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Oak Creek, CO 80467
970-870-2718

**Moffat County Mining, LLC**

February 28, 2022

Ms. Robin Reilley
Colorado Division of Reclamation, Mining, and Safety
1313 Sherman Street – Room 215
Denver, Colorado 80203

**Re: Moffat County Mining, LLC – William Fork Mines (Permit No. C-81-044), Mid Term Review (-MT8) Findings Response**

Dear Ms. Reilley:
Moffat County Mining, LLC (MCM) Has reviewed the findings for MT8 and is providing the following responses:

***Rule 2.03.4 Identification of Interests***

1. Please review ownership and control information provided in Section 2.03.4 of the permit and associated exhibits and provide any necessary updates.
    a) The control and ownership information in section 2.03.4 is current and no changes are needed.
2. Please review and update the Surface Ownership information provided in Section 2.03.4 page 2.03-8 through 2.03-10 in relation to Map 1. Please insure that any entity/person that is listed in this section of the permit has their property correctly depicted and labeled on Map 1.
    a) Pages 2.03.8-9 have been updated and included with the submittal. Map 1 has also been updated to reflect recent land sales within the Mine Permit boundary. A new Map 1 has been submitted with this submittal.
3. Map 2; the Coal Ownership map depicts the boundaries of the coal ownership areas and labels each area with their respective owner. Section 2.03.4 of the permit has a list of the Coal Ownership within the Life of Mine Permit Boundary. Please review and update if necessary the Coal Ownership information in section 2.03.4 to list all owners that are shown within the permit boundary.
    a) The coal ownership remains the same and no changes were needed.

***Rule 2.03.5 Compliance Information***

4. Based on the Division's records, MCM has not received a violation within the last three years. Please update section 2.03.5 of the application to delete any information about violations received more than three years ago.
    a) No violations have been received in the last three years. Application text is current.

***Rule 2.03.6 Right of Entry Information***

5. DRMS reviewed section 2.03.6 of the permit document for Right of Entry requirements. DRMS ascertained that this information was current as of 2013. Please update with revised pages for any Right of Entry information that has changed since 2013. In accordance with Rule 2.03.6(1), each document cited must identify or describe the specific lands to which the document pertains.
    a) There have been no changes to the Right of Entry information.

***Rule 2.03.9 Insurance Information***

6. Please update Exhibit 01 to include a copy of the most recent Certificate of Liability Insurance in accordance with Rule 2.03.9.
    a) A copy of the current insurance certificate has been included in this submittal.

***Rule 2.05.4 – Reclamation Plan***

7. Please provide a Post Mining Topography Map depicting ponds and the post mine configurations of all surface disturbed areas. Assure that topographic contours are legibly labeled with elevation values.
    a) MCM is working on updating the PMT and will submit in a future response or separate revision.
8. A detailed plan for the reclamation of the pond and associated drainage below the No. 5A portal.
    a) MCM is working on updating the reclamation plan and will submit in a future response or separate revision.
9. A detailed plan for the sealing of all wells and drilled holes. This should include a list of which holes will be sealed and which holes will remain open for monitoring purposes. This should include appropriate cross sections, maps and text describing measures used to seal mine openings, and to plug, case or manage bore holes, wells and other openings as per Rule 2.05.4(2)(g).
    a) MCM is reviewing the existing wells and drill holes and is putting together a reclamation plan for them. MCM will submit the plan in a future submittal.
10. Please update the "Removal of Structures and Facilities" section on permit page 2.05-23 to include a discussion of the reclamation activities completed since mid-2018.
    a) Page 2.05-23 has been updated and is included with this submittal.
11. DRMS was unable to locate Table 63 Overburden Redistribution in the permit file. This table may need to be updated based on recent reclamation and anticipated future reclamation.
    a) Table 63 has been updated and included in this submittal within the revised text.
12. Please update the reclamation status of the areas listed in the permit, beginning on page 2.05-28, to reflect the reclamation completed since 2017.
    a) Pages 2.05-28 through 2.05-31.3 have been updated included in this submittal.

