

EXHIBIT D
MINING PLAN

2.0 MINING PLAN

This update to the Mining Plan as Technical Revision 12 addresses DRMS request for clarification from an Inspection Report following an inspection on March 12, 2024. A particular focus was to facilitate a review of the Financial Warranty. The DRMS indicated in the Inspection Report that the detail in the Mining and Reclamation Plans (Exhibits D and E) as to the maximum disturbance or what exactly is the worst-case scenario is somewhat ambiguous.

American Gypsum acknowledges the general progression in the Mining and Reclamation Plans required additional explanation, but in general, the mining and reclamation plans remain unchanged from previous approved Amendments and Revisions. The edits to this Exhibit reflect an effort to consolidate previous changes into a single document.

Unless otherwise indicated, the maps from TR10 and AM04 are included and referenced in this Technical Revision. References to “Figure(s)” are the maps mostly addressing the Lower Pit from TR10. References to “Drawing(s)” are the maps mostly addressing the Upper and East Pits from AM04.

The proposed Revision would be a continuation of current mining operations. According to existing permits, the existing Lower (West) Pit will be mined within the approved boundary of the 2020 permit (BLM, 2021; CO DRMS TR10, 2017, CO DRMS AM04, 2020), to an estimated Lower Pit floor elevation of 6600 feet amsl. According to existing permits, the existing Upper Pit will be mined within the approved boundary of the 2002 permit (BLM, 2002; CO DRMS, 2001), to an estimated Upper Pit floor elevation of 6900 feet amsl. The existing Mine Office would remain in its current location north of the Lower Pit, along with the existing equipment laydown yards and parking lots (shown on Drawing 01).

Operations relocated from the Upper Pit back to the Lower Pit in late 2020 and have continued in the Lower Pit to the present. Operations are intended to complete the extraction of material from the Lower Pit to the 6600 feet level at approximately the end of 2025, when they will transfer back to the Upper Pit.

The Upper Pit footprint would be expanded to a pit floor elevation of 6760 feet amsl, with 1H:1V pit face slopes and 10-foot wide flat benches constructed every 40 vertical feet of development. To accommodate the lower pit extents, a portion of the Upper Pit 6900 Access Road (BLM, 2019; CO DRMS, 2019a) would be mined out and the road alignment would be modified by constructing a new road northeast of the Upper Pit 6900 Access Road. Once the Upper Pit floor reaches an elevation of 6760 feet amsl, the pit configuration would be modified to increase the pit depth without impacting the overall footprint. This would create interior benches to an ultimate pit floor elevation of 6560 feet amsl as shown on Drawings 06 and 07.

Before the Upper Pit is exhausted, American Gypsum plans to develop a new area to the east of the Upper Pit (East Pit). Approximately 1.19 million cubic yards (2.1 million tons) of overburden would be removed from the East Pit area prior to reaching usable gypsum and used as construction material for the East Pit Access Road. This estimate is based on previous drill data and experience at the Lower Pit and Upper Pit. Existing site roads would be used to access the East Pit during initial overburden removal while the main East Pit Access Road is being constructed. The East Pit Access Road would be constructed through a partially-backfilled section of the Upper Pit to connect the East Pit to the modified Upper Pit 6900 Access Road (BLM, 2019; CO DRMS, 2019a). As the East Pit progresses to its ultimate planned elevation of 6900 feet amsl,

the East Pit Access Road within the East Pit footprint would be mined out to maintain the same elevation as the pit floor (Drawing 08).

Mining methods are anticipated to remain the same throughout the Upper Pit and East Pit development. Intraburden removed during Upper Pit mining activities would be used as backfill material for progressive reclamation activities in the Lower and Upper Pits. Overburden and intraburden removed from the East Pit area would be used to construct the East Pit Access Road and as backfill material for progressive reclamation activities in the Upper Pit and East Pit.

Production capacity from the Mine is estimated to continue at a nominal rate of 500,000 tons of gypsum shipped to the wallboard plant per year, with a maximum of 600,000 tpy. This mining rate results in approximately 80 to 100 trucks per day traveling from the Mine to the wallboard plant.

2.1 Commodity

The primary commodity is gypsum. There is no secondary commodity.

2.2 Scope of Operation

The proposed mining activities would consist of the following:

Road construction (Drawings 06 and 16):

Remove a portion of the Upper Pit 6900 Access Road (BLM, 2019; CO DRMS, 2019a) to accommodate the Upper Pit expanded footprint, including constructing an interior pit road to access lower benches of the Upper Pit;

Construct a new section of road from approximate elevation 6946 feet amsl on the Upper Pit 6900 Access Road to an Upper Pit elevation of 6958 amsl feet. This would include demolishing the riprap collar on the 30-inch culvert inlet proposed as part of the Upper Pit 6900 Access Road (BLM, 2019; CO DRMS, 2019a), installing a new 230-foot long section of 30-inch culvert where the proposed road fill crosses an existing drainage to create a continuous 30-inch culvert. The riprap apron at the culvert outlet (BLM, 2019; CO DRMS, 2019a) would remain intact throughout the culvert's operational life;

