

State of New Mexico
Energy, Minerals and Natural Resources Department

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Certified Mail

December 12, 2023

Gerald Smith, President
Geo Southwest, LP.
P.O. Box 353
9751 Hwy. 86
Silverton, TX 79257

RE: Revision 14-1 Permit No. LU009RE Geo Southwest Deming Mill & Tailings, Luna County, NM, Updated Closeout Plan and Permit Re-issuance

Dear Mr. Smith:

See attached Revision 14-1 of LU009RE as issued on December 11, 2023, by the Mining and Minerals Division (MMD).

If you have any questions concerning this letter, please call 505-490-0726.

Sincerely,

Kevin C. Myers
Hydrologist, Permit Lead MMD No. LU009RE
Mining Act Reclamation Program/MMD

cc (via email):

DJ Ennis, Program Manager, MARP/MMD
Anne Maurer, Mining Act Team Leader, NMED
Gerald Smith, GeoSW



**REISSUED PERMIT NO. LU009RE
PERMIT REVISION 14-1: UPDATED CLOSEOUT PLAN
DEMING MILL AND TAILING IMPOUNDMENT
EXISTING MINING OPERATION**

**MINING AND MINERALS DIVISION
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT**

Permit Revision 14-1 to Permit No. LU009RE is issued by the Director of the Mining and Minerals Division (“MMD”) of the New Mexico Energy, Minerals and Natural Resources Department to:

Geo Southwest, LP
PO Box 353
Silverton, TX 79257

(Permittee) for the Deming Mill and Tailings Impoundment located in Luna County, New Mexico.

This Permit Revision updates the closeout plan and financial assurance (FA) requirements for the site. Specifically, the Permittee provided additional updated reclamation costs for the mill, borrow area, and tailing material south of the main tailing impoundment and the Mimbres River. The required financial assurance (FA) amount for Permit No. LU009RE increased from \$245,056.21 to \$280,517 based on a revised cost estimate and the existing deed of trust has been amended to include an adequate FA collateral amount in the form of a Deed of Trust (Amended on November 28, 2022). This revision sets permit boundaries for the site.

Figure 1 shows the location and approximate boundaries of the mill, tailings and borrow areas, and Figure 1 shows the main tailing impoundment having been released on November 1, 2022.

The reissued Permit No. LU009RE/Permit Revision 14-1:

1. Approves and incorporates the updated Closeout Plan and Cost Estimate for the GeoSW Deming Mill and Tailing, Permit No. LU009E.
2. Approves the FA required reclamation cost amount of \$280,517 and collateral FA instrument in the form of a Deed of Trust. Less a 20 percent margin of the 2021 appraised value of \$382,033 for tracks 1, 3, 4, 5 and 9, the collateral amount is more than the 2021 reclamation cost estimate.
3. Supplants and supersedes the initial permit No. LU009RE issuance on April 17, 1997, for an existing mining operation for the ASARCO Deming Mill.
4. Supplants and supersedes earlier modifications related to Permit No. LU009RE. To the extent that the provisions and requirements of this Revision 14-1 conflict with the provisions and requirements of the Modifications below, the provisions and requirements of Revision 14-1 shall govern.

- a. Modification 20-1, issued on September 23, 2021, reset vegetation success standards and proposed reference area.
 - b. Modification 22-1, issued on November 1, 2022, partial FA release of the entire main tailing impoundment without release of any FA instrument.
5. Supplants and supersedes earlier revisions related to Permit No. LU009RE. To the extent that the provisions and requirements of this Revision 14-1 conflict with the provisions and requirements of the Revisions below, the provisions and requirements of Revision 14-1 shall govern,
- a. Revision 96-1, issued on January 21, 1999, incorporated a Closeout Plan for the Deming Mill.
 - b. Prior Reclamation Release Determination by MMD of the Deming ASARCO Tailings Facility Impoundment. Tailing Impoundment not released. Permitting required.
 - c. Revision 99-1, issued on December 29, 1999, for conditional approval of placing the Deming Mill on Standby status. Standby Status application on May 21, 1999. Standby granted until December 13, 2004 plus no more than three 5-year renewals or to December 13, 2019.
6. The permit was transferred on June 28, 2010, from ASARCO Inc. to Le Petomane XXV, Inc., as the Multi-State Environmental Custodial Trust. Subsequently, on August 5, 2014, the permit was transferred from Le Petomane XXV, Inc., to Geo Southwest, LP ("GeoSW").
7. The Main Tailing Facility did not meet prior reclamation requirements as documented in MMD letter dated July 27, 1999, and MMD required permitting of the Tailings Facility. Prior to bankruptcy, ASARCO did not complete the process of revising permit No. LU009RE to include the Main Tailing Facility, which was reclaimed in 2008. The NMED Voluntary Remediation Program ("VRP") issued a conditional certificate of completion on February 6, 2009, for VRP site number No. 53043001 for windblown tailing site 2. On behalf of the ASARCO Multi-State Environmental Custodial Trust, ENVIRON constructed placed riprap on eroded slopes and completed a small-scale seeding event as a corrective action on May 19, 2012. The Main Tailing Facility was released in modification 22-1 as mentioned above.

