PERMIT MODIFICATION 16-1 TO PERMIT NO. SO001RE
SOCORRO MINE AND MILL
EXISTING MINING OPERATION

MINING AND MINERALS DIVISION
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

This Permit Modification 16-1 ("Permit Modification") to Permit No. SO001RE ("the Permit") is issued by the Director of the Mining and Minerals Division ("MMD") of the New Mexico Energy, Minerals and Natural Resources Department to:

Whose address is: Dicaperl Minerals Corporation
P.O. Box 1436
Socorro, NM 87801

("Dicaperl" or "Permittee") for the Socorro Mine and Mill ("the Mine"), located in Socorro County, New Mexico.

This Permit Modification:

A. Approves the updated financial assurance and updated closeout plan for the Mine. The approved updated financial assurance is $2,132,500.89. The updated financial assurance for the Mine closeout plan is in the form of a Surety Bond (No. 800031102) and Surety Rider No. 1, as amended, in the amount of $2,132,500.89 issued by the Atlantic Specialty Insurance Company.

In order to accomplish the approval contemplated by this Permit Modification 16-1, the following subparagraphs are added to Permit No. SO001RE:

Section 1 (16-1). STATUTES AND REGULATIONS

A. This Permit Modification is issued pursuant to the New Mexico Mining Act, NMSA 1978, §69-36-1, *et seq*. (1993, as amended through 2020) ("the Mining Act") and New Mexico Mining Act Rules, Title 19, Chapter 10 "the Mining Act Rules") of the New Mexico Administrative Code ("NMAC").

B. The Mine is and continues to be permitted as an existing mine under 19.10.5 NMAC.

C. This Permit Modification is subject to the Mining Act, the Mining Act Rules, and any other 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 1A (16-1). PERMIT APPLICATION PACKAGE

The permit application package for Modification 16-1 ("16-1 PAP") consists of:

A. *Dicaperl Minerals Corp. Socorro Mine and Mill Permit No. SO001RE Permit Modification Application* ("Updated Closeout Plan"), prepared by CDM Smith and dated June 10, 2016, to update the financial assurance and closeout plan for the Mine.

B. Dicaperl response letter dated March 10, 2017 to MMD's January 11, 2017 comments on the Updated Closeout Plan, Permit Modification 16-1, addressing permit boundary, quarry wall slope, cover application in the quarry, waste areas, and cost estimate.

C. Dicaperl response letter dated September 15, 2017 to MMD's July 17, 2017 comment letter addressing permit boundary, new units, quarry slopes, quarry revegetation, and cover application.

D. Dicaperl response letter dated July 20, 2018 addressing MMD's November 28, 2017 comment letter. Topics addressed included the permit boundary, new units, quarry slope stability, haul route for cover, and cost estimate.

E. Dicaperl response letter dated October 8, 2019 to MMD's comments from a phone conference on August 29, 2019 regarding separating the pit and financial assurance ("FA") release for the dumps into Revision 19-1 to Permit No. SO001RE, and cost estimate spreadsheet update.

F. Financial Assurance, in the amount of $2,132,500.89 (two million one hundred thirty-two thousand five hundred dollars and eighty-nine cents), was received by MMD on April 24, 2019 in the form of a Surety Bond No. 800031102 and Surety Rider No. 1 from Atlantic Specialty Insurance Company.

Any correspondence subsequently submitted to MMD by the Permittee or its representatives can be found at MMD offices within the Division's files, and is titled Socorro Mine and Mill, SO001RE, or similar.

Section 2 (16-1). PERMIT AREA AND DESIGN LIMITS

A. The mine permit area encompasses portions of Sections 21, 22, 27, and 28, in Township 3 South, Range 1 West in Socorro County, New Mexico, New Mexico Prime Meridian. The approved permit area is approximately 340 acres and is shown in Appendix A of this Permit Modification. The permit area is entirely located on surface lands owned exclusively by Dicaperl. The Permittee is authorized to conduct mining and reclamation operations only within the approved permit area, as set forth in 16-1 PAP and this Permit Modification.

B. The permit area and design limits of the existing mine units are delineated in Appendix A. The facilities within the mine unit are:

1. Overburden Dump A
2. Waste Dumps B, C, D, E, F and G (existing area and expanded area);
3. Quarry/Open Pit;
4. Mill Site.

Section 3 (16-1). FINDINGS OF FACT

The Permit Application Package

A. The 16-1 PAP is complete and demonstrates that the proposed operation will meet the performance and reclamation standards and requirements of 19.10.5.507.A NMAC.

B. The Permittee has paid the Permit Modification fee of $1,000.00 as required by 19.10.2.201.H NMAC.

C. 16-1 PAP has been reviewed in accordance with 19.10.5.505 NMAC and has been determined to be a Modification. 16-1 PAP is complete, accurate, and complies with the requirements for Permit Modifications under 19.10.5.505 NMAC.

