CERTIFIED MAIL – RETURN RECEIPT REQUESTED

August 6, 2025

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

RE: Draft Discharge Permit Renewal; DP-591, SX/EW Plant and Reservoirs 6 and 7, Freeport-McMoRan Chino Mines Company

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 of the existing Discharge Permit 591 (DP-591) for the Freeport-McMoRan Chino Mines Company (Applicant) SX/EW Plant and Reservoirs 6 and 7 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 in the near future and will forward a copy of the notice to you. The Application for Discharge Permit Renewal of DP-591 was deemed technically complete on July 30, 2025.

Prior to making a final ruling on the proposed DP-591 Discharge Permit Renewal, 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 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 jordan.anderson@env.nm.gov or mecs.general@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-591 Discharge Permit Renewal. Hearings are presided over by the NMED Secretary, or a hearing officer appointed by the Secretary.

NMED has imposed additional conditions on the Renewal of DP-591 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-591 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 C104.B – The reason for this condition is to ensure that all stormwater impoundments, conveyance channels and collection ponds are inspected after one inch rain events to maintain their integrity and function in a manner that is protective of groundwater quality.

2. Condition C106.F.1.b – The reason for this condition is to ensure that PLS Feed Pond is operating as designed and to compare input discharge with output discharge.

3. Condition C107.C – The reason for this condition is to ensure that contingency plans and schedules are provided should an unforeseen circumstance occur that may have the potential to impact ground water quality. This condition is intentionally broad to cover an event or situation not foreseen or covered by Section 20.6.7.30 NMAC that may have the potential to impact groundwater.

4. 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.

5. Condition D106.B – The reason for this condition is to ensure compliance with the discharge location reporting requirements of Subparagraph (c) of 20.6.2.1203.A(1) NMAC and that the Applicant submits consistent information regarding spill notifications.

Please review the enclosed draft DP-591 Discharge Permit Renewal carefully for accuracy and completeness, and to make sure you understand what it requires. Please be aware that the proposed DP-591 Discharge Permit Renewal 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, Part 20.6.2 NMAC and Part 20.6.7 NMAC, are available online at https://www.env.nm.gov/gwqb/gw-regulations.

Any comments relating to this draft DP-591 Discharge Permit Renewal can be sent through the SmartComment portal at https://nmed.commentinput.com/comment/search or by email to jordan.anderson@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-591

Discharge Permit Renewal will become final. Thank you for your cooperation during the review process.

Sincerely,

Brad Reid Digitally signed by Brad Reid
Date: 2025.08.06 17:21:01 -06'00' , for

Jordan Anderson, Permit Lead
Mining Environmental Compliance Section
Ground Water Quality Bureau
New Mexico Environment Department

Enclosure: Draft Discharge Permit Renewal, DP-591

Cc: Randy B. Ellison, Chino Mines Company (rellison@fmi.com)
Sherry Burt-Kested, Chino Mines Company (sburtkes@fmi.com)
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GROUND WATER QUALITY BUREAU (GWQB)
DISCHARGE PERMIT RENEWAL
EXISTING COPPER MINE FACILITY
Issued under 20.6.2 and 20.6.7 NMAC

Return Receipt Requested

Mine Facility Name:	SX/EW Plant and Reservoirs 6 and 7
GWQB Discharge Permit No.:	DP-591
GWQB TEMPO AI No.:	526
Permittee Name/Responsible Party:	Freeport-McMoRan Chino Mines Company
Mailing Address:	P.O. Box 10 Bayard, NM 88023
Mine Facility Contact:	Sherry Burt-Kested; (575) 912-5927
Mine Facility Location:	99 Santa Rita Mine Road Vanadium, NM 88023
County:	Grant County
Permitting Action:	Renewal
Renewal Effective Date:	DRAFT
Renewal Expiration Date:	DRAFT
NMED Permit Contact:	Jordan Anderson; (505) 660-8908
E-mail Address:	*jordan.anderson@env.nm.gov* Or: *mecs.general@env.nm.gov*