Construct a new road through the partially reclaimed northern section of the Upper Pit;

Construct a new road across the existing intraburden storage area and on native ground to the East Pit. This would include constructing a new 130-foot long 24-inch diameter culvert, riprap collar (inlet), and riprap apron (outlet) where the road fill crosses an existing drainage. Drawing 10 shows culvert details;

Abandon, regrade, and reclaim as much of the original haul road and Upper Pit 6900 Access Road (BLM, 2019; CO DRMS, 2019a) as possible throughout operations (although there will likely be a short period of time where all three roads would be in use at the same time); and

Throughout road construction and operation, following Best Management Practices (BMPs) for fill slopes to stabilize surface soils and reduce erosion potential. BMPs may include revegetating or installing erosion protection measures (straw wattles, silt fence, hay bales). Appropriate erosion protection would be determined by conditions encountered during operations.

Open pit mining activities (Drawings 06 through 09):

Complete extraction of the Lower Pit.

The Lower Pit would be excavated to an anticipated pit floor elevation of 6600 feet amsl as described in Technical Revision 10 (Figure 4); and

Excavate the Upper Pit within the approved boundary from the 2020 permit (BLM, 2021; CO DRMS, 2020). The maximum pit footprint would be excavated to a pit floor elevation of approximately 6760 feet amsl. If additional gypsum is present in the pit footprint and groundwater is not encountered (identified through additional drilling), interior benches would be constructed to bring the pit floor elevation to approximately 6560 feet amsl. Drilling permits (including drill hole plugging and reclamation) would be obtained prior to drilling and drill holes would be plugged in a manner appropriate to water

conditions encountered during drilling. Potential drilling areas are identified on Drawing 06; and

Develop the new East Pit, including removing an average overburden depth of 20 feet.

The East Pit would be excavated to an anticipated pit floor elevation of 6900 feet amsl as shown on Drawings 08 and 09. Additional drilling may be required to further explore the gypsum depth (potential drilling areas shown on Drawing 08). Drilling permits (including drill hole plugging and reclamation) would be obtained prior to drilling and drill holes would be plugged in a manner appropriate to water conditions encountered during drilling.

Material hauling:

Haul gypsum to American Gypsum's wallboard plant or existing on-site stockpiles;

Haul overburden and intraburden to new road construction areas, on-site storage, or to inactive pit areas for progressive reclamation; and

Haul intraburden to in-pit storage areas (inactive areas of the pits) and maintaining stockpiles.

Progressive (or concurrent) reclamation (Drawings 06 and 08, Figure 1):

Backfill inactive pit areas with overburden and intraburden to 2.5H:1V overall slopes where possible.

Final reclamation (Drawings 11 through 13, TR-10 Figures 1-3):

Regrade any areas within the Lower, Upper Pit, East Pit, or access roads associated with the proposed disturbance area (listed above) to 2.5H:1V slopes or flatter, achieving 3.0H:1V where possible;

Remove culverts and associated riprap collars/aprons through road crossings, including excavating road fill to pre-construction topography to expose culverts, re-establishing natural drainages at pre-construction grades, and regrading remaining road fill to 2.5H:1V or shallower;

Install riprap or other erosion protection measures where necessary (such as re-established native drainage channels); and

Revegetate disturbed areas.

There is no change in disturbance associated with the proposed Revision.

2.3 Period of Operation

Mining in the Lower and Upper Pit is ongoing; based on current mining rates (approximately 500,000 tpy), mining in the Lower and Upper Pit can continue to support American Gypsum's wallboard plant needs for an additional 15 to 25 years (depending on the quality of gypsum encountered). For the East Pit, clearing and grubbing/overburden removal is anticipated to begin no sooner than 2030. The East Pit is expected to support mining activities for an additional 26 years (duration may vary depending on the quality of gypsum encountered).

2.4 Annual Operation

Mining is expected to take place year-round with periodic breaks not to exceed 4 days to accommodate holidays or poor weather conditions that may impact the ability to safely traffic mine access roads. The Mine typically hauls material 5 days per week (Monday through Friday) and typically operates from 6 a.m. to 5 p.m. Infrequently, the Mine operates on Saturdays, limited to hauling 4 Saturdays per year.

2.5 General Schedule of Operations

Table 2.1 illustrates the estimated schedule of operations.