Definitions and Abbreviations

Whenever any terms defined in the Rules are used in this Permit, including any documents incorporated herein by reference, those definitions shall apply. In addition, whenever the terms listed below are used in this Permit, including any documents incorporated herein by reference, the following definitions shall apply:

CQA - Construction Quality Assurance

Main Tailing Facility – Reclaimed tailing impoundment area released and located north of the Mimbres River

Mill Area - Buildings and beneficiation infrastructure located in the southwest area of the site near rail spur

Borrow Area – Excavation area of alluvial materials used for cover material north of the Main Tailing impoundment and Mimbres River.

Test Pits – Shallow areas dug in Spring of 2021 to identify additional tailing material north and south of the Mimbres River not part of the Main Tailing Facility.

Smaller Tailing Area – Less than 5 acres of tailing material located South of the Mimbres River and adjacent to the FMI Cyprus Deming Tailing impoundment east of the mill area.

NMAC - New Mexico Administrative Code
NMED - New Mexico Environment Department
NMSA - New Mexico Statutes Annotated

PMLU - Post-Mining Land Use. Defined in 19.10.1.7.P(5) NMAC.

RCM - Reclamation Cover Material is defined as material sourced from the Borrow Area of the recent alluvium north of the Mimbres River.

SSE - Self-Sustaining Ecosystem. Defined in 19.10.1.7.S(2) NMAC.

Section 1 STATUTES AND RULES

- A. This Permit is issued pursuant to the New Mexico Mining Act, NMSA 1978, §69-36-1, et seq.(1993, as amended through 2020) (“the Act”) and New Mexico Mining Act Rules, Title 19, Chapter 10 of the NMAC (“the Rules”).
- B. This permit is subject to the Act, the Rules and any other applicable regulations, which are now or hereafter in force under the Act; and all such regulations are made a part of this Permit by this reference.

Section 2 PERMIT REVISION PACKAGE

- A. The Permit Application Package for Revision 14-1 (“PAP 14-1”) is comprised of the following documents:
 - 1) Geo SW submittal of request for Revision to Permit No. LU009RE, dated September 12,

2014, proposing a FA instrument, survey, updated closeout plan and revised reclamation cost estimate.

- 2) Geo SW submittal of final version of its updated closeout plan and revised reclamation cost estimate on March 30, 2021.
- 3) MMD letter dated May 28, 2021, acknowledging technical completeness of the updated closeout plan and requiring additional steps to be administratively complete by submittal of application fee, updated appraisal of collateral properties, a draft public notice, and the need for tribal consultation letters.
- 4) GeoSW sent a check of \$3,000 for the revision application fee on June 16, 2022.
- 5) MMD sent notification of Revision 14-1 on August 25, 2021, to inform the following tribal entities: White Mountain Apache Tribe, Ysleta del Sur, Hopi, Fort Sill Apache and Mescalero Tribe. White Mountain Apache Tribe and Hopi responses did not request any further information.
- 6) MMD sent requests for agency comments on Revision 14-1 to New Mexico Environment Department (NMED) on October 9, 2014, February 1, 2017, November 9, 2020, April 1, 2021, and NMED provided comments on December 19, 2014, March 9, 2017, December 11, 2020, and May 5, 2021.
- 7) MMD sent requests for information from Geo SW for establishing FA Collateral instrument on November 17, 2017, March 14, 2019, May 2, 2019, June 7, 2019 and August 26, 2020. GeoSW responded with additional information on March 5, 2018, March 22, 2019, May 2, 2019 and December 15, 2021.
- 8) Interim FA was established with a Deed of Trust on July 7, 2019, and the Deed of Trust was amended on November 28, 2022, for the collateral FA instrument.
- 9) MMD conducted site inspections on January 29, 2015, May 27, 2015, January 27, 2016, February 9, 2017, August 22, 2017, September 9, 2019, June 23, 2021, October 4, 2021, March 4, 2021, and August 4, 2022.

Section 3. PERMIT AREA

- A. The Permit Area lies within the Deming Mining District, approximately one mile northwest of Deming in Luna County, New Mexico in Township 23 South, Range 9 West; Section 20, 21 and 29 N.M.P.M and encompasses the following areas:

The Deming Mill Area is located within the SE ¼ SE ¼ of Section 20 and the NE ¼ NE ¼ of Section 29 and lying west of the right-of-way for Luna County Road 394 (Peru Mill Road).

Borrow area immediately north of the reclaimed main tailing impoundment and extends from SE ¼ NE ¼ NE ¼ to the NE ¼ NE ¼ NE ¼ of Section 20; and in the NW ¼ NW ¼ NW ¼ to the N 1/8 of the SW ¼ NW ¼ NW ¼ of Section 21

Former tailing launder is located east of the Mill Site and Luna County Road 394 and extends north from SW ¼ NW ¼ of Section 21 to the SE ¼ NE ¼ of Section 20.

Section 4 DESIGN LIMITS

- A. Design limits described as 110 acres total as shown in Figure 1 encompassing the following:
1. Mill site of approximately 7 acres
 2. Borrow area consisting of approximately 24 acres
 3. Former tailings launder pipeline area of approximately 79 acres.

