



MICHELLE LUJAN GRISHAM
GOVERNOR

JAMES C. KENNEY
CABINET SECRETARY

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

February 9, 2026

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

RE: Draft Discharge Permit Renewal and Modification; DP-526, Whitewater Leach System, 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 526 (DP-526) for the Freeport-McMoRan Chino Mines Company (Applicant) Whitewater Leach System has been proposed for approval (copy enclosed). The New Mexico Environment Department (NMED) Ground Water Quality Bureau (GWQB) will publish notice of the availability of the draft Discharge Permit Renewal and Modification in the near future and will forward a copy of the notice to you. The Application for Discharge Permit Renewal of DP-526 was deemed technically complete on October 8, 2025.

Prior to making a final ruling on the proposed DP-526 Discharge Permit Renewal and Modification, NMED will allow 30 days from the date the public notice is published, during which time written comments can be submitted or a public hearing requested. Comments and/or 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-526 Discharge Permit Renewal and Modification. Hearings are presided over by the NMED Secretary, or a hearing officer appointed by the Secretary.

NMED has imposed additional conditions on the Renewal and Modification of DP-526 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-526 or DP-213 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 C107.A – The reason for this condition is to ensure the Whitewater Groundwater Interceptor System is operated in an effective manner.
2. Condition C107.B – The reason for this condition is to ensure that monitoring and interceptor wells required pursuant to the correspondence titled, *Conditional Approval for Response to Conditional Approval of the Investigation Report and Interim Actions for the West Stockpile Dams, Discharge Permit 1340*, dated July 6, 2023, are constructed in a timely manner.
3. Condition C109.D – The reason for this condition is to efficiently compare current DP-526 monitoring data to historical trends.
4. Condition C109.G.4 – The reason for this condition is to ensure compliance with the monitoring well location requirements of Subsection B of 20.6.7.28 NMAC.
5. Condition C110.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 groundwater 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.
6. Condition C110.D – The reason for this condition is to require the Applicant to submit a corrective action plan that proposes measures to prevent additional West Waste Rock Stockpile seepage from impacting groundwater along Hanover Creek.
7. Condition C110.F – The reason for this condition is to ensure that actions approved by DP-526 Amendment 06-14 dated April 14, 2024, are completed in a timely manner.
8. Condition D105.A – The reason for this condition is to ensure that the Applicant submits proper notification prior to destruction or removal of any monitoring wells required under DP-526.

9. 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.
10. 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.

The following conditions have been pulled forward from the existing DP-526, DP-213, DP-526 amendments, or DP-213 amendments 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), Paragraph (2) of 20.6.7.23.B NMAC (pipelines and tanks), and Subsection G of 20.6.7.28 NMAC (water quality monitoring and reporting): C100.D, C100.E, C100.F, C101.E, C102.B, C103.E, C104.B, C104.C, C109.F, and C110.E.

Please review the enclosed draft DP-526 Discharge Permit Renewal and Modification carefully for accuracy and completeness, and to make sure you understand what it requires. Please be aware that the proposed DP-526 Discharge Permit Renewal and Modification may contain conditions that require the Applicant to implement operational, monitoring, or closure actions by a specified deadline.

The Water Quality Control Commission (WQCC) Regulations, 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-526 Discharge Permit Renewal and Modification 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-526 Discharge Permit Renewal and Modification will become final. Thank you for your cooperation during the review process.

Sincerely,

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

Enclosure: Draft Discharge Permit Renewal and Modification, DP-526

Cc: Randy B. Ellison, Chino Mines Company (rellison@fmi.com)
Sherry Burt-Kested, Chino Mines Company (sburtkes@fmi.com)
Tyler Johnson, Chino Mines Company (tjohnson2@fmi.com)
Roy Paquette, Chino Mines Company (rpaquette@fmi.com)
Gila Resources Information Project (grip@gilaresources.info)
Joseph Fox, MECS (joseph.fox@env.nm.gov)
Brad Reid, MECS (brad.reid@env.nm.gov)
David Mercer, MECS (david.mercer1@env.nm.gov)
David Hays, MECS (david.hays@env.nm.gov)
Sean Madden, MECS (sean.madden@env.nm.gov)
Kevin Barnes, MMD (kevin.barnes@emnrd.nm.gov)



MICHELLE LUJAN GRISHAM
GOVERNOR

JAMES C. KENNEY
CABINET SECRETARY

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

Return Receipt Requested

Mine Facility Name: Whitewater Leach System

GWQB Discharge Permit No.: DP-526
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 and Modification
Effective Date: DATE
Expiration Date: DATE

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, Groundwater Quality Bureau

Date

draft

This page intentionally left blank.

TABLE OF CONTENTS

Part A	GENERAL INFORMATION.....	1
A100	Introduction.....	1
A101	Applicable Regulations.....	1
A102	Permit Duration.....	2
A103	Terms of Permit Issuance.....	2
Part B	FACILITY SPECIFIC INFORMATION.....	3
B100	History and Facility Description.....	3
B101	Permit Modification.....	4
B102	Other Changes.....	5
B103	Permitting History.....	6
B104	Facility Location, Groundwater and Process Water Characteristics.....	6
B105	Authorized Mine Units.....	7
B106	Authorized Discharges.....	15
Part C	FACILITY SPECIFIC REQUIREMENTS.....	17
C100	Leach Stockpiles.....	18
C101	Waste Rock Stockpiles.....	18
C102	Impoundments.....	19
C103	Sumps, Tanks, Pipelines and Other Containment Systems.....	19
C104	Copper Crushing, Milling, and Concentrating.....	20
C105	Flow Measurement.....	20
C106	Truck and Equipment Washing Units.....	21
C107	Whitewater Groundwater Interceptor System.....	21
C108	Stormwater Management.....	21
C109	Monitoring and Reporting.....	21
C110	Contingency Plan.....	26
C111	Closure Plan.....	27
Part D	GENERAL CONDITIONS.....	27
D100	Enforcement.....	27
D101	General Inspection and Entry Requirements.....	28
D102	General Operational Requirements.....	28
D103	General Record Keeping and Reporting Requirements.....	29
D104	General Sampling and Analytical Methods.....	29
D105	Monitoring Well Abandonment.....	29
D106	Reporting Requirements for Unauthorized Discharges.....	30
D107	Modifications and Amendments.....	31
D108	Compliance with Other Laws.....	31

LIST OF TABLES AND FIGURES

Table 1 – Monitoring and Reporting Summary for DP-526 32
Figure 1 – Alluvial Monitoring and Interceptor Wells 36
Figure 2 – Ivanhoe Concentrator Area Facilities and Features 37
Figure 3 – DP-526 Facilities 38
Figure 4 – DP-526 Facilities 39
Figure 5 – DP-526 Facilities 40
Figure 6 – DP-526 Facilities 41
Figure 7 – DP-526 Facilities 42
Figure 8 – DP-526 Facilities 43

draft

Part A GENERAL INFORMATION

A100 Introduction

- A. The New Mexico Environment Department (NMED) issues this Groundwater Discharge Permit Renewal and Modification, DP-526 (Discharge Permit or DP-526), to Freeport-McMoRan Chino Mines Company (Permittee) pursuant to the New Mexico Water Quality Act (WQA), NMSA 1978, §§ 74-6-1 through 74-6-17, and the New Mexico Water Quality Control Commission (WQCC) Regulations, Part 20.6.2 NMAC (Ground and Surface Water Protection) and Part 20.6.7 NMAC Groundwater 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 Whitewater Leach System, the Ivanhoe Mill and Concentrator, and associated mine units 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 24,500,000 gallons per day (GPD) of acidic leach solution (raffinate) to the South Leach Stockpile and West Leach Stockpile for the purpose of leaching copper. These discharges may move directly or indirectly into groundwater of the State of New Mexico that 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. These discharges may contain water contaminants or toxic pollutants elevated above the water quality standards of Section 20.6.2.3103 NMAC in compliance with the terms and conditions of this Discharge Permit.
- C. The Permittee is authorized to discharge water contaminants pursuant to this Discharge Permit which requires compliance with 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 discharges from the facilities regulated pursuant to this Discharge Permit are not subject to any of the exemptions of Section 20.6.2.3105 NMAC unless otherwise noted.
- C. Groundwater quality as observed in monitoring wells required by Condition C109.G of this Discharge Permit and consistent with Subsection B of 20.6.7.28 NMAC is subject to the criteria

of Sections 20.6.2.3101 and 20.6.2.3103 NMAC except those excluded pursuant to Subsection D of 20.6.7.24 NMAC.

A102 Permit Duration

- A. Pursuant to NMSA 1978 § 74-6-5(I) and Subsection H of 20.6.2.3109 NMAC, the term of this Discharge Permit Renewal and Modification is **five (5) years** from its effective date.
- B. If the Permittee submits an application for renewal in accordance with Subsection G of 20.6.2.3106 NMAC, and the Permittee is not in violation of the discharge permit on the date of its expiration; then the existing discharge permit shall not expire until NMED approves or disapproves the application for renewal.

A103 Terms of Permit Issuance

- A. Permit Fees – As a discharge permit associated with Freeport-McMoRan Chino Mines Company, the Permittee shall remit an annual permit fee payment 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: Condition C107.A, Condition C107.B, Condition C109.D, Condition C109.G.4, Condition C110.C, Condition C110.D, Condition C110.F, Condition D105.A, Condition D105.B, and Condition D106.B.

Part B FACILITY SPECIFIC INFORMATION

B100 History and Facility Description

- A. The Chino Mine is an open pit copper mine owned by Freeport-McMoRan Chino Mines Company and 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 mill, a concentrator, 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-526 that produce discharges that may move directly or indirectly into groundwater include the South Leach Stockpile, West Leach Stockpile, West Waste Rock Stockpile, Ivanhoe Mill and Concentrator, and associated collection and containment systems. The associated infrastructure includes reservoirs, impoundments, Pregnant Leach Solution (PLS) collection units, sumps, tanks, booster stations, and pipelines. Collectively these mine units cover approximately 1,692 acres.
- C. The South Leach Stockpile and West Leach Stockpile receive ore for leaching from the Santa Rita Open Pit and Continental Mine. Stockpiling of leach ore on the South Leach Stockpile began in 1940 and on the West Leach Stockpile in 1969. Application of raffinate and collection of PLS to recover copper began in 1963 for the South Leach Stockpile and in 1969 for the West Leach Stockpile.
- D. The South and West Leach Stockpiles are leached through the application of raffinate to the top and side surfaces. Raffinate removes metals from the mined ore as it passes through the stockpile. PLS, which has a TDS concentration of up to 191,000 mg/L, is collected at the base of the leach stockpiles with the PLS Launder, Reservoir 4A, Reservoir 2, the Estrella Sub-pit, and Lee Hill Sub-pit. The PLS is then conveyed by pipelines to the SX/EW Plant for copper cathode production using an electrolytic procedure.
- E. Impacted material resulting from cleaning out permitted mine units are placed on the South and West Leach Stockpiles for leaching. Examples include filter cake, acid-impacted sediments from unauthorized discharges, and sediments from cleaning out process water impoundments including dredged sediment from Reservoir 7.
- F. The Whitewater Groundwater Interceptor System consists of 17 interceptor components that pump impacted groundwater to DP-526 sumps or impoundments. These interceptor components are located along the western toe of the West Waste Rock Stockpile and the southwestern toe of the South Leach Stockpile.

