



MICHELLE LUJAN GRISHAM
GOVERNOR

JAMES C. KENNEY
CABINET SECRETARY

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

May 8, 2026

Randy B. Ellison, General Manager
Freeport-McMoRan Chino Mines Company
P.O. Box 10
Bayard, NM 88023

RE: Draft Discharge Permit Renewal and Modification; DP-181, Continental Mine

Dear Randy B. Ellison:

Notice is hereby given pursuant to Subsection H of 20.6.2.3108 NMAC that the Ground Water Discharge Permit Renewal and Modification of Discharge Permit 181 (DP-181) for the Continental Mine has been proposed for approval (copy enclosed). The New Mexico Environment Department (NMED) Ground Water Quality Bureau (GWQB) will publish notice of the availability of the draft Discharge Permit Renewal and Modification in the near future and will forward a copy of the notice to you. All information required to deem the application technically complete has been submitted to the NMED. The Application was deemed technically complete on December 23, 2026.

Prior to making a final ruling on the proposed DP-181 Discharge Permit Renewal and Modification, NMED will allow 30 days from the date the public notice is published, during which time written comments can be submitted or a public hearing requested. Comments and/or hearing requests may be submitted by any interested person, including the DP-181 Discharge Permit Renewal and Modification applicant. Comments and/or request for a public hearing may be submitted by any interested person or the Applicant. Written comments or hearing requests may be submitted to the GWQB either by utilizing the SmartComment portal at <https://nmed.commentinput.com/comment/search> or by email to david.mercer1@env.nm.gov or mecs.gerneral@env.nm.gov. Hearing requests shall set forth the reasons why a hearing should be held. A hearing will be held only if hearing requests are received from the public or the Applicant during the 30-day comment period and NMED determines there is substantial public interest regarding the proposed DP-181 Discharge Permit Renewal and Modification. Hearings are presided over by the NMED Secretary, or a hearing officer appointed by the Secretary.

NMED has imposed additional conditions on the Renewal and Modification of DP-181 that are not requirements of the Copper Mine Rule (20.6.7 NMAC), and are not conditions that can be pulled forward from the existing DP-181 in accordance with Paragraph (2) of 20.6.7.20.B NMAC (leach stockpiles), Paragraph (2) of 20.6.7.21.C NMAC (waste rock stockpiles), Paragraph (2) of

20.6.7.22.B NMAC (copper crushing, milling, concentrator, smelting and tailing impoundments), and Paragraph (2) of 20.6.7.23.B NMAC (pipelines and tanks). Pursuant to Subsection I of 20.6.7.10 NMAC, NMED is providing the following written explanations of the reasons for the additional conditions.

1. Condition C101.E.4 - The reason for this condition is to ensure that the South Waste Rock Disposal Facility (SWRDF) completed construction is documented as required with a final topographic map. It is important for NMED to have an accurate figure depicting the footprint of stockpiles to help inform on future permitting activities.
2. Condition C110.B – The reason for this condition is to ensure the requirements to analyze samples for total and dissolved concentrations, which is allowable under Section 20.6.2.3103 NMAC in instances when the “secretary determines that there is reasonable probability of facilitated contaminant transport by colloids or organic macromolecules.” Please note that Sections 20.6.2.3000 through 20.6.2.3114 NMAC apply to discharges specific to copper mine facilities and their operations.
3. Condition C110.H – The reason for this condition is the outcome of response to comments on the previous Draft Discharge Permit Renewal and Modification, DP-181 (2018) and were agreed upon by all parties including NMED, the Gila Resources Information Project, and the Permittee.
4. Condition D105.A – The reason for this condition is to ensure that the Permittee submits proper notification prior to destruction or removal of any monitoring wells required under DP-181.
5. Condition D105.B – The reason for this condition is to ensure compliance with the monitoring well location requirements of Subsection B of 20.6.7.28 NMAC and that the Applicant submits consistent information supporting requests to plug and abandon monitoring wells.
6. Condition D106.A – The reason for this condition is to ensure that the Permittee properly notifies NMED in the event of any, and all unauthorized discharges so that a determination of applicable reporting requirements can be made pursuant to Section 20.6.2.1203 NMAC and Subsection G of 20.6.7.30 NMAC. Please note that Sections 20.6.2.3000 through 20.6.2.3114 NMAC apply to discharges specific to copper mine facilities and their operations.
7. Condition D106.B – The reason for this condition is to ensure that the Permittee properly submits spill location information and to fulfill location information specified by Subparagraph (c) of 20.6.2.1203.A(1) NMAC. Due to complex and ever-changing geography at mine sites, it is important for the Applicant to provide accurate and consistent spill location information, including location coordinates, elevations, and/or

maps/figures when requested, for proper determination of applicable spill reporting requirements. Please note that Sections 20.6.2.3000 through 20.6.2.3114 NMAC apply to discharges specific to copper mine facilities and their operations.

8. Condition D107.D – The reason for this condition is to assert NMED authority to require that the Permittee modify DP-181 should NMED determine that the requirements of 20.6.2 NMAC are being or may be violated, or the water quality standards of Section 20.6.2.3103 NMAC are being or may be violated.

The following conditions were pulled forward from DP-181, in accordance with Paragraph (2) of 20.6.7.21.C NMAC, Paragraph (2) of 20.6.7.22.B NMAC, and Paragraph (2) of 20.6.7.23.B NMAC:

C102.E, C108.A, C110.B, and C110.L.1

Please review the enclosed draft DP-181 Discharge Permit Renewal and Modification carefully for accuracy and completeness, and to make sure you understand what it requires. Please be aware that the proposed DP-181 Discharge Permit Renewal and Modification may contain conditions that require the Applicant to implement operational, monitoring, or closure actions by a specified deadline.

The Water Quality Control Commission (WQCC) Regulations, 20.6.2 NMAC and 20.6.7 NMAC, are available online at <https://www.env.nm.gov/gwqb/gw-regulations>.

Any comments relating to this draft DP-181 Discharge Permit Renewal and Modification can be sent through the SmartComment portal at <https://nmed.commentinput.com/comment/search> or by email to david.mercer1@env.nm.gov or mecs.general@env.nm.gov. If written comments or a written request for a hearing are not received during the public comment period, the draft DP-181 Discharge Permit Renewal will become final. Thank you for your cooperation during the review process.

Sincerely,

David W Mercer

David W. Mercer
Mining Environmental Compliance Section
Ground Water Quality Bureau
New Mexico Environment Department

Enclosures: Draft Discharge Permit Renewal and Modification, DP-181
Ground Water Discharge Permit Monitoring Well Construction and Abandonment
Conditions, Revision 1.1, March 2011

Cc: Joe Fox, NMED-MECS – joseph.fox@env.nm.gov
Brad Reid, NMED-MECS – brad.reid@env.nm.gov
Michael Boulay, NMED-MECS – michael.boulay@env.gov
Sherry Burt-Kested – sburtkes@fmi.com
Tyler Johnson - tjohnson2@fmi.com
Christian Krueger – ckrueger@fmi.com
Issac Marquez – imarquez1@fmi.com
Roy Paquette – rpaquett@fmi.com
Gila Resources Information Group – grip@qilaresources.info
D.J. Ennis - david.ennis@emnrd.nm.gov



MICHELLE LUJAN GRISHAM
GOVERNOR

JAMES C. KENNEY
CABINET SECRETARY

**GROUND WATER QUALITY BUREAU (GWQB)
DISCHARGE PERMIT RENEWAL and MODIFICATION
EXISTING COPPER MINE FACILITY
Issued under 20.6.2 and 20.6.7 NMAC**

Certified Mail No:
Return Receipt Requested

Mine Facility Name: Continental Mine

GWQB Discharge Permit No.: DP-181
GWQB TEMPO AI No.: 531

Permittee Name/Responsible Party: Freeport-McMoRan Chino Mines Company
Mailing Address: P.O. Box 10
Bayard, NM 88023

Mine Facility Contact Randy B. Ellison; (575) 912-5640
Mine Facility Location: Continental Mine
303 Fierro Road
Hanover, NM 88041

County: Grant County

Permitting Action: Renewal and Modification
Effective Date: DATE
Expiration Date: DATE

NMED Permit Contact David W. Mercer; (575) 202-9984
E-mail Address david.mercer1@env.nm.gov; OR mecsgeneral@env.nm.gov

Justin Ball, Chief
Ground Water Quality Bureau

Date

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Part A GENERAL INFORMATION

A100 Introduction

- A. The New Mexico Environment Department (NMED) issues this Ground Water Discharge Permit Renewal and Modification, DP-181 (Discharge Permit or DP-181) to Freeport-McMoRan Chino Mines Company (Permittee) 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, Part 20.6.2 (Ground and Surface Water Protection) and Part 20.6.7 NMAC Ground Water Protection – Supplemental Permitting Requirements for Copper Mine Facilities (the Copper Mine Rule). NMED is issuing this Discharge Permit to control the discharge of water contaminants from the Continental and Hanover Mountain Mines for the protection of groundwater and those segments of surface water gaining from groundwater inflow, for present and potential future use as domestic and agricultural water supply and other uses, and to protect public health.
- B. Pursuant to this Discharge Permit, the Permittee is authorized to discharge a maximum of 12,000,000 gallons per day (gpd) of tailing slurry to the Main Tailings Impoundment. The percent solids of the tailing slurry varies, but is on average approximately 50 percent solids. In addition, impacted stormwater and leachate from the waste rock stockpiles and other areas at the Continental Mine are regulated pursuant to this discharge permit. This discharge may move directly or indirectly into groundwater of the State of New Mexico which has an existing concentration of 10,000 milligrams per liter (mg/L) or less of total dissolved solids (TDS) within the meaning of Section 20.6.2.3104 and Subsection A of 20.6.2.3101 NMAC. The discharge may contain water contaminants or toxic pollutants elevated above the water quality standards of Section 20.6.2.3103 NMAC in compliance with the terms and conditions of this Discharge Permit.
- C. The Permittee is authorized to discharge water contaminants pursuant to this Discharge Permit which requires compliance with 20.6.2 NMAC and 20.6.7 NMAC and is enforceable by NMED.

A101 Applicable Regulations

- A. The Permittee is discharging from a facility that meets the definition of an “existing copper mine facility.” Sections 20.6.2.3000 through 20.6.2.3114 NMAC and Part 20.6.7 NMAC apply to discharges specific to copper mine facilities and their operations.
- B. The discharge from the facilities regulated pursuant to this Discharge Permit are not subject to any of the exemptions of Section 20.6.2.3105 NMAC, except as provided by B105.A(4).

- C. Groundwater quality as observed in monitoring wells required by C109.A of this Discharge Permit and consistent with Subsection B of 20.6.7.28 NMAC is subject to the criteria of Sections 20.6.2.3101 and 20.6.2.3103 NMAC except those excluded pursuant to Subsection D of 20.6.7.24 NMAC.

A102 Permit Duration

- A. Pursuant to the WQA 74-6-5(I) and Subsection H of 20.6.2.3109 NMAC, the term of this Discharge Permit Renewal and Modification is **five (5) years** from its effective date.
- B. If the Permittee submits an application for renewal in accordance with Subsection G of 20.6.2.3106 NMAC and the Permittee is not in violation of the discharge permit on the date of its expiration, then the existing discharge permit shall not expire until NMED approves or disapproves the application for renewal.

A103 Terms of Permit Issuance

- A. **Permit Fees** - As a discharge permit associated with Freeport-McMoRan Chino Mines Company, the Permittee shall remit an annual permit fee payment for the Continental Mine equal to the applicable permit fee based on mine size listed in Subsection A of 20.6.7.9 NMAC on August 1 of each year until termination of all discharge permits for the Continental Mine. [20.6.7.9.A NMAC].
- B. **Transfer of Discharge Permit** - Prior to the transfer of any ownership, control, or possession of this permitted facility or any portion thereof, the Permittee shall notify the proposed transferee in writing of the existence of this Discharge Permit and include a copy of this Discharge Permit with the notice. The Permittee shall deliver or send by certified mail to NMED a copy of the notification and proof that such notification has been received by the proposed transferee. [20.6.7.38 NMAC and 20.6.2.3111 NMAC]
- C. **Permit Renewal** - To renew this Discharge Permit, the Permittee shall submit an application and associated fees for renewal at least 270 days prior to the expiration date of this Discharge Permit **(by DATE)** in accordance with Sections 20.6.7.9, 20.6.7.10, and 20.6.7.11 NMAC.
- D. **Additional Conditions** - In addition to the requirements of 20.6.7 NMAC, the Permittee shall comply with the following additional conditions as authorized by Subsection I of 20.6.7.10 NMAC pursuant to WQA 74-6-5: Condition C101.E.4, Condition C110.B, Condition C110.H, Condition C110.I, Condition D105.A, Condition D105.B, Condition D106.A, Condition D106.B, and Condition D107.D.

