

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
COLORADO RIVER BASIN REGION

ORDER R7-2014-0032

WASTE DISCHARGE REQUIREMENTS AND  
MONITORING AND REPORTING PROGRAM  
FOR  
WESTERN MESQUITE MINES, INC., OWNER/OPERATOR  
MESQUITE MINE

Northeast of Glamis - Imperial County

The California Regional Water Quality Control Board, Colorado River Basin Region (Colorado River Basin Water Board), finds that:

1. Western Mesquite Mines, Inc., 6502 East Highway 78, Brawley, California, 92227 (Discharger), is the owner and operator of the Mesquite Mine, 6502 East Highway 78, Brawley, California 92227 (Facility). The Discharger submitted to the Colorado River Basin Water Board a Report of Waste Discharge (ROWD) and an application for Waste Discharge Requirements (WDRs) including a Form 200, both dated January 20, 2014.
2. The Facility's location is shown in Attachment A, incorporated herein and made part of this Board Order by reference. The facility is located on portions of sixty-nine different Imperial County assessor's parcels. The mine's property boundary map is shown relative to the parcels in Attachment B, incorporated herein and made part of this Board Order by reference.
3. The only land uses within 1,000 feet of the Facility include the Los Angeles County Sanitation District #2 (LACDS) landfill and undeveloped public lands.
4. The Discharger is expected to process up to 25 million tons of ore per year from 65 million tons of total mine production: the ore is processed on approximately 438 acres of active and under construction Heap Leach facilities through the related carbon adsorption processing facilities shown on Attachment C, incorporated herein and made part of this Board Order by reference.

**Definitions**

5. The following terms used in this Order are as defined:
  - a. Discharger - Any person who discharges waste that could affect the quality of the waters of the state, and includes any person who owns a waste management unit or who is responsible for the operation of the waste management unit (Title 27, California Code of Regulations).
  - b. Waste Management Facility - The entire parcel of property at which waste discharge operations are conducted.

- c. Waste Management Unit (WMU) - An area of land, or a portion of Waste Management Facility at which waste is or was discharged. The term includes containment features, ancillary features for precipitation and drainage control and monitoring.
  - d. Heap Leaching- An industrial mining process to extract precious metals from ore via a series of chemical reactions that dissolve specific minerals to disassociate them from other earth materials.
  - e. Pregnant Solution - A dilute cyanide solution containing dissolved precious metals generated from heap leaching.
  - f. Barren Solution- A dilute cyanide solution used to dissolve precious metals in the heap leaching process.
  - g. Closed System - A system of fluid management where no fluid discharges off site. All fluid is collected, processed and recycled within the system. The only losses are to evaporation.
  - h. Open Pits- pits excavated to extract ore from the earth for processing.
  - i. Waste Rock Storage Areas - areas where rock or minerals with no commercial value are stored.
  - j. Heap Leach - the lined areas where the precious metals are extracted from the ore using a sodium cyanide solution.
  - k. Ancillary Facilities- other infrastructure to support the mining operation.
  - l. Electrowinning- also called electroextraction, is the electrodeposition of metals from their ores that have been put in solution via a process commonly referred to as leaching.
6. The WMUs are currently regulated by WDRs found in Board Order 95-016, adopted on March 29, 1995. This Board Order updates Board Order 95-016 to incorporate the laws and regulations as set forth in the California Water Code and combined State Water Resources Control Board (SWRCB)/ California Department of Resources Recycling and Recovery (CalRecycle) Regulations, Division 2, Title 27 (hereinafter referred to as Title 27) and federal regulations under Subtitle D of the Resource Conservation and Recovery Act (RCRA) (42 U.S.C. § 6901 et seq.).
7. The Facility contains the following waste management units (WMUs):
- a. Heap Pads 1-4, a 292.4-acre heap leach from which drain-down solution is being recovered (no new solution being added). This Order updates existing Order 95-016 related to these Heaps.
  - b. The Vista Heap, a closed 78.2 acre heap leach. This Board Order updates existing Board Order 95-016 related to this Heap.
  - c. Heap Pads 5-6, a 398.3 acre heap leach up to 300 feet in height. This Board Order updates existing Board Order 95-016 related to these Heaps.

