September 10, 2021

RE: Final Environmental Assessment for an Application for a Minor Amendment for Magris Talc USA, Inc.; Operating Permit No. 00005

Dear Reader,

Magris Talc USA, Inc. (Magris) filed an application with the Montana Department of Environmental Quality (DEQ) for Minor Amendment 008 to Hard Rock Mine Operating Permit No. 00005 under the Metal Mine Reclamation Act. Magris currently produces talc at the Yellowstone Mine, which is located at Township 8S, Range 1W, Sections 32, 33, & 34 and Township 9S, Range 1W, Sections 3, 4, 5, & 9, approximately 21 miles south of Ennis in Madison County.

Minor Amendment 008 would allow reclamation of the North Main Pit by backfilling with overburden, regrading to blend with natural surrounding topography, and reseeding. This minor amendment would not substantively modify the Yellowstone Mine's activities. The approved 1,868.4-acre permit boundary and 928.3 acres of permitted disturbance would remain unchanged. Rather than approximately 50 acres of unvegetated highwalls, rock outcrop, and talus slopes remaining at the North Pit location after reclamation, the pit would be reclaimed such that 5 acres of these unvegetated features remain while the remainder would be backfilled and revegetated. Approximately 2.8 million cubic yards of overburden that would otherwise be placed in an external overburden pile would instead be used to backfill the North Main Pit.

For a minor amendment, DEQ shall not implement the application, notice and hearing requirements for new permits or major amendments, pursuant to Sections 82-4-337 and 82-4-353, Montana Code Annotated (MCA). The department shall provide the permittee with a notice of decision on the adequacy of the minor amendment application within 30 days of receipt of the application (ARM 17.24.119(4)).

The Final Environmental Assessment can be viewed on DEQ's website at https://deq.mt.gov/mining/Programs/hardrock. For questions, please contact:

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Sincerely,

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E-File: 00005.7

Montana Department of Environmental Quality

Environmental Assessment

Minor Amendment 008 for OP#00005 Magris Talc USA, Inc.

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Hard Rock Mining Bureau
ENVIRONMENTAL ASSESSMENT

COMPANY NAME: Magris Talc USA, Inc.
OPERATING PERMIT: Operating Permit No. 00005
LOCATION: Near Cameron and Ennis, MT
Township 8S, Range 1W, Sections 32, 33, & 34
Township 9S, Range 1W, Sections 3, 4, 5, & 9
COUNTY: Madison County
PROPERTY OWNERSHIP: FEDERAL ___ STATE ___ PRIVATE _ X _

COMPLIANCE WITH THE MONTANA ENVIRONMENTAL POLICY ACT

Under the Montana Environmental Policy Act (MEPA), Montana agencies are required to prepare an environmental review for state actions that may have an impact on the human environment. The proposed action is considered to be a state action that may have an impact on the human environment and, therefore, the Department of Environmental Quality (DEQ) must prepare an environmental review. This environmental assessment (EA) will examine the proposed action and no action alternative, and disclose potential impacts that may result from the proposed and alternative action. DEQ will determine the need for additional environmental review based on consideration of the criteria set forth in Administrative Rules of Montana (ARM) 17.4.608.

PROPOSED ACTION

DEQ would approve an application for a minor amendment (Amendment 008) to Operating Permit No. 00005 for Magris Talc USA, Inc. (Magris) to permit reclamation of the North Main Pit by backfilling with overburden, regrading the area to blend with natural surrounding topography, and reseeding.

PURPOSE AND NEED

For a minor amendment, DEQ shall not implement the application, notice and hearing requirements for new permits or major amendments, pursuant to Sections 82-4-337 and 82-4-353, Montana Code Annotated (MCA). The department shall provide the permittee with a notice of decision on the adequacy of the minor amendment application within 30 days of receipt of the application (ARM 17.24.119(4)). This is different than an application for a major amendment, which requires that DEQ detail in writing the substantive requirements of the Metal Mine Reclamation Act (MMRA) and how the proposed action complies with those requirements.

The purpose and need of Minor Amendment 008 (the "proposed action") for Magris is described in the following sections. The initial application for Minor Amendment 008 was submitted to DEQ on April 14, 2020, with a deficiency review provided by DEQ on May 8, 2020. Deficiency responses and updates to the application were submitted by Magris on December 15, 2020, followed by the second deficiency review from DEQ on January 13, 2021. DEQ has determined

that the deficiency responses and application updates provided on August 11, 2021 are adequate to meet the requirements for minor amendments described in ARM 17.24.119(3). The purpose and need for DEQ is to conduct an environmental review and to provide the permittee with a notice of decision on the adequacy of the application within 30 days of the most recent deficiency response (ARM 17.24.119(4)). This may result in DEQ issuing the proposed operating permit minor amendment under the MMRA, Title 82, chapter 4, part 3, MCA.

SUMMARY OF PROPOSED ACTION

Background:

Talc was first produced from underground mine operations located in the vicinity of the present Yellowstone Mine beginning in 1942. The Yellowstone Mine has been in operation in Madison County since the early 1950s. The mine has been operated under permit numbers 00005 and 00005A since 1971 and 1977, respectively. The permits were modified by minor revisions and amendments many times, with each modification requiring some level of environmental evaluation and approval (DSL, 1977, 1981, 1986a, 1986b, 1990, 1992; DEQ, 2004, 2006). In 2002, the consolidated Operating Permit No. 00005 was approved in order to combine Operating Permits No. 00005 and 0005A into one updated document. The permit was further modified by "Life of Mine" Amendment 007 (approved in 2006), which included expansion of open pit and overburden disposal areas, the relocation of sorting facilities, and associated updates to the Reclamation Plan. To date, approximately 10 million tons of talc ore have been produced at the Yellowstone Mine site.

Magris seeks to amend its Operating Permit No. 00005 to revise the reclamation plan for the Yellowstone Mine. The currently approved reclamation plan specifies that the 54.8-acre North Main Pit would be reclaimed to achieve long-term stability (Luzenac, 2003 and DEQ 2006). This would include reclaiming portions of the highwalls as rock faces and talus slopes; and regrading, soil placement, and seeding of accessible portions of haul roads, benches, and the pit floor. Overburden would be stored in external overburden piles and would not be placed in the North Main Pit as backfill.

Minor Amendment 008 would allow reclamation of the North Main Pit by backfilling it with overburden, regrading to a stable slope that will blend with natural surrounding topography, and revegetating the area. This minor amendment would not substantively modify the Yellowstone Mine's activities. The approved 1,868.4-acre permit boundary and 928.3 acres of permitted disturbance would remain unchanged. Rather than approximately 50 acres of unvegetated highwalls, rock outcrop, and talus slopes remaining at the North Pit location after reclamation, the pit would be reclaimed such that 5 acres of these unvegetated features remain as rock exposures and potential wildlife habitat (as currently approved), while the other 45 acres would be backfilled and revegetated. Approximately 2.8 million cubic yards of overburden that would otherwise be placed in an external overburden pile would instead be used to backfill the North Main Pit.

As approved under the previous Amendment 007, approximately 25 acres of the North 40, Cadillac, South Main, and Montana Talc pits were backfilled during previous mine operations, regraded, and revegetated (DEQ, 2006). Operations to backfill and reclaim the North Main Pit using overburden material would be similar to the previously approved backfill reclamation and

it would not result in increased surface disturbance.

Location:
The Yellowstone Mine is accessed by traveling approximately 21 miles south of Ennis, Montana, on U.S. Highway 287 (Figure 1). Access from U.S. Highway 287 is on a Madison County road called Johnny Gulch Road or Johnny Ridge Road. This road enters private property but is under the jurisdiction of the USFS (Forest Road No. 324) to the mine site (Figure 2). The Johnny Gulch Road continues past the mine site to access public lands to the south and west. The existing facilities and disturbance for the Yellowstone Mine are located entirely on private land.

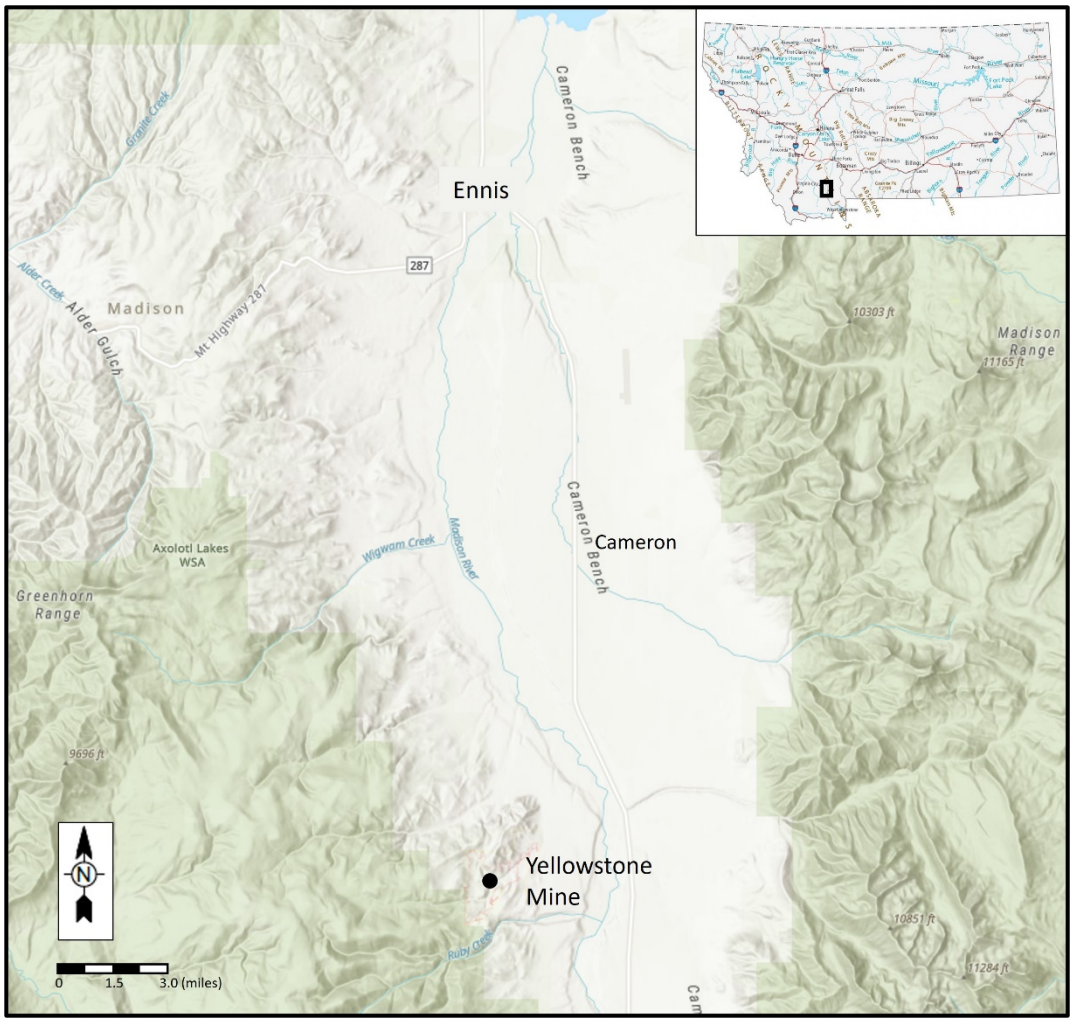


FIGURE 1: YELLOWSTONE MINE LOCATION

Analysis Area:
The area being analyzed as part of this environmental review includes the immediate project area (Figures 2 and 3) as well as immediate downstream water sources and neighboring lands surrounding the analysis area as reasonably appropriate for the impacts being considered.

