



COLORADO

Division of Reclamation,
Mining and Safety

Department of Natural Resources
1313 Sherman Street, Room 215
Denver, Colorado 80203

January 4, 2024

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

Re: Second Review of a 112 Construction Materials Reclamation Permit Application Package, Ewing Gravel Pit, DRMS File M2023-033

Mr. Langenfeld:

The Division of Reclamation, Mining, and Safety has completed its preliminary adequacy review of your 112 construction materials reclamation permit conversion application. The application was called complete for review on September 26, 2023. All comment and review periods began on September 26, 2023, and the public comment period ended on November 22, 2023. No objections to the proposed operation were received by the Division during the public comment period. **The decision date for this application is January 31, 2024. Please be advised that if you are unable to satisfactorily address any concerns identified in this review before the decision date, it will be your responsibility to request an extension of the review period. If there are outstanding issues that have not been adequately addressed prior to the end of the review period, and no extension has been requested, the Division will deny this application. In order to allow the Division adequate time to review your responses to any adequacy issues, please submit your adequacy responses to the Division no later than two weeks prior to the decision date (January 17, 2024).**

Please note that any changes or additions to the application on file in our office must also be reflected in the public review copy, which has been placed with the Weld County Clerk and Recorder.

The review consisted of comparing the application content with specific requirements of Rule 6.1, 6.2, 6.4 and 6.5 of the Minerals Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials. As with most applications, there are items that will require clarification of the existing information. Any inadequacies are identified under the respective exhibit heading in italics and numbered for reference in the adequacy response. I have attempted to retain the numbering from the first adequacy letter for consistency, although there are a few new comments – Items not listed have been addressed adequately.

APPLICATION FORM:

- *Adequate as submitted*



6.2 GENERAL REQUIREMENTS OF EXHIBITS

6.2.1 General Requirements

(1) This Rule provides for the guidelines for, and information requirements of, each Exhibit required to be submitted with the permit application, as specified according to Section 6.1.

(2) **Maps and Exhibits Maps, except the index map, must conform to the following criteria:**

- (a) show name of Applicant;
- (b) must be prepared and signed by a registered land surveyor, professional engineer, or other qualified person;
- (c) give date prepared;
- (d) identify and outline the area which corresponds with the application;
- (e) with the exception of the map of the affected lands required in Section 34-32.5-112(2)(d), C.R.S. 1984, as amended, shall be prepared at a scale that is appropriate to clearly show all elements that are required to be delineated by the Act and these Rules. The acceptable range of map scales shall not be larger than 1 inch = 50 feet nor smaller than 1 inch = 660 feet. Also, that a map scale, appropriate legend, map title, date and a north arrow shall be included.

EXHIBIT A - Legal Description (Rule 6.4.1): The legal description must identify all affected land and be wholly adequate for field location of the property. It can be in the form of metes and bounds survey or a description by reference to township, range and section to at least the nearest quarter/quarter section. Where applicable, the street address or lot numbers may be used.

- *Adequate as submitted*

EXHIBIT B - Index Map (Rule 6.4.2): An index map showing the regional location of all affected land and all roads and other access to the area. A standard U.S. Geological Survey topographic quadrangle or equivalent is acceptable. Scale criteria need not be followed for this map.

- *Adequate as submitted*

EXHIBIT C - Pre-mining and Mining Plan Map(s) of Affected Lands (Rule 6.4.3): One or more maps may be necessary to legibly portray the following information:

- (a) all immediately adjacent surface owners of record;
- (b) the name and location of all creeks, roads, buildings, oil and gas wells and lines, and power and communication lines on the area of affected land and within two hundred (200) feet of all boundaries of such area
- (c) the existing topography of the area with contour lines of sufficient detail to portray the direction and rate of slope of the affected land;
- (d) the total area to be involved in the operation, including the area to be mined and the area of affected lands (see definition of "Affected Land");

- (e) the type of present vegetation covering the affected lands; and
- (f) in conjunction with Exhibit G - Water Information, Subsection 6.4.7, if required by the Office, further water resources information will be presented on a map in this section.
- (g) Show the owner's name, type of structures, and location of all permanent or man-made structures contained on the area of affected land and within two hundred (200) feet of the affected land.
- (h) In conjunction with Exhibit I - Soils Information, Subsection 6.4.9, soils information may be presented on a map in this section;
- (i) Aerial photos, if available, may be included in this section.

