

APPENDIX E

Applicant-Committed Environmental Protection Measures

Table E-1. Applicant-Committed Environmental Protection Measures and applicability to the Proposed Action

ACEPM #	ACEPM Description	Mine Plan of Operation	Plan of Development
ADMIN AND REPORTING: Covered under SBC CUP (1997),* BLM ROD (1998),† RWQCB WDRs‡, and pending MPO (Appendix J) and POD (Appendix K)			
ADM-1	Annually, the Applicant shall provide a report summarizing mining progress in accordance with the authorized Mine Plan of Operations and Reclamation Plan. The report shall summarize the key elements of the forecasted sequential mine development and include appropriate maps that display annual progression. The report shall identify any deviations from the approved plan that may be anticipated and identified specific reclamation activities for the upcoming year.	X	
ADM-2	This approval is conditioned upon the Applicant obtaining all necessary county, state, or federal permits and complying with all applicable local, state, and federal laws and regulations.	X	X
ADM-3	An environmental specialist or contracted consultant meeting BLM’s qualifications shall be employed by the Applicant to monitor the effectiveness of wildlife mitigation measures and the revegetation program. Results shall be reported to the BLM, San Bernardino County, and Clark County monthly as concerns wildlife measures and annually concerning the revegetation program.	X	X
ADM-4	Personnel trained in security shall be on-site on a 24-hour basis to deter entry to potentially hazardous areas by unauthorized persons.	X	
ADM-5	Training programs shall be implemented to familiarize personnel with their specific jobs, including the handling of hazardous substances such as cyanide, and first aid procedures.	X	X
ADM-6	Fences and earthen berms to block vehicular access into open pit areas shall be erected around potentially hazardous areas to preclude entry by unauthorized personnel or visitors.	X	
ADM-7	The Applicant shall comply with the provisions of the Mitigation Compliance Program, which has been adopted pursuant to California Public Resources Code (PRC) Section 21081.6(a).	X	
ADM-8	In accordance with the Mitigation Compliance Program, remedial action shall not be delayed by dispute resolution proceedings for an emergency out of compliance condition.	X	
ADM-9	The Applicant shall implement measures to stabilize and secure the site during periods of inactivity in accordance with the approved Mine Plan of Operations and Reclamation Plan. An Interim Management Plan, as required by PRC Section 2770(h), shall be submitted to San Bernardino County, Land Use Services Planning Department for review and approval within 90 days of the mining operations becoming idle.	X	
ADM-10	Financial Assurance CMV shall obtain and maintain adequate assurances of financial responsibility for closure and post-closure maintenance at CMM in accordance with California Code of Regulations (CCR), Title 27, Section 22510.	X	
ADM-11	Financial Assurance <i>Financial Assurances Approval.</i> Within 90 days of the adoption of these Waste Discharge Requirements (WDRs), the Applicant shall demonstrate to the Regional Water Quality Control Board (RWQCB) that it has established acceptable financial assurance mechanisms described in subchapter 3 (“Allowable Mechanisms”) of CCR, Title 27, Division 2, Subdivision 1, Chapter 6 to meet—at a minimum—the cost estimate amount for closure and post-closure maintenance approved by the RWQCB’s Executive Officer.	X	

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ADM-12	Financial Assurance <u>Yearly Financial Assurances Report</u> . CMV shall submit a report calculating the increase in the cost estimates for closure and post-closure maintenance due to the inflation factor (specified in 27 CCR Section 22236) by June 1 of each year for the previous calendar year.	X	
PUBLIC HEALTH AND SAFETY: Covered under SBC CUP (1997), BLM ROD (1998), and pending MPO (Appendix J) and POD (Appendix K)			
PHX-1	Fences and earthen berms to block vehicular access into open pit areas shall be erected around potentially hazardous areas to preclude entry by unauthorized personnel or visitors. The Applicant shall provide road improvements and implement a regular maintenance program along the Mitigated Access Route in a manner acceptable to BLM. A maximum speed limit of 35 miles per hour will be posted.	X	
PHX-2	Vehicular access to the pit rims shall be prevented by constructing berms at all locations along the pit perimeter that would otherwise be accessible to vehicles.	X	
PHX-3	Earthen berms shall be constructed where necessary—as determined by the BLM—to restrict access to mine pits from recreational areas such as the East Mojave Heritage Trail, the agate field, or viewpoints or historic markers.	X	
PHX-4	CMM shall comply with applicable Mine Safety and Health Administration (MSHA) standards to achieve a safe working environment. Rules and regulations of Division of Environmental Health Services (DEHS) shall be followed to ensure that no significant public health hazard would be created.	X	
PHX-5	A vehicle shall be on-site for emergency response in the event of an accident. The Applicant shall maintain first aid and fire suppression equipment on-site. Procedures for emergency response shall be developed for use in the event of an accident.	X	
PHX-6	Test results that show potable water source quality and quantity standards shall be submitted to San Bernardino County Department of Public Health, Environmental Health Services.	X	
PHX-7	Monitoring for hydrogen cyanide shall be conducted routinely at the processing facilities as a requirement of the employee Health and Safety Plan implemented according to MSHA regulations. In addition, the Applicant shall periodically perform airborne hydrogen cyanide surveys to verify that the potential public exposure to cyanide is inconsequential.	X	
PHX-8	Lime, sodium hydroxide, or other alkaline material shall be added to the cyanide solution to reduce the potential for emitting hydrogen cyanide.	X	
PHX-9	CMV shall provide road improvements and implement a regular maintenance program along the Mitigated Access Route in a manner acceptable to BLM. A maximum speed limit of 35 miles per hour will be posted.	X	
PHX-10	Domestic sewage shall be disposed of in leach fields acceptable to DEHS. Portable toilet waste shall be removed off-site by a County-licensed hauler.	X	
PHX-11	CMV will be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the work, including giving notices, erecting and maintaining all safeguards, and complying with all laws, ordinances, regulations, codes and lawful orders of any public agency. CMV will maintain a safety program in conjunction with the Contractor's safety procedures and construction activities	X	X

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PHX-12	Signs will be posted to alert the public of construction activities, minimizing dangers to the public along the County and NDOT ROWs for the Water Line Project. All signs will meet BLM standards and approval, and/or County and NDOT standards, as necessary. Approved traffic control measures will be implemented, as necessary	X	X
FIRE PREVENTION AND CONTROL: Covered under SBC CUP (1997), BLM ROD (1998), and pending MPO (Appendix J) and POD (Appendix K)			
FIRE-1	All structures and facilities shall meet applicable seismic buildings safety standards.	X	X
FIRE-2	All new construction shall comply with applicable sections of the California Fire Code (CFC), County Development Code, and any other laws regarding fires and fire prevention adopted by the state or county.	X	X
FIRE-3	All flammable vegetation shall be removed a minimum distance of 30 feet from any building material, including any finished structure—with the exception of the nursery. Before removing any vegetation, the Applicant shall contact—and comply with any requirements of—the BLM Needles Field Office.	X	X
FIRE-4	Establish and maintain an industrial fire brigade approved by the County Fire Warden. Provide fire engine, equipment, and trained personnel as approved by the County Fire Warden.	X	X
FIRE-5	Each chimney used in conjunction with any fireplace or any heating appliance in which solid or liquid fuels are used shall be maintained with an approved spark arrester as identified in the Uniform Fire Code.	X	
FIRE-6	The Applicant shall submit the approved plot plans (brown-line or original) for a land use compliance review before obtaining building permits.	X	X
FIRE-7	The Applicant shall submit a detailed plant site plan showing: all building equipment, structures, and road improvements (public and private). The map shall also include parking, access, and handicap improvements, if applicable.	X	
FIRE-8	The Applicant shall provide plans showing that project facilities that are exposed to view (i.e., conveyor systems, processing facilities, etc.) shall be painted with colors that blend into the surrounding landscape. Project facilities on the patented mining claims shall not exceed 35 feet in height or as approved by the County Office of Building and Safety.	X	
FIRE-9	Fire hydrants must be no closer than 150 feet from propane tanks and may not be placed at the ends of the tanks.	X	
FIRE-10	Soil testing for the sewage disposal system shall meet the requirements of the DEHS. Submit test results and the appropriate fee to the DEHS.	X	
FIRE-11	All buildings and vehicles shall be equipped with a fire extinguisher.	X	X
FIRE-12	All federal, state, and county laws, ordinances, rules, and regulations, which pertain to prevention, pre-suppression, and suppression of fires, will be strictly adhered to, including fire safety requirements and reliability standards established by the Electric Reliability Organization (per 43 CFR 2805.21[c][3]). All personnel will be advised of their responsibilities under the applicable fire laws and regulations. It will be the responsibility of CMV to notify the BLM Las Vegas Interagency Communication Center at (702) 631-2350, if a Project-related fire occurs within or adjacent to the construction area in Nevada, and to 911 if a Project-related fire occurs in California.	X	X