Section 5 FINDINGS OF FACT

- 1) The Permittee has paid the permit revision fee of \$3,000.00 as required by 19.10.2.201 and 19.10.5.503.F(4) NMAC.
- 2) The PAP 14-1 is completed and contain all the information required with conditions outlined in this revision document, as required by 19.10.5.503.F(1), 19.10.5.506.B(1-4), and 19.10.5.506.J(1-6) NMAC.
- 3) The Permittee has provided written information stating the name and official business address of the applicant and its agent for service of process, as require by 19.10.5.503.F(2) NMAC.
- 4) The Permittee has provided the required signature and certification, as required by 19.10.5.503.F(3) NMAC.
- 5) The Permittee is in compliance with 19.10.2 NMAC regarding fees.
- 6) The Application has been reviewed in accordance with 19.10.5.505 and 19.10.5.506 NMAC and has been processed as a revision.
- 7) Public participation requirements including public notice and an opportunity for a public hearing were met in accordance with 19.10.9 NMAC.

- 8) As required by 19.10.5.505.B(2) NMAC, the application for permit revision was accompanied by sufficient information for the Director to determine whether any of the factors listed in 19.10.5.505 NMAC are present.
- 9) As required by 19.10.5.506.D NMAC, the Director determined the application was not administratively complete and notified GeoSW on May 28, 2021, and the deficiencies were remedied to make application administratively complete by October 21, 2022.
- 10) As required by 19.10.5.505.B(3) NMAC, the Director has consulted with NMED.
- 11) As required by 19.10.5.505.B(3), the Director has notified the following tribal entities: Hopi Tribe, Mescalero Apache Tribe, Ysleta del Sur and White Mountain Apache Tribe.
- 12) As required by 19.10.5.505C NMAC, the application for the permit revision was in a format acceptable to the Director.
- 13) As required by 19.10.5.505.D NMAC, the permit revision meets the requirements of 19.10.5.507 (“Existing Unit Standards”) NMAC.
- 14) The Permittee agrees to comply with the applicable requirement of the Act, the Rules and the Permit during active status, as required by 19.10.5.503.F(6) and 19.10.5.506.J(6) NMAC.
- 15) The disturbed areas within the permit area will be reclaimed to achieve self-sustaining ecosystem appropriate for the life zone of the surrounding areas following closure, except those areas designated as industrial PMLU, such as the mill. The remaining areas will be livestock grazing and wildlife PMLU.
- 16) NMED Written Determination dated March 22, 2023 and signed by the NMED Water Protection Division Director, John Rhoderick on March, 21, 2023, that Geo Southwest Inc. has demonstrated the activities proposed or authorized for Geo SW Deming Mill Tailings Facility are expected to achieve compliance all applicable air, water quality and other environmental standards if carried out as described in MMD Permit No. LU009RE and associated state and federal environmental permits.
- 17) As required by 19.10.5.506.G NMAC the March 30, 2021 Closeout Plan was deemed approvable and the permit was notified of the approvable determination in a MMD letter dated May 28, 2021.
- 18) No submittals of public comment and no requests for public hearing were received.

Financial Assurance requirements

- 19) The Permittee has provided satisfactory financial assurance to Complete the March 2021 Closeout Plan reclamation cost estimate of \$280,517 as required by 19.10.506.J(2) NMAC. The financial assurance for the reclamation of the GeoSW Deming Mill and Tailing Facility is in the form of Real Estate Collateral (Amended Deed of Trust on November 28, 2022) with a 2021 appraised value of \$382,033 reduced to \$305,626 by using a 20 percent margin.

Section 6 COMPLIANCE REQUIREMENTS

- A. The Permittee shall conduct mining and reclamation operations only as described in the approved PAP 14-1, this Permit or any revisions or modifications approved by the Director, as required by 19.10.5.505 NMAC.
- B. This permit revision 14-1 is issued pursuant to Section 69-36-1 et. seq. NMSA 1978 and Title 19, Chapter 10 NMAC. Permittee may be required to comply with other federal, State, county or local laws or ordinances before or while undertaking the activity that is the subject of this permit revision. MMD does not, by issuing this permit revision or otherwise, make any comment on Permittee's compliance with such other laws. It is Permittee's sole responsibility to investigate and comply with the requirements of such other laws.
- C. The Permittee shall obtain and maintain all environmental permits required for the permit area, including but not limited to permit(s) issued by NMED and water rights granted by the New Mexico office of the State Engineer. Revocation or termination of such a permit or the forfeiture of financial assurance related to such a permit is adequate grounds for the Director to issue a cessation order under authority of 19.10.5 and 19.10.11 NMAC with regard to mining operations covered by such a revocation, termination, or forfeiture.

Section 7 AGENCY RIGHT OF ENTRY

The Permittee shall allow the authorized representatives of the Director, without advanced notice, upon the presentation of appropriate credentials, and without delay.

- A. To enter upon, or through, any mining or reclamation operation at any time, as provided for in 19.10.11.1101.E(1) NMAC for purposes of conducting inspections and to determine if the Permittee is in compliance with the Permit requirements and conditions; and
- B. At reasonable times, and without delay, have access to and copies of any records associated with permitting and compliance required by the Act 19.10.NMAC or the Permit.