Exhibit C - New comment Remove/correct incorrect text boxes from Figure C-2 for permit and affected area. Permit area = 156.7 acres and affected area = 127 acres. (Disturbed area of 116 acres is not relevant).

- 2 *The application states that significant amounts of overburden, sand, and topsoil will be maintained on-site for reclamation, and that all stockpiles will be placed in Pod 3 outside of the Flood Plain. Please show the locations and expected volumes of all topsoil and overburden/sand stockpiles on the Mining Plan map. Note that the Act/Rule requires that Topsoil and Overburden/sand be segregated and maintained separately for reclamation.*
- 3 *What is the anticipated volume of the “concealment berm” shown on the mining plan map, and the “barrier berm” shown on the north side of the processing area?*
 - 3a- *Please edit height of eastern concealment berm for consistency on Figure C-2 (20 ft or 35 ft?)*

EXHIBIT D - Mining Plan (Rule 6.4.4): The mining plan shall supply the following information, correlated with the affected lands, map(s) and timetables:

- (a) description of the method(s) of mining to be employed in each stage of the operation as related to any surface disturbance on affected lands;
- (b) earthmoving;
- (c) all water diversions and impoundments; and
- (d) the size of area(s) to be worked at any one time.
- (e) An approximate timetable to describe the mining operation. The timetable is for the purpose of establishing the relationship between mining and reclamation during the different phases of a mining operation. You will not be required to meet specific dates for initiation, or completion of mining in a phase as may be identified in the timetable. This does not exempt you from complying with the performance standards of Section 3.1. Such timetable should include:
 - (i) an estimate of the periods of time which will be required for the various stages or phases of the operation;
 - (ii) a description of the size and location of each area to be worked during each phase; and
 - (iii) outlining the sequence in which each stage or phase of the operation will be carried out.(Timetables need not be separate and distinct from the mining plan, but may be incorporated therein.)

(f) A map (in Exhibit C - Pre-Mining and Mining Plan Maps(s) of Affected Lands, Subsection 6.4.3) may be used along with a narrative to present the following information:

- (i) nature, depth and thickness of the ore body or deposit to be mined and the thickness and type of overburden to be removed (may be marked "CONFIDENTIAL," as per Paragraph 1.3(3)); and
- (ii) nature of the stratum immediately beneath the material to be mined in sedimentary deposits.

(g) Identify the primary and secondary commodities to be mined/extracted and describe the intended use; and

(h) name and describe the intended use of all expected incidental products to be mined/extracted by the proposed operation.

(i) Specify if explosives will be used in conjunction with the mining (or reclamation). In consultation with the Office, the Applicant must demonstrate pursuant to Rule 6.5(4), Geotechnical Stability Exhibit, that off-site areas will not be adversely affected by blasting.

(j) Specify the dimensions of any existing or proposed roads that will be used for the mining operation. Describe any improvements necessary on existing roads and the specifications to be used in the construction of new roads. New or improved roads must be included as part of the affected lands and permitted acreage. Affected land shall not include off-site roads which existed prior to the date on which notice was given or permit application was made to the office and which were constructed for purposes unrelated to the proposed mining operation and which will not be substantially upgraded to support the mining operation. Describe any associated drainage and runoff conveyance structures to include sufficient information to evaluate structure sizing.

- 7 *Please clarify if both slurry walls will be installed at the same time prior to commencing mining activity, or if the Pod 3 slurry wall will be installed at a later date. Mining timetable does not include when second (Pod 3) slurry wall will be installed – please include*

EXHIBIT E - Reclamation Plan (Rule 6.4.5):

(1) In preparing the Reclamation Plan, you should be specific in terms of addressing such items as final grading (including drainage), seeding, fertilizing, revegetation (trees, shrubs, etc.), and topsoiling. You are encouraged to allow flexibility in your plans by committing to ranges of numbers (e.g., 6"-12" of topsoil) rather than specific figures.