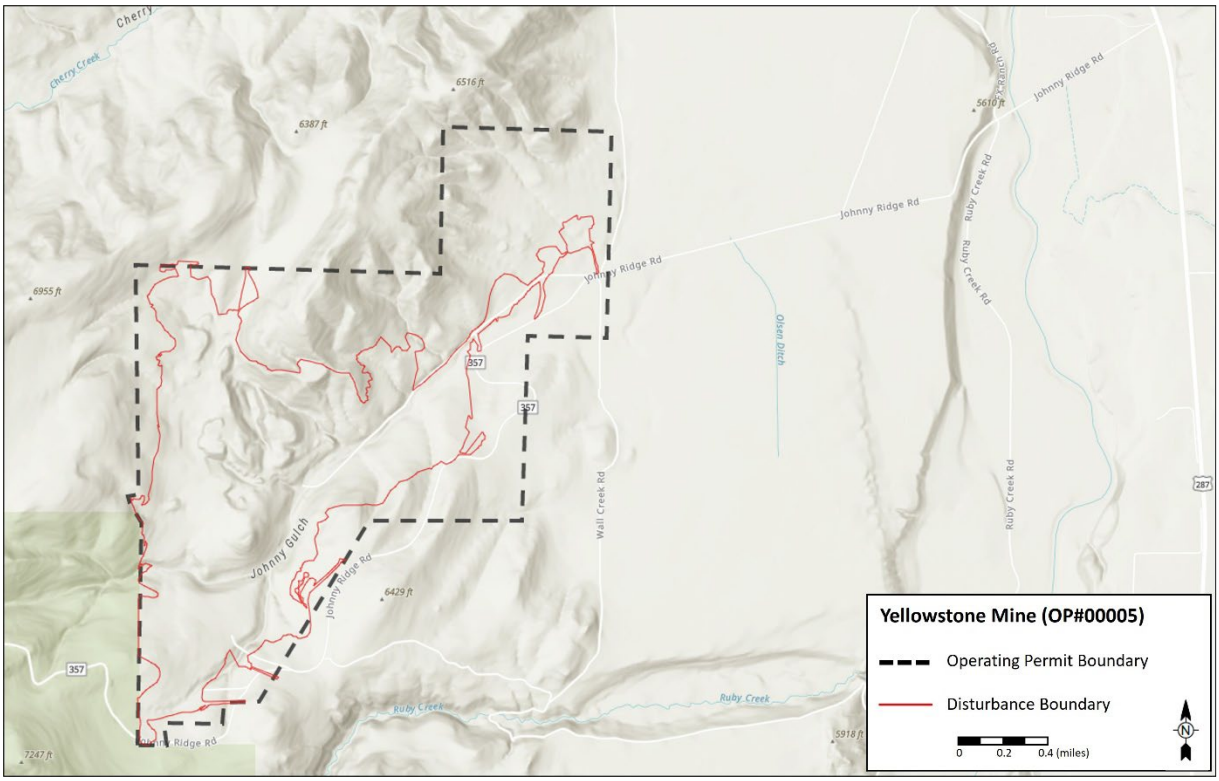


FIGURE 2: YELLOWSTONE MINE LOCATION AND PERMIT BOUNDARIES

Scope of Activity:
The proposed minor amendment would not affect the current permit area of 1,868.4 acres, nor affect the permitted disturbance area of 928.3 acre (Figure 2). Approximately 2.8 million cubic yards of overburden that would otherwise be placed in an external overburden pile would instead be used to backfill the North Main Pit (center of Figure 3). Rather than approximately 50 acres of unvegetated highwalls, rock outcrop, and talus slopes remaining in the North Main Pit after reclamation, the pit would be reclaimed such that 5 acres of these unvegetated features remain while the remainder would be backfilled and revegetated (Figure 4). The reclamation of the overburden placed within the North Main Pit footprint would be completed prior to the end of mining (anticipated in year 2056), and proposed final reclamation date for the entire site is two years following closure or abandonment of the operation.

Pit backfill activities would also include the construction of drainage features to eliminate the potential for surface water to pond within the reclaimed pit area. These features generally consist of a "Y" shaped system of channels with two branches extending along the east and west foot of a topographically high area. These branches would feed into a main channel to route runoff towards the south into an existing drainage feature.

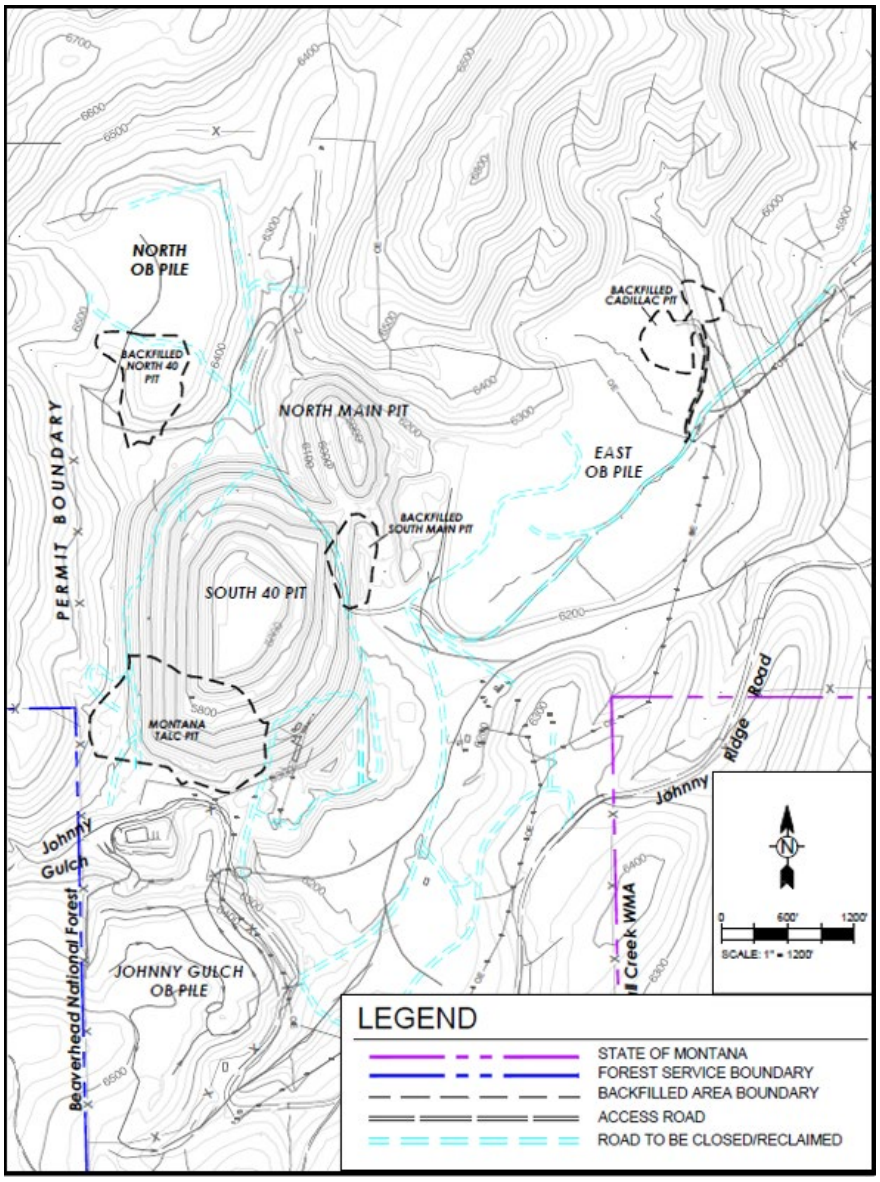


FIGURE 3: LOCATIONS OF CURRENT PITS AND PREVIOUSLY BACKFILLED PITS

Duration of Activity:
Mining activity would not substantively change as a result of this minor amendment. The mine would continue to operate up to 365 days a year, although most weekly activity occurs within four, ten-hour shifts. Blasting and hauling overburden would occur contemporaneously with talc ore production. The average annual production rate is 300,000 tons of talc ore and 2.2 million tons of overburden. The talc is sorted at the onsite facilities prior to being transported to mills located in Sappington Junction and Three Forks, Montana. Overburden materials would be transported by haul truck to the North Main Pit area and dumped in sequential lifts. The volcanic overburden would be placed in increments of 25-feet, while the dolomite overburden would be placed in increments of 75-feet. A portion of overburden would still be placed in the East Dump facilities during pit backfill, and the East Dump would continue to receive overburden after backfilling is completed. The backfill of North Main Pit would not affect future access to ore

reserves, nor change the anticipated mine life. The reclamation of the overburden placed within the North Main Pit footprint would be completed prior to the end of mining (anticipated in year 2056) and proposed final reclamation date for the entire site is two years following closure or abandonment of the operation.

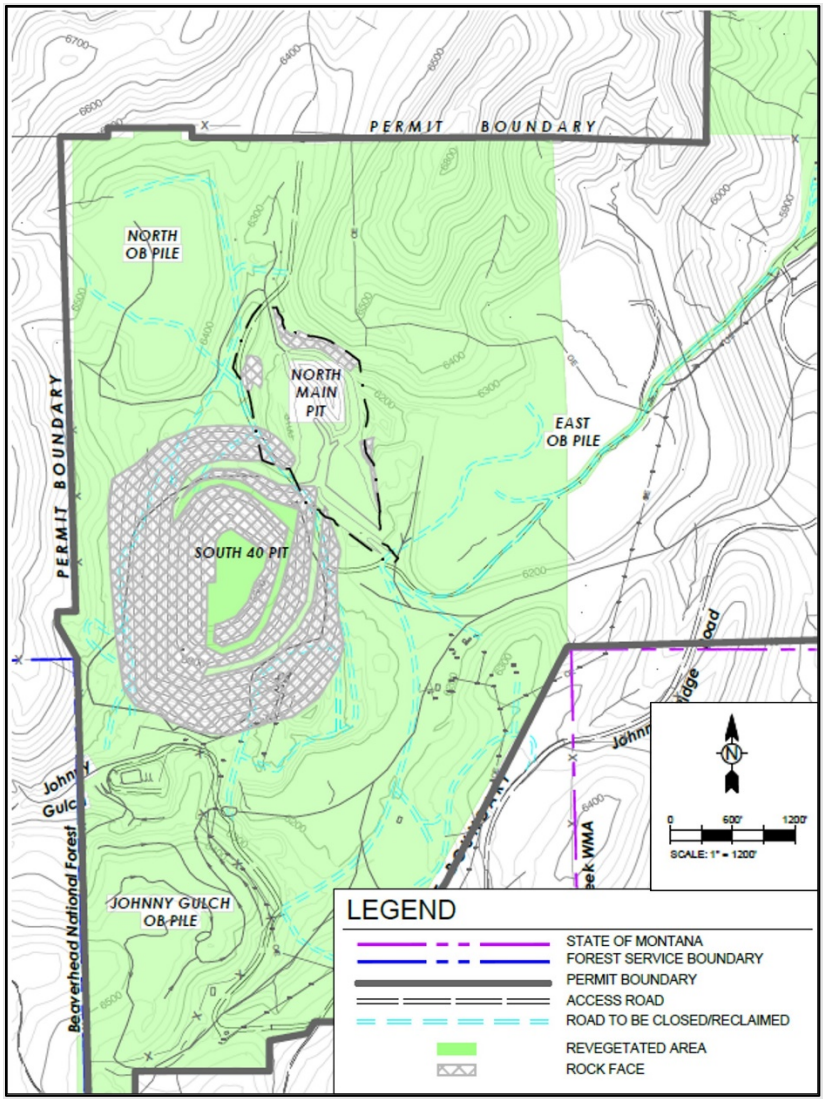


FIGURE 4: PROPOSED RECLAMATION FOR NORTH MAIN PIT BACKFILL

Personnel and Equipment:
Mine operations would continue to employ the same number of employees and onsite contractors, approximately 35 people. The use of mobile equipment (e,g, loaders, haul trucks, dozers) and stationary sorting facilities would not change from the current conditions as a result of this minor amendment.

Reclamation Plan:
Minor Amendment 008 does not propose to increase the disturbance area nor alter the conceptual reclamation cover methods to be employed on the backfilled portions of North Main Pit. The minor

amendment would instead increase the total surface area to be reclaimed. The previous Life of Mine amendment authorized approximately 50 acres of unvegetated highwalls, rock outcrop, and talus slopes remaining at the North Pit location after reclamation. Under Minor Amendment 008, the pit would be reclaimed such that 5 acres of these unvegetated features remain while the remainder would be backfilled and revegetated (Figure 4). Approximately 27 acres that were previously permitted to remain as highwalls or talus slopes would instead be covered with overburden and regraded to create a stable slope (2.5H:1V) that blends with natural topography. Approximately 2.8 million cubic yards of overburden that would otherwise be placed in an external overburden pile would instead be used to backfill the North Main Pit.

The approved reclamation plan for the Yellowstone Mine specifies that a minimum 6-inch thickness of soil will be placed on reclaimed areas to provide a seedbed for plant reestablishment (Luzenac, 2003). There are currently 490,000 cubic yards of soil stored in stockpiles with 376,000 cubic yards needed to reclaim existing disturbances leaving 114,000 cubic yards for other purposes such as revegetating the backfilled North Main Pit (Imerys, 2019). Placing a 6-inch soil cover across the 50-acre area of the North Main Pit proposed for reseeding would require 40,333 cubic yards of soil. The currently approved seed mix would be used to revegetate the backfilled North Main Pit (Table 1).

TABLE 1: SEED MIX

Approved Seed Mixture- Operating Permit No. 00005 (DEQ, 2006)			
Grasses			
Species	Variety	Common Name	Pure Live Seed (lb/acre)*
Agropyron dasystachyum	Critana	Thickspike Wheatgrass	2
Agropyron spicatum	Secar	Bluebunch Wheatgrass	3
Agropyron trachycaulum	Pryor	Slender Wheatgrass	2
Elymus cinereus	Magnar	Great Basin Wildrye	1
Festuca ovina	Covar	Sheep Fescue	1
Oryzopsis hymenoides	Nezpar	Indian Ricegrass	2
Poa ampla	Sherman	Big Bluegrass	0.5
Agropyron riparium	Sodar	Streambank Wheatgrass	2
Stipa viridula	Lodorm	Green Needlegrass	0.5
	Subtotal:		**14**
Forbs / Legumes			
Species	Variety	Common Name	Pure Live Seed (lb. per acre)*
Medicago sativa	Ladak	Alfalfa	2
Melilotus officinalis	Madrid	Yellow Sweetclover	2.5
Achillea millefolium		Western Yarrow	0.1
Astragalus cicer	Aski	Cicer Milkvetch	2
Linum lewisii	Appar	Blue Flax	2
	Subtotal:		**8.6**

SUMMARY OF POTENTIAL PHYSICAL AND BIOLOGICAL IMPACTS:

The impact analysis will identify and analyze direct and secondary impacts of the proposed action. Direct impacts occur at the same time and place as the action that causes the impact. Secondary impacts are a further impact to the human environment that may be stimulated, or induced by, or otherwise result from a direct impact of the action (ARM 17.4.603(18)). Where impacts would occur, the impacts analysis will estimate the duration and intensity of the impact.

