

EXHIBIT G – WATER INFORMATION

This information provided in this Exhibit is intended to satisfy the requirements outlined in Section 6.4.7 of the Colorado Mined Land Reclamation Board Construction Material Rules and Regulations:

(a) ***Locate on the map (Exhibit C) tributary water courses, wells, springs, stock water ponds, reservoirs and ditches***

The site is 0.2 miles east of the South Platte River. Please refer to Exhibit C for locations of water courses in close proximity to the site, including wells, springs, stock water ponds, reservoirs and ditches.

(b) ***Identify all known aquifers***

The site is underlain by a shallow alluvial aquifer, typical of its position upgradient of the South Platte River.

(c) ***Show how water from dewatering operations or runoff from disturbed areas, piled material and operating surfaces will be managed to protect against pollution of either surface or groundwater both during and after the operation.***

Please refer to the Mining Plan Map in Exhibit C-5 of this application. Mine areas will drain internally. Uncontrolled releases of surface water in disturbed areas will not occur. Stormwater collected in the active mine area will be managed through the dewatering system.

The dewatering system will be comprised of a sump which will hold a floating pump. The pump will have an HDPE discharge line that will be routed to one of the comingled discharge points located at the site. The pump will be powered by a diesel generator housed in the active mine area.

(d) ***Estimate project water requirements including flow rates and annual volumes for the development, mining and reclamation phases of the project.***

Water needs estimated below provide for sustained production as detailed in the Mining Plan. The Operator will adjust water supplies to account for actual demand, avoid waste, and continuously comply with laws and regulations of the Division of Water Resources and any other water agency having jurisdiction over the operation.

Projected Use And Consumption: Annual evaporative depletions will be the evaporation from up to 5000 feet of 4-foot wide de-watering trench, located inside of the slurry wall. The total area of exposed water is 0.5 acres. The gross annual evaporation at the Monarch DENM Mine is 42 inches according to NOAA Technical Report NWS 33, Evaporation Atlas for the Contiguous 48 United States. Monthly evaporative losses are determined using percentages specified by the State Engineer's Office for locations below 6,300 feet. The nearest weather station is in Longmont where the average annual precipitation is 15.08. Effective precipitation, that part of historical precipitation which was consumed by native vegetation on land to be covered by water surface, is conservatively estimated to be 70

percent of the total precipitation. The annual average effective precipitation at the property is estimated to be 9.09 inches. When subtracting the effective precipitation from the gross evaporation yields, the net annual evaporation is 31.44 inches, or 2.68 acre-feet per acre. The Fresh Water Pond 1(FWP 1) is approximately 12.9 acres and the Siltation Pond will be utilized in 10 acre stages. The approximate acreage of open water surface is 22.9 acres. The annual amount of evaporation from open water surfaces is 62.7 acre-feet.

The second Fresh Water Pond will not be utilized at the same time as Fresh Water Pond 1 and it is slightly smaller than FWP 1(approximately 10 acres).

Mining Production & Operations: The Operator expects to extract approximately 500,000 tons annually of aggregate material from the site. All water retained in the recovered material will be replaced pursuant to the Substitute Water Supply Plan (SWSP). The total annual amount of water retained in the gravel product from mining activities totals approximately 6.8 acre-feet. The SWSP is renewed annually and will reflect analysis of production and depletion anticipated in each year of operation.

In addition, an estimated 4.0 acre-feet of water per year will be used for dust control based (approximately) on 5,900 gallons per day for 5 days a week for 10 months.

Annually the total evaporative and operational losses from mining activities (open water surface evaporation, water retained in the aggregate product, dust suppression) totals 73.5 acre-feet of depletion which must be augmented. All depletions were lagged to the South Platte River using the lagging factors approved by the State Engineer pursuant to on-going Substitute Water Supply (SWSP) approvals.

(e) *Indicate the projected amounts of the water sources to supply project water requirements*

Replacement Water: The Miner will obtain an approved Substitute Water Supply Plan from the State Engineers office every year, providing annually or more frequently the opportunity to review the sufficiency of water supplies. The SWSP approvals require that the applicant provide a detailed explanation of the mining operations, a quantification of all mining activities and subsequent depletions and all legally available replacement sources.

