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

Certified Mail No:
Return Receipt Requested

Mine Facility Name:	Gettysburg and Savanna Pits; 6A, 6B, 6C, 6D, 7B and Gettysburg In-Pit Leach Stockpiles
GWQB Discharge Permit No.:	DP-455
GWQB TEMPO AI No.:	526
Permittee Name/Responsible Party:	Freeport-McMoRan Tyrone Inc.
Mailing Address:	P.O. Drawer 571 Tyrone, NM 88065
Mine Facility Contact:	Lee Nix: (575) 912-5777
Mine Facility Location:	Highway 90 South Tyrone Mine Road Tyrone, NM 88065
County:	Grant County
Permitting Action:	Renewal
Renewal Effective Date:	DATE
Renewal Expiration Date:	DATE
NMED Permit Contact:	Brad Reid; (505) 372-8533
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Justin Ball
Chief, Ground Water Quality Bureau
Water Protection Division

Date

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Part A GENERAL INFORMATION

A100 Introduction

A. The New Mexico Environment Department (NMED) issues this Discharge Permit Renewal, DP-455 (Discharge Permit) to Freeport-McMoRan Tyrone Inc. (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, 20.6.2 and 20.6.7 NMAC. NMED's purpose in issuing this Discharge Permit is to control the discharge of water contaminants from the Gettysburg and Savanna Pits, the 6A, 6B, 6C, 6D, 7B and Gettysburg In-Pit Leach Stockpiles 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 up to 34,992,000 gallons per day (gpd) of acidic leach solutions (raffinate) to the 6A, 6B, 6C, 6D, 7B, and Gettysburg In-Pit Leach Stockpiles. 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 standards of Section 20.6.2.3103 NMAC.

C. The permittee is authorized to discharge water contaminants pursuant to this Discharge Permit which contains conditions authorized or specified by Part 20.6.7 NMAC (Copper Mine Rule) on condition that the permittee complies with the Copper Mine Rule and this Discharge Permit, which are enforceable by NMED. Approval of this Discharge Permit does not relieve the permittee of liability should the operation result in pollution of surface or groundwater which may be actionable under other laws and/or regulations. [20.6.2.1220 NMAC]

A101 Applicable Regulations

A. The permittee is discharging from a facility that meets the definition of “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 covered under DP-455 are not subject to any of the exemptions of Section 20.6.2.3105 NMAC.

C. Groundwater quality as observed in monitoring wells required by Section C106.C 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 and unless otherwise specified in this Discharge Permit.

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 is **five (5) years** from its effective date.

B. If the permittee submits an application for renewal in accordance with Subsection F of 20.6.2.3106 NMAC at least 120 days before the discharge permit expires, 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 the application for renewal has been approved or disapproved.

A103 Terms of Permit Issuance

A. **Permit Fees** - As a discharge permit associated with the Freeport-McMoRan Tyrone Inc., Tyrone Mine, the permittee shall remit an annual permit fee payment 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 Freeport-McMoRan Tyrone Inc.

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, renewal and modification, or renewal for closure at least 270 days prior to the expiration date of this Discharge Permit in accordance with Section 20.6.7.9, Section 20.6.7.10, and Section 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: Condition B104.B, Condition C100.D, and Condition C102.A.5.

Part B FACILITY SPECIFIC INFORMATION

B100 History and Facility Description

A. The Tyrone Mine is an open pit copper mine facility owned by Freeport-McMoRan Tyrone Inc. which covers an area of approximately 9,000 acres. The Tyrone mine consists of several open pits, associated waste rock stockpiles and leach stockpiles, collections systems, and a solution extraction and electrowinning (SX/EW) plant located in the northwestern portion of the mine, six reclaimed tailing impoundments in the northern portion of the mine, and other reclaimed facilities. The mine is regulated under eight operational discharge permits, including DP-455, one closure discharge permit and one settlement agreement. The facilities regulated under DP-455 that produce discharges that may move directly or indirectly into groundwater include the 6A, 6B, 6C, 6D,7B, and Gettysburg In-Pit Leach Stockpiles, and the Gettysburg and Savanna Open Pits. The associated infrastructure includes pregnant leach solution (PLS) collection ponds, booster stations, tank and various pipelines. The Savanna Pit and 6B Leach Stockpile were previously regulated under DP-670 and were incorporated into DP-455 through a permit modification when DP-455 was renewed on August 17, 2010.

