Gila Mining, LLC
P.O. Box 444
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May 7, 2021

Ms. Jennifer Johnson
Reclamation Engineer, E.I.
New Mexico Energy, Minerals & Natural Resources Department
Mining and Minerals Division
1220 S. St. Francis Drive
Santa Fe, NM 87505

RE: Agency Review Comments and Request for Additional Information, Deming Alpha Mine New Minimal Impact Permit Application, Permit No. LU042MN – Luna County, New Mexico

Dear Ms. Johnson:

Enclosed please find Gila Mining's response to the "Agency Review Comments and Request for Additional Information, Deming Alpha Mine New Minimal Impact Permit Application, Permit No. LU042MN – Luna County, New Mexico". If any questions or concerns arise then please contact me at your earliest convenience.

Best regards,

E. Terry Jensen
Chief Operating Officer
Gila Mining, LLC

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RE: Agency Review Comments and Request for Additional Information, Deming Alpha Mine New Minimal Impact Permit Application, Permit No. LU042MN – Luna County, New Mexico

Dear Ms. Johnson:

The follow letter is a response to your April 19, 2021 New Mexico Mining and Minerals Division ("MMD") and collective state agencies comments letter to our Permit Application Package ("PAP"), for a minimal impact new mining operation permit, submitted by Gila Mining LLC ("Gila Mining"), under Subpart 3 of the New Mexico Mining Act Rules ("Rules"). The purpose for this permit request is to allow Gila Mining, LLC (Gila) to excavate reclaimed tailings for magnetite, silicates and other marketable commodities. Operations will consist of stripping and stockpiling the existing soil cover, excavating the tailings and hauling them to an adjacent loading facility for transport off-site. Your letter collectively contained the reviewing agency comment letters submitted by the following state agencies: New Mexico MMD, the New Mexico Environment Department ("NMED"), the New Mexico Department of Game and Fish ("NMDG&F"), the New Mexico Office of the Sate Engineer ("NMOSE"), the New Mexico Department of Cultural Affairs - Historic Preservation Division ("NMDCA/HPD"), and New Mexico State Forestry Division ("NMSFD").

In addition to State agencies, the Ysleta del Sur Pueblo, White Mountain Apache Tribe, and the Hopi Cultural Preservation Office have submitted comments for consideration.

Our letter below presents points of clarification and additional information as responses to agencies comments to Permit No. **LU042MN** PAP. Gila's response follows the same organizational order as your April 19, 2021 letter.

The **Agencies comments** are presented first in normal font (with the exception where the agency is quoting Gila in italic) and Gila's responses follow in italicized font:

1. Section 6 states "No fuel, oil, hydraulic fluid, lubricants and other petrochemicals will be stored on GILA's permitted area." During an inspection of the property on June 9, 2020 there was a diesel storage tank near the area designated on Figure 2 as the Tailings Container Loading Area. This diesel storage tank will need be moved so it will not fall within the proposed permit area.

Following MMD's inspection and upon Gila's request, the diesel storage tank was moved to the aggregate company's permitted area approximately six months ago. The storage tank in question is not owned by Gila.

2. Section 8.A.1 has described the excavation blocks as being both ~0.4 acres and ~0.6 acres. Please clarify the size of the excavation blocks.

The current excavation planned block size is approximately ~0.4 acres.

NMED Mining Environmental Compliance Section, Ground Water Quality Bureau Comments ("MECS")

In the background of NMED comments, NMED referred to the Peru Mill tailings stockpile as an "impoundment". An impoundment is an engineered enclosed structure employing embarkments retaining liquid saturated or near liquid saturated mining or milling wastes (i.e. tailings) (1). Gila fully recognizes the "impoundment" can be used as a "sack term" for stockpile however as NMED comments clearly indicate a concern for water, Gila believes it wise to eliminate any confusion cause by syntax. So, to clarify, there are no impoundments at the Peru Mill site and the stockpiled tailings have no perched water within its envelope and the tailings averages 8% moisture, thus making the tailings a relatively dry material. Also, the term "cap" has been used to describe the soil cover resting on and partially encapsulating the tailings. A "cap" implies a relatively impervious engineered cover. The soil cover over the tailings at Peru Mill readily allows water to percolate into the tailings, thus this soil cover is not a "cap". Gila apologizes for its sensitivity for terms but these terms have defined technical, environmental and legal meanings and potentially could cause misunderstandings in the future.

Gila advises that a stormwater management plan was not available or referenced even though surface water and stormwater ponds were constructed during the NM VRP mitigation event.

The MECS has the following comments:

1. **Section 7, Part A** requires the total dissolved solids (TDS) concentration in groundwater to be reported at the site. The applicant does not provide a total dissolved solids (TDS) concentration in mg/L, but reports a Specific Conductivity in µS/cm. Please provide the TDS if available.