D. The approved post-mining land use ("PMLU") continues to be rangeland for the entire permit area.

E. The proposed operation and reclamation, as described in the 16-1 PAP and this Permit Modification, will meet the requirements of reclamation, as identified in 19.10.1.7.R(1) NMAC. The Permit, the operation and reclamation plans described in 16-1 PAP, along with the conditions set forth in this Permit Modification, demonstrate that the reclamation of the disturbed areas within the permit area will result in a condition that allows for the establishment of a self-sustaining ecosystem within the permit area that is appropriate for the life zone of the surrounding areas.

Right-To-Enter / Property Access Information

F. This Permit Modification does not grant or create any property rights. Nor does MMD, by issuing this Permit Modification or otherwise, make any comment determination about the surface or mineral rights that the Permittee may or may not have in the area covered by the Permit. Permittee is solely responsible to take whatever steps are necessary to ensure that

Permittee has the surface and rights necessary to support the activities contemplated by the Permit and this Permit Modification.

General Information Regarding the Permittee

G. The Permittee is not in violation of the terms of another permit issued by the Director or in violation of a substantial environmental law or substantive regulation at another mining operation, has not forfeited or had forfeited financial assurance in connection with another mining, reclamation or exploration permit, and has not demonstrated a pattern of willful violations of the Mining Act, the Mining Act Rules or other New Mexico environmental statutes.

MMD's Request for Comments to the Agencies and Tribes

H. MMD provided the cooperating agencies (the New Mexico Environment Department, the Department of Game & Fish, State Forestry Division, State Historic Preservation Office, and the Office of the State Engineer) with a copy of 16-1 PAP pursuant to 19.10.5.506.E NMAC and requested comments from the agencies on August 30, 2016.

I. MMD provided a copy of 16-1 PAP to the following tribal entities and requested review and comment: Comanche Nation of Oklahoma, Fort Sill Apache Tribe of Oklahoma, Kiowa Tribe of Oklahoma, Mescalero Apache Tribe, Pueblo of Isleta, Pueblo of Acoma, Hopi Tribe, Navajo Nation, and White Mountain Apache Tribe on August 30, 2016. No comments were received from tribal entities.

J. MMD provided the Permittee with comments provided by the cooperating agencies on January 11, 2017.

Financial Assurance

K. The Permittee has provided satisfactory updated financial assurance to complete the closeout plan for the Mine as required by 19.10.5.506.J.(2) NMAC in the form of a Surety Rider No. 800031102 and Surety Rider No. 1 for FA, in accordance with 19.10.12.1201.A NMAC, in the amount of $2,132,500.89 (two million one hundred thirty-two thousand five hundred and eighty-nine cents), issued by the Atlantic Specialty Insurance Company on March 20, 2020.

Permittee Certification

L. The Permittee has submitted a notarized statement signed by the Permitee that he agrees to comply with the performance and reclamation standards and requirements of the Permit

Modification, 19.10 NMAC and the Act and allows the Director to enter the permit area without delay for the purpose of conducting inspections during mining and reclamation.

Section 6 (16-1). PERMIT COVERAGE

A. This Permit shall be binding on any person or persons conducting mining, exploration, and reclamation operations under this Permit.

B. The approval of this Permit Modification does not relieve the Permittee from the responsibility of complying with other state and federal requirements and standards.

C. The Permit Modification does not grant or create any water rights. Nor does MMD, by approving this Permit Modification 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 Modification. The Permittee is solely responsible and obligated to comply with all state and federal laws related to water rights sufficient to support the activities contemplated by the Permit Modification.

D. Future submittals required by this Permit shall be presented in electronic form in addition to written form to the Director for approval.

Section 7 (16-1). COMPLIANCE WITH THE PERMIT

A. The Permittee shall conduct mining and reclamation operations only as described in the approved 16-1 PAP, the Permit, and any revisions or modifications approved by the Director.

B. This Permit Modification is issued pursuant to NMSA 1978, Section 69-36-1 et. seq. 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 Modification. MMD does not, by issuing this Permit Modification 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. Where the 16-1 PAP is ambiguous or in apparent conflict with the provisions outlined in this Permit, the language of this Permit will supersede the 16-1 PAP.

Section 8 (16-1). CONDITIONS

The Director may approve a closeout plan subject to conditions necessary to meet the requirements of the Mining Act and the Mining Act Rules. The Permittee shall reclaim existing areas of

disturbance including the quarry/open pit, waste dumps, stockpiles, haul roads, access roads, mill site, and ancillary facilities, and stabilize the existing and new disturbed areas to mitigate off-site impacts. The conditions for the updated financial assurance and closeout plan are required to mitigate the disturbances within the Mine and provide for stabilization of the Mine that will minimize future impact to the environment and protect air and water resources in accordance with 19.10.1.7.R(1) and 19.10.5.507.A NMAC.

A. The Permittee shall notify MMD 30 days prior to performing any permanent closeout/reclamation activities at the Mine site.

B. **CONSTRUCTION QUALITY ASSURANCE PLAN**

1. The Permittee shall submit a Construction Quality Assurance ("CQA") plan to MMD for approval not less than 180 days prior to proposed commencement of reclamation, including final regrading of slopes and cover placement, and shall implement the plan after MMD approval. Engineering designs addressing slopes, surface erosion controls, and stormwater management structures shall be submitted for MMD approval. The CQA plan shall include: a description of work to be conducted, soil testing results, laboratory analytical reports, and identification of borrow areas, if applicable. 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 reclamation construction completion. The report shall include a summary of work conducted, as-built drawings, and final design specifications for slopes, covers and for stormwater management structures. The final report shall describe, at minimum, as-built drawings, a final topographic map with no greater than two-foot contour intervals for the top surfaces and no greater than five feet for slopes, and construction photographs.