TABLE 2.1: ESTIMATED SCHEDULE OF OPERATIONS

Phase	Activity	Mining Year ^[1]
Operational – Lower Pit (Permitted)	Active mining to the approved limits from the 2020 permit (BLM, 2021; CO DRMS TR10, 2017, CO DRMS AM04, 2020) Disturbed Area unchanged – Pit is developed to full extent	Year 1 to Year 8
Progressive Reclamation – Lower Pit	Placing intraburden/overburden in the Lower Pit, with a 3.0H:1V maximum slope	Year 1 to Year 8
Reclamation – Lower Pit (Full Footprint)	Placing intraburden/overburden in the Lower Pit with a 3.0H:1V maximum slope, covering with 6 to 12 inches of growth medium, and revegetating with a native seed mixture	Year 9 to Year 15
Operational – Upper Pit	Active mining to the approved limits from the 2020 permit (BLM, 2021; CO DRMS, 2020) to a pit floor elevation of 6760 feet amsl (maximum footprint extents), including using intraburden for progressive reclamation (3:H:1V maximum slope) Disturbed area increases by 15 acres from current.	Year 1 to Year 15
Operational – Upper Pit Interior Benches	Active mining of interior pit benches to a pit floor elevation of 6560 feet amsl (pending drilling confirmation/continuous gypsum at depths exceeding 6760 feet amsl), including using intraburden for progressive reclamation (2.5H:1V maximum slope) Disturbed Area unchanged – Pit is developed to full extent.	Year 15 to Year 25 ^[2]
Progressive Reclamation – Upper Pit	Placing intraburden/overburden in the Upper Pit, including forming the East Pit Access Road, with a 2.5H:1V maximum slope	Year 1 to Year 15 ^[2]
Reclamation – Upper Pit (Full Footprint, excluding active portion of East Pit Access Road)	Placing intraburden/overburden in the Upper Pit with a 2.5H:1V maximum slope, covering with 6 to 12 inches of growth medium, and revegetating with a native seed mixture	Year 16 to Year 26 ^[2]

Site Development – East Pit	Using existing roads to perform initial clearing and grubbing, stockpiling growth medium (if encountered during clearing and grubbing) within existing disturbance areas, removing overburden for haulage to the Upper Pit or East Pit Access Road Disturbed area increases by 20.2 acres.	Year 12 to Year 20
Operational – East Pit	Active mining to a pit floor elevation of 6900 feet amsl, including using intraburden for progressive reclamation (2.5H:1V slope) where possible and stockpiling intraburden within the East Pit for future reclamation regrading Disturbed area increases by 55.6 acres.	Year 20 to Year 41
Reclamation – East Pit	Regrading intraburden to an overall 2.5H:1V slope, covering with 6 to 12 inches of growth medium, and revegetating with a native seed mixture (includes portion of East Pit Access Road through the East	Year 41 to Year 42

Note: ^[1] Approximate timing estimated assuming Year 1 is 2019.

^[2] Remaining durations assume Upper Pit is operational for 15 years; though it may provide gypsum for a total of 25 years.

2.6 Roads and Utilities

2.6.1 Roads

The Upper Pit area is accessed using approximately 1.32 miles of existing access roads (starting at the Mine entrance location shown on Drawing 03). Roads were cleared of vegetation before construction. Juniper and pinion trees removed during vegetation clearing were stockpiled outside the construction area for use in future reclamation. Roads were constructed using cut-to-fill methods, with a 50-foot wide road to accommodate two lanes of traffic with safety berms and side drainage ditches. Culverts were installed where the road crossed drainages. Haul roads will be reclaimed as described in existing permits (CO DRMS, 2001; BLM, 2002).

The 1.32 miles of existing roads used to access the Upper Pit area includes approximately 0.06 miles of the approved Upper Pit 6900 Access Road (BLM, 2019; CO DRMS, 2019a). As the Upper Pit progresses past a pit floor elevation of 6900 feet amsl, a second road (approximately 0.08 miles long) would be constructed utilizing the partially reclaimed northern section of the Upper Pit and the southern section of the Upper Pit 6900 Access Road would be abandoned. As the Upper Pit depth increases, interior roads would be incorporated into the Upper Pit to continue accessing the lower portions of the Upper Pit. Drawing 16 shows the conceptual road configuration. Interior roads would be developed as the pit is developed and are not shown on the ultimate pit configuration shown on Drawings 06 and 07; the conceptual internal Upper Pit road configuration may be modified during operations but would be constructed within permitted disturbance areas.

The East Pit would also be accessed via approximately 1.32 miles of existing access roads, 0.8 miles of the new Upper Pit 6900 Access Road, extending east across the Upper Pit and existing intraburden storage, and approximately 0.2 miles of road within a new disturbance area before terminating at the East Pit. Another 0.28 miles of the new East Pit Access Road would be constructed within the East Pit footprint and would be removed as the East Pit is mined, leaving only 0.02 miles of the road within areas previously undisturbed (excluding the East Pit disturbance area).

All new roads would be 50 feet wide (including safety berms), with 1.5H:1V cut and fill slopes to tie into existing topography (using cut-to-fill methods where possible and utilizing inert intraburden for the remaining fill). Roads would have a maximum 8% longitudinal grade and would be graded with a high point in the center (crown) of the road (at 1.0%) so stormwater runs off the road. Culverts would be installed where the road fill crosses drainages (culvert details are shown on Drawing 10). Finished road fill slopes (that are not intended to see traffic) would be track-walked and revegetated immediately after construction or as soon as weather allows using an approved seed mixture.

