MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT
14306 Park Avenue Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

PERMIT TO OPERATE

B009992

Operation under this permit must be conducted in compliance with all information included with the initial application, initial permit condition, and conditions contained herein. The equipment must be maintained and kept in good operating condition at all times. This Permit to Operate or copy must be posted on or within 8 meters of equipment. If a copy is posted, the original must be maintained on site, available for inspection at all times.

EXPIRES LAST DAY OF: AUGUST 2027

OWNER OF OPERATOR (Co.#3254)

5E SVM Operations, LLC
13200 Main Street
Trona, CA 93562

EQUIPMENT LOCATION (Fac.#7)

SVM - West End Plant
80201 Trona Road
Trona, CA 93562

Description:
BOILER (NO. 5) consisting of: Natural gas fired, "D" type Babcock & Wilcox FM Package Boiler (FM 106-88) with a maximum rating of 126.58 MM Btu/hr, producing 100,000 lb of steam per hour at 250 psig.

CONDITIONS:

1. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.
[District Rule 204]

2. This equipment shall be exclusively fueled with pipeline quality natural gas and shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.
[District Regulation XIII - NSR; District Rule 431]

3. This equipment is subject to the federal NSPS codified at 40 CFR Part 60, Subparts Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units). Compliance with all applicable provisions of these regulations is required.

Fee Schedule: 2 (f)	Rating: 126580000 Btu	SIC: 1474	SCC: 10200601	Location/UTM(Km): 464E/3951N

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

5E SVM Operations, LLC
P.O. Box 367
Trona, CA 93592-0367

By: **COPY**
Brad Poiriez
Executive Director

UNOFFICIAL

4. Emissions from this equipment shall not exceed the following emission limit at any firing rate verified by CEMS, except during periods of startup, shutdown and malfunction:
(a) NOx as NO2 - 1.27 lb/hr ("F Factor" of 8710 DSCF per MMBtu corrected to 3% oxygen based on a three hour rolling average updated every 15 minutes)
[District Regulation XIII - NSR; 40 CFR 60, Subpart Db]

5. Emissions of NOx from this equipment shall only exceed the limits contained in Condition 4 during startup and shutdown periods. Startup is defined as the period beginning with ignition and lasting until the equipment has reached 30,000 lb of steam production per hour. Shutdown is defined as the period beginning with the lowering of equipment from base load and lasting until fuel flow is completely off and combustion has ceased.
[District Regulation XIII - NSR; 40 CFR 60, Subpart Db]

6. Emissions from this equipment shall not exceed the following emission limits, based on a rolling 12 month summary:
(a) NOx - 11,088 lb/year, verified by CEMS
(b) CO - 44,354 lb/year, verified by compliance test and hours of operation
(c) VOC as CH4 - 5,988 lb/year, verified by compliance test and hours of operation
(d) SOx as SO2 - 654 lb/year, verified by fuel sulfur content and fuel use data
(e) PM10 - 8,316 lb/year, verified by most recent compliance test and hours of operation
[District Regulation XIII - NSR]

7. Particulate emissions from this equipment shall not exceed an opacity equal to or greater than twenty percent (20%) for a period aggregating more than three (3) minutes in any one (1) hour, excluding uncombined water vapor.
[District Rule 401]

8. The owner/operator shall provide stack sampling ports and platforms necessary to perform source tests required to verify compliance with District rules, regulations and permit conditions. The location of these ports and platforms shall be subject to District approval.
[District Regulation XIII - NSR]

9. Emissions of NOx and oxygen shall be monitored using a Continuous Emissions Monitoring System (CEMS). The owner/operator shall install, calibrate, maintain, and operate these monitoring systems according to a District-approved monitoring plan and MDAQMD Rule 218, and they shall be installed prior to initial equipment startup.
[District Regulation XIII - NSR; 40 CFR 60, Subpart Db]

