



**COLORADO**  
**Division of Reclamation,  
Mining and Safety**  
Department of Natural Resources

April 7, 2023

Ben Langenfeld  
Greg Lewicki and Associates  
3375 W Powers Circle  
Littleton, CO 80123

**RE: Adequacy Review, 112 Construction Materials Amendment AM4; Hayden Gravel Pit, DRMS File No. M-1987-164**

Dear Mr. Langenfeld,

The Division of Reclamation, Mining, and Safety (Division) has reviewed the content of the Routt County 112 Construction Materials Application for Amendment AM4 for the Hayden Gravel Pit operation, File No. M-1987-164, and submits the following additional comments. Comments received from other agencies regarding this proposed permit renewal are attached to this letter. The Division is required to make an approval or denial decision no later than June 12, 2023; therefore, a response to the following adequacy review concerns should be submitted to the Division as soon as possible.

1. The Division found the application for AM4 complete on January 5, 2023. Pursuant to Rule 1.6.2(1)(g), upon completeness Oldcastle SW Group dba United Companies is required to publish a Public Notice for four consecutive weeks which will initiate a 20 day comment period from the date of the last publication. As of the date of this letter, the Division has yet to receive a proof of publication of the public notice for AM4. Please provide the Division with a copy of the public notice to ensure that the Public Notice was published as required. Please also provide proof of service to the entities listed under Rule 1.6.2(1)(e).

**6.2 General Requirements of Exhibits**

2. For clarity, please make transmission lines more visible across all maps provided. Consider using a different color to delineate between this feature and others.

**6.4.3 Exhibit C - Pre-mining and Mining Plan Map(s) of Affected Land**

3. On Map C-1B Baseline Conditions, there are discrepancies between the Parcel Numbers shown and the list of all adjoining surface owners of record. The following Parcel ID Numbers are listed in the table but not shown on the map: 939063005, 940123001, and



939073001. Please ensure that these parcels are listed on Map C-1B. If these parcels do not belong to adjoining surface owners of record, please remove them from the table.

4. The following Parcel ID Numbers are shown on the map but not listed in the table on Map C-1B: 940112001, 940014002, 940014005, and 939063002. Please ensure that ownership information is listed on Map C-1B for these parcels.
5. On Map C-1B Current Conditions it is unclear who owns several of the identified buildings which are within 200 feet of the affected land. Please revise Map C-1 to more clearly identify which Parcel ID belongs to which building(s) and add Parcel IDs to those buildings which are not currently marked with a Parcel ID.
6. Throughout the Mining Plan, mining slopes are referred to as highwalls. However, page D-1 of the Mining Plan states that “All final mining slopes will be at a maximum 2H:1V slope where mining does not daylight”. Please clarify if this means that in areas where mining is not intended to daylight, that all other slopes are only mined to a 2H:1V. If this is the case, please inform the Division if and how this alters the current plan for backfilling slopes to final grade, which mentions both a cut and fill and backfill-pushup method.
  - a. Related to the above question, please clarify text in the Mining Plan to distinguish between mining slopes which will be highwalls and mining slopes that will be at 2H:1V and clarify the proposed backfill plan for each type of slope. The Division will assume that highwalls are vertical for the purpose of bond calculation unless additional information is provided.
7. Figures on the C-3 Cross Sections Map indicate that the mining slope will be a 2H:1V slope. Please provide reasoning as to why these mining slopes are represented at a 2H:1V as opposed to being shown as a highwall as suggested in the text. This information is relevant in our review of the application’s Geotechnical Stability Report.
8. Rule 6.4.3(d) requires maps to portray “the total area involved in the operation, including the area to be mined and the area of affected lands”. Maps C-1 Current Conditions, C-2 Mining Plan, and F-1 Reclamation Plan do not show the western most portion of the permit boundary which includes the reclaimed but not yet released old Camilletti Pit. While undisturbed, this area is still ‘affected land’ and should be included in all relevant maps and acreage totals that are mentioned in text and on maps. Please update maps to include this area and ensure that accurate counts of acreage are depicted on maps, in the text, and on relevant tables.