B. The Gettysburg and Savanna pit walls and the leach stockpiles 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 elevated concentrations above the standards of Section 20.6.2.3103 NMAC. Both pits are located within the Tyrone Mine open pit surface drainage area (OPSDA) as defined by Section 20.6.7.7 NMAC. The southwest portion of the Savanna Pit has been partially backfilled with the 6A Leach Stockpile, and the western portion of the Gettysburg Pit has been partially backfilled with the 6C Leach Stockpile.

C. Placement of ore for leaching began in 1988 when ore was placed in the Gettysburg Pit to form the 6C Leach Stockpile and leaching of the 6C Leach Stockpile began in 1989. Placement of waste rock in the East Main Pit to form the 6B Leach Stockpile began in 1989, and leaching began in 1990. The 7B Leach Stockpile was a former waste rock stockpile on which leaching began in 1999. Construction of the 6A and 6D Leach Stockpiles began in 2013 pursuant to a modification to DP-455 issued by NMED on May 14, 2013. The 6A, 6B and 6D Leach Stockpiles are located within the OPSDA. The 6C and 7B Leach Stockpile are located partially outside the OPSDA.

D. The leach stockpiles are leached through the application of raffinate which is discharged onto the stockpile surfaces and allowed to percolate through the ore material. The raffinate removes metals from the ore as it passes through the stockpile, and the copper-laden PLS is collected at the 6A PLS Pond (Savanna Pit), 6C-2 PLS Pond, Gettysburg Pit Collection pond and

6A-2 PLS Collection Pond. From these ponds, the PLS is conveyed to the Land Bridge Booster, where it is then pumped to the SX/EW plant where the entrained copper is removed by an electroplating process. The regulated discharges under this Discharge Permit include raffinate and its copper-bearing equivalent PLS, stockpiled ore and ARD.

E. The approved footprint of the Gettysburg In-Pit Leach Stockpile is located entirely within the Gettysburg Pit and the Tyrone Mine Open Pit Surface Drainage Area (OPSDA).

B101 Permitting History

A. The Discharge Plan for DP-455 includes the Discharge Permit renewal application dated October 7, 2021, 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 October 6, 2015 and addended June 9, 2017, referred to as the Tyrone Master Document (TMD) which addresses Copper Mine Rule application requirements and is applicable to all of Tyrone Mine discharge permits, including DP-455. In addition, the Discharge Plan for DP-455 includes applicable information and materials submitted as part of the original Discharge Plan for DP-455 approved on January 15, 1988; renewed on January 15, 1995, December 13, 2004 and August 17, 2010; modified on May 14, 2013; renewed and modified on July 7, 2017; modified on January 15, 2021; and amended on December 6, 2013, December 9, 2013, October 10, 2014, April 18, 2015, February 26, 2020, and September 17, 2020.

B102 Facility Location, Groundwater and Process Water Characteristics

A. The mine units regulated pursuant to DP-455 are located approximately 10 miles southwest of Silver City at the Tyrone Mine in Sections 22, 23, 24, 25, 26 and 27, T19S, R15W, Grant County, New Mexico.

B. Depth to groundwater most likely to be affected by mine units regulated pursuant to DP-455 is at a depth ranging from approximately 0 to 560 feet and had a pre-discharge total dissolved solids concentration range from approximately 100 to 500 mg/L.

C. Process water discharges regulated pursuant to DP-455, including raffinate, PLS, and ARD exceed the water quality standards of Section 20.6.3103 NMAC for cadmium, fluoride, copper, manganese, iron, sulfate, TDS, nickel, cobalt, and aluminum, and is outside the acceptable range for pH.

B103 Authorized Mine Units

This Discharge Permit contains requirements associated with the following mine units as identified in the Discharge Plan. Unless otherwise specified, all mine units listed below meet the definition of "existing" mine units pursuant to the Copper Mine Rule and are located inside the Open Pit Surface Drainage Area (OPSDA) as defined by Section 20.6.7.7 NMAC.

A. Leach Stockpiles

1. The combined 6A, 6B, 6C, 6D and 7B Leach Stockpiles are approximately 350 acres in areal extent and comprise one large continuous stockpile that adjoins the 4A and 4B Leach Stockpiles which are regulated under DP-166.

2. The Gettysburg In-Pit Leach Stockpile meets the definition of a "new leach stockpile" subject to the requirements of Paragraph (1) of 20.6.7.20.A NMAC. The approved footprint of the Gettysburg In-Pit Leach Stockpile is approximately 30 acres.

B. Open Pits:

1. The Gettysburg Open Pit is approximately 140 acres in areal extent and approximately 480 feet deep. The Savanna Open Pit is approximately 59 acres in areal extent and is approximately 460 feet deep.