(2) The Reclamation Plan shall include provisions for, or satisfactory explanation of, all general requirements for the type of reclamation proposed to be implemented by you. Reclamation shall be required on all the affected land. The Reclamation Plans shall include:

- (a) A description of the type(s) of reclamation you propose to achieve in the reclamation of the affected land, why each was chosen, the amount of acreage accorded to each, and a general discussion of methods of reclamation as related to the mechanics of earthmoving;
- (b) A comparison of the proposed post-mining land use to other land uses in the vicinity and to adopted state and local land use plans and programs. In those instances where the post-mining land use is for industrial, residential, or commercial purposes and such use is not reasonably assured, a plan for revegetation shall be submitted. Appropriate evidence supporting such reasonable assurance shall be submitted;

- (c) A description of how the Reclamation Plan will be implemented to meet each applicable requirement of Section 3.1;
- (d) Where applicable, plans for topsoil segregation, preservation, and replacement; for stabilization, compaction, and grading of spoil; and for revegetation. The revegetation plan shall contain a list of the preferred species of grass, legumes, forbs, shrubs or trees to be planted, the method and rates of seeding and planting, the estimated availability of viable seeds in sufficient quantities of the species proposed to be used, and the proposed time of seeding and planting;
- (e) A plan or schedule indicating how and when reclamation will be implemented. Such plan or schedule shall not be tied to any specific date but shall be tied to implementation or completion of different stages of the mining operation as described in Subparagraph 6.4.4(1)(e). The plan or schedule shall include:
 - (i) An estimate of the periods of time which will be required for the various stages or phases of reclamation;
 - (ii) A description of the size and location of each area to be reclaimed during each phase; and
 - (iii) An outline of the sequence in which each stage or phase of reclamation will be carried out. (The schedule need not be separate and distinct from the Reclamation Plan, but may be incorporated therein.)
- (f) A description of each of the following:
 - (i) Final grading - specify maximum anticipated slope gradient or expected ranges thereof;
 - (ii) Seeding - specify types, mixtures, quantities, and expected time(s) of seeding and planting;
 - (iii) Fertilization - if applicable, specify types, mixtures, quantities and time of application;
 - (iv) Revegetation - specify types of trees, shrubs, etc., quantities, size and location; and
 - (v) Topsoiling - specify anticipated minimum depth or range of depths for those areas where topsoil will be replaced.

Exhibit E - New comments:

- The area/acreage values in Table E-1 do not match the values in the preceding paragraph – please edit for consistency.*
- Do the required topsoil values for reclamation in Table E-2 include replacement topsoil for the Process Area? It would be useful to also include a column for acreage(s) for areas/pods where topsoil replacement and revegetation will be required that add to the totals for Rangeland provided in Table E-1.*
- Please modify Tables E-2 and E-3 to add information for required backfill volumes for the process area ponds and relate those volumes to the projected area and depth of these ponds.*
- Where will the approximately 200K c.y. of required excess sand/byproduct be placed prior to use in reclamation?*

EXHIBIT F - Reclamation Plan Map (Rule 6.4.6): The map(s) of the proposed affected land, by all phases of the total scope of the mining operation, shall indicate the following:

(a) The expected physical appearance of the area of the affected land, correlated to the proposed mining and reclamation timetables. The map must show proposed topography of the area with contour lines of sufficient detail to portray the direction and rate of slope of all reclaimed lands; and

(b) Portrayal of the proposed final land use for each portion of the affected lands.

- *Adequate as submitted*

EXHIBIT G - Water Information (Rule 6.4.7):

(1) If the operation is not expected to directly affect surface or groundwater systems, a statement of that expectation shall be submitted.