Justin Ball, Chief
Ground Water Quality Bureau

Date

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TABLE OF CONTENTS

LIST OF TABLES AND FIGURES

Part A GENERAL INFORMATION

A100 Introduction

A. The New Mexico Environment Department (NMED) issues this Ground Water Discharge Permit Renewal, DP-591 (Discharge Permit) to Freeport-McMoRan Chino Mines Company (Permittee) pursuant to the New Mexico Water Quality Act (WQA), NMSA 1978, §§ 74-6-1 to 74-6-17, and the New Mexico Water Quality Control Commission (WQCC) Regulations, 20.6.2 NMAC (Ground and Surface Water Protection) and 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 Solution Extraction and Electrowinning (SX/EW) Plant, Reservoirs 6 and 7, and associated facilities 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 43,200,000 gallons per day (GPD) of process water to the SX/EW Plant and then to permitted leach stockpiles regulated under Discharge Permits DP-376, DP-459, and DP-526 for the purpose of leaching copper. These discharges 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 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 Part 20.6.2 NMAC and Part 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 "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.

C. Groundwater quality as observed in monitoring wells required by Condition C106.E 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 NMSA 1978 § 74-6-5(I) and Subsection H of 20.6.2.3109 NMAC, the term of this Discharge Permit Renewal is **five (5) years** from the 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 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 Chino Mines Company. [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: C104.B, C106.F.1.b, C107.C, D105.B, and D106.B.

Part B FACILITY SPECIFIC INFORMATION

B100 History and Facility Description

A. The Chino Mine is an open pit copper mine facility owned by Freeport-McMoRan Chino Mines Company which covers an area of approximately 35,000 acres. The Chino Mine consists of the Santa Rita Open Pit, associated waste rock and leach stockpiles, collection systems, a solution extraction and electrowinning (SX/EW) plant, a concentrator and associated mineral processing units, an active tailing impoundment, and reclaimed mine units. The mine is regulated pursuant to multiple operational Ground Water Discharge Permits, a supplemental discharge permit for closure, and an abatement plan.

B. The mine units regulated pursuant to DP-591 that produce discharges that may move directly or indirectly into groundwater include the SX/EW Plant, Reservoir 6, Reservoir 7, PLS Feed Pond, Raffinate Pond, and Raffinate Tank. The SX/EW Plant includes the SX Circuit, Tank Farm, and Tank House. The associated infrastructure includes sumps, tanks, and pipelines. DP-591 currently covers approximately 160 acres.

C. The SX/EW Plant and associated mine units were constructed in 1988.

D. Pregnant leach solution (PLS) collected from the Lampbright (DP-376), North In-Pit (DP-459), and Whitewater (DP-526) Leach Systems is transferred to the SX/EW Plant where copper is stripped from the PLS. PLS is stored in the synthetically lined PLS Feed Pond prior to processing at the SX/EW Plant. PLS is gravity conveyed from the PLS Feed Pond to the SX Circuit.

E. The SX Circuit consists of two parallel trains of process tanks (strippers, mixers, settlers) used to concentrate copper-bearing PLS into electrolyte using kerosene-based organic reagents and solvents. The PLS is separated into raffinate, loaded or used organic, and rich and lean electrolyte. The used organic and lean electrolyte are recycled primarily through the Tank Farm. Rich electrolyte (i.e., enriched with copper) is filtered at the Tank Farm then piped to the Tank House where copper cathodes are harvested using an electrolytic procedure (i.e., electrowinning). The plated copper cathode sheets are rinsed, loaded onto trucks, and shipped offsite.

F. After copper extraction is complete, raffinate is discharged from the SX/EW Plant to the stainless steel Raffinate Tank or double synthetically lined Raffinate Pond. Sulfuric acid is added to optimize pH before the raffinate is piped to and discharged on the Main, South and North Lampbright, North In-Pit, South, and West Leach Stockpiles to begin the leaching cycle again.

G. Reservoirs 6 and 7 are two large reservoirs used to manage process water and impacted stormwater and to store PLS that has high turbidity due to storm events.

H. Numerous spills in the vicinity of the Raffinate Tank and Raffinate Pond and proximal pipeline network have impacted groundwater directly through infiltration or indirectly by evaporation and precipitation of salts. The salts may dissolve during precipitation events and remobilize metals and residual acidity into groundwater and surface waters. This area is within the Area of Open Pit Hydrologic Containment (AOPHC) as defined in 20.6.7.7 NMAC, and groundwater in this area flows to the Open Pit. Water quality in the Open Pit will be addressed at closure in accordance with the Closure/Closeout Plan and as described in DP-1340.

