

DISCHARGE PERMIT
Lordsburg Mining Company, DP-1651
Banner Mill Site
Approval Date

I. INTRODUCTION

The New Mexico Environment Department (NMED) issues this Discharge Permit, DP-1651 to Lordsburg Mining Company (LMC) pursuant to the New Mexico Water Quality Act (WQA), NMSA 1978 §§74-6-1 through 74-6-17, and the New Mexico Water Quality Control Commission (WQCC) Regulations, 20.6.2 NMAC.

NMED's purpose in issuing this Discharge Permit, and in imposing the requirements and conditions specified herein, is to control the discharge of water contaminants from the Banner Mill site into ground and surface water, so as to protect ground and surface water for present and potential future use as domestic and agricultural water supply and other uses and protect public health. In issuing this Discharge Permit, NMED has determined that the requirements of 20.6.2.3109.C NMAC have been met.

DP-1651 is briefly described as follows:

The Banner Mill and Tailings Impoundment facility (Banner Mill Site) is located approximately 4 ½ miles southwest of Lordsburg in Sections 14 and 23, T23S, R19W in Hidalgo County, New Mexico.

Up to 200,000 gallons per day (gpd) of tailings slurry may be discharged to the Tailings Impoundment where water is decanted and reused in the concentration circuit. Other facilities covered under this discharge permit are located within a 13.6 acre Mill Site. The permitted extents of the facilities are as follows:

- Tailings Impoundment – 4.8 acres in areal extent,
- Tailings Piles remaining from previous milling operations at the Banner Mill site. – 4.8 acres.
- New Mill Site Area covering 4 acres in areal extent which include the following:
 - One portable crusher
 - Three coarse ore stockpiles – approximately .15 acres each,
 - One fine ore stockpile - .15 acre,
 - One fine ore pad - .15 acre,
 - One Mill Site Stormwater Pond – 4 acre feet storage capacity,
 - One 400 ton/day floatation ore concentrator.

Quantity, Quality and Flow Characteristics of the Discharge:

The permitted discharges covered by this Discharge Permit include:

- Tailings slurry derived from the crushing, milling and floatation of the gold-bearing quartz ore. The crushed rock slurry generated within the ball mill provides input flow to the floatation concentrator. Four chemicals are introduced to tailings slurry in the floatation concentrator circuit. The chemicals are: soda ash (Na_2CO_2), potassium amyl xanthate ($\text{C}_5\text{H}_{11}\text{OCS}_2\text{K}$), 1-Hexanol ($\text{C}_6\text{H}_{14}\text{O}$) and sodium dialkyl dithiophosphate ($\text{C}_8\text{H}_{18}\text{O}_2\text{PS}_2\text{Na}$). Tailings slurry output from the floatation concentrator is discharged to the Tailings Impoundment where tailings are settled and waste water is recovered and recycled to the milling operation in a closed loop circuit. Preliminary analysis indicates the tailings slurry may exceed the ground water quality standards of Section 20.6.2.3103 NMAC for iron, manganese, phenols, sulfate and total dissolved solids (TDS), as well as having elevated levels of fluoride. The discharge rate of tailings slurry to the Tailings Impoundment shall not exceed 200,000 gallons per day (gpd).
- Impacted storm water derived from the three coarse ore stockpiles, the fine ore stockpile and/or the fine ore pad, all located within the mill site area. Stormwater coming in contact with ore material in the mill site area will flow to constructed stormwater ditches and conveyed to the Mill Site Pond located northwest of the main mill site area. The Mill Site Pond is synthetically lined with a 60 mil HDPE liner. The design capacity of the Mill Site Pond is 4 acre feet.
- Up to 1000 gpd of treated domestic waste water effluent derived from a sanitary waste water treatment unit that will be pumped into the Mill Site Pond.
- Leachate that may collect from seeps at the base of the coarse and fine ore stockpiles and tailings impoundment dam.

The Tailings Impoundment is lined with 60 mil HDPE liner designed to contain and prevent release of leachate to the vadose zone beneath the Tailings Impoundment. A leachate collection system is installed above the liner to allow dewatering of tailings following closure. Tailings slurry is discharged from a series of valved outlets positioned around the perimeter of the Tailings Impoundment. Excess water decants and forms a pond on the surface of the Tailings Impoundment (decantation pond). A floating pump located within the decantation pond pumps decant water to the Reclaim Water Tank. The amount of decant water collected from the Tailings Impoundment is dependent on discharges of tailings slurry produced at the floatation mill. Water from the reclaimed water tank is reused in the ore milling and floatation process.

Characteristics of Ground Water:

The depth to ground water below the site is approximately 793 feet below ground surface determined at the Banner Mine Shaft. Based on ground water samples collected from the Banner Mine Shaft, ground water has a total dissolved solid (TDS) concentration of approximately 1800 milligrams per liter (mg/l).