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FIRE-13	Fire extinguishers will be available in the construction area. Water from a water truck that may be used for construction and dust control will be available for firefighting.	X	X
FIRE-14	CMV or its contractors would employ all fire-fighting measures for which they are trained, to safely extinguish a fire caused by or related to CMV's utility construction.	X	X
GEOLOGIC HAZARDS: Covered under SBC CUP (1997), BLM ROD (1998), RWQCB WDRs, and pending MPO (Appendix J) and POD (Appendix K)			
GEOL-1	The mining operation shall be conducted in a uniform manner with exterior slopes and floors trimmed as the mining operation proceeds. Excavation shall be conducted so as to leave them in a reasonably neat and trim manner. Final pits shall be excavated and trimmed according to the approved Mine and Reclamation Plan.	X	
GEOL-2	Slope monitoring shall be implemented to ensure that unnecessary hazards are not created with the active or final reclaimed slopes.	X	
GEOL-3	Pit walls shall be constructed in accordance with the standards of MSHA.	X	
GEOL-4	Project facilities shall be located so that earthquake-induced landslides will not encroach into areas where potentially hazardous chemicals are stored, ponded, or processed.	X	
GEOL-5	Slopes/Geotech CMV shall promptly notify the RWQCB of any slope failure occurring at a mining unit. The Discharger shall promptly correct any failure that threatens the integrity of containment features or the unit, in accordance with the method approved by the RWQCB's Executive Officer.	X	
GEOL-6	Earthquake Following an earthquake that generates significant ground shaking (Modified Mercalli Intensity Scale V or greater) at or near CMM, the Discharger shall submit a detailed Post-Earthquake Inspection and Corrective Action Plan. The plan shall address damage to and corrective measures for containment structures; leachate control and stormwater management systems; wells and equipment to monitor groundwater; and any other system/structure potentially impacted by static and seismic deformations of the mining unit. The Discharger shall notify the RWQCB's Executive Officer immediately—but no later than 24 hours after—damage to CMM due to an earthquake and provide a post-earthquake inspection report within 15 business days.	X	X
Hazardous Material Management: Covered under SBC CUP (1997), BLM ROD (1998), RWQCB WDRs, CalARP Risk Management Plan¹, and pending MPO (Appendix J) and POD (Appendix K)			
HAZMAT-1	Explosives shall be stored in a secured powder magazine constructed and maintained in accordance with federal and local requirements. Only personnel holding valid blasting certificates shall be allowed to initiate blasting.	X	X
HAZMAT-2	A Business Plan, as defined in Chapter 6.95 of the Health and Safety Code, detailing the plan for emergency release or threatened release of hazardous materials and wastes shall be required. Obtain clearance from County Fire Warden/Hazardous Materials Division.	X	X
HAZMAT-3	A hazardous materials handler permit and/or hazardous waste generator permit shall be required.	X	X
HAZMAT-4	Trucks containing hazardous chemicals shall be properly labeled and equipped to Interstate Commerce Commission specifications	X	X

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HAZMAT-5	Drivers shall receive training in proper handling and spill cleanup measures for hazardous materials.	X	X
HAZMAT-6	Reagents and fuels shall be stored in areas protected by dikes or curbs designed to contain the contents of containers to avoid the potential for an accidental spill.	X	X
HAZMAT-7	Fuels shall be stored in double-walled aboveground storage tanks (ASTs).	X	
HAZMAT-8	Planning and Reporting <u>Spill Prevention Plan.</u> Within 90 days of the adoption of this Order (<i>WDRs Order No. R7-2020-004</i>), CMV shall submit the Spill Prevention Plan for approval by the RWQCB's Executive Officer. The Discharger shall develop and implement a plan for immediate detection of leaks or failures in the aboveground pipelines carrying leaching, barren, or pregnant effluent. An alarm or shutoff device shall be installed on the pump used in leaching, barren, or pregnant effluent pipelines. Pumping of leaching, barren, or pregnant effluent shall be suspended immediately following major pipeline failure. The plan shall include daily inspection of the entire length of aboveground line in operation at the time and the maintenance of a daily log. Minor leaks shall be repaired immediately upon being identified. Lines should be sign-posted or marked to identify the fluid being pumped and alerting the public of the potential danger.	X	X
HAZMAT-9	Planning and Reporting <u>Cyanide Solution Spill Reporting.</u> If leaks or failures in the aboveground pipelines carrying cyanide solution occur or there is any spill of cyanide solution, the Discharger shall do the following: a. Verbally report to the RWQCB office and the Office of Emergency Services within 24 hours of when the Discharger becomes aware of the incident. If noncompliance occurs outside of business hours, the Discharger shall leave a message on the RWQCB's office voicemail. b. Provide a written report within 5 business days of the time the Discharger becomes aware of the incident. The written report shall contain a description of the noncompliance and its cause; period of noncompliance; anticipated time to achieve full compliance; and steps taken or planned, to reduce, eliminate, and prevent recurrence of the noncompliance. The Discharger shall estimate the total volume as well as the vertical and horizontal extent of the spill/leak/release. c. Submit a follow-up report within 30 days that includes confirmation sampling results indicating that cleanup goals have been achieved.	X	
HAZMAT-10	Maintain a Risk Management Plan for the storage of sodium cyanide, in compliance with applicable laws. The Risk Management Plan and facilities will be inspected each year and revised every 5 years. The Risk Management Plan describes the material handled, protective measures, and worst-case and alternate release scenarios.	X	
HAZMAT-11	All construction vehicles will be maintained in accordance with the manufacturers' recommendations. All vehicles will be inspected for leaks prior to entering the jobsite. All discovered leaks will be contained with a bucket of absorbent materials until repairs can be made.		X
HAZMAT-12	Pursuant to 43 CFR 8365.1-1(b)(3), no sewage, petroleum products, or refuse will be dumped from any trailer or vehicle.		X
HAZMAT-13	Hazardous material storage and equipment repair will be conducted at least 100 feet away from ephemeral drainages.		X
HAZMAT-14	Spilled materials of any type will be cleaned up immediately. A shovel and spill kit will be maintained on site at all times to respond to spills.		X

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HAZMAT-15	All construction, operation, and maintenance activities will comply with all applicable federal, state, and local laws and regulations regarding the use of hazardous substances. CMV will be responsible for maintaining compliance with all applicable laws and regulations.		X
HAZMAT-16	Hazardous substances utilized at the Project during construction will primarily include diesel fuel, gasoline, lubricating grease, and other substances used by mobile construction equipment. Diesel fuel and gasoline will be stored in fuel delivery systems (i.e., manufacturer installed gas tanks) on construction equipment and support vehicles. Lubricating grease and other substances will be transported by support vehicles and may be stored in the temporary staging areas.		X
HAZMAT-17	Diesel fuel will be transported in a truck-bed mounted external tank and in internal vehicle fuel tanks. Gasoline will be transported in hand-held containers and in internal vehicle fuel tanks. All containers of hazardous substances will be labeled and handled in accordance with NDOT and/or California Highway Patrol regulations.		X
HAZMAT-18	CMV and contractor on-road light-duty vehicles are generally maintained and refueled off-site. Off-road construction equipment will be regularly maintained and fueled at the project site. If a reportable amount of hazardous or regulated materials is spilled, measures will be taken to control the spill and the BLM and other appropriate agencies will be notified, as required. Any hazardous substance spills will be cleaned immediately and any resulting waste will be transferred off site in accordance with all applicable local, state, and federal regulations. Contract construction crews will maintain spill kits on site for use in case of a spill.		X
WASTE MANAGEMENT: Covered under SBC CUP (1997) and pending MPO (Appendix J) and POD (Appendix K)			
WM-1	The Applicant shall maintain the mine site and premises in a neat and orderly manner at all times. No refuse shall be maintained at any time in pit excavations, channel ditches or work areas. All trash shall be disposed of at an approved sanitary landfill site.	X	
WM-2	All trash storage shall be maintained in closed containers.	X	X
WM-3	Nonhazardous waste materials generated on the site shall be disposed at approved facilities. Waste oils shall be recycled. Other hazardous wastes shall be disposed of off-site, using services and procedures approved by the Department of Toxic Substance (DTSC) and the U. S. Environmental Protection Agency (USEPA).	X	X
WM-4	All sanitary waste will be collected in portable, self-contained toilets in the temporary use area and managed in accordance with local requirements.		X
WM-5	All solid waste will be disposed of in a state, federal, or local designated site.		X
WM-6	The construction areas and temporary staging areas will be kept in orderly conditions throughout the period of construction. A minimal amount of general refuse associated with work operations will be created. All refuse generated during the Project will be managed at the Project site using ten- or 20-cubic-yard closed top roll-off bins. Bins will be periodically removed and disposed of in an authorized off-site landfill facility, consistent with applicable regulations. No refuse will be disposed of or left on site. Portable chemical toilets will be used during the time the construction crew is on site.		X

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AESTHETICS/VISUAL RESOURCE: Covered under SBC CUP (1997) BLM ROD (1998), and pending MPO (Appendix J) and POD (Appendix K)			
AESTH-1	Operational structures and solution storage shall be painted to blend with the predominant background as viewed from surrounding roads. Colors used shall be selected by the BLM and the County.	X	X
AESTH-2	Outdoor lighting for the mine pits and other areas of nighttime activities shall be shielded to direct lighting to the area of activity.	X	X
AESTH-3	CMV shall minimize impacts on dark night skies and visual resources from nighttime operations by implementing a project-specific lighting plan. The lighting plan will incorporate applicable concepts and best management practices from the 1998 Record of Decision, BLM Technical Note 457 (Light Pollution and Lighting Best Management Practices), and other relevant guidance, and will address fixture type, shielding, placement, height, color temperature, and operational controls. The lighting plan will be developed during project design and submitted to the BLM for review and approval prior to installation or modification of outdoor lighting.	X	X
AIR QUALITY: Covered under SBC CUP (1997), Air District rules, Authority To Construct, and pending MPO (Appendix J) and POD (Appendix K)			
AQ-1	The Applicant shall apply to the Mojave Desert Air Quality Management District (MDAQMD) and obtain the required permits for the installation and operation of all stationary fossil fuel equipment used on-site.	X	
AQ-2	The Applicant shall submit detailed drawings and specifications to the MDAQMD regarding the type of equipment that will be purchased and particle collection system that will be used.	X	
AQ-3	A number of measures shall be incorporated into the project design to control the generation of particulate matter 10 microns or less in diameter (PM ₁₀). They include: a. Haul roads within the site boundary shall be surfaced with durable gravel and shall be well maintained. Water or surface binding agents shall be applied to haul and access roads within the site boundary as needed, depending on traffic volumes, ambient wind, and climatological conditions.	X	
AQ-4	b. Speed restrictions shall be enforced on mine roads to minimize surface disturbance of the roadways.	X	
AQ-5	c. Unauthorized vehicle travel shall be restricted within the site boundary to minimize surface disturbance of the roadways.	X	
AQ-6	d. Vehicle travel to and from the project site shall be reduced by the promotion of vanpools/busing for workers.	X	
AQ-7	e. During all drilling operations, air drilling equipment shall be shrouded with standard debris collection devices and/or wet drilling techniques. Manufacturer specifications for all shrouding devices shall be submitted to the MDAQMD for review before use. The debris collecting devices shall have a minimum design efficiency of 90%.	X	
AQ-8	f. The live storage portion of the coarse ore stockpile shall be covered to minimize windblown dust.	X	
AQ-9	g. Blasting during high winds shall be minimized or curtailed to minimize windblown dust.	X	

