

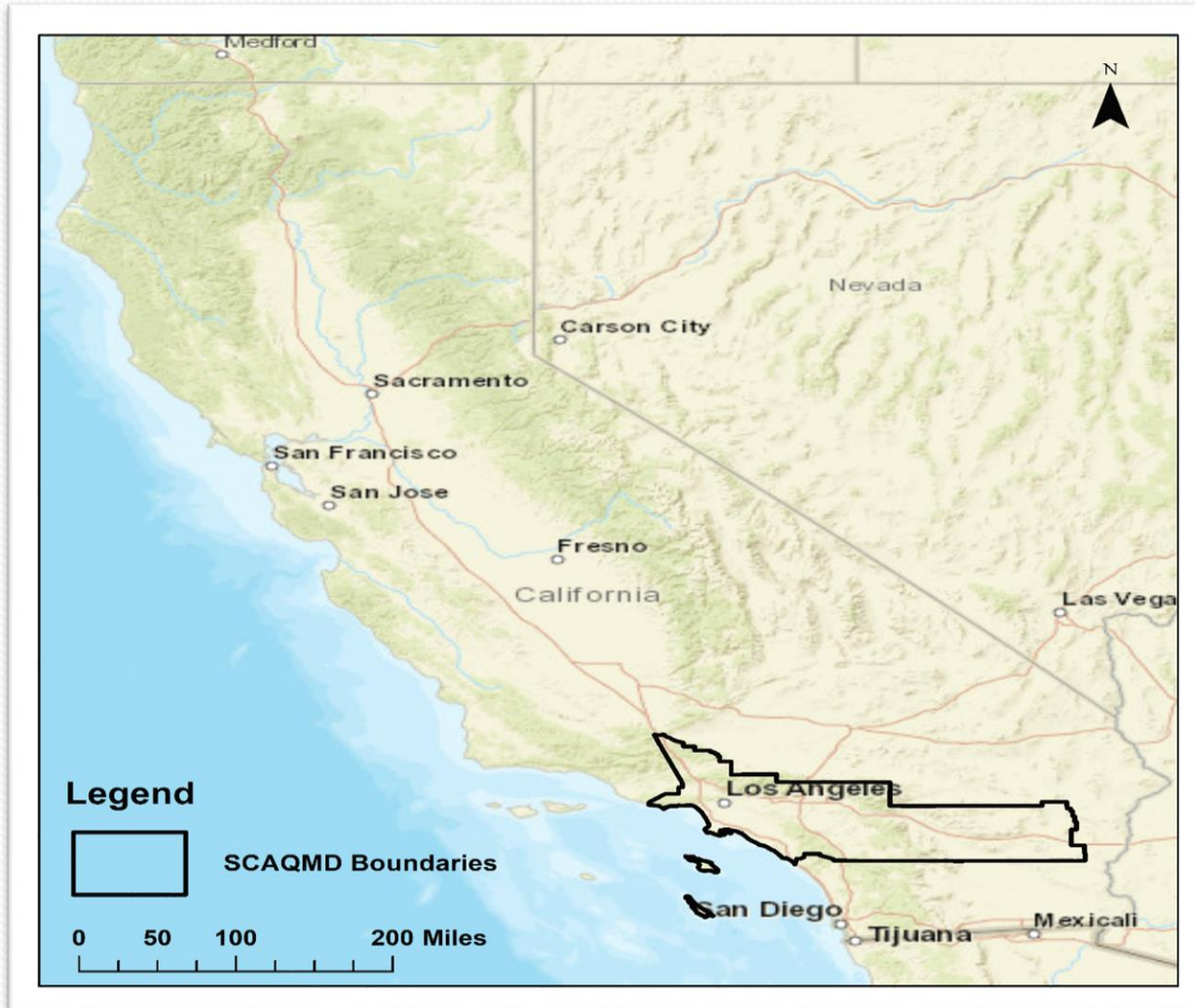
Proposed Rule 1157.1 - CONTROL OF PM FROM LARGE DEMOLITION PILES