(2) If the operation is expected to directly affect surface or groundwater systems, you shall:

(a) Locate on the map (in Exhibit C) tributary water courses, wells, springs, stock water ponds, reservoirs, and ditches on the affected land and on adjacent lands where such structures may be affected by the proposed mining operations;

(b) Identify all known aquifers; and

(c) Submit a brief statement or plan showing how water from dewatering operations or from runoff from disturbed areas, piled material and operating surfaces will be managed to protect against pollution of either surface or groundwater (and, where applicable, control pollution in a manner that is consistent with water quality discharge permits), both during and after the operation.

(3) You must provide an estimate of the project water requirements including flow rates and annual volumes for the development, mining and reclamation phases of the project.

(4) You must indicate the projected amount from each of the sources of water to supply the project water requirements for the mining operation and reclamation.

(5) You must affirmatively state that the Operator/Applicant has acquired (or has applied for) a National Pollutant Discharge Elimination System (NPDES) permit from the Water Quality Control Division at the Colorado Department of Health, if necessary.

15 The well locations identified in Table G-4 are very difficult to find/identify or are not shown on Figure C-1. Please provide another map (or a modified copy of Figure C-1) to clearly show the wells listed, as well as the XCEL wells in Table G-5, and the 4 piezometers listed in Table G-6.

15a - As a general note, my copy contained several formatting issues with the Exhibit G, primarily with subheading numbering in Sections 6 and 7, and also within the Water Quality Monitoring Plan, but I'm not entirely sure if these are in the provided file or an artifact of viewing on my system. Please review formatting for consistency where needed.

17 The following comments (17a- 17k) are from review of the provided revised Appendix G-2 Groundwater Quality Monitoring Plan (GQMP).

17a – Introduction, After the 5 consecutive quarters of baseline data are collected and any site specific Numeric Protection Levels (NPL) have been set (if needed) DRMS believes that quarterly water chemistry

sampling may be excessive. All mining will take place within slurry walls that should isolate mining impacts from surrounding alluvial aquifer. Therefore, DRMS would suggest that quarterly water chemistry sampling from the identified POC wells would likely be sufficient for 12 months after installation of the initial slurry wall, with sampling thereafter reduced to twice a year (every 6 months). With the installation of the second slurry wall, frequency will again increase to quarterly for 12 months before dropping again to every 6 months. This frequency should be sufficient unless additional site activity or the data warrants an increase in sampling frequency. Analytical data, and groundwater level data should be provided with the annual report, unless exceedances of Table Value Standards or Site Specific NPL are observed, or changes in Groundwater Elevations exceed trigger levels.

17b – Section 1.2: The sampling points are referred to in Appendix 1 and on Figure 3. I believe it should read Figure 2, as there is no Figure 3 in the GQMP - please correct as needed

17c – Appendix 1 Map: Xcel wells should be specifically identified to match the provided permit #'s, and Piez 4 is not labelled on the map – please correct as needed.

17d – Section 1.2.1: Provide lithologic and well construction information for the seven identified wells. If it is contained in the identified CDWR permits, provide copies of those permits. Also provide the surveyed elevations for the TOC for the seven wells.

17e – Section 1.2.2: The introduction states that GW levels will be collected weekly, and Section 1.2.2 states that GW level data collection will take place no less than quarterly. DRMS will require that water level data be collected and recorded from the 3 GW wells and 4 Piezometers on a no less than monthly basis. This data will be graphed and included as a required addendum to the annual report. Please modify the GQMP as needed.

17f – Section 3.1: DRMS has determined that GW1, Piez 1, and Piez 2 will be the Points of Compliance for this site, and all three locations will be monitored for life of mine. Monitoring frequency may be based on the proposed schedule in comment 17a. DRMS would also suggest that at least one background location be monitored at least annually as a reference to protect the mine from any off-site influences on groundwater chemistry that may be observed, otherwise changes/exceedances in POC well data must be assumed to be a result of mining activity. Please modify the GQMP as needed.

17g – Section 4.3: First sentence should read ... parameters identified in Table 2, not Table 1. Also include applicable Reg. 41 standards for the parameters identified in Table 1. Please also define the parameter MBAS, and make sure there is a reason (if so, please provide) for sampling for any total metals identified.