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AQ-10	h. The primary, secondary, and tertiary crushers and screens and all transfer points shall be completely enclosed or shrouded to minimize exposure to wind and, at a minimum, shall use spray bars to control fugitive dust emissions. Conveyors shall be enclosed in selected areas where the moisture content and/or consistency of the material would allow the generation of windblown dust. Dust suppression for secondary/tertiary ore-crushing operations shall be controlled using baghouses constructed to specifications acceptable to the MDAQMD.	X	
AQ-11	As required by the MDAQMD, PM ₁₀ concentrations shall be monitored at several locations near the project boundaries. The monitoring data shall be routinely submitted to the MDAQMD to demonstrate that the project is not violating ambient air quality standards.	X	
AQ-12	Emissions from mobile equipment and vehicular engines shall be controlled by: a. Using only low sulfur fuels.	X	X
AQ-13	b. Implementing a routine maintenance program to avoid operating inefficiencies.	X	
AQ-14	c. Using busing/vanpooling.	X	
AQ-15	Water and dust-inhibiting agents shall be employed as needed to reduce the potential visual impact of fugitive dust during the operational period.	X	X
AQ-16	All internal combustion engine (ICE)-driven equipment and vehicles shall be kept tuned according to the manufacturer's specifications and properly maintained. Vehicles and equipment shall not be left idling for prolonged periods.	X	X
AQ-17	Annually report the throughput of fuel for dispensing equipment to the MDAQMD.	X	
AQ-18	Fuel ASTs/Dispensing CMV shall maintain a log of all inspections, repairs, and maintenance on equipment subject to Mojave Desert Air Quality Management District (MDAQMD): District Rule 461. Such logs or records shall be maintained at the facility for at least 2 years and available to the MDAQMD upon request.	X	
AQ-19	Fuel ASTs/Dispensing Any modifications or changes to the piping or control fitting of the vapor recovery system require prior approval from the MDAQMD.	X	
AQ-20	Fuel ASTs/Dispensing Pursuant to Executive Order (EO) VR-402, vapor vent pipes are to be equipped with Husky 5885 pressure relief valves or as otherwise allowed by the EO.	X	
AQ-21	Fuel ASTs/Dispensing CMV shall perform the following tests within 60 days of construction completion and annually thereafter in accord with the following test procedures: Determination of static pressure performance of vapor recovery systems at gasoline dispensing facilities with ASTs shall be conducted in accordance with EO VR-404 Exhibit 6;	X	
AQ-22	Fuel ASTs/Dispensing Leak rate and cracking pressure of pressure/vacuum vent valves in accordance with Vapor Recovery Test Procedure-201.1E or TP-201.1E;	X	

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AQ-23	Fuel ASTs/Dispensing Phase I adapters, emergency vents, spill container drain valve, dedicated gauging port with drop tube and tank components, all connections and fittings shall NOT have any detectable leaks; test methods shall be in accordance with EO VR-402-D Table 2-1; and	X	
AQ-24	Fuel ASTs/Dispensing Liquid removal test (if applicable) in accordance with TP-201.6.	X	
AQ-25	Fuel ASTs/Dispensing Pursuant to California Health and Safety Code Sections 39600, 39601, and 41954, ASTs shall be installed and maintained in accordance with EO VR-402 for Enhanced Vapor Recovery (EVR) Phase I and EO VR-302 – standing loss requirements.	X	
AQ-26	Fuel ASTs/Dispensing Pursuant to EO VR-402, maintenance and repair of system components, including removal and installation of such components in the course of any required tests, shall be performed by Morrison Bros.–certified technicians or as allowed by Executive Officer.	X	
AQ-27	Fuel ASTs/Dispensing Pursuant to EO VR-402, maintenance intervals for Morrison Bros. tank gauge components, dust caps emergency vents, Phase I product and vapor adapters, and spill container drain valves shall be conducted by a Morrison Bros.–trained technician on an annual basis.	X	
AQ-28	ICE Power Generators The gasoline throughput would be reported to MDAQMD annually by the end of February. The annual total shall not exceed the volume authorized by MDAQMD.	X	
AQ-29	ICE Power Generators Tier 4 final stationary compression-ignited ICE and its associated emission control systems shall be installed, operated, and maintained in strict accordance with those recommendations of the manufacturer/supplier and/or sound engineering principles that produce the minimum emissions of air contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.	X	
AQ-30	ICE Power Generators The diesel particulate filter shall be installed with a backpressure monitor that notifies the Applicant when the high backpressure limit of the engine is approached.	X	
AQ-31	ICE Power Generators Diesel ICE shall not be operated unless all the following engine emission systems are properly functioning: engine control module, diesel particulate filter, diesel oxidation catalyst, selective catalytic reduction–urea system, and exhaust gas recirculation. Furthermore, no changes shall be made to any of the above systems unless done so by a factory-certified technician.	X	

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AQ-32	<p>ICE Power Generators Diesel ICE equipment shall only be fired on diesel fuel that meets the following requirements or an alternative fuel approved by the Airborne Toxic Control Measure (17 CCR Section 93115) for Stationary Compression Ignition Engines:</p> <ul style="list-style-type: none"> a. Ultra-low sulfur concentration of 0.0015% (15 parts per million) or less, b. A cetane index or aromatic content, as follows: <ul style="list-style-type: none"> 1. A minimum cetane index of 20 or 2. A maximum aromatic content of 35 volume percent. <p>(Note: the use of California Air Resources Board Ultra-Low Sulfur Diesel fuel satisfies this requirement.)</p>	X	
AQ-33	<p>ICE Power Generators CMV shall conduct inspection, whichever is more frequent—at least once every calendar quarter or after every 2,000 hours of engine operation. An inspection includes any testing, maintenance, and/or other procedures that ensure the ICE is operated in strict accordance with the manufacturer's specifications and in continual compliance with the provisions of this rule.</p>	X	
AQ-34	<p>ICE Power Generators CMV shall maintain an operations log for this unit, current and on-site (or at a central location), for a minimum of 5 years, and this log shall be provided to MDAQMD, state, and federal personnel upon request. The log shall include, at a minimum, the information specified below:</p> <ul style="list-style-type: none"> a. Quarterly fuel use and quarterly hours. b. The date and a summary of each engine inspection including any testing and maintenance performed. c. Fuel sulfur concentration (may use the fuel supplier's certification of sulfur content if it is maintained as part of this log). d. Records of any corrective action taken after digital engine monitoring has notified the Applicant of malfunction. 	X	
AQ-35	<p>Baghouse (Dust) CMV shall operate and maintain dust collectors in strict accordance with those recommendations of the manufacturer/supplier and/or sound engineering principles.</p>	X	
AQ-36	<p>Baghouse (Dust) CMV shall comply with all applicable rules and regulations of the MDAQMD. Applicable rules include MDAQMD Rules 401 – Visible Emissions, 402 – Nuisance, 403 – Fugitive Dust Control, and 430 – Breakdowns.</p>	X	
AQ-37	<p>Baghouse (Dust) Dust collected by the control equipment shall be maintained in closed containers.</p>	X	

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AQ-38	<p>Baghouse (Dust) CMV shall conduct a minimum program of inspection and maintenance on this equipment. CMV shall maintain current and on-site for 5 years a log of the following information, which shall be provided to MDAQMD personnel upon request:</p> <ul style="list-style-type: none"> a. Monthly baghouse stack observation date and result (using USEPA Method 22 and USEPA Method 9 if Method 22 detects opacity); b. Quarterly bag and bag suspension system inspection date and results; c. Date of bag replacements; and, d. Date and nature of any system repairs. 	X	
AQ-39	<p>Baghouse (Dust) All baghouse doors, hatches, and airlocks shall remain secured and closed during operation of this equipment.</p>	X	
AQ-40	<p>Baghouse (Dust) CMV shall maintain on-site, as a minimum, an inventory of replacement filter cartridges that ensures compliance with applicable rules of MDAQMD Regulation IV.</p>	X	
AQ-41	<p>Reagent (Lime/Cement) Metering Silo (Dust) Lime or cement shall not be added to the guppy and/or silo unless the guppy and/or silo are vented to a properly functioning bin vent.</p>	X	
AQ-42	<p>Reagent (Lime/Cement) Metering Silo (Dust) CMV shall comply with all applicable rules and regulations of the MDAQMD. Applicable rules include the following: Rules 401, 402, 403, and 430.</p>	X	
AQ-43	<p>Reagent (Lime/Cement) Metering Silo (Dust) The throughput to this equipment shall not exceed the tons stated on the permit.</p>	X	
AQ-44	<p>Reagent (Lime/Cement) or Metering Silo (Dust) A facility log must be maintained on-site for at least 5 years and made available to MDAQMD personnel upon request. This log shall contain, as a minimum:</p> <ul style="list-style-type: none"> a. Total tons of cement added to the cement guppy and cement silo per month and per each consecutive 12-month period; b. Semiannual inspection of the bin vent enclosure and cartridge filters, including dates and any corrective actions taken; c. Date and nature of any system repairs. 	X	
AQ-45	<p>Reagent (Lime/Cement) or Metering Silo (Dust) The transfer of cement at the metering silo screw conveyor transfer point must be controlled using either shrouding or enclosure.</p>	X	
AQ-46	<p>CMV shall obtain and maintain a MDAQMD-approved Dust Control Plan as set forth by the requirements of MDAQMD Rule 403.</p>	X	
AQ-47	<p>During Project construction, the disturbed soil will be wetted, chemically treated, or treated by other means satisfactory to the Authorized Officer, sufficiently to effectively reduce airborne dust and reduce soil erosion. Additionally, prudent vehicle speeds will be maintained to minimize fugitive dust created by travel</p>		X