General:

Lordsburg Mining Company's Discharge Plan consists of the following:

- Discharge Permit Application submitted by LMC dated June, 2007 and received by NMED on June 14, 2007;
- Response to NMED-GWB Request for Additional Information, dated November 7, 2008;
- Lordsburg Mining Company – Banner Mill Site Operation – Application for New Unit Modification of Existing Mine Close Out Plan, Financial Assurance Proposal, submitted to the Mining and Minerals Division (MMD) of the New Mexico Energy Minerals and Natural Resources Department (EMNRD) on July 7, 2008,
- Lordsburg Mining Company – Banner Mill Tailings Impoundment – Application for New Unit Revision of Existing Mine Close Out Plan, Financial Assurance Proposal submitted to MMD on August 8, 2008,
- Letter dated November 19, 2008 from LMC responding to NMED's second request for additional information.
- Letter dated March 6, 2009 from LMC to MMD and NMED providing Consolidated, Amended Financial Assurance Estimate.

The discharge shall be managed in accordance with LMC's Discharge Plan as conditioned by this Discharge Permit.

Issuance of this Discharge Permit does not relieve LMC of its responsibility to comply with the WQA, WQCC Regulations, any other applicable federal, state and/or local laws and regulations, including zoning requirements and nuisance ordinances.

Pursuant to 20.6.2.3109.E NMAC, NMED reserves the right to modify permit requirements in the event NMED determines that the requirements of 20.6.2 NMAC are being or may be violated, or the standards of 20.6.2.3103 NMAC are being or may be violated. This may include a determination by NMED that operational practices approved under this Discharge Permit are not protective of ground and surface water quality, and that a modification is necessary to protect water quality and/or abate water pollution. Permit modification may include, but is not limited to, lining or relining impoundments, changing discharge locations, changing waste management practices, expanding monitoring requirements, implementing abatement of water pollution and/or recalculation of the amount of financial assurance.

II. FINDINGS

In issuing this Discharge Permit, NMED finds:

1. LMC is discharging or intends to discharge effluent or leachate from the Tailings Impoundment, the Mill Site Pond and the coarse and fine ore stockpile and fine ore pad so that such effluent or leachate may move directly or indirectly into ground water within the meaning of 20.6.2.3104 NMAC.

2. LMC is discharging or intends to discharge effluent or leachate from the Tailings Impoundment, the Mill Site Pond and the coarse and fine ore stockpiles and fine ore pad so that such effluent or leachate may move into ground water of the State of New Mexico which has an existing concentration of 10,000 mg/l or less of total dissolved solids within the meaning of 20.6.2.3101.A NMAC.
3. The discharges at the Banner Mill Site are not subject to any of the exemptions of 20.6.2.3105 NMAC.
4. The Banner Mill Site is located at a place of withdrawal for present or reasonably foreseeable future use within the meaning of the WQA, 1978 NMSA, §74-6-5(E)(3), and the WQCC Regulations at 20.6.2.3103 NMAC.

III. PERMIT CONDITIONS

The following conditions shall be complied with by LMC and are enforceable by NMED. LMC is permitted to discharge water contaminants subject to the following conditions.

OPERATIONS

1. LMC shall implement the following operational requirements set forth below in accordance with the WQCC Regulations at 20.6.2.3106.C and 3107 NMAC to ensure compliance with 20 NMAC, Chapter 6, Parts 1 and 2.

Tailings Impoundment and Ore Stockpile Limits

2. LMC shall not exceed the land surface areas projected for the planned extent of the initial Tailings Impoundment and Banner Mill Site as follows: One Tailings Impoundment not to exceed 4.8 acres in areal extent; three Coarse Ore Stockpiles not to exceed .15 acre each; one Fine Ore Stockpile not to exceed .15 acre and one Fine Ore Pad not to exceed .15 acre. In addition, the Tailings Impoundment shall not exceed its design limit of 4,655 feet above mean sea level. LMC shall submit to NMED a request for approval for a permit modification or amendment prior to expanding any facility beyond these limits. [20.6.2.3106.C and 3109 NMAC]
3. LMC shall not expand the Tailings Impoundment without obtaining from NMED an approved discharge permit modification. An application to modify the discharge permit should be submitted to NMED a minimum of 180 days prior to any planned expansion activities. The permit modification application must include a design and work plan for construction and a plan for closure. This may include adjustments of financial assurance as necessary. [20.6.2.3109 and 3107 NMAC]

Flow Description

4. LMC shall manage discharges as follows. [20.6.2.3109 NMAC]

- a. Tailings Impoundment: LMC is authorized to discharge up to 200,000 gpd of tailings slurry to the Tailings Impoundment. Water decanted from the tailings will be pumped via a floating pump back to the Reclaim Water Tank where it will be transferred back to the mill for use as process water.
- b. Chemical Reagents: LMC is authorized to introduce the following four promoters and/or collector chemical reagents into the froth flotation circuit: soda ash (Na_2CO_2), potassium amyl xanthate ($\text{C}_5\text{H}_{11}\text{OCS}_2\text{K}$), 1-Hexanol ($\text{C}_6\text{H}_{14}\text{O}$) and sodium dialkyl dithiophosphate ($\text{C}_8\text{H}_{18}\text{O}_2\text{PS}_2\text{Na}$). No other chemical reagents shall be added to the froth flotation circuit without prior notification and approval from NMED. A request to change the permitted reagents must be submitted to NMED a minimum, of 30 days prior to the proposed change.
- c. Tailings Impoundment Seeps: Any water that emanates from the foot of the tailings impoundment dam shall be collected and transferred, by pumping or other means, back to the Reclaim Water Tank where it will be returned to the mill for use as process water.
- d. Mill Site Seeps and Storm Flow: Any water that passes through the ore stockpiles and creates a seep at the toe or base of a waste rock pile, or water flowing across other ore handling areas within the mill site shall be routed to the Mill Site Pond.
- e. The discharge from the sanitary waste water treatment plant shall be pumped to the Mill Site Pond for evaporation and shall not exceed 1000 gpd.