The Upper Pit/East Pit Access Road construction would require approximately 536,000 cubic yards of cut and 1.415 million cubic yards of fill. An additional 163,000 cubic yards of material would be removed from the Upper Pit 6900 Access Road (BLM, 2019; CO DRMS, 2019a) to accommodate the increased Upper Pit footprint and used as fill material for road construction or backfill for progressive reclamation activities. The remaining 716,000 cubic yards of fill required

for road construction will consist of intraburden/overburden from the Upper Pit and East Pit development. Drawings 06 and 07 show the Upper Pit and East Pit Access Roads just prior to East Pit development. Drawing 08 shows the East Pit Access Road configuration at the end of East Pit development.

2.6.2 Haul Routes

According to existing permits, roads are two lanes, and traffic patterns follow right-hand traffic conventions (except for the existing minor site access roads used for maintenance, overburden removal, and progressive reclamation activities). No new minor site access roads would be needed under this proposed Revision.

For the proposed Revision, trucks would carry gypsum from the Upper Pit to the new 0.08-mile long access road (west), to the remaining 0.06-mile long section of the Upper Pit 6900 Road (west) (BLM, 2019; CO DRMS, 2019a), to the existing haul road (west, then south), to Trail Gulch Road (south), cross over I-70, and continue southeast on Highway 6 to American Gypsum's wallboard plant. The total haul route would be approximately 2.8 miles from the northern edge of the Lower pit, 3.17 miles from the western edge of the Upper Pit and 3.49 miles from the western edge of the East Pit (internal pit roads excluded).

2.6.3 Other Utilities

The Mine Office would remain in its current location north of the Lower Pit. The Mine Office is a temporary building; there are no power or water lines to the site. No additional utilities such as power, water, or communication lines are anticipated within the proposed disturbance area. Power to the Mine Office is provided by a Multi Quip 70-kilowatt (kw) generator (Table 2.2).

2.7 Equipment

Table 2.2 lists anticipated equipment used during the active mine life and reclamation.

TABLE 2.2: ANTICIPATED EQUIPMENT BY PHASE

Equipment	Location ^[1]	Manufacturer	Size	Quantity	Model Year
<i>Operational – Lower and Upper Pit</i>					
Rotomill	Current operating pit (varies)	Wirtgen	220SM	1	2017
Rotomill	Current operating pit (varies)	Wirtgen	2200SM	1	2005
Front End Loader	Current operating pit (varies)	CAT	980	2	2017, 2007
Tracked Excavator	Staging Area	CAT	328DL	1	2014
Truck/Trailer with Bottom Dump	Staging Area	MACK	CHU613	5	2015-2017
Truck/Trailer with Bottom Dump	Staging Area	International	HX520	1	2018/2016
Articulated Dump Truck	Staging Area	CAT	730	1	2015

Equipment	Location ^[1]	Manufacturer	Size	Quantity	Model Year
<i>Reclamation – Lower and Upper Pit</i>					
Tracked Excavator	Staging Area	CAT	328DL	1	2014
Bulldozer	Staging Area	CAT	D9	1	1987
Articulated Dump Truck	Staging Area	CAT	730	1	2015
<i>Site Development – East Pit</i>					
Tracked Excavator	Staging Area	CAT	328DL	1	2014
Bulldozer	Staging Area	CAT	D9	1	1987
Articulated Dump Truck	Staging Area	CAT	730	1	2015
<i>Operational – East Pit</i>					
Rotomill	Current operating pit (varies)	Wirtgen	220SM	1	2017
Rotomill	Current operating pit (varies)	Wirtgen	2200SM	1	2005
Front End Loader	Current operating pit (varies)	CAT	980	2	2017, 2007
Tracked Excavator	Staging Area	CAT	328DL	1	2014
Truck/Trailer with Bottom Dump	Staging Area	MACK	CHU613	5	2015-2017
Truck/Trailer with Bottom Dump	Staging Area	International	HX520	1	2018/2016
Articulated Dump Truck	Staging Area	CAT	730	1	2015
<i>Reclamation – East Pit</i>					
Tracked Excavator	Staging Area	CAT	328DL	1	2014
Bulldozer	Staging Area	CAT	D9	1	1987
Articulated Dump Truck	Staging Area	CAT	730	1	2015
<i>Other</i>					
Water Truck	Staging Area	International	7600	1	2016
Fuel/Lube Truck	Staging Area or Current operating pit (varies)	International	4900	1	1999
Repair Truck	Staging Area	GMC	5500	1	2005
Grader	Staging Area	CAT	143H	1	1996
Pickup Trucks	Staging Area	Ford	F250	3	2002, 2015, 2016
Generator	Mine Office/Staging Area	Multi Quip	70 kw	1	2015
Generator	Varies – Active Pit Development Area	Wanco	30 kw	1	2016

Note: ^[1] For mobile equipment, location refers to where equipment is parked at the end of shift.

Mining activities proposed herein would not significantly impact equipment used or frequency of use. Trucks would continue to travel on the existing roads (and proposed roads) at a rate of approximately 80 to 100 trucks per day, typically 5 days per week. When not in use, trucks would be parked in existing parking areas near the existing Mine Office shown on Drawing 01.