#### **6.4.4 Exhibit D - Mining Plan**

9. Section one states that fill dirt may be incidentally produced during the operation. Is overburden currently being held onsite in product stockpiles? If so, please provide the Division with an approximate figure for how much is being stored for reclamation and how much is being used as product. The Division encourages the use of separate stockpiles of material to be used for reclamation vs product to allow for ease of estimating reclamation stockpile volumes during inspections.
10. Page D-2 of the Mining Plan references Figure D-1. Please clarify the meaning of this figure. Will both cut and fill and backfill-pushup activities be part of this reclamation activity? Will all mining slopes follow this same plan for backfilling? The Division encourages these figures to be represented to scale for clarity.
11. Page D-2 states that the total disturbance area at the site will be no more than 72.9 acres at a time. The most recent annual report cites 89.9 acres as being currently disturbed on the site. Please explain this difference of 17 acres or revise the total disturbance acreage cited in the Mining Plan.
12. The Division could not locate Division of Water Resources data on the two wells referenced on page D-2 of the Mining Plan (Wells 92353 & 287407). Please provide evidence that groundwater is not likely to be exposed during mining by, for example, providing a record of the wells located within the permit boundary which are referenced in the Mining Plan or providing static water level data for the permit area. Additionally, please update Mining Plan maps to clearly portray the location of these wells.
13. Please provide additional detail with regards to what appears to be intermittent streams or intermittent rivers in the proposed expansion area (Pod 2 & 3).
  - a. Please specify if this area is intended to be mined, how this stream will be protected, if there will be a crossing and culvert added. Please provide details on proposed reclamation with regard to this resource. Additionally, will involvement with USACE be required in this wetland area? Consider changing the color of either the 'Disturbed Area' or 'Berm/Windrow' lines on mining maps to make the two features more easily distinguished from each other.
14. The Division requests more information to clarify the Mining Timetable. As per Rules 6.4.4(d) and 6.4.4(e)(ii) please provide information on the size of areas to be worked at any one time and a description of the size and location of each area to be worked during each phase. Will any simultaneous mining of Pods occur? Specifically, clarify if all of Pod 1 mining and reclamation, aside from the 20 acres of processing plant, will be completed prior to beginning work on Pod 2. Please also clarify if all of Pod 2 mining and reclamation will be completed prior to beginning work on Pod 3.

15. Please revise text on page D-2 which states “Throughout mining of the site, reclamation will be occurring incrementally as mining progresses” to be more specific in terms of the mining and reclamation sequence and timeline.
16. Page D-4 Section 4 of the Mining Plan states that “Pod 1 is nearly mined out”, please use more specific, numerical language to explain how much of Pod 1 is left to be mined. This information is required for calculation of the financial warranty.
17. Page D-4 Section 4 of the Mining Plan states “Topsoil will be used to augment the replaced topsoil on all disturbed areas and slopes.” Please clarify the meaning of this statement and revise the text to be more specific and clear.
18. Please specify if the list on page D-3 ‘Mine Facilities and Operation’ is describing existing or proposed new additions to the mine plan. Specify which facilities and equipment are new and which are pre-existing.
19. As per Rule 6.4.5(1), Operators/Applicants are encouraged to allow flexibility in their plans by committing themselves to ranges of numbers (e.g., 6"-12" of topsoil) rather than specific figures. Section 4 ‘Topsoil and Overburden Handling’ on page D-4 states that topsoil will be replaced in a single 12-inch lift across areas. Consider revising this number to be a range rather than a specific figure to allow for variability during reclamation without need for a future revision.
20. There appears to be an error in acreage volumes used to calculate material generated volumes and reclamation volumes in Table D-2 of the Mining Plan and Table E-2 of the Reclamation Plan, respectively. Please clarify and justify the 137.9 acres amount used to calculate these volumes. Please also ensure these volumes and acreages include material generated during the final mining out of Pod 1. This information is relevant for calculation of the financial warranty.
21. Please show your work to describe how ‘Overburden Backfill Required (CY)’ volumes listed in Table E-2 Reclamation Volumes were calculated.

