



COLORADO

Division of Reclamation,
Mining and Safety

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

December 1, 2016

Joel Lemons
Cargill, Inc.
12998 CR 42
Yuma, CO 80759

Re: 110c Permit Application Adequacy Review; Cargill Cattle Feeders Dirt Pit; File No. M-2016-040

Dear Mr. Lemons,

The Division of Reclamation, Mining, and Safety (Division) has reviewed the content of the Cargill, Inc. 110c Permit Application for the Cargill Cattle Feeders Dirt Pit, File No. M-2016-040, and submits the following comments. **The Division is required to make an approval or denial decision no later than December 9, 2016, 2016; therefore, a response to the following adequacy review concerns should be submitted to the Division as soon as possible.** 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 three days prior to the decision date. Please respond to this Adequacy Review with the requested additional/updated information on permit replacement pages AND summarize each response in a cover letter titled "Adequacy Review Response; M-2016-040".

The review consisted of comparing the application content with specific requirements of Rules 1, 3, 6.1, 6.2, and 6.3 of the Mineral 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.

GENERAL APPLICATION PROCEDURES

1. As required by Rule 1.6.2(d), please submit proof of publication in a newspaper of general circulation in the locality of the proposed mining operation. Please note, the proof of publication submitted on November 7, 2016 with a notice dated October 13, 2016, predates the filed application and you are required to submit the proof of publication for a new, timely public notice.
2. As required by Rule 1.6.2 (e), please submit proof of the notice to all owners of record of surface and mineral rights of the affected land and the owners of record of all land surface within 200 feet of the boundary of the affected land; this includes all easement holders located on the affected land and within 200 feet of the boundary of the affected land. Proof of notice may be return receipts of a Certified Mailing or by proof of personal service.
3. The Division received a comment from History Colorado regarding the application. The letter is attached for review. Please acknowledge and address any comments noted in the letter and make changes to the application as necessary.

6.2 GENERAL PERMIT APPLICATION EXHIBIT REQUIREMENTS –110 LIMITED OPERATIONS

4. Please ensure that all maps submitted comply with Rule 6.2.1(2). Maps, except the index map, must conform to the following criteria: (a.) show the name of the applicant; (b.) must be prepared and signed by a registered land surveyor, professional engineer, or other qualified person; (c.) give the date prepared; (d.) identify and outline the area which corresponds with the application; and (e.) and shall include an



appropriate legend, map title, date, north arrow, and be prepared at a scale that is appropriate to clearly show all elements that are required to be delineated by the Act and Rules

6.3 SPECIFIC PERMIT APPLICATION EXHIBIT REQUIREMENTS –110 LIMITED OPERATIONS

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:

EXHIBIT B - Site Description (Rule 6.3.2)

5. The Soil Report provided in Exhibit B contains two maps which will need to be revised. The map on the cover page depicts the incorrect permit boundary the incorrect permit boundary and the map on page 8 of the report does not show the permit boundary. Please revise these maps to show the correct proposed permit boundary for the site.
6. Identify any permanent man-made structures within two hundred (200) feet of the affected area and the owner of each structure. Permanent man-made structures include houses, barns, fences, above or below ground utilities, irrigation ditches, maintained or public roads, bridges, wells, pipelines, water storage impoundments, railroad tracks, cemeteries, communication antennas, etc. Each structure should be located on Exhibit E – Map.

After reviewing Google Earth aerial imagery, the Division believes there is at least three structures that have not been identified. These include the fence line along the southern permit boundary, the overhead utility line just south of the southern permit boundary, and County Road N. Please verify that there are no other structures within 200 feet of the affected lands, specifically along County Road N.

7. In accordance with Rule 6.3.2(c), please provide a description of the depth of ground water at the proposed site location.

EXHIBIT C - Mining Plan (Rule 6.3.3)

8. The Applicant states that stormwater or runoff will be collected in the open pit mine and allowed to soak into the earth. In accordance with Rule 6.3.3(j), please specify how you will comply with applicable Colorado water laws and regulations governing injury to existing water rights. Although the Division of Water Resources as yet to provide comment on this application, this agency usually states “if stormwater is contained on-site, it must infiltrate into the ground or be release to the natural stream system within 72 hours, or al work must cease until a substitute water supply plan, or augmentation plan approved by water court, is obtained. Reclamation plans must ensure water will not be retained onsite for more than 72 hours unless an augmentation plan approved by water court is obtained.” Please commit that all stormwater will infiltrate into the ground within 72 hours at the site.
9. In accordance with Rule 6.3.3(l), please describe what measures will be taken to minimize disturbance to the hydrologic balance, prevent off-site damage, and provide for a stable configuration of the reclaimed area consistent with the proposed future land use.
10. Please clarify if mining slopes will be steeper than the reclaimed slopes. For example, please specify if the Applicant proposes to mine the site by creating a highwall that will be graded out during reclamation. If so, please provide the maximum dimensions (height and length) of the highwall.