2.8 Soil, Waste, and Mineable Material

Based on field observations and previous permits, there is no true “topsoil” at the Mine. Intact (native) growth medium is sparse and consists mainly of weathered gypsum (gypsite) and residual volcanic ash. Previous permits and investigations reported depths of volcanic ash ranging in thickness from 3 inches to 2 feet (isolated pockets as deep as 2 feet are typically found in dry creek beds); this material would be salvaged along with other growth medium during East Pit clearing and grubbing activities and stockpiled with maximum side slopes of 2H:1V in the growth medium stockpile shown on Drawing 06 for future use as growth medium during reclamation activities. Where salvaged growth medium contains biological soil crust material, the stockpiled depth would be limited to a depth of 4 feet to promote continued algae, fungi, and lichen formation and assist in stabilizing the growth medium stockpile surface. If stockpiled growth medium is dormant more than 6 months, the stockpile will be revegetated using an approved seed mixture to stabilize surface material and inhibit weed growth.

Overburden was estimated for the East Pit only. No overburden is expected to be encountered in the Lower and Upper Pit areas, as the pits are being actively mined and overburden was removed in the early stages of mining. Non-economic material encountered during mining is classified as intraburden (waste). The East Pit was anticipated to have a similar gypsum-to-intraburden ratio as the operational Upper Pit, assuming 55% of the material encountered during mining (by weight) is usable gypsum. Where the proposed East Pit depth exceeds the operational Upper Pit depth, the gypsum-to-intraburden ratio was estimated assuming only 40% of the pit material (by weight) is usable gypsum. As the Upper Pit and East Pit are developed, American Gypsum would propose additional drilling to refine these estimates and may modify the overall pit depth or footprint if drill data or continued mining activities do not produce usable gypsum. Material estimates are summarized in Table 2.3. The conceptual growth medium stockpile location is shown on Drawings 06 and 08.

TABLE 2.3: SOIL, WASTE, AND MINEABLE MATERIAL SUMMARY

Material	Thickness (feet)	Quantity (Million tons) ^[1]	Details on Use, Stockpiling, or Method of Disposal
Growth Medium	From 3 inches to 2 feet; assumed average of 6 inches	0.4	Salvageable material would be stockpiled in locations shown on Drawings 06 and 08 (if necessary) and used for progressive reclamation
Overburden (East Pit)	From 0 to 50 feet, assumed average of 20 feet	2.1	Used to construct the East Pit Access Road (overburden removal would be accessed via existing roads until the East Pit Access Road is constructed)
Intraburden – Upper Pit ^[2]	Varies	10.0	Material used for Upper Pit progressive reclamation, access road construction, or placed/stockpiled within inactive portions of the Lower Pit and Upper Pit for final reclamation
Mineable Material (Gypsum) – Upper Pit ^[3]	Varies	6.7	Gypsum used at American Gypsum's plant to manufacture wallboard
Intraburden – East Pit	Varies	19.7	Material used for East Pit progressive reclamation, access road construction, or stockpiled within inactive portions of the Upper Pit and East Pit for final reclamation
Mineable Material (Gypsum) – East Pit	Varies	13.2	Gypsum used at American Gypsum's plant to manufacture wallboard

Notes: ^[1] Calculated volumes converted to tonnages using 100 pounds per cubic foot (pcf) for growth medium and 130 pcf for overburden, intraburden, and gypsum.

^[2] Upper Pit material summaries do not include mining the Upper Pit to the approved limits, assumed to correlate with a pit floor elevation of 6900 feet amsl. Material summaries include development associated with the proposed Upper Pit below 6900-foot elevation.

2.9 Exploration Operations

Drilling was performed in 2006 to determine the estimated depth of overburden in the East Pit and the approximate extents and depth of gypsum in both the Upper Pit and East Pit areas. Due to limitations during drilling (access, drilling methods/drill refusal), the maximum gypsum depth within the Upper Pit and East Pit is unknown; additional drilling may be performed as the Upper Pit and East Pit depths progress, within the approved pit disturbance limits, to refine the pit layouts. Additional drilling would be performed using rotary or coring methods, with borehole diameters varying from 3 to 8 inches and depths up to 200 feet. Drilling campaigns would include up to 100 holes per drilling program, and holes would be plugged as soon as practical after drilling, resulting in as many as 20 open holes at any given time. Drilling programs may also include boreholes and sampling for geotechnical data. Drilling permits (including drill hole plugging and reclamation) would be obtained prior to drilling and drill holes would be plugged in a manner appropriate to water conditions encountered during drilling.

2.10 Operating Practices

The proposed activities would be a continuation of current mining operations, where a rotomill grinds shallow layers (approximately 6 inches) of gypsum and intraburden in the active pit. Gypsum is hauled via 25-ton truck/trailers to American Gypsum's wallboard plant approximately 1.6 miles south of the Mine entrance. Intraburden is stockpiled or stored on-site, used to construct access roads, or used as backfill material in progressive reclamation activities.