C. **QUARRY/OPEN PIT**

The following conditions apply to the open pit:

Reclamation of the open pit shall achieve a condition that mitigates the disturbances within the permit area and provides 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 permit area shall be reclaimed to a condition that allows for re-establishment of a self-sustaining ecosystem as required by 19.10.5.507.A NMAC.

1. **Public Health and Safety**

The Permittee shall ensure that the open pit areas do not pose a current or future hazard to public health or safety and will take measures necessary to limit future access to the open pit areas to authorized personnel by implementing the following conditions at closeout:

a) Where practicable, to restrict access by unauthorized personnel and provide for public safety, a berm and/or fence shall be placed and maintained around the perimeter of the open pit where highwalls exist;

b) Posting signage at approved intervals and at all access points, warning of potential hazards present;

c) Conducting annual visual inspections to monitor stability of the open pit walls and to identify potential failure areas which may adversely impact the environment and public health or safety. If potential failure areas are identified through monitoring, the Permittee shall propose measures to mitigate the hazard caused by the potential failure areas within 30 days of identification for MMD approval; and

d) To allow access to the open pit for maintenance activities by authorized personnel, locked gates may be placed at appropriate locations in association with the berm/fence combination.

2. **Surface Shaping and Stormwater Management**

a) The open pit slopes shall be graded for stormwater control and all slopes shall have a slope angle no steeper than 3H:1V, as measured from crest to toe, unless alternative regrading, cover, and revegetation designs are demonstrated and approved by MMD through studies and field testing to allow for re-establishment of a self-sustaining ecosystem that meets the standards addressed in Appendix B.

b) The Permittee shall place at least a one-foot-thick layer of cover material from Dump A on the open pit bottoms and on all benches.

c) All benches shall be constructed and maintained at all times to be safely accessible by heavy equipment to facilitate future reclamation.

3. **Revegetation Plan**

Open pit bottoms, haul roads, and safely accessible benches in the open pit shall be revegetated in accordance with revegetation standards set forth in Appendix B. The lowland reference area shall be used for the revegetation standard for quarry bottoms, haul

roads, and benches.

4. **Post-Mining Land Use**

The PMLU for the quarries shall be rangeland. Compliance with 19.10.5.507.A NMAC shall be achieved by the following:

a) Areas to be revegetated within the open pit shall meet approved MMD revegetation standards and shall be monitored in accordance with Appendix B.

D. OVERBURDEN DUMP A AND WASTE DUMPS B THROUGH F (Subject to 19.10.5.507.A "Existing Unit Reclamation Standards")

The conditions in this Permit Modification for Overburden Dump A and Waste Dumps B, C, D, E, and F ("Waste Dumps B-F") are required to mitigate the disturbances within the permit area and provide for stabilization of the permit area as necessary to establish a condition that will minimize future impacts 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.

1. **Surface Shaping and Stormwater Management**

a) The Permittee shall regrade the Overburden Dump A and Waste Dumps B-F in a manner that ensures positive drainage and eliminates, to the extent practicable, ponding on the top surfaces and final regraded surfaces.

b) The Overburden Dump A and Waste Dumps B-F shall be graded for stormwater control and all slopes shall have a slope angle no steeper than 3H:1V, unless alternative regrading, cover, and revegetation designs are demonstrated and approved by MMD based on acceptable studies and field testing that supports the re-establishment of a self-sustaining ecosystem that meets the standards addressed in Appendix B.

c) Appropriately designed channels for stormwater management and sediment control/containment shall be established on the reclaimed areas. These surface water diversion structures shall be designed and constructed for a 100-year, 24-hour storm event.

2. **Cover Placement Plan**

a) The physical and chemical characteristics of the cover material shall be supportive of a self-sustaining ecosystem.

b) A minimum of one-foot of cover material from Overburden Dump A or other suitable growth media material shall be placed over Waste Dumps B-F for use as a revegetation cover.

3. **Revegetation Plan**

Covered surfaces of all Waste Dumps B-F shall be revegetated in accordance with revegetation standards set forth in Appendix B.

a) The lowland reference area shall be used as the revegetation standard for Waste Dumps B-E.

b) The upland reference area shall be used as the revegetation standard for Waste Dump F and Overburden Dump A.

4. **Post-Mining Land Use**

The PMLU for the Overburden Dump A and Waste Dumps B-F shall be rangeland. Compliance with 19.10.5.507.A NMAC shall be achieved by the following:

a) Vegetation in the reclaimed areas shall meet approved MMD revegetation standards

b) Revegetative success shall be monitored in accordance with Appendix B.