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AQ-48	Construction and maintenance activities will be conducted to minimize disturbance to vegetation adjacent to the ROWs.		X
AQ-49	All construction vehicle movement outside the ROWs will be restricted on federal land where there is no prior authorization.		X
AQ-50	A facility-wide Comprehensive Emission Inventory for all emitted criteria and toxic air pollutants must be submitted to the MDAQMD, in a format approved by the MDAQMD, upon MDAQMD request.	X	
ARCHAEOLOGY: Covered under SBC CUP (1997), BLM ROD (1998), and pending MPO (Appendix J) and POD (Appendix K)			
ARCH-1	Pursuant to 43 CFR 10.4(g), CMV will notify the BLM authorized officer, by telephone, and with written confirmation, immediately upon the discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony (as defined in 43 CFR 10.2). Further pursuant to 43 CFR 10.4, CMV will immediately stop all activities in the vicinity of the discovery and not commence again until a notice to proceed is issued by the BLM authorized officer.	X	X
ARCH-2	Any cultural resource discovery by CMV, or any person working on their behalf, during the course of activities on federal land will be immediately reported to the authorized officer by telephone, and with written confirmation. The permit holder will suspend all operations in the immediate area of the discovery and an exclusion buffer may be defined by the BLM to protect it until an evaluation of the discovery can be made by the authorized officer. This evaluation will determine the significance of the discovery and what mitigation measures are necessary to allow activities to proceed. CMV will be responsible for the cost of evaluation and mitigation. Operations will resume only upon written authorization to proceed from the authorized officer.	X	X
ARCH-3	Access roads to areas of high cultural sensitivity in the project's vicinity in the project vicinity shall be closed or rerouted.	X	
ARCH-4	The Applicant shall construct the chain-link fence with lockable gate around the Hart Cemetery and post a descriptive sign within the fence within 6 months. Overburden placed in the North Overburden site shall not be placed closer than 50 feet from the cemetery and a berm shall be constructed, in association with growth media salvage, at the maximum extent of the footprint configuration of the North Overburden site as designed to prevent loose erratic overburden from encroaching upon areas not approved for surface-disturbing activities.	X	
ARCH-5	The Applicant shall implement an informational program for employees to increase their awareness of the value of cultural resources and the need for their preservation. This program shall be achieved by providing a section on the prehistory and history of the project area in the employee manual. This section shall stress the fragility of the archaeological record and the responsibility of employees in preserving these resources. The Applicant shall establish, with the approval of the BLM, a buffer zone to ensure the temporary or long-term preservation of any site and the safety of visitors to the sites. The manual shall be updated, as necessary, to reflect new research findings that may occur relative to the history and prehistory of the area.	X	X
ARCH-6	The four unevaluated archaeological sites—P-36-005705, P-36-005706, P-36-005708, and P-36-005707—shall be avoided. There shall be a 100-foot buffer extending from the sites to the nearest mining activity.	X	

ACEPM #	ACEPM Description	Mine Plan of Operation	Plan of Development
PALEONTOLOGY: Covered under SBC CUP (1997)			
PALEO-1	CMV will not knowingly disturb, alter, injure, or destroy any scientifically important paleontological deposits. If previously undiscovered paleontological resources are discovered by CMV in the performance of any surface disturbing activities, the item(s) or condition(s) will be left intact and immediately brought to the attention of the BLM authorized officer. If significant paleontological resources are found, avoidance, recordation, and/or data recovery will be required, and at the expense of CMV.	X	X
BIOLOGY (WILDLIFE): Covered under BLM ROD (1998), Reasonable and Prudent Measures set forth in the California Department of Fish and Wildlife's (CDFW's) Incidental Take Permit (ITP) for desert tortoise,[#] US FWS BO,^{**} BLM DR (2020)^{††}, and pending MPO (Appendix J) and POD (Appendix K)			
WILD-1	Measures to isolate cyanide processing solutions from wildlife have been incorporated into project design plans. Specific measures to be employed have been confirmed for their effectiveness during completed testing programs. a. The solution storage area shall use steel storage tanks.	X	
WILD-2	b. The solution storage area shall be designed so that solutions are unavailable to wildlife.	X	
WILD-3	c. The solution storage area shall include fencing or and netting over the emergency storage basin, designed to preclude access by birds and bats.	X	
WILD-4	d. The solution storage area shall employ hazing techniques if process solutions enters the stormwater storage basin.	X	
WILD-5	If avian entanglement becomes a problem, the Applicant shall replace the netting over the emergency storage basin with a different type of net or will implement another method to prevent entanglement.	X	
WILD-6	Heap Leach Piles Area: 1. Active heap leach pads shall be surrounded by chain-link fence.	X	
WILD-7	Heap Leach Piles Area: 2. Drip irrigation methods shall be used to distribute solution directly on the heaps, including both tops and sides, to minimize potential ponding of water available to birds and other animals.	X	
WILD-8	Heap Leach Piles Area: 3. Drip irrigation tubing shall be mostly buried within the upper surface of placed ore on the heap leach pad to minimize potential ponding of water and to reduce evaporative water loss.	X	
WILD-9	The cyanide solution system shall be operated as a closed circuit, with solution transported from heap piles to storage tanks, to the processing plant, and back to the heap piles in a system of pipes, rather than open ditches. Open ditches will be used only to carry heavy storm runoff.	X	
WILD-10	Cyanide-related animal mortalities must be reported monthly to the BLM Needles Field Office no later than the 10th of each month. The report shall include the following information: The number and kind of each mortality attributed to cyanide. "Kind" will be reported under one of the following categories: raptors, songbirds, upland game birds, waterfowl, shorebirds, mammals, and other; location where the dead animal was found; and other information requested by the BLM.	X	

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WILD-11	A program to educate employees about area wildlife shall be implemented by the Applicant in connection with the safety program. The Applicant shall acquaint personnel with laws protecting vegetation and wildlife, characteristics of desert wildlife, and proper procedures if wildlife is encountered. Drivers shall be educated about potential hazards of desert-road driving, driving at proper speeds, and the importance of not harassing or interfering with the desert tortoise. Employees shall comply with BLM open/closed area designations and road regulations.	X	X
WILD-12	Employees shall not bring domestic cats to the site. Dogs must be kept on a leash at all times.	X	X
WILD-13	Desert Tortoise The Applicant shall inform project personnel that only authorized personnel shall handle tortoises and of the tortoises' protected status.	X	X
WILD-14	Desert Tortoise A project sponsored program of busing/vanpooling to the project from locations in the Las Vegas valley shall be implemented. At a minimum 75% of the work force shall travel to the project by bus/vanpool.	X	X
WILD-15	Desert Tortoise The Applicant shall locate and flag on-site tortoise burrows before initiating surface-disturbing activities. Flagged areas shall be avoided whenever possible. If occupied burrows are within areas designated for project facilities or activities, relocation of tortoises shall be coordinated with the BLM and U.S. Fish and Wildlife Service (USFWS).	X	X
WILD-16	Desert Tortoise Project waste shall be properly managed, and the site monitored to control refuse that could attract ravens. Prior to landfill disposal, refuse shall be kept in containers designed to exclude wildlife.	X	X
WILD-17	Birds Power lines shall be constructed in a manner to discourage raven nesting/roosting. As part of the on-site biological monitoring, raven populations in the project vicinity shall be monitored by the project environmental specialist. Results shall be reported to the BLM annually to assess whether unusual increases in raven populations are occurring.	X	X
WILD-18	Desert Tortoise The Applicant shall implement the terms and conditions to comply with the reasonable and prudent measures set forth in the USFWS Biological Opinion (BO).	X	X
WILD-19	Desert Tortoise The Applicant shall implement the terms and conditions to comply with the reasonable and prudent measures set forth in the CDFW ITP.	X	X
WILD-20	Desert Tortoise Reasonable and Prudent Measure a: Worker education program and well-defined operational procedures shall be implemented to avoid the take of desert tortoises and their habitat during project activities.	X	X
WILD-21	Desert Tortoise Reasonable and Prudent Measure b. Take of desert tortoises, through injury or death due to the straying of equipment or vehicles beyond project areas, shall be reduced through establishment of clearly defined work areas.	X	X

ACEPM #	ACEPM Description	Mine Plan of Operation	Plan of Development
WILD-22	Desert Tortoise Reasonable and Prudent Measure c. Take of desert tortoises, through injury or death, shall be avoided through the removal of these animals to undisturbed areas out of harm's way when they are not otherwise avoidable.	X	X
WILD-23	Desert Tortoise Reasonable and Prudent Measure d. Attraction of common ravens and other potential desert tortoise predators to project areas shall be reduced to the maximum extent possible.	X	X
WILD-24	Terms and Conditions a.1: The BLM shall appoint an official project representative who shall be responsible for compliance with all mitigation measures. This person (who may also be an authorized biologist) shall have authority to stop all project-related actions that could cause death or injury to a desert tortoise.	X	X
WILD-25	Terms and Conditions a.2. All persons associated with the project shall participate in a desert tortoise education program. The program shall include, at a minimum, the following topics: the occurrence of desert tortoises at the mine site and along the access road, sensitivity of the species to human activities, legal protection for desert tortoises, penalties for violations of federal laws, general activity patterns of the desert tortoise, reporting requirements, measures to protect desert tortoises, and measures users can take to promote the conservation of desert tortoises. All persons shall be informed of their responsibility to report any form of take to the official project representative. An inventory of all trained personnel will be kept by CMV and be submitted to the BLM Needles Field Office by December 31 of each year.	X	X
WILD-26	Terms and Conditions a.3. Because desert tortoise may seek shade underneath equipment of vehicles, all on-site employees shall be responsible for surveying under parked vehicles prior to moving them. An authorized biologist shall be contacted to remove any desert tortoise found prior to moving a vehicle or the vehicle shall be left in place until the animal moves of its own accord.	X	X
WILD-27	Terms and Conditions a.4. All open holes shall be inspected at the beginning, middle, and end of the day for trapped desert tortoises. If desert tortoises are trapped, the biological monitor shall be notified immediately. The desert tortoises shall be allowed to escape or shall be carefully removed and relocated by an authorized biologist before work continues in that location.	X	X
WILD-28	Terms and Conditions a.5. Any activities that may disturb native habitat shall be limited to areas that have already been cleared of desert tortoises by the authorized biologist(s) and enclosed in a fence to exclude desert tortoises. When feasible, during the installation of the fence to exclude desert tortoise, vegetation shall be crushed rather than bladed.	X	X
WILD-29	Terms and Conditions a.6. The BLM shall ensure that CMV has installed fencing to exclude desert tortoises around the perimeter of its work area prior to surface disturbance. The fence design and location shall be approved by both USFWS and CDFW. Any proposals to alter the fence design or location shall be submitted to the USFWS and CDFW for approval prior to use. The authorized biologist or environmental specialist shall conduct periodic inspections of the fence to ensure its integrity and to inspect for trapped wildlife. Particular attention shall be given to wash areas after rainstorms.	X	
WILD-30	Terms and Conditions a.7. Fencing to temporarily exclude desert tortoises, if determined by the authorized biologist to be needed, shall consist of an approved design, maintained at zero ground clearance. It does not need to be buried. The fence shall be supported as necessary to prevent access by desert tortoise to the project site. The fence shall be removed immediately on completion of project activities in the fenced area.	X	

