



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

B011317

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:

SXI (IMPURITIES REMOVAL) CIRCUIT consisting of:

EQUIPMENT

| Capacity | Equipment Description |
|----------|--|
| 0 | D55-PMV101 Primary Mixer Vessel 3,688 gallon |
| 0 | D55-SMV101 Secondary Mixer Vessel 3,688 gallon |
| 0 | D55-STLR101 Settler 7,473 gallon |
| 0 | D55-PMV102 Primary Mixer Vessel 3,688 gallon |
| 0 | D55-SMV102 Secondary Mixer Vessel 3,688 gallon |
| 0 | D55-STLR102 Settler 7,473 gallon |
| 0 | D55-PMV103 Primary Mixer Vessel 3,688 gallon |
| 0 | D55-SMV103 Secondary Mixer Vessel 3,688 gallon |
| 0 | D55-STLR103 Settler 7,473 gallon |
| 0 | D55-PMV104 Primary Mixer Vessel 3,688 gallon |
| 0 | D55-SMV104 Secondary Mixer Vessel 3,688 gallon |
| 0 | D55-STLR104 Settler 7,473 gallon |

Fee Schedule: 1 (c)

Rating: 869.5 bhp

SIC: 1099

SCC: 30504099

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**
Brad Poiriez
 Executive Director

| Capacity | Equipment Description |
|----------|---|
| 0 | D55-PMV105 Primary Mixer Vessel 3,688 gallon |
| 0 | D55-SMV105 Secondary Mixer Vessel 3,688 gallon |
| 0 | D55-STLR105 Settler 7,473 gallon |
| 0 | D55-PMV106 Primary Mixer Vessel 3,688 gallon |
| 0 | D55-SMV106 Secondary Mixer Vessel 3,688 gallon |
| 0 | D55-STLR106 Settler 7,473 gallon |
| 0 | D55-PMV107 Primary Mixer Vessel 3,688 gallon |
| 0 | D55-SMV107 Secondary Mixer Vessel 3,688 gallon |
| 0 | D55-STLR107 Settler 7,473 gallon |
| 0 | D55-PMV201 Primary Mixer Vessel 3,688 gallon |
| 0 | D55-SMV201 Secondary Mixer Vessel 3,688 gallon |
| 0 | D55-STLR201 Settler 7,473 gallon |
| 0 | D55-PMV301 Primary Mixer Vessel 3,688 gallon |
| 0 | D55-SMV301 Secondary Mixer Vessel 3,688 gallon |
| 0 | D55-STLR301 Settler 7,473 gallon |
| 0 | D55-PMV302 Primary Mixer Vessel 3,688 gallon |
| 0 | D55-SMV302 Secondary Mixer Vessel 3,688 gallon |
| 0 | D55-STLR302 Settler 7,473 gallon |
| 0 | D55-PMV303 Primary Mixer Vessel 3,688 gallon |
| 0 | D55-SMV303 Secondary Mixer Vessel 3,688 gallon |
| 0 | D55-STLR303 Settler 7,473 gallon |
| 0 | D55-TK103 SXI Feed Storage Tank 33,000 gallon |
| 0 | D55-TK107 SXI Barren Organic Tank 3,800 gallon |
| 0 | D55-TK108 SXI Organic Holding Tank 33,000 gallon |
| 0 | D55-TK111 SXI NaOH Mix Tank 16,100 gallon |
| 0 | D55-TK114 SXI Raffinate Disengagement Tank 3,800 gallon |
| 0 | D55-TK119 SXI Raffinate Holding Tank 10,000 gallon |
| 0 | D55-TK121 SXI Pregnant Liquor Disengagement Tank 3,800 gallon |
| 0 | D55-TK201 SXI Raffinate Adjustment Tank 33,000 gallon |
| 5 | D55-P103 SXI Storage Feed Pump |
| 0 | D55-P104 SXI Storage Feed Pump back up only |
| 0 | D55-HX103 SXI Extraction Heat Exchanger |
| 15 | D55-PMAG101 SXI Extraction Cell 101 Primary Agitator |
| 10 | D55-SMAG101 SXI Extraction Cell 101 Secondary Agitator |
| 15 | D55-PMAG102 SXI Extraction Cell 102 Primary Agitator |
| 10 | D55-SMAG102 SXI Extraction Cell 102 Secondary Agitator |
| 15 | D55-PMAG103 SXI Extraction Cell 103 Primary Agitator |
| 10 | D55-SMAG103 SXI Extraction Cell 103 Secondary Agitator |
| 15 | D55-PMAG104 SXI Extraction Cell 104 Primary Agitator |
| 10 | D55-SMAG104 SXI Extraction Cell 104 Secondary Agitator |
| 15 | D55-PMAG105 SXI Extraction Cell 105 Primary Agitator |
| 10 | D55-SMAG105 SXI Extraction Cell 105 Secondary Agitator |
| 15 | D55-PMAG106 SXI Extraction Cell 106 Primary Agitator |
| 10 | D55-SMAG106 SXI Extraction Cell 106 Secondary Agitator |
| 15 | D55-PMAG107 Primary Mixer Agitator |
| 10 | D55-SMAG107 Secondary Mixer Agitator |
| 0 | D55-HX108 SXI Aqueous Strip Exchanger |
| 0 | D55-MX108 SXI Aqueous Strip Static Mixer |
| 15 | D55-PMAG201 Primary Mixer Agitator |
| 10 | D55-SMAG201 Secondary Mixer Agitator |