Part B FACILITY SPECIFIC INFORMATION

B100 History and Facility Description

- A. The Continental Mine is an open pit copper mine facility owned by Freeport-McMoRan Chino Mines Company and covers an area of approximately 1,450 acres. The Continental Mine consists of one open pit, a second open pit under development (Hanover Mountain Open Pit), associated waste rock stockpiles, collections systems, two tailing impoundments, and other reclaimed facilities. The mine is regulated under one operational discharge permit, DP-181, which covers existing mine units and several mine units to be constructed within the term of this discharge permit, one closure discharge permit (DP-1403), and an abatement plan.
- B. The mine units regulated pursuant to DP-181 that produce discharges that may move directly or indirectly into groundwater include the West Waste Rock Facility (WRF), Union Hill WRF, Buckhorn WRF, East WRF, South WRF, the Main Tailing Impoundment and the Magnetite Tailing Impoundment. Additional mine units include the Continental Open Pit, Hanover Mountain Open Pit, Low-Grade Ore Stockpile, High-Grade Ore Stockpile, the No. 3 Shaft Stockpile, North Overburden Stockpile, the stormwater collection system for Buckhorn Gulch and its tributaries, lined stormwater catchments in Grape Gulch and Poison Spring drainages, and associated infrastructure including seepage collection systems, impacted stormwater and/or seepage collection ponds, and various pipelines.
- C. Commercial production of copper began at the Continental Mine in 1858. Iron ore mining commenced in the area in 1909, followed by magnetite mining at the Union Hill and Republic Mines on the west side of Hanover Creek from 1909 to 1931. Development of lead-copper-zinc ore mines including the Shingle Canyon, Pearson-Barnes, and Continental No. 1 mines occurred in the late 1930s through the mid-1950s. Copper mining began in 1947 at the Continental No. 2 Mine, which is now part of the Continental Open Pit. Modern mining operations started in the 1960's with the development of the underground workings beneath the Continental Open Pit. The No. 1 Flotation Mill was completed in 1967 to process the underground ore. The No. 2 Flotation Mill was brought on-line in 1973 to process ore taken from the Continental Open Pit. The Main Tailing Impoundment and the Magnetite Tailing Impoundment were first established in 1967. The Continental Open Pit was operational from 1967 to 1982. Production from the Continental Open Pit and underground workings recommenced in 1993 and continued until March of 1999. The early timeline of placement of waste rock in the WRFs is unknown. Based on historical aerial imagery, the East WRF was in existence in 1971. Imagery from the early 1980's indicates that the West WRF was in place during that time.
- D. Following commencement of mining on Hanover Mountain and eventually the Continental Open Pit, waste rock will be placed in a manner that will coalesce all the existing WRFs into

one large waste rock stockpile designated the South Waste Rock Disposal Facility (SWRDF). Ore that is mined from Hanover Mountain will be hauled by truck to the Chino Mine for processing. An approximately three-mile-long haul road (Cobre Haul Road) connects the Continental Mine to the Chino Mine. Tailing resulting from processing of Continental Mine ore at Chino Mine will be stored in Chino Mine tailing storage units. Approval of processing and placement of ore at the Chino Mine will be conducted pursuant to Chino Mine operational permits. Tailing resulting from processing of Continental Mine ore at the Continental Mine will be stored in the Continental Mine Main Tailing Impoundment. Mining of Hanover Mountain will create an open pit.

B101 Permit Modification

- E. The modification of DP-181 includes expansion of the Hanover Mountain Open Pit from 156 acres to 276 acres and increasing it to a depth of 6,150 feet above mean sea level (ft. amsl) from the previous permitted limit of 6,750 ft. amsl.

B102 Permitting History

- A. The Discharge Plan for DP-181 consists of the Discharge Permit Renewal and Modification application dated July 20, 2022, and materials contained in the administrative record prior to issuance of this Discharge Permit. As part of the application process the Permittee also provided a document dated June 2022 referred to as the Continental Mine Master Document (CMD) which addresses Copper Mine Rule application requirements and is applicable to all of the Continental Mine discharge permits, including DP-181. In addition, the Discharge Plan for DP-181 includes applicable information and materials submitted as part of the original Discharge Plan for DP-181 approved on October 8, 1981; renewed and modified on September 29, 1992; renewed and modified on January 15, 1997; renewed and modified on March 2, 2007; renewed and modified on April 17, 2018; partially amended on January 31, 2024; and amended on May 8, 1998, February 5, 2015, October 8, 2020, June 10, 2025, and September 12, 2025.

B103 Facility Location, Ground Water and Process Water Characteristics

- A. The mine units regulated pursuant to DP-181 are located approximately one-half mile west of Fierro and four miles north of Hanover in Sections 3, 4, 5, 8, 9, 10, 15, 16, 20, 21, 29, 31, and 32, T17S, R12W, Grant County, New Mexico.
- B. Groundwater beneath the mine units regulated pursuant to DP-181 ranges from approximately 1 - 200 feet below ground surface and had a pre-discharge TDS concentration range from approximately 350 – 1,400 milligrams/Liter (mg/L).

- C. The Continental Open Pit walls, the Hanover Mountain Open Pit walls, the WRFs, the Low-Grade Ore Stockpile, the Main Tailing Impoundment, and the Magnetite Tailing Impoundment contain sulfide minerals which, when oxidized, generate acidic solutions. These acidic solutions react with in-situ minerals to produce acid rock drainage (ARD) that contains metals and sulfate in concentrations elevated above the water quality standards of Section 20.6.2.3103 NMAC. The Continental Open Pit and Hanover Mountain Open Pit are located within the Continental Mine/Hanover Mountain Mine Open Pit Surface Drainage Area (OPSDA) as defined by Section 20.6.7.7 NMAC.
- D. Process water and impacted stormwater discharges regulated pursuant to DP-181, including ARD may exceed the water quality standards of Section 20.6.2.3103 NMAC for aluminum, cadmium, chromium, chloride, cobalt, copper, fluoride, manganese, nickel, nitrate, iron, selenium, sulfate, TDS, nickel, and zinc, and are outside the acceptable range for pH.
- E. The tailings slurry has been found to exceed the water quality standards of Section 20.6.2.3103 NMAC for fluoride, sulfate, and TDS, as well as having elevated levels of zinc.

B104 Authorized Mine Units

This Discharge Permit contains requirements associated with the following mine units as identified in the Discharge Plan and Figure 1. All mine units listed below, meet the definition of “existing” mine units pursuant to the Copper Mine Rule, and are located outside the OPSDA, unless otherwise noted. The OPSDA and Area of Open Pit Hydrologic Containment (AOPHC) are shown on Figures 2a and 2b attached to this discharge permit.

A. Open Pits

1. The Continental Open Pit is approximately 190 acres in areal extent and approximately 500 feet deep. Based on Table 5 of the CMD and Figure 1 attached to this Discharge Permit, the maximum permitted footprint of the Open Pit is 250 acres.
2. The maximum permitted footprint of the Hanover Mountain Open Pit is 276 acres with a planned extent of mining to the 6,150-foot elevation as shown on Table 5 of the CMD and Figure 1 attached to this Discharge Permit. If no dewatering activities are occurring, it is anticipated that an open pit water body will form when groundwater is encountered and surface water runoff enters the pit. If the Permittee proposes to mine below this elevation or expand the permitted footprint of the Continental Open Pit or Hanover Mountain Open Pit, the Permittee shall apply for an amendment or modification of DP-181 as appropriate.

B. Waste Rock Stockpiles

1. South Waste Rock Disposal Facility: The current footprint of the SWRDF is approximately

270 acres. At full buildout, the SWRDF will incorporate the existing Pearson-Barnes Mine area, West WRF, Union Hill WRF, Buckhorn WRF, East WRF, and South WRF. As shown in Table 8 in the CMD and Figure 1 attached to this Discharge Permit, the permitted footprint of the SWRDF is 436 acres.

2. Low-Grade Ore/WRF: The current configuration of the Low-Grade Ore/WRF occupies 15 acres.
3. High-Grade Ore Stockpile: The High-Grade Ore Stockpile will be left in place, graded and compacted to be incorporated into the existing haul route between the Hanover Mountain Mine and the SWRDF. If future milling is performed, this material will be processed in the No. 2 Mill. If this material is left in place, it will be reclaimed according to the Closure/Closeout Plan and Copper Mine Rule requirements.
4. Conditionally Exempt Stockpile: The following waste rock stockpile is authorized by this Discharge Permit on condition that the Permittee adheres to the approved material characterization and handling plan defined in C101.C to ensure the conditionally exempt status as stockpiles that do not generate water contaminants that exceed the water quality standards of Section 20.6.2.3103 NMAC, and are conditionally exempt from applicable requirements listed in Subsection B of 20.6.7.21 NMAC.
 - a. OB Stockpiles Nos. 1 – 5 (will be incorporated into the SWRDF).

C. Tailing Impoundments

1. The Main Tailings Impoundment current acreage is 177 acres and is located within the AOPHC. As shown in Table 5 of the CMD and Figure 1 attached to this Discharge Permit, the maximum permitted footprint of the Main Tailings Impoundment is 268 acres. Containments associated with the Main Tailings Impoundment are listed in B105.E.5 through 11 and shown on Figure 3 attached to this discharge permit.
2. The Magnetite Tailings Impoundment current acreage is 23 acres, which also corresponds to the permitted footprint as shown in Table 5 of the CMD and Figure 1 attached to this Discharge Permit. The Magnetite Tailings Impoundment is located inside the AOPHC. Containments associated with the Magnetite Tailings Impoundment are listed in B105.E.14 and 15 and shown on Figure 3 attached to this discharge permit.

D. Impoundments

1. Decant Pond #4 – Decant Pond #4 is a high-density polyethylene (HDPE)-lined impoundment with a storage capacity of approximately 3 Acre-Feet (977,500 gallons). Decant Pond #4 collects drainage from the Main Tailings Impoundment via the Decant

Line for reuse in the mill and tailings circuit. Decant Pond #4 is also a main transfer point for process water from the Cement Pond, the Dam Toe Seep, the Decant French Drain, the North Tailing Decant Pond, Weber Pond, the Estrada Seep, the Magnetite Seepage Pond, the Magnetite Interceptor Trench, and the Union Hill Adit Seep. Seepage and impacted stormwater that is collected in Decant Pond #4 is pumped to the Surge Tank. Under tailings operations or upset conditions, water may be pumped directly from Decant Pond #4 to the Reclaim Pond.

2. Grape Gulch Pond #3 – Grape Gulch Pond #3 is a HDPE-lined impoundment with a storage capacity of approximately 2.8 AF (912,000 gallons), that collects impacted stormwater from the operational areas east of the general office and any overflow from Upper Creek Containment Pond 1. The impacted stormwater is pumped to the Surge Tank, or directly to the Reclaim Pond during upset conditions.
3. Reclaim Pond – The Reclaim Pond is an unlined impoundment with a storage capacity of approximately 467 AF (152,000,000 gallons). The Reclaim Pond collects decant water from the tailings during operation after the tailings are filtered through the Filter Dike. The Reclaim Pond also collects unimpacted stormwater from the upgradient watershed. In addition, the Reclaim Pond serves as emergency storage of excess impacted stormwater and seepage from the Continental Mine water management system. Impacted waters may be pumped from the Surge Tank, Grape Gulch Pond #3, Upper Creek Containment Pond 1, or the Upper Creek Containment Pond Expansion to the Reclaim Pond under upset conditions. Impacted solutions collected in the Reclaim Pond are pumped to the Surge Tank when there is capacity within the Bullfrog Pipeline to remove the excess water.
4. Upper Creek Containment Pond Expansion – Upper Creek Containment Pond Expansion is a HDPE single-lined impoundment designed to temporarily store impacted stormwater from areas disturbed by active mining on Hanover Mountain, impacted stormwater from the Mill No. 1 area, impacted stormwater and seepage from the Main Tailings Impoundment, and the Grape Gulch Seep Transfer system. The design capacity is approximately 17 AF (5,500,000 gallons). The Upper Creek Containment Pond Expansion and Grape Gulch Pond #3 are connected in series from north-to-south and together store impacted stormwater from the Upper Creek Containment Pond Expansion and Grape Gulch Pond #3 stormwater basins. The Upper Creek Containment Pond Expansion solutions are pumped to the Surge Tank, or directly to the Reclaim Pond during upset conditions.
5. SWRF Dam 1 – The SWRF Dam 1 is an unlined stormwater catchment with a storage capacity of approximately 3.4 AF (1,100,000 gallons) that impounds impacted stormwater

from the Buckhorn and South WRF's, and from the southwestern portion of the SWRDF. Impacted stormwater that is impounded behind the dam is pumped to SWRF Dam 3.