2.10.1 Mining Methods

The Lower Pit, Upper Pit and the East Pit would be mined using the same methods as used in the current Lower and Upper Pit operations. A rotomill continuous milling machine removes the top surface of gypsum and intraburden with an active working width of approximately 10 to 12 feet. The pit floor grades to drain to low area within the pit that temporarily contains surface water runoff within the pit footprint, with a 2-foot high perimeter berm to provide additional surface water controls. The rotomill constructs pit slopes at 1H:1V, with 10-foot wide benches constructed every 40 vertical feet. Intraburden is separated from gypsum (based on visual classification between material types) with a loader and stockpiled on the active pit floor prior to being hauled outside the pit.

Gypsum is hauled directly to American Gypsum's wallboard plant using over-the-road trucks and trailers with a 25-ton capacity. Intraburden is hauled to various locations, used to construct roads, as backfill material in progressive reclamation activities, or stockpiled/stored within approved disturbance areas. For the East Pit, overburden would be removed prior to active mining, using existing site access roads while overburden is excavated for use as fill material for the East Pit Access Road construction.

The Lower, Upper Pit and East Pit would be developed to allow for progressive or concurrent reclamation, where a portion of the completed pit is to be backfilled using overburden or intraburden removed after gypsum removal. This approach minimizes additional disturbance areas for overburden or intraburden storage, essentially using completed portions of the pit to store overburden or intraburden. Where possible, slopes will be backfilled to planned reclamation grades (2.5H:1V or shallower) to minimize material re-handling.

Although the primary mining method would be rotomills, drilling and blasting may be required throughout pit development. Periodically, isolated zones of hard anhydrite are encountered during open pit mining. The rotomill is unable to process the hard anhydrite, requiring drilling and blasting to continue pit development. In the past 12 years of operation, drilling and blasting has only been used twice. For the Lower Pit, Upper Pit, and East Pit development, drilling and blasting may be used but would be extremely rare. If blasting is required for pit development, blasting agents would include ammonium nitrate/fuel oil (AN/FO). Blasting would be performed using cast booster and nonelectric and/or electric blasting caps. Since blasting will be subcontracted, blasting materials and equipment will not be stored on site; blasting materials will only be on site temporarily during blasting programs. Proper approvals would be obtained, and any required notifications made prior to blasting.

Table 2.4 summarizes mining type by ton and estimated surface disturbance. For quantity estimates, it was assumed 1% of the total mining would be performed using drilling and blasting.

TABLE 2.4: MINING METHOD SUMMARY

Type or Mining Method	Quantity of Material Removed (tons)	Estimated Area of Surface Disturbance (acres)
Lower Pit – Roto-Milling	1.5	0.0
Upper Pit – Roto-Milling ^[1]	15.0	11.58
Upper Pit – Drilling/Blasting ^[1]	1.7	0.12
East Pit – Roto-Milling	29.6	81.76
East Pit – Drilling/Blasting	3.3	0.83
TOTAL	49.6	94.29

Notes: ^[1] Upper Pit material summaries and acreages do not include mining the Upper Pit to the approved permit boundary, assumed to correlate with a pit floor elevation of 6900 feet amsl.

If needed during the proposed mining activities, American Gypsum would contract a specialized contractor to perform drilling and blasting. Any necessary approvals would be obtained, and notifications made.

2.10.2 Underground Operations

No underground operations are anticipated for the Upper Pit and East Pit (and associated appurtenances).

2.11 Use and Occupancy

The proposed disturbance area would be used and occupied in a similar manner as the existing Mine, including all relevant permits. This includes items such as mining pits and access roads. There are no proposed changes to the Mine entrance or associated fences, gates, or signs. There are also no new structures (such as buildings) or enclosures associated with the proposed Revision. Drawing 15 shows a map of existing facilities at the Mine Office and staging area. Table 2.2 contains a list of all equipment currently used at the Mine and proposed for continued use as a part of this Revision, including locations where equipment is left at the end of shift.

An approximately 1,635-ft long 4-foot high wire fence has been installed north of the Upper Pit to prevent accidental access from BLM trails located north of the Mine and proposed East Pit area. Signs have been installed to alert recreationists to the potential hazard ahead.

The original Notice of Occupancy was submitted to the BLM on 03 October 1996. The updated Notice of Occupancy and site claim map was submitted to the BLM on 03 August 2016. The site claim map is included on Drawing 03; the list of applicable claims is shown in Table 2.5.

TABLE 2.5: CLAIM INFORMATION

CMC Number	Claim Name	Claim Type
CMC-230034	EGL #82	Unpatented
CMC-230035	EGL #83	Unpatented
CMC-230036	EGL #84	Unpatented
CMC-230037	EGL #85	Unpatented
CMC-230038	EGL #86	Unpatented

CMC-251155	EGL #88	Unpatented
CMC-230041	EGL #89 ^[1]	Unpatented
CMC-230042	EGL #90 ^[1]	Unpatented
CMC-230043	EGL #91 ^[1]	Unpatented
CMC-230044	EGL #92 ^[1]	Unpatented
CMC-230045	EGL#93	Unpatented
CMC-230053	EGL #101 ^[1]	Unpatented
CMC-230054	EGL #102 ^[1]	Unpatented
CMC-230055	EGL #103 ^[1]	Unpatented
CMC-230056	EGL #104 ^[1]	Unpatented
CMC-230112	JER #1 ^[1]	Unpatented

Note: ^[1] Claims are within permitted disturbance limits (BLM, 2002; CO DRMS, 2001).