- G. The Small Vehicle/Truck Wash Pad is located south of the Main Mine Offices area, and the Haul Truck Wash Pad is located northwest of the Main Mine Offices Area. The Permittee was authorized to relocate the Haul Truck Wash Pad to this location in 2013 to accommodate the expansion of the Lee Hill Sub-pit.
- H. The Ivanhoe Mill and Concentrator crushes, mills, and concentrates ore from the Santa Rita Open Pit and Continental Mine using a copper and molybdenum flotation process. Ore is crushed and mixed with water, and copper and molybdenum concentrates are produced via conventional froth and flotation processes at the Ivanhoe Mill and Concentrator. Copper and molybdenum concentrate slurries were historically conveyed to the Hurley Smelter located in the Chino South Mine Area (SMA) near Hurley, New Mexico. Copper concentrate slurry is now piped via the Copper Concentrate Pipeline to the Filter Plant located in the SMA for drying and subsequent transport off-site. Molybdenum concentrate is shipped off-site from the Ivanhoe Concentrator. The thickened tailings produced as a by-product of the concentration process are conveyed by three tailings pipelines to either the Chino Tailing Pump Station or the Termination Tank located in the SMA and ultimately to Tailing Pond 7 (DP-484).
- I. Water from the Lampbright Tank, Island Queue Tank, Café Queue Tank, South Side Tank, and Frog Pond, located at various locations in the Chino NMA, is used for dust suppression on mine haul roads within the Santa Rita Open Pit and on adjacent stockpiles. Water is supplied from various sources including the Star Shaft, Oswaldo Shaft, Princess Shaft, Bullfrog Shaft, LB East, wells north of the Lampbright Leach Stockpile, Reservoir 5 South, 700R, and 593 potable supply wells near Reservoir 5 South, Chino Tailing Pond 7 decant water, and pit wall dewatering wells within the Santa Rita Open Pit. Water from the Bullfrog Shaft and the Continental Mine is delivered via the Bullfrog Pipeline. Water quality data for these various sources is currently reported pursuant to applicable Chino and Continental Mine operational discharge permits, including DP-181, DP-376, DP-459, DP-484, and DP-526. The haul roads that water is applied to for dust control typically are constructed with mined rock that has acid-generating potential and are within demonstrated areas of ground and surface water capture. Dust suppression is a necessary action to meet air quality requirements and is not expected to result in a net impact to ground or surface water quality impairments within these heavily impacted and active mine areas.

B101 Permit Modification

- A. The modification of DP-526 consists of incorporating the Ivanhoe Mill and Concentrator and associated infrastructure from DP-213 into DP-526. The modification does not incorporate DP-213 pipelines, pipeline corridors, or associated discharges as these are permitted pursuant to DP-484.

B102 Other Changes

- A. Pursuant to DP-526 Amendment 06-14 dated April 14, 2024, the Permittee is authorized to relocate up to 4.6 million tons of stockpile material from the southwest outslope of the South Leach Stockpile to a permitted location on the South Leach Stockpile and regrade the stockpile to a 2:1 configuration. DP-526 Amendment 06-14 also authorizes construction of the Gunnite Slope Containment, Gunnite Slope Containment Headwall, discharge pipeline, pipeline corridor, a new monitoring well, a standpipe down drain from a sediment pond on the western edge of the South Leach Stockpile to Reservoir 4A, and reroute multiple pipelines on the South Leach Stockpile. The Permittee will remove the existing Gunnite Slope, South Leach Stockpile material beneath the Gunnite Slope, and the New York Margin 6525 Overflow Containment Sump. Overflow from the 6525 Raffinate Booster Tank will be routed to the PLS Launder after removal of the New York Margin 6525 Overflow Containment Sump. The Seep West of South Stockpile will be referred to as the Gunitite Slope Seep. The Permittee may be required to submit an additional amendment request to NMED to relocate additional South Leach Stockpile material, to relocate South Leach Stockpile material to a different location, and to implement any changes to the plans and specifications detailed in DP-526 Amendment 06-14.
- B. The following mine units are either no longer in service or have been removed and therefore are no longer permitted pursuant to DP-526: the Old Head Pump House, South Side Booster, Last Chance Reservoir, and Dam 14-3.
- C. Reservoir 9 is no longer permitted pursuant to DP-526 and has been incorporated into DP-459.
- D. Pursuant to the correspondence titled, *Approval of the Investigation Report and Actions for the West Stockpile Dams; DP-1340*, dated December 18, 2023 (DP-1340 Interim Actions), the Permittee is authorized to construct three monitoring wells, construct two interceptor wells, cease pumping of Interceptor Well (IW) CB-8A, and convert the following four existing monitoring wells (MW)s 526-2004-03, CB-6C, CB-8C, and WD-8D into interceptor wells.
- E. The following monitoring wells will no longer be sampled pursuant to DP-526 and will be incorporated into the DP-1340 sampling and analysis plan: 526-2006-01, 526-98-09, 526-2000-4S, 526-2000-4D, 526-98-02, 526-98-03, 526-2000-3S, 526-2000-3D, Rifle Range, 214-93-1D, Dennis, B-40, 526-2000-2S, B-43, B-42, B-39, 526-2000-1S, 526-2000-1D, B-46, and B-44 .
- F. NMED will herein refer to the authorized leaching portion of the West Stockpile as the West Leach Stockpile and the non-leaching portion as the West Waste Rock Stockpile. NMED will also refer to the South Stockpile as the South Leach Stockpile, the Upper South Stockpile as the Upper South Reclamation Cover Material Stockpile, and the STS2 Stockpile as the STS2 Reclamation Cover Material Stockpile.

B103 Permitting History

- A. The Discharge Plan for DP-526 includes the Discharge Permit renewal and modification application dated June 6, 2011, request for additional information response correspondences dated December 11, 2020, September 13, 2021, and July 31, 2025, and materials contained in the administrative record prior to issuance of this Discharge Permit. The Discharge Plan for DP-526 includes the most recent versions of the Chino North Mine Area Master Document (NMA Master Document) which addresses Copper Mine Rule application requirements, and the Chino North Mine Area Sitewide Water Management Plan. 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 discharge plan approved on February 3, 1989; renewed on February 8, 1991, September 9, 1991 and April 3, 1998; modified on November 23, 1994 and April 16, 1995; renewed and modified on October 3, 2006; and amended on April 23, 1996, April 17, 1997, July 2, 2003, August 28, 2003, September 16, 2003, November 12, 2003, May 9, 2008, January 26, 2010, November 24, 2010, June 22, 2012, August 6, 2013, October 17, 2013, November 22, 2013, March 27, 2014, May 5, 2015, November 23, 2015, June 8, 2016, March 22, 2019, and April 15, 2024. In addition, the Discharge Plan includes information and materials submitted as part of the original DP-213 discharge plan approved on June 7, 1982; renewed on June 11, 1987, and December 18, 1998; renewed and modified on October 9, 1992, and June 16, 2005; and amended on March 25, 1998, February 28, 2011, and December 5, 2016.

B104 Facility Location, Groundwater and Process Water Characteristics

- A. The mine units regulated pursuant to DP-526 are located approximately two miles northeast of Bayard in Sections 28, 29, 32, 33, and 34, T17S, R12W; and Sections 3, 4, and 5, T18S, R12W in Grant County.
- B. Groundwater beneath the mine units regulated pursuant to DP-526 ranges from approximately 0 to 300 feet below ground surface and had a pre-discharge TDS concentration of approximately 266-1,000 mg/L.
- C. The South Leach Stockpile, West Leach Stockpile, and West Waste Rock Stockpile contain sulfide minerals which, when oxidized, generate acidic solutions. These acidic solutions react with in-situ minerals to produce acid rock drainage (ARD).
- D. Process water and impacted stormwater discharges regulated pursuant to DP-526, including raffinate, PLS, and ARD exceed water quality standards of Section 20.6.2.3103 NMAC for aluminum, arsenic, cadmium, chloride, chromium, cobalt, copper, fluoride, iron, lead, manganese, nickel, sulfate, TDS, zinc, and are outside the acceptable range for pH.

- E. Water quality from sources used for dust control typically exceed water quality standards of Section 20.6.2.3103 NMAC for TDS, sulfate, iron, and manganese, and intermittently exceed Section 20.6.2.3103 NMAC water quality standards for pH, cobalt, fluoride, and selenium.

B105 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 outside 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 Figures 1-8 of this Discharge Permit.

A. Leach Stockpiles

- 1. South Leach Stockpile – The South Leach Stockpile is located southeast of the Ivanhoe Mill and Concentrator area and covers approximately 714 acres.
- 2. West Leach Stockpile – The West Leach Stockpile is located northeast of the Ivanhoe Mill and Concentrator area and east of the West Waste Rock Stockpile. The West Leach Stockpile is contiguous with the West Waste Rock Stockpile, and both cover approximately 625 acres. The West Leach Stockpile is located inside the OPSDA.

B. Waste Rock Stockpiles

- 1. West Waste Rock Stockpile – The West Waste Rock Stockpile is located north of the Ivanhoe Mill and Concentrator area and west of the West Waste Rock Stockpile. The West Waste Rock Stockpile is contiguous with the West Leach Stockpile, and both cover approximately 625 acres.

C. Conditionally Exempt Reclamation Cover Material Stockpiles

- 1. Upper South Reclamation Cover Material Stockpile – The Upper South Reclamation Cover Material Stockpile is located east of the South Leach Stockpile and covers approximately 313 acres. The stockpile is composed of un-mineralized volcanic waste rock proposed for use as reclamation cover material.
- 2. STS2 Reclamation Cover Material Stockpile – The STS2 Reclamation Cover Material Stockpile is located south of the South Leach Stockpile and covers approximately 68 acres. The stockpile is composed of un-mineralized volcanic waste rock proposed for use as reclamation cover material. It is underlain by sulfide-containing rock. The upper portion of this stockpile is authorized for storage of reclamation cover material on condition that the Permittee adheres to the most recent approved Material Characterization and

Handling Plan to ensure that the stockpile does not generate water contaminants.

3. Pending adherence to the most recent approved Material Characterization and Handling Plan, the Upper South Reclamation Cover Material Stockpile and the upper portion of the STS2 Reclamation Cover Material Stockpile are not expected to generate water contaminants that exceed the water quality standards of Section 20.6.2.3103 NMAC and are conditionally exempt from applicable requirements listed in Subsection B of 20.6.7.21 NMAC.

