MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

Statement of Basis

Preliminary Determination/Decision

for

Renewal of

FOP Number: 900002

For:

Searles Valley Minerals, Inc.

Facility:

Searles Valley Minerals, Inc.

Facility Address:

13200 Main Street
Trona, CA 93562

Document Date: August 24, 2023
Submittal date to EPA/CARB for review: August 24, 2023
EPA/CARB 45-day Commenting Period ends: October 12, 2023
Public Notice Posted: August 28, 2023
Public Commenting Period ends: September 27, 2023
Expected Permit Issue date: October 13, 2023

Permitting Engineer:
Christian Anderson/Sheri Haggard

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A. FACILITY IDENTIFYING INFORMATION:

Owner/Company Name:	Searles Valley Minerals Operations, Inc.
Facility Name:	Searles Valley Minerals Operations, Inc.
Facility Location:	13200 Main Street Trona, CA 93562
Mailing Address:	P.O. Box 367 Trona, CA 93592-0367
Federal Operating Permit Number:	00900002
MDAQMD Company Number:	009
MDAQMD Facility Number:	00002
Responsible Official:	Mr. Karl Cleary Director of Engineering and Strategic Development 760-372-2488
Facility "Site" Contact(s):	Mr. Mark Wood Environmental and PSM Systems 760-382-2547 woodm@svminerals.com
Nature of Business:	Sodium and Boron Minerals Processing
SIC/NAICS Code:	1474/Trona, Westend, & Argus: 212391; Utilities: 213112
Facility Coordinates	35.76058/-117.37721

B. INTRODUCTION:

1. Description of Facility:

FOP number: 900002 for SVM OPERATIONS, INC. (SVM) which includes the Trona, Argus, Westend, Utilities, and Railroad facilities. SVM is a Solution Mining and Chemicals Processing Facility located at 13200 Main Street, Trona, California 93562. The three plants are considered one contiguous facility under the federal Title V Operating Permit program. The Argus and Trona plants are adjacent to each other and share a portion of common boundary. These two plants are located in the southwest side of Trona, CA. The Westend plant is located approximately 6 kilometers south of the Argus and Trona plants on Trona Road.

The SVM facilities location has been designated non-attainment for the Federal particulate matter equal to or less than 10 microns (PM10) ambient air quality standard (NAAQS) and non-attainment for the State ozone (O3), (PM10) and hydrogen sulfide (H2S) ambient air quality standards (CAAQS). The area is attainment or unclassified for all other standards and averaging times. SVM is an Area toxic source of Hazardous Air Pollutants.

2. Description of Permitting Action(s):

The Mojave Desert Air Quality Management District (MDAQMD or District) received an application for renewal of SVM Federal Operating Permit on September 9, 2021. The application was accepted as complete by the District. Supplemental application materials were received February 23, 2022 and January 19, 2023.

The Federal Clean Air Act Amendments of 1990 established a nation-wide permit to operate program commonly known as "Title V". The MDAQMD adopted Regulation XII [Rules 1200 - 1210] and Rule 221 - Federal Operating Permit (FOP) Requirement; [Version in SIP = Current, 40 CFR 52.220(c)(216)(i)(A)(2) - 02/05/96 61 FR 4217], to implement both the FOP and Acid Rain Permit programs locally and have received Final Program Approval from EPA on March 6, 1996.

SVM is subject to the Operating Permit requirements of Title V of the Federal Clean Air Act, Part 70 of Title 40 of the Code of Federal Regulations (CFR), and MDAQMD Regulation XII. SVM is defined as a Major Facility pursuant to District Rule 1201(S)(2) – *FOP Definitions*, as this facility has a Potential to Emit (PTE) oxides of sulfur (SOx), PM10, and ozone precursor-oxides of nitrogen (NOx) - greater than the "Major Facility" thresholds for a facility located within the District where it is designated as Federal Ozone Attainment or Unclassified.

SVM is not subject to the requirements of the Acid Rain Program pursuant to 40 CFR 72.6 as this facility is not an electric utility power plant.

The SVM, Title V Federal Operating Permit # 900002, was developed by consulting District Permit conditions for existing power plant equipment, wet and dry mineral processing, and ancillary equipment and SIP Rule requirements for Federal Rules, applicable to the facility. In addition, the MDAQMD Title V Program Rules, having received Partial Program Approval from the USEPA, were also consulted.

Pursuant to Regulation XII, *Federal Operating Permits*, the District has reviewed the terms and conditions of this Federal Operating Permit. This review included an analysis of federal, state, and local applicability determinations for all sources, including those that have been modified or permitted since the issuance of the current Federal Operating Permit. The review also included an assessment of all monitoring in the permit for sufficiency to determine compliance. This *Statement of Legal and Factual Basis,* pursuant to Rule 1203(B)(1)(a)(i), is intended to assess the adequacy of the proposed Title V Permit renewal and explain the District's basis in composing the proposed Title V Permit renewal.

In the MDAQMD, state and District requirements are also applicable requirements and are included in the permit. These requirements can be federally enforceable or non-federally enforceable. State and District applicable requirements are designated as such.

C. PROPOSED CHANGES TO THE FEDERAL OPERATING/TILE V PERMIT:

Please note that the headings below correlate to the headings in the proposed FOP and any changes made to that section are outlined below with an explanation.

GENERAL UPDATES

● Updated cover page with new dates, and consistent formatting.
● Updated the table of contents to correctly identify corresponding page numbers.
● Updated the rule citations. Rule SIP History and citations can be found in Appendix C of the FOP.

PART I: INTRODUCTORY INFORMATION

This section of the FOP contains general information about the SVM facility, including facility identifying information, a brief description of the facility, and a description of the facility's equipment (Section A-D).

Changes made to this section of the FOP:

● Part I, Section A, the formatting of the Facility Identifying Information was updated into a table format for ease of updating.
● Part I, Section A, the Responsible Official and Facility "Site" Contact was updated per the request in the Title V Renewal application, and later correspondence with the facility. Minor typo corrections. Added NAICS code and decimal degrees location.
● Part I, Section B, the facility description was expanded to include what, specifically, SVM triggers Title V applicability for.

PART II: FACILITYWIDE APPLICABLE REQUIREMENTS; EMISSIONS LIMITATIONS; MONITORING, RECORDKEEPING, REPORTING AND TESTING REQUIREMENTS; COMPLIANCE CONDITIONS; COMPLIANCE PLANS

This section of the Federal Operating Permit contains requirements applicable to the entire facility and equipment (section A), facility-wide monitoring, recordkeeping, and reporting requirements (section B), and facility-wide compliance conditions (section C).

Changes to this section include minor formatting changes to make the permit more consistent as well as general updates resulting from amended or new District rules. Changes made to this section of the FOP:

● Part II, Section A. 1 was added to include the requirements of District Rule 201 which requires a permit to construct.
● Part II, Section A.13 was added to include the requirements of District Rule 401 which limits opacity from sources of emissions.
● Part II, Section A.15 was added to include the requirements of District Rule 402 – *Nuisance* to include current requirements of the rule.
● Part II, Section A.16 and 17. Added this condition to reflect the current requirements of District Rule 403 – *Fugitive Dust Control*, which was amended on 10/28/20. Additionally, removed requirements of District Rule 403.2, as this rule was rescinded.
● Part II, Section A.20. Updated requirements of District Rule 406 – *Specific Contaminants* to include current requirements of the rule.
● Part II, Section A.22. Updated requirements of District Rule 409 – *Combustion Contaminants* to include administrative update to rule that requires an average of 15 consecutive minutes which was previously 12.
● Part II, Section A.25 Updated Rule 431 sulfur content limits.
● Part II, Section A.26. Updated requirements of District Rule 442 – Usage of Solvents the operating condition to clarify that both VOC-containing materials and non-VOC organic solvent usage records must be maintained on both a daily and monthly basis.
● Part II, Section A.28. Added requirements of District Rule 461 – *Gasoline Transfer and Dispensing*, as it was not previously included.
● Part II, Section A.29. Added requirements of District Rule 462 – *Organic Liquid Loading*, as it was not previously included.
● Part II, Section A.30. Added requirements of District Rule 463 – *Storage of Organic Liquids*, as it was not previously included.
● Part II, Section A.31. Added requirements of District Rule 900 – *New Source Performance Standards*, as it was not previously included.
● Part II, Section A.32. Added requirements of District Rule 1000 – *National Emission Standards for Hazardous Air Pollutants* as it was not previously included.
● Part II, Section A.33. Added requirements of District Rule 1104 – *Organic Solvent Degreasing Operations*, which was amended on 4/23/18.
● Part II, Section A.34. Updates to District Rule 1113- Architectural Coatings. Incorporate updates to reflect year 2020 amendments to District Rule 1113. The updates mainly lower the VOC content limits for a number of coatings categories; contain revised definitions for a variety of coating types either for clarification or to limit the types of products that qualify for inclusion in a category and some definitions were deleted because the categories have been combined with other categories, were replaced by new categories, or were unnecessary.

