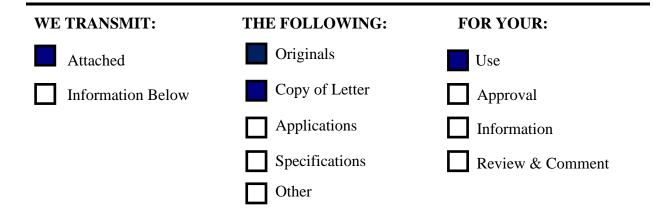


Letter of Transmittal

DATE: August 22, 2022

- TO: Division of Reclamation, Mining, and Safety Rm 215, c/o Mr. Peter Hays 1001 East 62ND Avenue Denver, Colorado 80216 (303) 866-3567
- FROM: Bill Schenderlein Blue Earth Solutions, LLC P.O. Box 2427 Fort Collins, Colorado 80522 (970) 227-2803



Remarks:

Submission of this material is for review and approval of the Carr Pit East Mine Land Reclamation Board Regular 112 Operation Reclamation Permit Application. Blue Earth Solutions is providing application support for the applicant, Connell Resources, Inc., whose address and phone number is 7785 Highland Meadows Parkway, Fort Collins, Colorado 80528, (970) 223-3151.

• Applicant responses to CPW comments dated August 15, 2022 under DRMS cover letter dated August 16, 2022 for Connell Resources, Inc., Carr Pit East (M-2022-005), Construction Materials Regular 112 Operation Reclamation Permit Application.

Signed: Will Jehhl.



August 22, 2022

Colorado Department of Natural Resources Division of Reclamation, Mining and Safety Attn: Mr. Peter Hays 1313 Sherman Street; Room 215 Denver Colorado, 80203

RE: Response to Colorado Parks and Wildlife Comments for Connell Resources, Inc. Carr Pit East, Permit No. M-2022-005

Dear Mr. Hays:

The following discussion and attachments are submitted on behalf of our client, Connell Resources, Inc., in response to the Colorado Parks and Wildlife comments (CPW) dated August 15, 2022 and forwarded in with your cover letter dated August 16, 2022 for the Carr Pit East 112 Construction Materials Reclamation Permit application.

1. Groundwater

Groundwater will not be exposed during mining or reclamation activities at the Carr Pit East site. Additionally, the sand and gravel deposit being mined does not extend to a depth that contacts hardpan, bedrock, or an aquitard (impervious layer). Instead, test pits on the Carr Pit East site and excavations on the Carr Pit (M-2014-001) site indicate an unconsolidated silty clay material of varying depths underlies the sand and gravel deposit.

2. <u>Surface Water</u>

Lone Tree Creek is the primary drainage through the Carr Pit East site and all stormwater and snowmelt shall be directed to Lone Tree Creek. To comply with the Colorado Discharge Permit System (CDPS), during mining operations stormwater from disturbed areas will be detained prior to discharge into Lone Tree Creek. Detaining stormwater is required to minimize suspended sediment in the surface water runoff. However, the stormwater (and snowmelt) shall not be retained (i.e. captured). Although stormwater runoff is allowed to be detained for water quality improvement, the Colorado State Engineer's Office prohibits capturing stormwater. Therefore, although stormwater runoff from the Carr Pit East site may be temporarily detained during mining operations, all runoff from the site will be allowed to return to Lone Tree Creek.

Once the Carr Pit East site has been reclaimed, backfilling and grading shall permit stormwater to flow back to Lone Tree Creek unimpeded. Seeding with native vegetation shall stabilize areas previously disturbed by mining activities and minimize sediment transport. Reclamation and mining activities are not anticipated to significantly reduce flows to, or within, Lone Tree Creek.

Mr. Peter Hays RE: Carr Pit East M-2022-005 August 22, 2022

Summary

From the CPW comments, the assumption appears to be that the Carr Pit East site mining operation is similar to mining activities adjacent to major river systems (i.e. South Platte River) along the Front Range of Colorado. Aggregate mining within these river systems generally includes mining a layer of alluvial sand and gravel from 20 to 60 feet deep. Alluvial groundwater in direct connection to the adjacent river is almost always encountered during these mining operations. Additionally, the alluvial sand and gravel being mined at these sites is typically underlain by an impervious bedrock layer such as the Pierre Shale.