6. SWRF Dam 2 – During non-operational periods, the SWRF Dam 2 captures un-impacted stormwater. During operations, the SWRF Dam 2 is an unlined stormwater catchment with a storage capacity of approximately 2.5 AF (815,000 gallons) that may impound impacted stormwater from the South WRF, and from the south-central portion of the SWRDF. Impacted stormwater that is impounded behind the dam is pumped to SWRF Dam 3.
 7. SWRF Dam 3 – The SWRF Dam 3 is an unlined stormwater catchment with a storage capacity of approximately 9 AF (2,900,000 gallons) that impounds impacted stormwater from the South and Union Hill WRF's, and ultimately from the southeastern portion of the SWRDF. Impacted stormwater from the SWRF Dam 1 and SWRF Dam 2 catchments is pumped to SWRF Dam 3. Stormwater collected in SWRF Dam 3 is pumped to the Bullfrog Pipeline.
- E. Sumps, Tanks, Pipelines and Other Containment Systems. Figure 3 attached to this discharge permit shows the location of all water management structures at the Continental Mine and provides estimates of typical flow rates under normal operating conditions.
1. Bullfrog Pipeline – The Bullfrog Pipeline is a 10-inch diameter HDPE pipeline. It provides supplemental process water to the Continental Mine from the Cron Ranch, Bullfrog Shaft, and the Hanover No. 8 shaft during operations when needed. When not used as a water supply for the Continental Mine, the Bullfrog Pipeline transfers commingled seepage, process water, and impacted stormwater from the Continental Mine to the Chino Mine. The pipeline extends approximately 7.5 miles from the Continental Mine Surge Tank to the Bullfrog Shaft, where it joins a line to the Chino Mine Tailing Thickener Tanks. The Bullfrog Pipeline, when used to transfer water to Chino Mine, is gravity fed from the Surge Tank, is pump fed by the SWRF Dam 3 pumping system, and is pump fed by the Bullfrog Shaft Pumping System.
 2. Cement Pond – The Cement Pond is an unlined pond with a storage capacity of approximately 0.1 AF (32,500 gallons) that collects seepage and impacted stormwater from the East WRF. The seepage and impacted stormwater from the Cement Pond are pumped to Decant Pond #4.
 3. Cement Pond Interceptor Trench – The Cement Pond Interceptor Trench is a French drain interceptor system that collects seepage from the toe of the Cement Pond headwall. The collected seepage is pumped to the Cement Pond.

4. Poison Spring Interceptor Trench – The Poison Spring Interceptor Trench is a French drain interceptor system that collects seepage from Main Tailings Impoundment and the East WRF. Collected solutions are pumped to the Cement Pond.
5. Blackman's Seep – Blackman's Seep is an unlined pond with nominal storage capacity that collects seepage from the Main Tailings Impoundment. The seepage from Blackman's Seep is pumped into Upper Creek Containment Pond 1.
6. Dam Toe Seep – The Dam Toe Seep collects seepage from the Main Tailings Impoundment. The seepage that is collected gravity drains to Decant Pond #4.
7. Decant French Drain – The Decant French Drain collects seepage from the Main Tailings Impoundment. The seepage that is collected gravity drains to Decant Pond #4.
8. North Tailing Decant Pond – The North Tailing Decant Pond is an unlined pond with a storage capacity of approximately 2.1 AF (684,000 gallons) that collects impacted stormwater from the Main Tailings Impoundment. The impacted stormwater gravity drains to Decant Pond #4.
9. Peach Tree Spring Seep – The Peach Tree Spring Seep collects seepage from the Main Tailings Impoundment. The collected seepage gravity drains to Decant Pond #4.
10. Weber Pond – Weber Pond is a lined pond with a storage capacity of less than 0.1 AF (32,500 gallons) that collects impacted stormwater and seepage from the Main Tailings Impoundment. The impacted stormwater and seepage gravity drains to Decant Pond #4.
11. Estrada Seep – The Estrada Seep collects seepage from the East WRF. The collected seepage is pumped to Decant Pond #4.
12. Grape Gulch Seep Transfer Systems – The Grape Gulch Seep Transfer System collects seepage from the east side of the Main Tailings Impoundment. This system collects seepage from six seeps and sumps: Cottonwood Seep, East Haul Road Seep, Rock Dam Seep, Borehole Sump, Unnamed Seep, and Borehole Access Seep, which are collected via gravity drains and report to the Upper Creek Containment Pond Expansion.
13. Magnetite Seepage Pond – The Magnetite Seepage Pond is an unlined pond with a storage capacity of less than 0.1 AF (32,500 gallons) that collects impacted stormwater and seepage from the Magnetite Tailings Impoundment. The seepage and impacted stormwater is pumped to Decant Pond #4.
14. Magnetite Interceptor Trench – The Magnetite Interceptor Trench is a French drain that collects seepage from the Magnetite Tailings Impoundment. The seepage that is collected

is pumped to Decent Pond #4.

15. Surge Tank – The Surge Tank is the primary water transfer hub in the Continental Mine water management system. It is a steel tank with a capacity of 352,500 gallons. Water that is stored in the Surge Tank gravity drains into the Bullfrog Pipeline. Under upset conditions, process water in the Surge Tank is pumped to the Reclaim Pond.
16. Union Hill Adit Seep – The Union Hill Adit Seep collects seepage from the Union Hill Adit, stormwater from the Union Hill WRF, and stormwater from the southeastern portion of the SWRDF.
17. Sumps – There are a total of fourteen sumps that range in capacity from 179 gallons to 41,888 gallons. Sumps S-1 through S-12 are designed to contain copper concentrate, tailings, reagent, and flotation reagent spillage from the No. 1 and No. 2 Mills. These sumps are no longer active and are anticipated to be demolished during the term of this Permit. S-13 is designed to collect sediment from vehicle washing. S-14 collects Estrada Seep water. Table 10 in the CMD describes the general location, purpose, material description (i.e., concrete-lined or earthen), surface area, and existing capacity of each currently active sump.
18. Continental Pipeline - The Continental Pipeline is a 10-inch diameter HDPE pipeline (authorized but not yet constructed) that increases to a double-lined-14-inch HDPE pipeline in areas outside the OPSDA, and includes three HDPE-lined secondary containment areas for spill management. It provides supplemental process water, seepage, stormwater, and make up water to the Continental and Chino Mines from the Continental Surge Tank during operations when needed. The pipeline extends approximately 42,573 feet from the Continental Mine Surge Tank to the Frog Pond at Chino Mine, and includes two spur routes. The west spur conveys impacted water to the Café Queue Tank and the east spur conveys impacted water to the Lampbright Tank.
19. Continental Pipeline Secondary Containment- Three HDPE-lined Spill Containment areas (Spill Containment Ponds 1, 2, and 3) will be located along the CHR in areas located outside the OPSDA. The capacity of Spill Containment Pond 1 is approximately 88,000 gallons. The capacity of Spill Containment Pond 2 is approximately 104,000 gallons. The capacity of Spill Containment Pond 3 is approximately 114,000 gallons. Solutions will be pumped out of containments within 30 days of a discharge.
20. Tanks – There are a total of nine tanks (not including the Surge Tank) that range in capacity from 1,200 gallons to 600,000 gallons. T-3 is a septic tank located at Mill No. 2. T-4 is a concrete tank with a storage capacity of 20,944 gallons that collects Union Hill Adit Seep water. T-5 is a steel tank with a storage capacity of 60,000 gallons that collects and

captures copper concentrate from the No. 1 Mill. T-6 is a steel tank with a storage capacity of 60,000 gallons that collects and captures zinc concentrate from the No. 1 Mill. Tank T-7 is a steel-sided tank with a concrete base with a storage capacity of 600,000 gallons that collects copper concentrate from the No. 1 Mill. T-8 is a steel tank with a storage capacity of 352,500 gallons that collects copper concentrate from the No. 1 Mill. Tanks T-5 through T-8 will be decommissioned and removed as part of the No. 1 Mill demolition scheduled during the term of this Permit. Three existing tanks will be relocated from the Mill No. 1 area for use as follows: Tank T-9 is a 100,000-gallon steel tank that will be used to store process water for dust suppression. Tank T-10 is a 100,000-gallon steel tank that will be used to store freshwater for dust suppression. Tank T-11 is a 24,500-gallon steel tank that stores potable water and is no longer active. Table 10 in the CMD describes the general location, purpose, material description, surface area, and existing capacity of each currently active tank.

21. Pipelines - Pipelines serving the DP-181 mine units consist of HDPE material and range in size from 2 inches in diameter to greater than 16 inches in diameter. Table 9 and Figures 5A through 5B in the CMD show the purpose, material, diameter, and location of each pipeline, with the exception of the new Continental Pipeline. The Continental Pipeline will vary from 10-14 inch single- and double-walled HDPE and its location and delivery endpoints are shown in Figure 4.

F. Flow Measurement Devices

1. The Permittee utilizes flow meters to measure regulated discharge volumes pursuant to this discharge permit and as required by the Copper Mine Rule. Flow meters utilized by DP-181 are described in Table 11 and Figures 7A and 7B of the CMD.

G. Truck and Equipment Washing Units

1. There is an existing truck and equipment washing unit, but it is not operational and would need to be updated to comply with 20.6.7.26 NMAC. Any new truck and equipment washing units shall be constructed and operated in accordance with 20.6.7.26 NMAC.

B105 Authorized Discharges

- A. The Permittee is authorized to discharge water contaminants from the following mine units in accordance with all applicable system design and operational constraints as described in this Discharge Permit, and the Discharge Plan. [20.6.2.3109 NMAC] The Permittee is authorized to discharge a maximum of 12,000,000 gpd of tailings slurry to the Main Tailings Impoundment and discharge water contaminants resulting from the placement of such materials. [20.6.2.3109 NMAC]

- B. The Permittee is authorized to dewater the Continental Open Pit and the Hanover Mountain Open Pit to accommodate mining of the Pits and to manage process water and impacted stormwater from the Continental Open Pit by transferring the water to Chino Mine via the Bullfrog Pipeline, using the water in the Continental Mine process water circuit, or using it as otherwise described in the Mine Operation Water Management Plan which is a component of the Storm and Process Water Operational and Emergency Response Plan for Cobre's Water Management System required pursuant to Condition C107.A.
- C. The Permittee is authorized to place waste rock from the Continental Open Pit and/or the Hanover Open Pit within the authorized SWRDF footprint and discharge water contaminants resulting from the placement of such materials.
- D. The Permittee is authorized to expand the Hanover Mountain Open Pit from approximately 156 acres to approximately 276 acres and deepen the pit to a bottom elevation of approximately 6,150 feet amsl.
- E. The Permittee is authorized to manage discharges associated with the following impoundments, sumps, tanks, seepage collection systems, vehicle wash station, and stormwater collection systems:
 - 1. Blackman's Seep
 - 2. Bullfrog Pipeline
 - 3. Continental Pipeline
 - 4. Cement Pond
 - 5. Cement Pond Interceptor Trench
 - 6. Poison Spring Interceptor Trench
 - 7. Decant Pond #4
 - 8. Dam Toe Seep
 - 9. Decant French Drain
 - 10. North Tailing Decant Pond
 - 11. Peach Tree Spring Seep
 - 12. Weber Pond

13. Estrada Seep
14. Grape Gulch Pond #3
15. Grape Gulch Seep Transfer Systems
16. Magnetite Seepage Pond
17. Magnetite Interceptor Trench
18. Reclaim Pond
19. Surge Tank
20. SWRF Dam 1
21. SWRF Dam 2
22. SWRF Dam 3
23. Union Hill Adit Seep
24. Upper Creek Containment Pond Expansion
25. Continental Mine Vehicle Wash Station
26. 14 Concrete-Lined Sumps (S-1, S-2, S-3, S-4, S-5, S-6, S-7, S-8, S-9, S-10, S-11, S-12, S-13, S-14)
27. Nine Tanks (T-3, T-4, T-5, T-6, T-7, T-8, T-9, T-10, and T-11)

- F. The Permittee is authorized to use water from various sources located at the Continental Mine for dust suppression within the area of DP-181 and associated haul roads, in accordance with the dust suppression plan submitted on November 8, 2017. Process water supplied from the Surge Tank, the Continental Shaft #3, or the Reclaim Pond does not meet the water quality standards of Section 20.6.2.3103 NMAC.
- G. This Discharge Permit authorizes only those discharges specified herein. Any unauthorized discharges such as spills or leaks must be reported to NMED and remediated as required by Section 20.6.2.1203 NMAC and Subsection G of 20.6.7.30 NMAC, and any additional requirements listed in this Discharge Permit.