Section 8 PERMIT COVERAGE/ENVIRONMENTAL COVERAGE

- A. This Permit shall be binding on any person(s) and/or corporate or business entities conducting mining and reclamation operations under this Permit.
- B. The Permittee shall take all necessary steps to minimize any adverse impact to the environment or public health and safety resulting from non-compliance with any term or condition of the Permit, the Rules, or the Act.

- C. The Permittee shall maintain this Permit until reclamation is complete at the site.

Water Rights

- D. This Permit does not grant or create any water rights. Nor does MMD, by approving this Permit or otherwise, make any comment on the water rights that the Permittee may or may not have available for use in the area covered by the Permit. Permittee is solely responsible and obligate to comply with all state and federal laws related to water rights sufficient to support the activities contemplated by the Permit.

Surface and Mineral Rights

- E. The Permit does not grant or create any property rights. Nor does MMD, by issuing this Permit or otherwise, make any comment on the surface or mineral rights that the Permittee may or may not have in the area covered by the Permit; only that the Permittee has provided a statement of basis on which the Permittee has a right-to-enter the property to conduct mining and reclamation. Permittee is solely responsible to take whatever steps are necessary to ensure that Permittee has property rights sufficient to support the activities contemplated by the Permit.

Cultural Resources

- F. The Permittee shall comply with all state and federal requirement and standards as applicable, including without limitation any applicable requirements of the Cultural Properties Act, NMSA 1978, Section 18-6-1 to 27 and the regulations promulgated pursuant thereto.

Section 9 GENERAL OBLIGATIONS AND CONDITIONS

In accordance with 19.10.5.506.I NMAC, the Director may approve a closeout plan subject to conditions necessary to meet the requirements of the Act and 19.10 NMAC. The conditions outlined in this section are required for the Permittee to meet certain requirements of the Rules.

- A. The Permittee shall notify MMD 30 days prior to performing any permanent closeout/reclamation activities at the site.
- B. The conditions specified in this Permit are required to mitigate the disturbance within the permit area and to ensure stabilization of the Permit Area and minimize future impacts to the environment and protect air and water resources. The conditions specified in this Permit are necessary to reclaim the Permit Area to the conditions that allow for establishment of the designated PMLUs of wildlife habitat, grazing land and industrial uses.
- C. Construction Quality Assurance

- 1) The permittee shall submit a final design and CQA plan to MMD for approval not less than 90 days prior to, or an acceptable time agreeable to MMD, before commencement of any reclamation activities and shall implement the final design and CQA plan only after MMD approval. The final design will include detailed engineering designs addressing, slopes, surface erosion controls and stormwater management structures for MMD approval. The CQA plan shall include: a description of work to be conducted and identification of borrow areas. Design specifications may be modified during the final engineering design with MMD approval.
- 2) The CQA plan shall be supplemented to include a final report to be submitted to MMD not more than 180 days after construction completion. The report shall include a summary of work conducted, as-built drawings and demonstration that the final design specifications for slopes, covers and stormwater management structures were achieved during construction. The CQA final report shall describe, at minimum, as-built drawings, a final topographic map with no greater than two-foot contour intervals and construction photographs.

Surface Shaping and Stormwater Management

- D. Reclamation final design shall conform with proposed design in Sections 5.D & 5.E and Figure 9 of the March 31, 2021 Closeout Plan. The approximately 3.6 acre are north of the FMI-Cyprus PA Tailing Impoundment with be reclaimed and may include some additional tailing from test pit areas. Slopes shall be not greater than 3 to 1 horizontal to vertical ratio.

Cover Placement Plan

- E. Three feet of cover material from the existing borrow area will be used to cover tailing material. Borrow material will be used in area to fill and stabilize area where tailing or soil has been removed.

Revegetation Plan

- F. Outslopes, top surfaces, borrow, removal and fill areas shall be reclaimed and revegetated in accordance with the reclamation and revegetation standards set forth in Appendix A. Seeding Methods and Revegetation Standards of this Permit.
- G. All slopes and high walls created by excavation of borrow, shall be no steeper than 3 to 1 horizontal to vertical ratio.

Post-Mining Land Use

- H. The PMLU for the Borrow area, vicinity of the test pits and Tailing area is livestock grazing. Compliance with the 19.10.5.507.A NMAC shall be achieved by the following:
 - a) Vegetation in the reclaimed area shall meet approved MMD revegetation standards set forth in Appendix A, Seeding Methods, and Revegetation Standards of this Permit.