Storm Water Management

5. LMC shall manage storm water as follows. [20.6.2.3109 NMAC]
 - a. Off-site storm water shall be routed around the Tailings Impoundment and Mill Site via the Initial Upper North Diversion channel, the Initial North Diversion channel and the Initial South Diversion channel.
 - b. The Tailings Impoundment shall be managed at all times to prevent overflows. Sufficient stormwater storage capacity shall be maintained within the Tailings Impoundment to store stormwater generated from a 100 year-24 hour storm within the area defined by the inside edge of the Initial North and South Diversion channels and the Tailings Impoundment Dam.
 - c. Storm water run-off from the Mill Site area including the coarse and fine ore stockpiles and fine ore pad will be routed to the Mill Site Pond.
 - d. Storm water diversion berms and dikes shall be maintained to adequately manage storm water run-on into units within the Mill Site and Tailings Impoundment facility.

6. LMC shall submit for NMED approval within 60 days of the date of issuance of this Discharge Permit an Emergency Response Plan (ERP) that addresses normal operation of the stormwater containment facilities and the operating plans following precipitation events. The ERP shall include inspection of the sediment level in the Mill Site Pond. If the sediment volume in the in the Mill Site Pond exceeds 33% of the designed storage capacity, LMC shall submit a proposal for removing accumulated sediment to maintain a Mill Site Pond storage capacity sufficient to hold the discharge from a 100-year, 24-hour storm event within the Mill Site Pond watershed. [20.6.2.3107 NMAC]

Tailings Impoundment Stability

7. Prior to discharging to the Tailings Impoundment, LMC shall insure that berms, storm water diversion channels and/or the dam structure of the Tailings Impoundment will have the capacity for such discharges while maintaining appropriate safety measures in accordance with the regulations of the Dam Safety Bureau of the Office of the State Engineer. [20.6.2.3107 NMAC]

MONITORING, REPORTING AND OTHER REQUIREMENTS

8. LMC shall conduct the following monitoring, reporting, and other requirements listed below. A summary of monitoring and sampling requirements is attached to this permit as Table 1 and Table 2. [20.6.2.3107 NMAC]

Sampling and Field Measurements

9. Ground Water Monitoring Well MW-1 and Banner Shaft #2 shall be sampled quarterly as follows. [20.6.2.3107 NMAC]
 - a. LMC shall sound the wells on a quarterly basis to determine if water is present. In the event water is present, LMC shall record the depth to the water and elevation above mean sea level to the nearest hundredth of a foot (0.01 ft) and measure and record field parameters listed in Condition 18a below.
 - b. If water is present, LMC shall collect samples from the wells and analyze for the water parameters listed in Conditions 18b and 18c below.
 - c. Analytical results shall be reported as required in Condition 20b below.
10. Surface water shall be sampled quarterly as follows. [20.6.2.3107]
 - a. LMC shall collect water samples once per quarter when surface water is present from of each the following outfall locations: the South Diversion Outfall, the North Diversion Outfall, and the Lower Mill Site Diversion Outfall. LMC shall analyze for the water parameters listed in Conditions 18a, 18b and 18c below.

- b. LMC shall collect water samples quarterly from the Tailings Impoundment Decantation Pond and analyze for the water parameters listed in Conditions 18a, 18b and 18c below.
- c. LMC shall collect water samples quarterly from the Mill Site Pond and analyzed for water parameters listed in Conditions 18a, 18b, 18c, 18d, and 18e below.

Analytical results for all surface water samples shall be reported as required in Condition 20b below.

- 11. Seeps: Any seeps originating from facilities including but not limited to the coarse and fine ore stockpiles, the fine ore pad, and the base of the Tailings Dam shall be sampled on a quarterly basis and analyzed for the parameters listed in Condition 18a, 18b and 18c below. All seep locations shall be reported on a site map and analytical results shall be reported as required in Condition 20f below. [20.6.2.3107 NMAC]
- 12. Production Water: LMC shall sample ground water produced from the Banner Mine No. 2 shaft quarterly and shall analyze for the parameters listed in 18a, 18b and 18c below. Analytical results shall be reported as required in Condition 20b below. [20.6.2.3107 NMAC]
- 13. Storm Water: LMC shall inspect on a monthly basis the Mill Site Pond, the Tailings Impoundment Dam, all dikes and stormwater diversions channels for the presence of storm water accumulations in excess of design capacities and erosion. Results of the inspections shall be reported quarterly as required in Condition 20a below. [20.6.2.3107 NMAC]
- 14. Flow Volumes:
 - a. LMC shall record the weekly volume of tailings slurry discharged to the Tailings Impoundment using a totalizing flow meter on the tailing discharge line and report volumes as required in Condition 20a below. [20.6.2.3109 NMAC]
 - b. LMC shall record the weekly volume of water produced from the Banner Mine No. 2 shaft using a totalizing flow meter and report volumes as required in Condition 20a below. [20.6.2.3109 NMAC]
 - c. LMC shall record the weekly volume of flows discharged from the sanitary waste water treatment system to the Mill Site Pond using a totalizing flow meter and report volumes as required in Condition 20a below. [20.6.2.3109 NMAC]
- 15. Tailings Discharge: LMC shall collect a tailings sample quarterly from an active tailings discharge location and analyze the solid fraction for whole rock analysis and acid-base accounting. Analytical results shall be reported as required in Condition 20b below.