C. Sumps, Tanks, Pipelines and Other Containment Systems:

1. 6A PLS Pond - The unlined 6A PLS Pond is located at the bottom of the Savanna Pit at an approximate elevation of 5,700 feet above mean sea level (amsl) and is within the OPSDA. PLS is pumped from the 6A PLS Pond to the Land Bridge Booster.

2. Gettysburg Pit Collection Pond - The Gettysburg Pit Collection Pond is unlined and located at the bottom of the Gettysburg Pit at an approximate elevation of 5,625 feet amsl and is within the OPSDA. PLS is pumped from the Gettysburg Pit Collection Pond to the Land Bridge Booster via the 6C-2 PLS Pond or Gettysburg Highwall Tank.

3. Gettysburg Highwall Tank - The 3,000-gallon capacity Gettysburg Highwall Tank is a plastic booster tank located on a bench at the north end of the Gettysburg Pit at an elevation of approximately 6,020 feet amsl and is located within the OPSDA. PLS is pumped from the Gettysburg Highwall Tank to the Land Bridge Booster.

4. Land Bridge Booster - The 7000-gallon capacity synthetically lined Land Bridge Booster is situated on a divide between the Gettysburg and Savanna Open Pits at an elevation of approximately 6,155 feet amsl and is located within the OPSDA. PLS from the Land Bridge

Booster is pumped to the SX/EW Feed Pond.

5. 6C-2 PLS Pond - The 240,000-gallon capacity synthetically lined 6C-2 PLS Pond is located between the Gettysburg Pit and 6C Leach Stockpile at an approximate elevation of 5,900 feet amsl and is located within the OPSDA. The 6C-2 PLS Pond serves as a PLS collection point and a booster station from where PLS is pumped to the Last Bridge Booster or Gettysburg Highwall Tank. During the initial construction sequence of the Gettysburg Waste Rock Stockpile a site within the Gettysburg Pit will be chosen for construction of a new PLS pond to replace the 6C-2 PLS Collection Pond.

6. 6A-2 PLS Collection Pond - The 208,730-gallon capacity 6A-2 PLS Collection Pond is located within the footprint of the 6A Leach Stockpile, at an approximate elevation of 6,130 feet amsl and is located with the OPSDA. Design and construction requirements for process water impoundments located inside the OPSDA are specified Paragraph (3) of 20.6.7.17.D NMAC. Because the 6A-2 PLS Collection Pond is constructed on top of the 6A Leach Stockpile and within the OPSDA, Paragraph (4) of 20.6.17.D NMAC allows for design and construction of impoundments without a synthetic liner. PLS collected in the 6A-2 PLS Collection Pond is pumped to the Land Bridge Booster or the No.2 PLS Pond (DP-166).

7. 6C PLS Sump - The 143,000-gallon capacity clay lined 6C PLS Sump is located on the east side of the 6C Leach Stockpile at an approximate elevation of 6,295 feet amsl and is located within the OPSDA. PLS collected in the sump is conveyed to the 6C-2 PLS Pond.

8. Pipelines - Pipelines serving the DP-455 mine units consist of high-density polyethylene (HDPE) material and range in size from 6 inches or less to 16 inches or greater in diameter.

B104 Authorized Discharges

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.

A. The permittee is authorized to discharge a maximum of 34,992,000 gpd of raffinate to the combined leach stockpile system consisting of the 6A, 6B, 6C, 6D, and 7B Leach Stockpiles, and the Gettysburg In-Pit Leach Stockpile for the purpose of leaching copper. [20.6.2.3109 NMAC]

B. The permittee is authorized to use water from various sources located at the Tyrone Mine for dust suppression within the area of DP-455 and associated haul roads. Water is supplied from Bill Evans Lake or other water supply wells at the Tyrone Mine that meet Section 20.6.2.3103 NMAC groundwater standards.

C. Discharges associated with the waste rock stockpiles and leach stockpiles will be managed through operation of mine units listed in B103.

D. 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 any additional requirements listed in this Discharge Permit.

Part C FACILITY SPECIFIC REQUIREMENTS

The permittee shall conduct operations in accordance with the requirements set forth below to ensure compliance with 20.6.2 NMAC, and in accordance with the applicable requirements of 20.6.7 NMAC.

C100 Open Pits

A. The Savanna and Gettysburg 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 requirements of the NMED-approved Mine Operation Water Management Plan included with the TMD.

