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

AUTHORITY TO CONSTRUCT C014967

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: DECEMBER 2026

OWNER OF OPERATOR (Co.#3254)

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

EQUIPMENT LOCATION (Fac.#2)

SVM - Trona Plant
13200 Main Street
Trona, CA 93562

Description:
SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM, BOILER NO. 22 consisting of: RF MacDonald, 19ft. 8.2in. L x 13ft. 1.5in. W, Corrugated Type, Umicore DNX-929 Modules, Module Arrangement 4 x 1 x 1, Module Type HO832AH, Module Dimensions 4ft. 7.6in. H x 12ft. 4.2in. W x 2ft. 11.2in. D.

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 installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles.
[District Rule 204]

3. The emission of ammonia slip (NH3) shall be continuously monitored with a Parametric Emission Monitoring System (PEMS). The owner/operator must install, calibrate, maintain and operate the PEMS according to a District-approved PEMS Monitoring and Quality Assurance Plan. No later than forty-five (45) days prior to installation of this equipment, the owner/operator must submit a PEMS

Fee Schedule: 7 (h)	Rating: 1 device	SIC: 1474	SCC: 10200601	Location/UTM(Km): 466E/3957N

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

Monitoring and Quality Assurance Plan for District review and approval. The PEMS Monitoring and Quality Assurance Plan must include the preliminary SCR operating parameters that maintain emissions within the specified limits, including but not limit to, the operating temperature range, pressure drop range, aqueous ammonia injection rate range, and ammonia content of the aqueous ammonia solution. These parameters must be established by the manufacturer and/or compliance testing and are subject to District approval. Final SCR operating parameters must be submitted in a revised PEMS Monitoring and Quality Assurance Plan no later than (6) months after the initial compliance test. The District-approved PEMS Monitoring and Quality Assurance Plan must be maintained with the recordkeeping for this equipment and made available to District, state, or federal personnel upon request.
[District Rule 1303(A) - BACT; 40 CFR 70.6 (a)(3)(B) - Periodic Monitoring Requirements]

4. Except during periods of startup, shutdown and malfunction, the ammonia concentration at the exit of the SCR shall not exceed 10 ppmv (NH3) measured by volume on a dry basis at 3% oxygen, averaged over three hours. Compliance must be demonstrated on an annual basis by compliance testing as outlined by condition 13 on B000483.
[District Rule 1303(A) - BACT]

5. The owner/operator must install and maintain a temperature gauge to accurately indicate the temperature at the inlet of the SCR catalyst bed. The measuring device or gauge shall continuously measure the temperature, be accurate to within plus or minus 5 percent, and be calibrated every 12 months. Ammonia shall be injected whenever the selective catalytic reduction system has reached or exceeded the temperature range indicated in the District-approved PEMS Monitoring and Quality Assurance Plan except for periods of equipment malfunction. The owner/operator must maintain monthly records of the temperature and calibrations. These records must be kept for at least five (5) years, and made available to District, state, or federal personnel upon request.
[District Rule 1303(A) - BACT; 40 CFR 70.6 (a)(3)(B) - Periodic Monitoring Requirements]

6. The owner/operator must install and maintain a pressure gauge to accurately indicate the differential pressure across the SCR catalyst bed in inches of water column. The measuring device or gauge must continuously measure the differential pressure, be accurate within plus or minus 5 percent, and be calibrated every 12 months. The pressure drop across the SCR bed must not exceed the range indicated in the District-approved PEMS Monitoring and Quality Assurance Plan. The owner/operator must maintain monthly records of the differential pressure and calibrations. These records must be kept for at least five (5) years, and made available to District, state, or federal personnel upon request.
[District Rule 1303(A) - BACT; 40 CFR 70.6 (a)(3)(B) - Periodic Monitoring Requirements]

7. The owner/operator must install and maintain a flow meter to accurately indicate the flow rate of the total hourly throughput of the injected ammonia. The measuring device or gauge shall continuously measure the hourly throughput, be accurate to within plus or minus 5 percent, and be calibrated once every 12 months. The ammonia injection rate shall not exceed the rate indicated in the District-approved PEMS Monitoring and Quality Assurance Plan. The owner/operator must maintain monthly records of the hourly throughput and calibrations. These records must be kept for at least five (5) years, and made available to District, state, or federal personnel upon request.
[District Rule 1303(A) - BACT; 40 CFR 70.6 (a)(3)(B) - Periodic Monitoring Requirements]