Relative to the geology, hydrogeology, and hydrology of mining operations along major river systems, the Carr Pit East site is notably different. The aggregates being mined are associated with narrow terrace deposits located above the creek. These deposits are not alluvial and are generally less than 15 feet thick. The aggregate deposits are also underlain by non-marketable, but unconsolidated silts and clays, not impervious bedrock. The sand and gravel is dry and does not contain groundwater in connection with Lone Tree Creek. Since the sand and gravel is dry, no groundwater is exposed during mining. These details are not just anticipated, they have been verified during nearly 10 years of mining at the Carr Pit (M-2014-001) site.

If you have any questions regarding this application and adequacy comment responses, please call me directly at (970) 227-2803.

Sincerely, Blue Earth Solutions, LLC

William Schenderlein, P.E. Project Manager

Enclosures



Proof of Adequacy Review Response Delivery to Weld County Clerk to the Board



Remarks:

Submission of this material satisfies requirements of the Mine Land Reclamation Board Regular 112 Operation Reclamation Permit Application. The enclosed application material must remain for public review at least sixty (60) days after a decision on said application has been made the Office of Mined Land Reclamation (Rule 1.6.2 (2)). Confidential materials were purposely excluded.

• One (1) copy of DRMS Construction Materials Regular 112 Operation Reclamation Permit Application Response to Colorado Parks and Wildlife Comments – Carr Pit East – Connell Resources, Inc.

Signed: Will Chil

Colorado Parks and Wildlife Comments Dated August 15, 2022



August 16, 2022

John M. Warren Connell Resources, Inc. 7785 Highland Meadows Parkway, Suite 100 Fort Collins, CO 80528

Re: Connell Resources, Inc., Carr Pit East, Permit No. M-2022-005, CPW Follow-up Comments

Mr. Warren,

The Division of Reclamation, Mining and Safety (Division/DRMS) received follow-up comments from Colorado Parks and Wildlife (CPW) in response to the Applicant's adequacy response letter dated June 27, 2022. The comment email is attached for review. Please respond to the comments noted in the email and revise the application accordingly.

If you have any questions, please contact me at <u>peter.hays@state.co.us</u> or (303) 866-3567 Ext. 8124.

Sincerely,

Peter S. Hays Environmental Protection Specialist

Enclosure – CPW Follow-up Email

Ec: Jared Ebert; Division of Reclamation, Mining & Safety Bill Schenderlein; Blue Earth Solutions, LLC





Hays - DNR, Peter <peter.hays@state.co.us>

CPW Comments Re Carr East Pit Application

Marette - DNR, Brandon <brandon.marette@state.co.us> Mon, Aug 15, 2022 at 4:56 PM
To: "Hays - DNR, Peter" <peter.hays@state.co.us>
Cc: Boyd Wright - DNR
boyd.wright@state.co.us>, Troy Florian - DNR <troy.florian@state.co.us>

Peter,

Thanks for the update, and thanks for the opportunity to provide these comments for the Carr Pit.

I just heard from Troy (cc'd), but our Aquatic Biologist (Boyd - also cc'd) is away from email for the next week. So consider these comments as our final comments, unless Boyd has anything else to add/clarify next week.

In response to the applicant's response to the 500' aquatic buffer, CPW has two remaining concerns regarding any changes to the surface flows and groundwater levels.

1) Re: groundwater - Our concern is that if we (CPW/DRMS) reduce or waive CPW's original drainage buffer recommendation, and the developer mines at or below the hardpan bottom (impervious layer) within close proximity of Lone Tree Creek, then there would be significant potential to create "leaks in the seal" of this drainage. Do you also know if the applicant will avoid penetrating the groundwater in this area? 2) Re: surface water - CPW also wants to ensure that existing surface flows are maintained throughout construction, though realize that there will likely be a change to the surface flow regime out and away from the drainage (likely from the 3-ft tall berms). As the applicant similarly mentioned in their responses, Lone Tree Creek already has a very limited flow system, including those stormwater and snowmelt flows from the uplands that can pool for weeks beyond the water event. While we understand stormwater management is needed (we agree), the closer the overburden berms are to the upland edge of the creek results in less stormwater to recharge these pools and small segments of water.

Therefore, while I understand that the applicant would like to maximize their mining area as much as possible, even the smallest of changes in surface flows and subsurface water levels would likely result in negative impacts for aquatic and semi-aquatic species that currently are dependent on the microhabitat of these limited stretches of water and small pools.

Regards,

Brandon B. Marette, CWB[®] Northeast Region Energy Liaison and Land Use Coordinator



Direct (303) 291-7327 6060 Broadway, Denver, CO 80216 brandon.marette@state.co.us CPW's Energy Webpage CPW's Wildlife Movements Webpage





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