- H. The Permittee shall provide written notice to NMED of the commencement, or recommencement of operations in accordance with Subsection C of 20.6.7.18 NMAC.

Part C FACILITY SPECIFIC REQUIREMENTS

The Permittee shall conduct operations in accordance with the requirements set forth below to ensure compliance with Part 20.6.2 NMAC.

C100 Open Pits

- A. The Continental and Hanover Mountain Open Pits shall be operated in accordance with the applicable requirements of Section 20.6.7.24 NMAC.
- B. Fluids generated within the open pits shall be managed according to the applicable requirements of Subsection C of 20.6.7.24 NMAC, and the Storm and Process Water Operational and Emergency Response Plan (formerly a Sitewide Water Management Plan) required pursuant to Condition C108.A.
- C. Pursuant to Subsection A of 20.6.7.24 NMAC, the Continental and Hanover Mountain Open Pits shall remain within the current pit perimeters shown in Table 5 of the CMD and Figure 1 attached to this Discharge Permit. The Permittee must obtain a permit modification or amendment prior to expanding the outer perimeter of either the Continental or Hanover Mountain Open Pits.

C101 Waste Rock Stockpiles

- A. Design, construction, and location of waste rock stockpiles shall be in accordance with the Discharge Plan, and applicable requirements of Subsections B and C of 20.6.7.21 NMAC.
- B. The Permittee shall comply with applicable operational requirements listed in Paragraphs (2) through (8) of 20.6.7.21.D NMAC including the requirement to place waste rock on waste rock stockpiles to plan for closure, to the extent practicable, and be in accordance with the operating plan required in C110.J.1 (Sections 20.6.7.18, 20.6.7.21 and 20.6.7.33 NMAC).
1. Pursuant to Paragraph (7) of 20.6.7.21.D NMAC, placement of waste rock shall be in accordance with an operating plan that describes the sequencing of waste rock deposition on an annual basis, operation of seepage collection systems, operation of interceptor systems, operation of systems to return water to the concentrator or other locations as appropriate, and any other water management features.
- C. Waste rock shall be handled in accordance with applicable requirements of Section 20.6.7.21 NMAC and the NMED-approved *Material Characterization and Handling Plan*. The *Material*

Characterization and Handling Plan for DP-181 is described in three documents: 1) "Aquifer Evaluation and Management of the South Waste Rock Disposal Facility at the Continental Mine," dated January 2017, 2) a second revision dated December 6, 2023 titled, "Hanover Mountain Waste Rock Classification Verification and Material Handling Plan Update DP-181," and 3) a third revision titled, "SWRDF Line - Waste Rock Handling Update" dated July 6, 2025. Collectively, these three documents constitute the *Material Characterization and Handling Plan* for the site.

- D. Construction of new waste rock stockpiles, or expansion of waste rock stockpiles beyond footprints or locations identified in Figure 1 of this Discharge Permit or in the Discharge Plan, or for the purpose of facility closure, must be evaluated in accordance with the requirements of Section 20.6.7.21 NMAC, and may be subject to additional permitting requirements as described in D107.
- E. South Waste Rock Disposal Facility
1. Pursuant to Paragraph (1) of 20.6.7.21.D NMAC and Paragraph (1) of 20.6.7.21.B NMAC, the SWRDF shall not exceed the footprint (436 acres), location, and configuration as shown in Table 5 of the CMD and Figure 1 attached to this Discharge Permit. The Permittee may only expand the footprint for the purpose of facility closure as approved through the Supplemental Discharge Permit for Closure, DP-1403, or through an NMED-approved permit amendment or modification to DP-181.
 2. Material removed from the Hanover Mountain Mine that is characterized as potentially acid generating (PAG) will be placed on the South WRF, which has acid neutralizing potential (ANP) material. Materials shall be placed in a manner that will achieve a positive net-neutralizing potential (NNP) and an ANP:AGP (Acid Generating Potential) ratio greater than 1.25:1 within the overall column of placed materials at all locations pursuant to Subparagraph (c) of 20.6.7.21.A(2) NMAC.
 3. Construction of the SWRDF shall be in accordance with the applicable engineering requirements referenced by Paragraph (1) of 20.6.7.21.C NMAC, Discharge Permit application materials dated September 13, 2011, the "Aquifer Evaluation and Management of the South Waste Rock Disposal Facility at the Continental Mine" dated January 2017, and materials contained in the administrative record prior to issuance of this Discharge Permit.
 4. Pursuant to Section 20.6.7.19 NMAC, the Permittee shall meet all setback requirements for the SWRDF. Within 120 days of completion of the SWRDF, the Permittee shall provide a topographic map showing the configuration of the entire Continental Mine area. The map shall have a contour interval no greater than 10 feet and shall be at a scale of 1-inch

equals 400 feet (1:4800) or larger.

5. In accordance with Roman numeral viii of 20.6.7.21.B(1)(d) NMAC, the Permittee shall submit a final report and as-built drawings within 120 days of completion of construction for any interceptor system, seepage collection, or liner system associated with the SWRDF.

C102 Tailing Impoundments

- A. The Permittee shall comply with applicable operational requirements listed in Paragraph (1) of 20.6.7.22.C NMAC and be in accordance with the operating plan required in C109.K.
- B. Pursuant to Subparagraph (a) of 20.6.7.22.C(1) NMAC, the Main Tailing Impoundment and Magnetite Tailing Impoundment shall not exceed the footprint (268 and 23 acres, respectively) or locations and configurations as shown in Table 5 of the CMD and Figure 1 attached to this Discharge Permit. The Permittee may only expand the permitted footprint for the purpose of facility closure as approved through the Supplemental Discharge Permit for Closure, DP-1403, or through an NMED-approved permit amendment or modification to DP-181.
- C. Pursuant to Section 20.6.7.19 NMAC, the Permittee shall meet all setback requirements for the Main and Magnetite Tailing Impoundments.
- D. An interceptor system monitoring and evaluation report shall be submitted for both impoundments annually pursuant to Subparagraph (k) of 20.6.7.22.C(1) NMAC and Subsection H of 20.6.7.29 NMAC.
- E. Prior to discharging to the Main Tailings Impoundment, the Permittee shall ensure that berms and/or the dam structure of the Main 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.

C103 Impoundments

- A. The Permittee shall operate the Decant Pond #4, Grape Gulch Pond #3, Reclaim Pond, Upper Creek Containment Pond 1, Upper Creek Containment Pond Expansion, SWRF #1, SWRF #2, and SWRF #3 in accordance with the applicable requirements of Subsection F of 20.6.7.18 NMAC.
- B. Pursuant to Paragraphs (1), (2), and (3) of 20.6.7.18.B NMAC, the Permittee shall notify NMED at least five working days before starting construction, repair or relining of a liner system for impoundments designed for the containment of water contaminants and submit a

construction certification report bearing the seal and signature of a licensed New Mexico professional engineer prior to discharging into the liner system.

- C. The Permittee shall submit to NMED for approval detailed plans and specifications and a construction quality assurance/construction quality control (CQA/CQC) plan pursuant to Subsection C of 20.6.7.17 NMAC and D107 of this Discharge Permit prior to construction of any proposed impacted stormwater impoundment. The impacted stormwater impoundment shall be designed to meet the design and construction requirements pursuant to Subsections C and D of 20.6.7.17 NMAC.

C104 Tanks, Pipelines, Sumps and Other Containment Systems

- A. The Permittee shall operate all pipelines, tanks and sumps in existence on the effective date of the Copper Mine Rule in accordance with the applicable requirements of Paragraph (2) of Subsection B and Subsection C of 20.6.7.23 NMAC.
- B. Detailed and complete construction plans and specifications and supporting design calculations for any proposed or required tanks, pipelines, sumps or other containment systems, including any replacements thereof, shall be submitted to NMED pursuant to Paragraph (2) of 20.6.7.17.C NMAC, Section 20.6.2.23 NMAC, and D107 of this discharge permit. This requirement does not apply to portable or temporary tanks, pipelines, sumps, or other containment systems that are subject to periodic relocation during mining operations.
- C. Pursuant to applicable requirements of Paragraph (2) of 20.6.7.23.B NMAC and Subsection J of 20.6.7.33 NMAC, the Permittee shall remove and properly dispose of the tailing, process water, or other materials contained in pipelines, tanks or sumps as soon as they are no longer needed for site operations, water treatment, or other post-closure water management. Any residual tailing, process water, sediments or contaminated water shall be removed from the pipelines, tanks or sumps prior to closure and dispose of the material in a department approved manner. Pipelines may be removed for appropriate disposal or cleaned and buried in place. Sumps may be removed for disposal or cleaned and broken up and buried in place. During pipeline, tank or sump closure, the Permittee shall inspect the entire pipeline, tank or sump area for evidence of past spills and characterize the impacts and potential impacts of such spills. The Permittee shall document all areas where there is evidence of spills and propose to the department appropriate corrective actions pursuant to 20.6.2.1203 NMAC. Following pipeline, tank or sump removal, the Permittee shall remove for disposal or reclaim in place all acid generating pipeline, tank or sump bedding material that has the potential to impact water quality in excess of the applicable standards.

C105 Truck and Equipment Washing Unit

- A. If the Permittee constructs a new truck and equipment washing unit, or resumes operation of the existing unit, the unit must comply with the applicable requirements of Subsection C of 20.6.7.26 NMAC.

C106 Stormwater Management

- A. Stormwater shall be managed in accordance with the applicable requirements of Paragraph (4), 20.6.7.17.C NMAC, and in accordance with the Sitewide Water Management Plan (referred to as the “Storm and Process Water Operational and Emergency Response Plan for Cobre’s Water Management System” by the Permittee) required to be submitted annually to NMED pursuant to C108.A of this Discharge Permit.
- B. The Permittee shall inspect monthly all stormwater impoundments, dikes and collection ponds for the presence of stormwater accumulations that exceed design capacities. In the event of rainfall, the Permittee shall pump the stormwater impoundments and collection ponds pursuant to the Storm and Process Water Operational and Emergency Response Plan for Cobre’s Water Management System. [20.6.2.3107 NMAC]

C107 Dust Suppression

- A. Process water used for dust suppression can only be used on approved areas of the Continental Mine. If at some time in the future the Permittee wishes to use an alternate source of dust suppression water the Permittee shall notify NMED for approval prior to the proposed change pursuant to 20.6.7.14 NMAC.

C108 Sitewide Water Management Plan

- A. The Permittee shall maintain and update a Sitewide Water Management Plan submitted annually with the February Semi-Annual Monitoring Report. This plan shall be a comprehensive plan that describes all water management systems at the Continental Mine, and be designed at a minimum to meet the requirements of 20.6.7.17.C(4) NMAC (Stormwater Management Plan), 20.6.7.24.C NMAC (Mine Operation Water Management Plan), and 20.6.7.30.K NMAC (Interim Emergency Water Management Plan).

C109 Flow Meters

- A. Pursuant to Paragraph (2) of 20.6.7.18.E NMAC, and Subsection F of 20.6.7.29 NMAC, the Permittee shall visually inspect all flow meters, used for compliance with Copper Mine Rule, on a monthly basis for evidence of malfunction and repair or replace malfunctioning flow meters within 30 days of or as soon as practicable following discovery.

C110 Monitoring and Reporting

- A. Pursuant to applicable requirements in Sections 20.6.7.28 and 20.6.7.29 NMAC, the Permittee shall identify, collect, preserve, transport, analyze, and report all groundwater, surface water, stormwater, seeps and springs, and process water samples from the facility in accordance with Table 1, and any additional requirements listed in this Discharge Permit. Table 1, attached to this Discharge Permit, provides a summary of the monitoring and reporting requirements.
- B. Samples of pit sump water, storm water, PLS, and process water, including seeps shall be analyzed for total (see 20.6.2.3103 NMAC) and dissolved concentrations in accordance with Table 1. Samples of groundwater and springs shall be analyzed for dissolved concentrations in accordance with Table 1.
- C. The Permittee shall submit monitoring reports to NMED on a semi-annual schedule that contain all quarterly monitoring data and information collected pursuant to the requirements of this Discharge Permit and applicable requirements of Section 20.6.7.29 NMAC. Semi-annual reports are due by February 28 and August 31 of each year. Data required to be submitted annually shall be submitted in the monitoring report due by February 28 of each year.
- D. Pursuant to Subsection L of 20.6.7.28 NMAC, the Permittee shall submit to NMED groundwater elevation contour map(s) on a semi-annual basis and a map showing the extent of the OPSDA on an annual basis. The groundwater elevation contour map(s) shall be of an appropriate scale to show groundwater elevation contours for the Continental Mine; the contour maps shall include land surface topographic contours with appropriate contour intervals, and shall include the monitoring wells that the groundwater data is based on. The maps shall be submitted according to the reporting schedule listed in C109.C.
- E. Changes to monitoring and reporting requirements may require amendment or modification of this Discharge Permit as required by the Secretary. [20.6.2.7.P and 20.6.7.7.B(19) NMAC]
- F. Groundwater
 - 1. The Permittee shall monitor groundwater at locations specified by Subsection B of 20.6.7.28 NMAC and listed in Table 1 of this Discharge Permit
 - 2. Pursuant to Paragraph (1) of 20.6.7.28.B NMAC, the existing monitoring wells listed in Table 1 have been deemed appropriate by NMED for continued use as groundwater monitoring wells under this Discharge Permit. These groundwater monitoring wells, installed prior to the effective date of the Copper Mine Rule, have been identified to be

constructed in accordance with the Copper Mine Rule.