E. **WASTE DUMP G (Subject to 19.10.5.507.A "Existing Unit Reclamation Standards" and 19.10.5.508 NMC "New Unit Reclamation Standards")**

The following conditions apply to Waste Dump G:

1. **Surface Shaping and Stormwater Management**

d) The Permittee shall regrade Waste Dump G in a manner that ensures positive drainage and eliminates, to the extent practicable, ponding on the top surfaces and final regraded surfaces.

e) Waste Dump G shall be graded for stormwater control and all slopes shall have a

slope angle no steeper than 3H:1V, unless alternative regrading, cover, and revegetation designs are demonstrated and approved by MMD based on acceptable studies and field testing that supports the re-establishment of a self-sustaining ecosystem that meets the standards addressed in Appendix B.

f) Appropriately designed channels for stormwater management and sediment control/containment shall be established on the reclaimed areas. These surface water diversion structures shall be designed and constructed for a 100-year, 24-hour storm event.

2. **Cover Placement Plan**

c) The physical and chemical characteristics of the cover material shall be supportive of a self-sustaining ecosystem.

d) A minimum of one-foot of cover material from Overburden Dump A shall be placed over Waste Dump G for use as a revegetation cover.

3. **Revegetation Plan**

a) The approximate southern half of Waste Dump G is subject to the reclamation standards of 19.10.5.507.A NMAC ("Existing Unit Reclamation Standards"). This area is depicted in the figure included with this Permit as Appendix A.

c) The Waste Dump G Expansion Area is approximately the north half of Waste Dump G as depicted in the figure included with this Permit as Appendix A. The Waste Dump G Expansion Area is subject to the reclamation standards of 19.10.5.508 NMAC ("New Unit Reclamation Standards").

d) The upland reference area shall be used as the revegetation standard for Waste Dump G.

4. **Post-Mining Land Use**

The PMLU for Waste Dump G shall be rangeland. Compliance with 19.10.5.507.A and 19.10.5.508 NMAC shall be achieved by the following:

c) Vegetation in the reclaimed areas shall meet approved MMD revegetation standards

d) Revegetative success shall be monitored in accordance with Appendix B.

F. ACCESS AND HAUL ROADS

The following conditions apply to all access and haul roads identified in the permit area. These requirements are necessary 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 and 19.10.5.508 NMAC, and to meet applicable environmental standards, as required by the NMED, pursuant to 19.10.5.506.J.5 NMAC.

1. The surfaces of access roads and haul roads shall have any perlite fines, where present, removed down to native material then be ripped to a depth of 18 to 24 inches and revegetated. Revegetation success shall be monitored in accordance with Appendix B. Any culverts, where present, shall be removed on all access road and haul roads where practicable. The ripped and covered surfaces shall be graded for stormwater control.

2. Appropriately designed channels for stormwater management and sediment control/containment shall be established on the reclaimed areas. These surface water diversion structures shall be designed and constructed for a 100-year, 24-hour storm event.

3. Roads shall be constructed and maintained during operation and reclamation to control erosion.

4. Access and haul roads shall be revegetated and monitored for revegetative success in accordance with Appendix B. The lowland reference area shall be used as the revegetation standard for all access roads and haul roads.

5. Roads required for continued site maintenance and monitoring shall be proposed in the final closeout engineering design for approval by MMD.

6. The Permittee shall implement and maintain best management practices described in the Socorro Mine and Mill Surface Water Pollution Prevention Plan.

G. ANCILLARY FACILITIES

The following conditions apply to Ancillary Facilities including the Mill and other support buildings and structures in the permit area. These conditions are required in order to establish the PMLU on a permit area approved by the Director, pursuant to 19.10.1.7.P(5) NMAC, and 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.

1. **Demolition and Burial**

The mill and boneyard (excluding the office building facilities and fuel tank storage area) will be removed and/or demolished within 180 days after cessation of mining. Demolition, removal, and/or burial shall be accomplished by meeting requirements of the following conditions. The following conditions may be modified with MMD approval following demolition and burial design.

a) All equipment and structures shall be dismantled and removed from the permit area. Where footings, slabs, walls, pavement, manholes, vaults, stormwater controls, and other foundations are not removed and are abandoned in-place, they shall be graded for stormwater control and covered with overburden and topsoil to a depth of three feet minimum.

b) Where footings, slabs, walls, pavement, manholes, vaults, stormwater controls, and other foundations are broken up to be buried, they shall be covered with a minimum of two feet of approved cover material.

c) All other Ancillary Facility areas shall be 1) graded for stormwater control, 2) ripped to a depth of 18 inches to 24 inches and covered with one foot of approved cover material, and 3) revegetated and monitored in accordance with Appendix B. The lowland reference area shall be used as the revegetation standard for all Ancillary Facilities.

d) Asbestos removal, if necessary, shall be carried out by a licensed, certified asbestos removal contractor. Hazardous waste removal, if necessary, shall be performed by a licensed, certified contractor.

e) Ancillary Facilities including the Mill and other support buildings and structures in the permit area shall be revegetated and monitored in accordance with Appendix B.

2. **Electrical Distribution System**

The Permittee shall remove all electrical systems and infrastructure that are not necessary for implementation of the PMLU, including but not limited to, the power substation (if applicable) and transmission lines. Power poles shall be removed, unless left in place as raptor habitat and approved by MMD. All areas shall be graded for stormwater control, ripped to a depth of 18 to 24 inches, and covered with overburden and topsoil to a depth of one-foot, minimum, and revegetated according to the requirements of Appendix B.