The duration is quantified as follows:

- Short-term: Short-term impacts are defined as those impacts that would not last longer than the life of the project, including final reclamation.
- Long-term: Long-term impacts are impacts that would remain or occur following project completion.

The intensity of the impacts is measured using the following:

- No impact: There would be no change from current conditions.
- Negligible: An adverse or beneficial effect would occur but would be at the lowest levels of detection.
- Minor: The effect would be noticeable but would be relatively small and would not affect the function or integrity of the resource.
- Moderate: The effect would be easily identifiable and would change the function or integrity of the resource.
- Major: The effect would alter the resource.

1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE

Are soils present which are fragile, erosive, susceptible to compaction, or unstable? Are there unusual or unstable geologic features? Are there special reclamation considerations?

Geology Background:

Talc deposits of the Yellowstone Mine occur in an area of folded Precambrian (Archean) dolomitic marble, along the east limb of a large, southwest-plunging fold. The dolomitic marble occurs over a zone about 1.5 miles wide and 3.5 miles long. To the southeast and northwest, these rocks are in contact with older, folded metamorphic schist and gneiss, to the southwest the marble is in contact with younger Paleozoic sediments, and to the east the marble is unconformably overlain by Quaternary gravel. Tertiary volcanic rocks unconformably overlie the marble along the axes of structural grabens and elsewhere in paleo-topographic depressions (DEQ, 2006).

The talc deposits at the Yellowstone Mine were formed in the early Proterozoic by hydrothermal alteration and replacement of the Archean dolomitic marble. The talc is massive and predominantly light green to light gray in color. Replacement of the dolomite by talc is complete; thus, the talc is easily separated from the host dolomite waste during ore sorting. The talc occurs mainly as tabular veins, but locally, pods and lenses are also found. Most talc veins are parallel or sub-parallel to the metamorphic structural foliation developed in the surrounding dolomite. This is because crosscutting foliation cleavage planes and nearly parallel fault zones provided pathways for silica-rich ore forming fluids to penetrate and interact with the carbonate host rock to produce the calc-silicate talc replacement deposits. The dominant structure associated with the deposit is a

major north-south trending fault called the Growth Fault. This fault is over 100 feet wide in places and is locally associated with some karst features. Yellowstone Mine talc is free of tremolite and other asbestiform minerals and contains only trace amounts of other impurities like iron and graphite (DEQ, 2006).

With regard to Minor Amendment 008, the overburden geochemistry (i.e. acid rock drainage and metal and nitrate mobility) and its potential to impact groundwater quality are important for evaluating placement of overburden in the North Main Pit. Previous evaluations and monitoring indicate that overburden is not a source for significant impacts to groundwater at the Yellowstone Mine.

Acid Rock Drainage:
A waste rock geochemical evaluation was completed by Maxim in 2001 and included as an appendix to the 2003 amendment application. The evaluation concluded that there is virtually no possibility of acid rock drainage produced by overburden because the total sulfide content in rock mined at the Yellowstone Mine is very low, often below analytical detection limits, while neutralization capacity provided by carbonates is high. This conclusion is supported by acid-base accounting data for overburden samples collected during the geochemical evaluation and operational monitoring conducted between 2004 and 2013 and in 2020 (Maxim 2005; Tetra Tech 2007 through 2013, 2020). Based on consistent demonstration of the non-acid generating character of Yellowstone Mine overburden, DEQ concurred with the decision to reduce the frequency of geochemical monitoring to once every seven years (DEQ 2013). Monitoring conducted in 2020 confirmed that samples of all waste types are net neutralizing and pose no risk of acid generation. There would be no changes from the current condition for the proposed minor amendment.

Metal Mobility:
Maxim (2001) evaluated metal mobility from overburden based on results of Synthetic Precipitate Leaching Procedure (SPLP) analysis on eight samples of each (total of 32 samples) of the four main lithologies present at the Yellowstone Mine. Analytical results showed antimony, arsenic, beryllium, cadmium, copper, lead, manganese, mercury, nickel selenium, silver, thallium, and uranium to be below detection in SPLP extracts from all samples except one volcanic sample, one gray dolomite sample, and one talc sample. Metals that were detected were typically below water quality standards that were in place at the time of the evaluation. Based on these data and the waste blending ratio (i.e. a minor volume of talc and volcanic rock is present in run-of-mine waste), the evaluation concluded that metals concentrations in seepage from waste piles would be well below state or federal water quality standards.

Operational monitoring on 100 overburden samples conducted between 2004 and 2013 returned similar SPLP test results with concentrations of most analytes being below detection limits with all other detected analytes present at concentrations below human health standards (Maxim 2005; Tetra Tech 2007 through 2013, 2020). Based on these data that consistently document limited metal mobility from Yellowstone Mine overburden, DEQ concurred with the decision to reduce the frequency of geochemical monitoring to once every seven years (DEQ 2013). Monitoring conducted in 2020 confirmed that metal concentrations are comparable to those observed in baseline and previous operational monitoring. Potential for trace metal mobility continues to be

low and there would be no changes from the current condition for the proposed minor amendment.

Asbestiform Minerals:
The geologic association of mafic intrusive dikes with dolomitic marbles at the Yellowstone Mine site is consistent with the possible occurrence of asbestiform minerals in intrusive contact zones. Asbestiform minerals could impact air quality and pose a human health risk, although asbestiform minerals have not been identified in ore or overburden at the Yellowstone Mine during routine mining or milling operations. A primary assessment for potentially asbestiform rock (PAR) occurrence at the Yellowstone Mine was completed by Maxim (2001). The report summarized the objectives, technical approach, and results of the asbestiform mineral assessment at the Yellowstone Mine and provided recommendations for operational monitoring during future operations.

No asbestiform minerals were identified at the Yellowstone Mine, based on Polarized Light Microscopy/Transmission Electron Microscopy (PLM/TEM) analysis of 108 samples collected from 20 map-transects specifically located in contact zones. No risk to human health or the environment was identified, and no further study apart from routine operational monitoring of contact zones was deemed warranted. An operational verification plan was defined. An operational rock monitoring sampling program has been implemented, and a management plan has been developed in the current mining permit, as contingencies to provide for environmental protection in the unlikely event that asbestiform minerals are identified during future operational monitoring. Monitoring conducted in 2020 confirmed that the rock encountered does not contain asbestiform mineral fibers.

Seismicity:
The Yellowstone Mine is located in seismic zone 4, which has moderate to high earthquake activity. One of the largest earthquakes recorded for the area was the 1959 Hebgen Lake earthquake with a magnitude of 7.3. The historical earthquake record of 126 years for the Yellowstone Mine area lists 133 earthquakes of a magnitude greater than 4.0 on the Richter scale that have occurred within 200 kilometers of the mine site (DEQ, 2006).

Based on the historical data, the maximum expected earthquake that might occur within the next 100 years is a magnitude 7.0+, which would have a horizontal peak particle acceleration of about 8 percent of gravity. Strong ground motions associated with a quake of this magnitude could be expected to last for about 15 seconds and have a predominant period of about 0.4 second. The maximum credible acceleration for the mine site area would be from a magnitude 7.3 earthquake on the south-central segment of the Madison Valley fault lying directly across the valley about 11 miles from the mine site. An earthquake of this magnitude could be expected to produce horizontal peak particle acceleration of 16 to 44 percent of gravity, with an expected value of 26 percent of gravity. The duration of expected strong motion from such a quake would be approximately 15 seconds with a predominant period of about 0.4 seconds (DEQ, 2006).

Not one of the fault structures mapped in the vicinity of the mine has been recently active as evidenced by the lack of fault scarps. An earthquake during mine life could cause operational problems on site. No mine-related off-site impacts would occur because of the lack of large water-impounding structures. An earthquake after mining has been completed could cause some settling

in the overburden disposal areas and some talus and rock raveling on exposed faces, particularly in the reclaimed pits. The total area of talus and rock slopes would be reduced by backfilling North Main Pit through the proposed minor amendment. The potential impact from the proposed action would be long-term, as the reclaimed surfaces in the previous North Main Pit would persist beyond the life of the operation, and minor, because settling and rock raveling caused by seismic activity in the area could be noticeable, but would be relatively small and would remain within the mine area, not affecting the integrity or function of the resource.

Soils:
The area has a cold and dry climate with a mean annual precipitation of 18.5 inches (McCarthy et al., 2016). The soil survey for the mine disturbance area, including the North Pit area, delineates the soil type as "Dumps, mine" (see Figure 5 for details). Therefore, native soil types must be inferred from the surrounding slopes.

FIGURE 5: SOILS MAP FOR THE NORTH MAIN PIT AREA OF THE YELLOWSTONE MINE

Typical profiles for the disturbance area and the soils surrounding the disturbance area are found in Table 2. Soils surrounding the disturbance area consist primarily of gravelly, channery, or stony loam. Over the history of mine operations, these soil units have been salvaged and stockpiled for future reclamation, although they are not necessarily segregated by soil unit because of their similar characteristics. The volcanic overburden material may also be used as a sub-soil layer during reclamation if other soil is not available. However, the current soil stockpiles are sufficient for reclamation requirements and the volcanic overburden may not be needed.

TABLE 2: TYPICAL SOIL PROFILES

Map Unit Symbol	Map Unit Name	Description of Unit/Unit Components
35	Craggo very stony loam, cool, 2 to 45 percent slopes	Very stony loam
40	Dumps, mine	-
50	Hanson channery loam	Channery loam
53	Hanson-Rock outcrop complex, 25 to 45 percent slopes	Channery loam and rock outcrop
94	Oro Fino-Poin complex, 15 to 45 percent slopes	Oro Fino: gravelly loam, gravelly sandy clay loam Poin: very flaggy sandy loam, extremely channery sandy loam
95	Pensore-Crago, cool-Rock outcrop complex, 25 to 75 percent slopes	Pensore: very channery loam Crago: very stony loam

Direct Impacts:
The currently approved reclamation plan specifies that the North Main Pit would be reclaimed to achieve long-term stability, including reclaiming portions of the highwalls as rock faces and talus slopes. Regrading, soil placement, and seeding would only take place on accessible portions of haul roads, benches, and the pit floor. Under the proposed action, the North Main Pit would be backfilled with overburden, regraded to blend with natural surrounding topography, soiled, and revegetated. There are currently 490,000 cubic yards of soil stored in stockpiles with 376,000 cubic yards needed to reclaim existing disturbances leaving 114,000 cubic yards for other purposes such as revegetating the backfilled North Main Pit (Imerys 2019). The approved reclamation plan for the Yellowstone Mine specifies that a minimum 6-inch thickness of soil will be placed on reclaimed areas to provide a seedbed for plant reestablishment (Luzenac 2003). Placing a 6-inch soil cover across the 50-acre area of the North Main Pit proposed for reseeding would require 40,333 cubic yards of soil, which is available in the current stockpiles. The stockpiled soil which would be used for reclamation of the former North Main Pit is sourced from adjacent areas identified as the Oro Fino-Poin complex (Map Unit 94), which is suitable for the reclaimed slopes that would be established.

No fragile soils or unstable geologic features are present at the site. There would be no special reclamation considerations, as soil quality would not be adversely impacted by the proposed action. Surface soil placement during reclamation could allow for the establishment of weeds. Weed control would be required to control the spread of noxious weeds caused by surface soil placement and is further addressed in "Section 4. Vegetation Cover, Quantity and Quality" (Table 3).

Impacts to geology, soil quality, stability, and moisture would not be significant. Impacts to geology would not be expected. Impacts to soil quality, stability, and moisture would be minor and beneficial, since 45 of the 50 acres in the North Main Pit would be backfilled, soiled, and reseeded instead of remaining as an open pit. Beneficial impacts would be long-term, since they would remain after the proposed action is completed, and minor, because impacts would be

noticeable but would be relatively small and would not affect the integrity or function of the resource (Table 3).

Secondary Impacts:
No secondary impacts to the geology and soil quality, stability and moisture would be expected.

2. WATER QUALITY, QUANTITY, AND DISTRIBUTION

Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?

Groundwater
Groundwater elevation and water quality data are available for nine wells. Groundwater elevation data are limited and the most complete evaluation of monitoring well construction, groundwater elevations, and flow direction is available in a draft document prepared to support mine planning (Luzenac, 2009). Groundwater flow paths generated from inferred groundwater contours show a steep gradient from the southwest that flattens as is extends to the northeast. This flow path is generally parallel to the Mylonitic Fault Zone which acts as a boundary between aquifers (Luzenac, 2009; Figure 6)).

The most recent groundwater elevation data were measured in 2008 except for well 2001-01 located in the North Main Pit, which was measured in 2007 prior to abandonment later that year (Table 3). Based on these data, groundwater elevation in the vicinity of the North Main and South 40 Pits is about 5,475 feet above mean sea level (amsl), approximately 355 feet below the floor of the North Main Pit (5,830 feet amsl) (DEQ, 2006; Figure 7).