#### **6.4.5 Exhibit E –Reclamation Plan**

22. Page E-1 of the Reclamation Plan states that Routt County Land Development Code dedicated land areas “includes grounds within the property but not within the permit and affected area boundaries”. Please clarify this statement and describe if or how it affects the required amendment to Routt County Special Use Permit PL-18-114.
23. Describe the difference between ‘dedicated land’ and ‘designated land’ shown in Map F-1. Please update the legend to include this ‘designated land’ feature.

24. The Reclamation Map F-1 and other maps provided depict a southern portion of the proposed permit boundary (Figure 1) which appears to overlap with land which is currently permitted under another DRMS permit (Figure 2) held by Routt County, the Funk and Hooker Pit (M-1979-058). Please clarify if this boundary (Figure 1) is drawn in its intended location. DRMS will not permit over the county's existing permit if this is the case. Please revise all permit boundaries shown on maps to reflect either a corrected or new permit boundary line.



*Figure 1: Reclamation Map F-1 for the Hayden Gravel Pit which depict new permit boundary lines as part of AM4. Red box highlights the portion of the southern boundary line referenced above.*

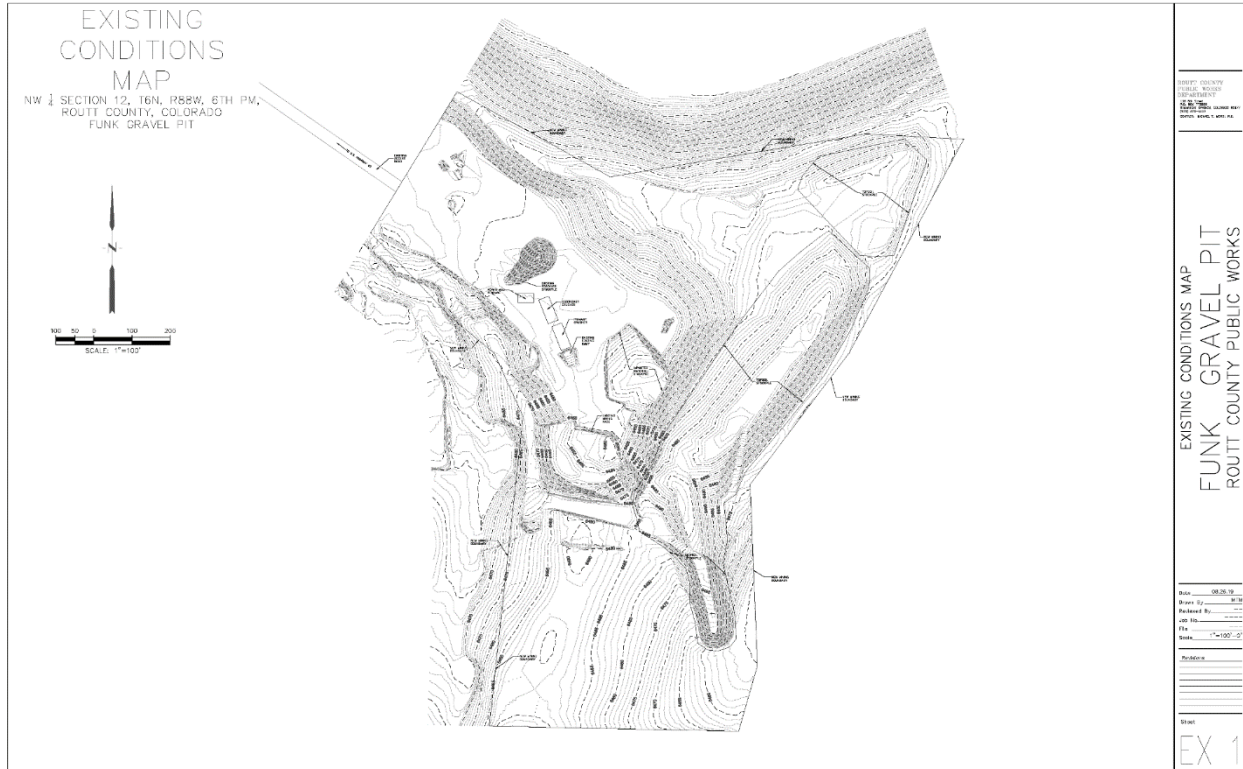


Figure 2: 2022 Annual Report Map for the Funk and Hooker Pit (M-1979-058) which depicts currently existing permit boundary lines.

25. The given list of species in the proposed seed mix contains a typing error, i.e. 'Four-winged Saltbrush' instead of 'Four-winged Saltbush'. Please provide an updated Rangeland Seed Mix Table with this revised information.
26. While the stated agreement between Routt County and Oldcastle SW Group, LLC dba United Companies allows for the permanent retention of proposed haul roads referenced in Section 3, a signed letter from the appropriate landowner(s) which states acceptance of the permanent retention of this haul road is also required as per Rule 3.1.11. Additionally, please add clear delineation of all permanent haul roads to the appropriate maps and legends, including map F-1 Reclamation Plan.