16. Surface Water Elevations: A staff gage labeled with elevations indexed to a base site elevation monument shall be located in the Mill Site Pond and the Tailings Impoundment pond. Fluid surface elevations for each pond shall be recorded quarterly at the same time water samples, if any, are collected. LMC shall report water levels as required in Condition 20a below.
17. Meteorological Data – LMC shall measure total daily precipitation at the Banner Mill site and shall report the data as required in Condition 20a below. [20.6.2.3107 NMAC]

Analysis:

18. Samples of surface water and storm water shall be analyzed for total and dissolved concentrations of the analytes listed below. Samples of ground water, seeps and springs shall be analyzed for dissolved concentrations of the analytes listed [20.6.2.3107 NMAC]:
 - a. Field parameters (analysis to be performed in the field): pH and specific conductance.
 - b. Indicator parameters: field parameters in Condition 18a plus sulfate (SO₄), and total dissolved solids (TDS).
 - c. Comprehensive Inorganic parameters: aluminum, arsenic, cadmium, calcium, chloride, chromium, cobalt, copper, fluoride, iron, lead, manganese, nickel, potassium, sodium, selenium and zinc.
 - d. Organic parameters: Total Petroleum Hydrocarbons (TPH).
 - e. Total Kjeldahl Nitrogen (TKN) and Nitrate (NO₃ – N).

Methodology:

19. Unless otherwise approved in writing by NMED, LMC shall conduct sampling and analysis in accordance with the most recent edition of following documents:
 - a. American Public Health Association, Standard Methods for the Examination of Water and Wastewater.
 - b. U.S. Environmental Protection Agency, Methods for Chemical Analysis of Water and Waste.
 - c. U.S. Geological Survey, Techniques for Water Resource Investigations of the U.S. Geological Survey.

- d. American Society for Testing and Materials, Annual Book of ASTM Standards, Part 31. Water.
- e. U. S. Geological Survey, et al., National Handbook of Recommended Methods for Water Data Acquisition.
- f. Surface water monitoring must also be conducted according to test procedures approved under Title 40 Code of Federal Regulations Part 136. [20.6.2.3107B NMAC]

Reporting:

- 20. LMC shall submit to NMED quarterly reports by the last day of January, April, July and October of each year. Information due semi-annually shall be submitted by the last day of February 15th and August 15th of each calendar year. Reports shall use the following format. [20.6.2.3107 NMAC, 20.6.3109 NMAC]
 - a. Include a summary of all activities at the facility during the preceding three months. For example, operational activities, weekly flow volumes, spills, maintenance, repairs, synopsis of completed studies relevant to the facility, well drilling, water management, construction or demolition of structures, water quality trends, precipitation and trends in water levels. If applicable, a summary of seep and spring flows as well as potentiometric maps shall also be included.
 - b. Water quality data shall be presented in a single table in a paper and electronic format (EXCEL spreadsheet) with those constituents analyzed and water levels measured during a single event shown in columns. Tabulated electrical conductivity will include the measured field values and corrected values to 25 degrees Celsius. Monitoring sites will be shown in rows. Each new sampling event shall be added as an additional row to the existing spreadsheet with the date noted in the far left column. Values exceeding standards will be bolded. Any constituent not analyzed for a particular site will be shown as “NA”, any site not sampled will be shown as “NS” with an associated reason, and any site not measured for water levels will be shown as “NM” with an associated reason. Copies of the signed laboratory analyses sheet shall be provided semi-annually in April and October as indicated in Table 1.
 - c. Quarterly reports shall include water quality trends, laboratory QA/QC, trends in hydrographs, signed laboratory analyses sheet and precipitation.
 - d. Flow measurements of seeps shall be reported quarterly with the seep location and flow estimation method noted. A clearly marked map shall be included with labeled locations for each seep area and ponded water area. The first submittal of seeps and ponded areas shall include photos of each location indicated on the map.
 - e. All flow meters shall be calibrated and kept operational at all times.

