

**Electronically received by DRMS
October 10, 2023
Adequacy Response, App Amended
AM-2 Terminated
AM-3 Start**

October 4th, 2023

PO Box 1550
Meeker, CO 81641

Colorado Division of Reclamation, Mining & Safety
1313 Sherman St.
Room 215
Denver, CO 80203

Meeker Sand & Gravel
Mine Permit#: M-1976-038

RE: Amendment (AM-3) to Construction Materials Regular 112c Operation

Greetings,

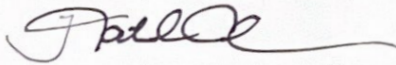
Attached please find amendment application materials (AM-3). Application seeks to:

- expand directly to the west of currently-permitted mine, increasing the total mine permit acreage to 124.20 acres
- allow mining to occur up to the permit boundaries in current mine and proposed expansion
- expand the area that will remain un-reclaimed following completion of mining to allow for continued use of industrial area
- revise the acreages to reflect updated mapping done in 2023

I have included responses to AR-1 on the attached letter which includes references to their locations within the amendment application.

We appreciate the opportunity to provide you with a complete and thorough application package. Thank you for your consideration of our application.

Sincerely,



Katie L. Conrado
Meeker Sand & Gravel

M-1976-038

**Amendment (AM-2) to Construction Materials Regular 112c Operation
Adequacy Review-1**

Operator Response-1

6.4.1 EXHIBIT A – Legal Description

1. The legal description provided under Exhibit A contains 174.64 acres +/-, which appears to be the parcel boundary. The permit application is for 111.20 acres. Per Rule 6.4.1(1) please provide the legal description of the affected lands (cumulative).

Included as Exhibit A-1

2. Pursuant to Rule 6.4.1(2) please provide a USGS Map depicting the permit boundary and the mine entrance location.

USGS Map depicting mine location, and including the mine permit boundary and mine entrance location is included as Exhibit A-2.

6.4.3 EXHIBIT C – Pre-Mining & Mining Plan Map(s) of Affected Lands

3. The Mine Plan Map (Exhibit D Map) should be included within Exhibit C. Exhibit D is the Mine Plan narrative portion only.

Exhibit C Map (previously Exhibit D) included here.

4. Note soils and vegetation provided under C-8 is not required by Rue in this exhibit aside from a map depicting soil/vegetation cover. This information should be presented under Exhibits I and J.

Soils Map and Inventory/Evaluation provided by NRCS (Exhibit C-8) taken out of this section and will remain only as required in Exhibits I and J

5. Please depict the locations of fuel storage on the Mine Plan Map.

Fuel Storage locations have been included on the Mine Plan Map (Exhibit C – Mine Plan Map) as (FS). Fuel storage in the future mine expansion area will be temporary locations with tanks housed in secondary containment units and will follow crushing spread as it moves through new area. Any additional fueling will be by mobile fuel truck (This verbiage included in Exhibit D – Mining Plan as (5))

6.4.4 EXHIBIT D – Mining Plan

6 The Mine Plan Map (Exhibit D), Map C-2, and Map F-1 are not signed as required by Rule 6.2.1(b)

Map is now signed/stamped as required and named Exhibit D – Mining Plan Map AR-1

7. Beyond the two ponds located within the current permit boundary, will any other water diversions or impoundments be constructed? Rule 6.4.4(c)

One additional impoundment will be created for overburden storage in Phase 1 of the proposed new area. The overburden (1' – 4') will be moved into a naturally-occurring low area to create an earthen embankment approximately 50-100' south of the property line. The overburden, utilized as an embankment, will create a natural catch basin for any and all run-off that could

occur in this area (L). The natural topography also allows for additional, graduated containments to be created to catch additional water if necessary in the future. Besides these berms, no other water diversions or impoundments will be constructed (7). (This verbiage included in Exhibit D as (7))

- a. Provide design specifications for the two new proposed ponds.

Berms will be created approximately 10-15' wide by 6'-8' tall which will serve two purposes: as overburden storage along with creating an impoundment for any stormwater runoff, should it be necessary. (This verbiage is included in Exhibit D as (7a))

8. If a road separates Phase 2 from everything to the east, will the road act as a barrier for stormwater? How will stormwater within Phase 2 be controlled?