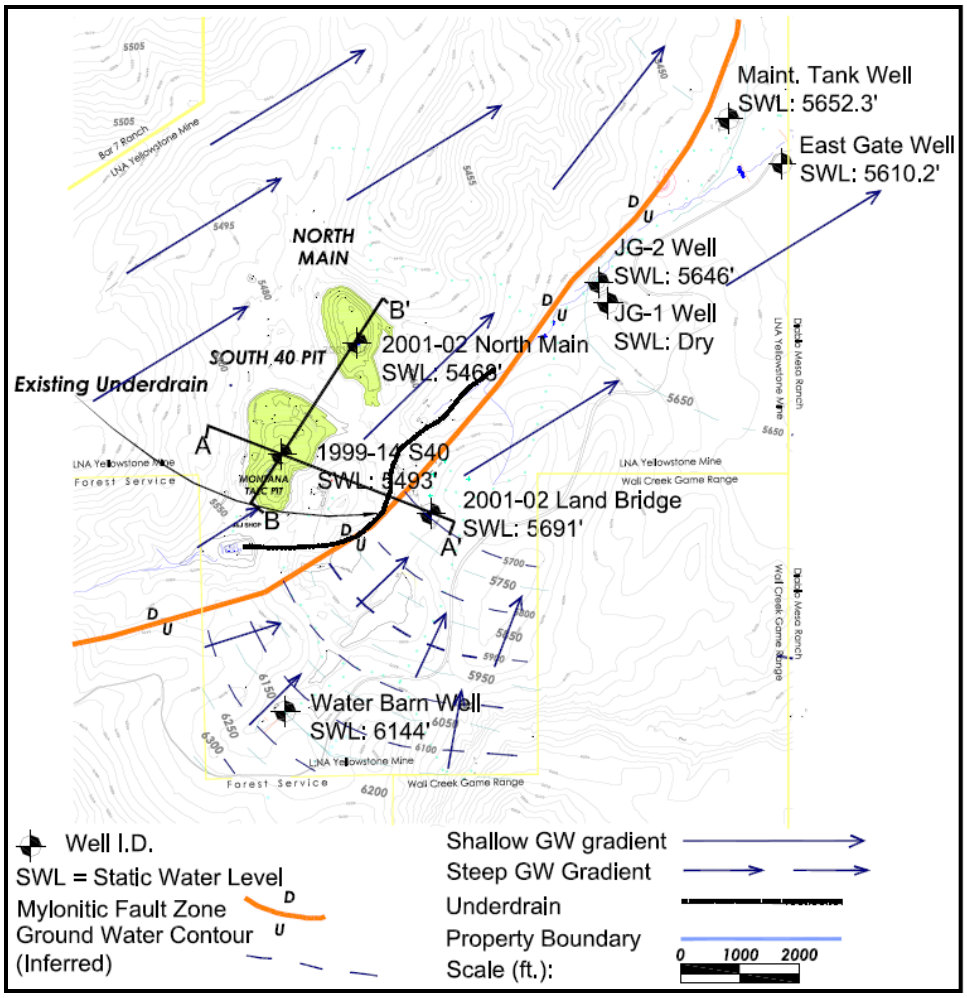


FIGURE 6: GROUNDWATER ELEVATION AND FLOW PATHS WITHIN YELLOWSTONE MINE

Figure 6 caption: Groundwater flow paths within the property boundary have been generated from inferred groundwater contours. A steep groundwater gradient from the southwest flattens at it extends to the northeast. Cross sections (B-B' and A-A') reveal complex geology and faults that contribute to varied groundwater elevations. See groundwater elevations below the North Main Pit in Figure 7 (Luzenac, 2009).

The potential for nitrate-nitrite (nitrate) to be released into groundwater is a recognized hazard at the Yellowstone Mine due to explosives residue in mined overburden (DEQ 2006, Luzenac 2003). A system of underdrains and five settling/infiltration ponds are in place at the northeast portion of the site and prevent nitrate and other constituents of concern from migrating off-site where they could contact surface water resources.

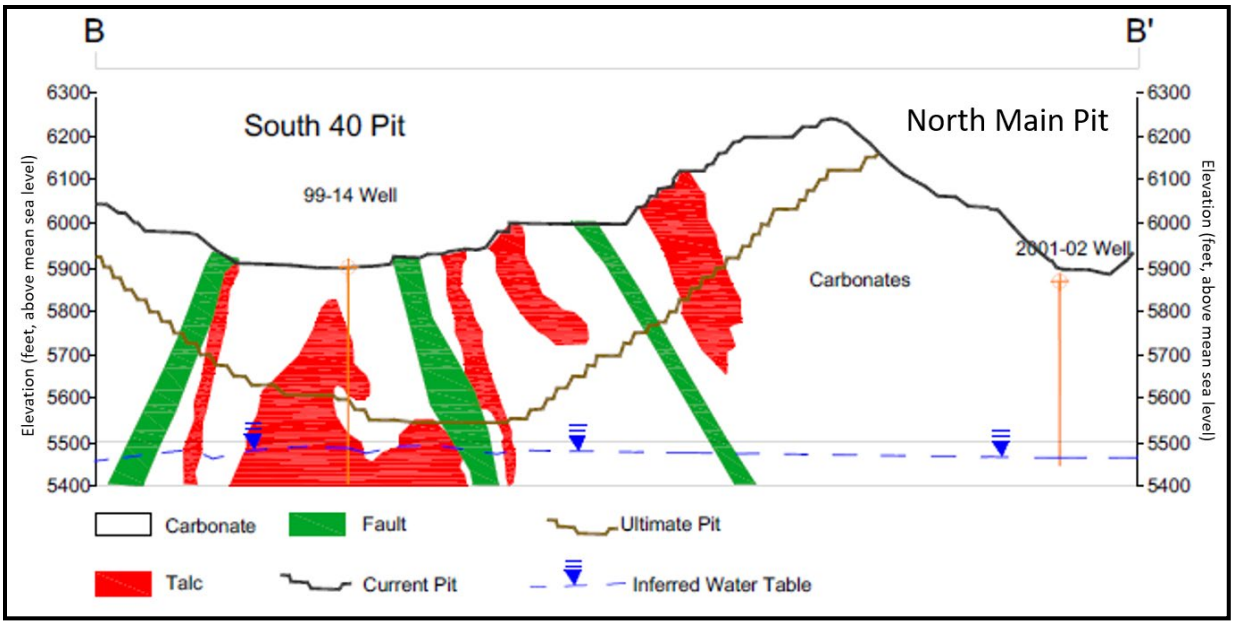


FIGURE 7: CROSS SECTION FOR SOUTH 40 PIT AND NORTH MAIN PIT

Figure 7 caption: Cross Section B-B' corresponds to the aerial view in Figure 6. The bottom of North Main Pit is at a higher elevation above groundwater than the ultimate configuration of the South 40 Pit. The two monitor wells have a slight water elevation change that may be a result of well 99-14 being completed in talc. Talc zones drain much slower than carbonates and may act as a perched aquifer (Luzenac, 2009).

Current and historic backfilled pits are located west of the Mylonitic Fault Zone, so data to assess impacts from the mine pits are limited to well 99-14 located in the South 40 Pit, downgradient of the historic Montana Talc Pit. Groundwater data were measured at this well prior to the South 40 Pit enlarging to engulf the Montana Talc Pit and therefore are representative of conditions downgradient of an open pit that was mined beginning in 1986 (Luzenac, 2003). Nitrate concentrations measured beneath the South 40 Pit are within the range of concentrations measured at wells 2001-02 and Water Barn located upgradient or cross-gradient and on the opposite side of the Mylonitic Fault Zone. This suggests that groundwater potentially influenced by the backfilled South 40 and Montana Talc Pits has similar nitrate concentrations as the comparison monitoring points for up-gradient or background water quality.

Five wells were located within or downgradient of the sediment pond system below the outlet of the Johnny Gulch Rock Drain. Well SW-1 was abandoned in 2006 as it was located near an abandoned septic drain field that likely contributed to anomalously high nitrate concentrations. Alluvial well JG-1 was dry during all monitoring events. Of the remaining three down-gradient wells (JG-2, JG-3, and SW-2), nitrate concentrations are consistently below 1.2 mg/L and average 0.52 mg/l or less indicating that the Johnny Gulch Rock Drain seepage and any stormwater runoff intercepted by the ponds have not impacted nitrate concentrations in groundwater relative to groundwater or non-degradation standards.

TABLE 3: GROUNDWATER ELEVATION AND WATER QUALITY

Monitoring Well Identification	Groundwater Elevation (ft)	Notes	Nitrate-Nitrite as Nitrogen (mg/L)		
			Min.	Mean	Max.
99-14 (South 40 Pit Well)	5,487	Monitored for nitrate in 2000, 2003, and 2006	1.26	2.19	3.5
2001-01 (North Main Pit Well)	5,462	Abandoned in 2007	No Data		
2001-02 (Land Bridge)	5,689	Monitored 2001 through present	0.74	2.61	4.76
Water Barn	6,144	Monitored 2002 through present	0.96	1.46	2.48
JG-1 (MW-1)	5,730	Alluvial well downgradient of Pond 5a. Monitored 2000 through 2012	Dry		
JG-2 (MW-2)	5,641	Bedrock well downgradient of Pond 5a. Monitored 2002 through present	<0.01	0.31	1.2
SW-1 (Maintenance Shop Well)	No Data	Drilled near septic field. Abandoned in 2006.	2.8	5.7	12.2
SW-2 (Maintenance Water Tank)	5,652	Monitored 2002 through present	0.16	0.52	1.17
MW07-01 (JG-3, Landscape, East Gate Well)	5,610	Downgradient of Pond 10a/Vegetated Swale. Monitored twice in 2007 and 2008	0.34	0.36	0.37

The 2006 EA states that a Land Application Disposal (LAD) strategy must be implemented if water monitored in the Johnny Gulch Rock Drain exceeds 7.5 mg/L nitrate (DEQ, 2006). This concentration was established as an internal threshold for monitoring and not necessarily tied to numeric water quality requirements for the flow in the drain. In addition to a LAD strategy, the approved Operating Plan (Luzenac, 2003) and approved SWPPP (Imerys, 2018) state that infiltration ponds with demonstrated natural attenuation (i.e., the existing settling/infiltration pond system) and/or treatment using an engineered biodegradation system could also be employed.

Water monitored in the Johnny Gulch Rock Drain has not exceeded 7.5 mg/L nitrate since March 2017 although this threshold was occasionally exceeded prior to that time (Imerys, 2019; maximum of 31.1 mg/L and mean of 8.0 mg/L from 2003 to 2019). Throughout this period, the rock drain flow has not reported directly to groundwater. Water quality from the rock drain has been managed through attenuation in the settling/infiltration pond system. No flow was observed at the Johnny Gulch Rock drain outlet on 30 of the 61 monitoring events completed between 2003 through 2019 (Imerys, 2019). ARM 17.30.715(1)(d)(i) states that changes in the concentration of nitrate in groundwater should not exceed 7.5 mg/L for nitrate sources other than domestic sewage. Groundwater monitored at the Yellowstone Mine, particularly down-gradient from the

settling/infiltration ponds, has nitrate concentrations that are consistently well below 7.5 mg/L at all locations and therefore any changes are less than this threshold. This shows that the current pond system is effective at naturally attenuating nitrate concentrations in seepage from the Johnny Gulch Rock Drain and other mitigations are not necessary.

Direct Impacts:
Groundwater elevation in the vicinity of the North Main and South 40 Pits is about 5,475 feet amsl, approximately 355 feet below the floor of the North Main Pit (5,830 feet amsl) (DEQ, 2006; Figure 7). By backfilling the North Main Pit, the distance between groundwater and the elevation of the reclaimed ground surface would be even greater. There would be potential for storm water to infiltrate into the benches and highwalls of an open pit, but this is not a significant source of recharge to the very deep groundwater system. The potential for infiltration would be reduced by backfilling the pit, followed by recontouring, placing soil, and revegetating the final surface. The infiltration of water into the backfill would be limited by evapotranspiration in the revegetated cover material. This would return the site and the hydrologic balance to a scenario which is more similar to surrounding native slopes and pre-mining conditions. Impacts to groundwater quantity and distribution would be long-term, as the backfill material would remain beyond the life of the operation, and impacts to groundwater levels would be negligible , at the lowest levels of detection (Table 3). Impacts to groundwater quantity and distribution would not be significant as a result of the proposed minor amendment.

Based on extensive characterization and ongoing monitoring, there would be no acid rock drainage or significant metal mobility associated with the waste rock or overburden, precluding impacts to groundwater quality from those sources. As noted above, the potential for nitrate-nitrite (nitrate) to be released into groundwater is a recognized hazard at the Yellowstone Mine due to explosives residue in mined overburden (DEQ 2006, Luzenac 2003). As shown with previous monitoring data, other backfilled pits have had little to no impact on the nitrate concentrations in groundwater that occurs below or down-gradient from the pits. The overburden that would be placed in North Main Pit is expected to have a similarly low potential to increase nitrate in groundwater, particularly over the anticipated life of the mine operation (to year 2056). The infiltration of water into the backfill, which could potentially mobilize nitrate, would be limited by evapotranspiration in the revegetated cover material. Any potential downward migration of nitrate would also be subject to attenuation processes through the unsaturated zone (355 feet) above the groundwater elevation. In down-gradient wells, nitrate concentrations are consistently below 1.2 mg/L and average 0.52 mg/l or less, indicating that the Johnny Gulch Rock Drain seepage and any stormwater runoff intercepted by the ponds have not impacted nitrate concentrations in groundwater relative to groundwater or non-degradation standards.

