

STATE OF COLORADO

DIVISION OF RECLAMATION, MINING AND SAFETY

Department of Natural Resources

1313 Sherman St., Room 215

Denver, Colorado 80203

Phone: (303) 866-3567

FAX: (303) 832-8106



John W. Hickenlooper
Governor

Mike King
Executive Director

Loretta E. Piñeda
Director

February 7, 2014

Gayle Lyman
Elam Construction, Inc.
556 Struthers ave.
Grand Junction, CO 81501-3826

RE: Elam Construction, Inc. dba Sandco, Inc., Dillon Ranch Pit (112c), File No. M-1987-064
Technical Revision – Adequacy Review

Dear Mr. Lyman,

The Division reviewed the submittal for technical revision for the above permit, proposing a change to the mining plan to allow for dewatering. The proposed plan indicates the potential for a substantial drawdown over a considerable aerial extent. The Division has the following concerns related to the proposal:

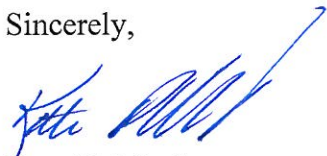
1. The proposed plan states that due to the timing of the proposed dewatering, as occurring only during the Winter months, there are no foreseen impacts to the Cottonwoods within the cone of depression. The amount of potential drawdown in the areas inhabited by Cottonwoods is substantial. The Division has no evidence that Cottonwoods require no water during the Winter months, and relies heavily on the document *Responses of Riparian Cottonwoods to Alluvial Water Table Declines* (Environmental Management Vol. 2, No. 3, pp 347-358). This paper indicates that variations in ground water level of less than or equal to one meter can have mortal impacts to Cottonwoods. There is no indication in this paper or other resources researched that the extent of drawdown cited in the proposed technical revision would not have detrimental impacts to the trees, even during the Winter months. Please address this issue, either with researched evidence that this degree of drawdown will not have negative impacts to the Cottonwoods, or a proposed mitigation plan to protect the trees within the drawdown area.
2. There are numerous wells located within the potential cone of depression resulting from dewatering of the pit. Although the well depths of most of these wells appear to be far deeper than the drawdown expected in their locations, there are a few wells that appear to be close enough to the expected drawdown that there may be potential for impacts to the wells. Wells of specific concern are: 46320; 144732; and 244426-A. All wells within the cone of depression must be protected from potential impacts due to the dewatering operation. Please indicate how all wells, including the three cited above, will be protected from impacts.

3. If wells within the estimated cone of depression experience unforeseen impacts during the dewatering process, the Division will require that Elam take mitigation measures to correct the problems associated with their project. Please indicate what mitigation measures will be taken in the event that any of these wells is impacted by the operation.
4. Although the groundwater model appears to be an accurate estimate of the potential impacts to groundwater relative to the proposed dewatering plan, the Division requires assurance of the accuracy of the model once dewatering activities commence. Therefore the Division requires that the impacts to the groundwater be monitored to ensure that the model is an accurate depiction of the actual impacts. Please propose a monitoring plan to indicate whether groundwater is behaving as expected in the model.
5. The proposal indicates that mining will occur at a 1:1.5 slope, which will be reduced to a 1:3 slope at the completion of mining. Please clarify the following: Is this ratio expressed as vertical:horizontal? The rules refer to a final slope that is horizontal to vertical. Is Elam committing to a 3H:1V slope even at 10 feet below water level? If the slopes are left at 1.5H:1V until final reclamation and the pond is allowed to fill prior to grading to the final slope, the Division will require a bond increase to cover the costs related to dewatering of the pit. If Elam commits to grading all slopes to final grade prior to allowing the pit to fill with water, it can avoid this increase in bond.

Please be advised that the Elam Construction, Inc, Dillon Ranch Pit (112c), Technical Revision may be deemed inadequate, and may be denied February 24, 2014 unless the above mentioned adequacy review items are addressed to the satisfaction of the Division. Response to these adequacy concerns must be received by the Division to allow adequate time for review prior to the decision date. If you feel more time is needed to complete your reply, the Division can grant an extension to the decision date. This will be done upon receipt of a written waiver of your right to a decision by February 24, 2014 and request for additional time. This request must be received no later than February 24, 2014. Please be aware that depending on the answers that are received regarding the above adequacy issues, the Division may have further adequacy questions.

If you have any questions, please do not hesitate to call me at (970) 259-5861.

Sincerely,



Kate Pickford
Environmental Protection Specialist