17h – Section 4.4: Samples must be preserved and shipped in accordance with method requirements (i.e. nitric acid to pH less than 2 for dissolved metals and iced to 4 deg. C.) Industry standards for field sampling logbooks or field data sheets should be maintained for all sampling locations and events. Please provide generic examples of whichever method will be utilized.

17i – Section 4.5.1: Site specific Numeric Protection Levels for any analytes that exceed table value standards in baseline data will be determined by DRMS when all five quarters of baseline data have been provided for review in a subsequent TR to be submitted for the site. This would also apply to groundwater level monitoring corrective action trigger levels and corrective actions.

At this time the applicant will need to commit to submittal of a TR containing the full set of baseline water quality data along with any proposed NPLs for constituents that exceed Table Value Standards, along with proposed groundwater elevation trigger levels and proposed corrective actions for DRMS review prior to installation of the first slurry wall. (this commitment could be in Section 4.7 Reporting). Please acknowledge/modify as needed.

17j – Section 4.8: as a general note, this would be a good place to include any appropriate TSOP documents or data collection sheets.

17k - Appendix 2: Consider using the tables provided in the Peak Ranch baseline data submittal as a template for this section.

Table Value Standards for all constituents should be provided and highlighted in the data when/where they are exceeded. Consistent units should also be provided for all data (mg/L or other). It may be useful to provide a separate sheet/table for each baseline sampling location as the existing data is very awkwardly presented at this time.

Data should be reported as “ND” - not detected at the method detection level (specify for analyte), not “0”

Water level data should always be reported in feet ASL to correlate with data presented on any groundwater contour map(s) and any applicable graphing for water levels in each well over time. However, a row for depth to water from surveyed TOC may be included if you wish.

All water level data should always be collected and reported to the nearest (0.01 foot).

Explanations should be provided for any data missing from Appendix 2

EXHIBIT H - Wildlife Information (Rule 6.4.8):

(1) In developing the wildlife information, you may wish to contact the local wildlife conservation officer. You must include in this Exhibit, a description of the game and non-game resources on and in the vicinity of the application area, including:

(a) a description of the significant wildlife resources on the affected land;

(b) seasonal use of the area;

(c) the presence and estimated population of threatened or endangered species from either federal or state lists; and

(d) a description of the general effect during and after the proposed operation on the existing wildlife of the area, including but not limited to temporary and permanent loss of food and habitat, interference with migratory routes, and the general effect on the wildlife from increased human activity, including noise.

- *Adequate as submitted*

EXHIBIT I - Soils Information (Rule 6.4.9): In consultation with the Soil Conservation Service or other qualified person, you must indicate on a map (in Exhibit C) or by a statement, the general type, thickness and distribution of soil over the affected land. Such description will address suitability of topsoil (or other material)

for establishment and maintenance of plant growth. The above information shall satisfy "completeness" requirements for purposes of determination of date of filing.

- *Adequate as submitted*

EXHIBIT J - Vegetation Information (Rule 6.4.10):

(1) You must include in this Exhibit a narrative of the following items:

- (a) descriptions of present vegetation types, which include quantitative estimates of cover and height for the principal species in each life-form represented (i.e., trees, tall shrubs, low shrubs, grasses, forbs);
- (b) the relationship of present vegetation types to soil types, or alternatively, the information may be presented on a map; and
- (c) estimates of average annual production for hay meadows and croplands, and carrying capacity for range lands on or in the vicinity of the affected land, if the choice of reclamation is for range or agriculture.

(2) You must show the relation of the types of vegetation to existing topography on a map in Exhibit C. In providing such information, you may want to contact the local Soil Conservation District.

- *Adequate as submitted*

EXHIBIT K - Climate (Rule 6.4.11): Provide a description of the significant climatological factors for the locality.