3. **Explosives, Fuel, and Reagent Storage Areas**

The Permittee shall remove and properly dispose of explosives, fuel, and reagent chemicals and materials. All storage areas shall be graded for stormwater control, ripped to a depth of 18 to 24 inches and covered with the approved cover material to a depth of one-foot, minimum, and revegetated according to the requirements of Appendix B.

4. **Water Supply**

The Permittee shall remove all water tanks, if any exist, at the completion of mining if not approved to remain in operation on site as part of the reclamation final design. The water tank areas shall be graded for stormwater control, ripped to a depth of 18 to 24 inches, minimum, and revegetated according to the requirements of Appendix B.

5. **Well and Pipeline Abandonment**

The Permittee shall plug and abandon all wells and pipelines at the completion of mining if not approved to remain in operation on site as part of the reclamation final design in accordance with NMOSE's *Rules and Regulations Governing Well Driller Licensing, Construction, Repair, and Plugging of Wells,* §19.27.4 NMAC.

6. **Post-Mining Land Use**

The PMLU for the Ancillary Facilities shall be rangeland. Compliance with 19.10.5.507.A NMAC shall be achieved by the following:

a) vegetation in the reclaimed areas shall meet approved MMD revegetation standards and shall be monitored in accordance with Appendix B.

H. OTHER NON-SPECIFIED AREAS

The following condition applies to any other disturbances within the permit area resulting from the existing mining operation, not identified specifically in the 16-1 PAP, or this Permit Modification. This condition is required in order to reclaim the permit area to a condition that allows for reestablishment of a self-sustaining ecosystem, as required by 19.10.5.507.A NMAC.

All areas previously disturbed and not identified specifically as a mine unit or borrow area, and not otherwise addressed specifically in this Modification, shall: 1) be graded for stormwater control; 2) have any perlite fines, where present, removed down to native

material then be ripped to a depth of 18 to 24 inches and 3) revegetated and monitored in accordance with Appendix B. The lowland reference area shall be used as the revegetation standard for all other disturbances not identified specifically in the 16-1 PAP or this Permit Modification.

I. FINANCIAL ASSURANCE

The following conditions are required to ensure that adequate financial assurance is provided for the site, pursuant to 19.10.12.1202, 19.10.12.1204.A, 19.10.12.1206.A, and 19.10.12.1210 NMAC.

1. The Permittee may apply for release of financial assurance in accordance with 19.10.12.1210 NMAC.

2. The approved cost estimate amount for the updated closeout plan is $2,132,500.89.

3. The Permittee currently maintains financial assurance for the Mine in the amount of $794,403.00, using Surety Bond No. 800031102, as amended, issued by the Atlantic Specialty Insurance Company, with MMD as beneficiary.

4. The Permittee shall be responsible at all times to maintain adequate financial assurance in a form and in an amount that is acceptable to MMD, pursuant to the Mining Act Rules.

5. The Permittee may replace the Surety Bond and Surety Rider with other forms of financial assurance acceptable to the Director, pursuant to 19.10.12.1209 NMAC. The Director may require adjustment of the financial assurance as provided in 19.10.12.1206 NMAC.

6. The Permittee shall evaluate the adequacy of the financial assurance approved, every five (5) years, as part of the updated closeout plan, beginning April 2025.

J. POST-CLOSEOUT MONITORING AND MAINTENANCE

1. Erosion

The following conditions apply to all reclaimed areas. The conditions for the monitoring and maintenance of the reclaimed areas are required, during and after mining operations, to mitigate the disturbances within the permit area and provide for stabilization of the permit area that will minimize future impacts to the environment and protect air and water resources, in accordance with 19.10.1.7.R(1) NMAC. The conditions, also, are required to

reclaim the permit area to a condition that allows for reestablishment of a self-sustaining ecosystem, as required by 19.10.5.507.A NMAC (for Existing Units) and to meet the requirements of 19.10.5.508.D NMAC (for New Units), and to meet applicable environmental standards as required by 69-36-11.B(4) of the Act. The Permittee shall implement and maintain best management practices described in the Socorro Mine and Mill Surface Water Pollution Prevention Plan.

a) The Permittee shall visually inspect reclaimed lands for signs of significant erosion and shall mitigate significant erosion features to prevent further degradation of the site. Drainage channels, diversion structures, retention ponds, and auxiliary erosion control measures shall be inspected, in accordance with nationally recognized standards of the U.S. Natural Resource Conservation Service, or alternative equivalent best management practices acceptable to MMD. Inspections of specific units shall continue until those specific units are released under the Mining Act Rules. Inspections shall be conducted quarterly for the first year following completion of reclamation construction activities for each unit, and annually, thereafter. The Permittee also shall inspect for evidence of erosion after storm events of one inch, or greater, in any 24-hour period as reported by a local (within 10 miles) weather station. Inspections shall continue until the specific units are released under the Mining Act Rules. Release by MMD shall not affect the right of other State or federal agencies to require continued inspections after release by MMD.

b) The Permittee shall report evidence of significant rill, gully, or sheet erosion on any reclaimed area 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, for approval by MMD, 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 practicable following regulatory approval.

c) Erosion control measures that are damaged, or ineffective, shall be repaired, or re-designed as necessary. The Permittee shall use a variety of erosion control measures, as needed, if erosion control problems develop. Long-term erosion control measures may include, but not be limited to, the installation of berms, designed channels, and sediment containment structures, as necessary, and shall be designed for a 100-year, 24-hour, storm event. Short-term erosion control measures may include, but not be limited to: silt fences, hay bales, water bars, and mulching.