3. Pursuant to Subsection G of 20.6.7.28 NMAC, the Permittee shall sample and analyze groundwater from the DP-181 monitoring wells according to the schedule and parameters provided in Table 1, and applicable requirements of Subsection F of 20.6.7.28 NMAC. Analytical results shall be submitted in the semi-annual monitoring reports in the format specified by Subsection C of 20.6.7.29 NMAC.

G. Continental Mine Seepage Collection Systems

1. The Permittee shall submit an annual monitoring and evaluation report for the Continental Mine seepage collections systems authorized by this discharge permit that contain the information required by Subsection H of 20.6.7.29 NMAC. The report shall be submitted with the monitoring report due by February 28 of each year.

H. Mine Operation Water Management Plan Reporting

1. Pursuant to 20.6.7.24.C, the Permittee shall submit annually a report summarizing the pit dewatering activities for the Continental Open Pit and Hanover Mountain Mine Open Pit for the previous year, including reporting on volumes of water pumped to dewater the Pit and location of pumping. The report shall also discuss changes and planned activities for dewatering the Continental Open Pit and Hanover Mountain Mine Open Pit for the coming year. The planned future dewatering activities shall be incorporated into the annual Sitewide Water Management Plan update required pursuant to C109.F.

I. Waste Rock Stockpiles

1. Pursuant to Paragraph (7) of 20.6.7.21.D NMAC, the Permittee shall submit on an annual basis an operating plan that describes the sequencing of waste rock deposition on the SWRDF, including the volume and location of PAG material placed in the past year and a proposal for material placement for the next year and describes the operation of any applicable systems utilized to contain or transport process water or impacted stormwater from the SWRDF. The operating plan shall be submitted with the monitoring report due by February 28 of each year.
2. In the event material with AGP will be placed in an area not located on the South WRF, the Permittee shall submit a plan for approval a minimum of 30 days prior to placement of this material. The plan shall ensure that placement of this material meets the ANP:AGP ratio of 1.25:1 as stipulated in C101.C(1) and pursuant to Subparagraph (c) of 20.6.7.21.A(2) NMAC.

J. Tailing Impoundments

1. Pursuant to Subparagraph (j) of 20.6.7.22.C.(1) NMAC, the Permittee shall submit on an annual basis an operating plan that describes the sequencing of tailings deposition on the Main Tailings Impoundment and describes the operation of any applicable systems utilized to contain or transport process water and measures taken to manage the surface impoundment area to maintain adequate freeboard.

K. Flow Meters

1. Pursuant to Subparagraph (a) of 20.6.7.18.E(2) NMAC, the Permittee shall submit a report of repaired or replaced flow meters in the semi-annual monitoring reports that include a description of any flow meter malfunctions with a statement verifying the repair and description of calibration of the flow meter pursuant to Paragraph (3) of 20.6.7.18.E NMAC.

L. Discharge Volumes

1. In addition to discharge volume reporting required by Subsection B of 20.6.7.29 NMAC, the Permittee shall measure and report discharge volumes pursuant to Subsections E and F of 20.6.7.29 NMAC for tailing discharges, process water and impacted stormwater.

M. Meteorological Data

1. Meteorological data shall be measured as stipulated in the CMD. The data shall be submitted to NMED in the monitoring report due on February 28 of each year as required in Section C109.C.

N. Open Pit Water Quality

1. In order to evaluate Continental Open Pit and Hanover Open Pit water bodies water quality, the Permittee shall continue quarterly sampling of pit water in accordance with Table 1.

C111 Contingency Plan

- A. The Permittee shall comply with all applicable contingency requirements and submit to NMED all applicable information or documentation specified in Subsections A through J of 20.6.7.30 NMAC.
- B. If NMED or the Permittee identifies any other failures of the discharge plan or system not specifically noted in this permit or Section 20.6.7.30 NMAC that may have the potential to

impact water quality, NMED may require the Permittee to develop and submit contingency plans and schedules for NMED approval to address such failures. [20.6.2.3107.A.10 NMAC]

C112 Closure Plan

- A. Closure of all mine units associated with this Discharge Permit shall be performed in accordance with the requirements of Section 20.6.7.33 NMAC and Section 20.6.7.34 NMAC, and in accordance with DP-1403, as applicable. Closure and financial assurance requirements associated with facilities authorized by this Discharge Permit are included in DP-1403.

Part D GENERAL CONDITIONS

General conditions issued by the Ground Water Quality Bureau pursuant to 20.6.2 NMAC and 20.6.7 NMAC are listed below.

D100 Enforcement

- A. Any violation of the requirements and conditions of this Discharge Permit, including any failure to allow NMED staff to enter and inspect records or facilities, or any refusal or failure to provide NMED with records or information, may subject the Permittee to a civil enforcement action pursuant to the NMSA 1978, Section 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, modifying 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 NMSA 1978, Section 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 NMSA 1978, Section 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. In any action to enforce this Discharge Permit, the Permittee waives any objection to the admissibility as evidence of any data generated pursuant to this Discharge Permit. The Permittee does not waive any argument as to the weight such evidence should be given. [74-6-10 WQA, 74-6-10.1 WQA]
- B. Pursuant to the NMSA 1978, Section 74-6-10.2(A-F), criminal penalties may be assessed for any person who knowingly violates or knowingly causes or allows another person to:
1. Make any false material statement, representation, certification or omission of material fact in an application, record, report, plan or other document filed, submitted or required to be maintained under the WQA;

2. Falsify, tamper with or render inaccurate any monitoring device, method or record required to be maintained under the WQA; or
3. Fail to monitor, sample or report as required by a permit issued pursuant to a state or federal law or regulation.

D101 General Inspection and Entry Requirements

- A. Nothing in this Discharge Permit shall be construed as limiting in any way the inspection and entry authority of NMED under the WQA, the WQCC Regulations, or any other applicable law or regulation. [20.6.2.3107 NMAC, NMSA 1978 74-6-9(B) & (E) WQA]
- B. The Permittee shall allow the Secretary or an authorized representative, upon the presentation of credentials, to [20.6.2.3107.D NMAC, NMSA 1978 74-6-9(B) & (E) WQA]:
 1. Enter at regular business hours or at other reasonable times upon the Permittee's premises or other location where records must be kept under the conditions of this Discharge Permit, or under any federal or WQCC regulation.
 2. Inspect and copy, during regular business hours or at other reasonable times, any records required to be kept under the conditions of this Discharge Permit, or under any federal or WQCC regulation.
 3. Inspect, at regular business hours or at other reasonable times, any facility, equipment (including monitoring and control equipment or treatment works), practices or operations regulated or required under this Discharge Permit, or under any federal or WQCC regulation.
 4. Sample or monitor, at reasonable times for the purpose of assuring compliance with this Discharge Permit or as otherwise authorized by the WQA, any effluent, water contaminant, or receiving water at any location before or after discharge.

D102 General Engineering, Operational, and Setback Requirements

- A. New mine units shall be designed in accordance with the applicable requirements of Section 20.6.7.17 NMAC.
- B. The Permittee shall follow the general operational requirements of Section 20.6.7.18 NMAC.
- C. The Permittee shall meet all applicable setback requirements for any new mine units pursuant to Section 20.6.7.19 NMAC.

D103 General Record Keeping and Reporting Requirements

- A. The Permittee shall retain written records at the copper mine facility written records as required pursuant to Section 20.6.7.37 NMAC.
- B. The Permittee shall furnish to NMED, within a reasonable time, any documents or other information which it may request to determine whether cause exists for modifying, terminating and/or renewing this Discharge Permit or to determine compliance with this Discharge Permit. The Permittee shall also furnish to NMED, upon request, copies of documents required to be kept by this Discharge Permit. [20.6.2.3107.D NMAC, NMSA 74-6-9(B) & (E) WQA]

D104 General Sampling and Analytical Methods

- A. Unless otherwise specified by this Discharge Permit, or approved in writing by NMED, the Permittee shall use sampling and analytical techniques that conform with the references listed in Subsection B of 20.6.2.3107 NMAC. [20.6.2.3107.B NMAC, 20.6.7.29.D NMAC]

D105 Monitoring Well Abandonment

- A. The Permittee shall submit a written request for NMED approval in accordance with Condition C109.E at least 30 days prior to the anticipated destruction or removal of any monitoring wells required under this Discharge Permit. After the Permittee receives NMED approval, monitoring well plugging and abandonment shall be completed in accordance with the document titled, *Ground Water Discharge Permit Monitoring Well Construction and Abandonment Conditions*, Revision 1.1, March 2011, or according to regulations issued by the Office of the State Engineer in 19.27.7 NMAC, unless an alternate method is approved by NMED. [20.6.2.3107 NMAC]
- B. The request required in D105.A shall include the following information:
 - 1. A scaled map showing the location of the monitoring well(s) and the mine units it is intended to monitor.
 - 1. The purpose for plugging and abandoning the monitoring well(s).
 - 2. Details, if available, on the monitoring well(s) including depth-to-water elevation, top-of-casing elevation, construction and lithologic logs.
 - 3. Recent groundwater analytical results from a minimum of the most recent eight sampling events (or as approved by NMED) from the monitoring well(s).

4. Proposed replacement well(s), if applicable.
5. Same details, as applicable, listed in Conditions D105.B.1, and D105.B.3 are required for the proposed replacement monitoring well(s). New replacement wells require monitoring well completion reports pursuant to Subsection K of 20.6.7.28 NMAC.

D106 Reporting Requirements for Unauthorized Discharges

- A. In the event of a spill or release that is not authorized under this Discharge Permit, the Permittee shall initiate the notifications and corrective actions as required in 20.6.2.1203 NMAC and Subsection G of 20.6.7.30 NMAC. The Permittee shall take immediate corrective action to contain and remove or mitigate any damage caused by the discharge. Process water or impacted stormwater or other material that is spilled or released that has the potential to impact water quality shall be contained and pumped to a sump, impoundment, or leach stockpile permitted pursuant to the Copper Mine Rule. Contaminated soils shall be removed and placed in a location specifically authorized in the discharge permit, an alternate location subject to NMED approval, or otherwise properly contained, transferred, or disposed of in a manner that does not result in discharge to non-authorized areas. Within 24 hours after discovery of the discharge, the Permittee shall verbally notify NMED and provide the information required by Paragraph (1) of 20.6.2.1203.A NMAC, and to determine applicable monitoring and reporting requirements pursuant to Paragraphs (2) and (3) of 20.6.7.29.B NMAC. The Permittee shall repair or replace failed components within 48 hours from the time of failure or as soon as practicable pursuant to Subsection G of 20.6.7.30 NMAC. Within 7 days of discovering a discharge reportable under 20.6.2.1203 NMAC, the Permittee shall submit a written report to NMED verifying the oral notification and providing any additional information or changes. Pursuant to Paragraph (6) of 20.6.2.1203.A NMAC, the Permittee shall submit a corrective action report within 15 days after discovery of the discharge that describes corrective actions taken and/or to be taken. [20.6.2.1203 NMAC; 20.6.7.29.B(2) and (3) NMAC; Subsection G of 20.6.7.30 NMAC]
- B. As part of the 24-hour spill notification requirements, the Permittee shall submit a figure to NMED by the end of the next business day that clearly displays the location (or locations) of the spill, elevation(s) of the spill, and identifies nearby mine units and/or location information in latitude/longitude coordinates in decimal degrees (XX.XXXXXX and -XXX.XXXXXX, respectively), using a specified datum of WGS 84. Submittal of location information in Universal Transverse Mercator (UTM) format is also acceptable.