The data supplied in the PAP came from the City of Deming, who currently own the four-site groundwater monitoring but did not install those wells. The water quality information was submitted to and accepted by NMED VRP. The following table is a modified table from Gila's PAP.

Well I.D.	Sampling Date	Depth to Water (fbtoc)	Total Depth (fbtoc)	Purge Volume (gallons)	Temp. (oC)	pH	Specific Conductivity (µS/cm)	TDS mg/L
MW-1	9/24/2020	143.28	172.2	15.0	2.1	7.69	391	215.05
MW-2	9/24/2020	136.68	168.0	16.0	23.0	7.56	387	212.85
MW-3	9/24/2020	148.63	164.5	8.0	22.9	7.64	397	218.35
MW-4	9/24/2020	124.36	153.4	15.0	24.4	7.50	825	453.75

The above table presents the conversation from specific conductivity (µS/cm) (SC) to TDS (mg/L) using the equation: TDS (mg/L) = k x SC(µS/cm), where the specific k value is based on specific SC ranges (2, 3, 4). In this case Gila used TDS/SC ratio or k of 0.55 for freshwater (4). It should be noted that it has been Gila's experience that most regulatory agencies accept EC as a conservative measurement of TDS and do not expect the regulated to spend the additional cost for a laboratory TDS.

In addition, it should be noted that only one of the four groundwater monitoring wells on-site is registered with the State Engineer's office. This well, MW3 or NMOSE *ID. M-527, was installed by Barite of*

America in 1981 north of the south stockpile and in the middle of what was the old Peru Mill location. These groundwater monitoring wells represent contractual compliance for water quality beneath the Peru Mill Property and the well construction should have been filed with NMOSE.

2. **Section 8, Part A.1** states "*the engineered soil cover material currently on the impoundments will be systematically salvaged (first the gravel, then the compacted soil) and stockpiled separately for later reclamation purposes."* Discriminating between the cover system and tailings may be difficult. It is likely the two materials will be comingled where they interface. Please provide a material handling plan that will be used to ensure that no tailing is comingled with the cover material.

Gila fully realizes the potential comingling of cover soils and tailings. The cover will be removed with a scraper bucket (no digging teeth). Gila will supervise closely the removal of the cover to minimize the comingling. Consider that the Gila goal is to sell the tailings, and as such, Gila would do its best to eliminate any loss of the product. However, Gila also understands the environmental concerns. Gila discovered during the April 2020 assessment that in most of the soil boring locations there was no clear visible strata to distinguish between the soil cover and the tailings. Under microscopic inspection there appeared to be a significant percentage of fine-sand/silt (potentially windblown sand & silt) mixed with the uppermost foot of tailings, indicating comingling has already occurred. Nonetheless, Gila's total metal analyses indicate the lead, zinc and arsenic concentrations in the mixture directly below the cover is substantially below the NMED VRP and the Hazardous Waste Bureau soil screening levels of 1,000 mg/kg for lead; 23,000 mg/kg for zinc; and 70 mg/kg for arsenic. New Mexico Soil Screening Guidance (NMSSG) for lead and zinc are for industrial use properties. Arsenic levels were developed from a site-specific risk assessment in 2002. Gila has consulted the NMED Risk Assessment Guidance for Site Investigation and Remediation document, specifically Volume I Soil Screening Guidance for Human Health Risk Assessments, for any changes in the NMSSG. Gila identifies this mining project as "Industrial/Occupational", for which the values of lead, zinc and arsenic are: 800 mg/kg; 389,000 mg/kg; and 35.9 mg/kg; respectively. Gila chose the more conservative cancer risk value for arsenic, though there is no indication the arsenic compounds/minerals are potential carcinogenic. These concentrations define the level for "clean soils" at the Peru Mill Property and for future reclamation. Gila will visually inspect all soils for tailings comingling and analytically test to verify that the lead, zinc and/or arsenic do not exceed NMSSG. If these soils exceed these soil screening levels, then these soils will be appropriately containerized and disposed of following State and Federal guidelines.

For the record, Gila discovered, from its analyses of the tailings, the average lead, zinc and arsenic are 608 mg/kg, 6201 mg/kg and 30.3 mg/kg, respectively, from a statistical population of 173 samples. As expected, the tailings are not homogeneous, with demonstrated concentration variations at various depths. However, there was no increase of lead, zinc and/or arsenic concentrations with depth. This is due to the lack of water as a mobilizing agent. The reported pan evaporation of 9 feet per year or net lake evaporation rate of 5 to 6 feet per year eliminates water mobilizing possible toxic elements (6, 7). Furthermore, a mining engineer, who began his career at the Peru Mine, indicated there were never true water impoundment ponds at Peru Mill during his 18-year tenure. More importantly, sample and analyses results from samples collected 3 feet and 6 feet beneath each tailings stockpile resulted in the concentrations of lead, zinc and arsenic substantially below the NMSSG screening levels and in most cases were approaching or at background levels. This is evidence indicating the contaminant impact to the soils beneath the stockpiles is minimal at worst for the near 90 years of the tailing's residence on the soils and reclamation impacts will be minimal.

