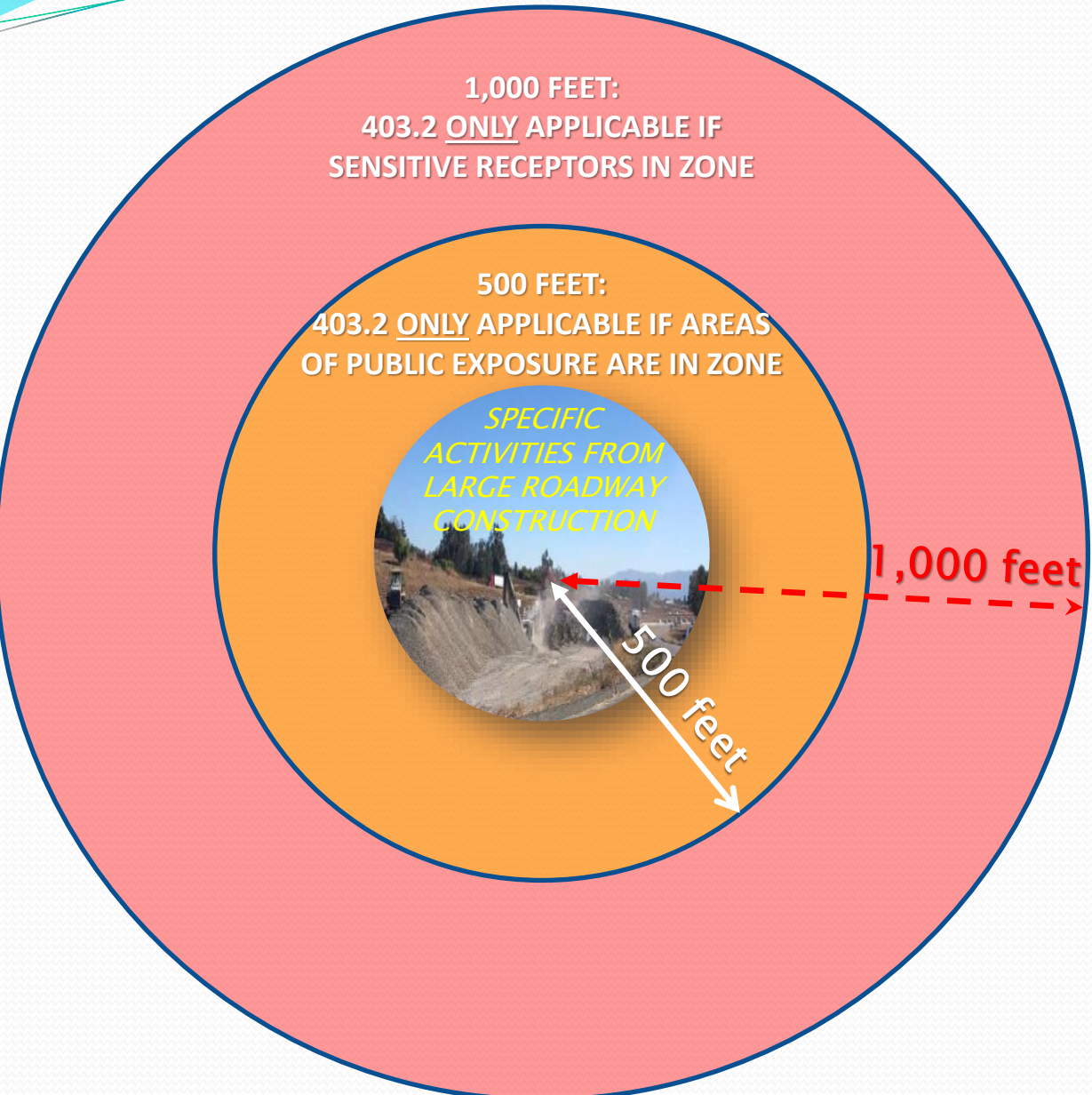
Potential Approach for PR 403.2

- Proposed Rule 403.2 would place additional requirements on some road construction activities when they occur in close proximity to areas of public exposure:
 - Prohibition on certain activities
 - Additional fugitive dust controls for some activities
 - Advance project notification to the public and job-site signage
 - Recordkeeping of fugitive dust controls

Potential Receptor Distances Used for PR 403.2 Applicability

- Previous studies and policy actions have focused on 500-foot and 1,000-foot zones close to roadways as areas requiring additional attention
- Potential tiered approach for PR 403.2:
 - Distances as measured from the property line of the receptor to specific dust generating activities:
 - **500 feet or less – areas of public exposure**
 - **1,000 feet or less – sensitive receptors**

Potential Receptor Distances Used for PR 403.2 Applicability (cont'd)



Sensitive Receptors



Homes



Schools, Daycares, Hospitals



Parks and recreational facilities

Open Space Areas?



Office, Commercial and Industrial Buildings

Areas of Public Exposure

Potential Approach for Key Rule Definitions

- Large Roadways could be based on the amount of vehicle traffic on the roadway over a set period of time (e.g., annual average daily traffic)
- Large Roadway Construction Site/Operation could cover any site where construction/demolition materials associated with large roadway projects involving aggregate material storage, crushing or grinding
- Large Demolition Piles could include large piles containing aggregate materials (typically recycled asphalt and concrete)

Potential Approach for Key Rule Definitions (cont'd)

- Sensitive Receptor could include residences, hospitals, and schools (e.g., see definitions in Rules 1157, 1420.1, 1469, 1470, 1480)
- Occupied Buildings could include structures such as dwellings, offices, and commercial and industrial buildings which are routinely occupied
- Areas of Public Exposure could include areas within PR 403.2 receptor distances such as occupied buildings, parks, and recreational areas

Q & A – What Demolition Piles would potentially be subject to PR 403.2?

- Only covers construction piles associated with large roadway construction projects
- Staff is proposing that the following pile sizes be **exempt** from PR 403.2 requirements:
 - **Less than 3 foot maximum height, AND**
 - **Less than 150 feet total surface area**
- Consistent with Rule 403 and Rule 1157 “Open Storage Piles” and Rule 1466 “Stockpiles”

Q & A – Will existing operations/sites be impacted if PR 403.2 is approved?

- Staff is proposing to allow sufficient time for rule requirements to be implemented such that contractors have adequate lead time to incorporate requirements in their proposals
- Existing long-term sites with new operations or new phases of operation may be subject to the rule requirements after a grace period

Q & A – Will new permits be required from PR 403.2?

- Equipment must be in compliance with all existing permitting requirements
- No new permit or equipment permit requirements currently being considered for PR 403.2
- Existing permitted equipment requirements or other rules may exceed requirements in PR 403.2

Discussion Points for Next Working Group Meeting

- Potentially prohibited activities directly next to sensitive areas at certain large road construction projects (e.g., crushing and grinding)
- Definitions (e.g., “Areas of Public Exposure”, and Large Road Construction Project”)
- Other issues

Revised Tentative Rule Development Schedule

- 1st Working Group Meeting Held - July 15, 2021 ✓
- 2nd Working Group Meeting – October 22, 2021
- 3rd Working Group Meeting – November 16, 2021
- Public Workshop – February 2022
- Governing Board Hearing – May 6, 2022

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OPEN DISCUSSION