B101 Permitting History

A. The Discharge Plan for DP-591 includes renewal application materials submitted by the Permittee to NMED dated April 9, 2025 and materials contained in the administrative record prior to issuance of this Discharge Permit. The Discharge Plan for DP-591 includes the Chino North Mine Area Master Document dated February 27, 2025 (NMA Master Document) which addresses Copper Mine Rule application requirements and the Chino Sitewide Water Management Plan dated February 27, 2025. The NMA Master Document and Chino Sitewide Water Management Plan are required to be submitted annually pursuant to DP-459 and are applicable to all discharge permits in the Chino North Mine Area. In addition, the Discharge Plan includes information and materials submitted as part of the original plan approved on July 21, 1997, renewed on September 1, 2006 and December 15, 2020; and amended on April 14, 2008, January 12, 2012, January 17, 2012, November 13, 2013, April 28, 2015, April 25, 2018, and March 11, 2024.

B. Fleming Pond is no longer permitted pursuant to DP-591. This mine unit is now permitted pursuant to DP-376, dated March 12, 2024, and is identified as Fleming Pond 2.

B102 Facility Location, Groundwater and Process Water Characteristics

A. The mine units regulated pursuant to DP-591 are located approximately 4 miles northeast of Bayard and 3 miles southeast of Hanover in Section 25 and 26, T17S, R12W in Grant County.

B. Groundwater beneath the mine units regulated pursuant to DP-591 is at a depth of approximately 3 to 297 feet and had a pre-discharge TDS concentration of approximately 255 milligrams per liter.

C. The SX/EW Plant, Reservoirs 6 and 7, and associated pipelines and tanks process, transport, and store acidic solutions of process water and impacted stormwater. These solutions typically exceed the water quality standards of Section 20.6.2.3103 NMAC for aluminum, cadmium,

chloride, chromium, cobalt, copper, fluoride, iron, lead, manganese, nickel, selenium, sulfate, TDS, and zinc, and are outside the acceptable range for pH.

D. Water quality of sources used for dust control in the permit area typically exceeds the water quality standards of Section 20.6.2.3103 NMAC for TDS, sulfate, iron, and manganese, and intermittently exceeds Section 20.6.2.3103 NMAC standards for pH, cobalt, fluoride, and selenium.

B103 Authorized Mine Units

This Discharge Permit contains requirements associated with the following mine units as identified in the Discharge Plan. 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, unless otherwise noted. Authorized mine units are displayed in Figure 1.

A. SX/EW Plant

1. The SX/EW Plant covers a footprint of approximately 51 acres. The SX/EW Plant includes the SX Circuit, Tank Farm, Tank House, and associated infrastructure, including multiple pipelines and tanks.

    a. SX Circuit – Each of the two flow-through trains of the SX Circuit consists of four tanks (8 tanks total). Six of the tanks have a storage capacity of approximately 103,000 gallons, and two Mixer-Settler Tanks have a capacity of 195,242 gallons each. The flow-through trains consist of three Mixer-Settler Tanks and one Stripper Tank. The entire infrastructure is constructed upon a concrete foundation. The foundation includes a concrete-lined gravity drain (or trench) system that conveys solutions from precipitation events or pipeline breaks within the SX Circuit to the Raffinate Tank. The trench widths range from approximately 30 feet around the perimeter to 13 feet between the tanks. Trench depths are approximately 8 feet.

    b. Tank Farm – The SX/EW Tank Farm consists of numerous tanks situated on a concrete platform enclosed with a concrete wall approximately 4 feet in height. The west side of the Tank Farm consists of 14 tanks used to store and recycle organic products used in the SX Circuit. The newly constructed Barren Organic Tank has a capacity of 82,000 gallons, and the newly constructed Gunk Tank has a capacity of 15,200 gallons. The east side consists of tanks used to filter suspended solids from the rich electrolyte before it is piped to the Tank House. A center collection trench collects stormwater and minor spills from both sides of the Tank Farm. Solutions captured in the collection trench discharge to a drain located on the south side of the farm which discharges to the Raffinate Tank. There is also an overhead trestle between the SX Circuit and the Tank Farm containing numerous pipes. In the event of a pipeline break from this area, process water will discharge to the Raffinate Tank via the trench systems; some

solutions may flow a short distance to the Raffinate Pond over permeable but impacted surface materials.

c. Tank House – The SX/EW Tank House is a covered industrial building used for the electrowinning process. A center drain collects any wash down process water or spilled solutions. Solutions captured in the center drain discharge to the trench system in the Tank Farm. A drain system outside of the Tank House is used to collect wash down process water and stormwater; solutions captured in this drain system also discharge to the Tank Farm trench system.

