



# **Proposed Amended Rule 1407**

## **Control of Emissions of Arsenic, Cadmium, and Nickel from Non-Chromium Metal Melting Operations**

**Working Group Meeting #9**  
**July 17, 2019**

Teleconference Number: 1-888-450-5996  
Passcode: 100040

# Agenda

- Summary of Public Workshop
- Discuss Revised Proposed Rule Language

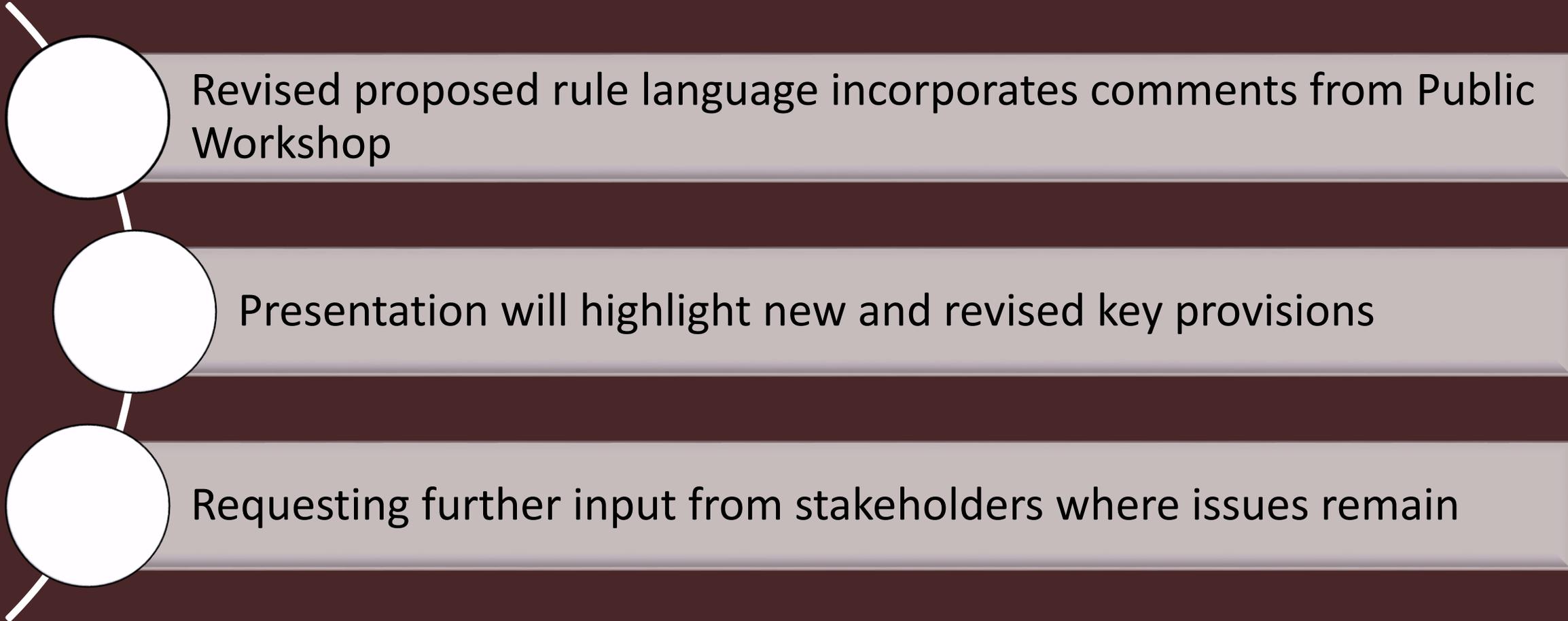


# Public Workshop – June 19, 2019

- Presented
  - Background
  - Proposed Rule Language
  - Impacted Facilities
  - Scope of Socioeconomic Impact Assessment
  - California Environmental Quality Act (CEQA)
- Received
  - 4 comment letters

# Revised Proposed Rule Language

# Overview



# Definitions (subdivisions (c))

## (c)(25) – Rerun Scrap

Public Workshop Rule Language	Revised Rule Language
<ul style="list-style-type: none"><li>• Restricted to rerun scrap generated at the facility</li></ul>	<ul style="list-style-type: none"><li>• Includes scrap generated at another location from materials exclusively generated at the facility<ul style="list-style-type: none"><li>◦ Must include documentation</li></ul></li></ul>
<ul style="list-style-type: none"><li>• If a facility can demonstrate that the rerun scrap generated at another facility came from material generated at the facility, then it will be considered rerun scrap and not scrap<ul style="list-style-type: none"><li>◦ Demonstration can be customer paperwork identifying source of material, material specification sheets, laboratory analysis, etc.</li></ul></li></ul>	