2. **Notification**

The Permittee shall notify MMD at least two weeks prior to any monitoring conducted pursuant to this Modification. Monitoring shall be scheduled and arranged so that MMD may accompany personnel of the Permittee, if MMD chooses to do so.

K. RECLAMATION SCHEDULE

1. A reclamation schedule is required pursuant to 19.10.5.506.B(1) NMAC.

2. Reclamation of the Mine shall begin no later than 180 days after cessation of mining, unless the Permittee has applied for standby status for the Mine.

3. 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.

4. Reclamation shall be completed in accordance with the Reclamation Schedule shown in Table 1:

Table 1: Reclamation Schedule for the Mine

Unit	Reclamation to Begin	Anticipated Duration	Required Completion
Removal of Facilities and Structures	180 days following Cessation of Operation	6 months	One year following Cessation of Operation
Quarry/Open Pit	180 days following Cessation of Operation	4.5 weeks	One year following Cessation of Operation
Haul Roads and Access Roads	180 days following Cessation of Operation	1 week	One year following Cessation of Operation
Perlite Fines and Overburden Waste Dumps	180 days following Cessation of Operation	5 weeks	One year following Cessation of Operation

5. The Permittee may submit for MMD approval, a request to modify or revise the Reclamation Schedule.

L. TEMPORARY CESSATION

If, due to a temporary cessation of Mining Operation exceeding 180 days, and the Permittee wishes to suspend reclamation pursuant to the Reclamation Schedule provided above, the Permittee shall submit an application for a Permit Revision for standby status pursuant to 19.10.1.7.S, 19.10.5.505, and 19.10.7 NMAC.

M. **COMPLIANCE WITH ENVIRONMENTAL PERMITS**

Pursuant to 19.10.5.509.C NMAC, during the term of the Permit, as revised and/or modified, issued pursuant to 19.10 NMAC, the Permittee must maintain environmental permits required for the permit area. Revocation, or termination of such a permit, or the forfeiture of financial assurance that is related to the permit area is adequate grounds for the Director to issue a cessation order pursuant to 19.10.11 NMAC.

N. **CLOSEOUT PLAN UPDATE**

The Permittee shall submit an updated closeout plan to MMD by no later than March 2025, and at least every five (5) years thereafter. If MMD determines that alternative or additional closeout actions are necessary, prior to submission of the updated closeout plan, to allow for the establishment of a self-sustaining ecosystem, and/or–meet the requirements of reclamation defined under 19.10.1.7.R.(1) NMAC, MMD shall require that the Permittee modify or revise the Permit in accordance with 19.10.5.504.B and 19.10.5.505.B NMAC.

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

Section 9 (16-1). CONCLUSIONS OF LAW

A. The Director has jurisdiction over the Permittee and the subject matter of this proceeding.

B. The 16-1 PAP is complete, accurate, and complies with the requirements of Section 19.10.5 NMAC including those set forth in 19.10.5.505.D.(1) NMAC. The Permittee is authorized pursuant to the New Mexico Mining Act to conduct mining and reclamation operations at the Mine, Socorro County, New Mexico, upon the condition that the Permittee complies with the requirements of this Order, the Mining Act, the Mining Act Rules, Permit No. SO001RE, and all modifications thereof and Modifications thereto.

All other provisions, modifications, and Modifications for mining and reclamation contained in the Socorro Mine Permit No. SO001RE, remain unchanged.

CERTIFICATION

I certify that I am authorized to bind the Permittee and that have read, understand and will comply with the requirements of this Permit, this Permit Modification, the Mining Act, the Mining Act Rules, including without limitation that I will allow the Director to enter the Permit Area as required by the Permit and/or the Rules and/or as otherwise required by law.

Authorized Representative of the Permittee

Vice President, Deputy General Counsel
Title

Diamond Materials
Company

Subscribed and sworn to before me this 1st day of July, 2020

Barbara H Hladik
Notary Public

My Commission Expires

July 18th, 2023

Commonwealth of Pennsylvania - Notary Seal
BARBARA H. HLADIK, Notary Public
Montgomery County
My Commission Expires July 18, 2023
Commission Number 1355189

ORDER

NOW THEREFORE, IT IS HEREBY ORDERED that the Director approves Permit Modification 16-1 to the Socorro Mine and Mill – Dicaperl Minerals Corporation, Permit No. SO001RE, located in Socorro County, New Mexico. The approval is for the updated financial assurance and closeout plan for the Socorro Mine and Mill.