EXHIBIT D - Reclamation Plan (Rule 6.3.4)

11. The Applicant states that the site will be returned to rangeland for livestock grazing purposes. Please specify if livestock will be precluded from the reclaimed areas during reclamation. If so, please clarify if a fence will be constructed around the reclaimed area and if the fence will be removed prior to the release of the site.
12. The Applicant states that all grades will be established at or less than a 45% grade. Please provide a technical justification for the 2.22H:1V slope and demonstrate compliance with Rule 3.1.5(1), Rule 3.1.(3), Rule 3.1.5(7), and C.R.S. 34-32.5-116(4)(n) OR commit to a maximum slope no steeper than 3H:1V.
13. The Applicant states that 2 to 6 inches of topsoil will be replaced on exposed areas. However, the soil profile provided in Exhibit B states that the first loam horizon is up to 8 inches deep. Please provide a technical justification and appropriate documentation supporting a 2 to 6 inch topsoil replacement OR revise this proposal. The Division's standard practice is to require a minimum of 6 inches of plant growth medium to be replaced on these types of operations.
14. A soil test shall be conducted on the imported topsoil to sufficiently analyze the soil quality as required by Rule 6.3.4(1)(c)(i). In accordance with Rule 6.3.4(1)(c)(ii), if the soil test indicates nutrient deficiencies for the plant species to be established, than soil amendments shall be applied. Please commit to conducting a soil test to determine if soil amendments are needed and submitting the results to the Division for review.
15. In accordance with Rule 6.3.4(1)(c)(ii), please explain how the seedbed will be prepared to eliminate compacted conditions (e.g., plowed, chiselled, disced).
16. Please verify that the seeding time of March-May is appropriate for the site. The Division typically approves reclamation plans which state that seeding will in occur late fall/early winter to utilize available winter moisture prior to germinating in the spring.
17. The Applicant states that a native grass mix will be used at 20 lbs/acre to reseed the site. As required by Rule 6.3.4(1)(c)(iii), specify each species that will be in the seed mixture and the quantity of each species as pounds of pure live seed per acre. Additionally, specify if forbs will be included in the reclamation seed mixture. The Division recommends contacting the Natural Resource Conservation Service for assistance in developing the ideal site-specific seed mixture as related to the desired post-mining land use.
18. Specify the application method for grass and forb seeding. If the seed is to be broadcast, the application rate shall be twice the rate required for seed drilling. If the seedbed has not been adequately roughened prior to seeding, the seed shall be raked or harrowed after broadcast application.
19. As required by Rule 6.3.4(1)(v), specify if mulch will be used as a part of the reclamation. Provide the kind to be used, the crimping method, and rate of application for the mulch.
20. Specify if shrubs or trees will be incorporated into the reclamation of the site. Explain the establishment methods for each species of shrub and/or tree, and state the number of each to be established per acre.
21. Specify if any ponds, streams, roads and buildings, if any, will remain after reclamation. These features must be shown on the Exhibit E - Map. If the Applicant does not intend to keep the access road, please provide the reclamation specifics for the road OR state that the road will be reclaimed in accordance with the site's reclamation plan.

22. The Reclamation Plan states that there will be no revegetation, but also states that a native grass mix will be used to establish vegetation. Please explain this discrepancy or remove the "Revegetation – None" line from the plan.
23. In accordance with Rule 6.3.4(2), the Applicant provided a reclamation cost estimate. Within this cost estimate, the Applicant states that hauling 20 loads of topsoil is needed. Please clarify the total volume (cubic yards) of topsoil needed at the site. This will be determined from the depth of topsoil required versus the total number of acres needed to be reclaimed.
24. Please provide the Division with three (3) independent quotes to purchase the required amount of topsoil and delivery it to the site.