# Emission Control Requirements (subdivision (d))

## (d)(4) – Facility-Wide Mass Emission Limits

Public Workshop Rule Language	Revised Rule Language
<ul style="list-style-type: none"> <li>• Arsenic: 0.095 pounds/year</li> <li>• Cadmium: 0.74 pounds/year</li> <li>• Nickel: 12.2 pounds/year</li> </ul>	<ul style="list-style-type: none"> <li>• Arsenic: 0.000066 pounds/hour</li> <li>• Cadmium: 0.000514 pounds/hour</li> <li>• Nickel: 0.008480 pounds/hour</li> </ul>
<ul style="list-style-type: none"> <li>• Revised limits reflect more detailed assessment of worst-case facility</li> <li>• Returned to hourly limit to simplify compliance determination</li> <li>• Non-detect result will result in compliance for almost all situations</li> </ul>	

# Emission Control Requirements (subdivision (d))

## (d)(7) – Visible Emissions to Emission Control Device

Public Workshop Rule Language	Revised Rule Language
<ul style="list-style-type: none"><li>No provision</li></ul>	<ul style="list-style-type: none"><li>Visible emissions cannot meander out of direct path from the metal melting operations to the collection location of the emission collection system</li></ul>
<ul style="list-style-type: none"><li>Allows an inspector to observe emissions failing to be collected by emission collection system</li></ul>	

# Emission Control Requirements (subdivision (d))

## (d)(8) – Permit Application Submittal

Public Workshop Rule Language	Revised Rule Language
<ul style="list-style-type: none"><li>No provision</li></ul>	<ul style="list-style-type: none"><li>By July 1, 2020, a facility must submit a permit application for emission control devices that will be used for existing furnaces</li></ul>
<ul style="list-style-type: none"><li>Ensures adequate time for processing applications</li></ul>	

# Building Enclosure Requirements (subdivision (f))

## (f)(1) – Building Enclosure

Public Workshop Rule Language	Revised Rule Language
<ul style="list-style-type: none"><li>• Close at least one end</li></ul>	<ul style="list-style-type: none"><li>• Close all enclosure openings on one end for each pair of opposing ends</li></ul>
<ul style="list-style-type: none"><li>• Provides additional clarity for building enclosure requirements</li></ul>	

# Source Testing Requirements (subdivision (g))

## (g)(1) – Source Test Protocol Submittal

Public Workshop Rule Language	Revised Rule Language
<ul style="list-style-type: none"><li>• At least 60 days prior to conducting source test</li></ul>	<ul style="list-style-type: none"><li>• By 10/1/20 for initial test and no later than three months prior to deadline for periodic source tests</li></ul>
<ul style="list-style-type: none"><li>• Specifies when protocol should be submitted rather than a waiting period</li></ul>	

# Source Testing Requirements (subdivision (g))

## (g)(8)(A) – Source Test Method, Sample Volume

Public Workshop Rule Language	Revised Rule Language
<ul style="list-style-type: none"><li>No provision for sample volume</li></ul>	<ul style="list-style-type: none"><li>Requires sample volume to:<ul style="list-style-type: none"><li>Be sufficient to achieve method report limit; or</li><li>150 dry standard cubic feet</li></ul></li><li>Method reporting limit is 0.2 µg/sample</li></ul>
<ul style="list-style-type: none"><li>Establishes a non-detect value for source test results</li></ul>	

# Source Testing Requirements (subdivision (g))

## (g)(8)(B) – Source Test Method, Non-Detect

Public Workshop Rule Language	Revised Rule Language
<ul style="list-style-type: none"><li>No provision for handling non-detect results</li></ul>	<ul style="list-style-type: none"><li>If all source test runs are below the limit of detection, the compound can be identified as non-detect</li><li>If one or more source test runs are above the limit of detection, assign half of the limit of detection for the run(s) below the limit of detection</li></ul>
<ul style="list-style-type: none"><li>Follows guidelines in <u>South Coast AQMD “Risk Assessment Procedures for Rules 1401, 1401.1 and 212”, Version 8.1, Appendix III</u></li><li>Specifies procedures on calculating source test results if some source test runs are below the limit of detection</li></ul>	

# Material Testing Requirements (subdivision (h))

## (h)(1) – Determining Composition of Alloys

Public Workshop Rule Language	Revised Rule Language
<ul style="list-style-type: none"><li>No sunset date</li></ul>	<ul style="list-style-type: none"><li>Provisions retained until 1/1/21 coinciding with sunset of (k)(2) exemption</li></ul>
<ul style="list-style-type: none"><li>Test methods are old/outdated</li><li>Additional test methods included in (h)(3)</li></ul>	

# Material Testing Requirements (subdivision (h))

## (h)(2) – Analyses of Alloys and Baghouse Catch

Public Workshop Rule Language	Revised Rule Language
<ul style="list-style-type: none"><li>• Provisions in recordkeeping ((g)(2) and (g)(3))</li></ul>	<ul style="list-style-type: none"><li>• Moved provisions to materials testing</li></ul>
<ul style="list-style-type: none"><li>• Clarified rule language by separating out material testing requirement from recordkeeping requirement</li></ul>	