D. Copper Crushing, Milling, and Concentrator Mine Units

1. Ivanhoe Mill and Concentrator area – The Ivanhoe Mill and Concentrator area is located south of the West Waste Rock Stockpile, and west of the Mine Maintenance and General Offices Area. Ore from the Santa Rita Open Pit is crushed, ground, milled, and concentrated in the Ivanhoe Mill and Concentrator area. Any unauthorized discharges and stormwater from this area are collected in concrete drains and discharge to either Reservoir 4A or Reservoir 2.
 - a. Primary Crusher – The Primary Crusher is located west of the Mine Maintenance and General Offices Area. The Primary Crusher crushes ore from the Santa Rita Open Pit, to approximately 8-inches in diameter or less, as the first step of the ore milling process. Crushed ore from the Primary Crusher is transported by conveyer belt to the Intermediate Ore Stockpile at a maximum rate of 3,500 tons per hour.
 - b. Intermediate Ore Stockpile – The Intermediate Ore Stockpile is located north of the Ivanhoe Mill and Concentrator and covers approximately three acres. The stockpile receives crushed ore from the Primary Crusher. The stockpile is underlain by concrete as well feeder chutes that transfer crushed ore to a belt system which transport the crushed ore to the Ivanhoe Mill.
 - c. Ivanhoe Mill – The Ivanhoe Mill is located adjacent to the Ivanhoe Concentrator and consists of two Semi-Autonomous Grinding (SAG) mills, four ball mills, and four vertical mills. The mill further crushes and grinds crushed ore from the Intermediate Ore Stockpile to a fine-grain particle size. Crushed ore is sequentially entered into the sag mill for coarse crushing, and the ball and vertical mills for fine grinding. The mill receives process water from either the 2.5 Million Gallon Tank, or the Head Tank. Process water from the mill is pumped to the Head Tank, Ivanhoe Concentrator, or the North and South Tailing Thickeners.
 - d. Ivanhoe Concentrator – The Ivanhoe Concentrator receives milled ore material from the Ivanhoe Mill and produces copper concentrate slurry, molybdenum concentrate or tailing slurry through a flotation process. The concentrator consists of eight 4500 agitator tanks, 48 rougher cells, two cyclone units, four ball mills, 36 flotation cells, and two vertical flotation cells. The copper concentrate slurry, and molybdenum concentrate slurry are pumped to either the Copper Thickener, Copper-Moly

Thickener, or Moly Thickener. The tailing slurry produced as a by-product of the flotation process is pumped to the North and South Tailing Thickeners. The Ivanhoe Concentrator also receives solutions from the Ivanhoe Mill, the North and South Tailing Thickeners, Reagent Tanks, and Milk of Lime Tanks.

- e. Copper Thickener – The Copper Thickener consists of a tank with steel sides and a clay bottom. The thickener is located adjacent to the Ivanhoe Mill and Concentrator and is used to thicken copper concentrate. When a copper concentrate of 55-65 percent solids is achieved, the slurry is pumped to a Concentrate Storage Tank and then to the Filter Plant located at the Hurley Operational Area via the Concentrate Pipeline. The thickener has a capacity of approximately 777,679 gallons.
- f. Copper-Moly Thickener – The Copper-Moly Thickener consists of a tank with steel sides and a clay bottom. The thickener is located adjacent to the Ivanhoe Mill and Concentrator and is used to thicken copper and molybdenum concentrate before it is pumped to a Concentrate Storage Tank. The thickener has a capacity of approximately 777,679 gallons.
- g. Moly Thickener – The Moly Thickener consists of a tank with steel sides and a clay bottom. The thickener is located adjacent to the Ivanhoe Concentrator and is used to thicken molybdenum concentrate before it is pumped to a Concentrate Storage Tank. The thickener has a capacity of approximately 260,000 gallons.
- h. Concentrate Storage Tanks – The Concentrate Storage Tanks consist of two steel tanks located south of the Ivanhoe Mill and Concentrator. The tanks receive copper concentrate and molybdenum concentrate from the Copper Thickener, Copper-Moly Thickener, or Moly Thickener. Copper concentrate is pumped to the Filter Plant located in the SMA and molybdenum concentrate is transported offsite for additional processing. The tanks each have a capacity of approximately 192,500 gallons.
- i. North and South Tailing Thickeners – The North and South Tailing Thickeners consist of two tanks with steel sides and clay bottoms. They are located west of the Ivanhoe Mill and Concentrator and are used to thicken the tailing slurry to a solids content of approximately 48 percent before it is pumped to either the Chino Tailing Pump Station or the Termination Tank located in the SMA. They each have a capacity of approximately 8,000,000 gallons. The thickeners also receive impacted groundwater from IWs I-3 and I-7.
- j. Tailing Thickener Overflow Tank – The Tailing Thickener Overflow Tank consists of a steel tank located between the North and South Tailing Thickeners. The tank is used to contain overflow from the North and South Tailing Thickeners and is pumped to the 2.5 Million Gallon Tank or the 1.5 Million Gallon Tank. The tank has a capacity of approximately 91,000 gallons.
- k. 2.5 Million Gallon Tank – The 2.5 Million Gallon Tank consists of a steel tank located north of the Ivanhoe Mill and Concentrator. The tank receives process water from the 750K Tank located in the SMA, the 1.5 Million Gallon Tank, or the Tailing Thickener Overflow Tank. Process water from the tank is pumped to the Ivanhoe Mill, 1.5 Million

Gallon Tank, or the Head Tank. The tank has a capacity of approximately 2,501,978 gallons.

- l. 1.5 Million Gallon Tank – The 1.5 Million Gallon Tank consists of a steel tank located north of the Ivanhoe Mill and Concentrator. The tank receives process water from the 750K Tank located in the SMA, the 2.5 Million Gallon Tank, or the Tailing Thickener Overflow Tank. Process water from the tank is pumped to the Head Tank, or the 2.5 Million Gallon Tank. The tank has a capacity of approximately 1,508,342 gallons.
- m. Head Tank – The Head Tank consists of a steel tank located north of the Ivanhoe Mill and Concentrator. The tank receives process water from the 1.5 Million Gallon Tank or the 2.5 Million Gallon Tank, and pumps process water to the Ivanhoe Mill.
- n. Reagent Tanks – The Reagent Tanks consist of eight steel tanks located south of the Ivanhoe Mill and Concentrator. They receive flocculant solutions from offsite and pump the solutions to the Ivanhoe Concentrator. Five of the tanks have a capacity of approximately 803,000 gallons each and three of the tanks have a capacity of approximately 234,000 gallons each.
- o. Lime Silos – The Lime Silos consist of two steel tanks located south of the Ivanhoe Mill and Concentrator. The tanks store lime from offsite before it is piped to the Milk of Lime Tanks. Each tank has a capacity of approximately 1,575,000 gallons.
- p. Milk of Lime Tanks – The Milk of Lime tanks consist of two steel tanks located south of the Ivanhoe Mill and Concentrator. The tanks mix lime from the Lime Silos with water, and the resultant Milk of Lime solution is pumped to the Ivanhoe Concentrator. The Milk of Lime solution is used to increase the pH during the flotation process. Each tank has a capacity of approximately 73,933 gallons.
- q. Small Equipment Wash Rack – The Small Equipment Wash Rack is located southwest of the Ivanhoe Mill and Concentrator and consists of a raised concrete pad and sump used to wash items that are associated with milling and concentrating operations. Solutions from the sump are directed to a stormwater drain that discharges by gravity to Reservoir 4A.

E. Impoundments

1. Reservoir 2 – Reservoir 2 is an earthen reservoir constructed with a concrete dam located west of Reservoir 4A, east of Reservoir 17, and south of the Ivanhoe Mill and Concentrator. Reservoir 2 receives PLS seepage from South Leach Stockpile and Reservoir 4A; impacted stormwater from the Ivanhoe Mill and Concentrator area, as well as overflow solutions from Reservoir 4A and the South Side PLS Tank. The reservoir also receives impacted groundwater from IWS CB-10J, CB-10C, and WD-1. The reservoir will also receive impacted stormwater from the Gunnite Slope Containment after construction is completed. The solutions from Reservoir 2 are pumped to Reservoir 4A. Reservoir 2 has a storage capacity of approximately 1,140,000 gallons. Overflow from Reservoir 2 discharges to Reservoir 17. Portable pumps can be used to transfer water from Reservoir 2 to Reservoir 4A during upset conditions.

2. Reservoir 4A – Reservoir 4A is an earthen reservoir constructed with a concrete dam located on the western toe of South Leach Stockpile, east of Reservoir 2, and southeast of the Ivanhoe Mill and Concentrator. Reservoir 4A receives PLS seepage and impacted stormwater from the South Leach Stockpile, the New York Margin 6525 Overflow Containment Sump, and PLS Launder, impacted stormwater from the Ivanhoe Mill and Concentrator area, and the Mine Maintenance and General Offices area, wash water from the Haul Truck Wash Pad and Small Vehicle/Truck Wash Pad, as well as overflow from the South Side PLS Tank. Reservoir 4A also receives impacted stormwater and seepage from several West Waste Rock Stockpile Catchment Dams including Dam 10, Dam 11, Dam 13, Dam 14, and Dam 20, Reservoir 2, and Reservoir 17. The capacity of Reservoir 4A is approximately 15,000,000 gallons. Reservoir 4A is equipped with two barge decant pumps with pumping capacities of 1,500 GPM each which discharge to the South Side PLS Tank as well as two active and one backup vertical pump with pumping capacities of 3,000 GPM each which discharge to either Reservoir 6 or Reservoir 7.
3. Reservoir 17 – Reservoir 17 is a High-Density Polyethylene (HDPE) lined, concrete dam west of Reservoir 2 and southwest of the Ivanhoe Mill and Concentrator. Reservoir 17 receives PLS seepage from the South Leach Stockpile, seepage and overflow from Reservoir 2, impacted stormwater from the Ivanhoe Concentrator. It also receives impacted alluvial groundwater from Dam 16. Solutions from Reservoir 17 can be pumped to either Reservoir 4A, the South Side PLS Tank, or the North and South Tailing Thickeners. The capacity of Reservoir 17 is approximately 15,250,000 gallons. Reservoir 17 is equipped with three active and one spare 2,000 GPM barge pumps.

F. Sumps, Tanks, Pipelines and Other Containment Systems

1. Frog Pond – Frog Pond is a double HDPE lined sump, located on the east side of West Leach Stockpile, and supplies the NMA with water for dust suppression of roads and stockpiles. The Frog Pond is located inside the OPSDA. The sump consists of an inner and outer 60 mil HDPE liners with interstitial leak collection and fluid removal system. The sump receives groundwater pumped from the Princess Shaft and process water from the 2.5 Million Gallon Tank. Solutions from the sump are conveyed to the Frog Pond Spout for use as dust suppression water. Solutions collected in the interstitial layer between the two liners are gravity piped to the OPSDA. The capacity of Frog Pond is approximately 1,650,000 gallons.
2. Muffler Sump – The Muffler Sump is an earthen sump located between the South Leach Stockpile and the Mine Maintenance and General Offices. The Muffler Sump is located inside the OPSDA. The sump receives impacted stormwater from the South Leach Stockpile and the Mine Maintenance and General Offices area. Solutions from the sump

are pumped to the PLS Launder. The sump has a capacity of approximately 7,472,837 gallons.

3. South Side PLS Tank – The South Side PLS Tank is a stainless steel tank located between Reservoir 4A and Reservoir 2. The tank has a capacity of approximately 500,000 gallons. The tank receives PLS from the South and West Leach Stockpiles, as well as solutions from Reservoir 4A, Reservoir 2, and Reservoir 17. Solutions from the tank are pumped to Reservoir 7, the PLS Feed Pond, or the 6525 Raffinate Booster Tank by four vertical pumps with pumping capacities of 3,200 GPM and two high-head pumps with pumping capacities of 1,200 GPM each.
4. 6525 Raffinate Booster Tank – The 6525 Raffinate Booster Tank is located on the northwest side of the South Leach Stockpile. The tank has a capacity of approximately 100,000 gallons. The tank receives raffinate from the SX/EW Plant and the South Side PLS Tank. Raffinate from the tank is pumped to the South or West Leach Stockpiles.
5. Gunnite Slope – The Gunnite Slope covers South Leach Stockpile material placed in the headwaters of an unnamed Whitewater Creek tributary that runs toward Reservoir 17. Seepage that emanates from the base of the Gunnite Slope is collected by IW WD-1 and the Gunnite Slope Seep which is currently pumped to Reservoir 4A. Seepage from the Gunnite Slope area will be routed to Reservoir 2 after construction of the Gunnite Slope Containment Sump.
6. Gunnite Slope Containment Sump – The Gunnite Slope Containment Sump will be located on the southwest toe of the South Leach Stockpile. The sump and associated headwall will be constructed using dental concrete and dental mortar. The sump will receive impacted stormwater from the area currently covered by the Gunnite Slope. The sump will also receive impacted groundwater from IW WD-1 and the Gunnite Slope Seep. The sump will be constructed before the removal of the Gunnite Slope. The sump will have a capacity of approximately 15,574 gallons and solutions from the sump will discharge by gravity to Reservoir 2.
7. New York Margin 6525 Overflow Containment Sump – The New York Margin 6525 Overflow Containment Sump is an earthen sump located on the southwest side of the South Leach Stockpile. The sump receives overflow from the 6525 Raffinate Booster Tank, as well as PLS and impacted stormwater from the South Leach Stockpile. Solutions from the sump are pumped to Reservoir 4A.
8. West Waste Rock Stockpile Catchment Dams – The West Waste Rock Stockpile Catchment Dams are located west of the West Waste Rock Stockpile, and either east of Hanover Creek (Dam 12, Dam 10, Dam 14-2, Dam 14-1, Dam 13, Dam 19, Dam 14, Dam 11, and

Dam 18) or northeast of Whitewater Creek (Dam 20 and Dam 15). Each dam collects impacted stormwater runoff and seepage from the West Waste Rock Stockpile, and some receive additional solutions as discussed below. The catchment dams consist of a concrete dam and earthen catchment unless otherwise described below. The catchment dams are described from north to south.