EXHIBIT E - Map (Rule 6.3.5): In addition to the requirements of 6.2.1(2), you must provide a map that clearly describes the features associated with the mining plan and the components of the Reclamation Plan. Include one map for the mine plan and one map for the Reclamation Plan. The map(s) must be drawn to a scale no smaller than appropriate to clearly show all elements that are required to be delineated by the Act and these Rules; show a north arrow, note any section corners adjacent to the proposed operation, and indicate the date illustrated. At a minimum, maps must include the following information:

25. Mining Plan Map

- a. Outline and label the permit boundaries, described in Exhibit A - Legal Description; for all 110 Limited Impact and 111 Special Operations, the Office considers the area bounded by the permit boundary to be analogous to the affected area;
- b. Label the names of owner(s) of record of the surface of the affected area, of the land within two hundred (200) feet of the affected area, identify the owner of the substance to be mined, and the type of structure and owners of record of any permanent or man-made structures within 200 feet of the affected area;
- c. Outline and label all major surface features to be used in connection with the proposed operation such as: existing and proposed roads, pit boundary, topsoil stockpiles, overburden stockpiles, product stockpiles, waste rock fills, stream channels, buildings, processing plant, underground openings such as adits or ventilation facilities, ponds, impoundments, dewatering pumps, diversions, tail or waste disposal areas;
- d. Indicate the direction that mineral extraction will proceed;
- e. Note the location of any significant, valuable, and permanent man-made structures within two hundred (200) feet of the affected area such as houses, barns, fences, above or below ground utilities, irrigation ditches, maintained or public roads, bridges, wells, pipelines, water storage impoundments, railroad tracks, cemeteries, and communication antennas. A narrative description must be provided in Exhibit B - Site Description; and
- f. Outline and label existing disturbance within and/or adjacent to the permit boundary (e.g., previously mined areas, roads or excavations resulting from utility construction). Re-disturbance of previously disturbed areas, by the proposed mining operation, must be included in the permit area and addressed in Exhibit D - Reclamation Plan.

26. Reclamation Plan Map

- a. Show the gradient of all reclaimed slopes (horizontal:vertical) sufficient to describe the post mine topography;
- b. Indicate where vegetation will not be established and the general area(s) for shrub or tree planting;
- c. If ponds are a part of the Reclamation Plan, outline the final shore configuration of the ponds and shallow areas if the future land use is for wildlife;
- d. State the average thickness of replaced overburden by reclamation area or phase; and
- e. State the average thickness of replaced topsoil by reclamation area or phase.

EXHIBIT F – List of Other Permits and Licenses Required (Rule 6.3.6)

27. Please verify that none of the following permits, licenses and approvals are required to be held in order to conduct the proposed mining and reclamation operations: effluent discharge permits, air quality emissions permits, radioactive source materials licenses, disposal of dredge and fill material (404) permits, permit to construct a dam, well permits, State Historic Preservation Office clearance, 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.

EXHIBIT I - Proof of Filing with County Clerk (Rule 6.3.9)

28. Any changes or additions to the application on file with the Division, must also be reflected in the public review copy. Please submit proof that the public review copy has been updated or a copy of the response to this incompleteness letter has been added to it.

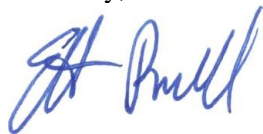
EXHIBIT L - Permanent Man-Made Structures (Rule 6.3.12)

29. As discussed in Adequacy Item 6, the fence line along the southern permit boundary, the overhead utility line just south of the southern permit boundary, and County Road N are permanent man-made structures that are within 200 feet of the permit boundary. Please verify that the structures listed above are the only structures within 200 feet of the permit boundary and comply with the requirements of Rule 6.3.12 for all structures within 200 feet of the permit boundary. The Division has attached the Sample Structure Agreement form, which can also be found on the Division's website, <http://mining.state.co.us/>.

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 Cargill Cattle Feeders Dirt Pit permit application may be deemed inadequate, and the application may be denied on December 9, 2016 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 December 9, 2016 and the request for additional time. This must be received no later than the deadline date.**

If you need additional information or have any questions, please contact me at Division of Reclamation, Mining and Safety, 1313 Sherman Street, Room 215, Denver, CO 80203, by telephone at **303-866-3567 x8132**, or by email at elliott.russell@state.co.us.

Sincerely,



Elliott R. Russell
Environmental Protection Specialist

Enclosure: History Colorado comment letter M2016040
Sample Structure Agreement

Cc: Wally Erickson; Division of Reclamation, Mining & Safety