3. **Section 8, Part A.1** states that "before starting any excavation event(s), GM will consult weather forecasting so there will be a minimum of a 48-hour window of no precipitation predicted. The highest precipitation events occur during New Mexico's summer "monsoons" while the remaining months (November through May) average less than 0.5 inches per month in southern New Mexico". While rainfall between November and May is associated with regional storm systems and may be more predictable, the monsoon rainfall during the summer months is difficult to forecast. Besides producing intense rain events, the summer monsoons also produce high winds, and high wind events

can occur at any time of year. The applicant indicates that berms will be constructed to contain stormwater and wind-blown tailing during excavation, but there are no other stormwater management strategies discussed that will protect the exposed tailing during a precipitation event. Please include a discussion of how exposed tailing will be managed in the event of a precipitation or high wind event (i.e., temporarily covered or other method).

As stated in previous permitting correspondence, Gila must sell a dry commodity, so it is incumbent on Gila to protect the excavation and its product from unnecessary moisture. Gila's operations plan describes the maximum planned excavation area during operations is 0.4 acres and during wet months, the excavation area is reduced to less than 0.2 acres. Gila will place a temporary cover over the excavation area before precipitation events and the cover will be stored to the side of the excavation and designed for rapid deployment in case of the unexpected significant rainfall event.

Gila is and will remain sensitive at all times to weather conditions at the site. To emphasize that sensitivity, Gila plans to setup a weather station that will collect temperature, atmospheric moisture, barometric pressure, wind speed and precipitation data. These data, along with the daily monitoring of publicly available weather forecasting, will be used to monitor climatic conditions at the site. As MECS is aware, the terrain is flat with an unobstructed 25-mile radius view. This view gives Gila significant time to see oncoming storms from any direction and take appropriate, timely action.

4. **Section 8, Part A.1** states "*small retention ponds will be constructed at the bottom of exposed tailing blocks to capture any tailing sediment that may migrate during precipitation events. These retention ponds will be excavated into native soil and will be inspected regularly."* All stormwater retention pond(s) will need to be synthetically lined to prevent any discharges to groundwater or surface water and sized appropriately to ensure no overtopping and surface discharges. Please provide a plan for periodically removing any solids accumulated in the pond during operations and at closure.

Per Section 3 above, the excavation area will be covered. The cover will follow the slope of the excavation which will be sloped downward to the north. Precipitation (clean water) will be guided from the cover by a synthetically lined berm [retention sump. Pneumatic "trash" pump(s) will be placed in the bottom of the sump. The precipitation (clean water) entering the sump will be pumped to one of two 40,000 open top fracking tanks. The hundred-year storm for Luna County is calculated at 3.5 inches over a 24-hour period time (9). It should be noted historically this has never happened in Luna County. The most intense 24-hour precipitation event was 2.21 inches in 1957(9). A 40,000-gallon tank represents the capacity of one storm thus Gila will have two tanks in case of storms that occur back-to-back. The water in the open tanks will be allowed to evaporate and considering the above referenced that the net lake evaporation rate (gross annual evaporation rate-annual average precipitation = lake evaporation rate) for Deming area is 60 to 72 inches, the water should evaporate quickly (9). It should be noted this evaporation rate exceeds the soils percolation rate (7, 8, 9).
Better to say: The NOAA Atlas 14, Volume 1, Version 5 100-year, 24-hour precipitation event for the Peru Mill area is 3.5 inches of rain. Based on this, Gila will implement a stormwater container for 38,016 gallons of capacity, representing 3.5 inches of rain falling on 0.4 acres of disturbed stockpile. The stormwater container will consist of either a lined pond or a FRP tank. In both cases, the water will be segregated from the soil.

5. **Section 8, Part A.1** states "*excavation activities will be entered from the west side of the stockpile so surface damage such as rutting will not occur."* It is unclear to MECS why entering the tailing impoundment from the west side exclusively would eliminate surface damage. Please provide additional discussion on site access.

Gila's goal is to have all mobile equipment move in one circular direction. This single direction concept employed in many mines is used as a safety and dust control measure, and Gila includes those goals to

minimize future reclamation activities to only the road system.

6. **Section 8, Part A.1** states **"***GILA commits to cessation of operations during heavy rain and high-wind events."* The applicant must specifically define the high rain and high-wind thresholds that would trigger cessation of operations.