● Part II, Section A.35. Updates to District Rule 1114- Wood Products Coatings. This Rule is listed in the facility wide section of SVM Title V permit and may or may not be applicable to the source. District Rule 1114 was amended in 2018 and again in 2020. The amendments at the last amendment were to amend the emissions limit for High-Solids Stains coating category, requiring a Work Practice Implementation Plan, and reducing the general exemption limits from 55 gallons per year to 20 to be consistent with the State CTG.
● Part II, Section A.36. Updates to reflect amended District Rules 1115, Metal Parts and Products Coatings Operations, amended in 2018 and 2020. Amendments to Rule 1115 address the RACT SIP Analysis and former H&S Code §39614(d) commitments. The proposed amendments update rule definitions; transfer efficiency requirements; coating limits; control device efficiency; work practices; VOC content for strippers and surface preparation materials; test methods; and, record retention requirements as well as reducing the general low use exemption from 10 tpy to 2.7 tpy, removing the "clear coat" category, amending the "metallic coating" and "camouflage coating" to match the more stringent requirements set upon by other Districts, and amending the "chemical agent resistant coating" categories to be consistent with the CTG.
● Part II, Section A.37. Added the operating condition to reflect the requirements of District Rule 1157.1 – *BARCT Requirements for Boilers and Process Heaters Outside the FONA*, which was adopted on 9/23/19.
● Part II, Section A.38. Added the operating condition to reflect the new requirements of District Rule 1168 – *Adhesive and Sealant Applications*, which was adopted on 4/27/20.
● Part II, Section A.40. Added general inclusion of applicable NSPS regulations.
● Part II, Section A.41. Added general inclusion of applicable NESHAP regulations.
● Part II, Section B.4. Condition requiring CEI submission upon District request added. Authority cited.
● Part II, Section B.5 and B.6. Conditions reformatted and arranged consistent with District standard FOP's.
● Part II, Section C.7; Updated condition pertaining to the Asbestos NESHAP 10-day notification and annual predicted renovation reports were consolidated into one Asbestos NESHAP standard condition as suggested by EPA Region 9 staff L. Beckham for all of the Districts FOPs.
● Part II, Section E; Updated condition to current District requirements and citation of authority from District Rule 461, CARB executive orders, and 40 CFR 63, Subpart CCCCCC.
● Part II, Section F; previous condition 1 was removed as it referenced District Rule 432 – Gasoline Specifications as this rule was rescinded on 4/25/22.
● Part II, Section F; previous condition 1 was removed as it referenced District Rule 432 – Gasoline Specifications as this rule was rescinded on 4/25/22.
● Part II, Section F; amended conditions to adhere to last amendment of District Rule 461, as this rule was last amended on 1/22/18. Some conditions were redundant and removed. The entirety of this rule is also incorporated by reference under Part II, Section A.28

PART III: EQUIPMENT SPECIFIC APPLICABLE REQUIREMENTS; EMISSIONS LIMITATIONS; MONITORING, RECORDKEEPING, REPORTING AND TESTING REQUIREMENTS; COMPLIANCE CONDITIONS; COMPLIANCE PLANS

This section of the Federal Operating Permit contains equipment-specific applicable requirements including emission limitations, monitoring and recordkeeping, reporting and testing, and compliance plans.

General Corrections Include: Typographical fixes; General formatting updates; Renumbering permit sections; and making name change from legacy "NACC" to 'SVM" in various locations. Diesel IC engine permits updated with standardized language pertaining to fuel sulfur content (note portable diesel engines are not subject to RICE NESHAP making for variation in permit language between portable and stationary engines). Also added applicable regulatory citations were possible.

● Part III, Section A.1. & A.2. Condition #1; Added the word "electrostatic" to precipitator to better clarify the attached control device name.
● Part III, Section A.2. Added Btu rating 25.3 MMBtu/hr to furnace #3.
● Part III, Section A.3. Condition 3 was modified to add CAM requirements, and Conditions 8 and 9 were added to incorporate CAM requirements. Condition 5, clarified PM10 fraction stated in the condition is that of TSP (as in other similar conditions in FOP) AND added standard language relating to source test protocol, notification, and report submission.
● Part III, Section A.4. Equipment description updated with "Hammer Mill, Jeffery Radar, Feed Screw, Hammer Mill, and Discharge Screw, Hammer Mill".
● Part III, Section A.5. Equipment description updated by adding "star valve" and "screw conveyor"; updated condition 4 to add CAM requirements and added conditions 7 and 8 to add CAM Requirements; AND updated Condition 5 with Districts standard language relating to source test protocol, notification, and report submission.
● Part III, Section A.7. Added requirement from District permit requiring replacement baghouse bags be kept on site (NSR) as a new Condition 4, AND Condition 6 updated with Districts standard language relating to source test protocol, notification, and report submission; AND added opacity requirements of condition 8 for existing condition that is in condition 5.
● Part III, Section A.8. Added condition 2 to match the requirement for PM10 on the basic process permit for consistency.
● Part III, Section A.9. Condition 5 updated with Districts standard language relating to source test protocol, notification, and report submission AND clarified that the PM10 fraction is to TSP for establishing emission factor for the process. Modified Condition 4 and added Conditions 7 and 8 to incorporate the requirements of CAM.
● Part III, Section A.12. Condition 2, corrected typos to referenced permit numbers alpha characters are "B" not "C" (as in process permits vs control permits.)
● Part III, Section A.12. Condition 3 updated with Districts standard language relating to source test protocol, notification, and report submission.
● Part III, Section A.14. Condition 5 updated with Districts standard language relating to source test protocol, notification, and report submission. Added Condition 6 to specify requirements of existing opacity requirement in Condition 4.
● Part III, Section A.16. Condition 5 updated with Districts standard language relating to source test protocol, notification, and report submission. Modified Condition 4 and added conditions 6 and 7 to incorporate CAM.
● Part III, Section A.17. Modified Condition 4 and added conditions 6 and 7 to incorporate CAM. Updated condition 5 to include source testing requirement.

● Part III, Section A.18. Condition 1 updated to include reference to equipment's product transfer equipment AND Condition 3 updated to reference additional C permit, C001685, which also controls this equipment. Modified Condition 4 and added conditions 6 and 7 to incorporate CAM.
● Part III, Section A.19. changed Condition 1 equipment description from "Boric Acid Process" to Boric Acid Dryer" to be more accurate AND updated Condition 3 with Districts standard language relating to source test protocol, notification, and report submission. Added conditions 6, 7, and 8 to incorporate CAM.
● Part III, Section A.20 Added new Condition 1 and reordered remaining conditions. Condition 1 states which process this baghouse serves, better linking process to baghouse for compliance and transparency for inspection staff. Modified Condition 4 and added conditions 7 and 8 to incorporate CAM. Condition 5 updated with Districts standard language relating to source test protocol, notification, and report submission.
● Part III, Section A.21. Condition 4 updated with Districts standard language relating to source test protocol, notification, and report submission. Modified Condition 2 and added conditions 6 and 7 to incorporate CAM.
● Part III, Section A. 22. Minor type updates. Added new Condition 1 and reordered remaining conditions. Condition 1 states which process this baghouse serves, better linking process to baghouse for compliance and transparency for inspection staff. Modified Condition 4 and added conditions 7 and 8 to incorporate CAM.
● Part III, Section A.22. Condition 5 updated with Districts standard language relating to source test protocol, notification, and report submission. NOTE A.22. C000516, C001978, C001761, and C001685 were included in NSR action year 2002 which established boric acid process production increase and associated emission limits for these baghouses 2.62 tpy.
● Part III, Section A.24. Switched order of conditions 1 and 2.
● Part III, Section A.26 Added equipment details consistent with on-site equipment and District permit.
● Part III, Section A.27 Added equipment details consistent with on-site equipment and District permit.
● Part III, Section A. 32. Condition 5 updated with Districts standard language relating to source test protocol, notification, and report submission.
● Part III, Section A. 33. Added equipment details consistent with on-site equipment and District permit.
● Part III, Section A. 34. Added equipment details consistent with on-site equipment and District permit.
● Part III, Section A. 34. Added Conditions 3, 4, and 5 which contain NSPS OOO requirements pertaining to opacity limits and general applicability.
● Part III, Section A. 35. Added equipment details consistent with on-site equipment and District permit.
● Part III, Section A. 35. Condition 5 updated with Districts standard language relating to source test protocol, notification, and report submission AND Condition 7 addition with NSPS OOO stack grain loading limits.
● Part III, Section A.36. Added equipment details consistent with on-site equipment and District permit AND added Condition 3 requiring compliance with NSPS OOO.
● Part III, Section A.37. Added Condition 1 linking this baghouse to the process it shall operate with for compliance purposes and transparency for inspection staff AND added Condition 7

implementing by Condition the NSPS OOO stack grain loading limits. Added to equipment description that this equipment is an "affected facility" under 40 CFR 63, Subpart OOO.
● Part III, Section A.38. Updated equipment description which was missing the "Truck Loadout Conveyor" detail (it currently already exists on District permit). Added to equipment description that this equipment is an "affected facility" under 40 CFR 63, Subpart OOO.
● Part III, Section A.39. Updated equipment description which was missing "Loading Hopper, Conveyor Belt, and Crusher" detail (it currently already exists on District permit). Also added NSPS OOO as an applicable regulation as a new Condition 4. Added to equipment description that this equipment is an "affected facility" under 40 CFR 63, Subpart OOO.
● Part III, Section A.40. Boiler 22. Expanded on Condition 4 testing requirements to include District Rule 1157.1 annual test for high heat input units. Conditions 7, 8, and 9 were added to implement emission standards and District source test policy and clarify applicability of District Rule 1157.1.
● Part III, Section A. 42. Conditions 1 and 3 were updated to reflect District Rule 442 changes which include terminology change from photochemically reactive solvent to VOC. It appears this equipment was limited to non-photochemically reactive solvent only so we have left this condition 5 on the permit regardless of Rule 442 updates.
●Part III, Section A.43. Update to equipment description to include more engine details. Updated requirements of 40 CFR 63.6640.
●Part III, Section A.44. Update to equipment description to include more engine details. Updated requirements of 40 CFR 63, Subpart ZZZZ.
● Part III, Section A.46. Added the term "Low-Use" to the permit description and updated the equipment details. SVM elects to accept an 80 hour per calendar year limit in lieu of the allowable 200 hour per year ATCM low use limit. Note the ATCM limit was previously 80 hours per year. Subsequently also updated permit conditions to reflect recent amendments to the State Portable Diesel ATCM.
● Part III, Section A.47. Equipment details updated. Updated requirements of 40 CFR 63.6640.
● Part III, Section A.48. Equipment details updated.
● Part III, Section A.50. Equipment details updated. Permit conditions updated to reflect more current language for diesel fuel specifications and rolling blackout requirements. Updated requirements of 40 CFR 63, Subpart ZZZZ to address emergency use.
● Part III, Section A. 51. Permit detail describing SUPO added to permit.
● Part III, Section A.56. Condition 3 clarifications to indicate filters used in lieu of bags.

End of changes to Part III Section A

Part III, Section B: Changes made to this section of the FOP:

General formatting changes and where applicable reference to "NACC" replaced with "SVM". Also added applicable regulatory citations were possible.