B. Impoundments

1. Reservoir 6 – Reservoir 6 is an unlined earthen process water impoundment constructed with an upstream side concrete-faced dam. It has a storage capacity of approximately 93,110,000 gallons and a surface area of 2.9 acres. Reservoir 6 receives excess flows from Reservoir 4A, Reservoir 5 North and Reservoir 5 South, Reservoir 7, the Raffinate Tank and Raffinate Pond, Lee Hill Booster Station #2, the Princess Shaft, and the Estrella Sub-pit. Process water in Reservoir 6 is pumped to Reservoir 7 or the Estrella Sub-pit using two barge pumps. Reservoir 6 is equipped with an overflow pipe that conveys process water discharges to the Estrella Sub-pit during upset conditions (i.e., during a power or pipeline shutdown event), high-volume precipitation events, or maintenance and repair activities.

2. Reservoir 7 – Reservoir 7 is an unlined earthen process water impoundment constructed with an upstream side concrete-faced dam. It has a storage capacity of approximately 82,000,000 gallons and surface area of 8.6 acres. It is located approximately 1,000 feet south of Reservoir 6 and 2000 feet southwest of the SX/EW Plant. Reservoir 7 receives flows of process water and impacted stormwater from various locations, including Reservoir 4A, Reservoir 5 North and South, Reservoir 6, the Reservoir 8 area, the Lampbright Far East Sump area, East Headwall Impoundment, Fleming Pond 2, the Raffinate Tank and Raffinate Pond, 5900 Sump, Southside PLS Tank, Lee Hill Booster Station #2, Princess Shaft, and the Estrella Sub-pit. Process water in Reservoir 7 is pumped to either Reservoir 6, PLS Feed Pond, Raffinate Tank, or the Raffinate Pond using two barge pumps. An unlined secondary containment structure is located downstream of the dam face. A concrete sump equipped with a pump is located at the bottom of the containment. The secondary containment structure captures overflow from Reservoir 7 and process water spills from proximal pipeline corridors.

3. PLS Feed Pond – The PLS Feed Pond is an 80-mil high-density polyethylene (HPDE) lined impoundment that has a storage capacity of approximately 1,400,000 gallons and surface area of 0.12 acres. It is located at the northern edge of the SX/EW Plant and it stores PLS for delivery to the SX/EW Plant. Solutions in the PLS Feed Pond are maintained at a constant level with gravity overflow to SX/EW Plant.

4. Raffinate Pond – The Raffinate Pond is an 80-mil HPDE double-lined impoundment with a leak collection system and an operational storage capacity of approximately 2,138,000 gallons. An overflow pipe set two feet below the top of the impoundment can convey process water to Reservoir 7. Fluids collected in the leak collection system are returned to the Raffinate Pond. The Raffinate Pond receives raffinate discharged from the SX/EW Plant for use in the leaching systems, process water flows from Reservoir 7, and process water and impacted stormwater from the Santa Rita Open Pit. The Raffinate Pond also receives filter backwash water, process water, wash down water, domestic wastewater, and laboratory solutions from the SX/EW Tank House and Tank Farm.

   The Raffinate Pond was previously authorized under DP-591 for discharge of raffinate only during upset conditions. The pond was re-lined, and a second liner was installed in late 2019. The re-lined Raffinate Pond is used in tandem with the adjacent stainless steel Raffinate Tank to store and manage raffinate under normal operations. Use of the Raffinate Pond will allow for periodic cleaning of the Raffinate Tank and result in less entrained organic constituents being discharged to the leaching systems.

C. Sumps, Tanks, Pipelines and Other Containment Systems

1. Raffinate Tank – The stainless steel Raffinate Tank has a capacity of 900,000 gallons. The Raffinate Tank receives process water flows from Reservoir 7; process water and impacted stormwater from the Santa Rita Open Pit; filter backwash water, process water, wash down water, domestic wastewater, and laboratory solutions from the SX/EW Tank House and Tank Farm. Two small tanks are located proximal to the Raffinate Tank and receive skimmed organic product from the Raffinate Tank.

