Proposed Rule 1480 – Air Toxic Metals Monitoring

WORKING GROUP MEETING #4

February 5, 2019

Meeting Agenda

- Summary of Working Group Meeting #3
- Rule 1402 Notification Process
  - Determination of Potentially High Risk Level Facilities
- Recap of Proposed Rule (PR) 1480 concepts
- Framework for PR 1480
  - Purpose
  - Applicability
  - Air toxics monitoring plan

Summary of Working Group Meeting #3

- Provided overview of investigative tools (e.g., glass plates) used by SCAQMD
- General overview of rulemaking process
- Staff provided initial concepts for PR 1480
- Stakeholders requested:
  - An overview of Rule 1402 notification process for Potentially High Risk Level Facilities
  - Details of PR 1480 concepts (e.g., on-ramps, off-ramps and thresholds)

Rule 1402 – Control of Toxic Air Contaminants from Existing Sources

Rule 1402 Background

- Adopted in 1994 to implement the AB 2588 Toxics Hot Spots Program
- An “umbrella” rule for air toxics
  - The purpose of the rule is to reduce the health risk associated with emissions of toxic air contaminants from existing sources
  - Establishes facility-wide cancer and non-cancer health risk thresholds for existing sources
  - Requires evaluation of facilities every four years

Rule 1402 – Provisions for Potentially High Risk Level Facilities

- R1402 includes provisions for Potentially High Risk Level Facilities
- A facility designated as a Potentially High Risk Level Facility has additional requirements and an expedited schedule to reduce health risks
- Potentially High Risk Facilities have an estimated:
  - Cancer risk that exceeds 100 in-one-million, or
  - Total acute or chronic Hazard Index of five (5.0) for any target organ system at any receptor location

Rule 1402 – Process for Determination Potentially High Risk Level Facilities

- Executive Officer notifies the owner or operator that the facility may be designated as a Potentially High Risk Level Facility and meets with operator to obtain any additional information
- Executive Officer will provide the following information to substantiate designation:
  - Findings from the evaluation of data that includes, but is not limited to: ambient air quality data, source test data, compliance data, and emissions data;
  - Findings from facility site visits; and
  - Findings from the investigation of surrounding sources

Rule 1402 – Requirements for Potentially High Risk Level Facilities

- Implement an Early Action Reduction Plan that immediately reduces facility-wide health risk
- Submit detailed Air Toxic Inventory Report
- Submit a Health Risk Assessment
- Implement a Risk Reduction Plan to reduce risk below 25 in a million within two (2) years of approval of RRP

Rule 1402 – Process for Determination Potentially High Risk Level Facilities

Notification to Facility

- Executive Officer notifies the owner or operator that the facility may be designated as a Potentially High Risk Level Facility

Meeting with Facility

- Executive Officer will meet with the owner or operator to obtain any additional information