CONTINGENCY PLAN

Ground Water Exceedences:

21. In the event that monitoring indicates ground water standards are exceeded during the term of this Discharge Permit, upon closure of the facility or during post-closure monitoring, LMC shall collect a confirmatory sample from the monitoring well(s) within 15 days to confirm the initial sampling results. Within 30 days of confirmation of ground water contamination, LMC shall submit an abatement plan proposal to NMED for approval that includes: a site investigation to define the source, nature and extent of contamination, a proposed abatement option, and a schedule for its implementation. The site investigation and abatement option shall be consistent with the requirements and provisions of 20.6.2.4101, 4103, 4106, 4107, 4108 and 4112 NMAC. The abatement plan shall be implemented within 30 days of NMED approval. [20.6.2.3107A(10) NMAC] [20.6.2.1203A NMAC]

Operational Failures:

22. In the event of a pipeline break, pump failure, pond overflow or other system failure at the facility, the tailings slurry, decant water and other discharges shall be contained, pumped and/or transferred to areas of the facility that impose minimal impacts to ground water quality. Failed components shall be repaired, replaced, or temporarily replaced with an interim remedy as soon as possible and no later than 72 hours from the time of failure. [20.6.2.3107A(10) NMAC]
23. If NMED or LMC identifies any other failure of this Discharge Permit or system not specifically noted above, NMED may require LMC to develop for NMED approval contingency plans and schedules to address such a failure. [20.6.2.3107A(10) NMAC]

Spill Reporting and Remediation:

24. In the event of a spill or release that is not authorized under this Discharge Permit, LMC shall initiate the notifications and corrective actions as required in 20.6.2.1203 NMAC. LMC shall take immediate corrective action to contain and remove or mitigate the damage caused by the discharge. Within 24 hours after discovery of the discharge, LMC shall verbally notify NMED and provide the information required by 20.6.2.1203.A.1 NMAC. Within 7 days of discovering the discharge, LMC shall submit a written report to NMED verifying the oral notification and providing any additional information or changes. LMC shall submit a corrective action report within 15 days after discovery of the discharge. [20.6.2.1203 NMAC]

CLOSURE PLAN

Tailings Impoundment Closure:

25. LMC shall conduct Tailings Impoundment closure as follows. [20.6.2.3107.A.11 NMAC]
- a. LMC shall dewater the Tailings Impoundment by pumping from the Leachate Collection Well. Upon completion of the Tailings Impoundment closure the dewatering well shall remain secure and available for sampling for 12 years, or until post closure monitoring is complete.
 - b. A minimum of one year prior to final closure, LMC shall submit to NMED for approval a proposal for disposal of water from the Leachate Collection Well.
 - c. LMC shall grade the Tailings Impoundment to drain to the north diversion channel at a slope of between 2 and 5 degrees.
 - d. Following regrading, LMC shall cover the tailings impoundment with a store and release cover system constructed in two lifts. The first lift shall consist of a 12 inch thick layer of non-acid generating, by-product crusher fines spread evenly over the regraded tailings, then ripped to mix with the underlying tailings to a depth of 24 inches. The first lift shall then be compacted. The second lift will consist of native alluvial material and/or other growth medium containing 25% by volume of rock fragments in the size range of 3 to 10 inches. The second lift shall include biosolids material from a nearby municipality and have a minimal thickness of 12 inches. The store and release cover system shall be designed to store, at a minimum, the equivalent of the precipitation in any given year solely within the thickness of the non-acid generating cover material.
 - e. Riprap or derrick stones larger than 24" in diameter shall be randomly placed over the reclaimed area at a density of 5 tons per acre.
 - f. In the year of closure, prior to a typical monsoon season (July 1 to September 15) the reclaimed area shall be mulched, fertilized and seeded with a native seed mix approved by MMD.

Mill Site Area:

26. LMC shall conduct Mill Site Closure as follows. [20.6.2.3107.A.11 NMAC]
- a. LMC shall remove crushing and flotation equipment, and the WTTP from the site;
 - b. LMC shall conduct soil evaluation to determine impacts and removal as necessary;

- c. LMC shall conduct storm water pond sediment removal and perforation of the liner;
- d. Following removal activities the entire site shall be seeded, mulched and revegetated.

POST CLOSURE MONITORING

- 27. LMC shall perform post-closure monitoring for a minimum period of 12 years following completion of final closure construction activities, including cover placement. LMC shall conduct the monitoring, reporting, and other requirements listed below. [20.6.2.3107 NMAC]
- 28. LMC shall submit to NMED a minimum of 120 days prior to initiation of closure activities a proposal for ground and surface water monitoring following closure. The monitoring plan must address any ground water monitoring wells in place at the time, and monitoring of surface discharges from the Banner Mill Site off-site. [20.6.2.3107 NMAC]
- 29. Upon notification from NMED that post-closure monitoring may cease, LMC shall plug and abandon monitor well MW-1 (and any other wells in place at this time) according to the NMED Monitoring Well Construction and Abandonment Guidelines or an alternate method approved by NMED. Within 30 days after well abandonment, LMC shall provide NMED with the date and documentation of abandonment procedures. [20.6.2.3107 NMAC]
- 30. Revegetation - To ensure that revegetation is protective of water quality, LMC shall, at a minimum, perform closure and post-closure monitoring of revegetation pursuant to schedules and monitoring requirements approved by MMD. Any proposed changes to the closure or post-closure revegetation monitoring plan to meet the NMMA requirements shall be submitted to NMED to ensure monitoring is protective of water quality. LMC shall provide a summary of revegetation monitoring results, including photographic documentation, in annual reports to NMED. At such time as MMD's revegetation monitoring requirements under the NMMA have been met, revegetation monitoring shall continue under the authority of NMED pursuant to this Discharge Permit. [20.6.2.3107 NMAC]
- 31. Erosion - LMC shall visually inspect for rills and gullies that may erode the cover of reclaimed areas and expose tailings to the environment. Inspections shall occur on reclaimed areas twice a year in mid-May and mid-September and in the event of a rain event totaling one inch or greater in any 24-hour period measured at the nearest rain gauge. LMC shall verbally report evidence of major rill, gully, or sheet erosion on any closed impoundment to NMED within 24 hours of discovery. LMC shall provide a written report within 30 days of the discovery describing the nature and extent of erosion and steps taken to repair the erosion. NMED may require LMC to take additional actions to repair or otherwise mitigate the erosion. [20.6.2.3107 NMAC]