| Capacity | Equipment Description |
|----------|--|
| 15 | D55-PMAG301 SXI Extraction Cell 301 Primary Mixer Agitator |
| 10 | D55-SMAG301 SXI Extraction Cell 301 Secondary Mixer Agitator |
| 15 | D55-PMAG302 SXI Extraction Cell 302 Primary Mixer Agitator |
| 10 | D55-SMAG302 SXI Extraction Cell 302 Secondary Mixer Agitator |
| 15 | D55-PMAG303 SXI Extraction Cell 303 Primary Mixer Agitator |
| 10 | D55-SMAG303 SXI Extraction Cell 303 Secondary Mixer Agitator |
| 0.25 | D55-SK121 SXI Pregnant Liquor Disengagement Tank Organic Skimmer |
| 1 | D55-P121 SXI Disengaged Pregnant Liquor Pump |
| 0 | D55-P122 SXI Disengaged Pregnant Liquor Pump back up only |
| 40 | D55-P111 SXI Saponification Tank Pump #1 |
| 40 | D55-P126 SXI Saponification Tank Pump #2 |
| 15 | D55-P107 SXI Barren Organic Pump |
| 0 | D55-P125 SXI Barren Organic Pump back up only |
| 2 | D55-P115 SXI Disengaged Raffinate Pump |
| 0 | D55-P116 SXI Disengaged Raffinate Pump back up only |
| 1 | D55-P108 SXI Holding Tank Aqueous Pump |
| 15 | D55-P109 SXI Holding Tank Organic Pump |
| 0 | D55-P110 SXI Holding Tank Organic Pump back up only |
| 15 | D55-P119 SXI Raffinate Pump |
| 0 | D55-P124 SXI Raffinate Pump back up only |
| 15 | D55-PMAG107 SX12 Extraction Cell 107 Primary Mixer Agitator |
| 10 | D55-SMAG107 SX12 Extraction Cell 107 Secondary Mixer Agitator |
| 0 | D55-HX110 SX12 Aqueous Scrub Exchanger |
| 0 | D55-MX110 SX12 Aqueous Scrub Static Mixer |

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 Rules 204 and 1303]

2. This equipment shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.

[District Rule 204]

3. The following equipment shall not be operated unless it is vented to a properly functioning SX-12 adsorber under valid District permits C011327 or C011328:

- (a) Mixing tanks
- (b) Settling tanks
- (c) Sodium hydroxide mix tanks
- (d) Barren organic tanks
- (e) Organic holding tanks

[District Rule 1303]

4. The following equipment shall not be operated unless it is vented to a properly functioning HCl adsorber under valid District permits C011325 or C011326:

- (a) Mixing tanks
- (b) Mixing tanks
- (c) Settling tanks
- (d) Feed adjustment tanks

(e) Feed storage tank
[District Rule 1320]

5. Mountain Pass Mine Voluntary Emissions Limit/Synthetic Minor Hazardous Air Pollutant Limits - emission shall be less than the following limits:

- (a) VOC: 25.0 tons/year [District Rule 1303(B)]
- (b) CO: 100.0 tons/year [District Rule 1303(B)]
- (c) SOX: 25.0 tons/year [District Rule 1303(B)]
- (d) PM10: 46.0 tons/year [District Rule 1305(A)(2)(b)(ii)(b)(i)]
- (e) NOx: 42.0 tons/year [District Rule 1305(A)(2)(b)(ii)(b)(ii)]
- (f) Hazardous Air Pollutants (HAPs) 10.0 tons per year for any single HAP/ 25.0 tons per year for any combination of HAPs [District Rule 1201]

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. Emissions will be calculated separately for each emissions source on a monthly basis and used to calculate a 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 most recent approved CEIR shall be kept on site and provided to District personnel upon request.

6. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b); H&S Code 39607 & 44341-44342; and 40 CFR 51, Subpart A]