The existing road will act as a natural barrier for stormwater. Stormwater in Phase 2 will be controlled by berms which will be created on the north and south sides of the permit. (This verbiage is included in Exhibit D as (8))

9. Please state the slope of the active highwalls while mining. Clarify if internal vs. perimeter (adjacent to the boundary) will have a different slope while mining. As in require backfill vs. cut/fill for grading.

Highwalls (both internal and perimeter) while mining will be sloped to 2:1 (which was previously included in Exhibit D, but has been clarified with respect to internal/perimeter and noted with (9))

10. Explicitly state the maximum total length of the highwall to be present on site at any given time.

Maximum total length of highwall to be present on-site at any time is 1000'. (This verbiage has been included in Exhibit D as (10))

11. Please clarify pursuant to Rue 6.4.4(d). Does the 50 acre maximum disturbance at any given time include the 11.43 acres that will remain commercial industrial, or is it a 50 acre maximum of areas to be reclaimed to rangeland?

The 50 acre maximum disturbance at any given time DOES NOT include the 11.51 acres that will remain commercial industrial. (This verbiage has been included in Exhibit D as (11))

12. Will a temporary seed mix or the same final reclamation seed mix be used to stabilize topsoil piles? If a temporary mix is to be used please provide it.

The same, final reclamation seed mix will be used to stabilize topsoil piles. (This verbiage has been included in Exhibit D as (12)).

13. As specified in the application, the shale underlying the gravel deposited is Mancos shale. The Division requires either a minimum of two feet of gravel or water being left overlying the Mancos shale to avoid oxidation. Oxidation of Mancos shale may allow for selenium loading of the water which can be harmful to wildlife. Please commit to a minimum of 2 ft. cover to remain at all times over the Mancos shale.

We commit to maintaining a minimum of 2 ft of cover over the Mancos shale at all times in order to avoid oxidation. (This verbiage has been include in Exhibit D as (13))

14. Pursuant to Rule 6.4.4(g) state the primary and secondary commodities to be mined and describe their intended use.

Primary commodity to be mined is sand and gravel products for construction use. There are no secondary commodities that will be mined. (This verbiage has been included in Exhibit D as (14))

15. If applicable name and describe the intended use of all expected incidental products to be mined/extracted by the proposed operation per Rule 6.4.4(h)

There will be no additional, incidental products mined or extracted. (This verbiage has been included in Exhibit D as (15))

6.4.5 EXHIBIT E – Reclamation Plan

16. Please amend the first paragraph to include mention of the 11.51 ac industrial area that will remain post mining. Also clarify what, if any, work will be required in this area for final reclamation.

The entire disturbed area of the current pit and proposed new section will be returned to its original use as dry rangeland, with the exception of an 11.51 acre area in the front portion of the current pit that will remain for industrial use following completion of mining. No additional work will be required in the industrial area for final reclamation. (This verbiage has been included in Exhibit E as (16))

Also included is:

Buildings included but not limited to: batch plant and ancillary buildings, shop & maintenance buildings, office and truck scales, will remain following completion of mining in the area designated as industrial.

- a. Note that previously within the application this commercial area is stated to be 11.43 acres. Update as necessary to ensure consistency throughout exhibits.

-Changed in application, page 4 in 'Description of Amendment or Conversion'

-Changed in Introduction / Background

-Changed in Exhibit C – Pre-Mining & Mining Plan Maps

-Changed in Exhibit E – Reclamation Plan

17. Will Phases 1 and 2 of the expansion area also received 12-24" of overburden replacement prior to topsoiling? Please revise the Reclamation Plan to include this language.

Yes. The following verbiage was added to the narrative and corresponding timeline table:
Approximately 12-24" of overburden will be replaced prior to replacing topsoil (17).

18. Use of waste concrete as inert backfill is proposed. Please provide a signed affidavit certifying that the material is clean and inert, as defined in Rule 1.1(22), per Rule 3.1.5(9)(c). Also commit to burying all concrete a minimum of three feet below final grade per Division policy.