FINANCIAL ASSURANCE

32. LMC shall maintain financial assurance in the amount of \$230,705.00 to cover the costs associated with closure, post-closure monitoring and maintenance of the Mill Site Area and the Initial Tailings Impoundment combined. The \$230,705.00 amount represents the sum of the estimated costs for reclaiming the Initial Tailings Impoundment of \$152,616.00 and the estimated costs for reclaiming the Mill Site Area, which is \$78,089.00. The \$230,705 total amount is based on the calculations presented in the “Banner Mill Project, MMD Permit No. HI 001 RE and ED Discharge Permit No. DP-1651; Consolidated, Amended Financial Assurance Estimate”, submitted by LMC on March 6, 2009. [20.6.2.3107A(11) NMAC]
33. General Financial Assurance:
- a. LMC shall retain financial assurance instruments throughout the term of the Discharge Permit until released by the Secretary. The financial assurance shall remain in place during lapses in Discharge Permit coverage, including late Discharge Permit renewal.
 - b. NMED shall be named as the payee or beneficiary of the financial assurance instrument. LMC may select a joint financial assurance instrument to meet the requirements of both NMED and the New Mexico Energy, Minerals and Natural Resources Department (EMNRD). If a joint instrument is selected, both NMED and EMNRD must be named as payees or beneficiaries and the joint instrument must meet the requirements of both agencies.
 - c. The financial assurance instrument shall allow for adjustments due to inflation, new technologies, or NMED approved revisions to the closure plan based on continued investigations.
 - d. The financial assurance shall be evaluated, compared, and if necessary, revised to comply with WQCC financial assurance regulations, if and when such regulations are promulgated and become effective and from time to time as the regulations allow.
 - e. LMC shall provide at least 120 days written notice to the Secretary prior to cancellation or non-renewal of the financial assurance. LMC shall obtain an NMED approved alternate financial assurance mechanism within 90 days of such notice. If LMC fails to obtain alternate financial assurance within 90 days, the current financial assurance shall become immediately payable to NMED.
 - f. If LMC refuses or is unable to conduct or complete the closure requirements of this approval, if NMED determines the terms of the permit are not met, or if NMED determines that LMC defaults on the conditions under which the financial assurance was accepted, then the Secretary may proceed with forfeiture of all or part of the

- financial assurance. Prior to beginning a forfeiture proceeding, the Secretary shall provide a written notice to LMC and shall include the reasons for the forfeiture and the amount to be forfeited. The amount shall be based on the total cost of achieving compliance with the permit, including completion of the closure. All financial assurance forfeited shall become immediately payable to NMED.
- g. LMC may request a review by NMED of remaining closure measures once every twelve months. The request for closure review shall describe the closure measures completed and must contain a cost estimate for remaining closure measures.
 - h. The financial assurance shall be released or modified when the NMED determines that closure measures covered by the financial assurance have been completed according to the requirements of the NMED approved discharge plan, including the closure plan and the requirements of the New Mexico Water Quality Act and the WQCC regulations. [20.6.2.3107A(11) NMAC]

GENERAL TERMS AND CONDITIONS

- 34. LMC shall comply with the following general conditions, which shall be enforceable by NMED.

Record Keeping

- 35. LMC shall maintain at its facility a written record of all data and information on monitoring of groundwater, surface water, seepage, and meteorological conditions pursuant to this Discharge Permit including the following information. [20.6.2.3107.A NMAC]
 - a. The date, exact time, and exact location of each sample collection or field measurement;
 - b. The name and job title of the person who performed each sample collection or field measurement;
 - c. The date of the analysis of each sample;
 - d. The name and address of the laboratory and the name and job title of the person that performed the analysis of each sample;
 - e. The analytical technique or method used to analyze each sample or take each field measurement;
 - f. The results of each analysis or field measurement, including the raw data; and,
 - g. A description of the quality assurance and quality control procedures used.