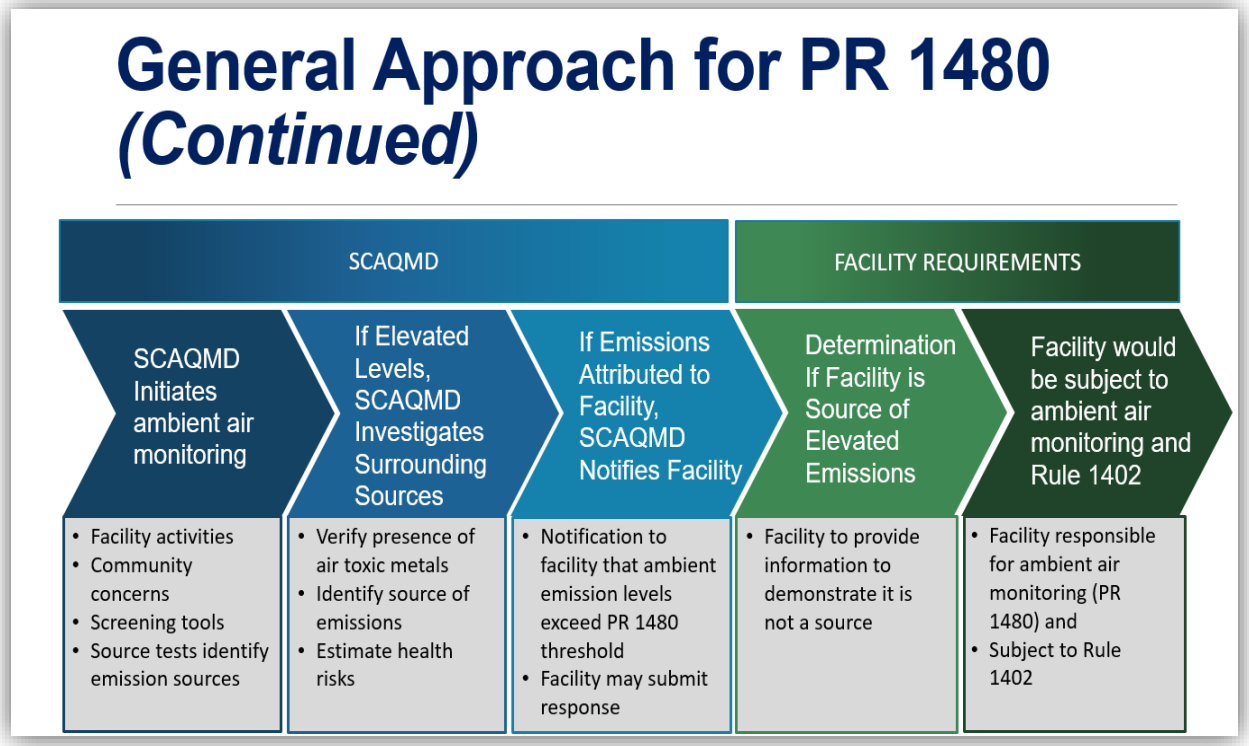
Determination by Executive Officer

- Executive Officer will notify the owner or operator of the designation as a Potentially High Risk Level Facility in writing and provide data used to substantiate the designation

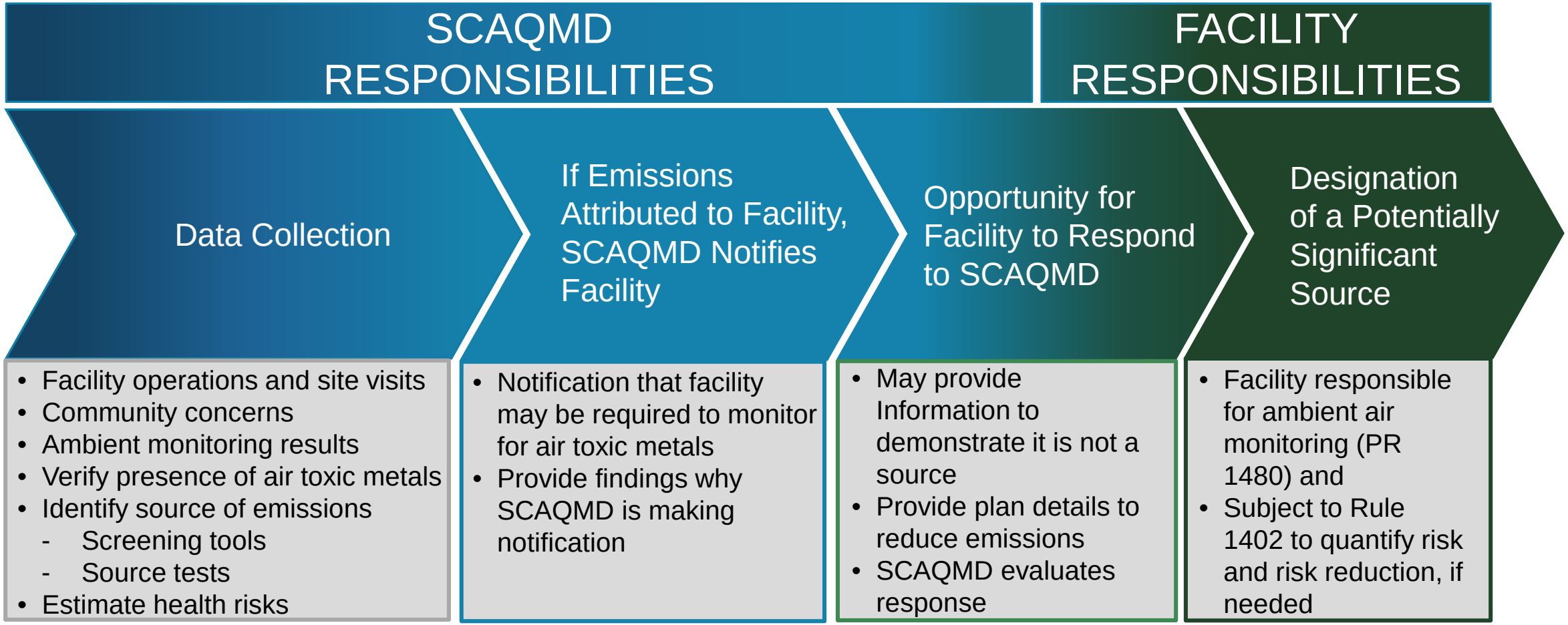
Recap of PR 1480 Concepts

General Approach for PR 1480

- At Working Group #3, staff presented the general approach for PR 1480
- Staff refined the general approach
- Staff will provide additional clarification on SCAQMD and facility responsibilities



General Approach for PR 1480 (Continued)



General Approach for PR 1480 – SCAQMD Data Collection

- Ambient air monitoring initiated by SCAQMD
  - Based on staff observations, community concerns, community monitoring program, etc.
  - Can include screening tools (e.g., deploying glass plate samples, bulk sampling, source tests)
  - Provides information about emission levels at monitored sites
- Verify the presence of toxic metals surrounding monitored site(s)
- If elevated emission levels are detected, SCAQMD would:
  - Identify potential source(s) of toxic metal emissions
  - Estimate the health risk impacts

General Approach for PR 1480 – SCAQMD Notification

- If data collected by SCAQMD demonstrates facility is a Potentially Significant Source, SCAQMD would:
  - Notify the facility that it is a Potentially Significant Source and could be subject to air monitoring requirements
  - Provide evidence collected by the SCAQMD
- A Potentially Significant Source would include facilities with a cancer risk that exceeds 100 in-one-million
- Examples of evidence to determine a Potentially Significant Source could include, air monitoring, source test and compliance data

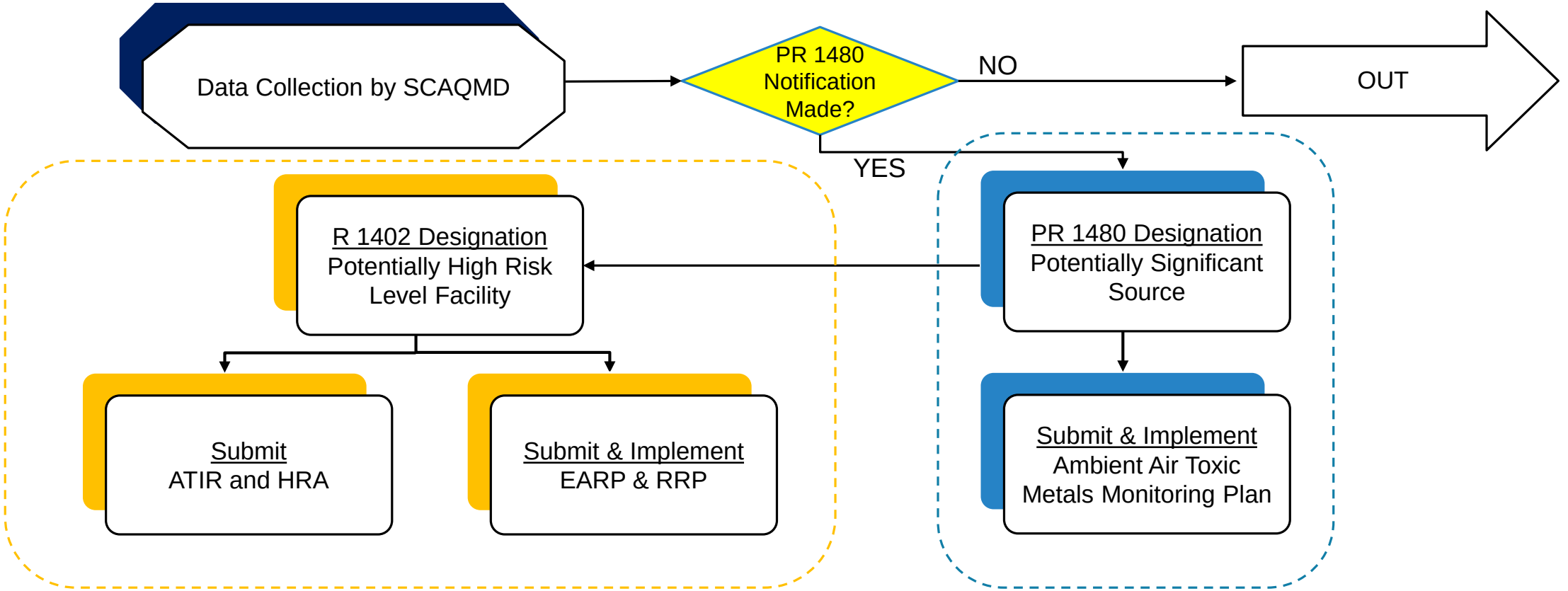
General Approach for PR 1480 – Facility Response to Notification

