

Response to Reclamation Permit Surety Release Request Consideration

DATE:	March 30, 2023
TO:	Robert D. Zuber, P.E.
FROM:	Sarah Brucker, P.E.
RE:	Loloff Pit, Permit No. M-1985-112, SL-3 Applicant/Operator: Loloff Construction, Inc. Phone Number: (970) 566-5090 NW¼ Section 4, Twp 5 North, Rng 65 West, 6th P.M., Weld County

COMMENTS: The applicant has submitted a request for full/final surety (bond) release for the Loloff Pit, which consists of 55.17 permitted acres located approximately 1.5 miles northeast of Greeley. Gravel mining at the site concluded in August 2019, and dewatering at the site ceased after July 2019. The slurry wall liner for the Loloff Pit was approved by the State Engineer's Office as meeting the design standard for liners on April 26, 2019, and the Loloff Pit is now classified as a lined reservoir in accordance with the August 1999 State Engineer Guidelines for Lining Criteria for Gravel Pits (Loloff Reservoir, WDID 0303483). The Loloff Reservoir is located adjacent to the Derr Pit, which is another lined gravel pit, and is situated between the Cache la Poudre River and numerous irrigated agricultural fields. Staff of the Division of Water Resources have observed groundwater problems that appear to be related to the lining of gravel pits located near streams, in particular when multiple liners are located adjacent to each other. Specifically, DWR has concerns about water mounding behind the slurry wall and injury due to irrigation return flows not being able to naturally accrue to the river. The DRMS should consider whether drainage structures are needed to allow water to flow back to the stream and to prevent water mounding behind the slurry wall.

There has been no consumptive use of groundwater at the site since the pit has been lined; however lagged depletions from past mining and dewatering operations at the site continue to impact the river. Lagged depletions are currently replaced under the Loloff Substitute Water Supply Plan (Plan ID 3270) approved on March 3, 2023, which covers depletions through March 31, 2024. After the end of this plan period, a total of 416.46 acre-feet of depletions associated with past operations at the Loloff Pit will remain to be replaced. Depletions must continue to be replaced until there is no longer an effect on stream flow. In accordance with the *General Guidelines for Substitute Water Supply Plans for Sand and Gravel Pits*, upon replacement of 95% of depletions that remained to be replaced when mining ceased (i.e., when the liner for the pit was approved), the operator may aggregate the remaining 5% of lagged depletions. Based on DWR's inputs into the AWAS model, 95% of the depletions remaining to be replaced when mining ceased (i.e., after April 2019) will not have impacted the stream until the end of 2027. The Division of Water Resources will not comment favorably on any request for surety release until all lagged depletions associated with the site have been fully replaced.

The Division of Reclamation, Mining and Safety and/or the applicant may contact the State Engineer's Office with any questions.