C. Pursuant to Subsection A of 20.6.7.24 NMAC, expansion of the Gettysburg and Savanna Open Pits shall not exceed the area shown on the map included as Addendum 1 in the TMD. The permittee must obtain a permit modification or amendment prior to expanding the Gettysburg or Savanna Open Pits beyond the area shown on the map.

D. The permittee shall maintain the fluid level in the Gettysburg Pit Collection Pond at or below 5,635 feet amsl. High level alarms shall be set between 5,633 and 5,634 feet amsl to preserve additional volume as freeboard for short term storage of fluids in the event of operational upset conditions. The permittee shall maintain a spare pump, motor, and power supply cable available for immediate replacement of existing equipment in the event of malfunction or failure. [20.6.2.3109 NMAC]

1. In the event of a heavy rainfall event or operational failure, the fluid level in the Gettysburg Pit is allowed to temporarily exceed 5,635 feet amsl up to a maximum level of 5,645 feet amsl. The permittee shall notify NMED within 72 hours of the pit water level exceeding 5,635 feet amsl. The permittee shall return the pit fluid level to 5,635 feet amsl as soon as possible and no later than 14 days after the initial excursion. In the event the permittee is unable to return the pit water level to 5,635 feet amsl within 14 days of the excursion, the permittee shall notify NMED within 24 hours of receiving the information. Within 24 hours of the 14th day of the excursion, the permittee shall submit a corrective

action plan and schedule for NMED approval to return the pit water to its permitted operating level. [20.6.2.3107.A(10) NMAC]

C101 Leach Stockpiles

A. The permittee shall operate the 6A, 6B, 6C, 6D, 7B, and Gettysburg In-Pit Leach Stockpiles in accordance with the operational requirements listed in Paragraph (1) of Subsection C of 20.6.7.20 NMAC.

B. Pursuant to Paragraph (1) of Subsection C of 20.6.7.20 NMAC, the 6B, 6C and 7B Leach Stockpiles shall not exceed their existing land surface areas of 105, 67 and 81 acres respectively, and the 6A and 6D Leach Stockpiles, presently under construction, shall not exceed the land surface areas, locations and configurations shown on Sheets 5 and 6 of the DP-455 Modification Application dated January 27, 2012. The Gettysburg In-Pit Leach Stockpile, presently under construction, shall not exceed the land surface area of 30 acres as shown on Figure 1. The permittee may only expand the land surface area of these leach stockpiles for the purpose of facility closure as approved through the Supplemental Discharge Permit for Closure, DP-1341, or through an NMED approved permit amendment or modification to DP-455.

C. The footprints of the 6A and 6D Leach Stockpiles shall not exceed 85.5 acres and 10.2 acres respectively, and they shall conform to the configurations shown on Sheets 5 and 7 attached to the Application for Modification of Discharge Permit 455 dated January 27, 2012 and Sheets 3 and 4 attached to the Addendum to the Permit Modification Application dated January 22, 2013. The permittee may only expand the land surface area of these leach stockpiles for the purpose of facility closure as approved through the Supplemental Discharge Permit for closure, DP-1341, or through an NMED approved permit amendment or modification to DP-455.

D. Within 120 days after completion of the 6A and 6D Stockpiles, the permittee shall provide a topographic map showing the completed configuration of the expanded leach stockpiles including the 6A, 6B, 6C, 6D and 7B stockpiles and configuration of the entire Savanna Pit. The map shall have a contour interval no greater than 10 feet and shall be at a scale of inch equals 400 feet (1:4800) or larger. The map shall show the location of all facilities within the immediate area of the expanded leach stockpiles and Savanna Pit, including sumps, major pipelines, booster stations and associated facilities, buildings, and wells.

C102 Gettysburg Waste Rock Stockpile

A. The permittee shall comply with the following conditions pertaining to the Gettysburg Waste Rock Stockpile.

1. Pursuant to Paragraph (2) of Subsection C of 20.6.7.18 NMAC a minimum of 30 days prior to emplacement of waste rock in the Gettysburg Waste Rock Stockpile, the permittee shall provide written notice to NMED of the anticipated date that the emplacement of waste rock will commence.

2. The permittee shall construct the Gettysburg Pit Waste Rock Stockpile pursuant to the applicable requirements of Section 20.6.7.21 NMAC.

3. Pursuant to Paragraph (2) of Subsection J of 20.6.7.11 NMAC, the footprint of the proposed Gettysburg Waste Rock Stockpile shall conform to the configuration shown on Figure 1 attached to the amendment request dated September 25, 2014, except as may be required for closure pursuant to the Supplemental Discharge Permit for Closure, DP-1341.