Mill Area – Buildings and Structures

Planned Closeout Activities

- I. Reclamation design shall comply with Table 1, Section 5.A and Section 6 of the March 31, 2021 Closeout Plan designation of PMLU Industrial as part of Deming Industrial Park.
 - a) Mining-specific equipment must be removed or demolished include the following: ore receiving(grizzly); conveyor system; ore crushing building; ore transfer building; fine ore storage bins; ore sampling building; processing equipment located within the mill building; concentrate thickeners; lime circulating tank. When as provided in section M.3 below GeoSW assess changes to possible industrial uses including the manufacturing of prestressed concrete beams and slabs, the list of buildings and equipment to be removed or demolished may change.
 - b) Specific components to remain on site for industrial use include the following: mill building; reagent mixing building; machine shop; office and laboratory building; temporary office building (mobile); change house building; north and south side buildings; two water wells with pumps; water tank, power and distribution system; electrical substation; truck and rail scales and scale houses; pole barn; concrete load-out slab.
 - c) Demolition specifications shall be submitted for MMD approval at least 90 days prior to implementation.
 - d) All debris and visually affected soil and or near the surface in unpaved areas including discolored soil south of the thickener tanks shall be removed and disposed in an appropriate manner at an approved waste facility.
 - e) Soil from the borrow shall be used to fill any areas where soil or foundations have been removed or covered. The covered foundation areas shall be graded for stormwater control.
 - f) Permittee shall provide MMD a building inspection certification signed by a professional engineer that the buildings are in good condition, meet all applicable codes, are structurally sound, meet all zoning requirements, meet all local ordinances, and all utilities are operable. This certification shall be provided to MMD within 180 days of completion of I.a above.
 - g) Permittee shall not be released from requirements of the New Mexico Mining Act and Rules for those areas approved as industrial until the industrial PMLU has been implemented. Implementation shall be demonstrated as follows:
 1. If soil contamination exists in and around any buildings and facilities for industrial use, the Permittee shall demonstrate that any required remediation has

been completed for these areas to be utilized for the industrial PMLU. The permittee shall provide a soil remediation plan to MMD for approval prior to implementation of remediation.

2. The Permittee shall demonstrate either: 1) execution of long-term contractual commitments for the sale, lease, or occupancy of a substantial portion of the areas approved for Industrial PMLU use with commercial businesses or 2) reasonable certainty that such contractual commitments will be executed either with the release of the permit from the Mining Act or shortly thereafter. MMD shall determine whether the Permittees has complied with those requirements.
3. Provide documentation that the area comprising the Industrial PMLU meets state and federal requirements.

Post-Closure Monitoring and Maintenance

- J. Post-closure monitoring and maintenance shall be conducted as described in Section D of Appendix A of this Permit.

Borrow Source Material – African rue removal prior to excavation

- K. Prior to excavation in the existing borrow source area, the vegetation shall be inspected for African rue (*Peganum harmala*), and plants should be manually removed to exclude them from any seed bank that may exist in the borrow area.

Revegetation Success Monitoring

- L. The following conditions are required to reclaim the Permit Area to a condition that allows for re-establishment of an SSE as required by 19.10.5.507.A NMAC to meet applicable environmental standards as required by NMSA 69-36-11.B(4) of the Act. These conditions supplement Section E of Appendix A.
1. Permittee shall notify MMD at least two weeks prior to any monitoring conducted pursuant to this Permit to allow MMD an opportunity to accompany personnel of the Permittee.
 2. The Permittee shall submit a vegetation monitoring plan 90 days prior to initial vegetation monitoring at a reclaimed area, for MMD approval and shall submit a map identifying the sample locations 30 days before subsequent monitoring events are conducted.
 3. The Permittee shall conduct qualitative vegetation monitoring of both volunteer revegetation and re-seeded areas during the third year after seeding. Results of the vegetation monitoring shall be provided to MMD. The Permittee shall inter-seed or re-seed areas that have volunteer vegetation as well as other areas, if necessary.

Quantitative monitoring shall be performed again in year 6 after reseeding, and then at least 2 years during the last 4 years starting no sooner than year eight prior to application for release of financial assurance. Revegetation monitoring shall include, at a minimum, survey of canopy cover, plant diversity, and woody stem density. The revegetation monitoring shall be conducted to meet statistical adequacy for the monitoring conducted during at least 2 years of the last 4 years prior to release of financial assurance.

4. The canopy cover survey and woody stem density survey shall be conducted using the survey techniques approved by MMD.

M. Additional Studies

1. Within 180 days of the issuance of this permit LU009RE, GeoSW will perform an alternatives analysis and submit a report considers reclamation options for the test pits that detected tailing material just north and south of the Mimbres River. At a minimum, the options shall consider combinations of complete removal, partial removal, stabilization of excavated areas with fill, cover tailing in place and cover removed tailing at a centralized repository for the approximately 3.6 acres adjacent to the FMI Cyprus PA Deming tailing. The report must recommend a preferred option with a proposed schedule for implementation and its cost estimate for review by MMD review and NMED will be copied on the report because of the proximity to the Mimbres River.
2. Within 180 days of MMD approval of the report, GeoSW shall start implementation of the approved option, and within 180 days of completion of the construction project, GeoSW shall submit a construction completion report. The report shall include a summary of work conducted, as-built drawings and demonstration that final design specifications for slopes, covers and for stormwater management structures were achieved during construction. The report shall describe at a minimum, as-built drawings, a final topographic map with no greater than a two-foot contour interval, construction photographs, the quantities of materials used and location maps with final surveyed/measured thicknesses and identify location of borrow source disturbance.
3. Within 180 days of the issuance of this permit, GeoSW shall assess if there are any changes to the industrial use designation of the buildings and equipment removal of the mill. This assessment will include consideration of how GeoSW could use existing buildings and equipment combined with its sand and gravel deposits and water rights to manufacture prestressed concrete products.
4. The Permittee must provide a schedule and plan for reclamation of the mill within 180 days of permit approval. This submittal shall provide a schedule for implementation of the mill demolition and removal of mining-specific equipment at the mill unless the property is sold. The existing mill is no longer eligible for further extensions of

standby status.