- d. Heap Pad 7, a new 39.7 acre heap leach expansion to be constructed in 2014-2015 which extends on top of the historic Pads 1-4 and rises to a total height of 300 feet, matching the height of Pads 5 & 6. This Board Order updates existing Board Order 95-016, adding this Heap expansion.
- e. The active process Ponds covering 3.12 acres each of which serves a specific purpose for the containment or emergency management of cyanide solution. This Board Order updated existing Board Order 95-016 related to these Ponds.
- f. Solution conveyance pipelines and secondary containment ditches, and process facilities including the Carbon-in-Column and Gold Plant buildings.

### **Process Description**

8. The gold-bearing ore that is leached consists of a combination of oxide ore and non-oxide ore and is processed according to the following operations:
  - a. Heap leaching.
  - b. Carbon adsorption.
  - c. Desorption and gold recovery.
  - d. Reagents and utilities.
  - e. Water supply services.
9. The mining process involves the following steps:
  - a. Run-of-mine ore is delivered to the heap leach pad from the open pits in mine trucks. Lime is added to the ore for pH control before being dumped onto the pad. Both the oxide ore and the non-oxide ore are leached with a dilute cyanide solution on the leach pad.
  - b. Pregnant solution is collected in a series of flume boxes with the option to send solution to ponds or the pregnant solution sump. From the pregnant solution sump, the gold bearing solution is pumped to the adsorption plant, comprising a set of carbon in columns (CIC's), where the gold is removed from the solution using activated carbon.
  - c. Solution that discharges from the last column overflows to the barren sump where liquid sodium cyanide, fresh makeup water, liquid caustic and antiscalant are added, as necessary, to make up fresh leach solution, which is returned to the leach pad for additional leaching of the ore.
  - d. Loaded carbon from the CIC circuit is transported to the desorption circuit located at the existing gold plant via trailer. There it is stripped in a conventional pressure strip circuit. Electrowinning cells are used to recover gold precipitate. The precipitate is dried and then placed in a high temperature induction furnace to produce a gold ore.
  - e. Caustic soda, liquid sodium cyanide, antiscalent, acetic acid and lime is received in bulk quantities and stored in tanks or bins. Appropriate storage and containment facilities are provided for all of the reagents and all acids are stored separately from all cyanide mixing and distribution areas.

- f. The processing circuits are designed to contain the water associated with normal precipitation events. The storm water ponds are designed to contain the excess water from an extreme event, such as a 24-hour, 100-year storm.
10. Process solution is transported in closed pipe lines located within impermeable-lined ditches (secondary containment) to processing facilities.
11. The ore piles to be leached are underlain by a lining system designed to be effective throughout the processing life of each pile or segment. The process facility design includes specification and regulation of:
  - a. The size of the ore particles in the initial lift, against the liner;
  - b. Maximum pile height;
  - c. Subgrade preparation and/or overliner procedures; and
  - d. Provisions for controlling the hydraulic head of the solution on the liner.

### **Expansion of Pad 7**

12. Pad 7 will extend over the area currently occupied by Pads 1-4 as well as the small "slot" infill area between Pads 1-4 and Pads 5-6 to a maximum height of 300 feet, effectively consolidating these separate leach pad facilities into a single facility.
13. Pad 7 will be constructed with a double liner consisting of two synthetic geomembrane liners with a leak detection system between the liners, laid over a liner bedding fill. An equivalency analysis comparison with the prescriptive liner was completed and submitted to the Board on November 14, 2012.
14. The Board issued a letter approving the Pad 7 expansion in December 4, 2012.
15. The lined leach pad, collection ditches, and event ponds will provide full containment of operational solutions and the design storm event. Leach solution and application flows to and from the proposed pad will use a new leachate collection piping system, including new piping to direct flows from the existing Pad 6 collection system ditch to the existing CIC plant. The existing Pad 1-4 liner and leachate collection system will be utilized as a Leak Detection System integrated with a new leachate collection and recovery system (LCRS) in the slot area between Pads 1-4 and Pads 5-6.
16. The ore that will be placed on the leach pad will be classified as Group B mining waste as described in the California Code of Regulations (CCR), Title 27, Section 22480(b)(2).

### **Description of Discharge**

17. No waste discharge is planned for the WMUs. All fluids are contained within a Closed System.
18. The discharge from the entire site consists of natural surface runoff from surfaces and materials that are not anticipated to adversely affect water quality in a significant manner.
19. Within the Closed System and upon completion of the heap leach process, each pile or segment would be flushed with fresh water or otherwise treated after completion of leaching operations to reduce cyanide concentrations to an acceptable level which would result in a

mining waste classification of Group C, as defined in CCR, Title 27, Section 22480(b)(3). The pile would then be removed or otherwise closed in accordance with the Closure Plan in force at that time for the facility.