Working Group Meeting

July 15, 2021



South Coast AQMD



- Regional air quality control agency for Orange, portions of Los Angeles, Riverside and San Bernardino counties
- ~17 million people (>40% of CA)
- Governed by a Board of local elected and appointed officials
- Monitor air quality to meet federal and state air quality standards
- Regulate air emissions from many sources (e.g., refineries, power plants, gas stations, aggregate and batch plants)
- Respond to citizen air pollution complaints and public nuisance situations including fugitive dust

Background

- Fugitive dust from large demolition piles can become airborne during roadway and some construction projects, open storage, crushing and grinding, and similar activities and can result in exposure to particulate matter emissions
- Health studies have shown a significant association between exposure to particle pollution and health risks including:
 - Premature death
 - Cardiovascular and respiratory impacts
- Three existing rules address fugitive dust:
 - Rule 403 - Fugitive Dust
 - Rule 1157- PM10 Emission Reductions From Aggregate & Related Operations
 - Rule 402 – Nuisance (in limited circumstances)
- Currently, existing rules do not include specific provisions such as notification and control measures for large demolition piles
- Proposed Rule 1157.1 requirements would supplement Rule 403 and Rule 1157 requirements for large demolition piles and address nuisance issues where applicable

Background (continued)

- Rule 403 allows a choice of compliance options for general fugitive dust sources but insufficient controls for large demolition piles
- Rule 1157 further minimizes PM emissions from aggregate industry but not specifically for large demolition piles
- Numerous complaints due to large demolition pile fugitive dust from roadway and some construction projects
 - Resulting in Rule 402 – Nuisance calls
- 33 complaints from May 2020 to June 2021 (additional staff research under way)
- Large demolition pile fugitive dust controls are insufficient especially close to nearby communities
- Existing rules do not address the concern regarding lack of project notification expressed by impacted members of the nearby communities

Large Demolition/Construction Operations



POTENTIAL
LARGE
DEMOLITION
PILES



Crushing, Grinding and
Conveyorizing
Operations



Large Open Demolition
Pile Storage

Materials Movement
and Handling

Potential Fugitive Dust From Large Demolition/Construction Operations



**LARGE
DEMOLITION
PILE POTENTIAL
FUGITIVE DUST**

Rule 403– Fugitive Dust

■ **Applicability**

- Any man-made fugitive dust (Particulate Matter) or PM including
 - ✓ Earth-moving, Construction/Demolition & Vehicle Dust
 - ✓ Aggregate Related Plants – produce/mix sand, gravel & crushed stone

■ **Prohibitions**

- Visible dust (PM) beyond the property line
- Maximum 20% opacity for dust caused from vehicles

■ **Controls**

- Use Best Available Control Measures based on acres/throughput (e.g., tarping, enclosures & stabilizers)
- Vehicle Track-out <25 feet & remove end of day

Rule 403 - Fugitive Dust (continued)

■ Additional Controls-Large Operations

- ≥ 50 acres
- Earth-moving operation $\geq 5,000$ cubic yards/day, 3 within last 365 days
- Submit Notification (Form 403 N) to South Coast AQMD
 - ✓ Public notification not required
 - ✓ Notify when no longer large operation
 - ✓ Notification valid for one year only
- Daily Records of dust control actions
- Project signage
- Dust control supervisor – has authority to expeditiously mitigate fugitive dust

Rule 1157 - PM10 Emission Reductions From Aggregate & Related Operations

■ Applicability

- Permanent and temporary aggregate and related operations

■ Prohibitions

- Fugitive dust opacity limits 20% (12 readings) or 50% (5 readings)
- No Plume ≥ 100 ft in any direction from activity, equipment or area

■ Controls

- Requirements to mitigate fugitive dust from
 - ✓ Loading/Unloading
 - ✓ Crushing, grinding, conveyors and screening
 - ✓ Paved/unpaved roads
 - ✓ Track-out
- Recordkeeping
- Additional requirements triggered by recurrent violation

Proposed Rule 1157.1 - PM Emission Reductions from Large Demolition Piles

Objective of PR 1157.1 - PM Emission Reductions from Large Demolition Piles

- Focus on minimizing release of fugitive dust into the air from large demolition piles
- Minimize exposure of particulates emissions (PM) to nearby receptors
- Providing nearby community information about the project both before and during project implementation