Dr. Dave Debois, NMSU, who is the state weatherman shared the following information:

- *In Luna County, only 44 days out 365 days are considered "rainy days"(9).*
- *Highest recorded rainfall 24-hour event was 2.21 inches in recorded in 1957(9).*
- *The theorical 100-storm event is 3.5 inches in 24-hours (9).*
- *The water from the 100-storm event will would evaporate with no net recharge to the interior of the Mimbres Basin (9).*
- *The highest wind averages in Deming occur between early February to late June averaging just over 9 mph with April being the windiest with an average of 11.7 miles per hour.*
- *The wind is most often from the* east *for* 2.7 months*, from early* July *to the end of* September*, with a peak percentage of* 40% *on* September 2*. For the remaining 9.3 months the wind is most often from the* west *with a peak percentage of* 39% *on* January 1 (10)*.*
- *Not data was identified for high-thresholds in Deming or Luna County.*

The follow operation's triggers are what is considered high for sustained winds and instantaneous gusts. Gila will stop operations if the forecast for that day includes sustained wind speeds in excess of 40 mph and/or instantaneous gusts of 58 mph. In addition, operations will stop if the on-site weather station records wind speeds exceeding speeds of 40 mph for more than one hour and/or instantaneous gusts of 58 mph that continue to occur for more than one hour (11).

As MECS is aware forecasting the intensity of the summer precipitation events is variable and challenging. If weather forecasting is indicating showers of 0.5 inch or greater then Gila will be on alert to cover the stockpile excavation.

7. **Section 8, Part A.2** states "*GILA will initially excavate and load the tailings into 40' sea containers for transport. As our system evolves, GILA will load tailings directly into rail cars at the new rail spur immediately east of the Peru Hill Mill gate."* Please explain if the new rail spur is within the permitted boundary.

The northeast corner includes the proposed loading area as illustrated by the revised attached Figure 2.

8. **Section 8, Part A.2** states "*the tailings will be dumped into a single deck vibrating screen which load a hopper. From the April 2020 sampling event, it was learned from the 160 samples the tailing grain is universally less than 1.0 mm. The vibrating screen purpose is to capture errant cover material that may have accidently been mixed with the tailings. The material captured by the screen is neither a tailing nor a waste. The captured cover material will be transported to the cover stockpile for reuse when the engineered cover is returned to the excavation area."* Commingled tailing and cover material cannot be used as part of the cover system. It is unclear how screening will effectively segregate tailing and cover materials, nor is it clear what size screen will be used. Please provide a material handling plan (see Comment No. 2 above) that ensures that tailing will not be commingled with cover. If tailing is commingled with cover, this material will need to be disposed of in a manner that is protective of the environment. Please include a discussion of how commingled material will be handled and disposed of in a manner that is protective of groundwater and surface water.

As indicated in Gila's response in Section 2, it is to Gila's economic benefit to minimize comingling of tailings and soil. Gila will test all soils where commingling has occurred and if the soils exceed the NMSSG values identified in Section 3 then these soils will be appropriately containerized and disposed of or processed following State and Federal guidelines.

9. **Section 8, Part A.3** states "*all equipment working within the excavation and loading areas will be washed before leaving the site".* Please describe how truck wash water and sediment from truck washing that likely contains tailing will be managed. Also, please discuss where equipment used to excavate and transport tailing will be maintained during non-working hours to ensure no tailing material is tracked outside of the footprint of the exposed tailing area.

The site will be organized into two sections: Operations Area and Administrative Area. The operations area will include the excavation, haul road and loading area. The operations area will be managed as an exclusion zone where only authorized vehicles and personnel will be allowed. The administrative area will include security trailer, office trailer, showers trailer and first aid trailer. At the egress/degress point Gila will create a vehicle decontamination station for vehicles entering the excavation area. This decontamination station will be constructed of synthetic material and it will be bermed to capture any wash water used during the decontamination process. Water generated during this process will be segregated and contained to eliminate any contact with soil and prevent any possibility of mixing with surface water or groundwater.

10. **Section 9, Part I** states "*the seed will be broadcast to preserve the furrows to maximize seed and moisture retention".* Please address if any of the seed will be drilled and if the mulch will be crimped in place.

Gila will follow the same procedures practiced by NMVRP, NMDG&F, NMSFD *and MMMD which does not require drilled seeding procedure or mulch crimped in place.*

<u>Watershed Protection Section Surface Water Quality Bureau (SWQB) Comments:</u>
NMED SWQB listed their comments as a recommendation and two bullets. GILA comment responses follow each comment point.

The SWQB recommends developing a Stormwater Protection Plan (SWPP) to prevent off-site migration of tailings, or impacted stormwater.

Gila is currently drafting SWPP. This will complete upon MECS's blessing on our handling of clean precipitation.

The following best management practices are recommended to protect surface water quality.