35. Such data and information as described in Condition 36, shall also be maintained on all split and duplicate samples, spike and blank samples, and repeat samples. [20.6.2.3107.A NMAC]
36. LMC shall maintain a written record of any spills, seeps or leaks of effluent, or process fluids not authorized by this Discharge Permit. [20.6.2.3107.A NMAC]
37. LMC shall maintain a written record of the operation, maintenance and repair of all facilities/equipment used to treat, store, or dispose of wastewater; to measure flow rates; to monitor water quality; or, to collect other data required by this Discharge Permit. This record shall include repair, replacement or calibration of any monitoring equipment and repair or replacement of any equipment used in the conveyance of process waters throughout this permit area. [20.6.2.3107.A NMAC]
38. Notwithstanding any company record retention policy to the contrary, until such time as NMED determines that all closure measures have been completed in accordance with the requirements of this Discharge Permit, LMC shall retain copies of all data, records, reports, and other documents generated pursuant to this Discharge Permit. Such record retention period may be increased by the NMED at any time upon written notice to LMC. [20.6.2.3107.A NMAC]
39. All such data, records, reports, and other documents generated pursuant to this Discharge Permit, shall be provided to the NMED upon request. [20.6.2.3107.A NMAC]

Inspection and Entry

40. LMC shall allow the Secretary or an authorized representative of NMED, upon the presentation of credentials to:
 - a. Enter any property or premises owned or controlled by LMC at reasonable times upon LMC's premises or at another location where records are kept under the conditions of this Discharge Permit or any Federal or WQCC regulation.
 - b. Inspect and copy, at reasonable times, records required to be kept under the conditions of this Discharge Permit or pursuant to State or Federal water quality regulations.
 - c. Inspect, at reasonable times, any facility, equipment (including monitoring and control equipment for treatment works), practices or operations regulated or required under this Discharge Permit or under any Federal or WQCC regulations.
 - d. Sample or monitor at reasonable times any effluent, water contaminant, or receiving water at any location before or after the discharge for the purpose of assuring compliance with this Discharge Permit or as otherwise authorized by the New Mexico Water Quality Act. [20.6.2.3107.D NMAC] [74-6-9.B and E WQA]

41. Nothing in this Discharge Permit shall be construed as limiting in any way the inspection and entry authority of the NMED under the WQA, the WQCC Regulations, or any other applicable law or regulation. [20.6.2.3107 NMAC]

Duty to Provide Information

42. Within a reasonable time after a request from the NMED, which time may be specified by the NMED, LMC shall provide the NMED with any relevant information to determine whether cause exists for modifying, terminating, or renewing this Discharge Permit, or to determine whether LMC is in compliance with this Discharge Permit. [20.6.2.3107.D NMAC] [74-6-9.B and E WQA]

43. Nothing in this Discharge Permit shall be construed as limiting in any way the information gathering authority of the NMED under the WQA, the WQCC Regulations, or any other applicable law or regulation. [20.6.2.3107.D NMAC] [74-6-9.B and E WQA]

Spills, Leaks and Other Unauthorized Discharges

44. This Discharge Permit authorizes only those discharges specified herein. Any discharge not authorized by this Discharge Permit or any other LMC Discharge Permit is a violation of the WQCC Regulations at 20.6.2.3104 NMAC. LMC must report any such discharge to the NMED, and it must take corrective action to contain and remove or mitigate the damage caused by the discharge in accordance with Section 2.6.2.1203 NMAC and, if applicable, Condition 24. [20.6.2.1203 NMAC]

Modifications and Amendments

45. LMC shall notify the NMED of any changes to its leachate or process water collection or disposal system, including any changes in the leachate or process water flow rate or the volume of leachate or process water storage, or of any other changes to its mining operations or processes that would result in any significant change in the discharge of water contaminants. LMC shall obtain NMED approval, as a modification to this Discharge Permit pursuant to Section 20.6.2.3109.E, F, or G NMAC, prior to any increase in the quantity leachate or process water discharged, or any increase in the concentration of water contaminants discharged, above those levels approved in this Discharge Permit. [20.6.2.3107 NMAC]

Enforcement

46. Any violation of the requirements and conditions of this Discharge Permit, including any failure or refusal to allow the NMED to enter and inspect records or facilities, or any refusal or failure to provide the NMED with records or information, may subject LMC to an enforcement action. Pursuant to WQA § 74-6-10(A) and (B), such action may include a compliance order requiring compliance immediately or in a specified time, assessing a civil penalty, suspending or terminating the Discharge Permit, or any combination of the

foregoing; or an action in district court seeking injunctive relief, civil penalties, or both. Pursuant to the WQA §§ 74-6-10(C) and 74-6-10.1, civil penalties of up to \$15,000 per day of noncompliance may be assessed for each violation of the WQA § 74-6-5, the WQCC regulations, or this Discharge Permit, and civil penalties of up to \$10,000 per day of noncompliance may be assessed for each violation of any other provision of the WQA, or any regulation standard, or order adopted pursuant to such other provision. For certain violations specified in the WQA § 74-6-10.2, criminal penalties may also apply. In any action to enforce this Discharge Permit, LMC waives any objection to the admissibility as evidence of any data generated pursuant to this Discharge Permit. LMC does not waive any argument as to the weight such evidence should be given.

