



# 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

B012173

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: FEBRUARY 2027**

### OWNER OF OPERATOR (Co.#2349)

MP Mine Operations LLC  
67750 Bailey Road  
Mountain Pass, CA 92366

### EQUIPMENT LOCATION (Fac.#364)

Mountain Pass Mine  
67750 Bailey Road  
Mountain Pass, CA 92366

#### Description:

LIGHT RARE EARTH CARBONATE PROCESS (LREC) consisting of:

#### EQUIPMENT

Capacity	Equipment Description
0	E08-TK54 SODIUM CARBONATE STORAGE TANK 6,000 gallons
15	E08-P054 TRANSFER PUMP
0	E08-TK206A CARBONATE PRECIP TANK #1 2,300 gallons
50	E08-P206A TRANSFER PUMP
0	E08-TK206B CARBONATE PRECIP TANK #2 2,300 gallons
10	E08-AG206A AGITATOR
10	E08-AG206B AGITATOR
50	E08-P206B TRANSFER PUMP
0	E08-TK301 LREC THICKENER 5,300 gallons
15	E08AG301 LREC THICKENER AGITATOR
0	E08-P301 ODS PUMP
0	E08-P302 ODS PUMP
0	E08TK401 LREC FILTER FEED TANK 12,900 gallons
30	E08AG401 LREC FILTER FEED TANK AGITATOR

Fee Schedule: 1 (c)

Rating: 453.5 bhp

SIC: 1099

SCC: 99999999

Location/UTM(Km):  
634E/3926N

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.

MP Mine Operations LLC  
1700 S. Pavilion Center Drive, 8th Floor  
Las Vegas, NV 89135

By: **COPY**  
**Eldon Heaston**  
Air Pollution Control Officer

Capacity	Equipment Description
50	E08P401A FILTER FEED #1 PUMP
50	E08P401B FILTER FEED #2 PUMP
0	E08FI501 FILTER LREC PRESS
7.5	E08HPU501 HYDRAULIC POWER LREC FILTER PRESS UNIT
0	E08TK501 LREC FILTER PRESS SQUEEZE WATER TANK 2,750 gallons
5	E08-P501 LREC FILTER PRESS SQUEEZE WATER PUMP
2	E08-HOI501 PLATE LIFTING HOIST
0.5	E08-Y501 FILTER PRESS PLATE (REVERSING) SHIFTER
7.5	E08-CV501 LREC PRESS CAKE #1 CONVEYOR
15	E08-CV502 LREC PRESS CAKE #2 CONVEYOR
0	E08-CV503A LREC PRESS CAKE #3A CONVEYOR
0	E08-CV503B LREC PRESS CAKE #3B CONVEYOR
0	E08-TK601A LREC FILTRATE RECEIVER #1 TANK 4,050 gallons
0	E08-TK601B LREC FILTRATE RECEIVER #2 TANK 4,050 gallons
60	E08-P601A LREC FILTRATE #1 PUMP
60	E08-P601B LREC FILTRATE #2 PUMP
0	E08-TK610 LREC FEED TANK 9,500 gallons
1	E08-P610 TRANSFER PUMP
15	E08P801 BUILDING TRENCH SUMP PUMP
0	E08-AR801 AIR LREC PRESS RECEIVER #1 2,650 gallons
0	E08-AR802 AIR LREC PRESS RECEIVER #2 650 gallons