PR 1157.1 Requirements Applicable Within X Distance of Communities

**PR 1157.1 APPLICABLE
IF $\leq X$ ft**



DISTANCE FROM PILE TO COMMUNITY $\leq X$ ft



Homes

Schools



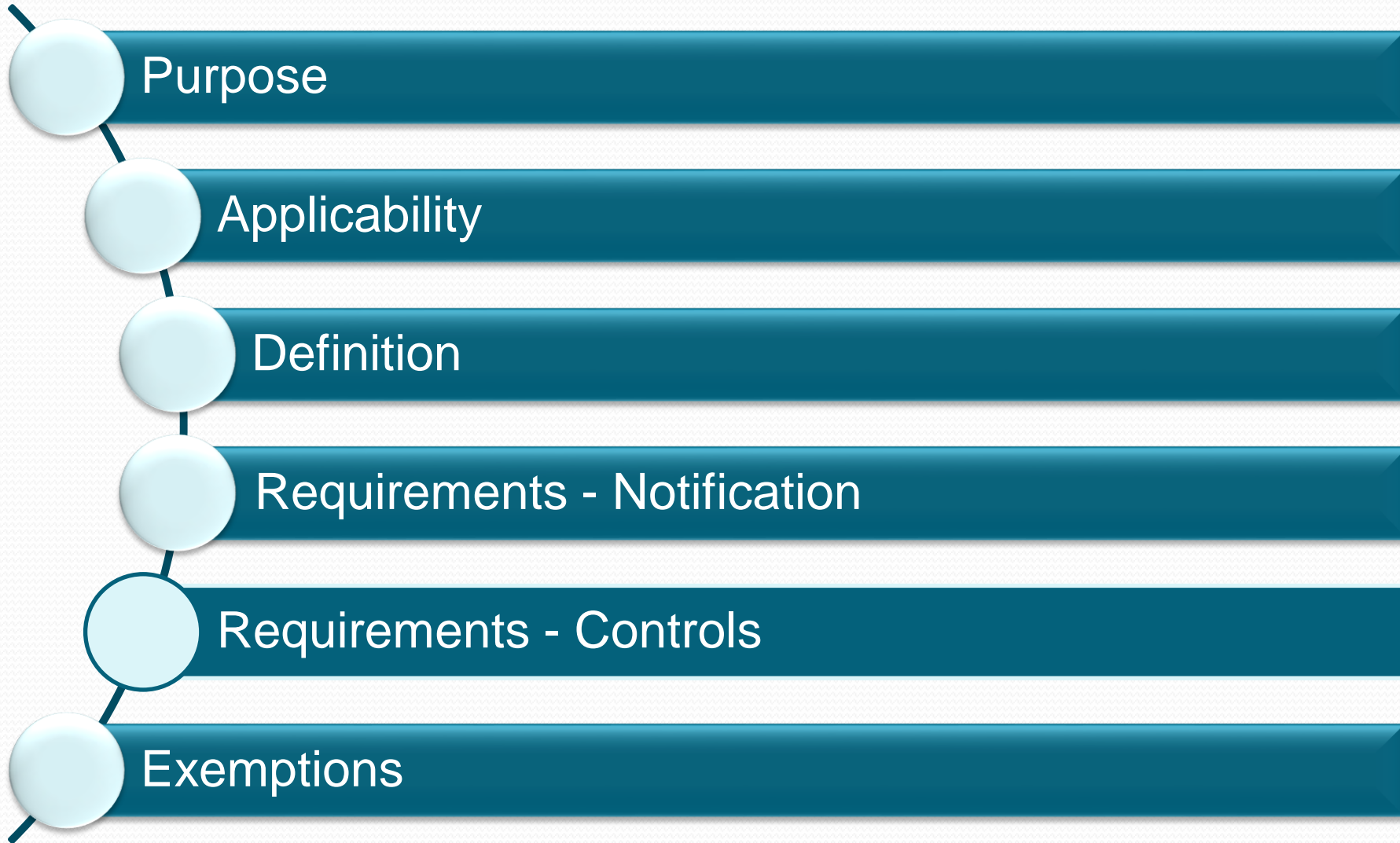
Office, Commercial
and Industrial
Buildings

Parks and open
air recreational
facilities

DISTANCE FROM PILE TO COMMUNITY $> X$ ft

**PR 1157.1 NOT
APPLICABLE IF $> X$ ft**

Proposed Concepts of PR 1157.1



Proposed Concepts of PR 1157.1 - Purpose

- Reduce PM emissions from large demolition piles and associated operations
- Prior to establishing an active site, provide advance notification to potentially impacted nearby communities and South Coast AQMD

Proposed Concepts for PR 1157.1 - Applicability

- Large demolition piles which meet the minimum criteria for size and are located at an active site within **XX** feet distance of nearby communities.