2. There are numerous existing above-ground tanks located at the SX/EW Plant associated with DP-591 that meet the criteria of Paragraph (2) of 20.6.7.23.B NMAC. These include three Sulfuric Acid Storage Tanks, a fire suppression tank, a potable water tank, and numerous tanks at the Tank Farm. These tanks are identified in the Discharge Plan, Table 8 of the NMA Master Document, or this Discharge Permit (e.g., Condition B103.A).

3. Pipelines – Pipelines serving the DP-591 mine units, including the PLS and raffinate pipelines serving the SX/EW Plant, consist of high-density polyethylene (HDPE) or stainless-steel material and range in size from 6 inches or less in diameter to greater than 16 inches in diameter. The pipelines are described in Table 7 and Figure 4 of the NMA Master Document.

D. Flow Measurement

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-591 are described in Table 1 of this Discharge Permit as well as Table 9 and Figure 6 of the NMA Master Document.

E. Truck and Equipment Washing Unit

1. SX/EX Truck and Equipment Wash Pad – The SX/EX Truck and Equipment Wash Pad consists of a concrete pad and is located at the northeast corner of the SX/EW Plant.

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. [20.6.2.3109 NMAC]

A. The Permittee is authorized to manage solutions through the SX/EW Plant at a rate of up to 43,200,000 GPD and then from the SW/EW Plant to the Raffinate Tank or Raffinate Pond, and then to permitted leach stockpile systems regulated by DP-376, DP-459, and DP-526. Excess process water may be discharged to Reservoir 6 or 7. Permitted discharges to the Raffinate Tank or Raffinate Pond are primarily acidic solutions from the SX/EW Plant and process water and impacted stormwater pumped from the Santa Rita Open Pit (DP-459).

B. The Permittee is authorized to discharge up to 43,200,000 GPD of acidic leach solutions from PLS collection systems located proximal to leach stockpiles to the synthetically lined PLS Feed Pond and then the SX/EW Plant.

C. The Permittee is authorized to discharge up to 50,000 GPD of filter backwash water, 215,000 GPD of process and washdown water, and 36,000 GPD of domestic wastewater and laboratory solutions from the SX/EW Tank House and Tank Farm to the Raffinate Tank or Raffinate Pond.

D. The Permittee is authorized to operate Reservoirs 6 and 7 as described in the most recent version of the Chino Water Sitewide Management Plan required by DP-459 and Condition B103.B, as part of the NMA process water management system to collect, store, and transfer discharges of process water and impacted stormwater from various locations, including the SX/EW Plant.

E. The Permittee is authorized to discharge water from the Café Queue Spout, Frog Pond Spout, South Side Spout, Lampbright Spout, and the Island Queue Spout for dust suppression within

the area covered by this Discharge Permit. Dust suppression monitoring and reporting requirements are set forth in DP-459.

F. 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, Subsection G of 20.6.7.30 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 Part 20.6.2 NMAC.

C100 SX/EW Plant

A. The Permittee shall operate the SX/EW Plant pursuant to the applicable operational requirements of Subsection C of 20.6.7.20 NMAC.

C101 Impoundments

A. The Permittee shall operate Reservoir 6 and Reservoir 7 in accordance with the applicable requirements of Subsection F of 20.6.7.18 NMAC.

B. To ensure compliance with Paragraph (4) of 20.6.7.18.F NMAC, the Permittee shall maintain a minimum pumping capacity between Reservoir 6 and Reservoir 7 and each reservoir to other locations as identified in the Chino Sitewide Water Management Plan required by DP-459. Reservoirs 6 and 7 shall be maintained to achieve a minimum of 2 feet of freeboard in compliance with Paragraph (4) of 20.6.7.18.F NMAC.

C102 Sumps, Tanks, Pipelines and Other Containment Systems

A. The design, construction and location of all pipelines, tanks, and sumps shall be in accordance with the Discharge Plan, and applicable requirements of Subsections A and B of 20.6.7.23 NMAC.

B. 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 Subsection C of 20.6.7.23 NMAC and Paragraph (2) of 20.6.7.23.B NMAC.

C. 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 20.6.7.23 NMAC, and Condition 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.

D. 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.

C103 Truck and Equipment Washing Unit

A. The Permittee shall operate the existing SX/EW Truck and Equipment Wash Pad in accordance with the applicable requirements of Subsection C of 20.6.7.26 NMAC.

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 the most recent version of the Chino Sitewide Water Management Plan required by DP-459.