27. As per Rule 6.4.5(e)(iii), please update the Reclamation Timetable and Sequence to include a description of the size and location of each area to be reclaimed during each phase.

28. Section 8 of Exhibit E, Monitoring Reclamation Success, states “the plan does not contemplate total weed removal on the property”. Please revise this statement or add another which clarifies that weeds will be treated in the appropriate manner as required by Department of Agriculture Noxious Weed Species lists. This ensures proper weed management in the case of, for example, A list noxious weed species which are required by law to be completely removed.

#### **6.4.7 Exhibit G – Water Information**

29. Section 1 of Exhibit G mentions local wells which are far enough away to be unaffected by mining operations. Please provide the Division with additional evidence to support that these wells will not be impacted. Additional evidence may include information related to the distance between the mine and the wells, as well as the total depth of the wells and the current static water levels within the wells.
30. Section 2 of Exhibit G along with Maps C-2 and G-1 reference berms which will be constructed as storm water control methods. Please describe how sediment will be controlled for the period of time after these berms are graded, but before vegetation has been established over the reclaimed area.
31. The Division is currently reviewing this section for technical adequacy. Additional comments may follow in separate adequacy letters.
32. Please see the Division’s additional hydrologic review memo attached with this letter.

#### **6.4.8 Wildlife Information**

33. Section 1 of Exhibit H states “The CPW will be consulted as part of the county and amendment permitting processes.” Please inform the Division if this process is separate from the Division sending a completeness notice to CPW. Or, if this is a separate process, has it already been initiated?

#### **6.4.10 Exhibit J - Vegetation Information**

34. Pursuant to Rule 6.4.10(1)(c), additional information about the site’s vegetation will need to be provided which estimates average annual production for hay meadows and croplands and carrying capacity for rangelands on or in the vicinity of the affected land, since the choice of reclamation is for rangeland.