Proposed Concepts for PR 1157.1 - Definitions

- **LARGE DEMOLITION PILE** means any accumulation of demolition material debris, including but not limited to stone, brick, concrete, asphalt or other building materials (also including recycled or recovered materials) typically resulting from the demolition of buildings, bridges or any other similar structures, or infrastructure such as roadways.
- **ACTIVE SITE** means any man-made large demolition pile source capable of generating fugitive dust, including, but not limited to, crushing, grinding and other activities, associated with large demolition piles.

Proposed Concepts for PR 1157.1- Requirements

■ Notification

- Notification requirements **Z hours** prior to establishing an active site:
 - ✓ Notify South Coast AQMD
 - ✓ Notify Nearby Community – residential, commercial or industrial building or dwelling units within **X feet** distance of large demolition pile
 - ✓ Notify Nearby Sensitive Receptors – schools, hospitals, convalescent homes and similar occupied facilities within **Y > X** feet distance of large demolition piles

Proposed Concepts for PR 1157.1- Requirements (Continued)

■ Contact Signage

- Install signage on project perimeter:
 - ✓ Dust Control Supervisor contact prominently displayed
 - ✓ South Coast AQMD phone number

■ Recordkeeping

- Maintain daily records to document the specific dust control actions taken (e.g., watering schedule)
- Retain records for a period of not less than 3 years
- Furnish records to South Coast AQMD upon request

Proposed Concepts for PR 1157.1- Requirements (Continued)

■ Controls

- Implement one of the following control methods for all large demolition piles:
 - ✓ Apply chemical stabilizers
 - ✓ Apply water to the surface area of the large demolition piles daily when there is evidence of wind driven fugitive dust
 - ✓ Install coverings/containment
- Implement control methods for crushing and grinding:
 - ✓ Stabilize surface soils prior to operation of support equipment; and
 - ✓ Stabilize large demolition material after crushing and grinding

Proposed Concepts for PR 1157.1- Requirements

■ Dust Control Supervisor

- Assign/appoint (South Coast AQMD Fugitive Dust Control Class certified) Dust Control Supervisor
- Has the knowledge and responsibility to take action with dust mitigation measures to ensure compliance with all Rule requirements

Proposed Concepts for PR 1157.1- Exemptions

- Emergency life-threatening situations or any officially declared disaster of state of emergency
- An owner-occupant of a residential single-unit dwelling who conducts a renovation activity at that dwelling

Additional PR 1157.1 Requirements As Compared to R 403 and R 1157

Requirements (For Large Demo Piles)	Rule 403	Rule 1157	Proposed Rule 1157.1
Notification to South Coast AQMD	Only applies to large operations*	None	Yes**
Notification to nearby communities	None	None	Yes**
Identify a Dust Control Supervisor	Only applies to large operations*	None	Yes**
Contact Signage	Only applies to large operations*	None	Yes**
Recordkeeping on Dust Control Action Taken	Only applies to large operations*	Yes	Yes**

* ≥ 50 acres or 5,000 cubic yards/days

**Only if the large demolition pile is in the proximity to nearby community

Tentative Rule Development Schedule

- Second Working Group Meeting – August 4, 2021
- Public Workshop – August 27, 2021
- Close of Public Comments – September 7, 2021
- Stationary Source Committee Meeting – September 17, 2021
- Set Hearing – October 1, 2021
- Public Hearing – November 5, 2021

PR 1157.1 Staff Contact

George Wu
(909) 396-2533
gwu@aqmd.gov

Henry Pourzand
(909) 396-2414
hpourzand@aqmd.gov

OPEN DISCUSSION