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WILD-31	Terms and Conditions a.8. If CMV fails to comply with any of the reasonable and prudent measures or terms and conditions of the BO or similar requirements of the ITP, the BLM shall suspend the authorization allowing for the activities until such time that CMV complies with these terms and conditions.	X	X
WILD-32	Terms and Conditions a.9. Firearms shall be prohibited on the CMM site, except for those borne by authorized security personnel, CDFW game wardens, and BLM rangers.	X	X
WILD-33	Terms and Conditions a.10. Each authorized biologist shall maintain a daily log recording all desert tortoises that are encountered. The annual report shall be forwarded to the USFWS and CDFW detailing the locations of each occurrence, the general condition and health of each individual, diagnostic markings, and any actions undertaken.	X	X
WILD-34	Terms and Conditions a.11. Reclamation activities shall include the removal from the site and proper disposal of all hazardous wastes that could be harmful to wildlife.	X	
WILD-35	Terms and Conditions b.1. Expansion areas shall be fenced prior to onset of mining operations. All workers shall be instructed that their activities must be confined to within these areas.	X	
WILD-36	Terms and Conditions b.2. If heavy equipment must be used outside the fence built for the long-term exclusion of desert tortoises, the work areas shall be clearly staked, flagged, or temporarily fenced prior to the onset of project activities. If such an area is staked or flagged, the authorized biologist shall be present at all times that activities are being conducted that could result in injury to or mortality of desert tortoises.	X	
WILD-37	Terms and Conditions c.1. The authorized biologist(s) shall accompany the fence construction crew to ensure that desert tortoises are not killed or injured during this activity. Where possible, the fence shall be routed to place occupied burrows of the desert tortoise outside of the mining area.	X	
WILD-38	Terms and Conditions c.2. After fencing to exclude desert tortoises has been installed and prior to ground disturbance, authorized biologists shall examine the mine expansion areas for desert tortoises and their burrows. The inspection shall provide 100% coverage of the area within the expansion zone.	X	
WILD-39	Terms and Conditions c.3. The fence around the existing leach pad shall remain intact until the native habitat between it and the new fence can be thoroughly searched for desert tortoises.	X	
WILD-40	Terms and Conditions c.4. Desert tortoises shall only be handled by biologists who are authorized by the USFWS and/or the CDFW. The BLM shall submit the names and credentials of CMV biologists to the USFWS for its review and approval at least 15 days prior to the time they will need to handle desert tortoises. Biologists who have been authorized by the USFWS to handle desert tortoises for the existing CMM project may continue with this task for the expansion without additional authorization. Desert tortoises and their eggs shall be handled according to the procedures outlined in Desert Tortoise Council (1996). ^{##}	X	X
WILD-41	Terms and Conditions c.5. Any desert tortoises found within the expansion areas shall be relocated outside the exclusion fence in undisturbed habitat. The relocation site shall be as close as possible to the capture site where suitable habitat is present. All excavation of desert tortoise burrows shall be done by hand by an authorized biologist. The desert tortoise shall be placed in a burrow of appropriate size or in a shady location under a large shrub. If relocation occurs during the normal dormant period, the desert tortoise shall be moved and placed in a burrow only. If no burrows are available for relocating the desert tortoises, artificial burrows shall be used. Protocols developed by the Desert Tortoise Council (1996) shall be followed for construction of artificial burrows.	X	

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WILD-42	Terms and Conditions d. All personnel that enter the expansion area shall be required to contain all food stuffs, trash, or other waste that may attract predators. Any trash receptacles shall be equipped with latching or locking lids.	X	X
WILD-43	Desert Tortoise During the active season from March–October, routine road repair work is monitored by an authorized biologist. The biologist has full authority to suspend work if a tortoise is in the project area or if a burrow is found adjacent to the roadway and marked for avoidance. Biologists are approved by the Needles BLM Field office biologist and if required, by USFWS; it is assumed here that a biologist approved by one U.S. Department of the Interior (DOI) agency (BLM) would also be approved by any other DOI agency. Biologists are not approved to handle the tortoise during normal road repair work. Standard procedure is for work to halt until the tortoise moves away from the active work area.	X	X
WILD-44	Desert Tortoise During the inactive winter period for the desert tortoise, any scheduled road maintenance may or may not include monitoring by a biologist, but at a minimum an observer will monitor the advance of road repair equipment to monitor for potential burrows adjacent to the road, which will be marked for avoidance.	X	X
WILD-45	Desert Tortoise CMV trains all staff and contractors on desert tortoise awareness, as well as maintains company policies that help prevent the take of any endangered species.	X	X
WILD-46	Bats/Birds Outdoor lighting for the mine pits and other areas of nighttime activities shall be shielded to direct lighting to the area of activity.	X	X
WILD-47	To allow access to abandoned mine workings used as habitat by bats and other animals, adits and shafts on the project site that do not pose a hazard to people shall be left open or barricaded in a manner acceptable to the BLM to permit animal ingress/egress.	X	
WILD-48	Bat/Birds An examination of former mine shafts and adits shall be completed prior to earth-moving activities in the area to estimate whether they are occupied by bats or other species. The evaluation shall be completed during the winter hibernation period by an ecologist familiar with bat fauna. If a colony is found or substantial use by individual bats is indicated, blasting or heavy-equipment use shall be restricted at or adjacent to the roost sites during the identified period of occupation. If the habitat used by a colony will be required for project development, a mitigation program shall be completed.	X	
WILD-49	Bats/Birds Design and construction of electric power-distribution poles shall incorporate provisions for raptor safety.	X	X
WILD-50	Bats/Birds Areas of significant cyanide solution ponding will be covered with netting or other similar material to prevent bird access to the solution.	X	
WILD-51	Bighorn Sheep Project fencing shall be constructed according to BLM specifications designed to prevent potential bighorn sheep entanglement.	X	

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WILD-52	<p>Birds Conduct vegetation removal outside the active nesting bird season that runs from March 1 through August 31. Vegetation clearance that does occur inside the active nesting bird season (March through August) must be preceded by a nesting bird survey to document the absence of nesting birds.</p>	X	X
WILD-53	<p>Bat/Birds When fencing is necessary, bird- and bat-compatible design standards shall be used.</p>	X	
WILD-54	<p>Bat/Birds Lighting and shield lighting that does not attract birds and bats or their prey to project sites shall be used.</p>	X	X
WILD-55	<p>Bat/Birds Drilling and mining activities will avoid features with identified owl nests in the spring and summer. During the winter, drilling and mining through bat habitat features on the east side of CMM shall not be done in the winter unless bats are temporarily excluded in the fall first. Therefore, wildlife exclusion and/or closure shall be done during the late summer and early fall (September–October).</p>	X	
WILD-56	<p>Bats/Birds If mining is renewed in the areas where bat habitat features are located, features will either be closed with bat and wildlife exclusion as described above or closed with a bat-compatible cupola or gate.</p>	X	
WILD-57	<p>Bighorn Sheep CMV shall report any bighorn sheep mortalities, whatever the cause, to the BLM Needles Field Office wildlife biologist within 48 hours of discovery.</p>	X	X
WILD-58	<p>When conducting drilling operations, all sumps shall be fenced with temporary plastic construction fencing to limit ingress of wildlife into the sump. As an additional safety measure, all sumps shall have one end ramped to facilitate escape in the unlikely event wildlife does get through the perimeter fence.</p>	X	
WILD-59	<p>Bighorn Sheep Existing wildlife drinkers shall be maintained and/or relocated as appropriate.</p>	X	
PLANTS/WEEDS: Covered under BLM DR (2020) and pending MPO (Appendix J) and POD (Appendix K)			
PLANTS-1	<p>Prior to grading of new pads or roads, preconstruction surveys would be conducted by a qualified biologist on new pad and road alignments to determine whether rosy two-toned beardtongue is present on-site. At locations in which the species is found, the seed and seed-bearing topsoil shall be collected (prior to land disturbance) and stored appropriately for revegetation on the site or other favorable areas on the mine site. In addition, the on-site vegetation will be crushed to the extent practicable, and pushed to the perimeter and pushed back over the site during reclamation.</p>	X	X
WEED-1	<p>If noxious weeds are encountered within the construction area, mitigation measures will be instituted in consultation with the BLM weed specialist, and/or County and NDOT. ROW monitoring and weed abatement following construction will be conducted as required by the applicable agency. To avoid the spread of noxious weeds, all vehicles brought in from out of the area will go through high pressure washing of the undercarriages at a commercial carwash prior to arriving on site and before being used on the Project</p>		X