B. To ensure compliance with applicable requirements of Paragraph (2) of 20.6.7.17.D NMAC and Paragraph (4) of 20.6.7.17.C NMAC, the Permittee shall inspect monthly or after rain events exceeding one inch - as determined by the nearest appropriate rain gauge(s) - all stormwater impoundments, conveyance channels, and collection ponds for evidence of stormwater accumulations that exceed designed capacities or containing excessive sediment buildup. Inspections after one-inch rain events shall occur as soon as practicable.

C105 Flow Measurement

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 on a monthly basis for evidence of malfunction and repair and replace malfunctioning flow meters within 30 days of or as soon as practicable following discovery.

C106 Monitoring and Reporting

A. Pursuant to applicable requirements of Sections 20.6.7.28 and 20.6.7.29 NMAC, the Permittee shall collect, preserve, transport, and analyze all groundwater, process water, tailings slurry, impacted stormwater, seep, spring, and surface water samples from the facility in accordance with Table 1 of this Discharge Permit, and any additional requirements listed in this Discharge Permit. Table 1 provides a summary of monitoring and reporting requirements. Figure 1 of this Discharge Permit shows sampling locations.

B. Samples of stormwater, PLS, and process water, including seeps, shall be analyzed for total and dissolved concentrations in accordance with Table 1 (20.6.2.3103 NMAC). 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 in both electronic and hard copy format on a semi-annual schedule that contain all quarterly monitoring data and information collected pursuant to the requirements of this Discharge Permit, and the applicable requirements of Sections 20.6.7.18 and 20.6.7.29 NMAC. Semi-annual reports are due by February 28 and August 31 of each year. Data or reports required to be submitted annually shall be submitted in the monitoring report due by February 28 of each year.

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

E. 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 quarterly from the DP-591 monitoring wells in accordance with the schedule and parameters provided in Table 1, and the 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.

4. Additional Groundwater Sampling Requirements

    a. Pursuant to Subsection G of 20.6.7.28 NMAC, if total petroleum hydrocarbons (TPH) in Monitoring Wells 591-97-02 and SX-6, or any new monitoring well exceeds 5 mg/L, the Permittee shall notify NMED of the results upon receiving the analysis and resample the monitoring well(s) for kerosene, ethylbenzene, naphthalene, and toluene (i.e., Organic Parameters II listed in Table 1) within two weeks of receiving the analytical results for the TPH analysis. The Permittee shall notify NMED of the kerosene, ethylbenzene, naphthalene, and toluene results upon receiving the analysis and they shall be included in the semi-annual monitoring reports in the format specified by Subsection C of 20.6.7.29 NMAC.

F. Discharge Volumes

1. The Permittee shall measure and report average daily discharge volumes (unless otherwise noted) for process water, interceptor collection systems, raffinate, and impacted stormwater discharges in accordance with Subsections B, E, and F of 20.6.7.29 NMAC using flow meters listed in Table 1 of this Discharge Permit. 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 Subparagraphs (g) and (h) of 20.6.7.20.C(1) NMAC and Subsections E and F of 20.6.7.29 NMAC for the following discharges:

    a. The daily volume of process water (GPD) discharged from the SX/EW Plant to the Raffinate Tank or Raffinate Pond.
    b. The daily volume of PLS (GPD) discharged to and from the PLS Feed Pond.
    c. The daily volume of additional flows discharged from the SX/EW Tank House and SX/EW Tank Farm authorized in Condition B104.C.

G. Flow Measurement

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.

H. Meteorological Data

1. Pursuant to Paragraph G of 20.6.7.29 NMAC, Meteorological data shall be measured as stipulated in the NMA Master Document. The data shall be submitted to NMED in the monitoring report due on February 28 of each year.

C107 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. The Permittee has been required to submit to NMED for approval a proposed abatement plan for the Chino Mine pursuant to Section C114 of DP-1340. All abatement plans and activities shall be performed in accordance with Sections 20.6.2.4000 through 4115 NMAC and Paragraphs (3) and (4) of 20.6.7.30.A NMAC.

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 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-1340, as applicable. Closure and financial assurance requirements associated with facilities authorized by this permit are included in DP-1340.

Part D GENERAL CONDITIONS

General conditions issued by the Ground Water Quality Bureau pursuant to Part 20.6.2 NMAC and Part 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 WQA, 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 WQA, 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 WQA, 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. [NMSA 1978 Section 74-6-10, Section 74-6-10.1]

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, Section 74-6-9(B) & (E)]

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)]:

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. 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.