20. Surface drainage from the WMU will remain within the Closed System. It is controlled and directed via lined installations such as berms, ditches, and culverts to lined collection ponds.
21. Overburden soil and rock, and waste rock from the mining operations, are being deposited in piles surrounding the mining pits or as backfill within the pits.

## **Hydrogeology**

22. The processing facilities are located in an area underlain by bedrock with low potential for water supply. The static depth to the limited ground water is approximately 200 feet below ground surface. The industrial water supply for this project is derived from three deep wells drilled into the alluvium, approximately three miles southeast of the processing facilities. The beginning of the alluvium basin, known as the Amos-Ogilby Hydrologic Unit, is estimated to be about one mile from the maximum limits of the processing facilities. Potable water at the mine is obtained by treating the local ground water with a reverse osmosis method to reduce naturally high constituents to acceptable drinking water standards. Ground water quality in the project area is sodium chloride in character with a total dissolved solids (TDS) concentration of approximately 1,700 mg/L. This 1,700 mg/L is the average TDS value of samples taken from four ground water monitoring wells at the processing site prior to commencement of heap leach operations.
23. The facility is located within the Salton Sea drainage basin. This is a closed hydrological basin which encompasses the Imperial, Coachella, and Mexicali valleys, each of which drains into the Salton Sea. Surface drainage from the Mesquite Mine area is further closed because of the relatively small drainages that traverse the site drain toward the Sand Hills. There, the infrequent surface flows infiltrate into the ground or evaporate. The regional drainage channels originate in the Chocolate Mountains immediately north of the mine, and drain to the southwest. They are normally dry, carrying flow only during infrequent precipitation events. Since there are no surface waters other than temporary pooling, which occurs during a few occasional periods of precipitation each year, available water in the vicinity of the project site consists solely of ground water.
24. The area overlies a minor sub-basin in which low permeability basement rock and conglomerate bedrock are present at shallow depths. Only minor amounts of groundwater are found. Lack of an on-site aquifer required the mine to develop a groundwater source for production purposes outside of the sub-basin, approximately 3 miles south of the mine area. Ground water beneath the Mesquite Mine ranges in depth from 180 to 250 feet. On-site pump tests and in-place permeability testing indicate permeabilities on the order of  $10^{-4}$  cm/sec. to  $10^{-6}$  cm/sec. for basement rock.

## **Geology**

25. The Facility lies at the southern end of the Chocolate Mountains at an elevation between 600 and 1000 feet. The site is located on the alluvium-veneered pediment slope that descends west-southwest from the base of the Chocolate Mountains. Formations exposed within the Chocolate Mountains include igneous and metamorphic crystalline basement rocks consisting of Precambrian through Mesozoic age gneiss, schist and granitics overlain

by Tertiary through Quaternary age volcanic and non-marine sedimentary rocks exposed along both flanks of the mountains. The Bear Canyon conglomerate, which lies beneath the site, has been described as consisting of poorly to well stratified conglomerate, sandstone, silty sandstone, sandy siltstone, siltstone, sandy claystone and claystone and occurs overlying basement rock, on the tops of low hills, and underlying alluvium. The basement rock is an igneous and metamorphic basement complex consisting of gneisses, schist, and granitics of Precambrian through Mesozoic age.

26. The following geological units are located beneath the site:

- a. Artificial Fill
- b. Mine Run Material
- c. Young Alluvium
- d. Intermediate-Age Alluvium
- e. Old Alluvium

27. The artificial fill is comprised mostly of granular materials generated from mining activities used for berms, road fill, and other miscellaneous uses. The mine run material includes the ore stacked on the various heap leach pads.

28. Two prominent fault sets have been mapped on surface, and were identified in mineral exploration drilling and in the Mesquite Mine pits. A fault of Oligocene age trends northwest to north and a fault set that "reportedly cut middle Miocene and Pliocene rocks as well as the older northwest to north trending faults" trends in the northeast direction. These faults are left lateral, oblique slip faults. Faulting present in the area of the Leach Pads is considered inactive.