4. Pursuant to Subsection A of 20.6.7.18 NMAC and Paragraph (7) of Subsection D of 20.6.7.21 NMAC, placement of the waste rock in the Gettysburg Pit Waste Rock Stockpile shall be implemented in such a way to plan for closure and be in accordance with an annual operating plan that describes, among other things, sequencing of material placement.

5. Within 120 days of completion of the Gettysburg Waste Rock Stockpile, the permittee shall provide a topographic map showing the configuration of the completed stockpile including the entire Gettysburg Pit. 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.

C103 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 Subsections B and C of 20.6.7.23 NMAC.

B. If the permittee proceeds with construction of the Gettysburg Pit Waste Rock Stockpile and replacement of the 6C-2 PLS Collection Pond is necessary, at least 45 days prior to construction of the new PLS collection pond the permittee shall submit for NMED approval detailed plans and specifications of the proposed collection pond, including a topographic map showing the proposed location. The collection pond shall be designed and constructed according to applicable Copper Mine Rule requirements [Sections 20.6.7.17 and 20.6.7.18 NMAC]

C. Pursuant to Subsection B of 20.6.7.18 NMAC, the permittee shall submit a construction certification report for the 6C-2 PLS Collection Pond replacement pond and associated pipelines to NMED within 90 days of completion of construction. [Section 20.6.7.18.B NMAC]

D. Pursuant to Subsection J of 20.6.7.33 NMAC, upon discontinuing the operation of, or before moving tanks, pipelines or sumps, or other containment systems, all liquids shall be released to an authorized discharge location or otherwise properly contained, transferred, or disposed of in a manner that does not result in discharge to non-authorized areas.

E. The permittee shall operate the 6A PLS Collection Pond under normal operating conditions with a ponded PLS surface elevation of 5670 to 5690 feet amsl, and at a maximum PLS surface elevation of 5700 feet amsl during upset conditions due to stormwater flows or diminished pumping capacity due to pump malfunctions or power loss.

C104 Stormwater Management

A. Stormwater shall be managed in accordance with the applicable requirements of Paragraph (4) of 20.6.7.17.C NMAC, and in accordance with the approved Sitewide Water Management Plan required by Condition C105 of DP-1236.

C105 Dust Suppression

A. If at some time in the future the permittee decides to use an alternate source of dust suppression water or change the location in which discharges have been approved, the permittee shall notify NMED for approval prior to the change.

C106 Monitoring and Reporting

A. Pursuant to applicable sections of the Copper Mine Rule, the permittee shall collect, preserve, transport, analyze, and report all groundwater, surface water, seepage water and process water from the facility in accordance with the NMED-approved facility monitoring plan titled, *Facility Monitoring Plan, DP-455, Tyrone Mine* dated October 6, 2021 (FMP), and any additional requirements listed in this Discharge Permit. Table 1, located at the end of this Discharge Permit, summarizes monitoring and reporting requirements.

B. The permittee shall submit monitoring reports to NMED on a semi-annual schedule that contain all monitoring data and information collected pursuant to the requirements of this Discharge Permit and applicable requirements of 20.6.7.29 NMAC. Semi-annual reports are due by February 28 and August 31 of each year. Annual data shall be submitted in the monitoring report due by February 28 of each year.

C. Samples of stormwater, PLS, and process water, including seeps, shall be analyzed for total and dissolved concentrations in accordance with Table 1. Samples of groundwater and springs shall be analyzed for dissolved concentrations in accordance with Table 1.

D. Requests to change monitoring and reporting requirements may require modification or amendment of the Discharge Permit as required by the NMED Secretary. [20.6.2.7 NMAC]

E. Groundwater

1. Pursuant to Subsection B of 20.6.7.28 NMAC, "a permittee shall monitor groundwater quality as close as practicable around the perimeter and downgradient of each open pit, leach stockpile, waste rock stockpile, tailings impoundment, process water impoundment, and impacted stormwater impoundment."

2. Pursuant to Paragraph (1) of Subsection B of 20.6.7.28 NMAC, the following existing monitoring wells have been deemed appropriate by NMED for continued use as groundwater monitoring wells: 670-2005-02, 455-2005-01, 455-2005-02, 455-2010-01, 455-2010-02, 670-2005-01, GLD-3A, and GLD-5A. 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 monitoring wells 670-2005-02, 455-2005-01, 455-2005-02, 455-2010-01, 455-2010-02, 670-2005-01, GLD-3A, and GLD-5A in accordance with the NMED-approved FMP dated October 6, 2021, and in accordance with the applicable requirements of Subsection F of 20.6.7.28 NMAC.