- B.3. Equipment horsepower updates. Two items Sweco feeder and shaker screens changed to Rotex. Added condition 4, but it is not a new requirement was incorrectly listed on control equipment.
- B.4. Equipment horsepower updates. Added condition 4, but it is not a new requirement was incorrectly listed on control equipment.
- B.5. Added condition 4, but it is not a new requirement was incorrectly listed on control

equipment.

- B.6, Modified condition 4 and added conditions 7 and 8 to incorporate the requirements of CAM. Updated condition 6 to reflect currently requirements of source testing timelines.
- B.7. Modified condition 4 and added conditions 7 and 8 to incorporate the requirements of CAM. Updated condition 6 to reflect currently requirements of source testing timelines.
- B.8. Modified condition 4 and added conditions 7 and 8 to incorporate the requirements of CAM. Updated condition 6 to reflect currently requirements of source testing timelines.
- B.9. Modified condition 5 and added conditions 9 and 10 to incorporate the requirements of CAM. Updated condition 6 to reflect currently requirements of source testing timelines.
- B.10. Modified condition 5 and added conditions 9 and 10 to incorporate the requirements of CAM. Updated condition 6 to reflect currently requirements of source testing timelines.
- B.11. Modified condition 5 and added conditions 9 and 10 to incorporate the requirements of CAM. Updated condition 6 to reflect currently requirements of source testing timelines.
- B.12. Modified condition 5 and added conditions 9 and 10 to incorporate the requirements of CAM. Updated condition 6 to reflect currently requirements of source testing timelines.
- B.13. Modified condition 4 and added conditions 7 and 8 to incorporate the requirements of CAM. Updated condition 5 to reflect currently requirements of source testing timelines.
- B.14. Modified condition 5 and added conditions 8 and 9 to incorporate the requirements of CAM. Updated condition 6 to reflect currently requirements of source testing timelines.
- B.15. Modified condition 6 and added conditions 9 and 10 to incorporate the requirements of CAM. Updated condition 7 to reflect currently requirements of source testing timelines.
- B.16. Modified condition 5 and added conditions 7 and 8 to incorporate the requirements of CAM. Updated condition 6 to reflect currently requirements of source testing timelines.
- B.17. Modified condition 4 and added conditions 9 and 10 to incorporate the requirements of CAM. Updated condition 6 to reflect currently requirements of source testing timelines.
- B.18. Modified condition 4 and added conditions 7 and 8 to incorporate the requirements of CAM. Updated condition 5 to reflect currently requirements of source testing timelines.
- B.19. Equipment horsepower updates, NSPS OOO opacity limits added.
- B.20. NSPS OOO opacity limits added.
- B.21. NSPS OOO opacity limits added.
- B.21.A. Relocated NSPS generally applicable requirements, monitoring, test methods for units B003655, C003667, C003668, C003669, C003670, B004540, C004542,

C004543, C004544, B003672, C003675, C003676, C003677 to APPENDIX D. Added specific opacity limits to each permit above in sections A and B.

- B.23. NSPS OOO opacity limits added to Condition 2. Corrected grain loading limit from 0.02 to 0.022 as required by NSPS OOO. Condition 8 updated with Districts standard language relating to source test protocol, notification, and report submission.
- B.24. NSPS OOO opacity limits added as Condition 2. Corrected grain loading limit from 0.02 to 0.022 as required by NSPS OOO. Condition 7 updated with Districts standard language relating to source test protocol, notification, and report submission.
- B.25. NSPS OOO opacity limits added as Condition 2. Corrected grain loading limit from 0.02 to 0.022 as required by NSPS OOO. Condition 6 updated with Districts standard language relating to source test protocol, notification, and report submission.
- B.26. NSPS OOO opacity limits added as Condition 2. Corrected grain loading limit from 0.02 to 0.022 as required by NSPS OOO. Condition 7 updated with Districts standard language relating to source test protocol, notification, and report submission.
- B.27. NSPS OOO opacity limits added as Condition 2. Corrected grain loading limit from 0.02 to 0.022 as required by NSPS OOO. Condition 7 updated with Districts standard language relating to source test protocol, notification, and report submission.
- B.28. NSPS OOO opacity limits added as Condition 2. Corrected grain loading limit from 0.02 to 0.022 as required by NSPS OOO. Condition 7 updated with Districts standard language relating to source test protocol, notification, and report submission.
- B.29. NSPS OOO opacity limits added as Condition 2. Corrected grain loading limit from 0.02 to 0.022 as required by NSPS OOO. Condition 7 updated with Districts standard language relating to source test protocol, notification, and report submission.
- B.30. NSPS OOO opacity limits added as Condition 2. Corrected grain loading limit from 0.02 to 0.022 as required by NSPS OOO. Condition 7 updated with Districts. Modified condition 7 and added conditions 9 and 10 to incorporate the requirements of CAM. Updated condition 8 to reflect currently requirements of source testing timelines standard language relating to source test protocol, notification, and report submission.
- B.31. NSPS OOO opacity limits added as Condition 2. Corrected grain loading limit from 0.02 to 0.022 as required by NSPS OOO. Modified condition 6 and added conditions 9 and 10 to incorporate the requirements of CAM. Updated condition 7 to reflect currently requirements of source testing timelines standard language relating to source test protocol, notification, and report submission.
- B.32. NSPS OOO opacity limits added as Condition 2. Corrected grain loading limit from 0.02 to 0.022 as required by NSPS OOO. Modified condition 6 and added conditions 9 and 10 to incorporate the requirements of CAM. Updated condition 7 to reflect currently requirements of source testing timelines standard language relating to source test protocol, notification, and report submission.
- B.33. NSPS OOO opacity limits added as Condition 2. Corrected grain loading limit from 0.02 to 0.022 as required by NSPS OOO. Modified condition 6 and added conditions 9 and 10 to incorporate the requirements of CAM. Updated condition 7 to reflect currently requirements of source testing timelines standard language relating to source test protocol, notification, and report submission.
- B.37. Modified condition 5 and added conditions 7 and 8 to incorporate the requirements of CAM. Updated condition 6 to reflect currently requirements of source

testing timelines standard language relating to source test protocol, notification, and report submission.

- B.38. The total flow had a typo which was corrected from 2050 to 25,000 ACFM. Updated condition 5 to include District timelines for source testing.
- B.39. Updated condition 6 to include District timelines for source testing.
- B.40. Updated condition 6 to include District timelines for source testing.
- B.41. Updated condition 6 to include District timelines for source testing.
- B.42. Updated condition 6 to include District timelines for source testing.
- B.43 and B.46. Boilers 25 and 26 equipment description updates to clarify existing sulfur treatments and to include ESP as well as a note indicating recent boiler modification for Rule 1157.1 requirements. No production or output changes.
- B.43 and B.46. Boiler 25 and 26 permit Condition 1 added a note that mercury fuel analysis may be substituted for stack test. Condition 2 updated to define annual as at least once every twelve months. Condition 9 NOx limit clarified that stated emission rates do not apply during startup and shutdown. SS NOx emissions limited by condition 7. Added Condition 12 as well as a condition 13 to specify that this unit is a high heat input unit subject to high heat input unit requirements including stack compliance test for purposes of District Rule 1157.1. Note that the most stringent emission limits apply for purposes of Condition 1 and 13. Additional NSPS and NESHAP applicable requirements are found in Appendix E. added note to description that the unit uses natural gas as a startup fuel.
- B.44. Added condition 6 to include the requirements of CAM.
- B.46. Added Districts source testing timelines to condition 2, added conditions 12 and 13 to include the requirements of 40 CFR 60, Subpart D and 40 CFR 63, Subpart DDDDDD and District Rule 1157.1.
- B.47. Added condition 6 to include the requirements of CAM.
- B.48A and 48B. Moved Subpart D and Subpart JJJJJJ requirements to Appendix E except the following which existing in Part II of the SVM FOP.
    - Annual compliance reporting mandates
    - Deviations reporting
        - Both these regulatory requirements will continue to apply and be enforced through Appendix E of the SVM FOP.
- B.53. Added 30 hp fan to equipment description.
- B.54. Modified condition 2 and added conditions 7 and 8 to include the requirements of CAM. Updated condition 6 to include the Districts time lines for source testing.
- B.55. Modified condition 2 and added conditions 7 and 8 to include the requirements of CAM. Updated condition 6 to include the Districts time lines for source testing.
- B.57. Updated conditions to current template. No requirements changing.
- B.58. Updated equipment description with more details from District permit.

End of Changes to Part III Section B.

Part III, Section C: Changes made to this section of the FOP:

- C.1. Equipment details updated to match District permit.
- C.2. Modified condition 3 and added conditions 7 and 8 to incorporate the requirements

of CAM. Added District source testing timelines to condition 4.

- C.3. Modified condition 4 and added conditions 7 and 8 to incorporate the requirements of CAM. Added District source testing timelines to condition 5.
- C.4. Equipment details updated to match District permit.
- C.5. Equipment details updated to match District permit. Modified condition 3 and added conditions 7 and 8 to incorporate the requirements of CAM. Added District source testing timelines to condition 4.
- C.7. Modified condition 4 and added conditions 7 and 8 to incorporate the requirements of CAM. Added District source testing timelines to condition 4.
- C.8. Modified condition 3 and added conditions 7 and 8 to incorporate the requirements of CAM. Added District source testing timelines to condition 5.
- C.9. Modified condition 4 and added conditions 7 and 8 to incorporate the requirements of CAM. Added District source testing timelines to condition 5.
- C.10. Modified condition 4 and added conditions 7 and 8 to incorporate the requirements of CAM. Added District source testing timelines to condition 5.
- C.11. Modified condition 4 and added conditions 7 and 8 to incorporate the requirements of CAM. Added District source testing timelines to condition 5.
- C.13. Updated condition 5 to include the District source test timelines.
- C.14. Updated condition 5 to include the District source test timelines.
- C.15. Updated condition 10 to include the District source test timelines. Added condition 17 to include the requirements of Rule 1157.1
- C.18. Equipment drift rate percent had typo 0.0001% which was corrected to 0.001%.
- C.19. Equipment drift rate percent had typo 0.0001% which was corrected to 0.001%.
- C. 20. Equipment drift rate percent had typo 0.0001% which was corrected to 0.001%.
- C. 21. Equipment drift rate percent had typo 0.0001% which was corrected to 0.001%.
- C. 22. Equipment drift rate percent had typo 0.0001% which was corrected to 0.001%.
- C. 23. Equipment drift rate percent had typo 0.0001% which was corrected to 0.001%.
- C.33. Equipment drift rate percent had typo 0.0001% which was corrected to 0.001%.
- C.38. Equipment drift rate percent had typo 0.0001% which was corrected to 0.001%.