D107 Modifications and Amendments

- A. The Permittee shall notify and obtain approval from NMED of a proposed change to the facility or the facility's discharge that would result in a change in the volume discharged; the

location of the discharge; or the amount or character of water contaminants received, treated, or discharged by the facility, prior to implementing such changes. Such changes may require modification or amendment to this Discharge Permit, including payment of applicable fees as specified in Section 20.6.7.9 NMAC. [20.6.2.3107.C NMAC, 20.6.2.3109.E NMAC, 20.6.7.7.B(19) NMAC, 20.6.7.14 NMAC]

- B. As determined by NMED, for any proposed change that would meet the definition of a discharge permit modification as specified in Paragraph P of 20.6.2.7 NMAC, the Permittee shall submit for NMED approval an application for modification of this Discharge Permit pursuant to Section 20.6.7.10 NMAC and 20.6.7.11 NMAC. Plans and specifications shall be included in the request, as applicable, pursuant to Section 20.6.7.17 NMAC.
- C. As determined by NMED, for any proposed change that meets the definition of a discharge permit amendment as specified in Paragraph 19 of 20.6.7.7.B NMAC, the Permittee shall submit a request to NMED for amendment of this Discharge Permit pursuant to Section 20.6.7.14 NMAC of the Copper Mine Rule. Plans and specifications shall be included in the request, as applicable, pursuant to Section 20.6.7.17 NMAC.
- D. Pursuant to Section 20.6.2.3109 NMAC, NMED reserves the right to require a discharge permit modification or amendment in the event NMED determines that the requirements of 20.6.2 NMAC are being or may be violated, or the standards of Section 20.6.2.3103 NMAC are being or may be violated. This may include a determination that structural controls and/or management practices approved under this Discharge Permit are not protective of groundwater quality, and that more stringent requirements are needed to protect groundwater quality.

D108 Compliance with Other Laws

- A. Nothing in this Discharge Permit shall be construed in any way as relieving the Permittee of the obligation to comply with all applicable federal, state, and local laws, regulations, permits or orders. [20.6.2 NMAC, 20.6.7.8(D) NMAC]

Table 1. Monitoring and Reporting Summary for DP Renewal & Modification, DP-181

Monitoring Report Schedule of Submittal (Subsection A of 20.6.7.29 NMAC)							
1	January 1 through June 30 (Q1 and Q2 sampling quarters) – Semi-annual report due by August 31 of each year						
2	July 1 through December 31 (Q3 and Q4 sampling quarters) – Semi-annual report due by February 28 of each year						
3	Annual reports due by February 28 of each year						
Reporting Summary							
Annual Reporting Frequency	Number of Sites	Description					
2	NA	Monitoring reports – All applicable requirements of Subsections A through C and E through H of 20.6.7.29 NMAC.					
Monitoring Schedule							
Sub-Area	Designation	Sampling					Notes
		type	Q1	Q2	Q3	Q4	
Hanover Mt	MW-1a	mw	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	Dissolved concentrations of B,C,D
Main Tailings Impoundment	MW-2 Cobre	mw	W	A,B,C,D,W	W	A,B,C,D,W	Dissolved concentrations of B,C,D
South Waste Rock Disposal Facility	MW-3	mw	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	Dissolved concentrations of B,C,D
South Waste Rock Disposal Facility	MW-4A	mw	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	Dissolved concentrations of B,C,D
South Waste Rock Disposal Facility	MW-5	mw	W	A,B,C,D,W	W	A,B,C,D,W	Dissolved concentrations of B,C,D
South Waste Rock Disposal Facility	MW-5A	mw	W	A,B,C,D,W	W	A,B,C,D,W	Dissolved concentrations of B,C,D
Main Tailings Impoundment	MW-7	mw	W	A,B,C,D,W	W	A,B,C,D,W	Dissolved concentrations of B,C,D
Grape Gulch	MW-8	mw	A,B,C,D,W	A,B,C,D,W	A,B,C,D, E,F,W	A,B,C,D,W	Dissolved concentrations of B,C,D
Hanover Creek	MW-10 Cobre	mw	A,B,C,D,W	A,B,C,D,W	A,B,C,D, E,F,W	A,B,C,D,W	Dissolved concentrations of B,C,D
South Waste Rock Disposal Facility	MW-12	mw	A,B,C,D,W	A,B,C,D,W	A,B,C,D, E,F,W	A,B,C,D,W	Dissolved concentrations of B,C,D
South Waste Rock Disposal Facility	MW-14	mw	A,B,C,D,W	A,B,C,D,W	A,B,C,D, E,F,W	A,B,C,D,W	Dissolved concentrations of B,C,D
Grape Gulch-South Waste Rock Disposal	MW-16	mw	A,B,C,D,W	A,B,C,D,W	A,B,C,D, E,F,W	A,B,C,D,W	Dissolved concentrations of B,C,D

Facility							
Main Tailings Impoundment	MW-17	mw	A,B,C,D,W	A,B,C,D,W	A,B,C,D, E,F,W	A,B,C,D,W	Dissolved concentrations of B,C,D
Hanover Mountain	MW-19	mw	A,B,C,D,W	A,B,C,D,W	A,B,C,D, E,F,W	A,B,C,D,W	Dissolved concentrations of B,C,D
South Waste Rock Disposal Facility	MW-22	mw	A,B,C,D,W	A,B,C,D,W	A,B,C,D, E,F,W	A,B,C,D,W	Dissolved concentrations of B,C,D
Main Tailings Impoundment	MW-24	mw	A,B,C,D,W	A,B,C,D,W	A,B,C,D, E,F,W	A,B,C,D,W	Dissolved concentrations of B,C,D
Magnetite Tailings Impoundment	MW-25	mw	A,B,C,D,W	A,B,C,D,W	A,B,C,D, E,F,W	A,B,C,D,W	Dissolved concentrations of B,C,D
Hanover Mountain	181-2004-01	mw	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	Dissolved concentrations of B,C,D
Poison Springs	181-2004-02	mw	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	Dissolved concentrations of B,C,D
Poison Springs	181-2004-03	mw	A,B,C,D,	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	Dissolved concentrations of B,C,D
Poison Springs	181-2004-04	mw	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	Dissolved concentrations of B,C,D
Poison Springs	181-2004-05	mw	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	Dissolved concentrations of B,C,D
Hanover Creek	181-2004-06	mw	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	Dissolved concentrations of B,C,D
South Waste Rock Disposal Facility	181-2004-07	mw	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	Dissolved concentrations of B,C,D
Poison Springs	181-2004-10	mw	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	Dissolved concentrations of B,C,D
Poison Springs	181-2004-11	mw	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	Dissolved concentrations of B,C,D
Poison Springs	181-2004-12	mw	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	Dissolved concentrations of B,C,D
Hanover Creek	AW-02	mw	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	Dissolved concentrations of B,C,D
Hanover Creek	AW-03	mw	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	Dissolved concentrations of B,C,D
Hanover Creek	AW-04	mw	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	Dissolved concentrations

							of B,C,D
Main Tailings Impoundment	MW-7A	mw	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	Dissolved concentrations of B,C,D
Humboldt Mountain	MW-15	mw	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	Dissolved concentrations of B,C,D
Hanover Creek	MW-18	mw	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	Dissolved concentrations of B,C,D
Main Tailings Impoundment	MW-23	mw	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	A,B,C,D,W	Dissolved concentrations of B,C,D
Grape Gulch	CONT POND 1 – Upper Pond 1	cp	A,B,C,D	A,B,C,D	A,B,C,D	A,B,C,D	Total + Dissolved Concentrations of B,C,D
Grape Gulch	Grape Gulch #3	cp	A,B,C,D	A,B,C,D	A,B,C,D	A,B,C,D	Total + Dissolved Concentrations of B,C,D
Grape Gulch	Upper Creek Containment Pond Expansion	cp	A,B,C,D	A,B,C,D	A,B,C,D	A,B,C,D	Total + Dissolved Concentrations of B,C,D
Main Tailings Impoundment	POND – Reclaim Pond	cp	A,B,C,D	A,B,C,D	A,B,C,D	A,B,C,D	Total + Dissolved Concentrations of B,C,D
South Waste Rock Disposal Facility	181-2003-Dam 1	cp	A,B,C,D	A,B,C,D	A,B,C,D	A,B,C,D	Total + Dissolved Concentrations of B,C,D
South Waste Rock Disposal Facility	181-2003-Dam 2	cp	A,B,C,D	A,B,C,D	A,B,C,D	A,B,C,D	Total + Dissolved Concentrations of B,C,D
South Waste Rock Disposal Facility	181-2003-Dam 3	cp	A,B,C,D	A,B,C,D	A,B,C,D	A,B,C,D	Total + Dissolved Concentrations of B,C,D
South Waste Rock Disposal Facility	BG-1	cp	A,B,C,D	A,B,C,D	A,B,C,D	A,B,C,D	Total + Dissolved Concentrations of B,C,D
Magnetite Tailings Impoundment	Magnetite Cont. Pond – Mag Dam Drain	cp	A,B,C,D	A,B,C,D	A,B,C,D	A,B,C,D	Total + Dissolved Concentrations of B,C,D
Poison Springs	PS-1	cp	A,B,C,D	A,B,C,D	A,B,C,D	A,B,C,D	Total + Dissolved Concentrations of B,C,D
Magnetite	Decant Pond	cp	A,B,C,D	A,B,C,D	A,B,C,D	A,B,C,D	Total +

Tailings Impoundment							Dissolved Concentrations of B,C,D
South Waste Rock Disposal Facility	Cement Pond	cp	A,B,C,D	A,B,C,D	A,B,C,D	A,B,C,D	Total + Dissolved Concentrations of B,C,D
South Waste Rock Disposal Facility	Union Hill Adit Seep	sp	A,B,C,D	A,B,C,D	A,B,C,D	A,B,C,D	Total + Dissolved Concentrations of B,C,D
Grape Gulch	Grape Gulch Transfer System (aka Grape Gulch Capture System)	sp	A,B,C,D	A,B,C,D	A,B,C,D	A,B,C,D	Total + Dissolved Concentrations of B,C,D
Continental Pit Lake and Hanover Pit Lake	Pit Lake Water Quality		B,C	B,C	B,C	B,C	Total Concentrations of B and C
<u>Sampling Analytical Suites:</u> A = Field parameters: temperature, pH, specific conductance B = General Chemistry: alkalinity-bicarbonate, alkalinity-carbonate, alkalinity-total, calcium, chloride, fluoride, magnesium, potassium, sodium, sulfate, and total dissolved solids (TDS). C = Metals: aluminum, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, iron, lead, manganese, nickel, total mercury, selenium, uranium, and zinc. D = Total Kjeldahl nitrogen (TKN) and nitrate-nitrogen (NO ₃ -N) <u>Measurements</u> W = Depth to water measurement to the nearest 0.01 foot							
Explanation to Abbreviations and Symbols							
<u>Type:</u> mw = monitoring well sp = seep cp = collection pond ts = tailing slurry					<u>Sampling Quarter:</u> Q1 = Jan-Mar Q2 = Apr-Jun Q3 = Jul-Sep Q4 = Oct-Dec		