Water Sources Controlled by the Property Owners:

Western Mutual Ditch	24 shares (own)
Western Mutual Ditch	3 shares (leased)
Farmers Independent	10 shares (leased)
Grotto Water wells	3 Wells
Main Farm property	6 wells
Big Bend Property	5 wells
Big Bend Ditch	3.48 CFS (6.9 acre feet) - March 1-Dec 15

(f) *Affirmatively state that the Applicant has acquired or applied for a National Pollutant Discharge Elimination System permit from the Water Quality Control Division*

The Operator will apply for a CDPS(Colorado Discharge Permit System) permit from the Water Quality Control Division of the Colorado Department of Public Health and Environment prior to discharging water from the site.

Groundwater Sampling and Analysis Plan

This information provided in this subsection of Exhibit G is intended to satisfy the requirements outlined in the Groundwater Monitoring and Protection Technical Bulletin dated November 19, 2019:

Existing Groundwater Conditions

The near surface groundwater is part of an alluvial aquifer in which permeable sand and gravel alluvium overlies relatively impermeable bedrock of either the Fox Hills Sandstone and/or the Laramie Formation. Groundwater, measured in 7 piezometers, occurs at depths usually ranging from 5 to 26 feet below surface with shallower groundwater to the north of the site. The prevailing groundwater flow at the site is to the north reflecting the site topography. Groundwater in the area is tributary to the South Platte River located northwest of the site. Locally the groundwater levels and flow directions are likely influenced by:

- The South Platte River is northwest of the site. For most of the year, the river likely acts as a drainage way maintaining groundwater levels at elevations greater than water elevations in the river. In shorter periods of high run off, usually in the spring, river water levels will locally recharge the groundwater table.
- The Western Mutual Ditch passes through the site between Cell 1 and Cell 2. The ditch may act like a drain during the non-irrigation season maintaining water levels at or above the water levels in the ditch. During the irrigation season, the ditch may serve as a source of recharge to the water table.
- The Farmers Independent Ditch traverses three quarters of a mile southeast of the site. The ditch may act like a drain during the non-irrigation season maintaining water levels at or above the water levels in the ditch. During the irrigation season, the ditch may serve as a source of recharge to the water table.
- There are two irrigation ponds servicing the irrigation pivots at the site. These ponds likely causes elevated groundwater levels at the south of the site during the irrigation season.

- Irrigation: The site is located in an area of irrigated cropland. Applied irrigation that is not lost to evaporation and transpiration likely recharges the groundwater.
- Alluvial wells: Other than the seven monitoring wells drilled at the site for monitoring groundwater levels, there are also nineteen pumping wells permitted within 600 feet of the mine property. There are seven wells north of the site, two wells east of the site, nine wells south of the site and one well west of the site. If pumping, groundwater will be drawn to these wells.

Potential Slurry Wall and Mining Impacts to Local Groundwater Levels

For all lined cells, a properly constructed slurry wall will tend to isolate these cells from the surrounding alluvial groundwater table. The liner around these cells could cause “mounding” of groundwater (increase in groundwater elevation) on the upgradient side (south and southeast) of the lined cells and a potential “shadow effect” (reduction in groundwater level) on the downgradient side (north and northwest) of the mine. Because the liner will tend to isolate these cells from the surrounding groundwater table, the effects of dewatering when mining lined cells will tend to not extend beyond the liner.

Any mounding effect on the upgradient side of the site (south and southwest) is anticipated to be on the order of a few feet or less and will dissipate with distance from the mine. Similarly, shadowing effects will be on the order of a few feet and will dissipate with distance from the mine. The shadowing effects will be minimized by the presence of the South Platte River to the northwest and the Western Mutual Ditch that runs between Cells 5A and 5B and the Farmers Independent Ditch which runs southeast of the site.