- Fuel, oil, hydraulic fluid, lubricants, and other petrochemicals must have a secondary containment system to prevent spills.

As indicated in Gila's response to NMMMD. fuel, oil, hydraulic fluid, lubricants, and other petrochemicals will not be stored on the permitted area. These chemicals will be contained in a DE's support vehicle. Where appropriate during excavation operations, if any of these liquids in their primary containment vessel are required to be removed from the support vehicle containment then they will be placed on heavy gauge plastic with a containment berm.

- Appropriate spill clean-up materials such as absorbent pads must be available on-site at all times during road construction, site preparations, drilling and reclamation to address potential spills.

Gila will require the DE to have the appropriate spill clean-up material on-site in their support vehicle for all phases of this exploration drill project. For the record, Gila will report any uncontrolled release to NMED following the requirements set by the New Mexico Water Quality Control Commission regulations (20.6.2.1203 NMAC).

NMED Air Quality Bureau Comments:

The follow are NMED Air Quality Bureau comments.

Paragraph (1) of Subsection A of 20.2.72.200 NMAC, *Application for Construction, Modification, NSPS, and NESHAP - Permits and Revisions*, states that air quality permits must be obtained by:

"Any person constructing a stationary source which has a potential emission rate greater than 10 pounds per hour or 25 tons per year of any regulated air contaminant for which there is a National or New Mexico Ambient Air Quality Standard. If the specified threshold in this subsection is exceeded for any one regulated air contaminant, all regulated air contaminants with National or New Mexico Ambient Air Quality Standards emitted are subject to permit review."

Further, Paragraph (3) of this subsection states that air quality permits must be obtained by:

"Any person constructing or modifying any source or installing any equipment which is subject to 20.2.77 NMAC, *New Source Performance Standards*, 20.2.78 NMAC, *Emission Standards for Hazardous Air Pollutants*, or any other New Mexico Air Quality Control Regulation which contains emission limitations for any regulated air contaminant."

Also, Paragraph (1) of Subsection A of 20.2.73.200 NMAC, *Notice of Intent*, states that:

"Any owner or operator intending to construct a new stationary source which has a potential emission rate greater than 10 tons per year of any regulated air contaminant or 1 ton per year of lead shall file a notice of intent with the department."

The above is not intended to be an exhaustive list of all requirements that could apply. The applicant should be aware that this evaluation does not supersede the requirements of any current federal or state air quality requirement.

As the PAP indicates no permanent and/or stationary structures/ equipment will be placed on the tailings pile, in the building or permit area. If that condition changes, then Gila will acquire the appropriate air permit.

Fugitive Dust

Air emissions from this project should be evaluated to determine if an air quality permit is required pursuant to 20.2.72.200.A NMAC (e.g. 10 lb/hour or 25 TPY). Fugitive dust is a common problem at mining sites and this project will temporarily impact air quality as a result of these emissions. However, with the

appropriate dust control measures in place, the increased levels should be minimal. Disturbed surface areas, within and adjacent to the project area, should be reclaimed to avoid long-term problems with erosion and fugitive dust. EPA's *Compilation of Air Pollutant Emission Factors, AP-42, "Miscellaneous Sources"* lists a variety of control strategies that can be included in a comprehensive facility dust control plan. A few possible control strategies are listed below:

Paved roads: covering of loads in trucks to eliminate truck spillage, paving of access areas to sites, vacuum sweeping, water flushing, and broom sweeping and flushing.
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Material handling: wind speed reduction and wet suppression, including watering and application of surfactants (wet suppression should not confound track out problems).

Bulldozing: wet suppression of materials to "optimum moisture" for compaction. Scraping: wet suppression of scraper travel routes.
Storage piles: enclosure or covering of piles, application of surfactants.

Miscellaneous fugitive dust sources: watering, application of surfactants or reduction of surface wind speed with windbreaks or source enclosures.

Fugitive dust is expected to be minimal, thus not a significant issue during this very short-term excavation event. From our drilling, GILA discovered the tailings have an approximate moisture content of 8% ± 4%. Dust is not expected to be an issue due to the in-situ moisture content and the very limited time during which the excavation will occur. Also, the haul distance to the loading area is 90 feet. This short distances and GILA will enforce a truck speed limit of 15 mph during the tailing's transportation. If additional dust control measures are found to be necessary, such as surfactants or watering the haulage road, then appropriate measures will be implemented.

Recommendation

The AQB has no objection to this request for mining.

State Of New Mexico Department of Game & Fish Comments:
The New Mexico Department of Game and Fish (Department) provided the following comments

Several active banner-tailed kangaroo rat *(Dipodomys spectabilis)* burrow complexes had been observed within the mill tailings reclamation area during a previous site inspection. The Department reiterates comments from a letter submitted to MMD on 16 September 2019, that Gila trap and relocate kangaroo rats into appropriate undisturbed habitat prior to mining activities that will result in the destruction of occupied burrow complexes.