Impacts to water quality would be short-term, as they would be expected to be similar to observations of previously backfilled pits and would not extend beyond the life of the operation. Impacts to water quality would also be considered minor, because impacts to nitrate concentrations could be noticeable but would be relatively small and would not affect the integrity or function of the resource (Table 3). Impacts to groundwater quality would not be significant as a result of the proposed action. Magris would continue to be required to follow all applicable state and federal rules regarding water quality and quantity.

Secondary Impacts:
No secondary impacts to groundwater quality, quantity, or distribution would be expected.

Surface Water
Surface water features near the Yellowstone Mine include ephemeral flow within Johnny Gulch, which is upgradient and directly west of the mine, Ruby Creek which is less than one mile to the south of the mine, Ruby River Irrigation Ditch which is downgradient from the mine, and the Madison River which is approximately two miles to the east of the mine (Figures 1 and 2). When present, flow from Johnny Gulch enters the mine permit area southwest of the mine facilities, where it is captured in settling Pond 2a (Figure 8). When necessary, water collecting in sumps in the South 40 Pit can be pumped to Pond 1a where any discharge would exit the pond at Outfall 001, which has not discharged since 1991. If Outfall 001 were to discharge, this flow would enter the Johnny Gulch Rock Drain and associated downstream pond system.

The potential for nitrate-nitrite (nitrate) to be released into surface water is a recognized hazard at the Yellowstone Mine due to explosives residue in mined overburden (DEQ 2006, Luzenac 2003). A system of underdrains and five settling/infiltration ponds are in place at the northeast portion of the site to prevent nitrate and other constituents of concern (from any sources) from migrating off-site into downgradient surface waters (Figure 8). This system is designed to be non-discharging for precipitation events less than the 10-year, 24-hour storm event and is described in the Storm Water Pollution Prevention Plan (SWPPP) for the site (Imerys, 2018) prepared to accompany the Montana Pollutant Discharge Elimination System (MPDES) permit (#MT0028584) that is maintained for the Yellowstone Mine, as well as the site plan "Figure 2. 10-year, 24-hour Stormwater Flow Chart," (Tetra Tech, 2021 within Magris, Amendment 008 Application).

Potential seepage through the interior of waste rock dumps is intercepted by the Johnny Gulch Rock Drain and conveyed to the five settling/infiltration ponds at the northeast end of the permit area (Figure 8). Surficial stormwater runoff is captured in a series of diversion channels which are isolated from the Johnny Gulch Rock Drain, but the channels also report to the system of ponds below the Johnny Gulch Rock Drain outlet. Whether originating as seepage or runoff, the water contained within the down-gradient ponds evaporates or infiltrates into the ground, so there has not been a direct connection to nearby surface water bodies since 2002.

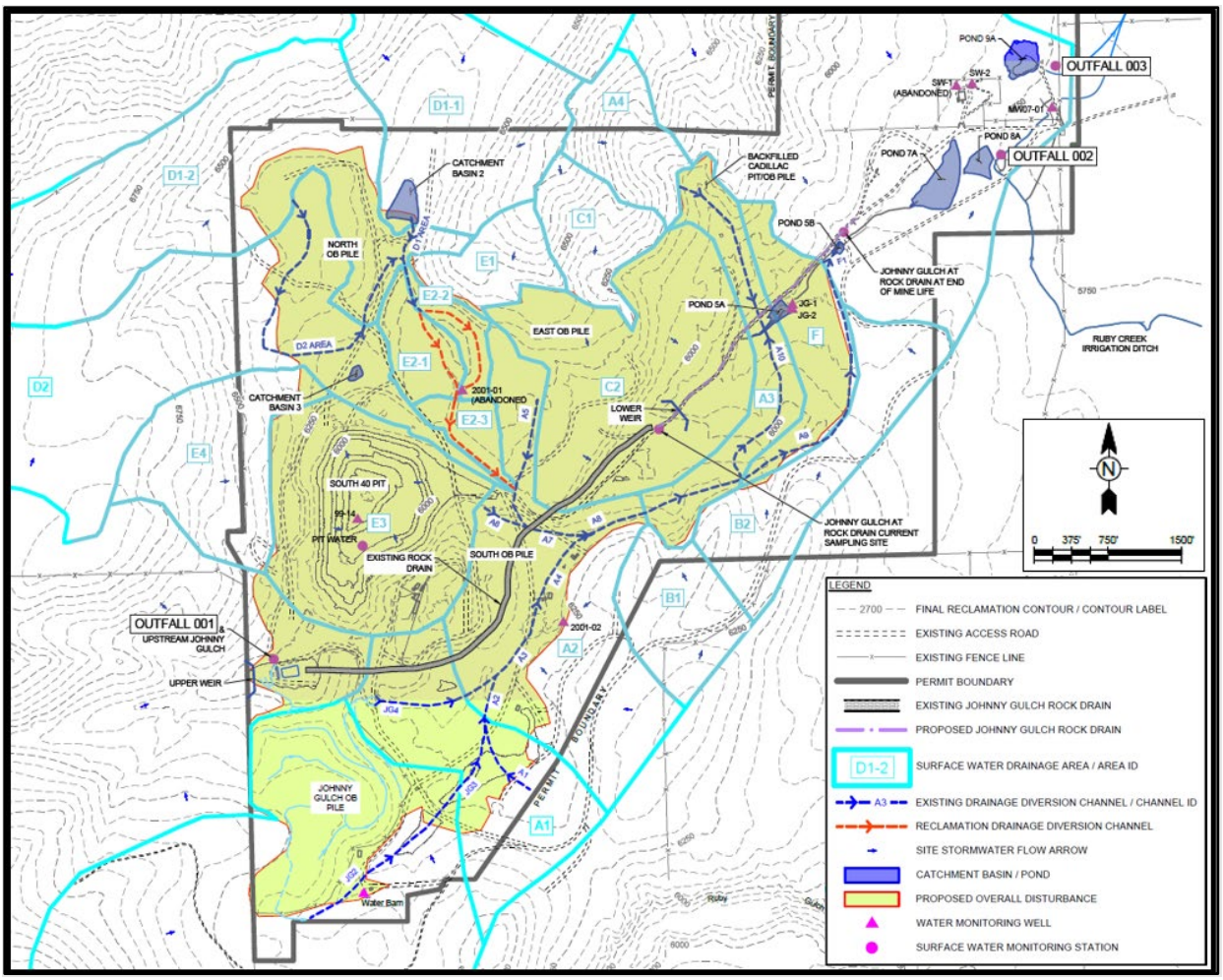


FIGURE 8: DRAINAGE AREAS, RUNOFF CHANNELS, AND PONDS WITHIN YELLOWSTONE MINE

Listed from upstream to downstream, Ponds 5a, 5b, 7a, and 8a have a combined volume of 22.8 acre-feet and the outlet of this series of ponds is identified as Outfall 002. If necessary, water can be diverted from Pond 8a to Pond 9a (28.4 acre-feet) providing a cumulative volume of 51.2 acre-feet, enough to impound the 10-year, 24-hour precipitation event. The outlet of Pond 9a is identified as Outfall 003. Along with a field-tested infiltration rates of 19 acre-feet (Maxim, 2006), the pond system provides a total effective storage capacity of 70.2 acre-feet, enough to contain greater than the 10-year, 24-hour storm event under the current approved Operating Plan.

The 2006 EA states that a Land Application Disposal (LAD) strategy must be implemented if a discharge from Outfall 002 exceeds 5 mg/L nitrate (DEQ, 2006). In addition to a LAD strategy, the approved Operating Plan (Luzenac, 2003) and approved SWPPP (Imerys, 2018) state that infiltration ponds with demonstrated natural attenuation (i.e., the existing sediment/infiltration pond system) and/or treatment using an engineered biodegradation system could be employed.

There have been no discharges from Outfall 002 or Outfall 003 since 2002, as water entering the pond system typically evaporates and infiltrates before leaving Pond 5a, the furthest upstream pond. Therefore, no LAD or other treatment strategies have been necessary to protect surface water

resources. No surface water samples have exceeded 5 mg/L nitrate except for excursions measured in seepage from the Johnny Gulch Rock Drain. No flow was observed at the Johnny Gulch Rock drain outlet on 30 of the 61 monitoring events completed between 2003 through 2019 (Imerys, 2019).

Wetlands:
A previous permittee for the Yellowstone Mine submitted a wetlands delineation and functional analysis report and a draft Clean Water Act (CWA) 404 Permit Application to the U.S. Army Corps of Engineers (USACE) seeking authorization to place fill material (overburden) in a portion of Johnny Gulch. Based on the results of that report and a site visit, USACE determined that Johnny Gulch is "isolated" and therefore, not subject to USACE regulatory authorities, and concluded that no permit is required. No other wetland issues have been identified within the Yellowstone Mine permit area (DEQ, 2006) and no impacts would occur as a result of the proposed minor amendment to backfill the North Main Pit.

Direct Impacts:
Pit backfill activities would include the construction of drainage features to eliminate the potential for surface water to pond within the reclaimed pit area. These features generally consist of a "Y" shaped system of channels with two branches extending along the east and west foot of a topographically high area (Figure 8, red lines). Runoff that would have collected in the pit and evaporated or infiltrated to groundwater would instead flow around the North Main Pit area within the newly constructed channels. This would result in a potential increase in the runoff reaching the settling/infiltration pond system at the downstream end of Johnny Gulch, with no direct connection to surface water bodies. The upland drainage areas which convey flow from up-gradient of the North Main Pit were delineated based on updated survey data, end of mine-life topography, and potential runoff flow paths (Figure 8). The delineation of the drainage basins was then used to determine the runoff volume from each area using runoff methodology consistent with the site's previous Drainage Plans (Luzenac, 2002) (CDM, 1997). A large catchment basin was identified and field-verified to be upgradient of the North Main Pit and was calculated to have a storage capacity of 27.6 acre-feet.

Using these factors, it was determined that 15.4 acre-feet of additional flow would be contributed to the stormwater system during a 10-year, 24-hour storm event. When this volume is added to the 35.9 acre-feet determined for the current Operating Plan the total (51.3 acre-feet) is considerably lower than the storage and infiltration capacity of the pond system (70.2 acre-feet). Based on the analysis, the ponds have sufficient capacity to manage a 10-year, 24-hour storm event and prevent impacts to downstream surface water resources.

The analysis then evaluated the potential impacts to the structure of the drainage channels from the additional flow that resulted from reclamation of the North Main Pit, ensuring that the channels are adequately sized. Peak flow calculations for both the 10-year, 24-hour storm event and the 50-year design storm were estimated because the drainage system at the site was designed for a 50-year storm event. For the 10-year, 24-hour storm event there are no concerns about the channels' ability to handle peak flow. However, for the 50-year design flow there is the potential for erosion in the drainage channel segment A5-A7, which is more than 5,000 feet (horizontal) upstream from the upper-most settling/infiltration pond (Pond 5a).

The minor amendment application includes recommendations to conduct a field verification of the channel depths and to reinforce the channel segment with rip rap if needed, for the location where increased flow could cause erosion during the 50-year design storm. In the absence of this reinforcement, any potential sediment loading from this channel erosion would be contained by the current downstream pond system. This mitigation would maintain the integrity of the upper channel, but is not required to reduce potential impacts to surface water resources.

Analysis results indicate the current stormwater system is adequate to handle a 10-year, 24-hour storm following the backfill and reclamation of the North Mine Pit, and that with field verification and channel improvements, the system can handle the 50-year design flow originally used to design the stormwater system. Potential impacts to runoff and surface water would be short-term, as they would not extend beyond the life of the operation, and minor, because the potential increase in runoff volume would be contained within the current system approved through MPDES permit #MT0028584. The proposed action would have no additional impacts on the integrity or function of surface water resources. Magris would continue to be required to follow all applicable state and federal rules regarding water quality and quantity.

Secondary Impacts:
No secondary impacts to surface water quality, quantity, or distribution would be expected.

3. AIR QUALITY

Would pollutants or particulate be produced? Is the operation influenced by air quality regulations or zones (Class I airshed)?

Mining and ore processing at the Yellowstone Mine produce particulate and gaseous emissions. Most emissions from the mine are particulate matter (PM) resulting from road use, drilling, blasting, loading, and hauling of overburden and ore. Gaseous emissions of combustion by-products from diesel engines and blasting compounds are minor but contribute some sulfur dioxide, nitrogen dioxide, carbon monoxide, and volatile organic compounds.