F. 7R2B Seepage Collection System

1. The permittee shall perform quarterly inspections of the 7R2B Seepage Collection System and perform maintenance as necessary to ensure that all water contaminants are managed in a manner that is protective of groundwater quality. Pursuant to the applicable requirements of Subsection H of 20.6.7.29 NMAC, the inspection results and any maintenance performed shall be reported in the annual monitoring and evaluation report due on February 28 of each year as required in Section C106.B.

2. Pursuant to Subsection E of 20.6.7.29 NMAC, the permittee shall utilize a flow meter to measure the quarterly volume of water that has discharged from the 7R2B Seepage Collection System. Meter readings shall be recorded at intervals no less than once per-week and shall be reported in the semi-annual monitoring reports required in Section C106.B.

G. PLS Collection

1. Pursuant to Subsection E of 20.6.7.29 NMAC, the permittee shall utilize flow meters to measure the volume of collection system fluids pumped from the Land Bridge Booster to the SX/EW Feed Pond. Meter readings shall be recorded at intervals no less than once per-week and shall be reported in the semi-annual monitoring reports required in Section C106.B.

2. The permittee shall sample and analyze the fluids collected in the Savanna Pit 6A PLS Collection Pond, the Gettysburg Pit Collection Pond, and the 6C-2 PLS Pond in accordance with the FMP, and the applicable requirements of Subsection N of 20.6.7.28 NMAC.

H. Leach Stockpiles

1. The permittee shall report approximate volumes of material placed during construction of the 6A, 6B, 6C, 6D and 7B Leach Stockpiles and the approximate percentage of the Savannah Pit that has been backfilled. Reporting on material placement and backfilling shall be submitted in the semi-annual monitoring reports required in Section C106.B.

I. Raffinate Application

1. Pursuant to Subparagraph (g) of 20.6.7.20.C(1) NMAC, the permittee shall measure the volume of raffinate applied to the DP-455 Leach Stockpiles using appropriate flow meter(s). In areas where raffinate distribution system locations result in overlap of raffinate application with leach stockpiles regulated under other discharge permits, the volume of raffinate applied may be determined using a calculation method.

J. Meteorological Data

1. Meteorological data shall be measured as stipulated in the TMD. The data shall be submitted to NMED in the monitoring report due on February 28 of each year as required in Section C106.B.

C107 Contingency Plan

A. The permittee shall comply with all applicable contingency requirements and submit to NMED all applicable information or documentation specified in Sections A through J of Section 20.6.7.30 NMAC of the Copper Mine Rule.

B. Pursuant to Subsection G of 20.6.7.30 NMAC, discharges of process water or impacted stormwater that exceed the standards of Section 20.6.2.3103 NMAC to non-authorized areas must be reported under Section 20.6.2.1203 NMAC and as required by D106.

C. 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]

C108 Closure Plan

A. Closure of facilities regulated under DP-455 shall be performed in accordance with the applicable requirements of Section 20.6.7.33 NMAC (Closure Requirements) and Section 20.6.7.34 NMAC (Implementation of Closure), and in accordance with the Supplemental Discharge Permit for Closure, DP-1341. For each unit closed, the closure period shall cease, and the post-closure period shall commence following the permittee's submission and NMED approval of a final Construction Quality Assurance/Construction Quality Control (CQA/CQC) report.

C109 Post-Closure Conditions

A. Post-closure requirements shall be performed in accordance with the applicable requirements of Section 20.6.7.35 NMAC. Pursuant to Subsection D of 20.6.7.35 NMAC, the permittee shall submit to NMED semi-annual reports pursuant to the schedule in Subsection A of 20.6.7.29 NMAC. Pursuant to Subsections A and B of 20.6.7.29 NMAC, the semi-annual reports shall include, but are not limited to, a description and the results of post-closure monitoring, any work completed during the preceding semi-annual period, any maintenance and repair work conducted for any closure unit, status of post-closure activities, and semi-annual potentiometric maps.

B. Pursuant to Subsection E of 20.6.7.35 NMAC, the contingency requirements of Section 20.6.7.30 NMAC apply to any deficiencies discovered during the post-closure monitoring and inspections, including, but not limited to, the requirements for possible corrective action plans, abatement plans, monitoring well replacement, reporting and correction of unauthorized discharges, and significant erosion of, or ponding of water on, a cover system.