All concrete will be buried a minimum of three feet below final grade per DRMS policy. Signed affidavit is included as Exhibit E-1 certifying that the material is clean and inert (18). (This verbiage has been included in Exhibit E as (18))

19. Pursuant to Rule 6.4.5(2)(d) please state the proposed timing of seeding and planting.

The following verbiage was added to Exhibit E and corresponding timeline tables as (19): Seeding and planting will take place within 6 months to 1 year of final grading being completed (19).

20. Please provide the referenced NRCS reclamation measures within the Reclamation Plan. This document is inferred to include information which satisfies Rule 6.4.5(f)(ii)-(iv). If it does not, please address these Rule requirements within the Reclamation Plan narrative.

NRCS recommendations are referenced in Exhibit E as (20) and included in their entirety as Exhibit E-1.

- a. The seed mix provided under I-4 is simplistic. To increase diversity, consider incorporating a few of the other shrub, forb or grass species identified under 1a of the "Reclamation Recommendations" section.

Additional verbiage has been added as (20a): Once final topsoil placement has been achieved, the site will be seeded with seed mix which has taken into account recommendations from the NRCS, CPW and DRMS. Seed mix is included as Exhibit E-2.

- b. Clarify if seeding rates specified are for drill seed or another means of seeding. Typically all seeding rates are double the drill rate for all other means.

Seeding rates specified are for drill seeding. (20b)

Drill seeding rate is also specified on Proposed Seed Mix included as Exhibit E-2

6.4.6 EXHIBIT F – Reclamation Plan Map

21. The Reclamation Plan Map F-2 is not signed as required by Rule 6.2.1(b)

Stamped map now included as F-1.1 Reclamation Plan Map.

22. Topsoil stockpiles will be utilized throughout reclamation and will not remain post completion of reclamation. Therefore the stockpiles should not be depicted on the Reclamation Plan Map (F-1) since they will no longer exist.

New Map F-1.1 replaces previous Map F-1 and Map F-2 and indicates what final topography will be following final reclamation.

- a. Map F-1 appears to be more of a mine plan map to depict features used for final reclamation than an actual reclamation plan map. Consider relabeling and moving to Exhibit C. Update map references as necessary.

Previous Map F-1 has been replaced by NEW Map F-1.1

23. Topographic lines on Map F-2 appear to be current contours not the proposed final reclamation contours. Please revise the map to depict the anticipated topography per Rule 6.4.6(2).

Contour lines have been removed on Map F-1.1 in an effort to show that the tops of the mounds will be flattened due to mining and daylighting out on most sides. Where not able to show visually, reclamation points have been made in narrative call-outs.

24. Through shading or similar means please depict the various types of reclamation (rangeland and commercial) Rule 6.4.6(b)

Types of reclamation are indicated on Reclamation Map F-1.1 and consist of the majority being dry rangeland and 11.51 acres remaining for industrial use.

25. Permanent roads are mentioned in the Reclamation Plan. Please delineate these and any other permanent features to remain post mining on the Reclamation Plan Map (F-2)

Permanent roads that will remain in final reclamation are indicated on Map F-1.1 as (H), (J) and (K). These roads are also referenced in Exhibit E as (25).

6.4.7 EXHIBIT G – Water Information

26. Please depict the on-site well on both the Mining and Reclamation Plan Map.

Onsite well depicted on Exhibit D – Mining Plan Map AR-1 as (WELL)

Verbiage included in Mining Plan Exhibit D: Fresh water well location included on Exhibit D as (WELL)(26)

Onsite well depicted on Exhibit F-1.1 as (WELL)

Verbiage included on Reclamation Plan Exhibit E: Fresh water well location included on Exhibit F-1.1 as (WELL)(26)

27. Please state the annual volume, by use, of water used for this mining operation, Rule 6.4.7(3).

According to estimated volumes given per day/week, annual volume of water used annually in wash plant is estimated to be approximately 3.96M gallons. Estimated annual volume of water used in water truck for dust suppression is approximately 8,000 gallons. (This verbiage is included in Exhibit G as (26))

28. Exhibit G state that the water source will be 50/50 ditch and well water. Please provide documentation for each water source demonstrating that sufficient rights exist, Rule 6.4.7(4)

Exhibit G-1 demonstrates that sufficient rights exist for water use. (This verbiage is included in Exhibit G as (28). Please note this excerpt from lease is confidential.