The permit application does not address how Gila will mitigate and control the spread of noxious weeds within the permit area. The invasive noxious weed African rue *(Peganum harmala)* has been observed within the project area and on the mill tailings reclamation site. African rue thrives on disturbed sites and along road sides. It is extremely drought-tolerant and will undergo rapid

vegetative growth when soil moisture is available. African rue is extremely toxic to horses, sheep, cattle and humans, containing at least four types of poisonous alkaloids. In order to help control its spread, the Department recommends that any vehicles and equipment arriving on site be thoroughly cleaned of all visible dirt and mud in a manner that will help contain and control the potential spread of weed seeds. The operator should also initiate a weed monitoring program that includes a commitment to aggressive control of African rue, and any other noxious weeds identified on the site.

Following 16 September 2019 inspection, Gila has been very aware of the banner-tailed kangaroo rat and African rue. Gila has spent time researching the living habits of the kangaroo rat and the necessary controls for the African rue. Before the April 2020 drilling event, Gila inspected all pathways the drill rigs were proposed to travel. That inspection only observed abandoned burrow mounds. Gila identified locations with the African rue and the plants will be destroyed. Before beginning any excavation activities, Gila will conduct a thorough inspection of each excavation area weeks before operations begin. If active burrows are discovered, then the kangaroo rat(s) will be humanely relocated. It should be noted that there are active burrows west of the tailing's stockpiles. What is interesting is their burrowing has unearthed tailings that were not recovered and moved by NMED VRP mitigation activities. Gila will sample and map these areas where tailings were missed by NMED and had mixed with windblown sands and share this information with the City of Deming.

In regards to the African rue, this plant and flowers should be easier to identify as we enter the wet season. Also, the plant's seed pods are very distinctive. Any African rue that is identified within or along the margins of the excavation areas will be painted red. During excavation these plants will be removed and burned. As part of Gila's decontamination process, any equipment entering or leaving the site will be inspected for African rue and decontaminated where necessary.

New Mexico State Forestry Division

The Department provided the additional comment:
The reclamation seed mix does not include any native cool season grasses. The Department recommends that Gila include the cool season grasses; bottlebrush squirreltail *(Elymus elymoides)* and western wheatgrass *(Agropyron smithii)* to the seed mix. The Department also recommends that the seed mix and mulch be certified weed-free, and that seed test results are requested from the vendor to avoid inadvertently introducing non-native species to the reclamation site. Any alternate seeds used to substitute for primary plant species that are unavailable at the time of reclamation should also be native. When possible, seeds that are sourced from the same region and habitat type as the reclamation site should also be used.

Gila has worked closely with NMMMD in finding and employing an appropriate and approved seed mixture for the Mimbres Basin and Luna County during previous reclamation activities following the drilling event. A number of timing obstacles were discovered post drilling making it difficult to acquire the correct mixture. This may have been Covid 19 related. Gila will begin its search for the seed mixtures now which include cool season grasses; bottlebrush squirreltail (Elymus elymoides) and western wheatgrass (Agropyron smithii). If we need additional guidance then we will reach out to NMSFD for additional guidance.

New Mexico Office of the State Engineer Hydrology Bureau (NMOSE) Comments:

The NMOSE indicated the applicant should contact the District III Office immediately if groundwater is encountered.

Surface and ground water are not expected to be intersected or impacted during Gila's excavation event. If in the very unlikely event perched groundwater is discovered within the tailings stockpile then excavation activities will be terminated. The depth of the perched water will be logged and the excavation will be covered appropriately.

NMDCA/HPD Comments:
NMCA/HPD concern was the Site becoming a historical site. GILA's response to that concern follows.

As indicated, Peru Mill site is not on the National Register of Historic Places or the State Register of Cultural Properties. There is no known cemetery or (human) burial ground located in the proximity of the Peru Mill Tailings Pile. Three buildings are located adjacent to the tailings pile; City of Deming municipal well pump building, inoperative weigh station building and a steel sided building measuring approximately 130 feet x 31 feet by 40 feet high. The steel sided building was part of the Peru Mill. Currently the steel building is empty with no operating equipment stored inside the building and offers no historic significance. This building will be used for storage; no major modifications will be done to the building. The only structure of any historical significance is the water tower located on the northern perimeter of the permitted area. At this time Gila has no plans of utilizing the water tower. If, however, Gila decides to use the water tower and needs to do any changes then Gila submit architectural drawings to NMCA/HPD *defining the changes to the tower for approval. It should be noted that all other historically relevant buildings were demolished by 2009 during NMED VRP mitigative action.*

Ysleta del Sur Pueblo, White Mountain Apache Tribe, and the Hopi Cultural Preservation Office

Each tribal organization has determined there is no adverse effect on the tribe's cultural heritage resources and/or historic properties. It is highly unlikely anything will be found that affect traditional, religious or of culturally significant to each of these Tribes. If by chance any human remains or artifacts are unearthed, then the State of New Mexico and the Tribes will be immediately informed of this discovery and respectfully not handled.