American Gypsum would maintain all right, title, and interest in and to each of the claims included as part of this Plan of Operations.

American Gypsum's use of public lands involves the continued use of roads and the maintenance of gates, fences, and signs. In accordance with 43 CFR § 3715, Table 2.6 documents structures on public lands that are reasonably incident to American Gypsum's mining activities. Drawings 03 and 15 show the detailed locations of surface facilities.

TABLE 2.6: FACILITIES ON PUBLIC LANDS

Structure	Location	Estimated Period of Use	Schedule for Removal and Reclamation
Mine access and haul roads	Drawing 03	Duration of mine life	See reclamation plan
Mine entrance gate	Drawing 03	Duration of mine life	See reclamation plan
Shop and office facilities	Drawings 03 and 15	Duration of mine life	See reclamation plan
Growth medium stockpile	Drawing 03	Through initial reclamation	See reclamation plan
Mine pits	Drawing 03	Duration of operations	See reclamation plan
Equipment staging areas	Drawing 15	Duration of mine life	See reclamation plan

2.12 Hazmat

Gypsum is processed into wallboard directly at the plant; there are no on-site processing facilities and therefore no processing chemicals or acid-producing materials used or stored at the Mine.

Hazardous materials would not be stored within the proposed disturbance area. Spills would be reported and managed according to American Gypsum's Spill Prevention, Control, and Countermeasure (SPCC) Plan (Environmental Solutions, 2019).

2.13 Rock Characterization and Handling Plans

During drilling, material was classified as "gypsum" or "waste" (intraburden), characterizing intraburden as material with less than 85% gypsum. During active mining, material is characterized as gypsum or intraburden based on visual observations. Geotechnical investigations have characterized the density of the gypsum and intraburden material to be between 124-125

pcf. Lower grade material classed as intraburden varies in composition including with the gypsum, anhydrite, shale, and fine grained sandstone or siltstone.

2.13.1 Materials Characterized

Table 2.7 lists materials characterized, and method used for characterization.

TABLE 2.7: CHARACTERIZATION METHODS

Material	Characterization Method
Waste Rock (Intraburden)	Less than 85% gypsum as defined by a combined moisture test during exploration.
Ore (Gypsum)	Greater than 85% gypsum as defined by a combined moisture test during exploration
Pit backfill rock (Intraburden)	See Waste Rock (Intraburden)
Cap/cover materials (Growth Medium)	Visual observations and historical information

2.13.2 Approach/Procedure for Characterization

During active mining, the rotomill grinds layers of gypsum and intraburden in approximately 6-inch layers. Intraburden is typically intermixed with gypsum, clearly identified by the distinct color variation. Gypsum is white in color while intraburden is a darker tan/brown color. Equipment operators (reporting to the Mine Superintendent) are responsible for segregating materials into separate stockpiles within the active pit, which are loaded and hauled to American Gypsum's wallboard plant (gypsum) or used for progressive reclamation, access road construction, or stockpiled within inactive portions of the Lower Pit, Upper Pit, and East Pit for final reclamation (intraburden/overburden).

2.13.3 Waste Rock (Intraburden/Overburden) Management Plan

Overburden is defined as material above the East Pit gypsum with little to no gypsum content, ranging in depth from 0 feet to 82 feet (using drilling data). Overburden would be removed during pre-production prior to active mining in the East Pit only. Intraburden is defined as inert, non-economic material to be removed during the East Pit, Upper Pit, and Lower Pit progression.

2.14 Quality Assurance Plan for Proposed Activities

A Quality Assurance Plan (QAP) is included as Appendix C. The QAP covers activities associated with culvert installation (including bedding, backfilling, and erosion controls) and road construction.

2.15 Spill Contingency Plan

Gypsum is processed into wallboard directly at the plant; there are no on-site processing facilities and therefore no processing chemicals or acid-producing materials used or stored at the Mine.

During operations, care would be taken to ensure that no oil, fuel, or lubricants are discharged onto the ground. Any spills or discharges would immediately be reported to the BLM, followed by prompt cleanup and remediation. Spills would be reported and managed according to American Gypsum's SPCC Plan (Environmental Solutions, 2019).

2.16 Monitoring and Inspections

Monitoring (surface and groundwater quality and quantity, air quality, revegetation, stability, noise levels, etc.) would be conducted as required by existing approvals.

Throughout operation, American Gypsum would perform additional inspections according to Table 2.8.