- a. Dam 12 – Dam 12 is an earthen dam with three concrete wing walls and has a capacity of approximately 10,000 gallons. Solutions collected in Dam 12 discharge by gravity to Dam 14.
- b. Dam 10 – Dam 10 has a capacity of approximately 840,695 gallons. Dam 10 also receives impacted groundwater from IWs CB-6E, 526-2004-03, and CB-6C. Solutions collected in Dam 10 are pumped to Reservoir 4A by one submersible pump with a pumping capacity of 500 GPM and a diesel pump with a pumping capacity of 2,250 GPM.
- c. Dam 14-2 – Dam 14-2 has a capacity of approximately 10,000 gallons. Dam 14-2 also receives impacted groundwater from IW WD-7. Solutions collected in Dam 14-2 discharge by gravity to Dam 14.
- d. Dam 14-1 – Dam 14-1 has a capacity of approximately 10,000 gallons. Solutions collected in Dam 14-1 discharge by gravity to Dam 14.
- e. Dam 13 – Dam 13 has a capacity of approximately 325,851 gallons. Dam 13 also receives solutions from Dam 19 and impacted groundwater from IWs WD-8S, CB-8C, and WD-8D. Solutions collected in Dam 13 are pumped to Reservoir 4A by two submersible pumps with pumping capacities of 500 GPM each and one diesel pump with a pumping capacity of 1,525 GPM.
- f. Dam 19 – Dam 19 is located 200 feet west of Dam 13 and has a capacity of approximately 162,925 gallons. Dam 19 collects seepage from Dam 13 and solutions collected in Dam 19 are pumped to Dam 13 by one submersible pump.
- g. Dam 14 – Dam 14 has a capacity of approximately 1,530,000 gallons. Dam 14 also receives solutions from Dam 12, Dam 14-1, and Dam 14-2. Solutions collected in Dam 14 are pumped to Reservoir 4A by one submersible pump with a pumping capacity of 500 GPM and one diesel pump with a pumping capacity of 2,250 GPM.
- h. Dam 11 – Dam 11 has a capacity of approximately 912,383 gallons. Dam 11 also receives solutions from Dam 18 and impacted groundwater from IW CB-9S. Solutions collected in Dam 11 are pumped to Reservoir 4A by one submersible pump with a pumping capacity of 500 GPM and one diesel pump with a pumping capacity of 2,250 GPM.
- i. Dam 18 – Dam 18 is located 300 feet west of Dam 11 and has a capacity of approximately 162,925 gallons. Dam 18 collects seepage from Dam 11. Solutions collected in Dam 18 are pumped to Dam 11 by one submersible pump.
- j. Dam 20 – Dam 20 is located adjacent to the north side of the mine entrance road and has a capacity of approximately 10,000 gallons. Dam 20 also receives impacted

groundwater from IW CB-10C. Solutions collected in Dam 20 are pumped to Reservoir 4A by one barge pump with a pumping capacity of 349 GPM and one diesel pump with a capacity of 1,525 GPM.

- k. Dam 15 – Dam 15 located south of the mine entrance road and has a capacity of approximately 10,000 gallons. Dam 15 also receives impacted groundwater from IW CB-10J. Solutions collected in Dam 15 are pumped to the North and South Tailing Thickeners by one submersible pump.

9. Whitewater Groundwater Interceptor System

- a. Several groundwater interceptor components are utilized to capture impacted groundwater and acidic seep solutions within the DP-526 permit area. These include IWs CB-6E, 526-2004-03, CB-6C (Dam 10), WD-7 (Dam 14-2), CB-8C, WD-8D, WD-8S (Dam 13, and Dam 19), WD-9S (Dam 11 and Dam 18), CB-10J (Dam 20), CB-10C (Dam 15), I-3 (Dam 15), I-7 (Dam 15), and the Gunnite Slope Seep and IW WD-1 (Gunnite Slope Containment Sump). Two additional interceptor wells will be constructed pursuant to the DP-1340 Interim Actions: one adjacent to Dam 14-2 and the other southwest of Dam 11.
- b. Impacted groundwater from each interceptor component is pumped to a West Waste Rock Stockpile Catchment Dam, Reservoir 2, or the North and South Tailing Thickeners. IWs CB-6E, 526-2004-03, and CB-6C are pumped to Dam 10; WD-7 is pumped to Dam 14-2; WD-8S, CB-8C, and WD-8D are pumped to Dam 13; WD-9S is pumped to Dam 11; CB-10J, CB-10C, WD-1, and the Gunnite Slope Seep are pumped to Reservoir 2; and I-3 and I-7 are pumped to the North and South Tailing Thickeners. Impacted groundwater from IW WD-1 and the Gunnite Slope Seep will be pumped to the Gunnite Slope Containment after the containment is constructed.
- c. Dam 16 – Dam 16 is a HDPE-lined trench approximately 10 feet deep and constructed across Whitewater Creek alluvium located upstream of the confluence with Hanover Creek. Dam 16 collects impacted groundwater in the Whitewater Creek alluvium. Groundwater from Dam 16 is pumped to Reservoir 17 using a sump pump.

10. PLS Launder – The PLS Launder is concrete and earthen PLS collection and open conveyance system located along the northwestern toe of the South Leach Stockpile. The launder collects PLS and impacted stormwater from the South Leach Stockpile and impacted stormwater from the Muffler Sump and the Mine Maintenance and General Offices area. Solutions from the launder discharges by gravity to Reservoir 4A.

11. Pipelines – Pipelines, including PLS Pipelines, serving the DP-526 mine units consist of HDPE and stainless steel material and range in size from 6 inches or less in diameter to greater than 16 inches in diameter. Pipelines located outside of the OPSDA have secondary containment structures pursuant to Subparagraph (c) of 20.6.7.23.A(1) NMAC. The pipelines are described in Table 8 and Figures 4A and 4B of the NMA Master Document.

G. Truck and Equipment Washing Units

1. Haul Truck Wash Pad – The Haul Truck Wash Pad is located northwest of the Mine Maintenance and General Offices and consists of a concrete pad. The pad consists of a containment pad, mud/grit trap, settling basin/mud sump, and oil-water separator. Wash water and mud/grit trap waste flows down a central trough to a settling basin/mud sump. Water from this basin overflows into a second basin, is pumped through a series of filters, and then recirculated back to the wash down equipment. Most of the wash water is recycled. Excess wash water discharges to a launder north of the truck wash and flows along the toe of the West Leach Stockpile to Reservoir 4A when the basins reach their capacities. The second settling basin contains an oil capture system. Captured oil is stored in containments and either recycled or disposed of offsite at a permitted facility.
2. Small Vehicle/Truck Wash Pad – The Small Vehicle/Truck Wash Pad is located south of Mine Maintenance and General Offices and consists of a raised concrete pad and sump that captures the wash water. The wash water is directed down an asphalt road to a stormwater drain that discharges by gravity to Reservoir 4A.

H. Flow Measurement Devices

1. The Permittee utilizes flow meters to measure regulated discharge volumes pursuant to this Discharge Permit and as required by the Copper Mine Rule. Flow meters utilized by DP-526 are described in Table 1 of this Discharge Permit as well as Table 9 and Figure 6 of the NMA Master Document. Whitewater Groundwater Interceptor System components are equipped with pumps and associated flow meters in order to fulfill, in part, the requirements of Subsections E and H of 20.6.7.29 NMAC.

B106 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 discharge up to 24,500,000 GPD of raffinate to the Whitewater Leach System with up to 20,177,000 GPD of raffinate discharged to the South Leach Stockpile and up to 4,323,000 GPD of raffinate discharged to the West Leach Stockpile.
- B. The Permittee may apply up to 4,323,000 GPD of solutions from the South Side PLS Tank to the West Leach Stockpile in lieu of application of raffinate.

- C. The Permittee is authorized to place ore from the Santa Rita Open Pit, ore from Cobre Mine including Hanover Mountain, dewatered acid or copper-bearing material resulting from cleaning out currently permitted mine units, and discharge water contaminants resulting from placement of these materials within the authorized South and West Leach Stockpile footprints.
- D. The Permittee is authorized to place waste rock from the Santa Rita Open Pit within the permitted footprint of the West Waste Rock Stockpile and discharge water contaminants in leachate generated from the waste rock stockpile.
- E. Ivanhoe Mill and Concentrator
- F. Reservoir 2
- G. Reservoir 4A
- H. Reservoir 17
- I. Frog Pond
- J. Muffler Sump
- K. South Side PLS Tank
- L. 6525 Raffinate Booster Tank
- M. Gunnite Slope
- N. Gunnite Slope Containment Sump
- O. New York Margin 6525 Overflow Containment Sump
- P. West Waste Rock Stockpile Catchment Dams:
 - 1. Dam 10
 - 2. Dam 11
 - 3. Dam 12
 - 4. Dam 13
 - 5. Dam 14
 - 6. Dam 14-1

7. Dam 14-2
 8. Dam 15
 9. Dam 18
 10. Dam 19
- Q. Whitewater Groundwater Interceptor System
- R. PLS Launder
- S. Truck and Equipment Wash Pads
- T. 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 including the leach and waste rock stockpiles, and associated haul roads. Dust suppression discharge volumes, monitoring and reporting requirements are set forth in DP-459.
- U. The Permittee is authorized to discharge up to 60,000 GPD of process water from the Mine Maintenance and General Offices area, located at the southwestern toe of the West Leach Stockpile, including domestic wastewater from two separate septic systems, assay lab wastewater, the Small Vehicle/Truck Wash Pad, and stormwater runoff from this area to the PLS Launder where it becomes part of the process water circuit.
- V. The Permittee is authorized to discharge up to 3,200 GPD of domestic wastewater generated from the Ivanhoe Mill and Concentrator and surrounding facilities to Reservoir 4A or the Termination Tank located in the SMA via tailing pipelines.
- W. 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 Part 20.6.2 NMAC.