C110 Financial Assurance

A. The permittee shall maintain the existing, and any revised, joint financial assurance with NMED and the Mining and Minerals Division of the New Mexico Energy, Minerals and Natural Resources Department to cover costs associated with closure and post-closure activities in accordance with the applicable requirements of Sections 20.6.7.33 and 20.6.7.35 NMAC, and in accordance with the Supplemental Discharge Permit for Closure, DP-1341. [20.6.2.3107 NMAC]

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, is subject to felony charges and shall be sentenced in accordance with the provisions of Section 31-18-15 NMSA 1978.

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, 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, 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 Operational Requirements

A. New mine units shall be designed in accordance with the applicable requirements of Section 20.6.7.17 NMAC.

B. Mine units shall be operated in accordance with the applicable requirements of Section 20.6.7.18 NMAC.

1. Pursuant to Subsection A of 20.6.7.18 NMAC, to the extent practicable, mine units shall be deigned and operated in a manner that contemplates the closure plan, including identifying and segregating suitable material to construct covers and consideration of closure grading and drainage plans in the design and construction of operational mine units.

C. The permittee shall meet all applicable setback requirements for any new mine units pursuant to Section 20.6.7.19 NMAC.

D. 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.

D103 General Record Keeping and Reporting Requirements

A. The permittee shall retain written records at the copper mine facility 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, 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 provide NMED at least 30 days written notification of the anticipated destruction or removal of any monitoring wells required under DP-455. Monitoring well abandonment shall be completed in accordance with the *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 written notification 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;

2. The purpose for plugging and abandoning the monitoring well(s);

3. Details, if available, on the monitoring well(s) including depth-to-water elevation, top-of-casing elevation, construction and lithologic logs;

4. Recent groundwater chemistry results from the monitoring well(s);

5. Proposed replacement well(s), if applicable, and;

6. Same details, as applicable, as provided in 1), 3), and 4) above are required for the proposed replacement monitoring well(s).

D106 Reporting Requirements for Unauthorized Discharges

A. In the event of a spill or release that is not authorized under this permit, the permittee shall initiate the notifications and corrective actions as required in 20.6.2.1203. The permittee shall take immediate corrective action to contain and remove or mitigate any damage caused by the discharge. 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. Within 7 days of discovering of 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. The permittee shall submit a corrective action report within 15 days after discovery of the discharge. [20.6.2.1203 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 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 WGS84. 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 in 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 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, DP-455

Monitoring Report Schedule of Submittal (Subsection A of 20.6.7.29 NMAC)	
1	January 1 through June 30 (first and second quarter sample periods) **–** Semi-annual report due by August 31 of each year
2	July 1 through December 31 (third and fourth quarter sample periods) **–** 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	All applicable requirements of Subsections A through C and E through H of 20.6.7.29 NMAC

Monitoring Schedule

Area	**Designation**	**Sampling**					**Notes**
		type	**Q1**	**Q2**	**Q3**	**Q4**	
DP-455	670-2005-02	mw	--	A,B,C,W	--	A,B,C,W	Perched Groundwater
	455-2005-01	mw	--	A,B,C,W	--	A,B,CW	Regional Groundwater
	455-2005-02	mw	--	A,B,C,W	--	A,B,C,W	Regional Groundwater
	455-2010-01	mw	--	A,B,C,W	--	A,B,C,W	Regional Groundwater
	455-2010-02	mw	--	A,B,C,W	--	A,B,C,W	Regional Groundwater
	670-2005-01	mw	--	A,B,C,W	--	A,B,C,W	Regional Groundwater
	GLD-3A	mw	--	A,B,C,W	--	A,B,C,W	Regional Groundwater
	GLD-5A	mw	--	A,B,C,W	--	A,B,C,W	Regional Groundwater
	6A PLS Pond	cp	--	A,B,C,TC	--	A,B,C,TC	PLS Collection, Savanna Pit Bottom
	6C-2 PLS Pond	cp	--	A,B,C,TC	--	A,B,C,TC	PLS Collection and Booster
	Gettysburg Pit Collection Pond	cp	--	A,B,C,TC	--	A,B,C,TC	PLS Collection, bottom of Gettysburg Pit
	396-2006-10 (7R2B Seep)	sp	--	A,B,C,W	--	A,B,C,W	Seep South of 7A West Stockpile

Sampling Analytical Suites:
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, cadmiun, chromiun, cobalt, copper, iron, lead, manganese, nickel, uranium, and zinc.