ACEPM #	ACEPM Description	Mine Plan of Operation	Plan of Development
BIOLOGY (RECLAMATION AND REVEGETATION): Covered under BLM ROD (1998), SBC CUP (1997), Reclamation, RWQCB WDRs, and pending MPO (Appendix J) and POD (Appendix K)			
REC-1	The Applicant shall continue to maintain its revegetation program that includes the following measures: a. Review of all available materials describing methods and success rates of revegetation programs employed on other lands in the arid west to determine the best available procedures.	X	
REC-2	b. Continue ongoing revegetation research programs, as necessary, to meet the reclamation and revegetation goals defined in the approved Reclamation Plan.	X	
REC-3	c. Revegetation success shall be determined by measuring the density and diversity of perennial species. "Density" here means the number of live perennial individuals per unit area; "diversity" here means the number of perennial species (with live individuals) per unit area. These standards are further defined in the approved Reclamation Plan.	X	
REC-4	d. Stockpiling of available soil. Redistribution of these soils over disturbed areas shall be done following completion of activities on an area. Studies shall be completed that defined how available soil would be most effectively used.	X	
REC-5	e. Identification of dominant species to be used in revegetation. Salvaging of individual plants amenable to transplantation shall be completed, and such plants will be kept in nursery areas for replanting on reclaimed areas to provide a continuous seed source. The goal will be to transplant at least 25% of barrel cactus and 25% of the following species with the size classification shown:	X	
REC-6	Joshua tree – 3 to 10 feet in height, unbranched or with few branches.	X	
REC-7	Mojave yucca – well-developed, single-stemmed plants that have not developed a vertical trunk.	X	
REC-8	Blue yucca – well-developed, single-stemmed plants that have not developed a vertical trunk.	X	
REC-9	Barrel cactus – plants no smaller than 8 inches in diameter and no taller than 14 inches.	X	
REC-10	f. The nursery will continue to support the revegetation research program and mine reclamation.	X	
REC-11	g. A plan shall be developed to coordinate and phase revegetation efforts in accordance with mining and processing operations; this is known as concurrent reclamation. The goal will be to initiate revegetation procedures within 6 months following completion of project activities over an area.	X	
REC-12	h. Potential invasion of exotic species shall be monitored. Prior research conducted at the CMM has shown that concentrations of exotic species (such as Russian thistle) decrease at a rate inversely proportional to the density (and success) of native vegetation established under the Reclamation Plan.	X	
REC-13	i. Employment of reseeding, transplantation, fertilization, and watering procedures determined appropriate for each disturbed area in the program methodology.	X	
REC-14	j. Evaluation of the benefits of removing, shredding, and composting vegetation that would otherwise be lost.	X	

ACEPM #	ACEPM Description	Mine Plan of Operation	Plan of Development
REC-15	k. Ground-preparation procedures shall include ripping and harrowing of compacted soils. Intervening areas between planted soil islands on overburden–waste-dump deck surfaces shall be ripped to decrease compaction and improve rainfall infiltration, reduce runoff, and provide a suitable seed bed for plant dispersal.	X	
REC-16	l. Implementation of a monitoring program to verify revegetation results, based upon the goals for diversity and density.	X	
REC-17	The revegetation bond for any specific area will not be released until the Applicant demonstrates, based on monitoring of the revegetation of that area (including at least 2 full years in which the vegetation is completely self-sufficient) that the density and diversity standards set forth in the Reclamation Plan have been met.	X	
REC-18	Vegetation considered unnecessary for reclamation shall be made available to the public during agreed-upon plant donation events.	X	
REC-19	Vegetation considered unnecessary for reclamation shall be made available to commercial plant harvesters according to the terms of any such agreement made between the Applicant and the BLM and the County.	X	
REC-20	Vegetation within areas of temporary disturbance (such as for well construction) shall be crushed—instead of bulldozed—to enhance recovery.	X	
REC-21	Waste rock (overburden) will be backfilled into final excavated mine pits when the action can occur concurrently with the mining schedule. Normally, this means that the last mine pit excavated would not be backfilled or would be only partially backfilled.	X	
REC-22	The Applicant shall comply with all reclamation and other requirements set forth in the Mine Plan and Reclamation Plan for CMM as approved and amended by the County Planning Commission.	X	
REC-23	The Applicant shall continue to post a letter of credit, cash, or surety bond jointly with the County and the BLM to ensure compliance with all conditions of the Plan of Operations and Reclamation Plan and Memorandum of Understanding for the Reclamation of CMM. That bond amount shall continue to be reviewed for adequacy at 2-year intervals. The bond amount shall be adjusted as set forth in detail in the Reclamation Plan. Portions of the bond shall be released to the Applicant upon certification by the BLM and the County that all reclamation conditions applicable to a given reclamation area have been complied with, as specified in detail in the Reclamation Plan. The County has agreed to administer the bond, subject to Regulation Plan Regulation No. 21(1)(2).	X	
REC-24	Revegetation efforts shall be initiated as soon as practicable during the project operation period as use of specific disturbed areas is completed.	X	X
REC-25	Revegetation efforts for completed portions of the overburden pile and decommissioned heap leach piles shall be initiated during the operational period rather than deferring revegetation until operations are completed.	X	
REC-26	At the time of project decommissioning, all equipment, buildings, structures, and refuse shall be removed from the site, all hazards mitigated, and reclamation completed according to the approved Mine/Reclamation Plan.	X	

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REC-27	Reclamation activities shall include control of slopes on cuts and fills, plus revegetation, to control surface erosion in accordance with the Reclamation Plan. Final slope lengths and appropriate mid-slope benches/terraces shall be reexamined prior to completion of final grading to determine adequacy of erosion control measures. Necessary corrections to ensure proper drainage and minimal erosion will be accomplished prior to acceptance for final reclamation of grading/earthwork activity and bond release.	X	X
REC-28	Upon project completion, the Applicant shall remove all operating facilities—including structures, equipment, transmission lines, and fencing—in conformance with the Reclamation Plan requirements.	X	
REC-29	Site reclamation shall include modification of final overburden and heap leach pile shapes to reduce the impact of straight-line geometrics and potential contrast in form and line. A revised plot plan shall be submitted and approved by the BLM and the County Planning Department showing final footprint configurations and cross sections that reflect the final mitigation imposed in the Reclamation Plan approval, such as Stipulations 20 and 92 of the BLMs March 1998 Record of Decision approving the mine plan of operation and reclamation plan changes analyzed in its 1997 EIS (No. DES 97-10).	X	
REC-30	At project decommissioning, final slopes shall be 2:1 (horizontal to vertical) for the overburden pile and 2.5:1 for the heap leach piles. Exceptions may be made based on individual slope characteristics and desired visual resource objectives by using the options described in the Reclamation Plan. Final slopes shall be contoured as provided for in the Reclamation Plan and shall incorporate to the extent available a final covering of darker material that blends with the surrounding landscape. Final slope angles shall mimic the natural topography as much as possible. Any exceptions must be authorized in writing and interested parties notified.	X	
REC-31	At the cessation of active mining, the Applicant shall secure separate financial assurance that will ensure that any pits created by mining activities in which a pit lake forms will be backfilled to a level at least 5 feet above the high-water lake level in the event monitoring of pit-lake water demonstrates: (1) that acidic conditions due to oxidation of sulfide minerals or (2) other poor water quality due to concentrations of metals would pose a substantial threat to health and the environment, as determined by state law, are likely to develop. Monitoring of pit-lake water would be conducted for the duration of the 10-year closure period unless: (1) pit-lake water toxic constituents exceed appropriate maximum allowed standards, according to state law, and pit backfilling is commenced or (2) appropriate state-of-the-art analytical techniques demonstrate the pi- lake waters would not exceed current state or federal water quality standards in the future. Backfill material shall have a high neutralization potential. The surface of any backfilled material placed in pits as a result of this circumstance should be loose, uncompacted, coarse cobble-sized material to inhibit ponding of surface water during and after precipitation events. This financial assurance shall be in place commencing at the beginning of the 10-year closure period and shall be maintained for the entire period unless released by the County and the BLM.	X	
REC-32	Reclamation and Closure New and existing mining units shall be closed so that they no longer pose a threat to water quality. No post-closure land uses shall be permitted that might impair the integrity of containment structures.	X	
REC-33	Reclamation and Closure The Discharger shall notify the RWQCB in writing of the final closure or partial final closure of a mining unit at least 180 days prior to beginning any final closure activities. The notice shall include a statement that all closure activities will conform to the most recently approved final or partial final closure plan and that the plan provides for site closure in compliance with all applicable federal and state regulations.	X	

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REC-34	Reclamation and Closure CMV shall carry out closure of a mining unit or a portion of a unit only in accordance with a Closure and Post-Closure Maintenance Plan approved by the RWQCB through the issuance of closure WDRs	X	
REC-35	Power line closure includes removing and recycling the overhead wiring, cutting the wood poles at or near ground level, and removing cable supports or other ancillary surface equipment.		X
REC-36	Water pipeline closure includes draining the water line, excavating both ends of the pipeline, and sealing the pipeline at those locations, followed by reburial. This closure technique is the industry standard for buried utilities known as closure-in-place. Any surface equipment or vaults will also be removed, and the pipeline will be sealed and reburied at those locations.		X
REC-37	During initial ground preparation and construction, affected vegetation will be crushed rather than bladed when it is feasible to do so. Vegetation that is not salvaged will be removed and stockpiled out of the way. This material can be reapplied during reclamation for use as a vertical mulch; it has also proven beneficial for seed stabilization during the germination period.		X
REC-38	Growth media will be salvaged primarily during the construction of the water pipeline because subsurface disturbance will be minimal for the overhead power line and power pole installation. The latter consists of installing the tension cables and small-diameter auger drilling for the poles. Pole locations will be as near as possible to the existing CMM Access Road, so temporary roads will not be required. Growth media will be furrowed adjacent to the water pipeline trench and will remain in place until short-term reclamation begins. Reclamation of the short-term water line ROW is estimated to begin within 12 months from the time of disturbance.		X
REC-39	The short-term water line ROW area will be seeded with a local certified weed-free seed mixture. The seed mix and application method will be preapproved by the BLM and included in a final reclamation plan. Seed will either be collected locally or purchased from a commercial vendor. Prior to beginning reclamation, a post-reclamation watering and monitoring schedule will be provided to the BLM for review and approval.		X
REC-40	Monitoring for reclamation success will follow the methods stated in the Castle Mountain Mine 2022 MPO and Reclamation Plan (2022 Plan). Standardized linear transects or plots (typically two meters by ten meters in size) will be used to record perennial plant density and diversity. Revegetation monitoring will be conducted to qualitatively evaluate native plant establishment and vigor, to identify and make recommendations for correcting problems (weeds, lack of progress), and to quantitatively measure the development of the reclaimed habitat to determine its progress to the established success criteria. An Annual Revegetation Monitoring Report will be prepared to summarize revegetation and monitoring efforts for ten years or until deemed successful by the observed results and review by the BLM. Based on the monitoring results, and upon consultation with the BLM, additional remedial activities may include additional seeding, plant protections, and/or a change of seed mix.	X	X
WATER (SURFACE): Covered under SBC CUP (1997), BLM ROD (1998), RWQCB WDRs, and pending MPO (Appendix J) and POD (Appendix K)			
SW-1	Adequate provisions shall be made to intercept and conduct the off-site tributary drainage flow around or through the site in a manner that will not adversely affect adjacent or downstream properties.	X	
SW-2	The Applicant shall obtain a California Fish and Game Code Section 1603 permit from the CDFW before altering any stream channels.	X	