10. The owner/operator must conduct a compliance test on this equipment at least once every twelve (12) months. Compliance tests must be performed in accordance with the District Compliance Test Procedural Manual. The owner/operator must submit a compliance/certification test protocol at least thirty (30) days prior to the compliance/certification test date. The owner/operator must conduct all required compliance/certification tests in accordance with a District-approved test protocol. The owner/operator must notify the District a minimum of ten (10) days prior to the compliance/certification test date so that an observer may be present. The final compliance/certification test results must be submitted to the District within forty-five (45) days of completion of the test. All compliance/certification test notifications, protocols, and results may be submitted electronically to reporting@mdaqmd.ca.gov

The following compliance tests are required:
(a) NOx as NO2 in ppmvd at 3% oxygen and lb/hr (measured per USEPA Reference Methods 19 and 20); shall not exceed 9 ppmvd and 1.27 lb/hr.
(b) VOC as CH4 in lb/hr (measured per USEPA Reference Methods 25A and 18); shall not exceed 0.68 lb/hr.
(c) SOx as SO2 in lb/hr; shall not exceed 0.07 lb/hr verified by stack test or fuel analysis.
(d) CO in ppmvd at 3% oxygen and lb/hr (measured per USEPA Reference Method 10); shall not exceed 50 ppmvd and 5.06 lb/hr.
(e) PM10 in gr/dscf and lb/hr (measured per USEPA Reference Methods 5 and 202 or CARB Method 5); shall not exceed 0.01 gr/dscf and 0.95 lb/hr verified during the initial compliance test and tested every fifth year thereafter.
[District Regulation XIII - NSR; Subpart Db; District Rule 1157.1(C)]

11. The Continuous Emissions Monitoring System (CEMS) shall meet the following acceptability testing requirements from 40 CFR 60:
(a) For NOx, Appendix B - Performance Specification 2.
(b) For oxygen, Appendix B - Performance Specification 3.

(c) Appendix F - Quality Assurance Procedures.
[District Regulation XIII - NSR; 40 CFR 60, Subpart Db]

12. The owner/operator shall submit to the MDAQMD the following information for the preceding calendar quarter by January 30, April 30, July 30 and October 30 of each year this permit is in effect. This information shall be maintained on site for a minimum of five (5) years and shall be provided to District personnel on request:
(a) All continuous emissions data reduced and reported in accordance with the District-approved CEMS protocol.
(b) Maximum hourly and total quarterly emissions of NOx.
(c) Fuel sulfur content quarterly natural gas sulfur content reports from the natural gas supplier(s).
[District Regulation XIII - NSR; 40 CFR 60, Subpart Db]

13. Within 60 days after achieving the maximum firing rate at which the facility will be operated, but not later than 180 days after initial startup, the operator shall perform an initial compliance test. This test shall demonstrate that this equipment is capable of operation at a minimum load of 50% in compliance with the emission limits in Condition 4 above.
[District Regulation XIII - NSR; 40 CFR 60, Subpart Db]

14. This boiler shall be operated in compliance with all applicable requirements of 40 CFR 60 Subpart Db - Standards of Performance for Industrial Steam Generating Units (NSPS Db) as modified by EPA letter dated September 17, 2007. In the event of conflict between Permit Conditions and the NSPS, the more stringent requirements shall govern.
[40 CFR 60, Subpart Db]

15. The owner/operator shall conduct an initial compliance test for the NOx NSPS Subpart Db requirement by collecting data from the CEMS during the first 720 hours of operation (successive but not continuous periods of operation) within one (1) year of startup. EPA letter dated 9/17/2007 modifying 40 CFR 60.46b(e)(1) and 60.8(a).
[District Regulation XIII - NSR; 40 CFR 60, Subpart Db]

16. The owner/operator shall comply with all applicable recordkeeping and reporting requirements of NSPS Db requirements. Records shall be kept for no less than 5 years and available to Local, State and Federal inspectors upon request.
[40 CFR 60, Subpart Db]

17. For compliance with Rule 1157.1, this unit, which only has the capability to fire gaseous fuel, will comply with the "Gaseous and liquid fueled, high annual heat input permit unit" provisions as shown in Rule 1157.1 (C)(3)(a), and is subject to NOx and CO compliance testing not less than once every 12 months, per (E)(1)(a).
[District Rule 1157.1]