All samples are analyzed for dissolved constituents. Samples collected at 6A PLS Pond, 6C-2 PLS Pond, Gettysburg Pit Collection Pond are also analyzed for total constituents (TC).

Measurements
W = Depth to water measurement to the nearest 0.01 foot

Explanation to Abbreviations and Symbols

Type:	Sampling Quarter:
mw = monitoring well	Q1 = Jan-Mar
sp = seep	Q2 = Apr-Jun
cp = collection pond	Q3 = Jul-Sep
TC = total constituents	Q4 = Oct-Dec

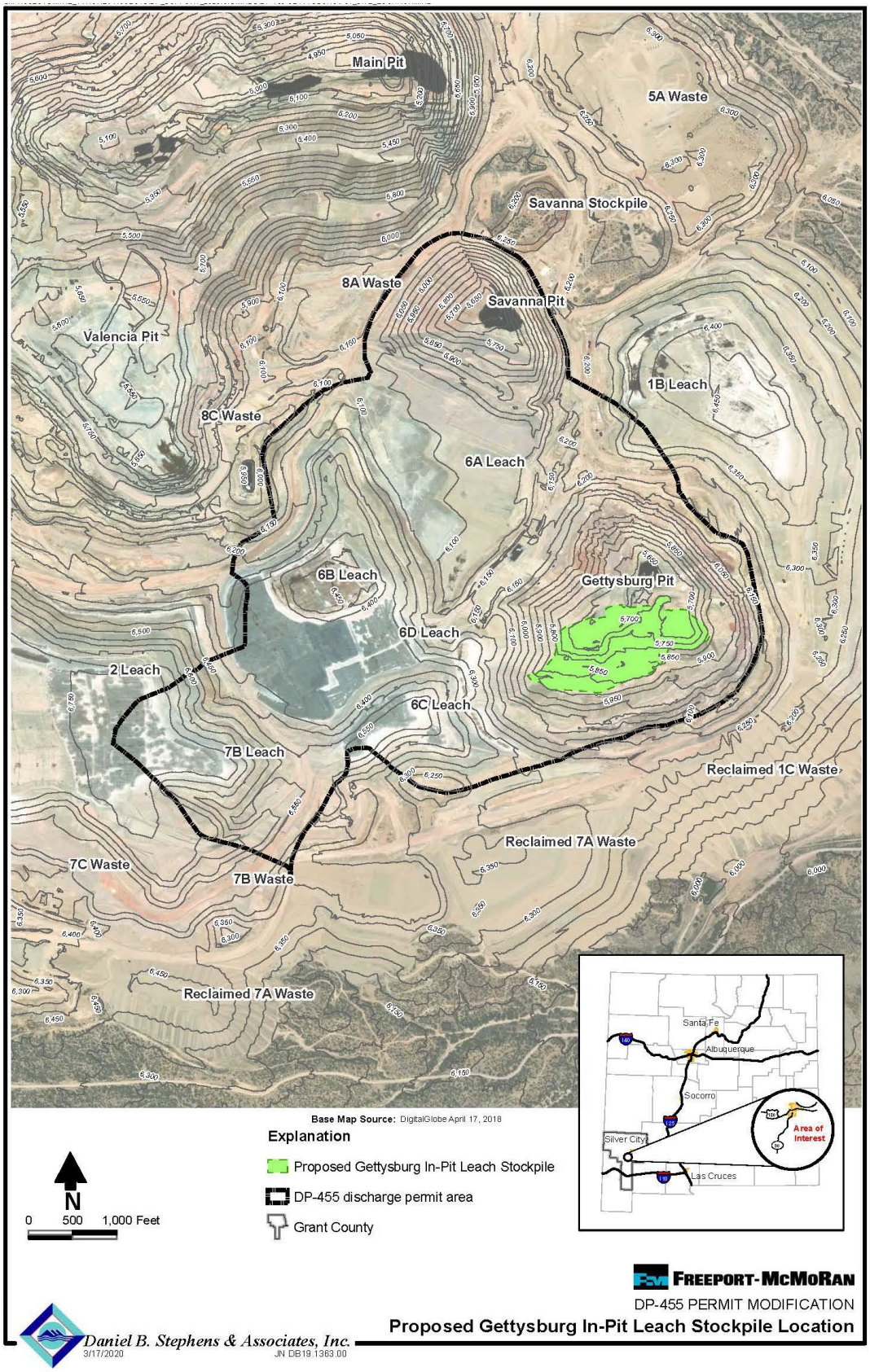

Figure 1 Map Showing Approximate Location of Gettysburg In-Pit Leach Stockpile