C100 Leach Stockpiles

- A. Design, construction, and location of leach stockpiles shall be in accordance with the Discharge Plan, and applicable requirements of Subsections A and B of 20.6.7.20 NMAC.
- B. The Permittee shall operate the West Leach Stockpile and South Leach Stockpile pursuant to the applicable operational requirements of Subsection C of 20.6.7.20 NMAC.
- C. Construction of new leach stockpiles; or expansion of leach stockpiles beyond footprints, location, or configuration identified in Figure 3 of this Discharge Permit, or for the purpose of facility closure as approved through DP-1340, must be evaluated in accordance with the requirements of Section 20.6.7.20 NMAC and may be subject to additional permitting requirements as described in Section D107.
- D. The Permittee shall not leach the western portion of the West Leach Stockpile within 1,000 feet east of the buried topographic divide between Hanover Creek and the drainages west of the Santa Rita Open Pit as depicted in Figure 3 of this Discharge Permit. [20.6.7.20.B(2) NMAC]
- E. The Permittee shall control the leaching of the eastern portion of the West Stockpile by adjusting leaching application rates and by pumping well N-19 to maintain water levels in the stockpile at least 25 feet below the lowest point (6,297 feet above mean sea level, AMSL) on the buried topographic divide. A high-level sensor in well N-19 will automatically engage the pump when water levels reach 6,297 feet AMSL (310.4 feet below ground surface). [20.6.7.20.B(2) NMAC]
- F. The Permittee shall not leach the southern portion of the South Leach Stockpile within 700 feet of Lucky Bill Canyon as depicted in Figure 3 of this Discharge Permit. The leaching boundary shall remain visibly staked at all times. The Permittee shall not place material within 200 feet of Lucky Bill Canyon. [20.6.7.20.B(2) NMAC]

C101 Waste Rock Stockpiles

- A. Design, construction, and location of the waste rock stockpiles shall be in accordance with the Discharge Plan, and applicable requirements of Subsections B and C of 20.6.7.21 NMAC.
- B. The Permittee shall comply with applicable operational requirements listed in Paragraphs (2) through (8) of 20.6.7.21.D NMAC including the requirement to place waste rock on waste rock stockpiles to plan for closure, to the extent practicable, and be in accordance with the operating plan required in Condition C109.J (Sections 20.6.7.18, 20.6.7.21 and 20.6.7.33 NMAC).

- C. Construction of new waste rock stockpiles; or expansion of waste rock stockpiles beyond footprints, location, or configuration identified in Figure 3 of this Discharge Permit, or for the purpose of facility closure as approved through DP-1340, must be evaluated in accordance with the requirements of Section 20.6.7.21 NMAC and may be subject to additional permitting requirements as described in Section D107.
- D. Waste rock shall be handled in accordance with applicable requirements of Section 20.6.7.21 NMAC and the most recent approved Material Characterization and Handling Plan.
- E. The Permittee shall inspect the Hanover Dams on a weekly basis during the months of July, August and September. The Permittee shall inspect the Hanover Dams every shift during precipitation events as well as after every significant rainfall (i.e., 0.4 inches or more within 24 hours). [20.6.7.21.C(2) NMAC]

C102 Impoundments

- A. The Permittee shall operate Reservoir 2, Reservoir 4A, and Reservoir 17 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 storage capacity of 15 million gallons in Reservoir 17 by keeping the water elevation at or below 6,021 feet AMSL pursuant to the most current version of the Sitewide Water Management Plan required by DP-459. [20.6.7.20.B(2) NMAC]

C103 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 Subsection C of 20.6.7.23 NMAC and Paragraph (2) of 20.6.7.23.B NMAC.
- C. Detailed and complete construction plans, 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.
- E. Subparagraph (e) 20.6.7.17.D(2) NMAC, the Permittee shall stage a pump at the Gunnite Slope Containment that will pump solutions from the containment to Reservoir 4A when the discharge pipeline is not operational. [20.6.7.20.B(2) NMAC]

C104 Copper Crushing, Milling, and Concentrating

- A. The Permittee shall operate the Ivanhoe Mill and Concentrator and associated mine units in accordance with the applicable requirements of Paragraph (3) of 20.6.7.22.C NMAC.
- B. The Permittee shall handle all concentrate on impermeable surfaces and keep it protected from storm water run-off or run-on. [20.6.7.22.B(2) NMAC]
- C. In the event that the Ivanhoe Concentrator temporarily ceases operation the Permittee shall notify NMED in writing within five (5) days of cessation of operation. The Permittee shall also notify NMED of the date of resumption of concentrator operations and the flow rate of tailings through the pipelines not more than five (5) days following the resumption of concentrator operations. [20.6.2.3107 NMAC & 20.6.7.22.B(2) NMAC]

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 Truck and Equipment Washing Units

- A. The Permittee shall operate the existing vehicle wash pads in accordance with the applicable requirements of Subsection C of 20.6.7.26 NMAC.

C107 Whitewater Groundwater Interceptor System

- A. The Permittee shall take all necessary actions to ensure that the Whitewater Groundwater Interceptor System and seepage collection systems are operating as efficiently as possible at all times in order to minimize impacts to groundwater. The Permittee shall expand or add additional interceptor wells, seepage and/or collection systems as needed to address new areas of contamination when ongoing groundwater monitoring indicates such measures are necessary. Any recommendations for improvement to the Whitewater Groundwater Interceptor System shall be included in the annual evaluation report required by Condition C109.I [20.6.2.3109 NMAC]
- B. Within 60 days of the effective date of this permit (by DATE), the Permittee shall submit for NMED approval a completion timeline for the additional monitoring and interceptor wells required pursuant to the DP-1340 Interim Actions and Condition C109.G.4.a of this Discharge Permit. The completion timeline shall propose completion of these wells within 270 days of the effective date of this permit (by DATE).

C108 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.

C109 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 the monitoring and reporting requirements. Figures 1-8 of this Discharge Permit show sampling locations.

- B. Samples of stormwater, PLS, and process water, including seeps, shall be analyzed for total and dissolved concentrations (20.6.2.3103 NMAC) in accordance with Table 1 of this Discharge Permit. 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 contains all quarterly monitoring data and information collected pursuant to the requirements of this Discharge Permit, and 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. Within 180 days of permit effective date (by DATE), the Permittee shall submit to NMED the period of record for each DP-526 monitoring location listed in Table 1 of this Discharge Permit in Excel table file format. The period of record shall include all available water quality and groundwater elevation data for each DP-526 monitoring location listed in Table 1.
- E. 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]
- F. The Permittee shall monitor water levels in MW N-19 on a quarterly basis while the West Leach Stockpile is not being leached and shall submit measurements with semi-annual monitoring reports required by Condition C109.C of this Discharge Permit. The Permittee shall notify NMED two weeks prior to the initiation of leaching and shall start monitoring water levels in MW N-19 on a weekly basis. The Permittee shall continue to monitor water levels in MW N-19 on a weekly basis while leaching the West Leach Stockpile and on a weekly basis for one year following the termination of leaching. [20.6.7.28.G NMAC]
- G. 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 of this Discharge Permit have been deemed appropriate by NMED for continued use as groundwater monitoring wells under this Discharge Permit. These groundwater monitoring wells, installed prior to the effective date of the Copper Mine Rule, have been identified to be constructed in accordance with the Copper Mine Rule.

3. Pursuant to Subsection G of 20.6.7.28 NMAC, the Permittee shall sample and analyze groundwater from the DP-526 monitoring wells in accordance with the schedule and parameters provided in Table 1 of this Discharge Permit, and applicable requirements of Subsection F of 20.6.7.28 NMAC. Analytical results shall be submitted in the semi-annual monitoring reports in the format specified by Subsection C of 20.6.7.29 NMAC.
4. Installation of Additional Monitoring Wells
 - a. Pursuant to Subsection B of 20.6.7.28 NMAC, the Permittee shall install at least one monitoring well west, downgradient, and as close as practicable to Dam 14. Construction of this well shall be included in the DP-1340 Interim Action well completion timeline required pursuant to Condition C107.B of this Discharge Permit. If groundwater analysis from this monitoring well indicates that groundwater at this location has been impacted by mining activity, NMED may require the Permittee to complete additional corrective actions pursuant to Subsection A of 20.6.7.30 NMAC.
 - a. Pursuant to Subsection A of 20.6.7.28 NMAC, the Permittee shall submit a monitoring well location proposal for NMED approval at least 30 days prior to installation of the monitoring well.
 - b. Installation of the monitoring well shall be in accordance with Subsections B, C, D and E of 20.6.7.28 NMAC.
 - c. The Permittee shall notify NMED in writing a minimum of one week prior to the start of installation of the monitoring well. Upon completion of the installation of the monitoring well, the Permittee shall submit to NMED a monitoring well completion report for the newly installed monitoring well in accordance with the applicable requirements of Subsection K of 20.6.7.28 NMAC.
 - d. Upon installation of the new monitoring well, the Permittee shall sample and analyze groundwater quarterly from the monitoring well in accordance with Table 1 of this Discharge Permit, and applicable requirements of Subsection F of 20.6.7.28 NMAC. Initial and future analytical results shall be submitted in the semi-annual monitoring reports in the format specified by Subsection C of 20.6.7.29 NMAC.
5. MW N-19, Reservoir 2, and Reservoir 4A, shall be sampled for Organic Parameters I (Total Petroleum Hydrocarbons (TPH)) in accordance with the Table 1 monitoring schedule. Analytical results shall be submitted in the annual monitoring report in the format specified by Subsection C of 20.6.7.29 NMAC.
 - a. If TPH at any location exceeds 5 mg/L, the Permittee shall resample the location within 15 days of receiving the analysis described in Condition C109.G.5 above, and analyze for Organic Parameters II (Ethylbenzene, Napthalene and Toluene) as shown in Table 1. Analytical results shall be submitted in the annual monitoring report in the format specified by Subsection C of 20.6.7.29 NMAC.
6. Authorization to Plug and Abandon Selected Monitoring Wells

- a. Pursuant to Subsection H of 20.6.7.28 NMAC, the Permittee is authorized to plug and abandon MWs WD-2S, WD-2D, B-55, I-1, I-6, and 214-93-1S.
- b. The monitoring wells shall be plugged and abandoned in accordance with the document provided in the draft Discharge Permit titled, *Groundwater Discharge Permit Monitoring Well Construction and Abandonment Conditions*, Revision 1.1, March 2011, and all applicable local, state, and federal regulations, including Section 19.27.4 NMAC.
- c. The Permittee shall submit documentation describing the well abandonment procedures in accordance with the document titled, *Groundwater Discharge Permit Monitoring Well Construction and Abandonment Conditions*, Revision 1.1, March 2011. The well abandonment documentation shall be submitted to NMED with the next semi-annual monitoring report for DP-526 upon completion of abandonment procedures.
- d. Pursuant to Subsection B of 20.6.7.30 NMAC, NMED may require replacement monitoring wells.

H. The Whitewater Groundwater Interceptor System

1. The Permittee shall submit an annual monitoring and evaluation report for the Whitewater Groundwater Interceptor System authorized by this Discharge Permit that contains the information required by Subsection H of 20.6.7.29 NMAC. The report shall include the information listed below and be submitted with the DP-526 Annual Monitoring Report due on February 28 of each year.
 - a. Pursuant to Subparagraph (c) of 20.6.7.29.H(6) NMAC, the Permittee shall provide time series graphs for each monitoring well listed in Table 1 of this Discharge Permit, interceptor system component listed in Condition B105.F.9 of this Discharge Permit, and West Waste Rock Stockpile Catchment Dam listed in Table 1 of this Discharge Permit with constituents above 20.6.2.3103 NMAC groundwater quality standards. Only constituents detected above groundwater standards shall be included in these graphs. Each graph shall contain all available analytical data.
 - b. Pursuant to Subparagraph (g) of 20.6.7.29.H(6) NMAC, the Permittee shall provide a status update on recommendations made in previous Interceptor System Monitoring and Evaluation Reports.
 - c. Pursuant to Subparagraph (a) of 20.6.7.29.H(6) NMAC, The report shall include a time series graph displaying the monthly volume of groundwater intercepted by each interceptor system component listed in Condition B105.F.9 of this Discharge Permit, and West Waste Rock Stockpile Catchment Dam listed in Condition C109.I.1.j of this Discharge Permit.