### **Climate**

29. The climate at Mesquite is typically arid with high temperatures (100 to 120 °F) in the summer and moderate temperatures in the winter, generally 70 to 80 °F and rarely below 32 °F. Average precipitation at the property is less than 3 inches per year. The annual evaporation (estimated at more than 100 inches) greatly exceeds the precipitation on an average annual basis.

30. The wind direction in the immediate vicinity of the Facility follows two general patterns:

- a. Seasonally from fall through spring, prevailing winds are from the west and northwest. Most of these winds originate in the Los Angeles basin area. Humidity is lowest under these conditions.
- b. Summer weather patterns are often dominated by an intense, heat-induced low pressure area that forms over the interior deserts, drawing air from south of the Facility; humidity is highest under these "monsoon" conditions.

### **Groundwater**

31. The Water Quality Control Plan for the Colorado River Basin Region of California (Basin Plan), which was adopted on November 17, 1993, and amended on November 16, 2012, designates the beneficial uses of ground and surface waters in this Region.

32. Mesquite Mine is located in the Amos-Ogilby Hydrologic Unit. The beneficial use of ground waters in the Amos-Ogilby Hydrologic Unit is:
- a. Municipal Supply (MUN)
33. State Water Resources Control Board (State Water Board) Resolution 68-16 ("Policy with Respect to Maintaining High Quality Waters of the State") (hereinafter Resolution 68-16) requires a Colorado River Basin Water Board in regulating the discharge of waste to maintain high quality waters of the State (i.e., background water quality) until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than as described in plans and policies (e.g., violation of any water quality objective). Moreover, the discharge is required to meet WDRs that result in the best practicable treatment or control (BPTC) of the discharge necessary to assure pollution or nuisance will not occur, and highest water quality consistent with maximum benefit to the people will be maintained.

#### **NEPA/CEQA**

34. The U.S. Department of the Interior, Bureau of Land Management (BLM), and the County of Imperial, acting as the Lead Agencies under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.), respectively, prepared a joint Environmental Impact Statement (EIS)/Environmental Impact Report (EIR) for the Mesquite Mine Expansion project. On March 1, 2002, prior to approving the project, the County of Imperial certified that the final EIR prepared for the proposed project was completed in compliance with CEQA; the final EIR was presented to the Imperial County Board of Supervisors, and that decision-making body reviewed and considered the information contained in the final EIR prior to approving the project; and the final EIR reflects the County's independent judgment and analysis. On March 27, 2002, the County filed a Notice of Determination (NOD) that the project, as approved, will have a significant effect on the environment, but that those impacts were mitigated through approved project changes to eliminate them or reduce them to less than significant levels, where feasible. In addition, on July 16, 2002, the BLM filed a Record of Decision to approve the project. As a Responsible Agency under CEQA, the Colorado River Basin Water Board has considered the EIS/EIR and the potentially significant impacts to water quality identified and mitigated by the BLM and County of Imperial. Since the date of the NOD (2002), Colorado River Basin Water Board staff has determined no water quality impacts associated with the Mesquite Mine have occurred. Finally, Board staff has concluded that the currently proposed expansion project falls within the scope of the environmental review conducted. Therefore, the Board has determined that the Discharger's compliance with the mitigation measures will avoid or reduce to less than significant levels any impacts to water quality associated with the proposed expansion project.

#### **Imperial County Permits**

35. On February 21, 2013, the Imperial County Planning and Development Services Department approved the engineering design for Pad 7, which is described in Conditional Use Permit #09-0020. The Conditional Use Permit was most recently amended prior to this approval on November 4, 2010.

#### **Monitoring Plan**

36. The monitoring and reporting requirements in Monitoring and Reporting Program R7-2014-0032, incorporated herein and made a part of this Board Order by reference, are necessary to determine compliance with these WDR's. The State Water Resource Control Board's electronic database, GeoTracker Information Systems, facilitates the submittal and review of monitoring and reporting.

### **Financial Assurance**

37. The Discharger has submitted to the Colorado River Basin Water Board evidence of Financial Assurance for Closure and Post-Closure Maintenance, commencing with Sections 22207 and 22212 of Title 27, CCR, respectively.

### **Notifications**

38. The Colorado River Basin Water Board has notified the Discharger and all known interested agencies and persons of its intent to update Waste Discharge Requirements for this discharge and has provided them with an opportunity for a public meeting and an opportunity to submit comments.
39. The Colorado River Basin Water Board, in a public meeting, heard and considered all comments pertaining to this discharge.