Compliance with Other Laws

47. Nothing in this Discharge Permit shall be construed in any way as relieving LMC of its obligation to comply with all applicable Federal, State, and local laws, regulations, permits, or orders. [74-5-5.K WQA]

Liability

48. The approval of this Discharge Permit does not relieve LMC of liability should the operation result in actual pollution of surface or groundwater which may be actionable under other laws and/or regulations. [20.6.2.1220 NMAC]

Right to Appeal

49. LMC may file a petition for a hearing before the WQCC on this Discharge Permit. Such petition must be made in writing to the WQCC within thirty (30) days after LMC receives this Discharge Permit. Unless a timely petition for a hearing is made, the decision of NMED shall be final. [74-6-5.N WQA]

Transfer

50. Prior to any transfer of ownership, control, or possession of the permitted facility or any portion thereof, LMC shall notify the proposed transferee in writing of the existence of this Discharge Permit and include a copy of this Permit with the notice. LMC shall deliver or send by certified mail to the NMED a copy of the notification and proof that such notification has been received by the proposed transferee. [20.6.2.3111 NMAC]

Term

51. The effective date of this Discharge Permit is the date it is issued and signed by the Chief of the Groundwater Quality Bureau. The term of this Discharge Permit is five (5) years, and the Permit will automatically expire five (5) years from the date it is issued. To renew this Discharge Permit, LMC must submit an application for renewal at least 120 days before that date. [74-6-5.H and 20.6.2.3109.H NMAC]

Issued this ___ day of ___, 2009

William C. Olson, Chief
Groundwater Quality Bureau
New Mexico Environment Department

Under authority delegated by the Secretary of the New Mexico Environment
Department

ISSUED: Approval Date
EXPIRES: Expiration Date

draft

**Table 1
LMC BANNER MILLSITE
REPORTING SCHEDULE**

Quarterly Monitoring Reports are due by January 31, April 30, July 31 and October 31

Sampling Description	Site Description	Annual Sampling Frequency	Annual Reporting Frequency
FIELD PARAMETERS: (Note: South, North and Lower Mill Site Diversion Outfall to be sampled once per quarter if water is present)	Monitor Well # 1 Banner Shaft # 2 Tailings Impoundment Decantation Pond South Diversion Outfall North Diversion Outfall Lower Mill Site Diversion Outfall Mill Site Pond	4 (Jan, April, July, Oct)	4 (January 31 April 30 July 31 and October 31)
WHOLE ROCK AND ACID BASE ACCOUNTING	Grab Sample from Tailing Discharge Line	4	4
INDICATOR PARAMETERS AND INORGANIC PARAMETERS:	Monitor Well # 1 Banner Shaft # 2 Tailings Impoundment Decantation Pond South Diversion Outfall North Diversion Outfall Lower Mill Site Diversion Outfall Mill Site Pond	4	4
TPH,	Mill Site Pond	4	4
Hydrographs and water quality trends	Monitor Well # 1 Banner Shaft # 2	4	4
Flow measurement of seeps	0-4 varies	4	4
Flow measurement of tailings impoundment discharge. *	Tailing Impoundment Discharge Line	52	4
Flow measurement of waste water package plant flow. *	Waste Effluent to Mill Site Pond Line	52	4
Flow measurement of Banner Shaft # 2, production well *	Banner Shaft #2	52	4
Daily precipitation data	Weather Station	365	4
Activities Report	Banner Mill Site	4	4

* Report Weekly Volume based on Totalizing Flow Meter

**Table 2
 Monitoring Schedule**

Site Description	Type	Q1	Q2	Q3	Q4	Notes
Monitor Well # 1	mw	ABCE	ABCE	ABCE	ABCE	
Banner Shaft # 2	ew	ABCE	ABCE	ABCE	ABCE	
Tailings Impoundment Decantation Pond	sw	ABCE	ABCE	ABCE	ABCE	
Tailings Impoundment Decantation Pond Outfall	cg	W	W	W	W	
South Diversion Outfall	sw if present	ABCE	ABCE	ABCE	ABCE	
North Diversion Outfall	sw if present	ABCE	ABCE	ABCE	ABCE	
Lower Mill Site Diversion Outfall	sw if present	ABCE	ABCE	ABCE	ABCE	
Mill Site Pond	sw	ABCDE	ABCDE	ABCDE	ABCDE	

Table 2 Notes

<p><u>Type:</u> mw = monitoring well ew = extraction well sw = surface water spg = spring sp = seep dc = dry channel cg = representative composite grab sample</p>	<p><u>Sampling Quarter:</u> Q1 = Jan-Mar Q2 = Apr-Jun Q3 = Jul-Sep Q4 = Oct-Dec</p>
<p><u>Sampling Analytical Suites:</u> A = Field parameters: pH, specific conductance B = Indicator parameters: sulfate (SO₄), TDS C = Comprehensive inorganic suite: Tabulated data for pH, Specific Conductance, TDS, aluminum, arsenic, cadmium, calcium, chloride, chromium, cobalt, copper, fluoride, iron, lead, manganese, nickel, potassium, sodium, selenium and zinc. D = Organic parameters : TPH, TKN and Nitrate (NO₃ - N) E = Water surface elevation (MSL) or depth to water measurement to the nearest 0.01 foot. W = Whole Rock Analysis and Acid Base Accounting</p>	