I. 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 raffinate in GPD applied to the top of the West and South Leach Stockpiles.
- b. The daily volume of process water in GPD pumped from Reservoir 4A either to Reservoir 6, Reservoir 7, or the South Side PLS Tank.
- c. The monthly volume of process water in GPD discharged to and from the Ivanhoe Concentrator.
- d. The daily volume of PLS in GPD pumped from the South Side PLS Tank, to either the SX/EW plant or the 6525 Raffinate Booster Tank.
- e. The weekly volume of groundwater in gallons collected from Dam 16.
- f. The monthly volume groundwater in gallons pumped from the Bullfrog Shaft, and Star Shaft.
- g. The monthly volume of process water in gallons received from the Continental Mine.
- h. The daily volume of process in GPD water pumped from the 750,000 Tank to the Ivanhoe Concentrator.
- i. The daily volume of process water in GPD discharged from the Gunnite Slope Containment.
- j. The monthly volume of process water in gallons discharged from Dam 10, Dam 11, Dam 13, Dam 14, Dam 14-2, Dam 15, and Dam 20.

J. 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.

K. 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.

C110 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 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]
- D. Pursuant to Comment 6 of the correspondence titled, *Conditional Approval for Response to Conditional Approval of the Investigation Report and Interim Actions for the West Stockpile Dams, Discharge Permit 1340*, dated July 6, 2023, and Subsection A of 20.6.7.30 NMAC, the Permittee shall submit a corrective action plan for NMED approval within 180 days of the effective date of this permit (by DATE) that proposes a method(s) to reduce infiltration through the top surfaces and side slopes of the West Waste Rock Stockpile. The purpose of the corrective action plan is to prevent additional seepage from the West Waste Rock Stockpile from further impacting groundwater along Hanover Creek.
- E. If a spill or a failure of a tailings thickener is identified, discharge to the affected thickener shall cease. If tailings material overtops the thickener secondary containment system, including the sump and berms, the discharge shall be reported to NMED with 24 hours, and corrective action measures shall be taken. Reservoir 17 shall be used to contain a potentially large spill from the thickeners. Spills contained in Reservoir 17 shall be pumped back to the Tailing Thickeners immediately upon resuming operations at the Tailing Thickener. [20.6.7.22.B(2) NMAC]
- F. NMED considers the actions proposed and approved by DP-526 Amendment 06-14 dated April 14, 2024 to be related to groundwater abatement in this area by reducing impacts to groundwater. The Permittee shall submit a completion timeline for NMED approval within 60 days of the effective date of this permit (by DATE) for the following actions, new monitoring well construction, South Leach Stockpile material pull back, Gunnite Slope Containment construction, and Gunnite Slope and underlying material removal. The completion timeline shall propose completion of the actions within 270 days of the effective date of this permit (by DATE).

C111 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 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. [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 74-6-9(B) & (E) WQA]
- B. The Permittee shall allow the Secretary or an authorized representative, upon the presentation of credentials, to [20.6.2.3107.D NMAC, NMSA 1978 74-6-9(B) & (E) WQA]:
 - 1. Enter at regular business hours or at other reasonable times upon the Permittee's premises or other location where records must be kept under the conditions of this Discharge Permit, or under any federal or WQCC regulation.
 - 2. Inspect and copy, during regular business hours or at other reasonable times, any records required to be kept under the conditions of this Discharge Permit, or under any federal or WQCC regulation.
 - 3. Inspect, at regular business hours or at other reasonable times, any facility, equipment (including monitoring and control equipment or treatment works), practices or operations regulated or required under this Discharge Permit, or under any federal or WQCC regulation.
 - 4. Sample or monitor, at reasonable times for the purpose of assuring compliance with this Discharge Permit or as otherwise authorized by the WQA, any effluent, water contaminant, or receiving water at any location before or after discharge.

D102 General Operational Requirements

- A. Mine units shall be operated 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 written records as required pursuant to Section 20.6.7.37 NMAC.
- B. The Permittee shall furnish to NMED, within a reasonable time, any documents or other information which it may request to determine whether cause exists for modifying, terminating and/or renewing this Discharge Permit or to determine compliance with this Discharge Permit. The Permittee shall also furnish to NMED, upon request, copies of documents required to be kept by this Discharge Permit. [20.6.2.3107.D NMAC, NMSA 1978 74-6-9 (B) & (E) WQA]

D104 General Sampling and Analytical Methods

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

D105 Monitoring Well Abandonment

- A. The Permittee shall submit a written request for NMED approval in accordance with Condition C109.G 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 Condition 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, or as requested by NMED) 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, and to provide location information specified by Subparagraph C of 20.6.2.1203.A(1) NMAC, the Permittee shall submit a figure, when required, 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 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 Section 20.6.7.10 NMAC and 20.6.7.11 NMAC. Plans and specifications shall be included in the request, as applicable, pursuant to Section 20.6.7.17 NMAC.
- C. As determined by NMED, for any proposed change that meets the definition of a discharge permit amendment as specified in Paragraph 19 of 20.6.7.7.B NMAC, the Permittee shall submit a request to NMED for amendment of this Discharge Permit pursuant to Section 20.6.7.14 NMAC of the Copper Mine Rule. Plans and specifications shall be included in the request, as applicable, pursuant to Section 20.6.7.17 NMAC.
- D. Pursuant to Section 20.6.2.3109 NMAC, NMED reserves the right to require a discharge permit modification or amendment in the event NMED determines that the requirements of 20.6.2 NMAC are being or may be violated, or the standards of Section 20.6.2.3103 NMAC are being or may be violated. This may include a determination that structural controls and/or management practices approved under this Discharge Permit are not protective of groundwater quality, and that more stringent requirements are needed to protect groundwater quality

D108 Compliance with Other Laws

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

Table 1 – Monitoring and Reporting Summary for DP-526

Monitoring Report Schedule of Submittal (Subsection A of 20.6.7.29 NMAC)							
1	January 1 - June 30 (first and second quarter sample periods) Semi-annual report due by August 31 of each year						
2	July 1 - 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	Description						
2	Monitoring reports – All applicable requirements of Subsections A through H of 20.6.7.29 NMAC, and Condition C109.						
2	Additional depth-to-water and discharge volume reporting required by Conditions C109.F and C109.I.						
2	Sitewide Water Management Plan						
Monitoring Schedule							
Area	Identification Number	Sampling					Notes
		type	Q1	Q2	Q3	Q4	
South LS	WD-1	IW	BCW	BCW	BCW	BCW	
	526-99-02	MW	BW	BW	BCW	BW	
	526-99-03	MW	BW	BW	BCW	BW	
	526-99-04	MW	BW	BW	BCW	BW	
	526-99-06	MW	BW	BW	BCW	BW	
	526-2008-05	BW		BCW			
	Gunnite Slope Seep	IW	BC	BC	BC	BC	
	526-97-01	MW	BW		BCW		
	New Gunnite Slope Monitoring Well	MW	BCW	BCW	BCW	BCW	
	Star Shaft	SH	BW	BW	BCW	BW	
	Lucky Bill 1 Seep	SPG	BC	B	BC	B	
	Lucky Bill 2 Seep	SPG	BC	B	BC	B	
	526-96-11	MW	BW	BW	BCW	BW	
	526-96-12	MW	BW	BW	BCW	BW	
	Reservoir 2	PW	BC		BCD		
	Reservoir 4A	PW	BC		BCD		
Reservoir 17	PW	BC	BC	BC	BC		
West WRSP	Princess Shaft	SH	BW	BW	BCW	BW	
	WD-5	MW	BW		BCW		
	Dam 10	PW	BC	BC	BC	BC	
	CB-6A	MW	BCW	BW	BCW	BW	
	CB-6B	MW	BCW	BW	BCW	BW	
	CB-6C	IW	BCW	BCW	BCW	BCW	
	CB-6D	MW	BCW		BCW		
	CB-6E	IW	BCW	BCW	BCW	BW	
	WD-6D	MW	BCW	BW	BCW	BW	
	526-2004-03	IW	BCW	BCW	BCW	BCW	
	WD-6S	MW	BCW	BW	BCW	BW	
	Dam 10 New Monitoring Well	MW	BCW	BCW	BCW	BCW	
	Dam 14-2	PW	BC	BC	BC	BC	

	WD-7	IW	BCW	BCW	BCW	BCW	
	526-98-01	MW	BCW	BCW	BCW	BCW	
	Dam 14-2 New Interceptor Well	IW	BCW	BCW	BCW	BCW	
	Dam 13	PW	BC	BC	BC	BC	
	CB-8A	MW	BCW	BW	BCW	BW	
	CB-8B	MW	BCW	BW	BCW	BW	
	CB-8C	IW	BCW	BCW	BCW	BCW	
	WD-8S	IW	BCW	BW	BCW	BW	
	WD-8D	IW	BCW	BW	BCW	BW	
	Dam 11	PW	BC	BC	BC	BC	
	CB-9A	MW	BCW		BCW		
	CB-9B	MW	BCW	BW	BCW	BW	Previously identified as CB-9S
	WD-9S	IW	BCW	BCW	BCW	BCW	
	WD-9D	MW	BCW		BCW		
	Dam 11 New Interceptor Well	IW	BCW	BCW	BCW	BCW	
	Dam 11 New Monitoring Well	MW	BCW	BCW	BCW	BCW	
	Whitewater Creek New Monitoring Well	MW	BCW	BCW	BCW	BCW	
	Dam 14	PW	BC	BC	BC	BC	
	Dam 14 New Monitoring Well	MW	BCW	BCW	BCW	BCW	
	Dam 14-1	PW	BC	BC	BC	BC	
	Dam 15	PW	BC	BC	BC	BC	
	CB-10J	IW	BCW	BW	BCW	BW	
	CB-10L	MW	BW		BCW		
	Dam 20	PW	BC		BC		
	CB-10C	IW	BCW	BW	BCW	BW	
	CB-10D	MW	BW		BCW		
	CB-10E	MW	BW		BCW		
	526-2008-01	MW	BW		BCW		Alluvial monitoring well
	526-2008-04	MW	BW		BCW		Alluvial monitoring well
West LS	WD-11	MW	BW		BW		
	N-19	MW	BW	BW	BCD W	BW	
Mine Maintenance Area	526-2004-04	MW	BW		BCW		
	526-2004-05	MW	BW		BCW		
	526-2004-06	MW	BW		BCW		
	526-2008-03	MW	BW		BCW		
Ivanhoe Mill and Concentrator Area	B-57R	MW	BW		BW		
	B-53	MW	BW	BW	BCW	BW	
	B-54	MW	BW		BW		
	CB-10I	MW	BW		BCW		
	CB-10M	MW	BW		BCW		
	213-99-01	MW	BW	BW	BCDE	BW	
	213-99-02A	MW	BW		BW		
	213-99-02B	MW	BW		BW		
	I-2	MW	BW		BCW		
	I-3	IW	BCW	BW	BCW	BW	