N. Financial Assurance

The following conditions are required to ensure that adequate financial assurance is provided for the site, as require by 19.10.5.506.J(2) and 19.10.12 NMAC.

1. The Permittee may apply for and obtain release of financial assurance in accordance with 19.10.12.1210 NMAC.
2. The Permittee shall evaluate the adequacy of the financial assurance at least every five years as part of the closeout plan update unless otherwise directed by MMD.
3. The Permittee shall not be released from the requirements of the Mining Act for those areas approved as industrial until the industrial PMLU has been implemented.
4. The Permittee shall be responsible at all times to maintain financial assurance in a form or forms and in an amount sufficient to meet the requirements of the Mining Act Rules.
5. The Director may require adjustment of the financial assurance as provided in 19.10.12.1206 NMAC.
6. The Permittee has provided financial assurance in the 2021 cost amount of \$280,517.00 in the form of real property collateral.
7. Collateral. Real property collateral may be offered by the Permittee and may be accepted by the Director as providing financial assurance.
 - a. The list of approved real property collateral and the amount of financial assurance provided by each property is shown in Table 1, which may be modified to address any changes in the approved collateral. As required by 19.10.12. 1208.C NMAC, all properties shall be located in the State of New Mexico and none may be located within the Permit or affected area of the mining operation. The permittee shall provide the Director with a first mortgage or other perfected first lien security interest for each property. The Director has approved the form of deed of trust provided for the tracts of land in Table 1 and the values indicated on Table 1, and will evaluate the adequacy of the properties at least every five years based upon appraisals that will be due every five years from December 6, 2021.
 - b. The Permittee shall provide an appraisal by an independent qualified appraiser for all properties and has done so for the properties listed on Table 1. The Director will review the appraisals and shall require that the fair market value of the properties be in excess of the financial assurance amount by a margin that reflects market fluctuations and transaction costs.

- c. Pursuant to 19.10.12.1208.C(1)(a) NMAC, the Director must require that the fair market values of collateral be in excess of the financial assurance coverage attributed to such collateral by a reasonable margin that reflects cost of disposition in event of forfeiture and changes in value anticipated over a five-year period.
- d. Prior to the approval of any real property collateral, the Permittee shall provide phase I environmental site assessments for all collateral properties to MMD. The environmental site assessments shall be conducted in accordance with ASTM standards. MMD will review the assessments and provide any objections to the Permittee, within a reasonable time of receipt. Environmental assessments have been provided for all properties listed in Table 1.

Table 1: Approved GeoSW Collateral Properties

Tract Number (Partial PLSS)	Appraised Value	20% Margin	Approved Collateral Value
1 (T23S R9W 21 N)	\$138,511	\$27,702	\$110,808
3 (T23S R9W 29 NE)	\$74,325	\$14,864	\$59,459
4 (T23S R9W 21 NE)	\$55,762	\$11,152	\$44,609
5 (T23S R9W 21 S)	\$84,552	\$16,910	\$67,641
9 (T23S R9W 20 SE)	\$28,883	\$76,406	\$23,106
Totals	\$382,033	\$76,407	\$305,626

O. Reclamation Schedule

- 1. The reclamation schedule shall be as described in Section 9 of the March 31, 2021 Closeout Plan. GeoSW estimates 6 to 10 months for closeout of the mill after a decision is made for closure. GeoSW estimates 2 years to complete the land reclamation activities associated with the smaller tailing area and test pit tailing material.
- 2. During reclamation, measures shall be taken to provide for the stabilization of the disturbances that will minimize future impact to the environment and protect air and water resources.
- 3. Permittee may submit to MMD for approval a request to modify or revise the Reclamation Schedule pursuant to 19.10.5.505 NMAC.

P. Compliance with Environmental Permits

During the term of the permit issued under the authority of 19.10.5 NMAC, the Permittee shall maintain in effect all environmental permits required for the Permit Area. Revocation or termination of such a permit or the forfeiture of financial assurance related to the Permit Area by another governmental agency is adequate grounds for the Director to issue a cessation order under the authority of 19.10.11 NMAC.

- Q. **Closeout Plan Renewal**
The Permittee shall submit an application for a revision of this Permit including an updated Closeout Plan pursuant to 19.10.5 NMAC. The renewal period shall be typically every 5 years, from the date of this permit approval.
- R. **Changes, Modifications, or Revisions to the Permit**
1. Earlier modifications or revision to a portion, or portions, of the permit may be required if changes at the mill and tailings warrant such action as determined by the MMD Director.
2. Any changes, modification or revisions to the approved Permit must be approved, in writing, prior to implementation.
- S. **Annual Report and Fees**
Permittee shall submit annual reports as required by 19.10.6.610 NMAC, and any fees as required by 19.10.2 NMAC. The Permittee shall identify any areas of new disturbance in each annual report submitted to MMD.
- T. **Permit Term**
Permittee shall maintain this Permit until reclamation is completed at the site. The term of the Permit is governed by 19.10.5 NMAC

Section 10) CONCLUSIONS OF LAW

- A. The Director has jurisdiction over the Permittee and the subject matter of this proceeding.
- B. PAP 14-1 is complete, accurate, and complies with the requirements in the Act and 19.10.5.502 and 19.10.12.503 NMAC, and with conditions described in this Permit Revision document.
- C. PAP 14-1 is complete, accurate and complies with the requirements of Section 19.10.5.505 NMAC. Permittee is permitted, under authority of the New Mexico Mining Act to conduct mining and reclamation operations at the Geo Southwest Deming Mill and Tailing Facility, Luna County, New Mexico, upon condition that the Permittee complies with the requirements of this Order, the Act, the Rules, and the Permit No. LU009RE and all revisions and modifications thereto.