Particulate matter emissions are controlled at the Yellowstone Mine by engineering and operating practices. Air quality was previously monitored at the Yellowstone Mine site as specified under the existing air quality permit (Montana Air Quality Permit #1648-11). Two samplers, one located upwind and another downwind of the mine property, monitored PM_{10} (particulate matter less than 10 microns in diameter). Data from PM_{10} samplers were collected every 6 days. Monitoring results were provided to DEQ on a quarterly basis. Air quality impacts were evaluated using the state and federal standards for PM_{10} of 150 micrograms per cubic meter (µg/m3) per 24-hour period or an annual average of 50 µg/m3 (ARM 17.8.223). Ambient air monitoring conducted at the Yellowstone Mine indicated mine emissions have historically had little effect on regional air quality and visibility. Data from those PM_{10} stations indicated concentrations ranged from approximately 10 to 15 µg/m3, with maximum concentrations typically 25 to 35 µg/m3 (DEQ, 2006).

The Yellowstone Mine has never exceeded state or federal air quality standards. Particulate and gaseous emissions would not change appreciably as a result of Minor Amendment 008. Mining and ore processing methods and rates, the size of the fleet, and types of vehicles to be used for pit

backfill and reclamation activities would not change from the current conditions. The air monitoring program (AIRS) was terminated in September 2003. DEQ recommended termination after review of nearly 20 years of data that indicated that results were repeatedly less than 50-80 percent of the enforceable standards (ARM 17.8.223).

In addition to the Yellowstone Mine, other occasional local sources of air pollutants in the mine area include vehicle traffic on unpaved roads, logging operations, and woodsmoke from wildfires and slash burning.

Direct Impacts:
The proposed action would not increase the impacts to air quality appreciably from the current operational impacts.

Impacts to air quality would not be significant as a result of the proposed operations. Any impacts would be short term, as they would not last beyond the life of the operation, and minor, because impacts would be noticeable but would be relatively small and would not affect the integrity or function of the resource (Table 3).

Secondary Impacts:
No secondary impacts to air quality would be expected.

4. VEGETATION COVER, QUANTITY AND QUALITY

Would vegetative communities be significantly impacted? Are any rare plants or cover types present?

The vegetation of the permit and surrounding areas is dominated by the Montana Sagebrush Steppe eco-type, with grassland areas of the Rocky Mountain Lower Montane, Foothill, and Valley Grassland type, and forest areas of the Rocky Mountain Montane Douglas-fir Forest and Woodland type. Montana Sagebrush Steppe is composed mainly of mountain big sagebrush (*Artemisia tridentata ssp. vaseyana*), along with occurrences of other brush species: silver sagebrush (*Artemisia cana ssp. viscidula*), subalpine big sagebrush (*Artemisia tridentata ssp. spiciformis*), three tip sagebrush (*Artemisia tripartita ssp. tripartita*) and antelope bitterbrush (*Purshia tridentata*). Rocky Mountain Lower Montane, Foothill, and Valley Grassland is dominated by Rough Fescue (*Festuca campestris*) and Idaho Fescue (*Festcua Idahoensis*) as co-dominant species. Bluebunch and Western Wheatgrass are also commonly found within the system. Rocky Mountain Montane Douglas-fir Forest and Woodlands are primarily found along the Rocky Mountain Front. The Douglas-fir (*Pseudotsuga menziesii*) dominates this system, accompanied by understory shrubs such as common ninebark (*Physocarpus malvaceus*), common juniper (*Juniperus communis*), Rocky Mountain juniper (*Juniperus scopulorum*), birch-leaf spiraea (*Spiraea betulifolia*), snowberry (*Symphoricarpos spp.*), creeping Oregon grape (*Mahonia repens*) and Canadian buffaloberry (*Shepherdia canadensis*). Pinegrass (*Calamogrostis rubescens*) is often associated with Douglas-fir (MTNHP, 2020).

A search of the Montana Natural Heritage Program (MTNHP) identified species occurrences and observations near the proposed amendment area for three vascular plant species of concern (SOC), Railhead Milkvetch, Whitebark Pine, and Spiney Skeletonweed, and potential species of concern

(PSOC), Limestone Larkspur. Additionally, possible habitat for 46 vascular plant and 1 moss SOC or potential species of concern (PSOC) was identified. Common Hound's-tongue, Spotted Knapweed, Whitetop, Canada Thistle, Leafy Spurge, and Cheatgrass, all noxious weeds, have been observed near the permit and proposed amendment area (MTNHP, 2020).

Direct Impacts:
No new surface disturbance is proposed in this amendment. Due to a wide range of suitable habitat surrounding the area, adverse impacts to SOC should be negligible. The proposed action would reclaim nearly 45 acres of unvegetated highwalls, rock outcrops, and talus slopes remaining at the North Pit location through backfilling and revegetation. Overburden used as backfill in the proposed action would otherwise be placed in an external overburden pile. The proposed action would reduce potential weed spread from previously unvegetated areas in the North Pit and the external overburden pile.

Impacts to vegetative cover, quantity, or quality resulting from this project would not be significant. Beneficial impacts would be long-term, since they would remain after the proposed action is completed, and minor, because impacts would be noticeable but would be relatively small and would not affect the integrity or function of the resource (Table 3).

Secondary Impacts:
No secondary impacts to vegetation cover, quantity and quality would be expected.

5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS

Is there substantial use of the area by important wildlife, birds or fish?

A survey of wildlife in the Yellowstone Mine area was completed in 1981 and 1982. Habitats were identified for elk, moose, mule deer, white-tailed deer, antelope, and black bear, along with potential habitat for grizzly bear. The survey indicated that the mining operation had not affected wildlife outside of the mine permit area (Farmer, 1982).

A 2020 search of the MTNHP identified potential habitat for 107 mammal, reptile, invertebrate, bird, and amphibian SOC, PSOC, or sensitive species. SOC that have recorded occurrences in or near the proposed amendment area include the Arctic Grayling, Long-billed Curlew, Golden Eagle, Bald Eagle, McCown's Longspur, Grizzly Bear, Flammulated Owl, and Wolverine. Additionally, SOC and PSOC that have been observed near the proposed amendment area include the Wyoming Ground Squirrel, Uinta Ground Squirrel, Trumpeter Swan, Great Blue Heron, Franklin's Gull, and Westslope Cutthroat Trout (MTNHP, 2020).

The Arctic Grayling, Trumpeter Swan, Great Blue Heron, Franklin's Gull, and Westslope Cutthroat Trout have a habitat requirement for open water, which is not found within the permit boundary. Threatened Species, Sensitive Species, and Special Status Species are further discussed in "Section 6. Unique, Endangered, Fragile, or Limited Resources."

Direct Impacts:
The Wall Creek State Wildlife Management Area is located east and south of the mine permit area and provides over 7,000 acres of suitable habitat for wildlife in the area. Wildlife most likely has been previously displaced by existing operations under the operating permit and would not be

further displaced by the proposed action. Any displaced animals could find other suitable habitat nearby and return to the project area shortly after the project conclusion. The proposed action would revegetate nearly 45 acres of the existing North Pit, returning it to suitable wildlife/grazing habitat after mine closure.

Impacts to terrestrial, avian, and aquatic life and habitat would not be significant. There are no aquatic habitats in the proposed permit area, so no impact on aquatic life would be expected. Any impacts to terrestrial and avian life and habitat would be short term, as they would not last beyond the life of the operation and minor, because impacts would be noticeable but would be relatively small and would not affect the integrity or function of the resource.

Secondary Impacts:
No secondary impacts to terrestrial, avian, or aquatic life or habitats that could be stimulated or induced by the direct impacts analyzed above would be expected.

6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern?

Species of concern and species of potential concern are addressed in "Section 4. Vegetation Cover, Quality and Quantity" and "Section 5. Terrestrial, Avian, and Aquatic Life and Habitats". Threatened Species and Special Status Species that have occurred or been observed near the proposed amendment area include the Grizzly Bear and Bald Eagle, respectively (MTNHP, 2020). No endangered species have been observed or occurred near the proposed amendment area. Habitats for the Grizzly Bear and Bald Eagle are discussed below.

Grizzly Bear (*Ursus arctos horribilis*) – Grizzly Bears are primarily found in the western part of Montana in meadows, seeps, riparian zones, mixed shrub fields, closed timber, sidehill parks, snow chutes, and alpine slab-rock habitats (Montana Field Guide, 2021). The home range of an adult bear may encompass up to six hundred square miles. They do not migrate, but follow food sources to higher elevations in the summer and lower elevations in the winter. Grizzly Bears are primarily found in large tracts of relatively undisturbed land. The Grizzly Bear is listed as a Threatened Species under the Endangered Species Act (USFWS, 2021). Due to a wide range of suitable habitat near the area and existing disturbance in the proposed amendment area, impacts to this species should be minimal.

Bald Eagle (*Haliaeetus leucocepalus*) – The Bald Eagle in Montana is primarily found in forested, mountainous areas along rivers and lakes, especially during the breeding season. Important year-round habitat includes wetlands, major water bodies, spring spawning streams, ungulate winter ranges, and open water areas. The Bald Eagle is listed as a Special Status Species. General objectives of habitat management for Bald Eagles in Montana include: maintaining prey bases; maintaining forest stands currently used or suitable for nesting, roosting, and foraging; planning for future potential nesting, roosting, and foraging habitat; and minimizing disturbances from human activities in nest territories, at communal roosts, and at important feeding sites (Montana Field Guide, 2021). Therefore, impacts to this species should be minimal due to existing disturbances that have taken place.

No wetlands have been identified in the proposed permit area.

Direct Impacts:
Grizzly bears and bald eagles most likely have been previously displaced by existing operations under the operating permit and would not be further displaced by the proposed action. Any displaced animals could find other suitable habitat nearby and return to the project area shortly after the project conclusion.

Impacts to unique, endangered, fragile or limited environmental resources would not be significant. Any impacts would be short term, as they would not last beyond the life of the operation and minor, because impacts would be noticeable but would be relatively small and would not affect the integrity or function of the resource (Table 3).

Secondary Impacts:
No secondary impacts to unique, endangered, fragile, or limited environmental resources that could be stimulated or induced by the direct impacts analyzed above would be expected.

7. HISTORICAL AND ARCHAEOLOGICAL SITES

Are any historical, archaeological or paleontological resources present?

Direct Impacts:
No new disturbance area is proposed in the amendment action, which would involve backfilling a previously disturbed open pit with material removed from an actively disturbed pit. Therefore, impacts to historical, archaeological, or paleontological resources are not likely to occur.

Secondary Impacts:
No secondary impacts to historical and archaeological sites would be expected.

8. AESTHETICS

Is the proposed operation on a prominent topographic feature? Would it be visible from populated or scenic areas? Would there be excessive noise or light?

The proposed amendment area would be located on private land. The North Pit site is not visible from any residential areas and is shielded from viewers on US Highway 287 by topographic features.

Direct Impacts:
The proposed action would reclaim the North Pit, regrading to blend with natural surrounding topography, and revegetating. There would be no change to current noise levels or visible light from the operating permit area.

Impacts to aesthetics would not be significant. Beneficial impacts to aesthetics would be long-term, since they will remain after the proposed project ends, and moderate but positive, because the effect would be easily identifiable and would change the function and integrity of the resource (Table 3).

Secondary Impacts:
There would be no secondary impacts to the sites as there are few residences in the area.

9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY

Would the proposed operation use resources that are limited in the area? Are there other activities nearby that would affect the project?

Current mining operations at the site use diesel fuel power for equipment. Approximately 14,000 gallons of diesel fuel is stored in the Land Bridge Plant area of the mine for use on site. An existing 12.47 kilovolt transmission line from a substation located in the Madison Valley supplies electrical power for mine operations. Dust control is the primary use for water at the site, with a negligible amount used in the sorting process. This water is sourced from precipitation and perched seepage that collects in the mine pit and from ephemeral flow in Johnny Gulch (DEQ, 2006). Water from these sources may be pumped into a lined storage pond or directly into water trucks, with pumping rates and frequency depending on the seasonal availability and demand for dust suppression. The proposed action would not expand any use of resources that are limited in the area.

Direct Impacts:
Any impacts on the demand on environmental resources of land, water, air, or energy would not be significant as a result of the proposed operations. Impacts would be short term, as they would not last beyond the proposed life of the operation and minor, because impacts would be noticeable but would be relatively small and would not affect the integrity or function of the resource.

Secondary Impacts:
No secondary impacts to environmental resources of land, water, air or energy would be expected.

10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES

Are there other activities nearby that would affect the proposed operation?

DEQ searched the following websites or databases for nearby activities that may affect the project, however no other projects were identified:

- Montana Department of Natural Resource and Conservation
- Montana Department of Environmental Quality
- Montana Department of Transportation
- Madison County
- United States Department of Interior Bureau of Land Management
- United States Forest Service

Aside from the current mining operations, the surrounding land is used for transportation, rangeland, recreation, and wildlife habitat.

Direct Impacts:
Impacts on other environmental resources are not likely to occur as a result of the proposed operations.

Secondary Impacts:
No secondary impacts to other environmental resources would be expected as a result of the proposed work.

11. HUMAN HEALTH AND SAFETY

Would this proposed operation add to health and safety risks in the area?

The applicant would be required to adhere to all applicable state and federal safety laws. Industrial work such as the work proposed by the applicant is inherently dangerous. The Mine Safety and Health Administration (MSHA) has developed rules and guidelines to reduce the risks associated with this type of labor. Employees at the Yellowstone Mine are required to receive initial and annual safety training.