	I-4	IW	BW		BCW		
	I-7	IW	BCW	BW	BCW	BW	
Whitewater Creek Area	526-97-2A	MW	BW		BCW		
	526-97-2B	MW	BCW	BW	BCW	BW	
	526-97-3	MW	BCW	BW	BCW	BW	
	MW-1	MW	BW	BW	BCW	BW	
	MW-2	MW	BW	BW	BCW	BW	
	526-2019-02	MW	BW	BW	BCW	BW	Alluvial monitoring well
	Dam 16	IW	BC	BC	BC	BC	Alluvial interceptor well
	526-99-07	MW	BCW	BW	BCW	BW	
	526-99-08	MW	BCW	BW	BCW	BW	Alluvial monitoring well
	526-2004-01	MW	BW		BCW		
526-2004-02	MW	BW		BCW			
Flow Meters	Meter Number	Meter Name					
	12	Dam 16 to Reservoir 17					
	13	Southside PLS Tank to SX/EW Plant					
	14	Reservoir 4A to Reservoir 6 or Reservoir 7					
	15	Reservoir 17 to Reservoir 4A					
	16	Raffinate/PLS from SX/EW Plant to West Stockpile					
	17	Raffinate/PLS from 6525 Raffinate Tank to South Stockpile					
	19	PLS Tank to 6525 Raffinate Tank (High Head)					
	21	IW CB-6E					
	22	IW WD-7					
	23	IW WD-8S					
	25	IW WD-9S					
	26	IW CB-10C					
	27	IW CB-10J					
	28	IW I-3					
	29	IW I-7					
	30	IW-4					
	31	WD-1					
	32	IW Gunnite Slope Seep					
	46	Princess Shaft					
51	Southside Spout						
Hanover Creek Catchment Dams	Flow meter ID to be determined at installation						
New Interceptor Wells	Flow meter ID to be determined at installation						

Sampling Analytical Suites:

A = Field parameters: Temperature (°C), pH, specific conductance (µS/cm)

B = Indicator parameters: Suite A, sulfate, total dissolved solids (TDS)

C = Metal and Inorganic parameters: alk-HCO₃, alk-CO₃, alk-Tot, Ca, Mg, Na, K, F⁻, Cl⁻, Al, As, Ba, Cd, Cr, Co, Cu, Fe, Pb, Mn, Ni, Se, U, Zn

D = Organic Parameters I: Total Petroleum Hydrocarbons (TPH) (see Condition C109.G.5)

E = Organic Parameters II: Ethylbenzene, Naphthalene, Toluene (see Condition C109.G.5)

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

Explanation to Abbreviations and Symbols

<p><u>Type:</u> MW = monitoring well IW = interceptor well PW = Process Water SH = shaft SPG = spring LS = Leach Stockpile WRSP = Waste Rock Stockpile</p>	<p><u>Sampling Quarter:</u> Q1 = Jan-Mar Q2 = Apr-Jun Q3 = Jul-Sep Q4 = Oct-Dec</p>	<p><u>Sampling Analytes Suite C:</u> alk-HCO₃ = alkalinity-bicarbonate alk-CO₃ = alkalinity-carbonate alk-Tot = alkalinity total Ca = Calcium Mg = Magnesium Na = Sodium K = Potassium F = Fluoride Cl = Chloride Al = Aluminum As = Arsenic Ba = Barium</p> <p>Cd = Cadmium Cr = Chromium Co = Cobalt Cu = Copper Fe = Iron Pb = Lead Mn = Manganese Ni = Nickel Se = Selenium U = Uranium Zn = Zinc</p>
---	---	---

