COLORADO
Division of Water Resources
Department of Natural Resources

Response to Reclamation Permit Application Consideration

DATE: September 19, 2023

TO: Robert D. Zuber, P.E., Division of Reclamation, Mining & Safety (DRMS), rob.zuber@state.co.us

CC: Division 1 Office, District 2 Water Commissioner

FROM: Wenli Dickinson, P.E., State Engineer's Office (SEO), wenli.dickinson@state.co.us

RE: Bernhardt Sand and Gravel Pit, M-2023-025

Operator: Andy Carpenter, IHC Scott, Inc., 10303 E Dry Creek Rd #300, Englewood, CO 80112 (303) 790-9100

Contact: J. C. York, J&T Consulting, Inc., 305 Denver Ave Suite D, Fort Lupton, CO 80621 (970) 222-9830

Location: Part of NE ¼ of Section 24, Twp. 4 North, Rng. 67 West, 6th P.M., Weld County

CONDITIONS FOR APPROVAL

The proposed operation will consume groundwater by: ☒ evaporation, ☒ dust control, ☒ dewatering, ☒ water removed in the mined product, ☒ washing, ☐ concrete production and ☐ reclamation.

☒ Prior to initiation of these uses of groundwater, the applicant will need to obtain either a gravel pit or other type of well permit, as applicable.

☒ Prior to obtaining a well permit, an approved substitute water supply plan or decreed plan for augmentation is required.

☒ Prior to approving a well permit, the applicant must conduct a field inspection of the site and document the locations of all wells within 600 feet of the permit area. The applicant must then obtain a waiver of objection from all well owners with wells within 600 feet of the permit area or request a hearing before the State Engineer.

COMMENTS: The subject application is for a surface mining and processing operation on approximately 111.01 acres located in the NE ¼ of Section 24, Twp. 4 North, Rng. 67 West, 6th P.M., Weld County. The 98.24-acre area to be mined is currently used as cropland. The mining plan calls for excavation of

approximately 300,000 to 1,000,000 tons, or 650,000 tons on average, of material per year for an estimated 11 years for phase 1. The primary materials to be mined at the site are sand and gravel.

Mining will occur at a distance of 880 feet north from the South Platte River. Mining will be accomplished by dry-mining method within a slurry wall. The applicant anticipates that groundwater will be consumed by evaporation, dust control, dewatering, water removed in the mined product, and washing. The majority of the mined areas will be reclaimed as a lined groundwater storage reservoir with an anticipated surface area of 92.35 acres.

Prior to the use or exposure of any groundwater, the applicant must first obtain a well permit and a substitute water supply plan ("SWSP") or decreed plan for augmentation to replace depletions caused by groundwater consumption. According to the mining plan, the applicant intends to replace depletions under an approved SWSP until reclamation is complete. The site must continue to be operated under a SWSP until such time as the proposed reservoirs are lined (lining approved by this office, backfilling is completed, and replacement of lagged depletions shall continue until there is no longer an effect on stream).

Additionally, in certain areas of the South Platte River Basin, SEO staff have observed groundwater problems that appear to be related to the lining of gravel pits located near streams, and in particular, these problems occur when multiple liners are located adjacent to each other. The nearest lined pit according to our records is approximately 3,000 feet from this site. As this pit is lined and additional pits become lined in this area, this office requests that DRMS consider the siting and design of lined gravel pits to ensure that they will not individually, or cumulatively, result in impacts to the timing and quantity of groundwater flow from upgradient locations back to the stream system. In addition to impacts to property, such as flooding upgradient and reduced water levels downgradient of the liner, there are decrees of the court that specify the timing, quantity, and amount of water depleted from the streams by wells and accreted to the stream through recharge operations. The installation of a gravel pit liner should not result in changes to the timing, location, and amount of such groundwater flow. In the design and construction of the liner, the applicant and DRMS should consider whether drainage structures are needed to allow water to flow back to the stream and to prevent water mounding behind the liner.

Any storm water runoff intercepted by this operation that is not diverted or captured in priority must infiltrate into the ground or be released to the stream system within 72 hours. Otherwise, the operator will be required to make replacements for evaporation.

The applicant may contact the SEO at (303) 866-3581 with any questions.