6.4.8 EXHIBIT H – Wildlife Information

29. Please commit to the mitigation measures specified in the Colorado Parks and Wildlife (CPW) letter dated May 16, 2023.

CPW letter has been revised, new letter addressing potential concerns is dated September 25, 2023 and is included as EXHIBIT H-1. This verbiage has been included:

There has been little or no change in the wildlife in this area since the original permit was issued. Animals of interest in the area include mule deer, elk and greater sage grouse. Greater sage grouse have not been present in the area in the past 40 years due to irrigated hay ground surrounding the gravel pit on all sides. The manner in which mining and reclamation moves allows the wildlife to move from one area to the other in the mining operation. Wildlife is acclimated to the operation and no significant impact is expected. The local Division of Wildlife office has been contacted regarding the proposed expansion and they have issued the attached statement dated September 25, 2023 (H-1). Meeker Sand & Gravel commits to the recommendations they have stated in the letter dated September 25, 2023, signed by Jonathan

Lambert. (29)

- a. Please provide clarification from CPW if the proposed NRCS seed mix supports GSRG. If they have specific objections/concerns, please revise the mix accordingly. CPW has also approved the proposed seed mix as being supportive of greater sage grouse in their letter included as Exhibit H-1(29a)

30. Please provide the information required under Rule 6.4.8(1)(a)-(d). If information is unchanged from AM-1 provide the final/approved AM-1 Exhibit H.

Animals of interest in the area include mule deer, elk and greater sage grouse. Greater sage grouse have not been present in the area in the past 40 years due to irrigated hay ground surrounding the gravel pit on all sides. No other threatened or endangered species are present in the area. Wildlife use of the area is consistent in that significant fluctuations by season are not present. The manner in which mining and reclamation moves allows the wildlife to move from one area to the other in the mining operation. Wildlife is acclimated to the operation and no significant impact is expected. (30)

6.4.10 EXHIBIT J – Vegetation Information

Vegetation information was provided under C-8 and I-4. The information must be contained within the exhibit as called out by the Rules to satisfy the requirement.

Included under Exhibit J as EXHIBIT J-1

6.4.12 EXHIBIT L – Reclamation Costs

31. Please include a reclamation task for regrading of highwalls. The volume of material to be moved should correlate to the maximum height, length and initial slope being graded to a 3H:1V as specified in the Mining Plan.

A maximum of 1000' of highwall will be open at any time. (31) Reclamation task for regrading of highwalls is included in the table as (31) (Includes Haul trucks hauling the materials + dozer pushing/grading the material)

32. The seeding rate provided under Exhibit L does not match that of the NRCS seed mix listed under I-4. Revise as necessary to be consistent throughout exhibits.

Updated to ensure approved seed mix is consistent throughout all exhibits.

33. Include a task and associated cost for the application of 3 tons of straw mulch and crimping.

Added to Reclamation Task Table in Exhibit L. Denoted with (33)

34. Please include a task for decompaction.

Added to Reclamation Task Table in Exhibit L. Denoted with (34)

35. The haul distances for overburden and topsoil do not correlate to the average centroid to centroid distance based on stockpile locations depicted on the Mine Plan Map. Please revise distances and associated costs.

Currently in affected mine, average distance to haul overburden for final reclamation is 106 yards and 145 yards to haul topsoil. In the new mining area overburden and topsoil storage piles will be in close proximity to the areas that will need to be reclaimed and will be located throughout the disturbed area, so this will assist in keeping dozer push distances and haul distances to a minimum. (35)

Attached Map L-1 shows haul distances from current overburden and topsoil storage piles.

6.4.19 EXHIBIT S – Permanent Man-made Structures

Agreements for features as identified on the Structure Agreement Table are sufficient.

36. Additional structures agreements will be necessary for areas within 200 ft. of the commercial area which shall remain in the permit. Please update the table based on the revised 200 ft. buffer from the affected lands. Submit agreements for all additional features identified as necessary.

No additional structures requiring structure agreements.

Public Notice

37. Provide proof of newspaper publication pursuant to Rule 1.6.2(1)(g)

38. Provide a copy of the receipt from the County Clerk and Recorder that additional/revised information to the application has been placed for public review (Rule 1.6.2(1)(c))