Draft

Figure 1 – Alluvial Monitoring and Interceptor Wells



Figure 2 – Ivanhoe Concentrator Area Facilities and Features

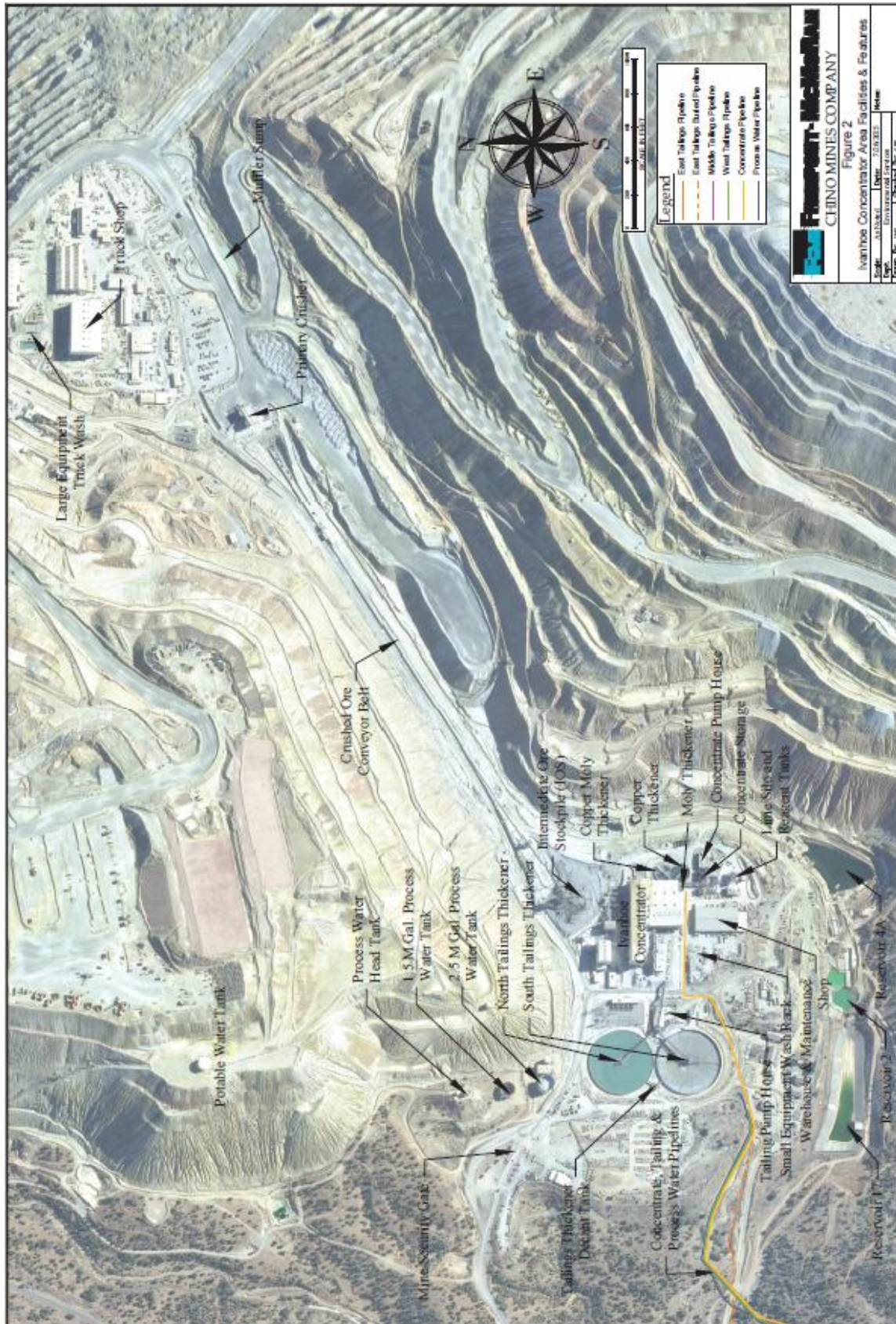


Figure 3 – DP-526 Facilities

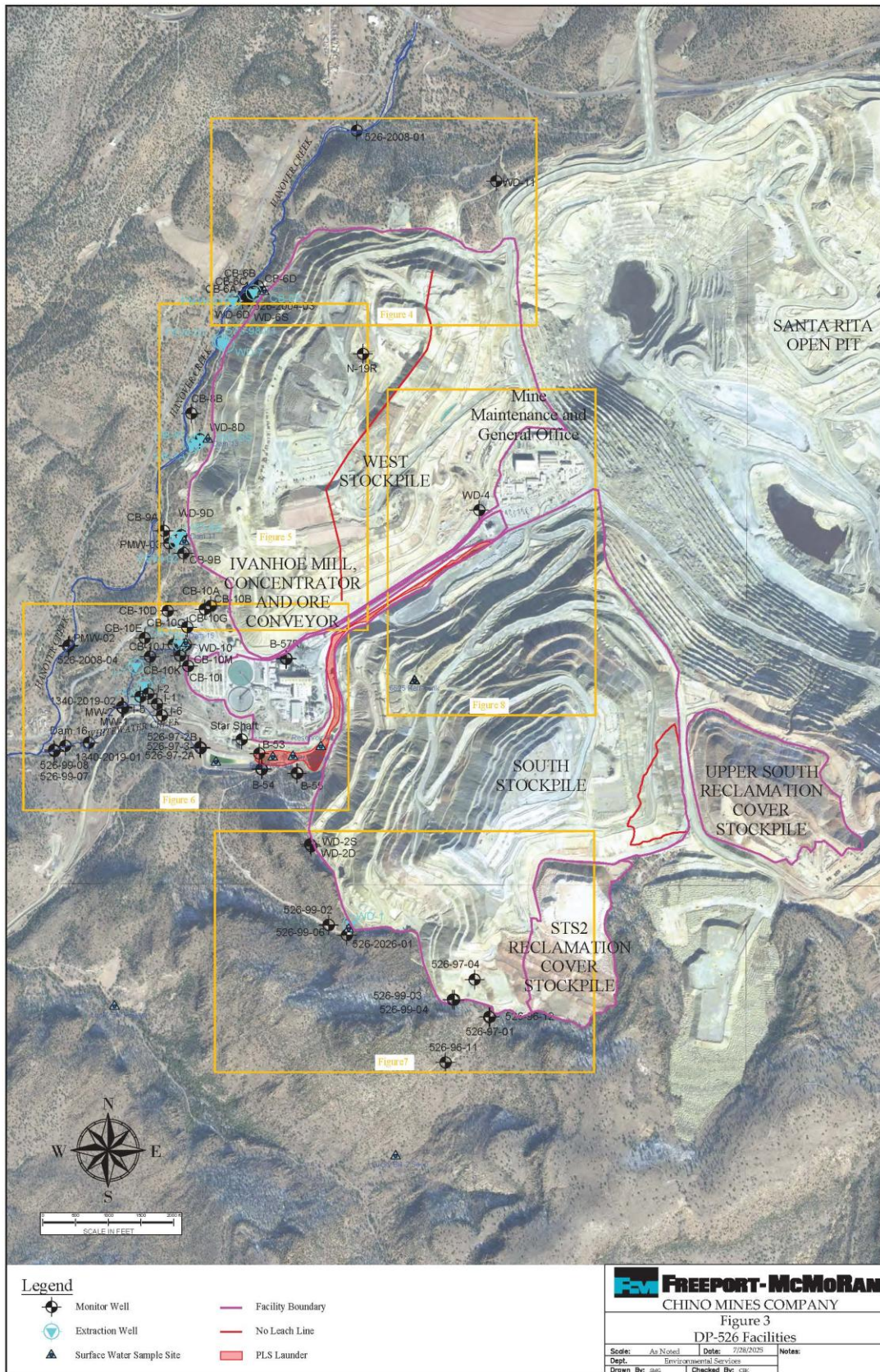


Figure 4 – DP-526 Facilities



Figure 5 – DP-526 Facilities

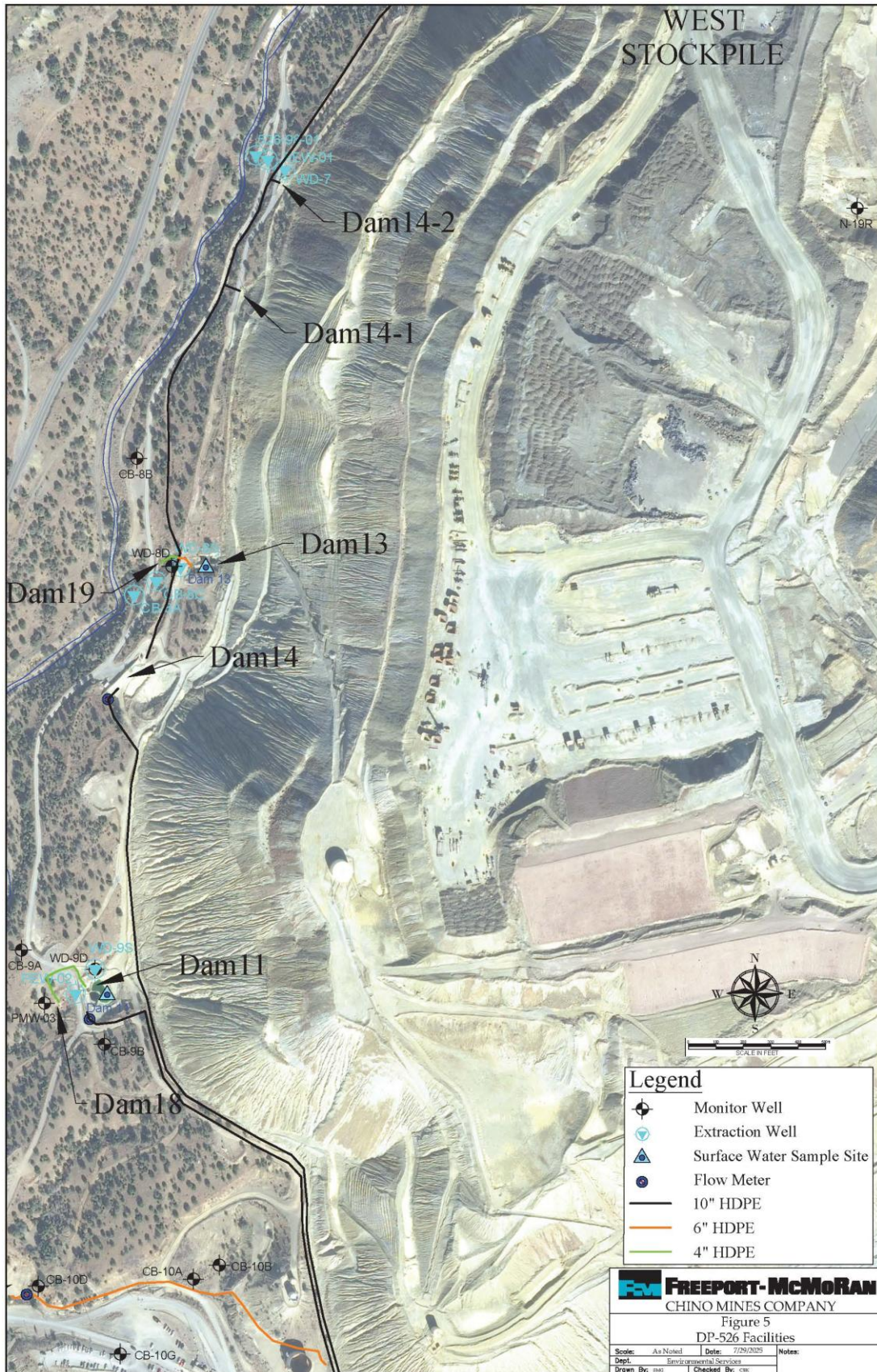


Figure 6 – DP-526 Facilities

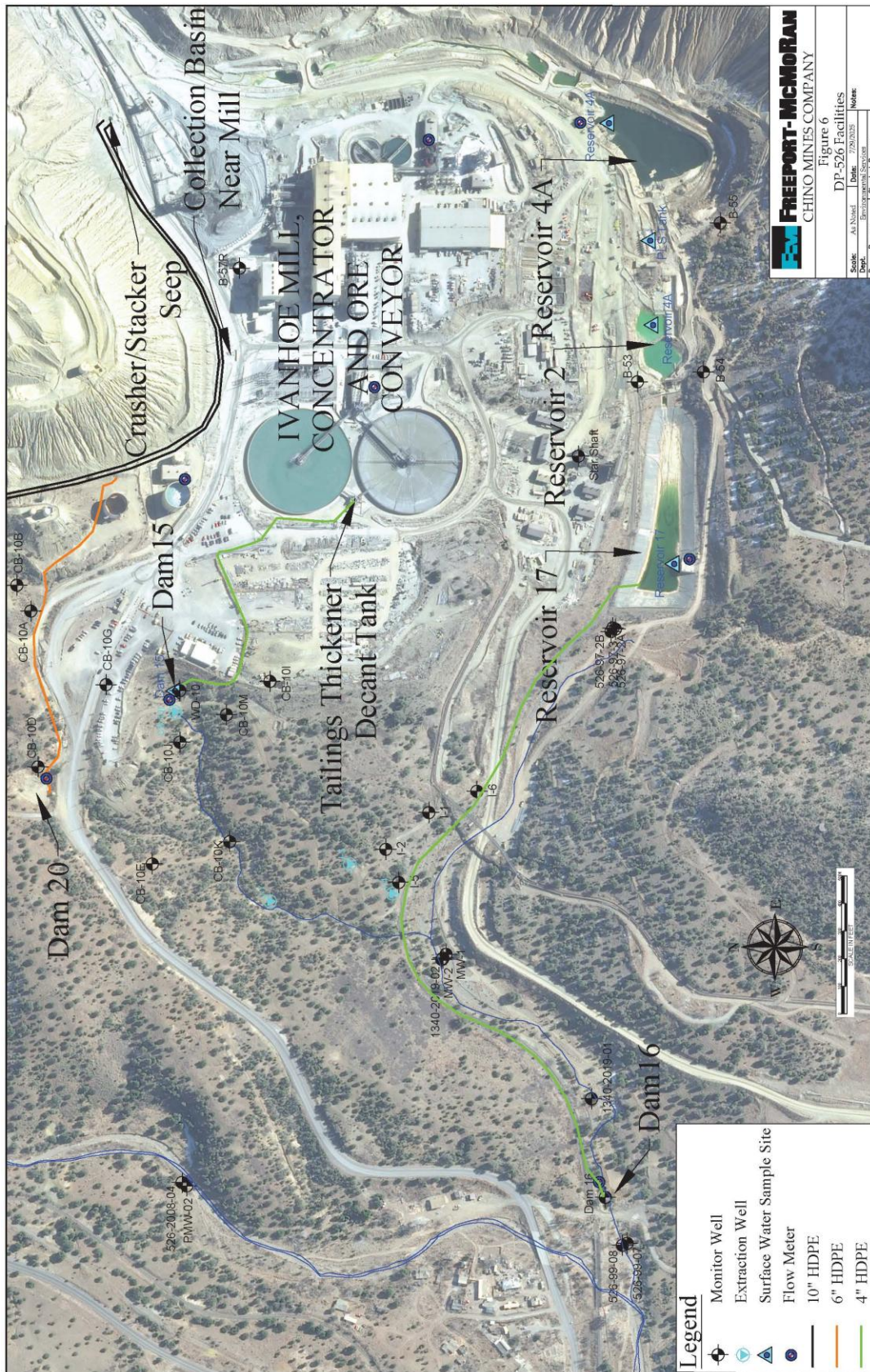


Figure 7 – DP-526 Facilities

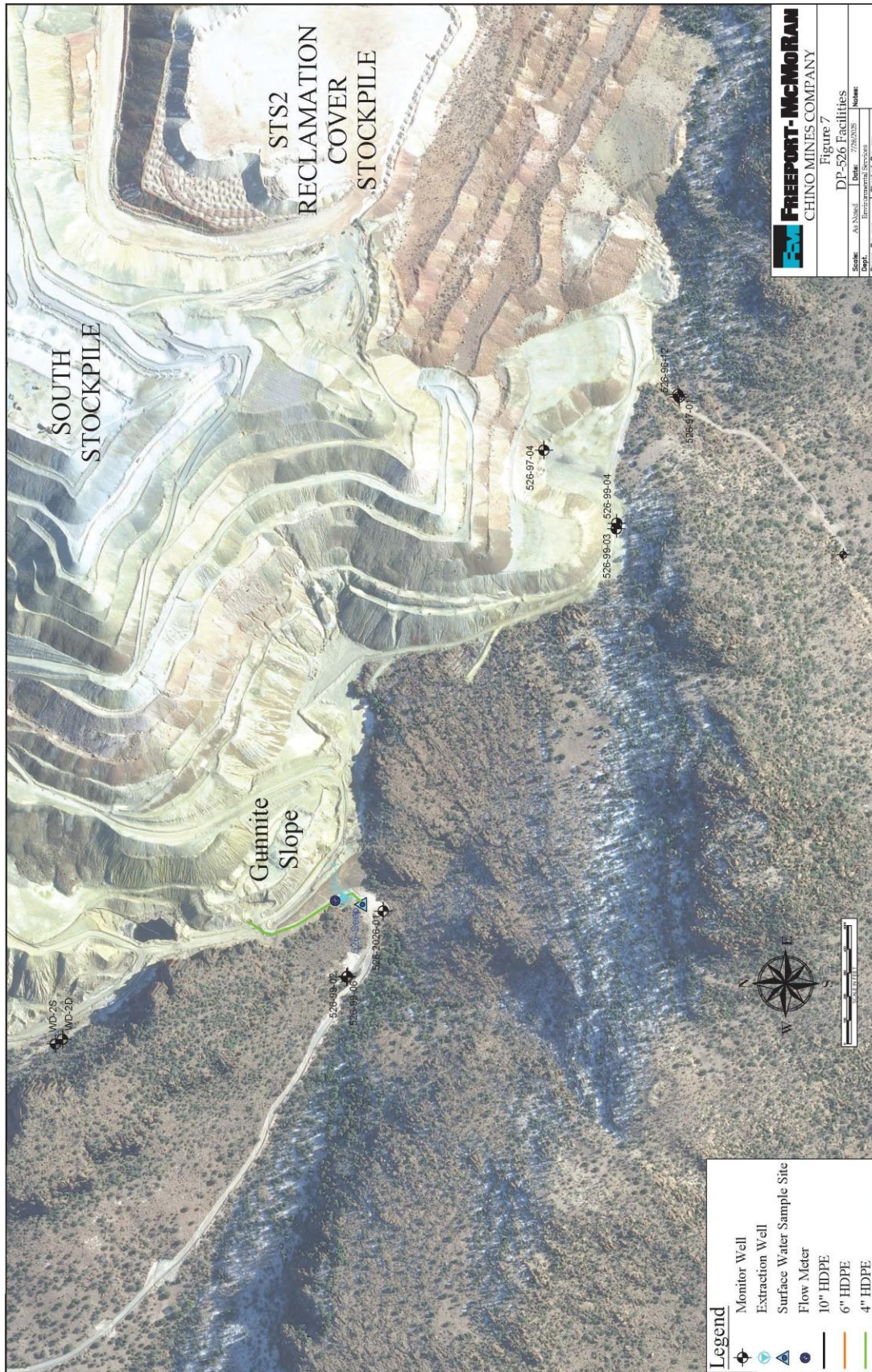


Figure 8 – DP-526 Facilities