New Mexico Energy, Minerals, and Natural Resources Department
The comment excludes the necessity of an archaeological survey.

If additional comments or concerns arise from this letter's responses then please do not hesitate in reaching out so Gila can respond. As stated, Gila looks forward to a positive working relationship with the State of New Mexico.

Best regards,

E. Terry Jensen
Chief Operating Officer
Gila Mining, LLC

Attachments:
References
Figure 2: Peru Mill Surface Operations Impact Map

ATTACHMENTS

Reference:

1. MSHA: https://www.msha.gov/training-education/safety-and-health-materials/safety-topic-impoundments-and-dams

2. Brown, E, Skougstad, M. and Fishman, M., 1960*, Methods for collection and analysis of water samples* USGS Water-Supply Pap. 1454

3. Hem, J. D., 1985, *Study and Interpretation the Chemical of Natural of Characteristics Natural Water* 3rdedition USGS Water Supply Paper 225466-69 US Govt Printing Office Washington DC.

4. Rusydi, A. F., 2017, *Correlation between conductivity and total dissolved solid in various type of water: A review,* Global Colloquium on GeoSciences and Engineering 2017 and IOP Conf. Series: Earth and Environmental Science 118 (2018).

5. Walton, N. R. G., 1989, *Electrical Conductivity and total dissolved solids*—What is their precise relationship? Desalination 72275–292

6. Personal communication, 04/29/2021, Mr. Jack Burgess. Mining engineer

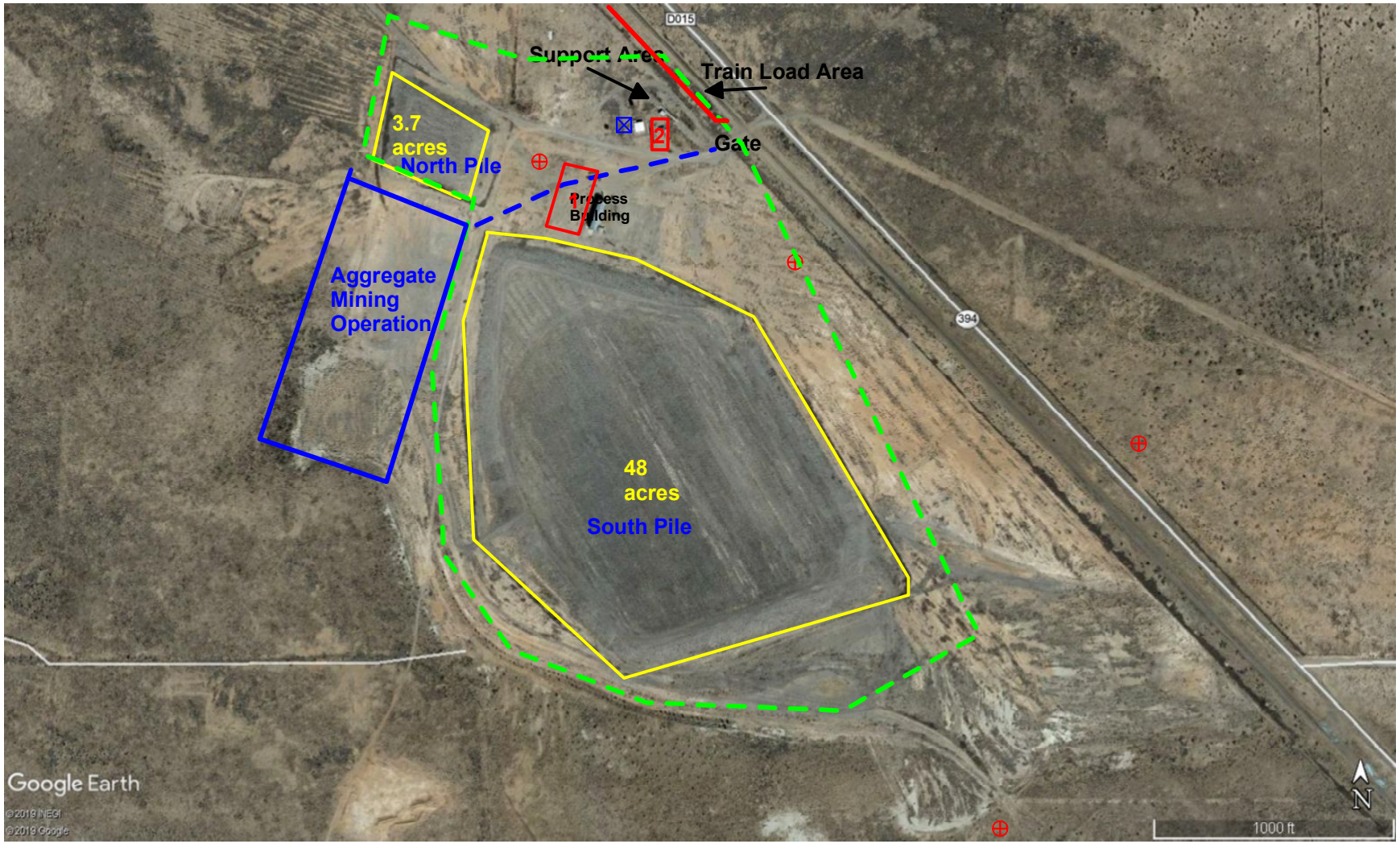
7. R.T. Hanson, J.S. McLean, and R.S. Mill, 1994, *Hydrogeologic Framework And Preliminary Simulation Of Ground-Water Flow In The Mimbres Basin, Southwestern New Mexico,* Water-Resources Investigations Report 94-4011, U.S. Geological Survey.