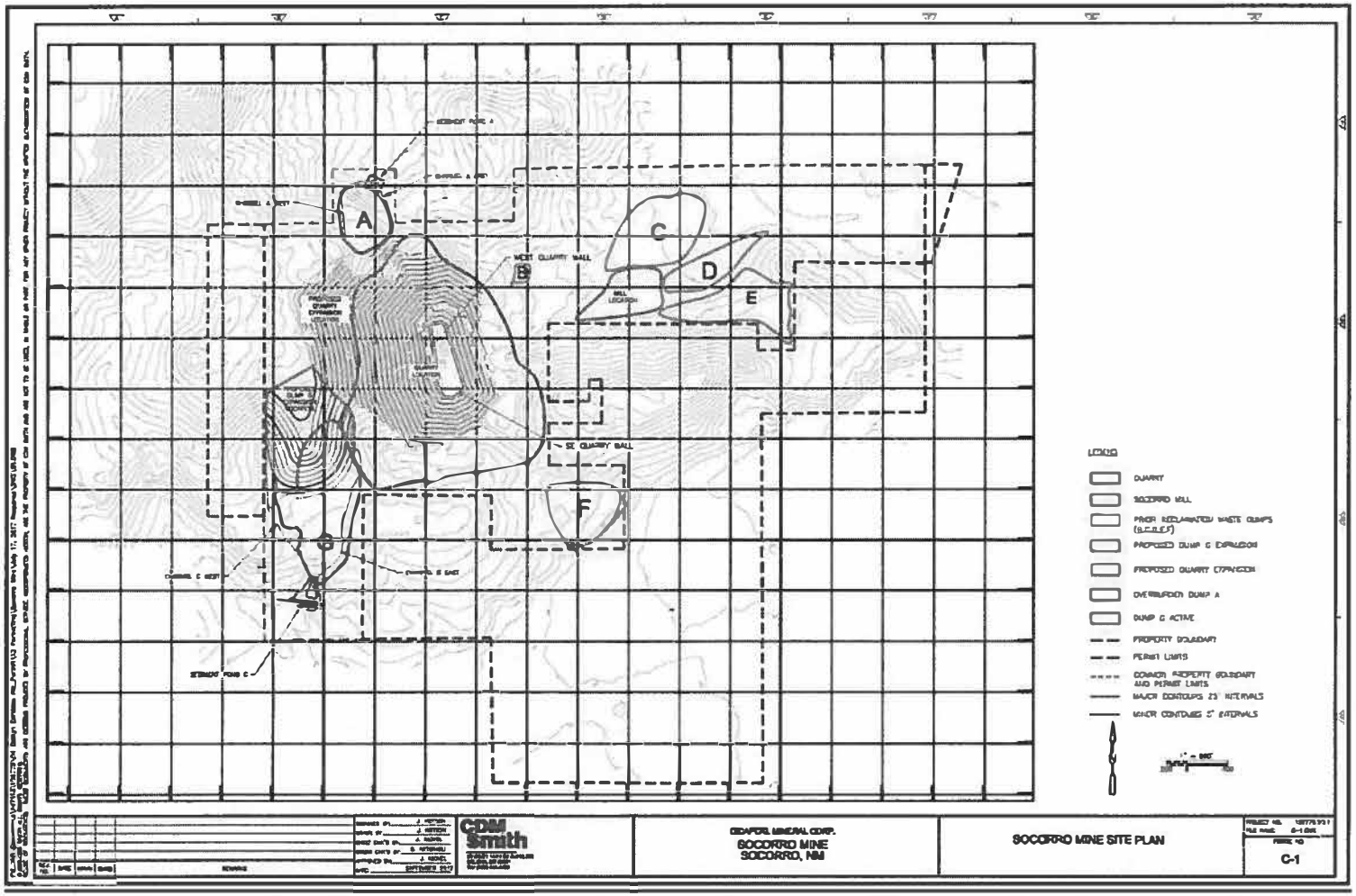
By Order of the Director, Mining and Minerals Division, Energy, Minerals and Natural Resources Department, of the State of New Mexico.

By: _____

Jerry Schoeppner, Director
Mining and Minerals Division
Energy, Minerals and Natural Resources Department

Date: July 27, 2020

APPENDIX A



Please note that this figure shows an expansion of the quarry which is not being approved in this modification and will be addressed in Revision 19-1.

APPENDIX B

A. Seeding Methods and Revegetation Standards

1. Seeding Methods

The seedbed will be prepared by ripping the topdressing to a depth of at least 12 inches. Compacted road surfaces will be ripped to a depth of at least 18 to 24 inches. The ripped furrows will be oriented across slope and the surface will be left in a roughened condition to reduce overland flow and promote the infiltration of water. Seed placement will be accomplished by drill seeding in all areas that can be safely traversed with a drill seeder. Where drill seeding is not a practical or safe option, broadcast seeding, followed by covering the broadcast seed using a chain or tire drag, will be used. Straw or native grass mulch will be applied at a rate of at least two tons/acre and stabilized by crimping. Long stem mulch is preferred over shorter materials. The mulch will be weed free and contain a minimum of viable seeds associated with the mulch source (e.g., barley or wheat seeds).