C. Pursuant to Subsection A of 20.6.7.18 NMAC, to the extent practicable, mine units shall be designed 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.

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

E. 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 that NMED requests 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 1978, 74-6-9 (B) & (E)]

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 C106.D 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 Section 19.27.4 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;
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 (i.e., most recent eight quarters of data) groundwater analytical results from the monitoring well(s);
5. Proposed replacement well(s), if applicable;
6. The 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 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. 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 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 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 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 Subsection D of 20.6.2.7 NMAC, the Permittee shall submit for NMED approval an application for modification of this Discharge Permit pursuant to Sections 20.6.7.10 NMAC and 20.6.7.11 NMAC. Plans and specifications shall be included in the requests 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. Plans and specifications shall be included in the requests 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 Part 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 – DP-591 Monitoring and Reporting Summary

Monitoring Report Schedule of Submittal (Subsection A of 20.6.7.29 NMAC)	
1	January 1 - June 30 (Q1 and Q2 sampling quarters) **–** Semi-annual report due by August 31 of each year
2	July 1 - 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	**Description**
2	Monitoring reports – All applicable requirements of Subsections A through H of 20.6.7.29 NMAC, and Condition C106.
2	Additional discharge volume reporting required by Condition C106.F.

Monitoring Schedule

Area	**Identification Number**	**Sampling**					**Notes**
		type	**Q1**	**Q2**	**Q3**	**Q4**	
Reservoir 6	591-97-02	MW	ABW	ABW	ABW	ABCW	Upgradient
	Reservoir 6	PW	AW	AW	AW	ABCW	Process Water
	SX-6	MW	ABW	ABW	ABW	ABCW	
SX/EW	PLS Feed Pond	PW	-	BCW	-	ABCW	PLS
	591-97-03	MW	AW	AW	AW	AW	
	SX-2S	MW	AW	AW	AW	AW	
	SX-2D	MW	AW	AW	AW	AW	
	591-2007-01	MW	AW	AW	AW	AW	
	591-2007-02	MW	AW	AW	AW	AW	
	591-2022-01	MW	ABW	ABW	ABW	ABCW	
	591-2022-02	MW	ABW	ABW	ABW	ABCW	
Raffinate Pond	Raffinate Pond	PW	-	ABW	-	ABCW	Process Water
	591-2007-03	MW	AW	AW	AW	AW	
Reservoir 7	Reservoir 7	PW	AW	AW	AW	ABCW	Process Water
	591-97-04	MW	AW	AW	AW	AW	
Flow Meters	6	Reservoir 6 to Reservoir 7 (pumped)					
	10	SX/EW Plant Drain to Raffinate Tank (gravity)					
	13	Southside PLS Tank to SX/EW (pumped)					
	14	Reservoir 4A to Reservoir 6 or 7 (pumped)					
	15	Reservoir 17 to Reservoir 4A (pumped)					
	37	SX/EW Circuit (A&B Trains) to SX					

Sampling Analytical Suites:

A = Field parameters and indicator parameters: Temperature (°C), pH, specific conductance (µS/cm), sulfate, total dissolved solids (TDS)
B = Inorganic suite: F, Cl, Al, As, Cd, Cr, Co, Cu, Fe, Pb, Mn, Ni, Se, U, and Zn
C = Organic Parameters I: Total Petroleum Hydrocarbons (TPH)
D = Organic Parameters II: Kerosene, Ethylbenzene, Naphthalene, Toluene if "C" exceeds 5 mg/L TPH (see C106.E.4)
W = Depth-to-water measurement to the nearest 0.01 foot

Explanation to Abbreviations and Symbols			
Type	Sampling Quarter	Suite B Sampling Analytes	
MW = monitoring well PW = process water TNK = tank	Q1 = Jan-Mar Q2 = Apr-Jun Q3 = Jul-Sep Q4 = Oct-Dec	F = Fluoride Cl = Chloride Al = Aluminum As = Arsenic Cd = Cadmium Cr = Chromium Co = Cobalt Cu = Copper	Fe = Iron Pb = Lead Mn = Manganese Ni = Nickel Se = Selenium U = Uranium Zn = Zinc

Figure 1 - DP-591 Monitoring and Reporting Sample Locations