Figure 1. Continental Mine Facilities with Permitted and Proposed Boundaries

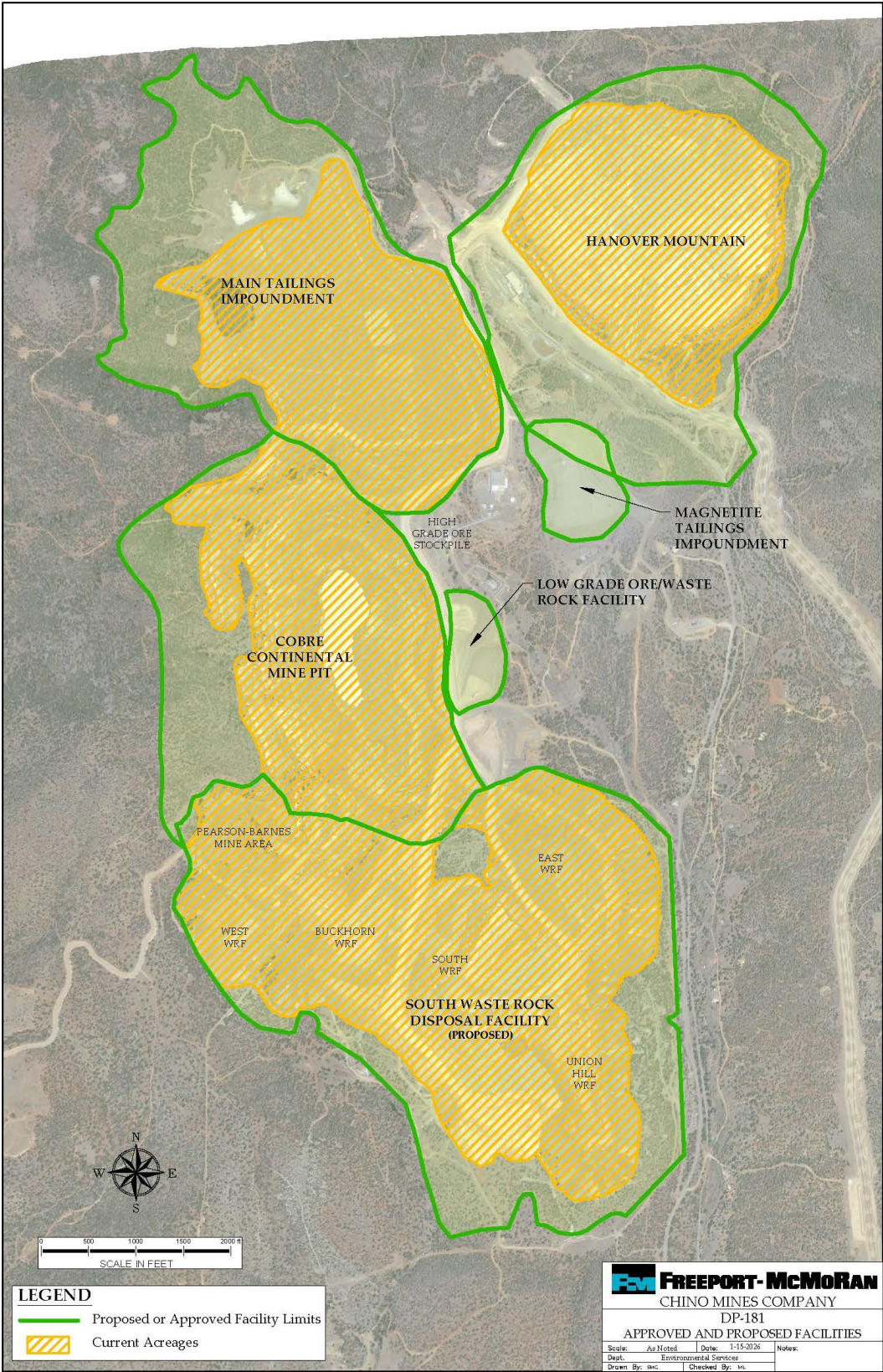


Figure 2a. Continental Mine Open Pit Surface Drainage Area

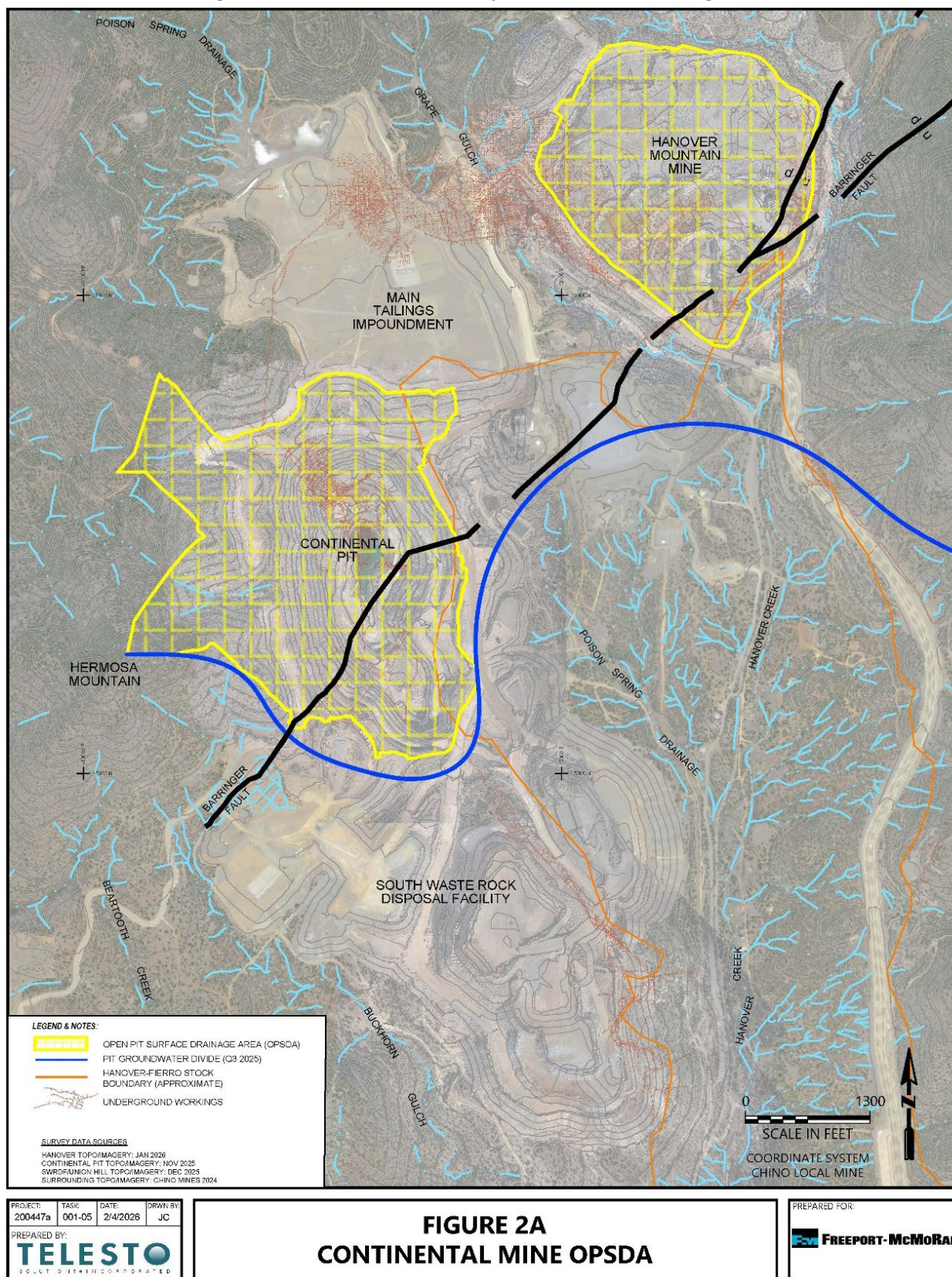
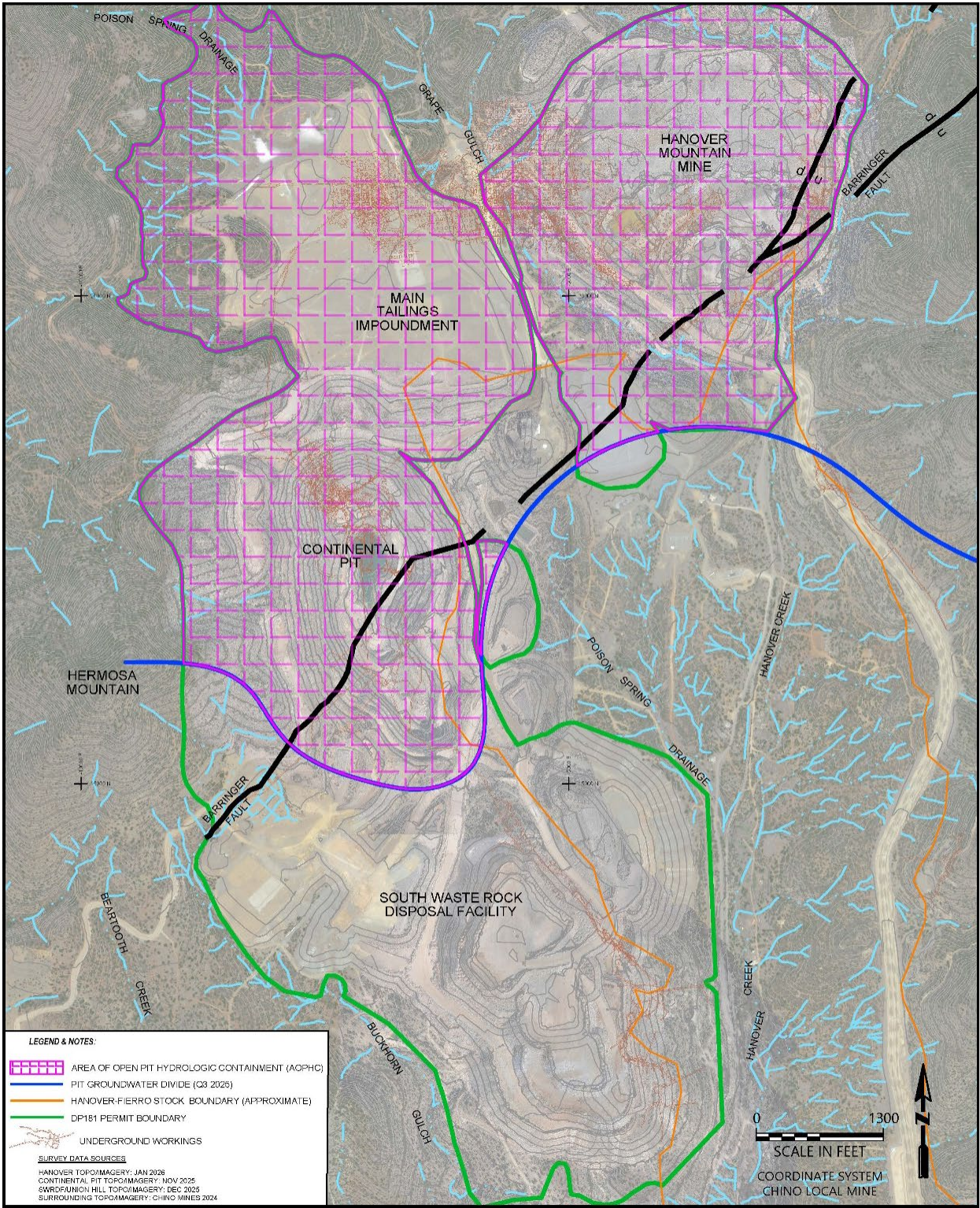