The Yellowstone Mine controls public access within the permit boundary through posting of signs, mandatory visitor check-in, and visitor escort procedures. Additionally, visitors and vendors are provided with hazard recognition training, personal protective equipment, and magnetically attached fluorescent vehicle cones, which serve as identification while traveling on mine property. Perimeter gates are locked to control access during non-operating hours (2006 EA).

Direct Impacts:
Impacts on human health and safety resulting from the proposed operation would not be significant. No impacts to public health and safety would result from the proposed action. However, impacts on worker human health and safety would be involved during mining operations, but would be short term, as they would not last beyond the proposed life of the operation and minor, because impacts would be noticeable but would be relatively small in number.

Secondary Impacts:
No secondary impacts to human health and safety would be expected as a result of the proposed work.

12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION

Would the proposed operation add to or alter these activities?

Direct Impacts:
As noted in the cumulative impacts analysis below, this project would add to the impacts of mining in the existing permit area, however all disturbance related to the proposed amendment would be reclaimed at the conclusion of the project.

Impacts on the industrial, commercial, and agricultural activities and production in the area would not be significant. Any impacts would be short term, as they would not last beyond the proposed life of the operation and minor, because impacts would be noticeable but would be relatively small and would not affect the integrity or function of the resource.

Secondary Impacts:

No secondary impacts to industrial, commercial and agricultural activities and production would be expected as a result of the proposed work.

13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT

Would the proposed operation create, move or eliminate jobs? If so, what is the estimated number?

The Yellowstone mine is currently operating under the Hard Rock Mine Operating Permit No. 00005. Mining operations would continue to employ the same number of employees and onsite contractors, approximately 35 people. The workforce is not expected to either increase or decrease as a result of the proposed action.

Direct Impacts:
All activities would be conducted by current Yellowstone mine employees. No additional work force is anticipated. If market conditions fluctuate, the work force may marginally increase or decrease. No lasting positive or negative impacts to employment would be expected from this project.

Secondary Impacts:
No secondary impacts to quantity and distribution of employment would be expected as a result of the proposed work.

14. LOCAL AND STATE TAX BASE AND TAX REVENUES

Would the proposed operation create or eliminate tax revenue?

The sale of talc creates local jobs, providing tax revenue to the state and/or the federal government. The landowner may receive royalties from the operation.

Direct Impacts:
The production and work force would not be anticipated to increase from the proposed action, and no change in tax revenues would be anticipated. Impacts to the local and state tax base and tax revenues are not expected.

Secondary Impacts:
No secondary impacts to the local and state tax base and tax revenues would be expected as a result of the proposed work.

15. DEMAND FOR GOVERNMENT SERVICES

Would substantial traffic be added to existing roads? Would other services (fire protection, police, schools, etc.) be needed?

The site is on private land and operations would be a continuance of current activities. The site is located off US Highway 287.

Direct Impacts:
The site is currently in operation as a permitted mine site. No increase in employment or production is anticipated from the proposed minor amendment. All traffic related to the mine operation, including employees, heavy equipment, and semi-truck traffic, would utilize US Highway 287.

Impacts on demand for government services would not be significant. Any impacts would be short term, as they would not last beyond the proposed mine life and minor, because impacts would be noticeable but would be relatively small and would not affect the integrity or function of the resource.

Secondary Impacts:
No secondary impacts to the demand for government would be expected as a result of the proposed work.

16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS

Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?

The proposed amendment area is on private land which is an existing pit resulting from permitted mine operations. The amendment area is and would continue to be subject to the Madison County Weed Management Control Plan. There are no known zoning or other restrictions in place.

Direct Impacts:
DEQ is not aware of any other locally-adopted environmental plans or goals that would impact this proposed project or the project area. Impacts from or to locally-adopted environmental plans and goals would not be expected as a result of this project.

Secondary Impacts:
No secondary impacts to the locally-adopted environmental plans and goals would be expected as a result of the proposed work.

17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES

Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?

The site is located on private property and there are no recreational or wilderness areas in the permit boundaries. The permit area borders the Wall Creek State Wildlife Management area, which is located south and east of the mine site. This public land can be accessed by the Johnny Gulch Road, which is adjacent to the mine and crosses onto the existing permit area in a few spots. Mine personnel would use permanent cautionary signs advising of possible mine traffic along this segment of road and supplement this with temporary signs, detours, and flagmen as necessary during potentially hazardous mine activities on or near the Johnny Gulch Road (2006 EA).

Direct Impacts:
The proposed amendment does not affect access to nearby wilderness or recreational areas. Visitors to the Wall Creek State Wildlife Management area may experience some noise from the mine, but this would not increase in frequency due to the proposed action. No direct impacts to access to or quality of recreational and wilderness activities would be expected form the proposed action.

Secondary Impacts:
No secondary impacts to access and quality of recreational and wilderness activities would be expected as a result of the proposed work.

18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING

Would the proposed operation add to the population and require additional housing?

As noted above in "Section 13, Quantity and Distribution of Employment," the mine site would not be expected to add to or decrease the local population or employment of the Yellowstone mine from the proposed action.

Direct Impacts:
No direct impacts to density and distribution of population and housing would be expected from the proposed operation.

Secondary Impacts:
No secondary impacts to density and distribution of population and housing would be expected as a result of the proposed work.

19. SOCIAL STRUCTURES AND MORES

Is some disruption of native or traditional lifestyles or communities possible?

Direct Impacts:
The proposed action would occur entirely on private land and involve backfilling a previously disturbed open pit with material removed from an actively disturbed pit. No disruption of native or traditional lifestyles or communities would be expected.

Secondary Impacts:
No secondary impacts to social structures and mores would be expected as a result of the proposed work.

20. CULTURAL UNIQUENESS AND DIVERSITY

Would the action cause a shift in some unique quality of the area?

Direct Impacts:
There are no unique qualities that would be affected by the proposed action, which involves backfilling a previously disturbed open pit with material removed from an actively disturbed pit. No impacts to cultural uniqueness and diversity would be expected from this project.

Secondary Impacts:
No secondary impacts to cultural uniqueness and diversity would be expected as a result of the proposed work.

21. PRIVATE PROPERTY IMPACTS

Montana's Private Property Assessment Act, Section 2-10-101, et seq., MCA establishes an

orderly and consistent internal management process for state agencies to evaluate their proposed actions under the "Takings Clauses" of the United States and Montana Constitutions, as those clauses are interpreted and applied by the United States and Montana Supreme Courts.

Section 2-10-104, MCA required Montana's Attorney General to develop guidelines, including a checklist, to assist state agencies in identifying and evaluating proposed agency actions that may result in the taking or damaging of private property. In turn, Section 2-10-105(1) and (2), MCA set out a process for each State Agency to evaluate whether a State action may result in an unconstitutional taking of private property. Those provisions direct that:

> (1) Each state agency shall assign a qualified person or persons in the state agency the duty and authority to ensure that the state agency complies with this part. Each state agency action with taking or damaging implications must be submitted to that person or persons for review and completion of an impact assessment. The state agency may not take the action unless the review and impact assessment have been completed, except that the action with taking or damaging implications may be taken before the review and impact assessment are completed if necessary to avoid an immediate threat to public health or safety.
>
> (2) Using the attorney general's guidelines and checklist, the person shall prepare a taking or damaging impact assessment for each state agency action with taking or damaging implications that includes an analysis of at least the following:
>
> (a) the likelihood that a state or federal court would hold that the action is a taking or damaging;
>
> (b) alternatives to the action that would fulfill the agency's statutory obligations and at the same time reduce the risk for a taking or damaging; and
>
> (c) the estimated cost of any financial compensation by the state agency to one or more persons that might be caused by the action and the source for payment of the compensation.

DEQ has utilized the Montana Attorney General's Checklist and analytical Flowchart revised in January, 2011 to evaluate the legal impact to property rights resulting from the proposed project (Attachment 1). These flowchart questions have been applied by DEQ to the proposed project area, which takes place on private real property owned by the Permittee, Magris, as follows:

1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights? Answer: Yes.
2. Does the action result in either a permanent or indefinite physical occupation of private property? Answer: No.
3. Does the action deprive the owner of all economically beneficial use of the property? Answer: No.
4. Does the action require a property owner to dedicate a portion of property or to grant an easement? Answer: No.
5. Does the action deny a fundamental attribute of ownership? Answer: No.
6. Does the action have a severe impact on the value of the property? Answer: No.
7. Does the action damage the property by causing some physical disturbance with respect

to the property in excess of that sustained by the public generally? No.

Given the results from the legal flowchart questions, DEQ has determined that the permit conditions are reasonably necessary to ensure and demonstrate compliance with applicable requirements of the Metal Mine Reclamation Act, Section 82-4-301, et seq., MCA, and have been sought by the Applicant and private property Owner. Therefore, no taking or damaging of private property rights will occur as a result of DEQ's approval of the Permit Application by the private property Owner, Magris.

22. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES

Due to the nature of the proposed activities, and the limited operations, no further direct or secondary impacts are anticipated from these proposed activities.

ALTERNATIVE CONSIDERED

In addition to the proposed action, DEQ also considered a "no action" alternative. Under the "no action" alternative, DEQ would deny Amendment 008 to Operating Permit No. 00005. Magris would lack the authority to backfill North Main Pit or to expand operations beyond what is allowed under the currently approved Operating Plan. Any potential impacts that are identified above, which would be authorized under the proposed amendment, would not occur.

PUBLIC INVOLVEMENT

For a minor amendment, DEQ shall not implement the application, notice and hearing requirements for new permits or major amendments, pursuant to Sections 82-4-337 and 82-4-353, MCA. The department shall provide the permittee with a notice of decision on the adequacy of the minor amendment application within 30 days of receipt of the application (ARM 17.24.119(4)). The decision notice and Final EA will be available to the public through the DEQ website, although there will not be a comment period associated with the Final EA.

Internal review of the environmental assessment document was completed by DEQ staff. The internal review included queries to the following websites/ databases/ personnel:

- Montana Department of Environmental Quality (DEQ)
- Montana Cadastral Mapping Program
- USDA NRCS Soil Survey
- Montana Natural Heritage Program (MTNHP)
- Montana Department of Natural Resource and Conservation (DNRC)
- Montana Department of Transportation
- United States Department of Interior Bureau of Land Management (BLM)
- United States Forest Service (USFS)
- United States Fish & Wildlife Service (USFWS)
- Madison County
- United States Geological Survey (USGS)– Stream Stats
- Montana Groundwater Information Center (GWIC)
- Montana Bureau of Mines and Geology (MBMG)

OTHER GOVERNMENTAL AGENCIES WITH JURSIDICTION

The proposed project would be fully located on private land. All applicable state and federal rules must be adhered to, which, at some level, may also include other state, federal, or tribal agency jurisdiction.

CUMULATIVE EFFECTS

Cumulative impacts are the collective impacts on the human environment within the borders of Montana of the Proposed Action when considered in conjunction with other past and present actions related to the Proposed Action by location and generic type. Related future actions must also be considered when these actions are under concurrent consideration by any state agency through preimpact statement studies, separate impact statement evaluation, or permit processing procedures.

This environmental review analyzes the proposed project submitted by the applicant. Any impacts from the proposed operation would be short-term and would be fully reclaimed while allowing certain structures to remain that have a post mining use at the conclusion of the proposed operation. Thus, impacts from the proposed project would not contribute to long-term cumulative effects on the area. Other than the existing Yellowstone Mine operations, DEQ has identified no active mining projects in the area.

No other DNRC, BLM, or USFS regulated projects were identified in the project vicinity. DEQ considered all impacts related to this project and secondary impacts that may result. Cumulative impacts related to this project are identified in the Table 3. Cumulative impacts related to this project would not be significant.

NEED FOR FURTHER ANALYSIS AND SIGNIFICANCE OF POTENTIAL IMPACTS

When determining whether the preparation of an environmental impact statement is needed, DEQ is required to consider the significance criteria set forth in ARM 17.4.608, which are as follows:

1. The severity, duration, geographic extent, and frequency of the occurrence of the impact;
2. The probability that the impact would occur if the proposed action occurs; or conversely, reasonable assurance in keeping with the potential severity of an impact that the impact would not occur;
3. Growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution of the impact to cumulative impacts;
4. The quantity and quality of each environmental resource or value that would be affected, including the uniqueness and fragility of those resources and values;
5. The importance to the state and to society of each environmental resource or value that would be affected;
6. Any precedent that would be set because of an impact of the proposed action that would commit the department to future actions with significant impacts or a decision in principle about such future actions; and
7. Potential conflict with local, state, or federal laws, requirements, or formal plans.