End of Changes to Part III Section C.

PART IV: STANDARD FEDERAL OPERATING PERMIT CONDITIONS

Changes made to this section of the FOP:

- No changes were made to this section.

PART V: OPERATIONAL FLEXIBILITY

Changes made to this section of the FOP:

- Corrections were made to address outdated regulatory citations in sections I and II.

PART VI: CONVENTIONS, ABREVIATIONS, DEFINITIONS, SIP TABLE

No changes made to this section of the FOP:

APPENDICES

Appendix A- Permit Revision History
No change.
Appendix B- Compliance Assurance Monitoring
No change.
Appendix C- SIP Table
Updated SIP table to most recent District provided table.
Appendix D- NSPS Subpart OOO Applicable requirements
Added NSPS OOO standards and operating limits to Part III applicable sources.
Appendix E- NSPS Subpart D and NEHSAP JJJJJJ
Updated mercury operating requirements, which apply to boilers 25 and 26, to specify that fuel analysis is required at least annually for sources which show by fuel analysis that the source emits equal to or less than half of the mercury emission limits.

D. RULE APPLICABILITY ANALYSIS:

District Rules

Rule 201/203 – *Permits to Construct/Permit to Operate*. Any equipment which may cause the issuance of air contaminants must obtain authorization for such construction from the Air Pollution Control Officer. SVM is in compliance with this rule as they have appropriately applied for a District permit for all new equipment and maintains District permits for all residing equipment per Part II, section A.1 and A.2 of their FOP.

Rule 204 – *Permit Conditions*. To assure compliance with all applicable regulations, the Air Pollution Control Officer (Executive Director) may impose written conditions on any permit. SVM complies with all applicable regulations per Part II, section A.3 and A.4 of their FOP.

Rule 206 – *Posting of Permit to Operate*. Equipment shall not operate unless the entire permit is affixed upon the equipment or kept at a location for which it is issued and will be made available to the District upon request. SVM complies with this regulation per Part II, section A.5 of their FOP.

Rule 207 – *Altering or Falsifying of Permit.* A person shall not willfully deface, alter, forge, or falsify any issued permit. SVM complies with this regulation per Part II, section A.6 of their FOP.

Rule 209 – *Transfer and Voiding of Permits*. SVM shall not transfer, whether by operation of law or otherwise, either from one location to another, from one piece of equipment to another, or from one person to another. When equipment which has been granted a permit is altered, changes location, or no longer will be operated, the permit shall become void. SVM complies with this regulation per Part II, section A.7 of their FOP.

Rule 210 – *Applications*. SVM provided all the required information to correctly address the renewal pursuant to this rule.

Rule 212 – *Standards for Approving Permits*. This rule establishes baseline criteria for approving District permits for certain projects. This permitting action is solely a federal operating permit renewal and is not subject to this District Rule.

Rule 217 – *Provisions for Sampling and Testing Facilitie*s. This rule requires the applicant to provide and maintain requirements for sampling and testing. SVM is in compliance with this rule per Part II, section A.8 of their FOP.

Rule 218 – *Stack Monitoring*. This rule requires facilities to provide, properly install, and maintain stack monitoring systems. SVM is in compliance with this rule per Part II, section A.8 of their FOP.

Rule 219 – *Equipment not Requiring a Permit*. This rule exempts certain equipment from District Permit. SVM is in compliance with this rule per Part II, section A.9.

Rule 221 – *Federal Operating Permit Requirement.* SVM is in compliance with this rule, as they currently hold and maintain a Federal Operating Permit.

Rule 301/312 – *Permit Fees/Fees for Federal Operating Permits*. SVM's annual permit fees are due by the applicable amounts.

Rule 401 – *Visible Emissions*. This rule limits visible emissions opacity to less than 20 percent (or Ringelmann No. 1). In normal operating mode, visible emissions are not expected to exceed 20 percent opacity. SVM has specific operating conditions that enforce compliance with this rule, specifically Part II, section A.13.

Rule 403 – *Fugitive Dust*. This rule prohibits fugitive dust beyond the property line of any emission source. SVM has specific operating conditions to ensure compliance with this condition, specifically Part II, section A.16.

Rule 404 – *Particulate Matter Concentration*. SVM shall not discharge into the atmosphere from this facility, particulate matter (PM) except liquid sulfur compounds, in excess of the concentration at standard conditions, shown in Rule 404, Table 404 (a).
(a) Where the volume discharged is between figures listed in the table the exact concentration permitted to be discharged shall be determined by linear interpolation.
(b) This condition shall not apply to emissions resulting from the combustion of liquid or gaseous fuels in steam generators or gas turbines.
(c) For the purposes of this condition, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
MCC adheres to this rule per Part II, section A.17 of their FOP.

Rule 405 – *Solid Particulate Matter, Weight*. SVM shall not discharge into the atmosphere from this facility, solid PM including lead and lead compounds in excess of the rate shown in Rule 405, Table 405(a):
(a) Where the process weight per hour is between figures listed in the table, the exact weight of permitted discharge shall be determined by linear interpolation.
(b) For the purposes of this condition, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.
SVM adheres to this rule per Part II, section A.18 of their FOP.

Rule 406 – *Specific Contaminants*. This rule limits single source of emissions of sulfur compounds. SVM meets this requirement by complying with operating condition listed in Part II, section A.19 of their FOP.

Rule 407 – Liquid and Gaseous Air Contaminants. This rule limits CO emissions from facilities. SVM meets this requirement by complying with operating condition listed in Part II, section A.20 of their FOP.

Rule 408 – *Circumvention*. This rule prohibits hidden or secondary rule violations. The proposed renewal as described is not expected to violate Rule 408. SVM meets this requirement by complying with operating condition listed in Part II, section A.21 of their FOP.

Rule 409 – *Combustion Contaminants*. This rule limits the emissions of combustion contaminants exceeding 0.23 gram per cubic meter (0.1 grain per cubic foot) of gas calculated to 12 percent of carbon dioxide (CO_2) at standard conditions averaged over a minimum of 25 consecutive minutes. SVM meets this requirement by complying with operating condition listed in Part II, section A.22 of their FOP.

Rule 430 – *Breakdown Provisions*. Any Breakdown which results in a violation to any rule or regulation as defined by Rule 430 shall be properly addressed pursuant to this rule. SVM meets this requirement by complying with operating condition listed in Part II, section A.23 of their FOP.

Rule 431 – *Sulfur Content of Fuels*. SVM is limited to use of the following quality fuels for fuel types specified elsewhere in this permit: PUC quality natural gas fuel - sulfur compounds shall not exceed 16 parts per million (ppm) calculated as hydrogen sulfide at standard conditions; diesel fuel - sulfur content shall not exceed 0.0015 percent by weight; Solid Fuels - having a sulfur content in excess of 0.5 percent by weight. Compliance with Rule 431 fuel sulfur limits is assumed for PUC quality natural gas fuel and CARB certified diesel fuel. Solid fuel sulfur content shall be demonstrated by ASTM Method D4239-18e1 or as otherwise allowed by rule. Records shall be kept on-site and available for review by District, state, or federal personnel at any time. The sulfur content of non-CARB certified diesel fuel shall be determined by use of American Society for Testing and Materials (ASTM) method D 2622-82 or ASTM method D 2880-71, or equivalent. SVM is required to adhere to this rule per Part II, section A.14.

Rule 442 – *Usage of Solvents*. This rule reduces VOC emissions from VOC containing materials or equipment that is not subject to any other rule in Regulation XI. SVM meets this requirement by complying with operating condition listed in Part II, section A.25 of their FOP.

Rule 444 – *Open Outdoor Fires*. The purpose of this rule is to ensure that the ambient air quality is not significantly degraded due to Open Outdoor Fires; and, to apply the District Smoke Management Program to specified applications while minimizing smoke impacts to the public. SVM is required to meet the requirements of this rule pursuant to Part II, section A.32 of their FOP.

Rule 900 – *Standards of Performance for New Stationary Sources (NSPS)*. Rule 900 adopts all applicable provisions regarding standards of performance for new stationary sources as set forth in 40 CFR 60. Four NSPSs apply to MCC: 40 CFR 60, Subpart A, Y, O, and IIII. MCC complies with these NSPSs per the specific requirements listed under the corresponding sections under Appendix C:

- 40 CFR 60, Subpart A – *NSPS General Provisions*: Section A.32.
- 40 CFR 60, Subpart OOO – *NSPS for Nonmetallic Mineral Processing Plants*: Appendix D.
- 40 CFR 60, Subpart D – *NSPS for Fossil-Fuel Fired Steam Generators*: Appendix E.

Rule 1000 – *National Emission Standards for Hazardous Air Pollutants (NESHAP)*. Rule 1000 adopts all applicable provisions regarding standards of performance for new stationary sources as set forth in 40 CFR 61. SVM complies with 40 CFR 61, Subpart M – *NESHAP for Asbestos* per conditions in Part II, section C.7.

Rule 1104 – *Organic Solvent Degreasing Operations*. This rule limits the emission of VOCs from wipe cleaning and degreasing operations using organic solvents. SVM meets this requirement by complying with operating condition listed in Part II, section A.26 of their FOP.

Rule 1113 – *Architectural Coatings*. This rule limits the quantity of VOC in Architectural Coatings. SVM meets the requirements of this rule by complying with operating condition listed in Part II, section A.27 of their FOP.

Rule 1114 – *Wood Products Coating Operations*. This rule limits the emission of Volatile Organic Compounds from Wood Products Coating Application Operations. SVM is required to comply with the requirements of this rule pursuant to Part II, section A.28 of their FOP.

Rule 1115 – *Metal Parts and Products Coatings*. This rule limits the emission of VOC from coatings associated with Metal Parts and Products. SVM meets the requirements of this rule by complying with operating condition listed in Part II, section A.29 of their FOP.

Rule 1168 - *Adhesives and Sealants.* This rule limits the emission of VOC from adhesives and sealants. This rule was adopted after the last SVM renewal in 2017 and the requirements are therefore new to the FOP. The requirements are largely place on the adhesive and sealant manufacture as the product categories regulated by this rule are largely consumer products. SVM meets the requirements of this rule by complying with the requirements of Part II.A.30.

Rule 1157.1 – *BARCT Requirements for Boilers and Process Heaters Outside the FONA.* District Rule 1157.1 is a state-mandated rule (District and State enforceable only) that was adopted on September 23, 2019 to address the requirements of California Health and Safety

Code Section 40920.6(c)(1) which requires the District to adopt an expediated schedule for the implementation of Best Available Retrofit Technology (BARCT) for any nonattainment area not later than December 31, 2023. Its purpose is to limit CO and NO_X emissions from industrial, institutional, and commercial Boilers, Steam Generators, and Process Heaters through the application of BARCT. The proposed operating conditions will meet the BARCT requirements of District Rule 1157.1.

Regulation X – *National Emission Standards for Hazardous Air Pollutants*. Pursuant to Regulation X, SVM is required to comply with all applicable ATCMs.

Regulation XII – *Federal Operating Permits.* This regulation contains requirements for sources which must have a FOP. SVM currently has a FOP and is expected to comply with all applicable rules and regulations. Additionally, this is a requirement of their FOP under Part II, section A.30.

Rule 1201 – *Federal Operating Permit Definitions.* SVM is defined as a federal Major Facility pursuant to this rule.

Rule 1202 – *Applications*. SVM properly applied for a renewal to their Title V permit pursuant to this rule. The application was timely and complete.

Rule 1203 – *Federal Operating Permits*. This rule outlines the permit term, issuance, restrictions, content, operational flexibility, compliance certification, permit shield, and violations of Federal Operating Permits. The proposed Title V permit renewal contains all applicable requirements for all relevant permit units, non-permitted and fugitive emissions. The proposed permit contains emission limitations and/or standards, including operational limitations, which assures compliance with the applicable requirements and a reference to the origin and authority of each term or condition. The proposed Title V permit contains the monitoring, reporting, and record keeping requirements, as applicable, to demonstrate compliance with the applicable requirements. SVM complies with this rule per Part II, Part III, Part IV and V of their FOP.

Rule 1205 – *Modifications of Federal Operating Permits*. This action to SVM's FOP does not constitute a modification; therefore, this rule is not subject to this action.

Rule 1206 – *Reopening, Reissuance and Termination of Federal Operating Permits*. This action to SVM's FOP does not constitute a Reopening, Reissuance or Termination of Federal Operating Permits; therefore, this rule is not subject to this action.

Rule 1207 – *Notice and Comment*. This rule outlines the noticing requirements for Notice and Comment. SVM will properly notice their renewal pursuant to this rule.

Rule 1208 – *Certification*. SVM included a Certification of Responsible Official as required with the submitted application for the Renewal.

Rule 1211 – *Greenhouse Gas Provisions of Federal Operating Permits*. SVM is a Major GHG Facility pursuant to Rule 1211. SVM is required to submit GHG data with any application per Part II, section A.31.

Regulation XIII – *New Source Review*. This regulation sets forth requirements for the preconstruction review of all new or modified facilities. SVM is not a new facility nor is it currently a modified facility; therefore, this regulation does not apply.

Rule 1520 – *Control of Toxic Air Contaminants from Existing Sources*. This rule controls the emission of toxic air contaminants from existing source. SVM is expected to comply with this rule on a routine basis as part of the Districts Emissions Inventory and Hot Spots Inventory programs. SVM is required to submit a comprehensive actual emissions inventory on an annual basis, and is required to update the actual toxic emissions on a triennial basis for routine toxics analysis and compliance with this rule.

Regulation XVII – *Prevention of Significant Deterioration*
Please take notice that this regulation is not currently used within the MDAQMD because the USEPA has not delegated authority for the PSD Program to the MDAQMD at this time. However, per the language in the applicability procedures of 40 CFR 52.21 (a)(2)(i) and (ii), PSD applies to "any new major stationary source or the major modification of any existing major stationary source". SVM is not a new major stationary source and this action does not constitute a major modification; hence, this project (Title V renewal) is not subject to PSD.

Federal Regulations

40 CFR 60, Subpart A – *NSPS General Provisions.* SVM complies with this regulation per Part II Section A.31.

40 CFR 60, Subpart OOO – *NSPS for Nonmetallic Mineral Processing Plants*. SVM complies with this regulation per Appendix D.

40 CFR, Subpart D – *NSPS for Fossil-Fuel Fired Steam Generators for Which Construction Is Commenced After August 17, 1971.* SVM complies with this regulation per Appendix E.

40 CFR 61, Subpart M – *NESHAP for Asbestos*. SVM complies with 40 CFR 61, Subpart M – *NESHAP for Asbestos* per conditions in Part II, section C.7

40 CFR 63, Subpart A – *NESHAP General Provisions*. SVM complies with this regulation per Part II. Section A.31.

40 CFR 63, Subpart CCCCCC – *NESHAP for Gasoline Dispensing Facilities*. SVM complies with this regulation per compliance with the more stringent District Rule and CARB EO, Sections Part II.D-F.

40 CFR 63, Subpart JJJJJJ – *NESHAP for Industrial, Commercial, and Institutional Boilers. SVM* complies with this regulation per Appendix E for Boilers 25 and 26.

40 CFR 64, *Compliance Assurance Monitoring*. Compliance Assurance Monitoring (CAM) is intended to provide reasonable assurance of compliance with applicable requirements under the Clean Air Act. Pursuant to 40 CFR 64.2(a) CAM applies to each Pollutant Specific Emissions Unit (PSEU) when it is located at a Major Facility that is required to obtain Title V, Part 70 or 71 permit and it meets all of the following criteria. "PSEU" means an emissions unit is considered separately with respect to each regulated air pollutant, i.e. CAM is applicable on a pollutant-specific basis.

> For CAM to be applicable the PSEU must all three of the following criteria:
> 1. Be subject to an emission limitation or standard [40 CFR 64.2(a)(1)]; AND,
> 2. Use a control device to achieve compliance [40 CFR 64.2(a)(2)]; AND,
> 3. Have the **potential pre-control** emissions that exceed or are equivalent to the major source threshold. [40 CFR 64.2(a)(3)]

SVM is a Major Source Facility under Title V, Part 70 or 71 for NOx, SOx and PM10; therefore, has PSEUs that are potentially subject to CAM for these pollutants **if** all three criteria listed above are also met. Table 1 below shows the District's Title V Major Source Thresholds for facilities located outside the Federal Ozone Nonattainment Area (FONA). SVM is located outside the FONA.

Table 1 – Major Source Thresholds

Pollutant	**Title V Major Source Threshold for Facilities located outside the FONA (tpy)**	An "x" indicates what pollutants SVM is considered Title V Major Source for:
CO	≥100	
NOx	≥100	x
VOC	≥100	
PM10	≥100	x
SOx	≥100	x
Single HAP	≥10	
Combined HAP	≥25	

Under the previous Title V Permit, there were only two PSEUs that were identified that met all three CAM applicability criteria: Boilers 25 & 26 (Permit Nos. B000555 & B000554). The CAM applicability for these two units was, and is, based on the post-controlled potential to emit emissions for CO, NOx, SOx and PM10 being in excess of the Major Source Thresholds by permit condition. These PSEUs only use a control device for PM10 (ESP) and SOx (scrubber); there are no control devices on these PSEUs for NOx; therefore, this PSEU is not subject to CAM for NOx. Since both of these units have a post-controlled potential to emit for PM10 and SOx in excess of the Major Source Thresholds, these two units certainly have an uncontrolled potential to emit in excess of the Major Source Thresholds for PM10 and SOx, as well. Additionally, since the post-controlled potential to emit for PM10 and SOx are in excess of the Major Source Thresholds (greater than 100 tpy) these two units are considered "Large PSEU" under the CAM regulation, and their associated CAM Plans must include monitoring frequencies

for each parameter monitored collected four or more data values equally spaced over each hour and average the values, as applicable, over the applicable averaging period as determined in accordance with 40 CFR 64.3(b)(4)(i) and (ii). SVM is required to have a Continuous Emission Monitoring System (CEMS) for SO2, and a Continuous Opacity Monitoring System (COMS) for opacity by permit condition. Under the CAM regulation there are special criteria for the use of continuous emission, opacity or predictive monitoring systems. Pursuant to 40 CFR 64.2(b)(vi), the CAM regulation allows the use of CEMS and COMS to satisfy the requirements of CAM for that specific pollutant since it is defined as a continuous compliance determination for that specific pollutant. Therefore, SVM is exempted from CAM for the SOx limit via the use of the CEMS for SO2, and the Opacity limit via the use of COMS for Opacity.

Furthermore, SVM is proposing to use the COMS as a CAM indicator for PM10 monitoring for both boiler PSEUs, which is allowed by the CAM regulation under 40 CFR 64.3(d)(2) and (3) provided that the criteria for establishing indicator ranges are met under 40 CFR 64.3(a) and (b). The opacity range for the COMS is zero to 100%, and the indicator range is 0-10%. During normal operation, the stack exhaust opacity of the control device is less than 7%. A comparison of source test data to opacity readings was conducted in April of 2023 to compare recent source test data for the PM limit of 0.01 gr/dscf to concurrent opacity readings from the COMS. During PM emissions testing, when PM emissions are below the PM limit of 0.01 gr/DSCF, the opacity is between 1% and 7%. There is no PM source test data available where PM levels are at or above the PM limit. Part 64 requires monitoring that identifies one or more representative control device operational parameters and specifies an indicator range that will provide a reasonable assurance of compliance with the emission limit. The indicator range may consist of multiple values, or a minimum or maximum value. An excursion of the PM10 limit is proposed at being defined at an hourly average that exceeds 10%. The monitoring system shall be calibrated to alarm when an excursion occurs which will trigger the need for corrective action steps which include immediate investigation, appropriate maintenance, replacing components, performing required reporting and recordkeeping actions, and returning the unit to normal operation as expeditiously as possible in accordance with good air pollution control practices for minimizing emissions. The District is confident that the proposed CAM for PM10 is adequate to reasonably assure compliance with the grain loading and hourly PM/PM10 limitations in between the annual source testing requirements. Using the COMS as an indicator also meets the requirements for “Large PSEU” under the CAM regulation since the COMS monitoring frequency is near continuous (once every 10 seconds). Please see the specific CAM Plan for Boilers 25 & 26 (Permit Nos. B000555 & B000554) in the proposed permit under Appendix B. Additionally, permit conditions have been specifically added to the control device units for PM (permit nos. C000557 & C000559) to incorporate CAM requirements.

As mentioned, previously, Boilers 25 & 26 (Permit Nos. B000555 & B000554) were the only units that were identified as applicable to CAM under the previous Title V Permit. During this renewal evaluation of the Title V permit, the District reassessed all permit units at SVM for CAM applicability. Other than Boilers 25 & 26 (Permit Nos. B000555 & B000554), the only PSEUs that use control devices at SVM are for PM, so to determine which PSEUs meet all three criteria of the CAM applicability, the uncontrolled potential to emit emissions were calculated using the maximum air flow rating (sfcm) of the control device and the inlet grain loading (amount of particulate by weight in grains per standard cubic foot of air flow) of the control

device using a conservative value of 0.2 grains of particulate per standard cubic foot. Due to the age of this facility, many of the permits predate New Source Review; subsequently, there are no throughputs on the process permits; therefore, the only way to calculate the potential to emit is using the control device volume of air rating (cfm) and an PM grain loading with the presumption that all PM emissions are vented to a control device(s). To ensure that this assumption is conservative from a CAM applicability perspective, the potential to emit emissions from processes which have multiple control devices were summed together to determine the uncontrolled and post-controlled emission values. Table 2 below shows the CAM Applicability Analysis for all PM sources which have a control device, except for the two units, Boilers 25 & 26 (Permit Nos. B000555 & B00554), which were addressed above. As demonstrated by Table 2, there are 13 processes with 32 control devices that have a limitation for PM/PM10 that also have an uncontrolled potential to emit in excess of the Major Source Threshold for PM10 which is 100 tons per year. These control devices are in red font in Table 2. It should be noted that all the processes in Table 2 have a post-controlled potential to emit PM emissions less than the Major Source Threshold for PM10; therefore, they are not considered "Large PSEU" under the CAM regulation; and subsequently, are only required to have a frequency of data collection for CAM once per 24-hour period pursuant to 40 CFR 64.3(b)(4)(iii).

Table 2 - SVM CAM Applicability Analysis for PM Controls Except for Boilers 25 & 26

District Permits	Process	Pollutant subject to Limitation or Standard [40 CFR 64.2(a)(1)]	Autority for Limitation	Does unit uses a control device for emission limit? [40 CFR 64.2(a)(2)]	Controls Used (Permit & Type)	Uncontrolled PTE (tpy)	Is the uncontrolled PTE greater than 100% of Major Source Threshold [40 CFR 64.2(a)(3)]	Controlled PTE (tpy)	CAM Applicable? [40 CFR 64.2(a)(1), (2),(3) all "yes"]?	Exempt from CAM? [40 CFR 64.2(a)(b)]	Is controlled PTE greater than 100% of Major Source Threshold [40 CFR 64.3(b)(4)(ii)] Yes = Large PSEU No = Other PSEU
B000448 & B000449	Pyrobor Plant Furnance No. 2 & 3	PM/PM10	District Rules 404, 405 & 1303-Offsets	yes	C002487 - ESP	345.4	yes	34.5	yes	no	no
B000471	Pyrobor Plant Milling & Screening	PM/PM10	District Rules 404, 405 & 1303-Offsets	yes	C000513 - Baghouse	267.3	yes	26.73	yes	no	no
T003968	Pyrobor Storage Silos	PM/PM10	District Rules 404, 405 & 1303-Offsets	yes	C000489 - Baghouse	45.1	no	13.14	no	n/a	no
B000467	Pyrobor Bulk Loadout Facility	PM/PM10	District Rules 404, 405 & 1303-Offsets	yes	C000509 - Baghouse	166.7	yes	16.7	yes	no	no
B000452 & B000453	Borax Dryer No.1 & 2	PM/PM10	District Rules 404 & 405	yes	C000546 - Scrubber	81.1	no	15.5	no	n/a	no
B000490	Borax Screening	PM/PM10	District Rules 404 & 405	yes	C000488 - Baghouse	88.7	no	8.9	no	n/a	no
B000466	Borax Bulk Loadout	PM/PM10	District Rules 404 & 405	yes	C000508 - Baghouse C000518 - Baghouse	189.2	yes	18.9	yes	no	no
B000480	Boric Acid Dryer & Product Transfer/Storage	PM/PM10	District Rules 404, 405 & 1303 - Offsets	yes	C000516 - Baghouse C001978 - Baghouse C001761 - Baghouse C001685 - Baghouse	141.4	yes	14.1	yes	no	no
B001760 & T002133	Boaric Acid Loadout,Stacking & Storage	PM/PM10	District Rules 404, 405 & 1303-Offsets	yes	C001761 - Baghouse	34.4	no	3.4	no	n/a	n/a
B003343	Boric Oxide Plant	PM/PM10	District Rules 404 & 405	yes	C003344 - Scrubber	23	no	0.02	no	n/a	n/a
B003655	Consolidated Packaging & Warehouseing	PM & Opacity	District Rules 404, 405 & 40 CFR 60, Subpart OOO	yes	C003656 - Baghouse	62.6	no	6.3	no	n/a	n/a
T003427	Storage Area Soda Ash	PM & Opacity	40 CFR 60, Subpart OOO	yes	C003428 - Baghouse	75.1	no	7.5	no	n/a	n/a
B012530	SUPO Dryer	PM/PM10	District Rule 404,405 & 1303-BACT	yes	C012532 - Baghouse	37.5	no	0.9	no	n/a	n/a
B012531	SUPO Transfer and Storage	PM/PM10	District Rule 404,405 & 1303-BACT	yes	C012534 - Baghouse C012535 - Baghouse C012536 - Baghouse C012950 - Baghouse	34.5	no	1.0	no	n/a	n/a
B012533	SUPO Buld Loadout Facility	PM/PM10	District Rule 1303-BACT	yes	C012537- Baghouse C012538 - Baghouse C012539 - Baghouse	20.5	no	0.8	no	n/a	n/a
B000537	Soda Ash Production Line No. 1	PM/PM10	District Rules 404, 405 & 1303-Offsets	yes	C000533 - Baghouse C000544 - ESP C000553 - Scrubber C000527 - Scrubber C003533 - Baghouse C000532 - Baghouse	909.9	yes	91.4	yes	no	no
B000538	Soda Ash Production Line No. 2	PM/PM10	District Rules 404, 405 & 1303-Offsets	yes	C000539 - Baghouse C000544 - ESP C000556 - Scrubber C000545 - Scrubber C000532 - Baghouse	844.3	yes	84.4	yes	no	no
B000547	Soda Ash Production Line No. 3	PM/PM10	District Rules 404, 405 & 1303-Offsets	yes	C000548 - Baghouse C000544 - ESP C000552 - Scrubber C000549 - Scrubber C003534 - Baghouse C000532 - Baghouse	881.3	yes	88.2	yes	no	no
B003665	Dryer System, No. 1 Bicarbonate Fluidized Bed	PM/PM10 & Opacity	District Rules 404, 405, 1303 - Offsets & 40 CFR 60, Subpart OOO	yes	C003668 - Baghouse C003669 - Baghouse C0003670 - Baghouse C003667 - Baghouse	45.1	no	3.5	no	n/a	n/a
B004540	Dryer System, No. 2 Bicarbonate Fluidized Bed	PM/PM10 & Opacity	District Rules 404, 405, 1303 - Offsets & 40 CFR 60, Subpart OOO	yes	C004542 - Baghouse C004543 - Baghouse C004544 - Baghouse	33.8	no	2.6	no	n/a	n/a
B003672	Dryer System, No.1 Monohydrate Fulidized bed	PM/PM10 & Opacity	District Rules 404, 405, 1303 - Offsets & 40 CFR 60, Subpart OOO	yes	C003673 - Baghouse C003675 - Baghouse C003676 - Baghouse C003677 - Baghouse	731.6	yes	63.5	yes	no	n/a
T000528	Frame Soda Ash Storage	PM/PM10	District Rules 404, 405 & 1303-Offsets	yes	C000529 - Baghouse	122.6	yes	12.3	yes	no	no
B000530	Soda Ash Truck Loadout System	PM/PM10	District Rules 404, 405 & 1303-Offsets	yes	C000543 - Baghouse	15.4	no	1.5	no	n/a	n/a
B000128	Soda Ash Railroad Loadout Facility	PM/PM10	District Rules 404, 405 & 1303-Offsets	yes	C000126 - Baghouse C000127 - Baghouse C002354 - Baghouse C002355 - Baghouse	97.6	no	9.7	no	n/a	n/a
B000519, B000521 & B011272	Coal Reclaim System	PM/PM10	District Rules 404, 405 & 1303-BACT	yes	C002124 - Baghouse C002125 - Baghouse	540.6	yes	8.3	yes	no	no
B000541	Fly Ash Storage & Loadout System	Opacity	District Rule 401	yes	C000540 - Baghouse	15.0	no	1.5	no	n/a	n/a
B000221	Sodium Sulfate Process Train	PM/PM10	District Rules 404, 405 & 1303-BACT	yes	C000240 - Scrubber C004431 - Baghouse	131.2	yes	19.9	yes	no	no
B002253	Sodium Sulfate B Process Train 2	PM/PM10	District Rules 404, 405 & 1303-BACT	yes	C000354 - Scrubber	56.7	no	9.0	no	n/a	n/a
B000228	Borax Process Train and Bulk Loadout	PM/PM10	District Rules 404, 405 & 1303-Offsets	yes	C000347 - Baghouse C000348 - Baghouse C000353 - Baghouse C000357 - Baghouse C000241 - Scrubber	271.3	yes	27.2	no	no	no
B001764	Sulfate Shipping	PM/PM10	District Rules 404, 405 & 1303-BACT	yes	C001765 - Baghouse C000341 - Baghouse	52.3	no	5.6	no	n/a	n/a
B003883	Sand Loadout Storage	PM/PM10	District Rule 1303	yes	C003884 - Baghouse	3.5	no	0.4	no	n/a	n/a
B000519	Coal Stockout System	PM/PM10	District Rules 404, 405 & 1303-BACT	yes	C002124 - Baghouse	450.5	yes	6.8	yes	no	no

Of these 32 control devices there are three types: 1) Baghouses, 2) ESPs, and 3) Scrubbers, all of which are required to demonstrate compliance with the PM limits via source testing. All of these CAM applicable PSEUs have PM limitations from District Rule 404 – *Concentration* and District Rule 405 – *Solid Particulate – Weight.* Both District Rules 404 and 405 were adopted in 1977 and limit Total Suspended Particle (TSP) or PM30. Today, these District Rules are thought of as "PM Backstop Rules" as they only apply if there are no other, more stringent, applicable regulations, which is rare, but is the case for most of SVM's permits since many of them pre-date NSR. The District is interpreting PM30 to be a surrogate of PM10, and therefore, an applicable regulated air pollutant under 40 CFR 64.2(a)(1). Interestingly, District Rules 404 and 405 do not require compliance demonstration by rule, a component most likely overlooked when established in 1977; however, it is the MDAQMD's policy to demonstrate compliance with these rules with source testing paired with routine monitoring and inspection requirements, specifically: daily checks of the differential pressure, and monthly Method 22 observations, all of which are proposed in the corresponding CAM plans. The MDAQMD believes that the source testing, monitoring, and inspection frequencies are sufficient for demonstrating compliance with the PM limits of District Rules 404 and 405, as since the inception of requiring source testing for these rule limits in the early 1990s, when the MDAQMD became the permitting authority, SVM has not failed one of these District Rule 404 and 405 source tests despite having to conduct this source testing more than 70 permit units on a routine frequency. Additionally, some permits have a PM10 limitation related to District Rule 1303 – *New Source Review*, and are related to an offsetting provision that affected some of the process permits; however, the compliance with these offset-related PM limits is directly demonstrated with the source testing used to demonstrate compliance with District Rules 405 and 405, by permit language; therefore, the District is proposing the same CAM approach for both of these PM limitations.

The District used USEPA's *Compliance Assurance Monitoring Technical Guidance Document* and CAM Illustrations (Appendix B) as guidance for the CAM Plans for these PSEUs. Since these PSEUs are only required to have a frequency of data collection for CAM, once per 24-hour period, pursuant to 40 CFR 64.3(b)(4)(iii), the indicator selected for the PM limits for all the PSEUs with Baghouse and Scrubbers is pressure differential readings since this is a metric that SVM currently collects twice a day, and this was an example indicator used for baghouse and scrubber control devices in the USEPA CAM Guidance document. The 24-hour indicator proposed for the ESP control devices is daily monitoring and recording of the ESP secondary voltage and current, which is also in line with the example indicators of the USEPA CAM Guidance document for ESPs. Since the CAM regulation only requires one 24-hour indicator for "other PSEUs" the District proposes strengthening the CAM further by the inclusion of a second indicator: monthly visible emission readings using USEPA Method 22 procedures. Justification for these two indicators are proposed in the CAM Plan for these PSEUs under Appendix B of the proposed permit. Additionally, SVM is also required by permit condition to conduct an annual internal inspection of these control devices which for the baghouse consists of bag and bag suspension inspections; for the scrubbers consists of inspecting the venturi, spray bars, head trays and; and for the ESPs consists of burner efficiency checks, transformer oil inspection, and checks of primary and precipitator volts and current. Equipment-specific conditions of the proposed permit have been specifically added to each PSEU control device units for PM to incorporate CAM requirements.

There is one unit which has an opacity limit from 40 CFR 60, Subpart OOO in addition to a PM limitation, B003672 – Dryer System for the No. 1 Monohydrate Fluidized bed and the associated PM baghouse controls C003673, C003675, C003676, and C003677. This process permit and control devices are an "affected facility" under 40 CFR 60, Subpart OOO and commenced construction, modification, or reconstruction after August 31, 1983, but before April 22, 2008; therefore, the opacity limits are not exempted under CAM pursuant to 40 CFR 64.2(b)(1)(i). Since this PSEU already has a CAM requirement for the PM limits from District Rule 404, 405, and 1303 the District is proposing the same CAM approach for the opacity limit from 40 CFR 60, Subpart OOO which is daily differential pressure readings and daily visible emission checks using USEPA Method 22 procedures on these affected PSEU control devices.

Since SVM has maintained these set schedule of routine monitoring and inspections, prior to them being required by CAM, and SVM has had such a successful demonstration of compliance with the source tests for these PM and Opacity limitations, the District is confident that compliance is being reasonably assured with the emission limitations and will continue to be demonstrated now that these PSEUs are identified as applicable to CAM as part of this renewal.

To succinctly satisfy the CAM applicability analysis Table 3 below shows the remaining permitted equipment at SVM, all of which show that the process does not use a control device to demonstrate compliance with a pollutant-specific limitation; therefore, CAM does not apply.

Table 3 - SVM Equipment with no Control Device for Specific-Pollutant

District Permits	Process	Pollutant subject to Limitation or Standard [40 CFR 64.2(a)(1)]	Autority for Limitation	Does unit uses a control device for emission limit? [40 CFR 64.2(a)(2)]
B003430	Mobile Conveyor	n/a	n/a	no
B004762	Transloading Conveyor	n/a	n/a	no
B000534	Bicarbonate Crystallizer No. 1	n/a	n/a	no
B000535	Bicarbonate Crystallizer No. 3	n/a	n/a	no
B008672	Salt Crushing Loading Equipment	Opacity	40 CFR 60, Subpart OOO	no
B003955	Salt Crushing Equipment	Opacity	40 CFR 60, Subpart OOO	no
T002236	Lake Garage Waste Oil Tank	n/a	n/a	no
P005350, P005206, P004050, P004051	Paint Spray Guns	VOC	Rules 1113, 1114, 1115, 1116, and 442	no
E003522	DICE, Emergency	n/a	n/a	no
E004553	DICE Emergency Fire	n/a	n/a	no
B004554	Portable DICE Compressor Utility	n/a	n/a	no
B007852	Portable, Low Use DICE Compressor	n/a	n/a	no
E009159	DICE Emergency Water Pump	n/a	n/a	no
B009160	Gasoline ICE, Portable Pump	n/a	n/a	no
B009161	DICE Portable Concrete Pump	n/a	n/a	no
E009163	DICE Emerncy Generator	n/a	n/a	no
B000537, B000538, B000547	Soda Ash Production Line No. 1,2,3	NOX, SOX, VOC	District Rule 1303-Offsets	no
B000551	Monoethanolamine (MEA) and/or Diglycolamine (DGA) System	Opacity	Distrit Rule 401	no
B001920	Cooling Tower	PM/PM10	District Rule 1303-BACT	no
B000520	Solid Fuel Exterir Stockout And Reclaim System	Opacity	Distrit Rule 401 & 403	no
E004550	Emergency DICE Fire	n/a	n/a	no
B005124	Portable DICE Air Compressor	n/a	n/a	no
A000522 & A000523	Portable Abrasive Blasting Systems	Opacity	Distrit Rule 401	no
B005291	Cooling Tower - Sulfate Number 1	PM/PM10	District Rule 1303	no
B005188	Cooling Tower - Sulfate Number 2	PM/PM10	District Rule 1303	no
B005292	Cooling Tower - Sulfate Number 3	PM/PM10	District Rule 1303	no
B005212	Cooling Tower - Sulfate Number 4	PM/PM10	District Rule 1303	no
B005213	Cooling Tower - Sulfate Number 5	PM/PM10	District Rule 1303	no
B005211	Cooling Tower - Sulfate Number 6	PM/PM10	District Rule 1303	no
B001926	Borax Cooling Tower	PM/PM10	District Rule 1303	no
B005205	Mobile Transloading Conveor	PM/PM10	District Rules 401, 403	no
B005224	Mobile Transloading Conveor	PM/PM10	District Rules 401, 403	no
B003707	Mobile Transloading Conveor	PM/PM10	District Rules 401, 402, 403, 404, 405, and 1303	no
T009101	Tank, Waste Oil	n/a	n/a	no
T003953	Tank, Waste Oil	n/a	n/a	no
T003952	Tank, Waste Oil	n/a	n/a	no
B001916	LLX Process	NMHC/VOC	District Rule 1303	no
B001758	P-20 Manufacturing, LLX Basin	none	n/a	no
B001757	Carbon Regeneration Furnance, Herrschoff	none	n/a	no
M000483	Boiler No.22	NOX, CO, SOX	District Rule 1303 & 1157.1	no
B009992	Boiler No. 5	NOX, CO, VOC, SOx PM10	District Rule 1303; 40 CFR 60 Subpart Dd	no
B000555	Boiler No. 25	NOX, SOx, CO, NMHC	District Rule 475 & 1303, 40 CFR 63, Subpart JJJJJJ	no
B000554	Boiler No. 26	NOX, SOx, CO, NMHC	District Rule 475 & 1303, 40 CFR 63, Subpart JJJJJJ	no

40 CFR 82, *Protection of Stratospheric Ozone*. SVM complies with this regulation per Part IV.A.20-21

E. CONCLUSIONS AND RECOMMENDATION:

In conclusion, the proposed SVM Title V Permit has been found to satisfy all of the requirements of District Rule 221, Rule 312, Regulation XII Rules, and the District's Title V Permit Program requirements.

Copies of the Application, the Proposed FOP, the Statement of Legal and Factual Basis, and other supporting documentation are available from the MDAQMD by mail (including email) or in person.

The proposed Title V Permit is subject to review and approval by USEPA as well as comment from the public.

The District recommends that this Title V - Federal Operating Permit be renewed to satisfy these requirements for a new 5 year permit term.

F. PUBLIC COMMENT AND NOTIFICATIONS:

1. Public Comment

This preliminary determination will be publicly noticed for the required 30-Day Public commenting period.

Noticing Methods include the following, per District Rule 1207 (A)(1)(a) and District Rule 1302(D)(2) and (3):

- Publish in newspapers of general circulation - Press Enterprise and the San Bernardino Sun.
- Mail and/or email to MDAQMD contact list of persons requesting notice of actions (see the contact list following the Public Notice in Appendix B).
- Posted on the MDAQMD Website at the following link: https://www.mdaqmd.ca.gov/permitting/public-notices-advisories/public-notices-permitting

Please refer to the cover page for noticing dates.

2. Notifications/USEPA & CARB Review

The preliminary determination(s) will be submitted via e-mail to EPA and CARB pursuant to District Rule 1207 for a forty-five (45) day review period. Please refer to the cover page of this document for noticing dates. The final modified FOP shall be issued after the review period is over, provided there are no comments that require resubmission. All correspondence as required by District Rules 1302 and 1207 were forwarded electronically to the following recipients.

Director, Office of Air Division
United States EPA, Region IX
75 Hawthorne Street
San Francisco, CA 94105
via EPA's EPS Portal:
https://cdx.epa.gov/

Chief, Stationary Source Division
California Air Resources Board
P.O. Box 2815
Sacramento, CA 95812
via e-mail at: Permits@arb.ca.gov

Searles Valley Minerals, Inc.
P.O. Box 367
13200 Main Street
Trona, CA 93592-0367
Attention: Mark Wood, Environmental and PSM Systems
via e-mail at: woodm@svminerals.com

APPENDIX A

DISTRICT / SIP RULE COMPLIANCE DEMONSTRATIONS:

A. Rule 406: Owner/Operator shall not discharge into the atmosphere from this facility, from any single source of emissions whatsoever, Sulfur compounds, which would exist as a liquid or gas at standard conditions, calculated as sulfur dioxide (SO_2) greater than or equal to 500 ppm by volume.
[40 CFR 70.6 (a)(1) - Periodic Monitoring Requirements] (For Periodic Monitoring Requirements, see applicable Part II and Part III conditions))
[Rule 406 - *Specific Contaminants*; Version in SIP = 07/25/77, 40 CFR 52.220(c)(42)(xiii)(A) - 12/21/78 43 FR 52489, Subpart (a) only; Current Rule Version = 02/20/79]

Rule 406 specifies standard conditions, but not dry. Standard conditions for Rule 406 will be calculated as wet.

Calculate the SO_2 concentration in the diesel fueled IC engine exhaust gas using the following assumptions/calculations:

1. Maximum sulfur content of the diesel fuel is by permit condition: 0.05 % by weight.
2. Specific gravity of diesel fuel is 0.84: weight of one gallon of diesel fuel is: 8.33 lb/gal x 0.84 = 7 lb/gal.
3. Heating value of diesel fuel from U.S. EPA AP-42, Section 3.3: 19,300 Btu/lb.
4. Gallons of fuel required for 10^6 Btu: 1 lb/19,300 Btu = x lb/ 10^6 Btu: x = 51.8 lb: (51.8 lb)(1 gal/7 lb) = 7.4 gallons per 10^6 Btu.
5. Pounds of sulfur per 10^6 Btu (7.4 gallons): (7.4 gal)(7 lb/gal)(0.0005) = 0.0259 pounds.
6. Mols of sulfur per 10^6 Btu: 0.0259 lb/ 32 lb/mol = 8.09 x 10^{-4} mols.
7. Volume of SO_2 produced; assuming that one mol of sulfur produces one mol of SO_2; 8.09 x 10^{-4} mols of SO_2 are produced per 10^6 Btu of diesel burned: (385 ft^3 / mol)(8.09 x 10^{-4} mols) = 0.312 $ft^{3:}$ (385 ft^3/mol is at 68 degrees Fahrenheit).
8. From 40 CFR 60, Appendix A, Method 19 the F_w factor for diesel is 10,320 wscf / 10^6 Btu (68 degrees Fahrenheit, 0 % excess O_2). Rule 406 specifies the SO_2 concentration at standard conditions, wet, not dry.

For purposes of this calculation, excess air from the combustion process will not be considered in calculating the SO_2 concentration & is the most conservative assumption:
Concentration of SO_2 at zero percent oxygen:

$$0.312\ ft^3/(0.010320 \times 10^6\ wscf) = 30.2\ ppmv$$

Conclusion: Diesel fueled IC Engine exhaust SO_2 concentration of 30.2 ppmv complies with Rule 406 SO_2 limit of 500 ppmv.
It is assumed that the SO_2 concentration in natural gas fueled IC engine exhaust gas will be conservatively less than that demonstrated above for diesel combustion:

Calculate the CO concentration in boiler exhaust gas using the following assumptions/calculations:

1. Based on U.S. EPA AP-42; Section 1.4, Table 1.4-2, lists the CO emission factor for natural gas combustion in boilers to be 35 lb CO per 10^6 ft^3 of natural gas burned. Assume 1000 Btu / ft^3 of natural gas.

2. From 40 CFR 60 Appendix A, Method 19, the F_d factor for natural gas is 8710 dscf /10^6 Btu (68 degrees Fahrenheit). Rule 407 specifies the CO concentration on a dry basis.
3. For the purposes of this calculation, excess air will not be considered in calculating the CO concentration (most conservative):

   Cubic feet of CO produced per 10^6 ft^3 of natural gas burned:
   (35 lb) (1 lb mol / 28 lb) (385 ft^3 / mol) = 481 ft^3 CO (385 ft^3 / mol at 68 degrees Fahrenheit)

   Dry cubic feet of combustion gas formed from 10^6 ft^3 of natural gas burned:
   (10^6 ft^3 gas) (1000 Btu / ft^3) (8710 dscf / 10^6 Btu) = 8,710,000 dscf

   CO concentration = 481 ft^3 / 8.71 10^6 ft^3 = 55.2 ppm (most conservative)

   Conclusion: Boiler exhaust CO concentration of 55.2 ppmv complies with Rule 407 CO limit of 2000 ppmv.

B. Rule 409: Owner/Operator shall not discharge into the atmosphere from this facility from the burning of fuel, combustion contaminants exceeding 0.23 gram per cubic meter (0.1 grain per cubic foot) of gas calculated to 12 percent of carbon dioxide (CO_2) at standard conditions averaged over a minimum of 25 consecutive minutes.
[Rule 409 - *Combustion Contaminants*; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(C) - 09/08/78 43 FR 40011; Current Rule Version = 07/25/77]

Calculate the Total Particulate Concentration in the diesel fueled IC engine exhaust gas using the following assumptions/calculations:

1. Based on U.S. EPA AP-42, Section 3.4, Table 3.4-5, the emission factor for total particulate is 0.0697 lb/10^6 Btu. (= 487.9 grains/10^6 Btu)
2. From 40 CFR 60, Appendix A, Method 19 the F_w factor for diesel is 10,320 wscf/10^6 Btu (68 degrees Fahrenheit, 0 % excess O_2). Rule 409 specifies the Particulate concentration at standard conditions, wet, not dry.

For purposes of this calculation, excess air from the combustion process will not be considered in calculating the Particulate concentration & is the most conservative assumption:

Concentration of Particulate at zero percent oxygen:

(487.9 grains/10^6 Btu) / (10,320 wscf/10^6 Btu) = 0.047 grain/ft^3

Conclusion: Diesel fueled IC Engine exhaust Total Particulate concentration of 0.047 grain per cubic foot complies with Rule 409 limit of 0.1 grain per cubic foot.

It is assumed that the Total Particulate concentration in natural gas fueled IC engine exhaust gas will be conservatively less than that demonstrated above for diesel combustion

Appendix B
Public Notice Information

NOTICE OF TITLE V PERMIT RENEWAL

NOTICE IS HEREBY GIVEN THAT *Searles Valley Minerals Operations* located at 13200 Main Street, Trona, CA 93562; owned and operated by *Searles Valley Minerals Operations, Inc.,* has applied for Renewal of their Federal Operating Permit (FOP # 90002) pursuant to the provisions of Mojave Desert Air Quality Management District (MDAQMD) Regulation XII. Applicant is a company operating a Solution Mining and Chemicals Processing Facility.

REQUEST FOR COMMENTS: Interested persons are invited to submit written comments and/or other documents regarding the terms and conditions of the proposed Renewal of the affected Federal Operating Permit. If you submit written comments, you may also request a public hearing on the proposed Renewal of the FOP. To be considered, comments, documents and requests for public hearing must be submitted no later than 5:00 P.M. on September 27, 2023 to the MDAQMD, Attention: Sheri Haggard, at the address listed below.

PETITION FOR REVIEW: Federal Operating Permits are also subject to review and approval by the United States Environmental Protection Agency (USEPA). If the USEPA finds no objection to the proposed permit renewal, the final permit will be issued. In the event of public objection to the issuance of a specific permit, a Title V petition may be submitted to the USEPA Administrator electronically through the Central Data Exchange at: https://cdx.epa.gov/. In order to file a Title V petition, issues must be raised with reasonable specificity during the public comment period, and filed within 60 days of the close of the USEPA review period.

AVAILABILITY OF DOCUMENTS: The proposed Federal Operating Permit, as well as the application and other supporting documentation are available for review at the MDAQMD offices, 14306 Park Avenue, Victorville, CA 92392. In addition, these documents are available on the MDAQMD website and can be viewed at following link: https://www.mdaqmd.ca.gov/permitting/public-notices-advisories/public-notices-permitting. Please contact Sheri Haggard, Air Quality Engineer, at the address, above, or (760) 245-1661, extension 1864, or at shaggard@mdaqmd.ca.gov for additional questions pertaining to this action and/or corresponding documents.

Traducción en español esta disponible por solicitud. Por favor llame: (760) 245-1661

SHERI HAGGARD
Permit Engineering Manager
Mojave Desert Air Quality Management District
14306 Park Avenue, Victorville, CA 92392

MDAQMD contact list of persons requesting notice of actions:

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