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

B011248

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:
CRACK PHASE 1A PROCESS EQUIPMENT consisting of:

EQUIPMENT

Capacity	Equipment Description
0	D25-TK118 Reactor Caustic Feed Tank, 5000 gallon capacity
0	D25-TK120 Catch Tank, 200 gallon capacity
0	D25-TK121 Crack Centrifuge Feed Tank, 6000 gallon capacity
0	D25-TK129 Crack Centrifuge Filtrate Receiver # 2, 1200 gallon capacity
0	D20-TK057 Crack Fundabac Filtrate Tank # 1, 6000 gallon capacity
0	D20-TK061 Crack Fundabac Filtrate Tank # 2, 6000 gallon capacity
0	D25-TK131 Crack Fundabac Filtrate Tank # 3, 6000 gallon capacity
0	D25-TK173 Recovered Water Tank , 18000 gallon capacity
0	D25-TK181 Fundabac Wash Water Receiving Tank, 18000 gallon capacity
5	D25-P118 ReF3 Make Up Tank Pump
15	D25-P173 Recovered Water Tank Pump
0	D25-P174 Recovered Water Tank Pump (back up only)
3	D25-P127 Crack Filtrate Receiver Pump # 1
3	D25-P129 Crack Centrifuge Filtrate Receiver Pump # 2

Fee Schedule: 1 (c) Rating: 593 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
15	D25-P181 50% Caustic Pump
0	D25-P182 50% Caustic Pump (back up only)
10	D25-P122 Fundabac Filter Feed Pump 1
10	D25-P124 Fundabac Filter Feed Pump 2 p
5	D25-AG118 ReF3 Makeup Tank Agitator
5	D25-AG121 Crack Centrifuge Feed Tank Agitator
5	D20-AG057 Crack Fundabac Filtrate Tank # 1 Agitator
5	D20-AG061 Crack Fundabac Filtrate Tank # 2 Agitator
5	D25-AG131 Crack Fundabac Filtrate Tank # 3 Agitator
0	D25-ER101 First Effect Evaporator
0	D25-ER102 Second Effect Evaporator
0	D25-ER103 Third Effect Evaporator
0	D25-HX102 First to Second Effect Inter Heat Exchanger
0	D25-HX104 Main Condenser
0	D25-HX106 Second to Third Effect Inter Heat Exchanger
0	D25-HX107 Seal Water Cooler
0	D25-HX108 Vent Condenser
0	D25-HX109 Dry Cooler #1
0	D25-HX110 Dry Cooler #2
0	D25-HX111 Dry Cooler #3
0	D25-HX114 Final Product Heater
20	D25-P101 First Effect Recirculation Pump
7.5	D25-P102 First Effect Transfer Pump
40	D25-P103A Caustic Feed Pump A
40	D25-P103B Caustic Feed Pump B
20	D25-P107 Third Effect Recirculation Pump
10	D25-P108 Third Effect Extraction Pump
10	D25-P110 First Effect Condensate Pump
15	D25-P112 Third Effect Condensate Pump
10	D25-P114 Condenser Condensate Pump
7.5	D25-P116A Caustic Product Pump A
7.5	D25-P116B Caustic Product Pump B
150	D25-P119 Dry Cooler Pump #1
150	D25-P120 Dry Cooler Pump #2
30	D25-P201 Second Effect Recirculation Pump
7.5	D25-P202 Second Effect Transfer Pump
0	D25-TK102 Condensate Tank, 1000 gallon capacity
0	D25-TK103 Caustic Evaporator Feed Tank, 30000 gallon capacity
0	D25-TK104 Caustic Evaporator Product Tank, 30000 gallon capacity
0	D25-TK105 Vacuum Pump Level Tank, 15 gallon capacity
0	D25-TK106 Flash Tank, 50000 gallon capacity
0	D25-TK201 Reactor Vent Knock-Out Tank, 19340 gallon capacity
1.5	D25-P126 Reactor Vent Knock-Out Tank Pump 1
1.5	D25-P127 Reactor Vent Knock-Out Tank Pump 2
0	D25-TK44A Cooling Water Tank A, 8000 gallon capacity
0	D25-TK44B Cooling Water Tank B, 8000 gallon capacity
30	D25-VP101 Vacuum Pump
0	D25-TK144 Caustic Evaporator Feed Surge Tank, 19954 gallon capacity
7.5	D25-P01 Caustic Evaporator Feed Surge Tank Pump 1
7.5	D25-P02 Caustic Evaporator Feed Surge Tank Pump 2

Capacity	Equipment Description
0	D25-HX101 Recovered Water Heat Exhanger
10	D25-AG102 Crack Reactor Agitator # 1
10	D25-AG104 Crack Reactor Agitator # 2
10	D25-AG202 Crack Reactor Agitator # 3
0	D25-RE101 Crack Reactor # 1, 4000 gallon capacity
3	D25-RE103 Crack Reactor # 2, 4000 gallon capacity
0	D25-RE201 Crack Reactor # 3, 4000 gallon capacity
0	D25-SE101 Steam Jet For Reactor # 1
0	D25-SE103 Steam Jet For Reactor # 2
0	D25-SE201 Steam Jet For Reactor # 3
0	D25-FI102 Crack Fundabac Wash Filter 1
0	D25-FI104 Crack Fundabac Wash Filter 2
0	D25-FI112 Crack Fundabac Wash Filter 3
0	D25-TK175 Fundabac Filter Feed Tank, 14,000 gallon capacity
3	D25-P175 Filter Pump

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. Additionally equipment shall be operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering practices consistent with minimum emissions of contaminants.

2. HCl emissions from this equipment shall not exceed 800 ppmv. [Rule 406 - Specific Contaminants]

3. (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 NOx, 25 tons per year of VOC, 46 tons per year of PM10, 25 tons per year of SOx, 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 Lists of pollutants 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 Subpart Q]