TABLE 3: SUMMARY OF POTENTIAL IMPACTS THAT COULD RESULT FROM MINOR AMENDMENT 008 TO OPERATING PERMIT #00005

Potential Impact	Affected Resource and Section Reference	Severity[1], Extent[2], Duration[3], Frequency[4], Uniqueness and Fragility (U/F)	Probability[5] impact will occur	Cumulative Impacts	Measures to reduce impact as proposed by applicant	Significance (yes/no)
Increased soil quality, stability, and moisture	Soil 1. Geology	**S**-high: North Main Pit footprint of 50 acres would be backfilled **E**-medium: 50 acres **D**-Permanent backfill **F**-Permanent backfill **U/F**-Not unique or particularly fragile.	Probable	Increased soil quality, stability, and moisture in the North Main Pit footprint would add to overall stability of the surrounding area	N/A – impact is beneficial	No
Increased ground water quality	Groundwater 3. Water Quality, Quantity, and Distribution	**S**-medium: Backfill of the North Main Pit would decrease potential for infiltration, with low potential to increase nitrate-nitrite. **E**-medium: 50 acres **D**- Permanent backfill. Nitrate-nitrite from blasting would dissipate when mining ceases. **F**- Daily: Potential for runoff and infiltration during mining and initial reclamation operations. **U/F**-Not unique or particularly fragile.	Probable	None	N/A – impact is beneficial.	No
Increased runoff volume and water quality	Surface water 3. Water Quality, Quantity, and Distribution	**S**-low: Backfill of the North Main Pit would increase potential runoff volume, but reduce potential for nitrate-nitrite loading. Runoff would be contained within existing management system. E-medium: 50 acres D- Permanent backfill. Nitrate-nitrite from blasting would dissipate when mining ceases. F-Daily: During mining and initial reclamation operations. U/F-Not unique or particularly fragile.	Probable	None	Channel protection (rip rap) may be needed, but not a mitigation for impact to surface water resources	No

1. Severity describes the concentration at which the impact may occur. Levels used are low, medium, high.
2. Extent describes the land area over which the impact may occur. Levels used are small, medium, and large.
3. Duration describes the time period over which the impact may occur. Descriptors used are discrete time increments (day, month, year, and season).
4. Frequency describes how often the impact may occur.
5. Probability describes how likely it is that the impact may occur without mitigation. Levels used are: impossible, unlikely, possible, probable, certain.

SUMMARY

The severity, duration, geographic extent, and frequency of the occurrence of the impacts associated with the proposed activities would be limited. Magris is proposing to reclaim the current disturbance of the North Main Pit by backfilling with overburden, regrading, and revegetating the area. The proposed amendment would be a continuation of current mining and reclamation activities at the site and would not result in any increased disturbance.

DEQ has not identified any significant impacts associated with the proposed activities for any environmental resource. Approving Amendment 008 to Operating Permit #00005 does not set any precedent that commits DEQ to future actions with significant impacts or a decision in principle about such future actions. If the applicant submits another operating permit application, DEQ is not committed to issuing those authorizations. DEQ would conduct an environmental review for any subsequent authorizations sought by the applicant that require environmental review. DEQ would make a permitting decision based on the criteria set forth in the MMRA. Approving Amendment 008 to Operating Permit #00005 does not set a precedent for DEQ's review of other applications for operating permits, including the level of environmental review. The level of environmental review decision is made based on a case-specific consideration of the criteria set forth in ARM 17.4.608.

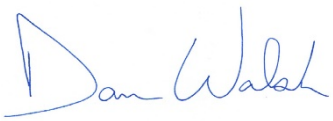
Finally, DEQ does not identify any of the proposed activities as having growth-inducing or growth-inhibiting aspects or conflict with any local, state, or federal laws, requirements, or formal plans.

Based on a consideration of the criteria set forth in ARM 17.4.608, the proposed activities are not predicted to significantly impact the quality of the human environment. Therefore, DEQ believes that preparation of an environmental impact statement is not required.

Environmental Assessment Prepared By:
Garrett Smith, Geochemist
Millie Olsen, Environmental Science Specialist
Hard Rock Mining Section, DEQ

Environmental Assessment Reviewed by:
Herb Rolfes, Operating Permit Section Supervisor
Hard Rock Mining Section, DEQ

Approved By:



September 10, 2021

Signature — Date
Dan Walsh, Chief
Mining Bureau, DEQ

CITATIONS

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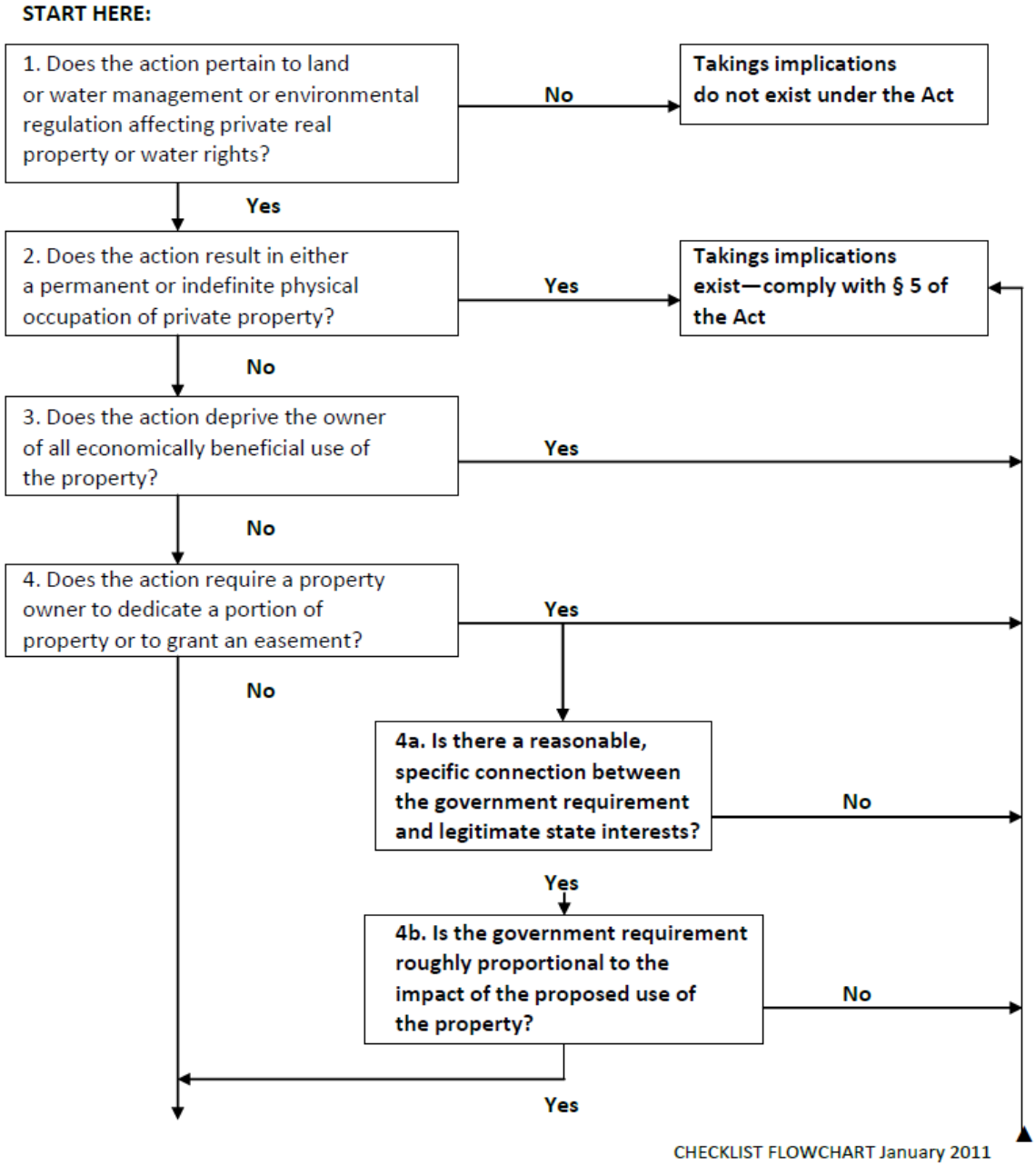
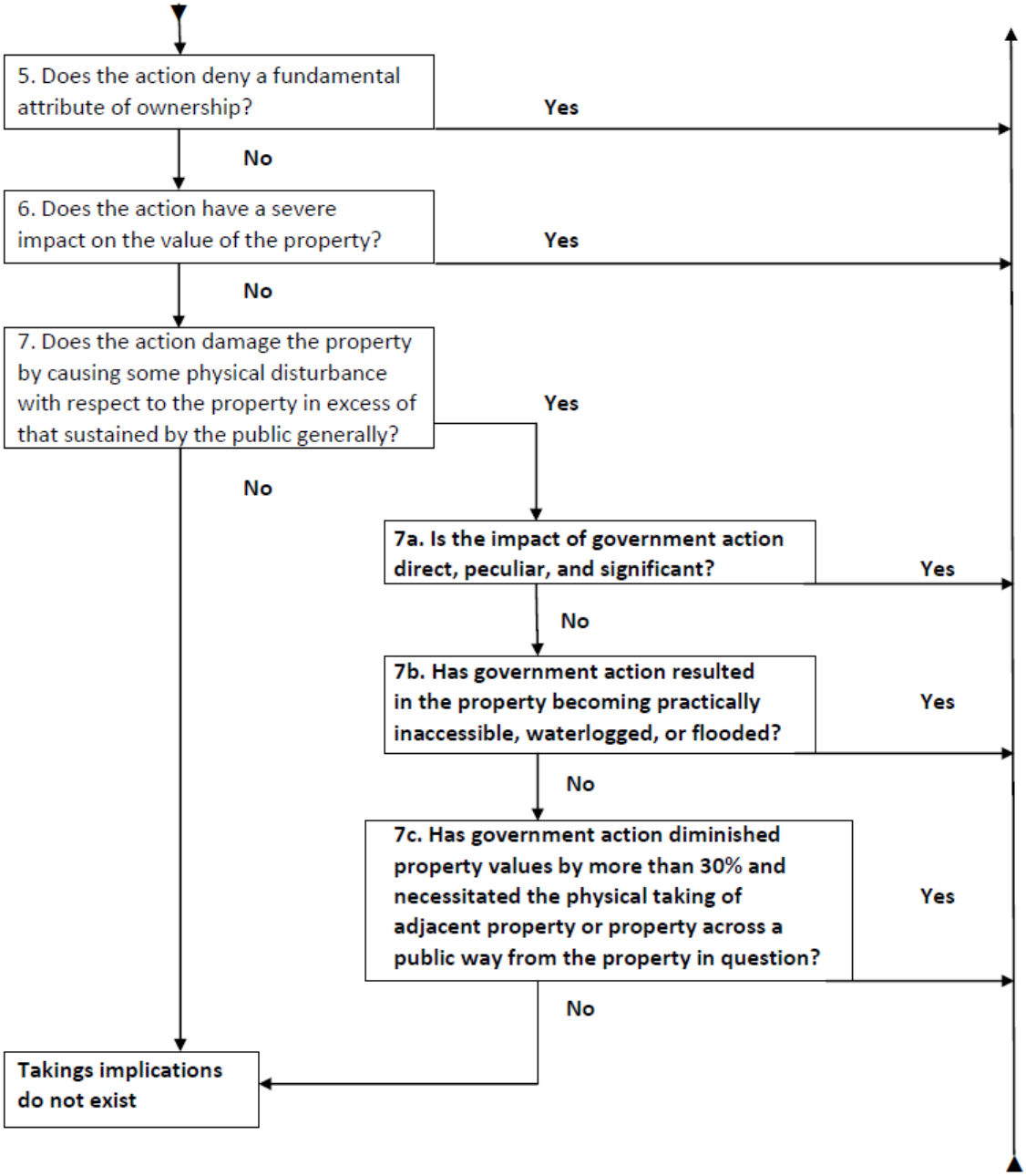
ATTACHMENT 1

Montana Department of Justice
PRIVATE PROPERTY ASSESSMENT ACT
CHECKLIST FLOWCHART
(January 2011)

Does the proposed agency action have takings implications under the Private Property Assessment Act?




5. Does the action deny a fundamental attribute of ownership?
Yes
No
6. Does the action have a severe impact on the value of the property?
Yes
No
7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?
Yes
No
7a. Is the impact of government action direct, peculiar, and significant?
Yes
No
7b. Has government action resulted in the property becoming practically inaccessible, waterlogged, or flooded?
Yes
No
7c. Has government action diminished property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
Yes
No
Takings implications do not exist

Montana Department of Justice
PRIVATE PROPERTY ASSESSMENT ACT CHECKLIST

Does the proposed agency action have takings implications under the private property assessment act?

YES	NO	
_____	_____	1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
_____	_____	2. Does the action result in either a permanent or indefinite physical occupation of private property?
_____	_____	3. Does the action deprive the owner of all economically beneficial use of the property?
_____	_____	4. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If the answer is **NO**, skip questions 4a and 4b and continue with question 5.]
_____	_____	4a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
_____	_____	4b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
_____	_____	5. Does the action deny a fundamental attribute of ownership?
_____	_____	6. Does the action have a severe impact on the value of the property?
_____	_____	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally? [If the answer is **NO**, do not answer questions 7a-7c.]

_____ _____ 7a. Is the impact of government action direct, peculiar, and significant?

_____ _____ 7b. Has government action resulted in the property becoming practically inaccessible, waterlogged, or flooded?

_____ _____ 7c. Has government action diminished property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?

Taking or damaging implications exist if **YES** is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 5, 6, 7a, 7b, 7c; or if **NO** is checked in response to questions 4a or 4b.

If taking or damaging implications exist, the agency must comply with Section 5 of the Private Property Assessment Act, Mont. Code Ann. § 2-10-105, to include the preparation of a taking or damaging impact assessment. Normally, the preparation of an impact assessment will require consultation with agency legal staff.