### **Clean Water Policy**

40. It is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This order promotes that policy by requiring discharges to meet maximum contaminant levels designed to protect human health and ensure that water is safe for domestic use.

**IT IS HEREBY ORDERED** that Board Order 95-016 be rescinded, except for enforcement purposes, and in order to meet the provisions contained in Division 7 of the California Water Code, RCRA Subtitle D and regulations adopted thereunder, and the provisions of the Federal Clean Water Act and regulations adopted thereunder, the Discharger shall comply with the following requirements regarding the discharge of waste.

### **A. Prohibitions**

1. The discharge of waste to land not owned and controlled by the Discharger is prohibited.
2. The Discharger shall neither cause nor contribute to the following conditions:
  - a. Contamination or pollution of ground water via the release of waste constituents in either the liquid or gaseous phase.
  - b. Increase in the concentration of waste constituents in soil-pore gas, soil-pore liquid, soil or other geologic material outside of the WMU, if such waste constituents could



migrate to waters of the state, in either liquid or gaseous phase, and cause contamination, pollution, or nuisance.

3. The discharge of waste to surface water, surface water drainage courses, or to ground water is prohibited.
4. The discharge or deposit of wastes that could cause erosion or decay, or otherwise reduce or impair the integrity of containment structures is prohibited.
5. Odors, vectors and other nuisances of waste origin beyond the Facility boundary are prohibited.

**B. Specifications**

1. The treatment or disposal of wastes at this WMU shall not cause pollution or nuisance as defined in Sections 13050(l) and 13050(m) of Division 7 of the California Water Code.
2. The cyanide solutions shall be contained only in the processing system and in other leak-proof double-lined containers.
3. Each process solution or waste-containing structure or features at the mine shall be constructed in accordance with designs prepared by a civil engineer or a certified engineering geologist appropriately licensed by the State of California.
4. The processing area(s) shall be protected from any run-on, washout, or erosion, which could occur as a result of a storm having a predicted frequency of once in 100 years.
5. The heap leach processing area(s) shall be diked and containment basins shall be provided to impound all storm water drainage from the piles and from the cyanide solution collection and transport facilities during a maximum probable one-hour storm, as set forth in the Department of Water Resources Bulletin No. 195 for the average of El Centro, California and Yuma, Arizona. In addition, containment capacity shall be provided for 24 hours of cyanide solution drainage from the piles. Also, standby emergency facilities shall be available to assure continual circulation of the leaching solution if at any time it is determined that a planned processing configuration or rate could, in an emergency, result in a flow in excess of existing basin storage capacity.
6. The containment basins shall provide at least two feet of freeboard. Transport ditches at the downgradient perimeter of the process area shall be designed to hold flows that include a 100-year storm frequency runoff from the maximum probable one-hour storm event and at least two feet of freeboard.
7. There shall be no discharge of process wastewater at any location without prior approval from the Colorado River Basin Water Board's Executive Officer.
8. All drainage and collection facilities used to contain or transport leaching solution shall be effectively sealed to prevent leakage of these liquids.
9. Leached, or residual, ore, and any other "waste" material impacted by process solution, shall not be placed in perennial, intermittent, or ephemeral stream channels unless provision

is made to divert runoff around the waste in a non-erosive manner. Waste shall not be placed where it can be eroded by stream flows or cause accelerated stream bank erosion.