## 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.
2. This equipment shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.
3. Materials processed by equipment delineated above shall maintain compliance with District rules 401, 402, 403, and 405.
4. Material handling processes (i.e. drops and conveyors) shall not discharge PM10 to the atmosphere in excess of 0.01 grains/dscf.
5. The moisture content of the material handled by this equipment shall not be less than 25% by weight.  
Measurement and recording of moisture content is not required due to the wet nature of the filter cake processed by the material handling. District staff may require that the facility measure the moisture content of the filter cake with results to be submitted to the District within fifteen days should the filter cake produce any visible emissions as it is processed by this equipment.
6. This equipment shall not discharge hydrogen chloride at more than a maximum of 800 ppm v/v, per District rule 406. To demonstrate compliance with this limit, the owner/operator, o/o, shall demonstrate that the HCl concentration in the liquid shall remain at or below an HCl concentration of 12% in the LREC Feed Tank. HCl concentration in the LREC Feed Tank (TK610) shall be measured/monitored at SXI (permit B011317) on a weekly basis according to a district approved protocol, with results logged. The facility shall keep a copy of the district approved protocol, the MDAQMD approval and the required log which shall be maintained current, kept on-site for a minimum of 5 years, and provided to District personnel on request.

7. The LREC Feed Tank (TK610) shall not be operated with a VOC concentration above 1000 ppm v/v in strict accordance with the engineering design. To demonstrate compliance with this condition, the owner/operator, o/o, shall conduct weekly VOC sampling in TK610 using a handheld PID.

The concentration shall be estimated weekly according to a district approved protocol, with results logged. The log shall be maintained current, kept on-site for a minimum of 5 years, and provided to District personnel on request.

8. All remaining tanks shall not be operated with a VOC concentration above 150 ppm v/v in any tank in strict accordance with the engineering design. To demonstrate compliance with this condition, the owner/operator, o/o, shall conduct weekly VOC sampling in TK206A using a handheld PID.

The concentration shall be estimated weekly according to a district approved protocol, with results logged. The log shall be maintained current, kept on-site for a minimum of 5 years, and provided to District personnel on request.

9. (a) Mountain Pass Mine Facility Emissions Limits: The total criteria pollutant emissions for the Mountain Pass Mine shall be less than: 42 tons per year of NO<sub>x</sub>, 25 tons per year of VOC, 46 tons per year of PM<sub>10</sub>, 25 tons per year of SO<sub>x</sub>, and 100 tons per year of CO. The total emissions of Hazardous Air Pollutants (HAPs) for the Mountain Pass Mine shall be less than 10 tons per year for any single HAP and 25 tons per year for any combination of HAPs calculated on an annual basis. HAPs are defined in 40 CFR 61.01 and are the chemical compounds listed in section 112(b) of the Clean Air Act (Act). (b) Monitoring, Periodic Monitoring & Recordkeeping Conditions. This facility shall demonstrate compliance with the specific facilitywide emission limits through the submission of an approved CEIP and CEIR. The CEIP and CEIR shall be based on actual emissions as determined by source test of the equipment or on district approved methods and emissions factors only. Generic or default emission factors shall not be used without approval from the District. The Comprehensive Emission Inventory Plan (CEIP) shall be due no later than March 31 of the year following the year of the actual emissions to be reported. Emissions will be calculated separately for each emissions source on a monthly basis and used to calculate the 12 month rolling annual total. All emissions sources including all permit units will be summed on a monthly basis and used to calculate the 12 month rolling annual total. The permit unit and facilitywide monthly emissions, 12 month rolling annual emissions total, and approved CEIR shall be kept on site and provided to District personnel upon request. (c) A facility wide Comprehensive Emission Inventory (CEIR) must be submitted to the District, in a format approved by the District, for all emitted criteria air pollutant on a yearly basis, and every three years for toxic air pollutants, which is to be received by the District no later than April 30 of the following year. [40 CFR 70.6 (a)(3)(i)(B) - Periodic Monitoring Requirements] [Rule 204 - Permit Conditions; Version in SIP = CARB Ex. Order G-73, 40 CFR 52.220(c)(39)(ii)(B) - 11/09/78 43 FR 52237; Current Rule Version = 07/25/77] [California Clean Air Act, Health and Safety Code \S\S39607 and \S\S44300 et seq., and the Federal Clean Air Act, \S110(a)(2)(F)(ii), codified in 40 CFR 60]