- *Adequate as submitted*

EXHIBIT L - Reclamation Costs (Rule 6.4.12): All information necessary to calculate the costs of reclamation must be submitted and broken down into the various major phases of reclamation. You must provide sufficient information to calculate the cost of reclamation that would be incurred by the state.

19 DRMS will evaluate the reclamation bond calculation when the other adequacy issues have been resolved. However, a significantly more detailed reclamation estimate, ideally broken down by Pod and Reclamation Task will need to be provided along with supporting documentation for provided unit costs (for example, a task list for Pods 1 and 2 reclamation should include at a minimum: Installation cost for slurry wall, costs to install inlet/outlet structures, backfilling of mine slope to 3:1, topsoil replacement, soil prep., seeding and weed control costs, etc.). Initial cost estimate will need to include tasks for reclamation of Pods 1 and 2, process area, and visual berms at a minimum.

EXHIBIT M - Other Permits and Licenses (Rule 6.4.13): A statement identifying which of the following permits, licenses and approvals the Operator/Applicant holds or will be seeking in order to conduct the proposed mining and reclamation operations: effluent discharge permits, air quality emissions permits, radioactive source material licenses, the State Historic Preservation Office clearance, disposal of dredge and fill material (404)

permits, permit to construct a dam, well permits, highway access permits, U.S. Forest Service permits, Bureau of Land Management permits, county zoning and land use permits, and city zoning and land use permits.

- *Adequate as submitted*

EXHIBIT N - Source of Legal Right to Enter (Rule 6.4.14): You must provide the source of your legal right to enter and initiate a mining operation on the affected land.

- *Adequate as submitted*

EXHIBIT O - Owner(s) of Record of Affected Land (Surface Area) and Owners of Substance to be Mined (Rule 6.4.15): Please submit a complete list of all owners or show the owners on your map in Exhibit C.

- *Adequate as submitted*

EXHIBIT P - Municipalities Within Two Miles (Rule 6.4.16): Please list any municipality(s) within two miles of the proposed mining operation and address of the general office of each municipality.

- *Adequate as submitted*

EXHIBIT Q - Proof of Mailing of Notices to County Commissioners and Soil Conservation District (Rule 6.4.17): Please submit proof of actual delivery or proof of mailing by Certified Mail, return receipt requested, of Notice of the Application to the local Board of County Commissioners and, if the mining operation is within the boundaries of a Soil Conservation District, to the Board of Supervisors of the Soil Conservation District.

- *Adequate as submitted*

EXHIBIT R - Proof of Filing with County Clerk and Recorder (Rule 6.4.18): You must submit an affidavit or receipt indicating the date on which the application was placed with the local County Clerk and Recorder.

- *Adequate as submitted*

EXHIBIT S - Permanent Man-Made Structures (Rule 6.4.19): Please note that roadways and above-ground or underground utilities (if present) within 200 feet of the proposed affected area are considered permanent man-made structures. In accordance with Rule 6.4.19, when mining operations will adversely affect the stability of any significant, valuable and permanent man-made structure located within 200 feet of the affected area, the applicant may either:

(a) 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;

or

(b) Where such an agreement cannot be reached, the applicant shall provide an appropriate engineering evaluation that demonstrates that such structure shall not be damaged by activities occurring at the mining operation.

- *Adequate as submitted*

Additional Information:

The provided proof of publication is adequate, however, you will need to provide proof that adequacy responses have been included with the Weld County review copy.

This concludes the Division's second adequacy review of this application. This letter shall not be construed to mean that there are no other technical deficiencies in your application. Other issues may arise as additional information is supplied. Please remember that the decision date for this application is January 31, 2024. As previously mentioned, if you are unable to provide satisfactory responses to any inadequacies prior to this date, it will be your responsibility to request an extension of time to allow for continued review of this application. If there are still unresolved issues when the decision date arrives and no extension has been requested, the application will be denied. If you have any questions, please contact me at (303) 229-9414.

Sincerely,

A handwritten signature in blue ink, appearing to read "Eric Scott", with a stylized flourish at the end.

Eric Scott – Environmental Protection Specialist

CC:

Enclosures: