

Proposed Rule 1480 – Ambient Monitoring and Sampling of Metal Toxic Air Contaminants

WORKING GROUP MEETING #11

October 29, 2019

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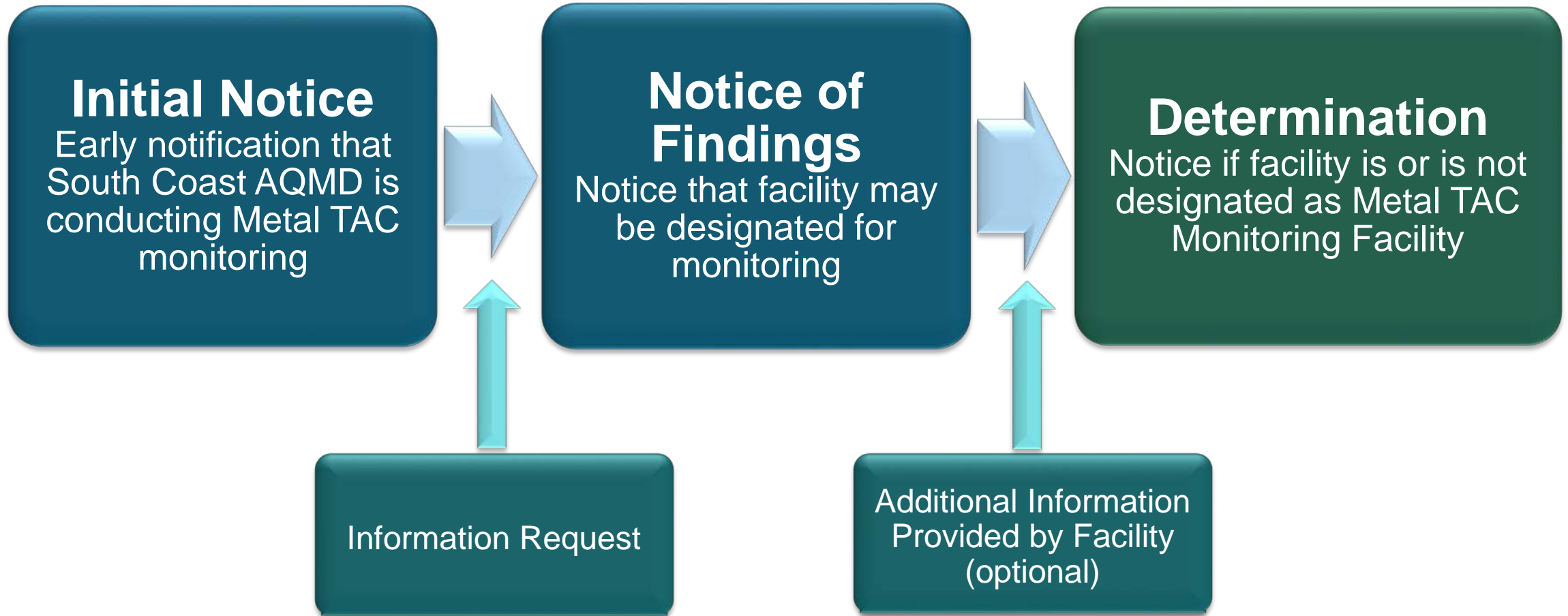


Overview

- Purpose of Working Group meeting
 - Address questions and comments raised during Working Group Meeting #10
 - Address any other questions or comments, or clarifications
- Encourage stakeholders to provide input today – staff will be finalizing the “30-day” documents this week
- Received comment letter from the California Metals Coalition today – incorporated additional slides to address issues
 - In addition to their comments – requested flow charts for PR 1480

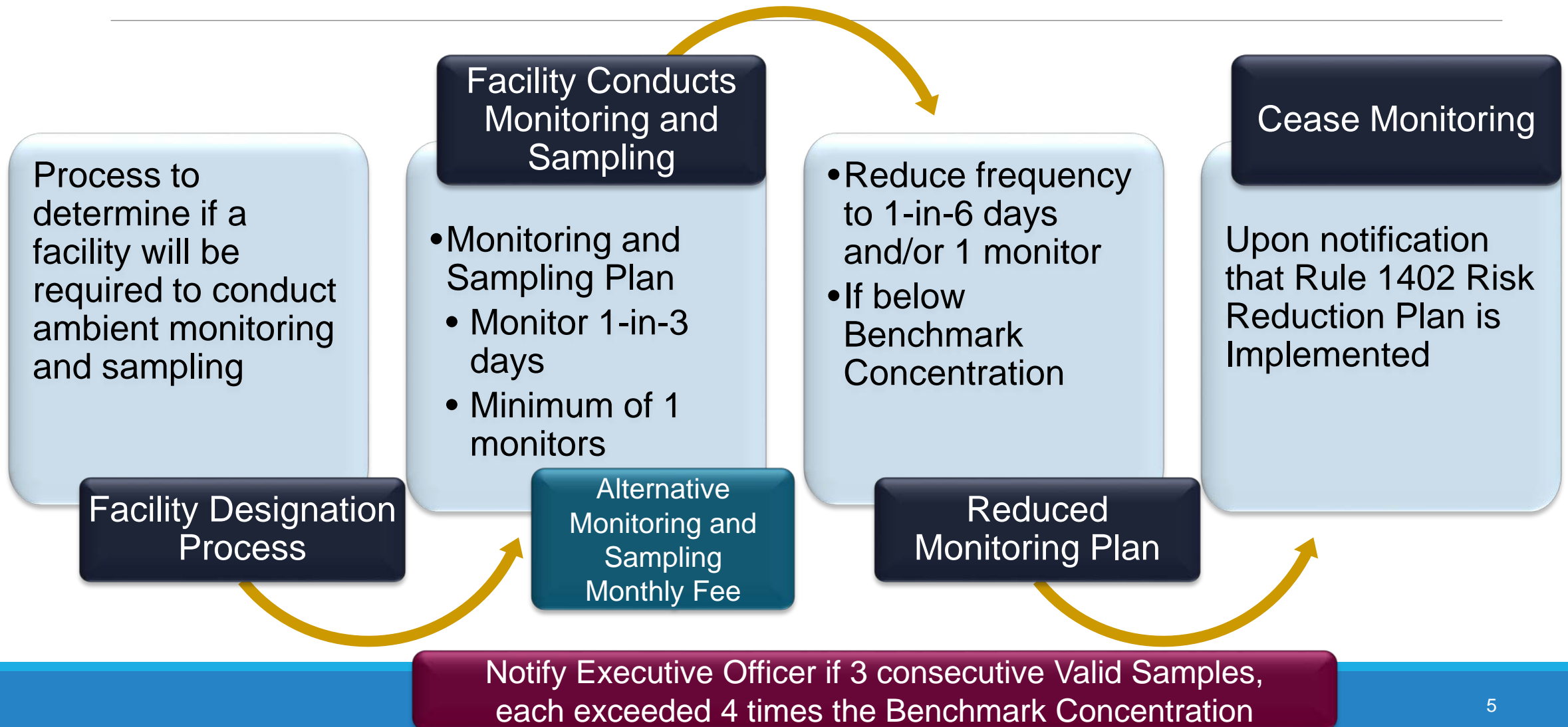
PR 1480 Flow Charts

Designation Process



South Coast AQMD will conduct monitoring until the facility begins monitoring

PR 1480 Overview



Modeled Sources for Designation

What Information is Used to Estimate the Health Risk at the Sensitive Receptor for the Designation Process?

- Only Metal TAC emissions data and facility specific information will be used to estimate the health risk at the sensitive receptor
- Methodology will follow Risk Assessment Procedures referenced in Rule 1401

Facility-Specific Inputs:

- Emission rates
- Emission source types (point, volume, area)
- Release parameters
- Meteorological data
- Terrain type
- Receptor locations

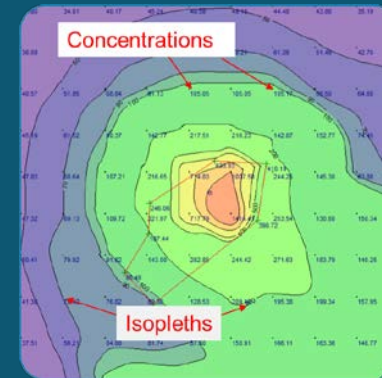


Model Inputs Using AERMOD and HARP 2



Results

Estimated concentrations and health risk at receptor locations



How are Monitoring Results Used in the Designation Process?

- Estimated health risk at the sensitive receptor is based on facility-specific inputs and air dispersion modeling
- Staff will compare the modeled and monitored results at the fenceline to assess if the model captures the key Metal TAC emission sources at the facility
- If the modeled results are substantially lower than the monitored results, it may indicate
 - Key Metal TAC emission source(s) within the facility are missing
 - Other sources of Metal TAC emissions outside of the facility are contributing to the monitored results
 - Details of the monitoring results such as a spike for an exceptional event may be the cause of the substantial difference between the modeled and monitored results
- If a source outside of the facility is identified, the South Coast AQMD will conduct the 4-step process to verify if the facility is a source of Metal TAC emissions

Comment: Implementation of Rules that Affect the Metal Sector Should be Considered

- Maintain the provisions for enforceable measures and enforceable measures that would be implemented within 90 days
- Adding a provision that would recognize implementation of adopted or amended rules that affect Metal TAC sources
- Owner or operator would be required to provide:
 - List of each piece of equipment and the Metal TAC where there is an applicable South Coast AQMD rule with a future final compliance date
 - For each piece of equipment any interim compliance dates such as permit submittals, source test requirements, etc.

Comment: Implementation of Rules that Affect the Metal Sector Should be Considered *(Continued)*

- Modify designation criteria for estimating the health risk at the sensitive receptor to exclude those Metal TAC emissions associated with equipment or processes where the Executive Officer can verify that Metal TAC emissions will be reduced through:
 - An enforceable measure;
 - Enforceable measure that would be implemented within 90 days of the Notice of Findings; or
 - A South Coast AQMD toxics rule with a future effective compliance date, provided the owner or operator has complied with all compliance dates for that piece of equipment or process

Excludes Metal TAC emissions from verified enforceable measures, enforceable measures with 90 days, and equipment with a future effective date, that have met compliance deadlines

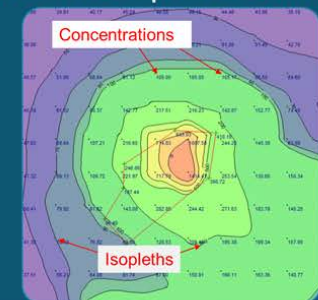
Facility-Specific Inputs:

- Emission rates
- Emission source types (point, volume, area)
- Release parameters
- Meteorological data
- Terrain type
- Receptor locations

Model Inputs Using AERMOD and HARP 2

Results

Estimated concentrations and health risk at receptor locations



Information Request

Comment: Initial Notice Should be Issued Prior to Information Request (d)(2)

Previous Version of PR 1480	Revision to PR 1480
<ul style="list-style-type: none">• No specification in the process when Information Request could be made• Information Request could be made before or after Initial Notice is issued	<ul style="list-style-type: none">• PR 1480 has been revised to state that Information Request cannot be made until after Initial Notice is issued<ul style="list-style-type: none">• <i>After an Initial Notice is issued to an owner or operator of a facility the Executive Officer may issue an Information Request</i>
<ul style="list-style-type: none">• Information Requests pursuant to paragraph (d)(2) will occur after an Initial Notice is issued• This does not preclude the South Coast AQMD to request information for implementation of other rules or compliance efforts	

Revisions to Wind Monitoring

Revisions to Provisions for Wind Monitor and Wind Data

- Revised provisions for recording wind monitor data to further reduce overall costs for monitoring and sampling
- Operator may be able to be relieved for maintaining a wind monitor
 - Considerations are generally based on proximity to another wind monitor that meet the requirements of PR1480 and topography
 - Staff will evaluate on case-by-case basis in monitoring and sampling plan
- Operators using an Alternative Monitoring and Sampling can opt to record wind data
 - Less costly option to purchase equipment and record wind data

Options for Recording Wind Data

South Coast
AQMD Records
Wind Data

Cost:
\$8,000 per
year

Operator Records
Wind Data

Cost:
<<\$8,000
per year
(Wind monitor, data
acquisition system,
and staff time)

If Determined No
Wind Monitor
Needed

No
Additional
Cost

Requirements for Continuously Recording Wind Speed and Direction (f)(8)

Previous Version of PR 1480	Revision to PR 1480
<ul style="list-style-type: none">Requires a Metal TAC Monitoring Facility to continuously record wind speed and direction	<ul style="list-style-type: none">Requires Metal TAC Monitoring Facility to continuously record wind speed and direction, <i>if required in an approved Monitoring and Sampling Plan</i>
<ul style="list-style-type: none">No option for operator to record wind speed and direction data if Alternative Monitoring and Sampling is selected	<ul style="list-style-type: none">Added option for operator to record wind speed and direction data if Alternative Monitoring and Sampling is selected
<ul style="list-style-type: none">Included additional options for recording wind speed and direction that can reduce costs	

Back-up Power

Comment: Cost Should Include a Back-up Power Source

Previous Version of PR 1480	Revision to PR 1480
<ul style="list-style-type: none"> An owner or operator of a Metal TAC Monitoring Facility shall not miss collecting a Valid Sample, unless the Valid Sample was not collected due to a mechanical failure... 	<ul style="list-style-type: none"> Added that mechanical failure includes loss of electricity An owner or operator of a Metal TAC Monitoring Facility shall not miss collecting a Valid Sample, unless the Valid Sample was not collected due to a mechanical failure, <u>including loss of electricity...</u>
<ul style="list-style-type: none"> Clarification that mechanical failure includes loss of electricity ensures that an operator will not be penalized if a sample is not collected due to loss of power Back up power is not required there is no penalty if sample is not collected due to loss of power – no additional cost is needed 	

Benchmark Concentration

Three Areas Where the Benchmark Concentration is Used in PR 1480

Criteria for
Reduced
Monitoring and
Sampling Plan

1 in 3 → 1 in 6

- 30 consecutive day average < the **Benchmark Concentration**

Criteria to Revert
From a Reduced
Back to a Basic
Monitoring and
Sampling Plan

1 in 3 ← 1 in 6

- 3 Valid Samples are each > 4 times the **Benchmark Concentration**

Threshold to
Notify Executive
Officer



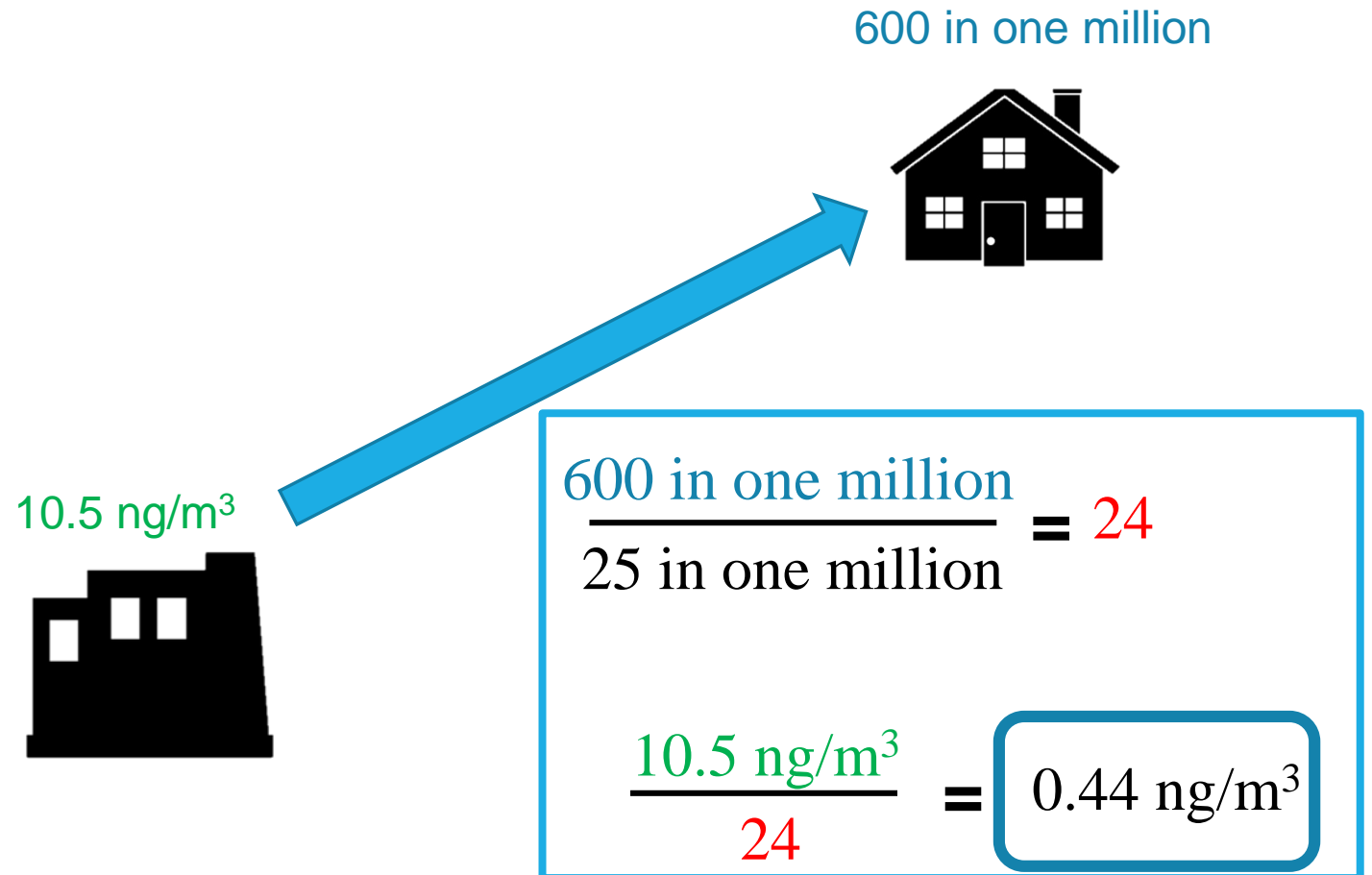
- 3 Valid Samples are each > 4 times the **Benchmark Concentration**

Considerations for Benchmark Concentration

- Stakeholders asked how the Benchmark Concentration accounts for contributions from other sources
 - Operator can lower the pre-risk reduction concentration at the fenceline by removing other sources that may be contributing to the monitored values
 - Lowering the pre-risk reduction concentration – would also lower the threshold for a Reduced Monitoring and Sampling Plan
- Comment received to use the implementation of an Early Action Risk Reduction Plan as the criteria for a Reduced Monitoring and Sampling Plan
 - Concerned “implementation” may be subjective
 - Many measures are interim measures
- Staff is recommending to maintain the Benchmark Concentration
 - Based on health risk at the sensitive receptor
 - Provides certainty to operator when the facility is designated

Example of Ratio Concentration for Benchmark Concentration

- Sensitive Receptor with the Highest Health Risk
 - Based on Metal TAC emissions from the facility
 - Can use default emission factors
 - Can use emission factors from source tests of similar sources
 - Using air dispersion modeling and Rule 1401 Risk Assessment Procedures



How Will the Benchmark Concentration Address Multiple Metal TACs?

Criteria for Reduced Monitoring and Sampling Plan

1 in 3 → 1 in 6

- 30 consecutive day average < the Benchmark Concentration **for all Metal TACs**;
- Air dispersion modeling to show < Reduced Risk Level at Sensitive Receptor; or
- Alternative approach approved by the EO that represents Reduced Risk Level at Sensitive Receptor

Criteria to Revert From a Reduced Back to a Basic Monitoring and Sampling Plan

1 in 3 ← 1 in 6

- 3 Valid Samples are each > 4 times the Benchmark Concentration **for any Metal TAC**

Threshold to Notify Executive Officer



- 3 Valid Samples are each > 4 times the Benchmark Concentration **for any Metal TAC**

Minimum Number of Monitors

Minimum Number of Monitors

Initial Comment:
Monitoring and Sampling costs are too high

PR 1480 at WG #10:
Reduced minimum monitors from 2 to 1 monitor

Stakeholder Comments:
2nd monitor is useful to show upwind sources

- Minimum number of monitors was reduced to 1 monitor to lower the cost of monitoring and sampling
- Staff will maintain provision of a minimum of 1 monitor
- Operator can still keep a second monitor

Discontinuing Monitoring and Sampling

Comment: More Expeditious Process to Discontinue Monitoring and Sampling (j)

Previous Version of PR 1480	Revision to PR 1480
<ul style="list-style-type: none">PR 1480 allows up to 90 days for the Executive Officer to notify the operator of the status of the Monitoring and Sampling Relief Plan	<ul style="list-style-type: none">Eliminated step to submit Monitoring and Sampling Relief Plan and wait for approvalOperator is relieved from monitoring sampling when Executive Officer notifies that either:<ul style="list-style-type: none">Risk Reduction Plan under Rule 1402 is fully implemented; orIf no Risk Reduction Plan is required under Rule 1402, the Health Risk Assessment is approved
<ul style="list-style-type: none">Simplifies process for discontinuation of monitoringProvisions for housekeeping, which were a condition discontinuing monitoring, can be incorporated in Risk Reduction Plan	

Assessment of Fees

Rule 1402 Costs

- Stakeholders commented that the implementation costs of PR 1480 should include the cost of implementation of Rule 1402
- Staff response
 - Implementation costs associated with Rule 1402 are not an effect of PR 1480
 - A facility that is designated under PR 1480, will have costs associated with Rule 1402 and PR1480
 - Socioeconomic Impact Analysis will provide general cost information for implementation of Rule 1402
 - Rule 1402 information will be general – Health Risk Assessments and Risk Reduction Plans are very facility-specific

Assessment of Fees and Penalties for Alternative Monitoring and Sampling

Comment	Response
<ul style="list-style-type: none"> Quarterly fees may be too much for smaller facilities 	<ul style="list-style-type: none"> PR 1480 has been revised to assess fees on a monthly basis, instead of quarterly
<ul style="list-style-type: none"> Payment should be after instead of before ambient monitoring and sampling is conducted 	<ul style="list-style-type: none"> Invoice issued at the beginning of the month, with the payment due at the end of the month Payment is due <i>after</i> each month of ambient monitoring and sampling is conducted
<ul style="list-style-type: none"> Penalty of 10 percent after 60 days is too strict 	<ul style="list-style-type: none"> Maintain provision
<ul style="list-style-type: none"> Operators have the option to use a third party contractor instead of paying the South Coast AQMD through the Alternative Monitoring and Sampling approach Third party contractors may have a different fee structure Failure to pay required fees under the Alternative approach would be a violation of PR 1480 	

Status Report on PR 1480

Comment: Report on Rule in 3 Years

- Staff will add a commitment in the adoption resolution to report back to the Stationary Source Committee on:
 - Number and type of facilities designated under PR 1480
 - Cost estimates, if available

Next Steps

Set Hearing: November 1, 2019



Governing Board Meeting: December 6, 2019



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