All other provisions, modifications, and revisions for mining and reclamation contained in the Deming Mill and Tailing Permit No. LU009RE and Closeout Plan, remain unchanged.

CERTIFICATION

I certify that I have read, understand and will comply with the requirements of the Permit. I also agree to comply with the performance and reclamation standards and requirements of the permit, the Rules, and the Act, and allow the Director to enter the permit area without delay for the purpose of conducting inspections during mining and reclamation.

Sherald Smith

Authorized Representative of the Permittee

*President, Metal Southwest, LLC
The General Partner of Geo Southwest, Ltd
dba in New Mexico as*

Title

Geo Southwest, LP
Company

Subscribed and sworn to before me this 6 day of November, 2023

Ciara Lauren Patino
Notary Public

My Commission Expires

6/20, 2027



ORDER

NOW THEREFORE, IT IS HEREBY ORDERED that reissued Permit No. LU009RE, incorporating the updated closeout plan allowing GeoSW to conduct closeout and reclamation operations in Luna County, New Mexico, is approved. The approval replaces previous modifications and revisions with an entirely new permit. The Permit may not be transferred without approval by the Director. The Permit is subject to all conditions set out in the Director's Findings of Fact, General Obligations and Conditions, and Order.

By Order of the Director, Mining and Minerals Division, Energy, Minerals and Natural Resources Department, of the State of New Mexico.

Mining and Minerals Division

BY: 

Albert C.S. Chang, Director
Mining and Minerals Division
Energy, Minerals and Natural Resources Department

DATED: 12/11/2023

APPENDIX A

This Appendix briefly summarizes changes from the 2020 modification of the Closeout Plan, which has greater detail regarding the Reference Area, Erosion Monitoring, Vegetation Monitoring and Vegetation Success. Erosion monitoring and Vegetation monitoring results are due at the same time as the Annual Report to MMD on April 30th of the following year after early fall monitoring of vegetation.

A. Seeding

After placement of cover material in accordance with this Permit Revision, the permittee shall leave the seedbed in roughened condition to reduce the overland flow and promote infiltration of water. This soil surface confirmation and the high rock fragment content of the topdressing may preclude the use of a drill seeder, which is the preferred methodology for reseeding. If drill seeding is not feasible, seed shall be broadcast and covered using a drag or another approved method. Certified weed-free straw or native grass mulch shall be applied at a rate of at least two tons/acre and stabilized using a tackifier emulsion or by crimping. Long-stem mulch is preferred over shorter materials. The mulch shall be certified weed-free and contain minimum of viable seeds associated with the mulch source (e.g., barley or wheat seeds). Permittee shall design, construct and maintain best management practices for erosion control according to nationally recognized standards of the the U.S National Resources Conservation Service or alternative equivalent standards.

B. Seed Mix

Plant Species			Grass	Seeding Rate
Common Name	Scientific Name	Duration	Seasonality	lbs PLS/ac
Grasses				
Alkali sacaton	<i>Sporobolus airoides</i>	Perennial	Warm	0.1
Spike dropseed	<i>Sporobolus contractus</i>	Perennial	Warm	0.1
Purple threeawn	<i>Aristida purpurea</i>	Perennial	Warm	0.3
Sand dropseed	<i>Sporobolus cryptandrus</i>	Perennial	Intermediate	0.1
Sideoats grama	<i>Bouteloua curtipendula</i>	Perennial	Warm	1.0
Plains lovegrass	<i>Eragrostis intermedia</i>	Perennial	Warm	0.5
Black grama	<i>Bouteloua eriopoda</i>	Perennial	Warm	0.5
Shrubs				
Fourwing saltbush	<i>Atriplex canescens</i>	Perennial	NA	0.5
Broom dalea	<i>Psoralea scoparius</i>	Perennial	NA	0.5
Desert willow	<i>Chilopsis linearis</i>	Perennial	NA	0.1
Longleaf jointfir	<i>Ephedra trifurca</i>	Perennial	NA	0.2
Whitethorn acacia	<i>Vachellia constricta</i>	Perennial	NA	0.2
Soap tree yucca	<i>Yucca elata</i>	Perennial	NA	0.6
Forbes				
Desert marigold	<i>Baileya multiradiata</i>	Annual/pere.	NA	0.2
Desert globemallow	<i>Sphaeralcea ambigua</i>	Perennial	NA	1.0
Prairie aster	<i>Machaeranthera tanacetifolia</i>	Perennial	NA	0.2
Prairie coneflower	<i>Ratibida columnifera</i>	Perennial	NA	0.2
Desert Penstemon	<i>Penstemon psuedospectabilis</i>	Perennial	NA	0.2
See Below			Approximately 6.5	
<p>Final seed mix subject to availability of seeds, and proposed changes must be approved by MMD. Seed mixes should preferentially include native, perennial plants. A general rule of thumb is 20 to 40 pure live seed (PLS) per square foot – drilled seed, and 40 to 60 PLS per square foot – broadcast. When broadcasting seed, higher rates are usually recommended because fewer of the seed will end up at optimum burial depth. Generally speaking seeding rates are doubled if seed is broadcast.</p>				

C. Reference Area

The MMD approved reference area is approximately 3.5 acres located east of the Freeport-McMoRan Copper and Gold, Inc. - Cyprus Pinos Altos Deming Tailing Impoundment.