8. Cuddy, A.S. and Keyes, E., 2011, *Groundwater Model Of The Mimbres Basin, Luna, Grant, Sierra And Doña Ana Counties, New Mexico,* New Mexico Office of the State Engineer Hydrology Bureau Technical Report 11-1

9. Personal communication, 04/29/2021, Dr. David DeBois, NMSU.

10. Deming Weather: https://weatherspark.com/y/3189/Average-Weather-in-Deming-New-Mexico-United-States-Year-Round

11. Wind speeds: https://www.weather.gov/abq/features_highwind



Permited Excavation & Reclamation Area

Operations Area (~90 acres)

Municipal Well

Groundwater Monitoring Well

Aggregate Access Road

1 Tailings Container Loading Area ~ 1.0 acres

2 Office Area ~ 0.15 acre

Scale

Project No.:2020-1 Date: January 2021 Drawn by: ETJ Reviewed by: RSG & SPF	Project: Peru Mill Tailings *Gila Mining, LLC*	Operations Permit	**Figure 2** Surface Operations Impact Map

Johnson, Jennifer E, EMNRD

From: tjensen@g3inc.ca
Sent: Friday, May 14, 2021 10:44 AM
To: Johnson, Jennifer E, EMNRD
Cc: 'Shawn Findlan'; 'Rosemary Niechcial'
Subject: RE: [EXT] Response to Agency Review Comments and Request for Additional Information, Deming Alpha Mine New Minimal Impact Permit Application, Permit No. LU042MN

Jennifer:
Thank you for catching the night-blooming cereus issue. Not stated in your response but we planning and actually currently being done is the surveying (physically walking the area) the proposed mining area for the African Rue and the night-blooming cereus. I have spoken with Ms. Roth regarding our proposed mining activities. If the night-blooming cereus is discovered on the cover then the plan is to transplant the plant to a safe location and cultivate until healthy. Please remember we will be doing the excavations in <0.4 acre areas. The surveying will be done on a continuous base throughout the life of project.

It should be noted that we have done an initial survey and did not find the plant. However we did find the African rue.

Finally, on the request from Ms. Roth I have taken some pictures of the site. I will send her those pictures with a request for additional guidance for transplanting if the night-blooming cereus is discovered. I will copy you in the email.

Regards,
E. Terry Jensen, PG
Principal Consultant
G3 - Gauvreau GeoEnvironmental Group Inc.
420 Westview Drive
Sudbury, Ontario P3C 3M5
Office: 1-705-682-3333
Cell: 1-519-635-0160 Email: tjensen@g3inc.ca

From: Johnson, Jennifer E, EMNRD <JenniferE.Johnson@state.nm.us>
Sent: Thursday, May 13, 2021 3:24 PM
To: tjensen@g3inc.ca
Cc: 'Shawn Findlan' <shawn@ccexgroup.com>; 'Rosemary Niechcial' <rniechcial@waypointinfrastructure.com>
Subject: RE: [EXT] Response to Agency Review Comments and Request for Additional Information, Deming Alpha Mine New Minimal Impact Permit Application, Permit No. LU042MN

Hi Terry,

I was looking over Gila Mining's response to comments and I do have one question. Did you answer the comment from the New Mexico State Forestry Division about the night-blooming cereus? I apologize if you did, and I am just overlooking it in the document. Please provide me a response to State Forestry's night-blooming cereus comment if it is missing or direct me to where it is addressed in your letter? Just to clarify, the comment you responded to about the cool season grass was from Game & Fish and not State Forestry. Please let me know if you have any questions.

Thanks,

Jenn Johnson
Reclamation Engineer, EI