#### **6.4.12 Reclamation Costs**

35. The Division requests more information related to the provided Reclamation Cost Estimate. The unit costs should include estimates for the following activities as appropriate to the operation:
- a. backfilling, grading, topsoil application, seeding, mulching, fertilization, and labor to complete reclamation. Determine and specify the point during the operation when the site has reached a point of maximum disturbance. The cost to reclaim the site to the specifications of the Reclamation Plan at this point must be estimated. Unit costs (cost per cubic yard), volumes, haul or push distances, and grades must be included when backfilling and grading are part of the Reclamation Plan. Volume and unit costs for finish grading, subsoil and topsoil application must be provided in terms of cost per cubic yard. The estimated cost for fertilizer, seed and mulch acquisition and application must be provided as cost per acre.
  - b. All items referenced in the Reclamation Plan must be included in the cost calculation. These items in addition to earthwork, such as building demolition, fencing, monitoring well sealing or stream channel reconstruction must also be included in the reclamation cost estimate.
36. The Division is currently updating the reclamation cost estimate for the Hayden Gravel Pit Amendment, AM4. This updated estimate will be provided to Oldcastle SW Group dba United Companies upon completion and may be revised based on adequacy responses provided through this review process.

#### **6.4.14 Exhibit N Source of Legal Right to Enter**

37. Exhibit N references a lease agreement which lists a CWH Properties LLC (CWH) as the owner of parcels 940122001 and 940124001. It also lists Connell Resources, LLC as an owner of subsurface mineral rights through Sand & Gravel Lease No. GL 3467. Exhibit O identifies United Companies as the only owners of record of affected land and substance to be mined. Please update Exhibit O to reflect the accurate list of all owners of both affected land and substance to be mined.
- a. This same lease agreement also references a Mining Pod #4 of which is not currently listed on Mining Plan maps presented to the Division. Please expound on what Mining Pod #4 is and how it relates to the current operation under Permit m-1987-164.
38. The Statement of Ownership and Grant of Right of Entry document included in Exhibit N states that one Jocko Camilletti is the owner of land within Permit m-1987-164. Their name will also need to be added to the list of owners of subsurface and mineral rights given in Exhibit O.
39. Please clarify for the Division the necessity of the all three agreements included in Exhibit N i.e. lease agreement, memorandum of lease, and statement of ownership and



grant of right of entry. Which documents pertain to which parcels of land within the permit and proposed expansion area? Do the documents provided give Right of Entry proof for all permitted areas, just the proposed expansion area, or both?

40. In order to assist the Division in understanding the relationship between surface ownership and leasing agreements of the currently permitted and proposed expansion areas, please provide the Division with a map of surface ownership which portrays all permitted and proposed areas.
41. The copy provided to the Division of 'Exhibit B Memorandum of Lease' included in Exhibit N has not been signed or notarized. Please provide the Division with a signed and notarized copy of this document.
42. The Division has been informed that Untied Companies does not have legal right of access to mine the SENW portion of Section 12 which is included in the expansion for AM4 (Figure 3 attached below). Per correspondence with the State Land Board, the only lease held is for the SWNW portion of Section 12, which includes the extent of the current operation. Please provide the Division with the appropriate documents to demonstrate legal right of entry for the SENW portion of Section 12.

#### **Exhibit O: Surface Owners of Record**

43. Exhibit O states that United Companies is the owner of both the affected land (surface area) and substance to be mined. However, page 3 of the application indicates that the State Land Board is an additional landowner. Please submit a revised Exhibit O which accurately lists all owners of record.

#### **6. 4.19 Permanent Man-made Structures**

44. Rule 6.4.19 requires operators to provide a notarized agreement between the applicant and the person(s) having an interest in the structure, that the applicant is to provide compensation for any damage to the structure. Please provide the Division with all available signed agreements in accordance with this rule.

#### **6.5 Geotechnical Stability Exhibit**

45. Please see the Division's geotechnical review memo attached with this letter.

This concludes the Division's adequacy review of this application. This letter shall not be interpreted to mean that there are no other technical deficiencies in your application; other issues may arise as additional information is supplied. Please be advised the permit application may be deemed inadequate, and the application may be denied on June 12, 2023, unless the above mentioned adequacy review items are addressed to the satisfaction of the Division. If more time is needed to complete the reply, the Division can grant an extension to the decision date.

This will be done upon receipt of a written waiver of the Applicant's right to a decision by June 12, 2023, and the request for additional time. This must be received no later than the deadline date.

