

Response to Consideration of 112 Construction Materials Reclamation Permit Amendment Application

- DATE: November 9, 2018
- TO: Peter S. Hays, Environmental Protection Specialist (peter.hays@state.co.us)
- CC: Water Commissioner, District 7
- FROM: Sarah Brucker, P.E,
- RE: Douglas Mountain Mine, File No. M-2018-016 AM01 Applicant/Operator: Empire Aggregates, Inc.; (970) 485-4818 Sections 27 & 28, Twp 3 South, Rng 74 West, 6th P.M., Clear Creek County

CONDITIONS FOR APPROVAL

- The proposed operation does not anticipate exposing groundwater. Therefore, exposure of groundwater must not occur during or after mining operations.
- Water is proposed to be used at the site for dust control, crushing and screening, and a wash plant. The applicant will need to document that the water was obtained from a legal source, or the water was diverted in priority under a water right decreed for such mining/industrial use.
- Prior to the use of any water not already permitted/decreed for these uses, the applicant will need to obtain an approved substitute water supply plan or decreed plan for augmentation to allow for such use.
- If stormwater runoff is intercepted by this operation and is not diverted or captured in priority, it must be released to the stream system within 72 hours; otherwise the operator will need to make replacements for evaporation.

COMMENTS: The subject application has been amended from 91.6 permitted acres to 68.1 acres. This will be a surface mining operation located approximately ½ mile southeast of the Town of Empire. The primary commodities to be mined at the site are sand and gravel. The site is proposed to be reclaimed to its current use of rangeland upon completion of mining. The applicant is undergoing a land use application process with Clear Creek County to allow for the construction of a reservoir onsite. If approval of this use is granted by the county, the applicant will file an amendment to change the post-mining land use of this permit.

Under the amended mining plan, the site is proposed to be mined to a depth of approximately 80 feet. Water levels measured in September of 2009 in a series of test holes constructed on the site range from 95 to 115 feet below ground surface. According to the application, recent sampling of two of these test holes (TH-4 and TH-5) showed groundwater depths of 106 feet and 99 feet below ground surface. However, a pump installation report for well permit no. 67276-F, located a quarter-mile east of the proposed excavation site, shows a static water level of 30 feet below ground surface recorded on March 17, 1997; and the well construction report for well permit no. 271822, which has a permitted location within the proposed mining area but is likely located just south of the mining area, shows a static water level of 60 feet below ground surface recorded on June 16, 1999 (see Appendix 4). In addition, a tour of properties adjacent to the proposed mining site by DWR staff earlier this year showed evidence consistent



with a shallow groundwater table which included visible seepage coming directly from the proposed mining site. If mining at the site exposes groundwater, the excavation will be considered a well and will require an approved substitute water supply plan or decreed plan for augmentation to replace the evaporative losses to the stream system.

During mining, runoff will be routed to the active mining pit where it is expected to infiltrate into the ground within 72 hours.

The site is proposed to contain a portable asphalt plant, portable concrete plant, office, portable crusher, portable wash plant, and wash plant recycle pond. Portable toilets will be used for employees. Water demands for dust control, crushing and screening, and the wash plant are estimated to total 28 acre-feet per year.

Water for mining purposes is proposed to be supplied via either ditch rights or onsite wells. Prior to the construction or use of any well(s) for these purposes, the applicant will need to obtain a well permit allowing for such commercial/industrial use, which will require an approved substitute water supply plan or decreed plan for augmentation. The applicant owns a surface water right decreed as the Douglas Mountain Ranch Reservoir Collection System (WDID 0700552) in Division 1 Water Court case no. 97CW394. The decree allows for the diversion of up to 10 cfs, conditional, from Bard Creek for a variety of uses including domestic, sanitary, irrigation, and commercial purposes. Gravel mining use is generally considered an industrial use, which was not included as a decreed use of the Douglas Mountain Ranch Collection System. A decreed change of water right for the proposed gravel mining purposes. In addition, the decreed prior to the use of this water right for the proposed gravel mining purposes. In addition, the decreed priority date for the Douglas Mountain Ranch Collection System is December 31, 1997. A priority analysis shows that this water right was out-of-priority approximately 65% of the time over the past ten-year period. The application acknowledges that this water right is relatively junior and proposes to obtain a water contract with the local reservoir via a substitute water supply plan in order to ensure adequate water supply for the operation.

No material may be mined below the groundwater table and no water may be used for any purpose at the site until the applicant has obtained a substitute water supply plan that covers such use(s).

Please contact the State Engineer's Office with any questions.