TABLE 2.8: INSPECTION SCHEDULE

Component	Inspection Frequency	Inspection Items
Culverts	<ul style="list-style-type: none"> - Quarterly - After high rainfall event (greater than 1.5 inches in 24 hours) 	<ul style="list-style-type: none"> - Obstructions or other blockage that may inhibit flow - Signs of buckling or crushing of culvert material - Excessive erosion or loss of erosion control measures (riprap collars/aprons)
Road Fill/ Embankments	<ul style="list-style-type: none"> - Weekly 	<ul style="list-style-type: none"> - Signs of geotechnical instability (bulging at toe, cracks at crest, sloughing, etc.) - Signs of erosional instability (material washing out, erosion gullies, exposed rocks without fine matrix, etc.) - Signs of subsidence such as depressions or unintentional low areas
Pit Slopes ^[1]	<ul style="list-style-type: none"> - Weekly - After high rainfall event (greater than 1.5 inches in 24 hours) - After seismic activity (magnitude greater than 3.0 within 50 miles of the pit) - If conditions vary significantly from previous inspection 	<ul style="list-style-type: none"> - Cracks, bulges, or other signs of movement - Fractures in pit walls - Signs of subsidence such as depressions or unintentional low areas - Seeps or springs emanating from pit walls - In-pit stormwater storage "low area" away from pit wall
Pit Berms	<ul style="list-style-type: none"> - Daily - After high rainfall event 	<ul style="list-style-type: none"> - Berms intact, continuous - Berm height adequate - No ponding water behind berms
Reclaimed and/or Backfilled Slopes ^[2]	<ul style="list-style-type: none"> - Weekly - After high rainfall event 	<ul style="list-style-type: none"> - Signs of geotechnical instability (bulging at toe, cracks at top of slope, sloughing, etc.) - Signs of erosional instability (material washing out, erosion gullies, exposed rocks without fine matrix, etc.) - Signs of subsidence such as depressions or unintentional low areas

Note: ^[1] Pit slope inspections will be documented on an inspection form and/or log with photographs to document conditions.

^[2] Inspections/monitoring for erosional success is discussed under exhibit E.

If conditions are observed that may be an early indicator of geotechnical instability (pits, reclaimed/backfilled areas, and road slopes), American Gypsum would inform the appropriate state and federal agencies (namely, BLM and CO DRMS) via telephone or email, increase inspection frequency, and (depending on the severity) would engage an engineering consultant to observe conditions and provide recommendations. If necessary, the impacted area would be blocked off until the potential hazard could be further evaluated or mitigated. Corrective actions would be completed as appropriate to the conditions encountered and plans would be submitted

to the appropriate state and federal agencies prior to beginning work if not in accordance with this Revision.

2.17 Interim Management Plan for Cessation of Activities

The proposed activities are a continuation of existing mining activities and there is no anticipated break or gap by American Gypsum between existing and proposed mining activities. However, if temporary cessation of mining activities are determined to be required, American Gypsum would perform the activities outlined below to prevent undue and unnecessary degradation of facilities, lands, and resources during an unplanned period of non-operation.

2.17.1 Measures to Stabilize Excavations and Workings

Pit slopes and pit floors would be assessed and any minor grading would be performed to ensure drainage into a low area of the pit floor, located away from pit walls (only minor grading would be required to prepare the pits for a temporary shutdown, as this would be part of normal operational practices);

Pit berms would be inspected and repaired as necessary to maintain a continuous berm around pits;

Stockpiles and un-vegetated progressive reclamation slopes would be stabilized;

Sediment control structures would be cleaned out to maintain the full capacity; and

Sediment control structure outlets (standpipes, spillways, etc.) would be inspected and repaired as necessary.

2.17.2 Measures to Isolate or Control Toxic or Deleterious Materials

Dust suppression surfactants or other chemicals or deleterious materials (none anticipated) would be relocated to the Plant.

2.17.3 Provisions for the Storage or Removal of Equipment, Supplies, and Structures

Equipment would be removed from the Mine; and

Temporary facilities such as restrooms, office trailers, etc. would be locked and secured.

2.17.4 Measures to Maintain the Project Area in a Safe and Clean Condition

The Mine would generally be inspected and cleaned up. All garbage would be removed from the Mine and any loose material (i.e. boxes, packaging, etc.) would be removed or otherwise secured in locked office buildings;

Roads would be assessed to ensure the road grades drain at approximately 1% on either side of the road (from the road centerline) to prevent water accumulation (roads will be maintained as such during normal mining operations and only minor grading may be required during a temporary shutdown);

Road berms would be inspected and repaired as necessary; and

Roads, including cut and fill slopes, would be inspected to ensure all stormwater runoff reports to existing sediment control structures (roads will be maintained as such during normal mining operations and only minor grading would be required to prepare the roads for a temporary shutdown).

2.17.5 Plans for Monitoring Site Conditions during Periods of Non-Operation

Site conditions would be inspected every 14 days or following periods of rainfall exceeding 1.5 inches in a 24-hour period.

2.17.6 Schedule of Anticipated Periods of Temporary Closure

No temporary closures are planned or anticipated. If a temporary closure is necessary, American Gypsum would notify state and federal agencies in writing within 90 days after work is suspended for more than 120 days. The notification would state the nature and reason for suspension of work, the anticipated duration of the suspension, and any event that would be reasonably expected to result in either the resumption of activities or the abandonment of the operation.