If you have any questions, please contact me at (303)866-3567 x8176 or (720)868-7757.

Sincerely,  
Hunter C. Ridley

A handwritten signature in blue ink that reads "Hunter Ridley". The signature is written in a cursive, flowing style.

Environmental Protection Specialist  
CC: Michael Cunningham, DRMS

  Find address or place 



- ROW - Centerlines (ALL)
- Communications
  - Miscellaneous Line
  - Pipeline - Oil and Gas
  - Pipeline - Water and Sewer
  - Power
  - Transportation
- SLB Leases - ALL
- SLB Surface Ownership
- Township / Range
- Section
- Section (QTRQTR)
- SLB\_Districts
- County
- World Imagery
- World Imagery
- Low Resolution 15m Imagery
- High Resolution 60cm Imagery





## MEMORANDUM

**To:** Hunter Ridley

**From:** Tim Cazier, P.E. 

**Date:** April 6, 2023

**Re: Hayden Gravel Pit – Permit No. M-1987-164; Amendment 4 (AM-4)  
Exhibit G and Rule 6.5 – Preliminary Adequacy Review**

The Division of Reclamation, Mining and Safety engineering staff (DRMS) have reviewed the Hayden Gravel Pit Exhibit G and Rule 6.5 Geotechnical Stability Exhibit, provided with AM-4 and prepared by Lewicki & Associates.

The review consisted of comparing the contents of these two exhibits with specific requirements of Rules 6.4.7 and 6.5 of the Minerals Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials. Any inadequacies are identified under the respective exhibit heading along with suggested actions to correct them.

The following items must be addressed by the applicant in order to satisfy the requirements of C.R.S. 34-32.5-101 et seq. and the Mineral Rules and Regulations of the Mined Land Reclamation Board:

### **6.4.7 EXHIBIT G – Water Information**

1. Groundwater Exposure: There appears to be a discrepancy between Sections 1 and 2 of Exhibit G. Section 1 states “Groundwater is below the bottom of mining ...” and Section 2 states “Fuel storage will be stored away from exposed groundwater ...”. Please clarify whether or not groundwater is expected to be encountered or exposed.
2. Hydrograph Reports: Several aspects of the stormwater runoff calculations were considered inadequate for the purpose of assessing appropriate stormwater controls. Please provide revised Hydrograph Reports addressing the following:
  - a. SCS Curve Numbers (CN): Three different curve numbers were used: 74 (for apparently undisturbed areas); 89 (disturbed Basin 1 areas); and 81 (disturbed



Basins 2 and 3 areas). Please provide some rationale for the selection of these three curve numbers.

- b. Time Interval: The time interval used for Hydrograph Reports 1, 2, 3, 7, 8, and 9 was 15 minutes. The SCS synthetic hydrographs are based on one tenth of an hour increments. Some software programs include interpolations between the six minute synthetic hydrograph increments. It is not known to the DRMS if this is the case for Autodesk's Hydraflow extension. Regardless, the time step for hydrograph analyses should be no greater than six minutes in order to capture the peak flow.
    - c. Times of Concentration: A basin slope and hydraulic length equal to zero was used for all nine Hydrograph Reports. This implies only direct precipitation on a ponded surface was considered. Basins 1 and 3 have significant slopes and hydraulic lengths; and those for Basin 2 are greater than zero. Basin specific slopes and hydraulic lengths should be used to predict peak runoff as stated in the second paragraph of Section 6.
3. Runoff Volume: Exhibit G is incomplete with respect to demonstrating adequate stormwater storage. Please address the following:
  - a. Underestimated Volume: DRMS engineering used equations 2-3 and 2-4 from the SCS runoff curve number method (USDA, 1986; TR-55) to check the runoff volume reported in the nine Hydrograph Reports and found the Hydrograph Reports consistently under predicting the runoff volume by about six percent. This may be related to the zero values used for the basin slopes and hydraulic lengths, or the fact the model appears to end at 26 hours (1560 minutes); or both.
  - b. Ponds: There are three Pond Reports suggesting a stormwater pond in each Pod. No pond locations are shown on the Exhibit C maps or Exhibit G maps. All ponds are only 2 feet deep, but have a very large footprints, between 35 and 52 acres. It is impractical to expect a stormwater pond of that extent to be flat enough over the entire bottom such that a two-foot depth would be available over the entire footprint to store runoff. Please provide locations of the three ponds and consider a smaller, practical footprint and a depth greater than two feet.
4. Erosion Potential: The reclamation grading for Pods 1 and 3 show steeper than existing slopes at the downgradient end of the contributing areas, with the final slope on the south side of Pod 3 being significantly steeper. Given the large contributing areas, erosion gullies are expected on these reclaimed slopes. How is stormwater to be controlled on these reclaimed slopes so as to prevent significant gullying?