10. Prior to the removal of leached or residual ore from a lined pad for disposal, the cyanide contained therein shall be neutralized as described in Specification B.15, below.
11. Leached or residual ore may be abandoned on a pad, provided the cyanide in the ore is neutralized as described in Specification B.15, below, and all other necessary and applicable closure requirements are complied with.
12. All industrial waste materials not covered by CCR, Title 27, Section 22480(b)(3) shall be discharged at a WMU approved by the Colorado River Basin Water Board's Executive Officer for accepting such waste.
13. Adequate measures shall be taken to assure that unauthorized persons are effectively prohibited from entering from the processing areas.
14. When abandoning leached or residual ore, the procedure for determining whether free cyanide (CN) has been neutralized to a satisfactory level shall be as follows:
  - a. A sampling grid for the ore pile or segment on the leach pad shall be submitted for approval by the Colorado River Basin Water Board's Executive Officer. The sampling grid shall contain a total of at least ten sampling locations on the ore pile or segment being abandoned.
  - b. The samples to be analyzed from each location shall contain 100 grams, and:
    - i. No sample shall be taken within three feet above the plastic liner unless special provisions are made to avoid penetrating the liner or for sealing said penetrations.
    - ii. An ore pile thirty feet or less in depth shall have samples taken at 25, 50, and 75 percent of the depth.
    - iii. An ore pile greater than thirty feet in depth shall have samples taken every ten feet of depth.
  - c. The sample analysis procedure shall be per current approved analytical methods by a California certified lab.
  - d. The maximum allowable free cyanide shall not exceed the following levels in the filtrate portion of a 5:1 extraction.
    - i. Ninety percent of at least 10 samples shall contain less than 1 mg/L free cyanide in the filtrate.
    - ii. None of the samples shall contain more than 2 mg/L free cyanide in the filtrate.
  - e. For any sampling location that indicates a free cyanide level in excess of 2 mg/L in the filtrate, the areal extent of the inadequately detoxified area shall be determined and

detrified so that the cyanide levels in that particular area will comply with the limitations contained herein.

15. Adjacent and contiguous ore piles or segments shall also be sampled simultaneously when any pile or segment is to be abandoned. If any additional processing is done in the sampled areas, the piles and segments tested will require additional treatment and testing prior to abandonment.

### **C. Provisions**

1. The Discharger shall comply with Monitoring and Reporting Program (MRP) R7-2014-0032, described in Part II of the MRP, and future revisions thereto, as specified by the Colorado River Basin Water Board's Executive Officer.
2. Prior to any modification in this facility which would result in material change in the quality or quantity of wastewater treated or discharged, or any material change in the location of discharge, the discharge shall report all pertinent information in writing to the Colorado River Basin Water Board and obtain revised requirements before any modifications are implemented.
3. Prior to any change in ownership or management of this operation, the Discharger shall transmit a copy of this Order to the succeeding owner/operator, and forward a copy of this transmittal letter to the Colorado River Basin Water Board.
4. The Discharger shall ensure that all site operations personnel are familiar with the content of this Order, and shall maintain a copy of this Order at the site.
5. This Order does not authorize violation of any federal, state, or local laws or regulations.
6. The Discharger shall allow the Colorado River Basin Water Board, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:
  - a. Enter upon the premises regulated by this Order, or the place where records must be kept under the conditions of this order;
  - b. Have access to and copy, at reasonable times, any records that shall be kept under the conditions of this Order;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
  - d. sample or monitor at reasonable times, for the purpose of assuring compliance with this Order or as otherwise authorized by the California Water Code, any substances or parameters at this location.
7. The Discharger shall comply with all of the conditions of this Board Order. Any noncompliance with this Board Order constitutes a violation of the Porter-Cologne Water Quality Control Act and is grounds for enforcement action.

8. The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurances procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order.
9. This Board Order does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.
10. The Discharger shall comply with the following:
  - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
  - b. The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least 5 years from the date of sampling, measurement, reports or application. This period may be extended by request of the Colorado River Basin Water Board's Executive Officer at any time.
  - c. Records of monitoring information shall include:
    - i. The date, exact place, and time of the sampling or measurements.
    - ii. The individual(s) who performed the sampling or measurements.
    - iii. The date(s) analyses were performed.
    - iv. The individual(s) who performed the analyses.
    - v. The results of such analyses.
  - d. Monitoring must be conducted according to test procedures under 40 CFR Part 136, unless test procedures have been specified in this Order.
11. All regulated disposal systems shall be readily accessible for sampling and inspection.
12. The Discharger is the responsible party for the waste discharge requirements, and the monitoring and reporting program for the facility. The Discharger shall comply with all conditions of these waste discharge requirements. Violations may result in enforcement actions, including Colorado River Basin Water Board Orders or court orders, requiring corrective action or imposing civil monetary liability, or in modification or revocation of these waste discharge requirements by the Colorado River Basin Water Board.
13. The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances), which are installed or used by the Discharger to achieve compliance with conditions of this Order.