D. Erosion Monitoring

The following conditions apply to the reclaimed areas. The conditions for the reclaimed areas are required to mitigate the disturbances within the permit area and provide for stabilization of the permit area that will minimize future impact to the environment and protect air and water resources in accordance with §19.10.1.7.R(1)NMAC. The conditions are also required to reclaim the permit area to a condition that allows for re-establishment of a self-sustaining ecosystem as required by §19.10.5.507.A NMAC and to meet applicable environmental standards as required by §69-36-11.B(4) of the Act and §19.10.5.506.J(5) NMAC.

- a) The Permittee shall visibly inspect reclaimed lands for signs of excessive erosion and shall mitigate significant erosion features to prevent further degradation of the site. Diversions, retention ponds, and auxiliary erosion control measures will be inspected in accordance with nationally recognized standards of the U.S. Natural Resource Conservation Service or alternative equivalent best management practices. Inspections shall continue until the specific units are released under the Act and Rules. Inspections shall be conducted monthly for the first year following completion of reclamation construction activities for each unit, and quarterly thereafter. Reclaimed areas including reclaimed borrow areas shall additionally be inspected for evidence of erosion after storm events of one inch or greater in any one-day period. Inspections shall continue until the specific units are released under the Act and Rules, unless continued inspections are required by other agencies.
- b) The Permittee shall report evidence of significant rill, gully, or sheet erosion on any reclaimed area including reclaimed borrow areas within 24 hours of discovery. The Permittee shall then provide the MMD a written report that describes the nature and extent of erosion and a corrective action plan, according to the following schedule. The Permittee shall provide the report within 30 days of discovery. The corrective action plan shall describe the efforts necessary to stabilize the affected area. The plan shall be implemented as soon as practical following regulatory approval.
- c) Erosion control measures that are damaged or ineffective shall be repaired or re-designed as necessary. The Permittee shall commit to using a variety of erosion control measures, as needed, if erosion control problems develop. Long-term erosion control measures for a 100-year, 24-hour storm event will be proposed in the final design. Short-term erosion control measures will also be proposed in the construction plan and may include, but not be limited to: Best Management Practices ("BMP's") such as silt fences, hay bales, water bars, mulching and use of vegetation, rock and soil.

E. Vegetation Success Standards and Success Monitoring

Canopy Cover A proportional canopy cover standard will be determined based on quantitative vegetation data and on the interpretation of the community structure and ecological conditions in the reference area. The numerical standard derived from the proportional standard may vary over time to account for temporal differences in canopy cover associated with climatic variations. Thus, the numerical standard may increase or decrease based on reference area measurements, but the proportional standard will remain fixed. The numerical standard for canopy cover shall be 70% of the reference area at a 90 percent statistical confidence level.

Shrub Density The standard for shrub density will be 60% of the shrub density in the reference area at a 90 percent statistical confidence level.

Plant Diversity The plant diversity standard (shown below) shall be utilized for the Geo Southwest Deming Mill and Tailings. A complete listing of species in reclaimed areas will complement the species composition data from the quadrats.

Class	Seasonally	Number	Minimum occurrence (% cover)
Perennial grass	Warm	3	1
Perennial shrub	NA	2	0.5
non weedy, native forbs	NA	2	0.1

NA= Not applicable.

The above standards for canopy cover, shrub density, and plant diversity shall be applicable to the naturally revegetated areas as well.

Revegetation Success Monitoring

Quantitative vegetation monitoring of the reference area in 2019, 2020 and 2021, when the main tailing impoundment was evaluated for bond release.

Reclamation success for bond release will be determined based on the comparison of quantitative vegetation monitoring of the reclaimed and reference areas during the 12-year period to re-establish vegetation after last year of augmented seeding. At a minimum, the vegetation will be monitored for two of the last four years prior to bond release.

Sample Adequacy The minimum number of samples required to meet sample adequacy will be calculated based on a statistical confidence level of 80 percent or an alpha of 0.2. Sample adequacy will be calculated depending on the distribution of the data (normal verses non-normal). For normally distributed data, sample adequacy will be calculated using Snedocor and Cochran (1967). Hofmann and Ries (1990) will be used to determine sample adequacy for data that are not normally distributed. The Permittee recognizes that statistical adequacy may not be achieved at either the reclaimed and reference areas because of their limited size and the

dispersed-clumped character of semi-arid plant communities. An appropriate one-sided hypothesis test will be used to compare reclamation to the reference area standard and determine whether the difference in population means is greater than zero. Either a parametric or non-parametric hypothesis testing method will be selected based on the normality of the data and will be performed at the 80 percent level of confidence.