Dewatering of the unlined cells (Freshwater Pond 1, Freshwater Pond 2 and the Siltation Pond) will result in decreases in water levels around these cells. Since there are no wells permitted within 600’ of the unlined cells, the effects of dewatering the unlined cells will be minimal.

Area Wells

A review of the permitted wells on file with the State Engineer’s Office (SEO), Division of Water Resources (DWR) indicates that there are forty one permitted pumping wells within 600 feet of the permit boundary. All of these wells are screened in the alluvium. None of these wells are within 600 feet of the unlined cells (Cells 1 and 2). The well locations and applicants are shown on Figure G-2 attached at the end of this section.

Groundwater Level Monitoring and Mitigation Plan

Dewatering during mining of Cells 1 and 2 is unlikely to affect any wells in the area. However, if the miner receives a complaint, the following mitigation plan will be implemented.

The site monitoring wells will be measured monthly to identify potential changes in alluvial groundwater flow or elevation associated with mining and reclamation activities. Baseline data will be collected prior to dewatering or construction of the slurry walls. Baseline data will be collected from the monitoring program will provide a range of relative water levels associated with pre-mining groundwater conditions. Experience

at other mines in similar geologic settings has found that groundwater levels tend to fluctuate being highest in the summer irrigation season and lowest in the winter and early spring.

If, during mining or reclamation, the relative seasonal groundwater elevation at any monitoring wells differs from baseline conditions by more than 2 feet, and the condition was not observed during baseline monitoring, or if the miner receives a complaint from any well owner within 600 feet of the site boundary, then the miner will evaluate the cause and take action within 7 days and notify the DRMS.

After the DRMS has been notified, the miner will review the data and available information and submit a report to the DRMS within 30 days. The evaluation will include discussions with the well owner who has contacted the miner regarding a concern and review of baseline data from the well and vicinity to evaluate whether changes may be due to seasonal variations, climate, mining, slurry wall lining or other factors. The report will identify the extent of potential or actual impacts associated with the changes. If the extent of groundwater changes due to mining or reclamation activities is determined to be a significant contributing factor that has or may create adverse impacts, the mining associated impacts will be addressed to the satisfaction of the DRMS.

Miner will begin implementing one or more mitigation measures if mining and reclamation activity is determined to be a significant factor to groundwater changes requiring mitigation.

Mitigation measures may include, but are not limited to:

- Placing water in a recharge pond to raise groundwater levels around the well.
- Constructing a local clay liner at the edge of the mine Cell (i.e. between the dewatering point and the well) in order to raise water levels on the well side of the liner and mitigate dewatering effects.
- Cleaning the well to improve efficiency.
- Providing an alternative source of water or purchasing additional water to support historic well use in terms of water quantity and quality. If needed, water quality parameters will be checked in affected wells to ensure alternative sources support historic use.
- Modifying a well to operate under lower groundwater conditions. This could include deepening the well or lowering pumps. All work would be done at the miner's expense with the exception of replacing equipment that was non-functional prior to mining.

Groundwater Quality Monitoring Plan

Since mining operations at the site will take place inside of slurry wall lined cells, except for establishing the Freshwater Pond and Siltation Pond, it is unlikely that these operations will have a negative effect on groundwater quality. To establish pre-mining groundwater quality for the site and to get coverage for each side of the site, the permittee will sample MW-1, MW-2, MW-4, and MW-6.

To establish that mining has had no negative affect on water quality in the area, RMCC will sample the wells listed above annually during the month of November. The water quality samples will be tested for the analytes listed in Tables 1 through 4 of "The Basic Standards for Ground Water," excluding the radiological section of Table 1. RMCC will notify DRMS within 7 days of receiving a lab report that indicates any of the standards set forth in Tables 1 through 4 have been exceeded. If a lab report indicates an exceedance, a new sample will be taken to verify the exceedance and discount lab contamination. Any water quality lab results will be included in the DRMS annual report for the site.

Annual groundwater testing will be conducted for the life of the mine unless the requirement has been reduced or eliminated through the Technical Revision process with the DRMS.