***Rule 2.05.6(3) – Protection of the Hydrologic Balance***

13. Sampling frequency issues in the DRMS Review of the 2019 Annual Hydrology Report, and Permit Exhibit 29 are pointed out below in Rule 4.05.13(1), will need to be addressed specifically, where a monitoring requirement was not met. Please either submit the data or explain why the data was not collected.
    a) See responses below for Items 16-24.
14. DRMS has no record of discharge monitoring reports (DMRs), being submitted for Williams Fork Mines for 2020. In accordance with Rule 4.05.13(2)(a)(iii) MCM must submit copies of the

completed DMRs forms or a letter identifying the State of Federal government official with whom the reporting form was filed to meet NPDES permit requirements and the date of filing. Please submit the required documentation to DRMS within 30 days on or before 1 April 2021, for the DMRs due in 2020.

a) All missing DMRs were submitted in December 2021 to DMRS through Laserfiche.

***Rule 2.05.6(3): Protection of Hydrologic Balance Groundwater***

15. Please indicate if inflow monitoring is still occurring, and if not please explain.
    a) Inflow monitoring is no longer occurring. There is no access inside the mine to monitor inflow. The mine is completely sealed and is no longer being dewatered, therefore the entries are mostly flooded.

***Rule 4.05.13(1): Ground Water Monitoring***

16. Please provide the missing data for well AVF-6, as outlined in the permit monitoring requirements. Also, assure going forward that the monitoring information is provided in future AHRs.
    a) Monitoring for AVF-6 was not able to be conducted during the 1st quarter 2019 due to a blockage in the monitoring well. Reclamation was ongoing during this time and it was thought that the well may have been damaged. When the 2nd quarter sampling was conducted the well was able to be sampled and no samples have been missed since. MCM believes that the monitoring well may have been blocked by ice in the 1st quarter of 2019.
17. The sampling frequency discrepancy of alluvial wells AVF-3, 5 and 6 should be researched and corrected as needed. Please resolve these discrepancies with revised pages updating the necessary text and associated tables.
    a) The sampling frequency for AVF-3, 5, and 6 is quarterly. Except for the 1st quarter of 2019 all of the wells have been sampled and monitored on a quarterly basis.
18. MCM needs to determine if the YAW alluvial wells need to be sampled or not. Please resolve this discrepancy in these tables with revised pages.
    a) The YAW alluvial wells were permitted to monitor the Yampa River Alluvium during the development of the North Mains Mining District. The mine shut down before reaching the monitoring area and therefore the wells have never been monitored. There is baseline information for the wells, but no further monitoring has been conducted.
19. Please correct the AHR Table1B for future submissions.
    a) Table 1B remains correct and current.
20. Please provide the missing data as outlined in the permit monitoring requirements or a discussion of why these wells were not sampled.
    a) MCM has no data for the YAW wells since mining never reached the area and sampling was never implemented.
21. Please resolve this discrepancy in Table 3B of the permit with revised pages and assure correspondence with future AHRs. Also, please update Exhibit 29 as necessary.
    a) Table 3B of the AHR will be updates in future submittals to reflect the same as Table 8 in Exhibit 29.
22. Please provide the missing data for groundwater well no. 5 as outlined in the permit monitoring requirements.
    a) The power at the site was disconnected in 2013. Well No. 5 is the mine discharge well that was pumped to the surface and discharged under the NPDES permit. The pump and cables are still in the casing and therefore with out power a sample can not be collected. MCM will be submitting a revision to address wells that will no longer be sampled.

23. Please provide the missing data for well 9BF as outlined in the permit monitoring requirements.
    a) Well 9BF has been monitored as outlined in the monitoring requirements. Well 9BF is a newer well and was never added to the AHR layout. MCM will be adding the water year and the historic data for 9BF to the 2021 AHR and future AHRs.