**Rule 6.5 EXHIBIT G – Geotechnical Stability Exhibit**

5. Clarification Requested: The third paragraph states “Mining will be conducted at the active highwall angle until the highwall has reached the half-way point of the final mining slope.” Please explain what is meant by the half-way point.
6. Typo: As this is the second submittal from Lewicki & Associates citing Table 2.5 in the SME Mining Reference Handbook with author “Hoek” being misspelled in the footnote, the DRMS is pointing out the incorrect spelling as “Houk”. No response is necessary.

If either you or the applicants have any questions regarding the comments above, please call me at (303) 328-5229 [mobile #].



STATE OF  
COLORADO

Ridley - DNR, Hunter <hunter.ridley@state.co.us>

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## M-1987-164 Expansion

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**Teschner - DNR, Benjamin**

<benjamin.teschner@state.co.us>

Wed, Mar 15, 2023

at 3:26 PM

To: "Ridley - DNR, Hunter" <hunter.ridley@state.co.us>

Hunter,

At present, Connell Resources / OldCastel / United do not have legal right to mine any of the SENW of Section 12. They only hold a lease with us on the SWNW. I've tried to reach out to our lessee (Connell Resources) and have not received a response. Where is this at in the permitting process?

Thanks,

Ben

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STATE OF  
COLORADO

Ridley - DNR, Hunter &lt;hunter.ridley@state.co.us&gt;

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**Information Request - Notice of Complete Application for Permit: M1987164**

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**Frank, Robert CIV (USA)** <Robert.W.Frank@usace.army.mil>  
To: "Ridley - DNR, Hunter" <hunter.ridley@state.co.us>

Mon, Jan 9, 2023 at 1:33 PM

Afternoon Mr. Ridley,

Our cursory desktop review of the project description you provided indicates expansion of the mine may require a Department of the Army (DA) permit due the proposed project's potential intersection with Waters of the United States (WOTUS). The project is centered at latitude 40.49780, longitude -107.22120, Routt County, Colorado. We recommend that the project proponent contact us with a request for a Pre-Application Consultation or alternatively, submit an application for a DA permit (or Pre-Construction Notification for a Nationwide Permit verification if applicable).

These items should be submitted to the USACE, Albuquerque District's Colorado email inbox (with a copy to me) at: [SPA-RD-CO@usace.army.mil](mailto:SPA-RD-CO@usace.army.mil).

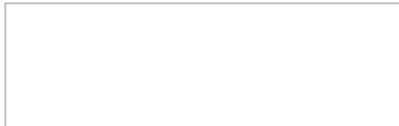
Please let me know if you have any questions.

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Kind regards,

[Quoted text hidden]



P 303.866.3567 x8176 | F 303.832.8106

Physical: [1313 Sherman Street, Room 215, Denver, CO 80203](#)

Mailing: DRMS Room 215, [1001 E 62nd Ave, Denver, CO 80216](#)

[hunter.ridley@state.co.us](mailto:hunter.ridley@state.co.us) | <https://drms.colorado.gov>

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