- A facility would have an opportunity to respond to the SCAQMD notification
- Facility required to respond within 14 days from the date of SCAQMD notification
- Examples of facility responses:
  - Substantiate why the facility is not a source
  - Request to meet with SCAQMD staff to present additional evidence

General Approach for PR 1480 – Potentially Significant Source

- Executive Officer could designate a facility as a Potentially Significant Source based on evidence such as:
  - Data collected by SCAQMD
  - Information provided by the facility
- Facilities designated as a Potentially Significant Source would be required to:
  - Submit a PR 1480 ambient air monitoring plan
  - Comply with the requirements for a Potentially High Risk Level facility pursuant to Rule 1402 (e.g. Early Action Reduction Plan)

PR 1480 Process



REDUCE HEALTH RISK **MONITOR EMISSIONS**

PR 1480 Framework

PR 1480 Framework

- Purpose
- Applicability
- Potentially Significant Source (On-Ramp for Monitoring)
- Monitoring Plan

Purpose

- To require ambient air monitoring for facilities that are the source of toxic metal emissions
- Examples of toxic metal emissions:

Arsenic (As)	Cadmium (Cd)
Copper (Cu)	Hexavalent Chromium (CrVI)
Nickel (Ni)	Manganese (Mn)

Applicability

Applies to any facility determined to be a Potentially Significant Source of toxic metal emissions

Examples

Metal Finishing

Metal Heat Treating

Metal Forging

Chromate Coatings

Metal Shredding

Metal Melting

Metal Buffing and Grinding

Notification of Potential Air Monitoring or “On-Ramp”

- Executive Officer notifies the facility it may be a Potentially Significant Source
- Notification based on information from data collection – emissions data, results of ambient monitoring, etc.
- Facility can provide information within 14 days from date of notification to substantiate it is not a source
- Executive Officer notifies facility if designated a Potentially Significant Source of toxic metal emissions

Monitoring Plan

- A facility designated as a Potentially Significant Source would be required to submit a monitoring plan
- Objective of the monitoring plan is to identify the maximum ground level concentration
  - Includes information about the facility and location of sources
  - Air dispersion modeling is needed to estimate the point of maximum ground level concentration
- A Monitoring Plan may not be required if the maximum ground level concentration is already known

Monitoring Plan (Continued)

The monitoring plan would include detailed information such as:

- Locations for sampling sites
- Source test results for toxic metal point sources
- Facility map identifying locations:
  - Toxic metal emission sources
  - Air pollution controls and stack information
  - Building enclosures and openings
  - Storage areas
  - Vehicle access areas
  - Facility boundaries (e.g., property line)

Monitoring Plan Approval

- The Executive Officer would notify the facility in writing of the plans approval status
  - If disapproved, the facility would revise the plan to address deficiencies identified by the Executive Officer within 30 days
- Plan approval would be based on adequate coverage of emissions

Monitoring Requirements

- Begin ambient monitoring within 30 days from approval of the monitoring plan
- Minimum of two locations (1 downwind and 1 upwind)
- Frequency of monitoring
  - 1 in 3 day monitoring frequency
  - 24 hour sampling period
- Considerations when siting monitors
  - Logistics to physically locate monitor
  - Accessibility and safety
  - Surrounding receptors

Other Monitoring Requirements

- Sample collection and analysis based on monitoring plan
- Weather station to collect wind speed and direction data
- Quality control and quality assurance procedures
- Specify monitoring and wind data reporting and recordkeeping
- Notify SCAQMD of equipment malfunctions

Monitoring Options

- Facility may elect to have the Executive Officer conduct air monitoring
- Facility would cover the cost of SCAQMD air monitoring
  - Capital cost (e.g., equipment installation and site preparation)
  - Operating and maintenance costs (e.g., labor costs)
- Facility would provide the Executive Officer necessary access (e.g., monitors, operations)

Next Steps

- 5th Working Group Meeting: March 2019
- Governing Board Meeting: 3rd quarter of 2019

PR 1480 Staff Contacts

Min Sue
(909) 396-3241
msue@aqmd.gov

Neil Fujiwara
(909) 396-3512
nfujiwara@aqmd.gov

Dan Garcia
(909) 396-3304
dgarcia@aqmd.gov

Susan Nakamura
(909) 396-3105
snakamura@aqmd.gov