24. Please provide an analysis of the excursions in Well 81-01 and the No. 9 Mine Well.
    a) Well 81-01
        - Monitoring well 81-01 is screened within the Middle Sandstone located approximately 60 ft above F coal seam mined at the facility. The well is located immediately above the Williams Fork Mine shadow area. Review of the 2020 monitoring data indicates that the water level in well 81-01 is consistent with historic water levels, which have been stable since monitoring was reactivated in 2006. Although the iron measured at 81-01 exceeded the Domestic Water Supply Drinking Water standard (0.3 mg/L) it remains within the Agricultural Standard of 5 mg/L. This is characteristic of the Middle Sandstone which exhibited an average dissolved iron concentration of 0.41 mg/L (range: <0.02 – 1.51 mg/L) that was greater than the Drinking Water Standard prior to mining (Well TR-4). Furthermore the Drinking Water Standards should not be applied to deep bedrock wells where there are no known users and limited potential for future use due to the high economic cost for drilling to the depth of the Middle Sandstone (~533 ft bgs) and location within the mine boundary. Similarly manganese exceeds the Drinking Water Standard but does not exceed the Agriculture standard, as the 0.2 mg/L Agricultural Standard is only applicable to areas where irrigation water is being applied to soils with pH values less than 6 (see Regulation 41). The Middle Sandstone is not being used for irrigation purposes and acidic soils are not present at Williams Fork, therefore this standard should not apply. The pH in the 2020 remained neutral indicating the iron and manganese where not mobilized by acidic conditions. Its possible that the filter may have burst during sample collection and the iron and manganese concentrations were elevated by solids greater than 0.45 micron that would normally be removed. Magnesium does not have a Drinking Water or Agricultural Groundwater Quality Standard and has remained fairly stable over the last few years. An increased emphasis on monitoring techniques and evaluation of the wells condition will occur during the 2022 monitoring event.
    b) No. 9 Mine Well (9MN)
        - Monitoring well 9MN is located between the Williams Fork F and E Seam Workings and Empire's P Seam Workings. The well is screened within the Twentymile Sandstone, which is several hundred ft above the F coal (shallower of two seams mined at Williams Fork) and is separated by several units of low permeable siltstone and mudstone which act as an aquitard. The groundwater levels within 9MN have remained stable since the mine ceased using the well for water supply purposes and are above the water levels present within the lower sandstone units further indicating the Twentymile Sandstone remains disconnected from deeper groundwater that could potentially be influenced by the Williams Fork underground mine area. Groundwater within the Twentymile Sandstone generally flows from the southeast to the northwest. Well 9MN is located approximately 1000 ft

south of the downgradient 9MN portal and Empire P Seam Workings. Although minor increases to sulfate, sodium, chloride, and calcium have been observed, none of the increases are the result of adverse impacts from the adjacent mining as the mine workings are either downgradient or vertically disconnected. Therefore the increasing concentration of these parameters are most likely associated with either ambient conditions or unassociated activities located to the east-southeast. Review of historic water quality data for 9MN indicates that only a single sulfate sample has exceeded the drinking water supply standard. The chloride concentration (~50 mg/L) remains well below the current drinking water standard. Drinking water standards should not be applied to deep bedrock wells where there are no known users and limited potential for future use due to high economic cost for drilling to the depth of the Twentymile Sandstone (~600 ft bgs) and close proximity to historic mining. Boron was also noted as exhibiting the highest concentration on record, however review of the historic dataset suggests boron has remained below 0.1 mg/L since 2009. This is significantly lower than the agricultural groundwater standard of 0.75 mg/L, which is only applicable when specific crops are being irrigated with groundwater (see note g for Table 3 Agricultural Standards in Regulation 41). None of the other parameters noted above have groundwater standards or exhibit concentrations at levels that are of concern.

***Rule 4.05.8(1) - (3): Acid and Toxic-Forming Materials***

25. Based on the Division's files the last refuse pile inspection report was submitted for the fourth quarter of 2017. In accordance with Rule 4.10.2(2) inspection of coal mine waste banks shall be performed in accordance with Rule 4.09.1(11) and other requirements listed in Rule 4.10.2(2). Please provide copies of the requisite refuse pile inspection reports from 2018, 2019, and 2020 within 30 days, on or before 1 April 2021.
    a) MCM submitted copies of the refuse pile reports to DRMS via Laserfiche in December 2021.

***Rule 4.05.9(17) – Impoundment inspection* reports**

26. The last pond inspection reports the Division has on file are for the fourth quarter of 2017. In accordance with Rule 4.05.9(17), MCM must inspect all impoundments at least quarterly and submit a copy of the inspection report to the Division on a quarterly basis. Please provide copies of the requisite impoundment inspection reports from 2018, 2019, and 2020 within 30 days, on or before 1 April 2021.
    a) MCM submitted copies of the missing quarterly pond inspection reports to DMRS via Laserfiche in December 2021.

Please review the provided information and let me now if you have any further questions.

Sincerely,

Miranda Kawcak

Miranda Kawcak
Environmental Manager, Colorado Operations
Peabody