ACEPM #	ACEPM Description	Mine Plan of Operation	Plan of Development
SW-3	The heap leach piles shall be constructed to avoid disruption of the large drainage that passes through the western portion of the CMM. Minor drainages that would be restricted by heap pad construction shall be diverted around the heap piles. Facilities shall be constructed to avoid major drainages.	X	
SW-4	Stormwater and Erosion CMV shall maintain all overburden and stockpiles to prevent excess erosion and stormwater ponding through the use of best management practices, such as micro-catchments from machine tracks; coarse rock riprap armoring if nearby ephemeral surface water flow; rock mulching; and seeding with native seed mix collected on-site.	X	
SW-5	Stormwater and Erosion The perimeter of all Group C mining units shall be inspected monthly for erosion, ponding, excessive plant growth, and incompatible wastes.	X	
SW-6	Stormwater and Erosion CMM shall be designed, operated, and maintained to prevent inundation, washout, or erosion of wastes or covering material, which could occur as a result of floods having a predicted frequency of once in 100 years.	X	
SW-7	Stormwater and Erosion Surface and subsurface drainage from outside of a mining unit shall be diverted from the unit.	X	
SW-8	Stormwater and Erosion Leached ore residual shall not be placed in perennial, intermittent, or ephemeral stream channels, unless provisions are made to divert runoff around the waste in a nonerosive manner. Waste shall not be placed where they can be eroded by stream flows or cause accelerated stream bank erosion.	X	

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SW-9	<p>Stormwater and Erosion Diversion and drainage facilities shall be designed, constructed, and maintained to:</p> <ul style="list-style-type: none"> a. Accommodate the anticipated volume of precipitation and peak flows from surface runoff and under the precipitation conditions for the mining unit. b. Effectively divert sheet flow runoff laterally, via the shortest distance, into the drainage and collection facilities. c. Prevent surface erosion through the use of energy dissipaters where required to decrease the velocity of runoff, slope protection, and other erosion control measures where needed to prevent erosion. d. Control and intercept run-on drainage to isolate uncontaminated surface waters from water that might have come into contact with waste. e. Take into account: <ul style="list-style-type: none"> (i) For closed mining units and for closed portions of units, the expected final contours of the closed unit, including its planned drainage pattern. (ii) For operating portions of mining units other than surface impoundments, the unit's drainage pattern at any given time. (iii) The possible effects of the mining unit's drainage pattern on and by the regional watershed. (iv) The design capacity of drainage systems of downstream and adjacent properties by providing for the gradual release of retained water downstream in a manner which does not exceed the expected peak flow rate at the point of discharge if there were no CMM. f. Preserve the system's function. The Discharger shall periodically remove accumulated sediment from sedimentation or detention basins as needed to preserve the design capacity of the system. 	X	
SW-10	<p>Stormwater and Erosion Collection and holding facilities associated with precipitation and drainage control systems shall be emptied immediately following each storm or otherwise managed to maintain the design capacity of the system.</p>	X	
GROUNDWATER QUALITY: Covered under SBC CUP (1997), BLM ROD (1998), RWQCB WDRs, and pending MPO (Appendix J) and POD (Appendix K)			
GW-QUAL-1	<p>The Applicant shall abate potential impacts to surface water and groundwater from on-site storage of fossil fuels, chemicals, explosives, and reagents, as well as the use of dust-binding agents, through compliance with all applicable regulations of the Colorado River Basin RWQCB, County DEHS and County Fire Marshal. Use of ASTs requires the preparation of a contingency plan for secondary containment of potential leaks to the satisfaction of the RWQCB and the County DEHS, including the following:</p>	X	
GW-QUAL-2	<p>A containment area designed to accommodate the volume of the tank plus a 24-hour, 100-year storm.</p>	X	
GW-QUAL-3	<p>If a series of tanks are involved, containment shall be provided for 10% of the combined capacity plus a 24-hour, 100-year storm.</p>	X	
GW-QUAL-4	<p>Belowground storage tanks shall be subject to the following RWQCB regulatory criteria:</p>	X	
GW-QUAL-5	<p>All tanks shall be registered with the RWQCB and shall conform to RWQCB construction standards. The County DEHS will be responsible for and will issue permits for implementation of these requirements and standards.</p>	X	

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GW-QUAL-6	Domestic sewage shall be disposed of in leach fields acceptable to DEHS. Portable toilet waste shall be removed off-site by a County-licensed hauler.	X	
GW-QUAL-7	The Applicant shall meet all the requirements of the RWQCB Waste Discharge Order and make all monitoring data and correspondence available to the BLM.	X	
GW-QUAL-8	A Spill Prevention, Control, and Countermeasures Plan shall be developed to establish procedures for spill prevention and cleanup	X	
GW-QUAL-9	Pit-water drainage shall be independently monitored and evaluated for acid mine water conditions. Should acidic water conditions develop during mining activity, an appropriate remediation plan shall be prepared. All work shall be conducted under the direct supervision of the BLM.	X	
GW-QUAL-10	The Applicant shall obtain a permit from and comply with the RWQCB requirements concerning using materials and implementing procedures to safely contain liquids, including: a. Impermeable liners for process solution basins and heap leach pads.	X	
GW-QUAL-11	b. Sealed drainage and collection facilities to transport or contain leaching solution.	X	
GW-QUAL-12	c. Diked leach pads to confine and control drainage from the leach piles.	X	
GW-QUAL-13	d. Storage basins with adequate freeboard to safely contain storm runoff from within the heap leach system and drain-down of solution from the leach pads in the event pumps cannot operate because of a power failure.	X	
GW-QUAL-14	e. Drainage or diversion ditches outside the heap leach system to preclude entry of storm runoff into the system.	X	
GW-QUAL-15	f. A leakage detection monitoring system for the leach pads, emergency solution storage, and stormwater storage basins. Detected leaks shall be reported verbally to BLM within 72 hours and in writing describing the nature of leaks within 10 working days. The BLM shall be promptly provided copies of all correspondence with RWQCB regarding monitoring and leaks.	X	
GW-QUAL-16	g. Regularly prepared monitoring reports on the current status of operations, and copies will be provided to the BLM.	X	
GW-QUAL-17	h. Final rinsing and neutralization confirmation of the heap leach piles and decommissioning/removal of the solution storage facilities at the time of project completion.	X	
GW-QUAL-18	Groundwater Monitoring CMV must submit an Unsaturated Zone Monitoring Work Plan for installing unsaturated/vadose zone monitoring systems under the Class B mining units that meet the requirements of 27 CCR Section 20415.	X	
GW-QUAL-19	Stormwater The final surfaces, interim surfaces, and top deck areas of the heap leach pad will be sloped to promote controlled stormwater runoff that falls directly onto the pad. Channels, basins, and other drainage control structures will be constructed during various phases of construction and operations.	X	

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GW-QUAL-20	Stormwater CMV must comply with all pertinent stormwater requirements contained in 27 CCR and in the WDR Order.	X	
GW-QUAL-21	Financial Assurance Within 90 days following the issuance of a new or revised Order, CMV must provide appropriate assurances of financial responsibility in compliance with 27 CCR.	X	
GW-QUAL-22	Waste Discharge CMV is prohibited from waste discharge classified as hazardous, as defined in 27 CCR Section 20164.	X	
GW-QUAL-23	Waste Discharge Group B mining waste other than the permitted discharge is prohibited. Group B mining waste is defined in 27 CCR Section 22480.	X	
GW-QUAL-24	Waste Discharge The discharge of any waste other than mining waste at CMM is prohibited. Prohibited wastes may include oil, grease, solvents, other petroleum products, and toxic and hazardous materials.	X	
GW-QUAL-25	Waste Discharge The discharge of wastes outside of the mining unit(s) or portions of a mining unit specifically designed for their containment is prohibited.	X	
GW-QUAL-26	Waste Discharge The discharge of Class B mining wastes to the unsaturated/vadose zone or to groundwater is prohibited.	X	
GW-QUAL-27	Waste Discharge The discharge of mining waste to land not owned or controlled by the Discharger is prohibited.	X	
GW-QUAL-28	Waste Discharge The discharge of waste to any surface water or surface drainage courses is prohibited.	X	
GW-QUAL-29	Waste Discharge The storage, treatment, or disposal of wastes at CMM shall not cause contamination, pollution, or nuisance as defined in California Water Code Section 13050, Subdivisions (k), (l), and (m).	X	
GW-QUAL-30	Waste Discharge Wastes shall be discharged only into mining units specifically designed for their containment and/or treatment, as described by an approved RWQCB Order (WDRs).	X	
GW-QUAL-31	Waste Discharge CMV shall not cause the concentration of any Constituent of Concern (including laboratory monitoring parameters), as specified in the Monitoring and Reporting Plan for groundwater, MRP R7-2020-0004 and incorporated herein by reference, to exceed its representative concentration limit in any monitoring medium (i.e., exceed the Water Quality Protection Standard). The concentration limit for each constituent will be set in accordance with the MRP. Data analysis shall be performed in accordance with the MRP.	X	
GW-QUAL-32	Waste Discharge Mining waste shall be treated or neutralized whenever feasible to minimize the threat to water quality and minimize the need to install waste containment structures.	X	