14. The Discharger shall retain records of all monitoring information including all calibration and maintenance records, copies of all reports required by this Order, and records of all data used to complete the application for this Order. Records shall be maintained for a minimum of three years from the date of the sample, measurement, or report. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Colorado River Basin Water Board's Executive Officer.
15. The Discharger shall furnish, under penalty of perjury, technical monitoring program reports, and such reports shall be submitted according to Chapter 30, Division 3, Title 23 of the California Code of Regulations, as data uploads and in Portable Document Format (PDF) electronically over the internet into the State Water Board's GeoTracker database. Documents that are normally mailed by the Discharger, such as regulatory documents, submissions, materials, data, and correspondence, to the Colorado River Basin Water Board shall be converted to Portable Document Format (PDF) and emailed to RB7-wdrs\_paperless@waterboards.ca.gov. Documents that are 50 MB or larger should be transferred to a disk and mailed to the Colorado River Basin Water board office in Palm Desert. The Facility is identified in the GeoTracker by the global identification number L10002722293 and in the California Integrated Water Quality Systems (CWIQS) by waste discharge identification (WDID) No. 7A1321400003.
16. Pursuant to CCR, Title 27, section 21710(d), any report submitted in compliance with CCR, Title 27, and this Order, which proposes a design or design change that might affect containment features, erosion and drainage control systems or monitoring systems, shall be approved by a civil engineer or a certified engineering geologist appropriately licensed by the State of California. The Discharger shall provide documentation that plans and reports required under this M&RP are prepared by or under the direction of, appropriately qualified professionals. CCR, Title 27, sections 20324(b) and 21090(b)(1)(C); and the California Business and Professions Code sections 6735, 7835, and 7835.1 require that engineering and geologic evaluations and judgments be performed by or under the direction of licensed professionals. A statement of qualifications and license numbers of the responsible lead professionals shall be included in all plans and reports submitted by the Discharger. The lead professional shall sign and affix their license stamp to the report, plan or document.
17. The Discharger may be required to submit technical reports as directed by the Colorado River Basin Water Board's Executive Officer.
18. There shall be no discharge of process wastewater at any location without prior approval from the Colorado River Basin Water Board's Executive Officer.
19. The Discharger shall maintain a ground water monitoring well network and a vadose zone monitoring system, as approved by the Colorado River Basin Water Board's Executive Officer.
20. At least 60 days prior to commencement of construction of each component of the facility, the Discharger shall submit a technical report to the Colorado River Basin Water Board for approval by the Colorado River Basin Water Board's Executive Officer, which shall include a plan showing in detail the proposed construction of the component.

21. At least 10 days prior to commencement of operations of any new facility or major process feature, the Discharger shall submit a certificate to the Colorado River Basin Water Board, signed by a California Registered Civil Engineer or Certified Engineering Geologist, stating that the pads, containment basins, leakage detection systems, flood protection and attendant facilities, and disposal areas are constructed in accordance with the technical report approved by the Colorado River Basin Water Board's Executive Officer to meet the requirement of this Board Order.
22. At least 10 days prior to loading ore onto the pads, the Discharger shall notify the Colorado River Basin Water Board to allow sufficient time to schedule a staff evaluation of construction and inspection procedures utilized by the Discharger for liner installation.
23. The Discharger shall submit to the Colorado River Basin Water Board, at least 30 days prior to commencement of the herein stated expanded operations, written adequate financial assurances, as determined by the Colorado River Basin Water Board's Executive Officer, to demonstrate that the Discharger has sufficient financial means to ensure neutralization of all cyanide, plus cleanup and closure, and postclosure maintenance of the processing and tailings disposal site upon abandonment of facilities, in a manner that will not adversely affect water quality.
24. Lack of construction or operational activity on the site for a period of one year shall constitute abandonment for the purpose of this Board Order.
25. The procedures for preparing samples for analyses for free cyanide and extractable metals in the detoxified tailings shall be consistent with Monitoring and Reporting Program R7-2014-0032. The Monitoring Reports shall be certified to be true and correct, and signed, under penalty of perjury, by an authorized official of the Discharger.
26. Back-up emergency generators shall be provided to assure that process solution storage ponds never overflow.
27. Upon request from the Colorado River Basin Water Board's Executive Officer, the Discharger shall furnish special technical and/or monitoring reports on the treatment and discharge of wastes and on the integrity of the cyanide solution containment system.
28. In accordance with the financial assurance requirements set forth in Title 27, CCR, a closure bond in the amount of \$550,000 has been posted and submitted to the Colorado River Basin Water Board.

### **Certification**

I, Robert Perdue, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on May 8, 2014.

  
ROBERT PERDUE  
Executive Officer