2. Vegetation Success Standards and Success Monitoring

a. Canopy Cover

The numerical standard for plant canopy cover and species diversity shall be at least 70% of the numerical combined average of the reference areas at 90% confidence level for native, perennial species for all reclamation of the Existing Unit (19.10.5.507.A NMAC) disturbed areas.

The numerical standard for plant canopy cover and species diversity shall be at least 90% of the numerical combined average of the reference areas at 90% confidence level for native, perennial species for all reclamation of the New Unit (19.10.5.508 NMAC) disturbed areas.

b. Species Diversity

Vegetation diversity will be assessed by the number and relative abundance of native, perennial species present. At minimum there will be two (2) warm season grass species and two (2) forb species, and one (1) shrub species. Based on the plant species composition and diversity present in the reference areas, alternate closeout actions, as determined by MMD, to allow for the establishment of a self-sustaining ecosystem, and/or-meet the requirements of reclamation defined under 19.10.1.7.R(1) NMAC, may require that the Permittee submit a request to modify or revise the Permit in accordance with 19.10.5.504.B and 19.10.5.505.B NMAC.

c. Revegetation Success Monitoring

Vegetation establishment monitoring of reseeded areas will be conducted during the third year after seeding, with the objective of determining the adequacy of reseeding efforts. The vegetation establishment monitoring shall be quantitative and the results shall be provided to MMD. Areas where vegetation has not been successfully established will be reseeded or interseeded. Alternate closeout actions, as determined by MMD, to allow for the establishment of a self-sustaining ecosystem, and/or-meet the requirements of reclamation defined under 19.10.1.7.R(1) NMAC, may require that the Permittee submit a request to modify or revise the Permit in accordance with 19.10.5.504.B and 19.10.5.505.B NMAC.

Revegetation monitoring will be performed at the sixth year after planting, and for at least two consecutive years of the last four years, starting after the eighth year of the twelve-year monitoring period. Revegetation monitoring will include, at a minimum, canopy cover and plant diversity. The revegetation monitoring shall be conducted to meet statistical adequacy for the monitoring conducted during the two of last four years prior to financial assurance release. The canopy cover and plant species diversity surveys shall be conducted using survey techniques approved by MMD. The Permittee shall follow the vegetation monitoring plan approved by MMD for the Socorro Mine and Mill. The vegetation monitoring plan shall be quantitative, using the same techniques for the reclamation area and the reference areas for each monitoring event and from year to year during the monitoring period. Any changes proposed to the approved vegetation monitoring plan shall be submitted to MMD for approval at least 90 days prior to a monitoring event. Proposed changes to the vegetation monitoring plan shall state the reasons for the proposed changes, how the proposed changes compare to the approved plan, and how the proposed changes will affect the statistical analysis for meeting the vegetation success criteria for financial assurance release.

B. **Seed Mix and Tree List**

The primary reclamation seed mix proposed for the Socorro Mine and Mill includes warm season grasses, forbs, and shrubs (Table 1). Alternative options for the seed mix are parry penstemon (*Penstemon parryi*) and desert honeysuckle (*Anisacanthus Nees*). The seed mix is designed for application prior to the summer rains and the seeding should be completed in early to mid-July. Alternative seed mixtures planned for application in a specific seeding season shall be submitted to MMD for review and approval with MMD prior to seed purchase. The species list will be included in the vegetation monitoring work plan and may be amended with MMD approval.

Table 1. Proposed species list for the seed mix

Species[a]	Life-form	Duration	Seasonality	Rate[ab]
Blue grama (*Bouteloua gracilis*)	Grass	Perennial	Warm	1.05
Black grama (*Bouteloua eriopoda*)	Grass	Perennial	Warm	0.32
Sideoats grama (*Bouteloua curtipendula*)	Grass	Perennial	Warm	3.79
Galleta grass (*Pleuraphis jamesii*)	Grass	Perennial	Warm	2.73
Purple three-awn (*Aristida purpurea*)	Grass	Perennial	Warm	2.31
Indian Ricegrass (*Achnatherum hymenoides*)	Grass	Perennial	Warm	6.15
Sand dropseed (*Sporobolus crytandrus*)	Grass	Perennial	Warm	0.11
Alkali sacaton (*Sporobolus airoides*)	Grass	Perennial	Warm	0.25
Palmer penstemon (*Penstemon palmeri*)	Forb	Perennial	NA	0.71
Desert senna (*Senna covesii*)	Forb	Perennial	NA	1.31
Desert marigold (*Baileya multiradiata*)	Forb	Perennial	NA	0.55
Desert globemallow (*Sphaeralcea ambigua*)	Forb	Perennial	NA	0.43
Fourwing saltbush (*Atriplex canescens*)	Shrub	Perennial	NA	4.17
Apache plume (*Fallugia paradoxa*)	Shrub	Perennial	NA	1.03
Winterfat (*Krascheninnikovia lanata*)	Shrub	Perennial	NA	1.18
Skunkbush sumac (*Rhus trilobata*)	Shrub	Perennial	NA	2.00
Total PLS (lbs/ac)				**25.36**

[a]Seed mix and rates are subject to change based on future investigations.

[b]Rate is in pounds of pure live seed (PLS) per acre; Substitutions may change seeding rates. NA = not applicable. ND= not determined.