ACEPM #	ACEPM Description	Mine Plan of Operation	Plan of Development
GW-QUAL-33	<p>Waste Discharge All mining units shall be operated to ensure that wastes, including leachate, will be a minimum of 5 feet above the highest anticipated elevation of underlying groundwater, including the capillary fringe.</p>	X	
GW-QUAL-34	<p>Waste Discharge CMV shall promptly remove and properly dispose of any unpermitted wastes that are discharged at CMM in violation of these requirements.</p>	X	
GW-QUAL-35	<p>Leak Detection and Monitoring The leachate collection and removal system (LCRS) for each Group B mining unit shall be designed, constructed, maintained, and operated to collect and remove twice the maximum anticipated daily volume of leachate from the unit.</p>	X	
GW-QUAL-36	<p>Leak Detection and Monitoring Leachate generation by an LCRS for a mining unit shall not exceed 85% of the design capacity of (a) the LCRS or (b) the sump pump. If leachate generation exceeds this value and/or if the depth of the fluid in an LCRS exceeds the minimum needed for safe pump operation, the Discharger shall immediately notify the RWQCB in writing within 7 days. Notification shall include a timetable for a remedial action to repair the containment structures or other action necessary to reduce leachate production.</p>	X	
GW-QUAL-37	<p>Leak Detection and Monitoring Each LCRS shall be operated to function without clogging through the scheduled closure of the applicable mining unit and during the post-closure maintenance period. Each LCRS shall be tested at least annually to demonstrate proper operation. The results of the tests shall be compared with results of earlier test completed under comparable conditions.</p>	X	
GW-QUAL-38	<p>Leak Detection and Monitoring CMV shall notify the RWQCB within 7 days if fluid is detected in a previously dry LCRS or unsaturated zone monitoring system or if a progressive increase is detected in the volume of fluid in an LCRS th exceeds the previously observed range of volumes for that location or exceeds the Leakage Rate specified in the MRP.</p>	X	
GW-QUAL-39	<p>Leak Detection and Monitoring CMV shall maintain sufficient freeboard in Group B mining units to accommodate seasonal precipitation and to contain a 24-hour, 100-year storm event but in no case no less than 2 feet of freeboard (measured vertically).</p>	X	
GW-QUAL-40	<p>Leak Detection and Monitoring Any direct-line discharge to Group B mining units shall have fail-safe equipment or operating procedures to prevent overflowing. Discharges shall be stopped in the event of any containment system failure that causes a threat to water quality.</p>	X	
GW-QUAL-41	<p>Leak Detection and Monitoring All visible portions of synthetic liners shall be inspected weekly until all free liquid is removed from the Group B mining unit as part of closure. If, during the active life of the impoundment, the wastes are removed and the bottom of the impoundment is cleaned down to the liner, an inspection shall be made of the bottom of the liner prior to refilling of the impoundment.</p>	X	

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GW-QUAL-42	Leak Detection and Monitoring LCRS maintenance and repair plans shall be submitted to the RWQCB in advance of any work. Group B mining unit repair plans and liner Construction Quality Assurance (CQA) Plans shall be developed and stamped by a licensed professional experienced in this type of work.	X	
GW-QUAL-43	Leak Detection and Monitoring Within the heap leach pad, the Discharger shall maintain devices installed in the ore piles that measure solution depth (hydraulic head) within each ore pile over the liner.	X	
GW-QUAL-44	Waste Discharge Cyanide solutions shall be contained only in the heap leach pad, solution conveyance system, tank pond, event pond, and/or other leakproof containers.	X	
GW-QUAL-45	Waste Discharge CMV shall prohibit wind transport of cyanide solution or ore containing cyanide away from the heap leach pad area.	X	
GW-QUAL-46	Waste Discharge Standby emergency facilities shall be available to ensure continual circulation of the leaching solution if a planned processing configuration or rate could, in an emergency, result in a flow in excess of existing Event Pond capacity.	X	
GW-QUAL-47	Mining Unit Specifications Construction shall be performed in accordance with a CQA Plan that complies with 27 CCR Section 20324 and is prepared by a California Registered Civil Engineer or Certified Engineering Geologist.	X	
GW-QUAL-48	Mining Unit Specifications The CQA Program, including all relevant aspects of construction quality control, shall provide evidence that materials and procedures used in the placement of the any containment feature at any mining unit will be tested and monitored to ensure the structure is constructed in accordance with the design specifications approved by the RWQCB.	X	
GW-QUAL-49	Reporting Preconstruction Notice. At least 60 days prior to the commencement of construction of each phase/component of CMM, the Discharger shall submit a technical report to the RWQCB for approval by the Executive Officer, which shall include a plan showing in detail the proposed construction of that phase/component. Any portion of the 60-day requirement may be waived in writing by the Executive Officer at the request of the Discharger.	X	
GW-QUAL-50	Reporting Pre-Operations Notification. At least 10 days prior to commencement of operations at any new component or at least 20 days prior to loading ore onto any new heap leach pad phase, the Discharger shall submit a certificate to the RWQCB signed by a California Registered Civil Engineer or Certified Engineering Geologist stating that the pads, containment basins, leakage detection system, flood protection and attendant facilities, and/or disposal areas are constructed in accordance with the respective technical report, as approved by the Executive Officer to meet the requirements of this Order.	X	

ACEPM #	ACEPM Description	Mine Plan of Operation	Plan of Development
GW-QUAL-51	<p>Reporting CQA Final Report. Within 90 days of the completion of construction, the Discharger shall submit a final CQA report documenting the construction process and containing the quality assurance documentation described in the Report of Waste Discharge and required by 27 CCR Section 20324(d).</p>	X	
GW-QUAL-52	<p>Reporting For all mining units in a corrective action program to address a release from the unit, the Discharger shall implement all corrective measures necessary to remediate the release and to ensure that the Discharger achieves compliance with the Water Quality Protection Standard (as defined in the MRP) adopted for that unit. To show cleanup of all water-bearing media affected by the release, the Discharger shall complete the demonstration required under 27 CCR Section 20430(g).</p>	X	
GW-QUAL-53	<p>Reporting The cessation of any corrective action measure (e.g., leachate and groundwater extraction) is prohibited without written approval from the RWQCB Executive Officer. If routine maintenance or a breakdown results in cessation of corrective action for greater than 24 hours, the Discharger shall notify RWQCB staff.</p>	X	
GW-QUAL-54	<p>Monitoring CMV shall implement MRP R7-2020-0004 and any revisions thereto to detect at the earliest opportunity unauthorized discharges of waste constituents from CMM, or any impairment of beneficial uses that result from discharges of waste to CMM. CMV shall report the results of all on-site monitoring in accordance with MRP R7-2020-0004 and revisions thereto.</p>	X	
GW-QUAL-55	<p>Monitoring Pursuant to 27 CCR Section 22500, the Discharger shall conduct a water quality monitoring and response program in accordance with MRP R7-2020-0004 and any future amendments thereto, including:</p> <ul style="list-style-type: none"> a. Detection Monitoring. The Discharger shall institute a detection monitoring program pursuant to 27 CCR Title 27 Section 20420. b. Evaluation Monitoring. The Discharger shall institute an evaluation monitoring program under 27 CCR Title 27 Section 20425. c. Corrective Action Monitoring. The Discharger shall institute a corrective action program under 27 CCR Title 27 20430 when the RWQCB determines that the assessment of the nature and extent of the release and the design of a corrective action program have been satisfactorily completed. 	X	
GW-QUAL-56	<p>Monitoring <i>Sample Collection and Analysis Plan.</i> Within 90 days of the adoption of these WDRs, the Discharger shall submit to the RWQCB for review and approval a comprehensive Sample Collection and Analysis Plan that shall describe in detail the methods to be used to perform all monitoring activities for all on-site features.</p>	X	

ACEPM #	ACEPM Description	Mine Plan of Operation	Plan of Development
GW-QUAL-57	<p>Monitoring <u>Groundwater Monitoring Network Work Plan</u>. Within 90 days of the adoption of this Order, the Discharger shall submit to the RWQCB's Executive Officer for review and approval a work plan describing how many new wells are needed to properly monitor groundwater at CMM in compliance with 27 CCR Section 20415 and propose a time schedule, location(s), and methods of installation for the new monitoring well(s). Within 30 days of approval of the work plan by the Executive Officer, the Discharger shall begin implementation of the work plan in accordance with the time schedule. The time schedule for implementation shall not exceed 12 months. The Discharger shall not begin discharging the cyanide leach solution to any Group B mining units until an approved groundwater monitoring network is in place.</p>	X	
GW-QUAL-58	<p>Monitoring <u>Unsaturated Zone Monitoring Work Plan</u>. Within 90 days of the adoption of this Order, the Discharger shall submit to the RWQCB for review and approval a work plan for installing unsaturated/vadose zone monitoring systems under the Group B mining units that meet the requirements of 27 CCR Section 20415.</p>	X	
GROUNDWATER QUANTITY: Covered under SBC CUP (1997), BLM ROD (1998), and pending MPO (Appendix J) and POD (Appendix K)			
GW-QUANT-1	<p>Project water requirements shall be minimized by the following operational procedures: a. Crushing the ore to reduce leaching time so that less water will be circulated and evaporation will be reduced.</p>	X	
GW-QUANT-2	b. Employing drip irrigation to distribute solution directly to the heap leach surfaces.	X	
GW-QUANT-3	Groundwater extraction shall be recorded at each well with flowmeters.	X	
GW-QUANT-4	If any existing wells in Lanfair Valley within 10 miles of the WWF go dry as a result of CMM operations, the Applicant shall pay the costs to have these wells deepened or shall provide replacement water to the Applicant of the affected wells.	X	
GW-QUANT-5	If any existing wells in the Ivanpah Valley within 1 mile of the Nipton wells go dry as a result of the CMM operations, the Applicant shall pay the costs to have these wells deepened or shall provide replacement water to the owner of the affected wells.	X	
GW-QUANT-6	The Applicant shall comply with an approved groundwater monitoring and contingency plan. It defines monitoring locations, frequency, and contingency thresholds and actions to be taken if modeled impacts exceed established thresholds due to groundwater pumping or pit dewatering at the CMM.	X	

Notes:

- * San Bernardino County (SBC). 1997. Condition Use Permit. (SBC CUP [1997]).
- † Bureau of Land Management (BLM). 1998. Record of Decision. (BLM ROD [1998]).
- ‡ Regional Water Quality Control Board (RWQCB) Waste Discharge Requirements (WDRs).
- ¶ California Accidental Release Prevention Program (CalARP) Risk Management Plan.
- # California Department of Fish and Wildlife (CDFW). Incidental Take Permit for desert tortoise.
- ** U.S. Fish and Wildlife Service (USFWS). Biological Opinion. (USFWS BO).
- †† Bureau of Land Management (BLM). 2020. DR. (BLM DR [2020]).
- ‡‡ Desert Tortoise Council (1996).