# Material Testing Requirements (subdivision (h))

## (h)(3) – Materials Testing Methods

Public Workshop Rule Language	Revised Rule Language
<ul style="list-style-type: none"><li>• Original rule language</li><li>• References old/outdated ASTM methods</li></ul>	<ul style="list-style-type: none"><li>• U.S. EPA-approved methods</li><li>• ASTM International methods</li><li>• Use of metallurgical assay</li><li>• Executive Officer-approved methods</li></ul>
<ul style="list-style-type: none"><li>• Removes old/outdated ASTM methods and allows facilities to pick from a large suite of approved test methods</li></ul>	

# Emission Control Device Monitoring (subdivision (i))

## (i)(5) – Smoke Test

Public Workshop Rule Language	Revised Rule Language
<ul style="list-style-type: none"><li>• Requires facilities to conduct a smoke test</li><li>• No provision for when a smoke test fails</li></ul>	<ul style="list-style-type: none"><li>• Add requirement that facility must pass smoke test</li><li>• Add provision that furnaces cannot be operated until smoke test is passed</li></ul>
<ul style="list-style-type: none"><li>• Clarifies rule language and establishes consequence for failure of smoke test</li></ul>	

# Emission Control Device Monitoring (subdivision (i))

## (i)(6)(C) – Canopy Hood

Public Workshop Rule Language	Revised Rule Language
<ul style="list-style-type: none"><li>No provision</li></ul>	<ul style="list-style-type: none"><li>Establishes velocity requirements for canopy hood collection systems</li><li>Prohibits operations with cross drafts</li></ul>
<ul style="list-style-type: none"><li>Provides requirements for commonly used hood design</li></ul>	

# Exemptions (subdivision (k))

## (k)(1) – Facilities melting less than one ton/year

Public Workshop Rule Language	Revised Rule Language
<ul style="list-style-type: none"><li>• Subject to all recordkeeping provisions</li></ul>	<ul style="list-style-type: none"><li>• Subject to only recordkeeping of quantities of raw materials processed</li></ul>
<ul style="list-style-type: none"><li>• If facilities fall under this exemption, it is not necessary for the additional records to be kept</li></ul>	

# Exemptions (subdivision (k))

## (k)(3) – Metal or Alloy Purity Exemption

Public Workshop Rule Language	Revised Rule Language
<ul style="list-style-type: none"><li>8,400 tons/year of material with less than 0.004% cadmium and 0.002% arsenic</li></ul>	<ul style="list-style-type: none"><li>Adds an exemption for 84,000 tons/year of material with less than 0.0004% cadmium and 0.0002% arsenic</li></ul>
<ul style="list-style-type: none"><li>Allows facilities with very clean materials to process more materials</li></ul>	

# Exemptions (subdivision (k))

## (k)(7) – Rules 1420 and 1420.2 Exemption

Public Workshop Rule Language	Revised Rule Language
<ul style="list-style-type: none"><li>• Exempt from Rule 1407</li></ul>	<ul style="list-style-type: none"><li>• Exempt from all Rule 1407 provisions except for (d)(5)<ul style="list-style-type: none"><li>• Limit temperature of gas stream entering into the emission control device to &lt; 360°F, unless 99% control can be demonstrated for arsenic and cadmium</li></ul></li></ul>
<ul style="list-style-type: none"><li>• Maintains requirement from ATCM until Rules 1420 and 1420.2 can be amended to include this provision</li></ul>	

# Exemptions (subdivision (k))

## (k)(9) – Health Risk Assessment and Air Toxics Inventory Report

Public Workshop Rule Language	Revised Rule Language
<ul style="list-style-type: none"><li>No provision</li></ul>	<ul style="list-style-type: none"><li>Facilities with a Health Risk Assessment with a maximum individual cancer risk less than ten in one million or an Air Toxics Inventory Report with a Facility Priority Score of less than 10 are exempt from subdivision (d)</li></ul>
<ul style="list-style-type: none"><li>Facilities that have conducted extended risk analysis demonstrating low risk to the surrounding community will not be required to put on additional controls</li></ul>	

# Exemptions (subdivision (k))

## (k)(11) – Repair and Maintenance

Public Workshop Rule Language	Revised Rule Language
<ul style="list-style-type: none"><li>• Metal grinding and metal cutting operations conducted during repair and maintenance are exempt</li></ul>	<ul style="list-style-type: none"><li>• Includes dip soldering and brazing operations conducted during repair and maintenance included in exemption</li></ul>
<ul style="list-style-type: none"><li>• These minor activities are not conducted on production scale</li></ul>	

# Smoke Test (Attachment B)

Public Workshop Rule Language	Revised Rule Language
<ul style="list-style-type: none"><li>• Smoke release procedure and observation contained in single paragraph</li><li>• Successful result not established</li></ul>	<ul style="list-style-type: none"><li>• Separate smoke release procedure and observation into two paragraphs</li><li>• Include passing smoke test determination</li></ul>
<ul style="list-style-type: none"><li>• Clarifies test methodology and provides criteria for successful result</li></ul>	

# Next Steps



<b>Action</b>	<b>Target Dates</b>
Stationary Source Committee	July 26, 2019
Final Draft Documents	August 7, 2019
Public Hearing	September 6, 2019

# Contact Information

## Rule Development

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