Figure 2b. Continental Mine Area of Open Pit Hydrologic Containment



PROJECT	TASK	DATE	DRWN BY
200447a	001-05	2/4/2026	JC
PREPARED BY:			
TELESTO			
SCIENTIFIC DATA INCORPORATED			

FIGURE 2B
CONTINENTAL MINE AOPHC

PREPARED FOR
Freeport-McMORAN

Figure 3. Continental Mine Containment Systems

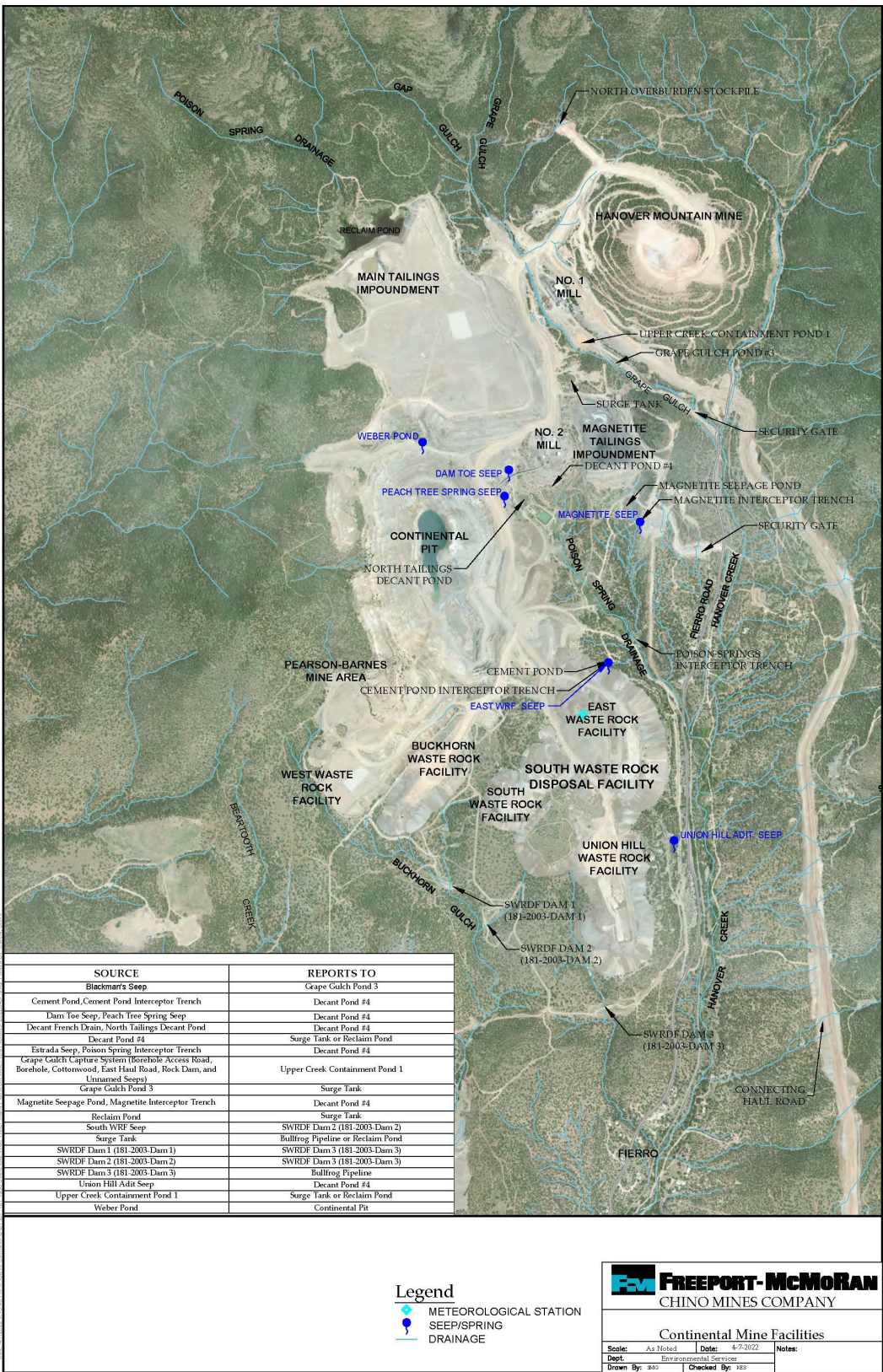
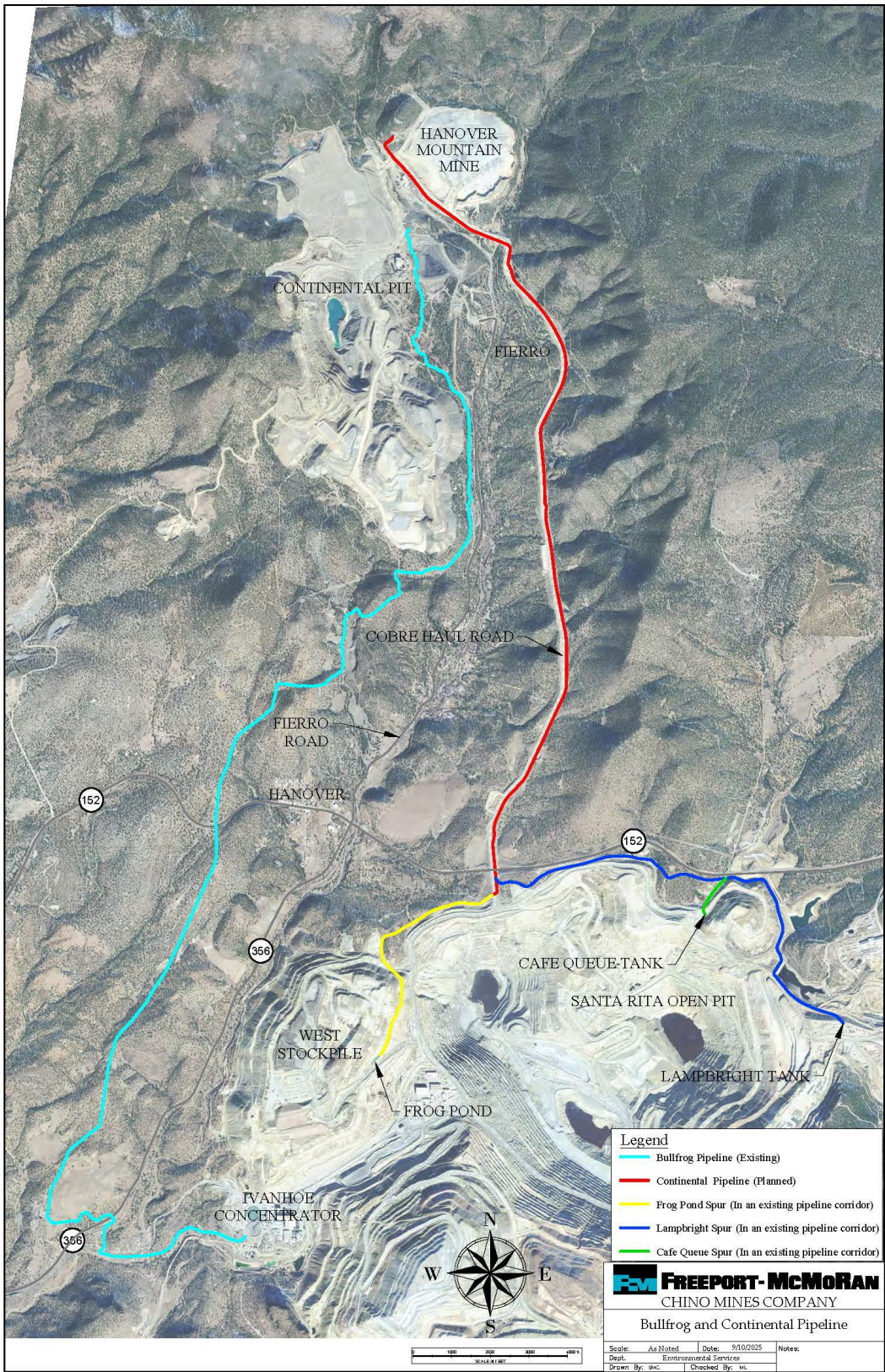


Figure 4. Continental Mine Bullfrog and Continental Mine Pipelines



**NEW MEXICO ENVIRONMENT DEPARTMENT
GROUND WATER QUALITY BUREAU
MONITORING WELL CONSTRUCTION AND ABANDONMENT GUIDELINES**

Purpose: These guidelines identify minimum construction and abandonment details for installation of water table monitoring wells under ground water Discharge Permits issued by the NMED's Ground Water Quality Bureau (GWQB) and Abatement Plans approved by the GWQB. Proposed locations of monitoring wells required under Discharge Permits and Abatement Plans and requests to use alternate installation and/or construction methods for water table monitoring wells or other types of monitoring wells (e.g., deep monitoring wells for delineation of vertical extent of contaminants) must be submitted to the GWQB for approval prior to drilling and construction.

General Drilling Specifications:

1. All well drilling activities must be performed by an individual with a current and valid well driller license issued by the State of New Mexico in accordance with 19.27.4 NMAC. Use of drillers with environmental well drilling experience and expertise is highly recommended.
2. Drilling methods that allow for accurate determinations of water table locations must be employed. All drill bits, drill rods, and down-hole tools must be thoroughly cleaned immediately prior to the start of drilling. The borehole diameter must be drilled a minimum of 4 inches larger than the casing diameter to allow for the emplacement of sand and sealant.
3. After completion, the well should be allowed to stabilize for a minimum of 12 hours before development is initiated.
4. The well must be developed so that formation water flows freely through the screen and is not turbid, and all sediment and drilling disturbances are removed from the well.

Well Specifications (see attached monitoring well schematic):

5. Schedule 40 (or heavier) polyvinyl chloride (PVC) pipe, stainless steel pipe, carbon steel pipe, or pipe of an alternate appropriate material that has been approved for use by NMED must be used as casing. The casing must have an inside diameter not less than 2 inches. The casing material selected for use must be compatible with the anticipated chemistry of the ground water and appropriate for the contaminants of interest at the facility. The casing material and thickness selected for use must have sufficient collapse strength to withstand the pressure exerted by grouts used as annular seals and thermal properties sufficient to withstand the heat generated by the hydration of cement-based grouts. Casing sections may be joined using welded, threaded, or mechanically locking joints; the method selected must provide sufficient joint strength for the specific well installation. The casing must extend from the top of the screen to at least one foot above ground surface. The top of the casing must be fitted with a removable cap, and the exposed casing must be protected by a locking steel well shroud. The shroud must be large enough in diameter to allow easy access for removal of the cap. Alternatively, monitoring wells may be completed below grade. In this case, the casing must extend from the top of the screen to 6 to 12 inches below the ground surface; the monitoring wells must be sealed with locking, expandable well plugs; a flush-mount, watertight well vault that is rated to withstand traffic loads must be emplaced around the wellhead; and the cover must be secured with at least one bolt. The vault cover must indicate that the wellhead of a monitoring well is contained within the vault.
6. A 20-foot section (maximum) of continuous-slot, machine slotted, or other manufactured PVC or stainless steel well screen or well screen of an alternate appropriate material that has been approved for use by NMED must be installed across the water table. Screens created by cutting slots into solid casing with saws or other tools must not be used. The screen material selected for use must be compatible with the anticipated chemistry of the ground water and appropriate for the contaminants of interest at the facility. Screen sections may be joined using welded, threaded, or mechanically

- locking joints; the method selected must provide sufficient joint strength for the specific well installation and must not introduce constituents that may reasonably be considered contaminants of interest at the facility. A cap must be attached to the bottom of the well screen; sumps (i.e., casing attached to the bottom of a well screen) should not be installed. The bottom of the screen must be installed no more than 15 feet below the water table; the top of the well screen must be positioned not less than 5 feet above the water table. The well screen slots must be appropriately sized for the formation materials and should be selected to retain 90 percent of the filter pack. A slot size of 0.010 inches is generally adequate for most installations.
7. Casing and well screen must be centered in the borehole by placing centralizers near the top and bottom of the well screen.
 8. A filter pack must be installed around the screen by filling the annular space from the bottom of the screen to 2 feet above the top of the screen with clean silica sand. The filter pack must be properly sized to prevent fine particles in the formation from entering the well; clean medium to coarse silica sand is generally adequate as filter pack material for 0.010-inch slotted well screen. For wells deeper than 30 feet, the sand must be emplaced by a tremmie pipe. The well should be surged or bailed to settle the filter pack and additional sand added, if necessary, before the bentonite seal is emplaced.
 9. A bentonite seal must be constructed immediately above the filter pack by emplacing bentonite chips or pellets (3/8-inch in size or smaller) in a manner that prevents bridging of the chips/pellets in the annular space. The bentonite seal must be 3 feet in thickness and hydrated with clean water. Adequate time should be allowed for expansion of the bentonite seal before installation of the annular space seal.
 10. The annular space above the bentonite seal must be sealed with cement grout or a bentonite-based sealing material acceptable to the State Engineer pursuant to 19.27.4 NMAC. A tremmie pipe must be used when placing sealing materials at depths greater than 20 feet below the ground surface. Annular space seals must extend from the top of the bentonite seal to the ground surface (for wells completed above grade) or to a level 3 to 6 inches below the top of casing (for wells completed below grade).
 11. For monitoring wells finished above grade, a concrete pad (2-foot minimum radius, 4-inch minimum thickness) must be poured around the shroud and wellhead. The concrete and surrounding soil must be sloped to direct rainfall and runoff away from the wellhead. The installation of steel posts around the well shroud and wellhead is recommended for monitoring wells finished above grade to protect the wellhead from damage by vehicles or equipment. For monitoring wells finished below grade, a concrete pad (2-foot minimum radius, 4-inch minimum thickness) must be poured around the well vault and wellhead. The concrete and surrounding soil must be sloped to direct rainfall and runoff away from the well vault.

Abandonment:

12. Approval for abandonment of monitoring wells used for ground water monitoring in accordance with Discharge Permit and Abatement Plan requirements must be obtained from NMED prior to abandonment.
13. Well abandonment must be accomplished by removing the well casing and placing neat cement grout, bentonite-based plugging material, or other sealing material approved by the State Engineer for wells that encounter water pursuant to 19.27.4 NMAC from the bottom of the borehole to the ground surface using a tremmie pipe. If the casing cannot be removed, neat cement grout, bentonite-based plugging material, or other sealing material approved by the State Engineer must be placed in the well using a tremmie pipe from the bottom of the well to the ground surface.
14. After abandonment, written notification describing the well abandonment must be submitted to the NMED. Written notification of well abandonment must consist of a copy of the well plugging record submitted to the State Engineer in accordance with 19.27.4 NMAC, or alternate documentation containing the information to be provided in a well plugging record required by the State Engineer as specified in 19.27.4 NMAC.

Deviation from Monitoring Well Construction and Abandonment Requirements: Requests to construct water table monitoring wells or other types of monitoring wells for ground water monitoring under ground water Discharge Permits or Abatement Plans in a manner that deviates from the specified requirements must be submitted in writing to the GWQB. Each request must state the rationale for the proposed deviation from these requirements and provide detailed evidence supporting the request. The GWQB will approve or deny requests to deviate from these requirements in writing.

