



Ms. Miranda Kawcak  
Environmental Supervisor  
Moffat County Mining, LLC  
29515 RCR27  
Oak Creek, Colorado 80467

May 2023

**Re: Williams Fork; Permit C1981044  
DRMS Preliminary Adequacy Review of Permit Revision 8 (RN8)**

Upon approval, the new permit term will comprise the years 2023 through 2027. The adequacy review comprised the submitted revised pages, maps and the following rules.

**Rules Reviewed for Trapper Permit Renewal RN8**

2.03.4	2.03.5(1a)	2.03.6	2.03.7(3)	2.03.8(1, 2)
2.03.9	2.03.10	2.03.11	2.03.12	2.04.3
2.04.4	2.04.5	2.04.6	2.04.7(1 iv)(b)(4)	2.04.8(b)
2.04.9	2.04.10(1)	2.04.11	2.04.12	2.05.3
2.05.4(2)	2.05.5(2)	2.05.6(2)	2.05.6(3)	2.05.6(4)
2.05.6(6)	2.06(8)	3.02.2		

Adequacy issues are numbered in italics below.

**Rule 2.03.4 Identification of Interests**

DRMS understands that since the last permitting action (Mid Term 8 in 2021), changes may have occurred with respect to:

1. Corporate officers
2. Owners,
3. Board of Directors and Members
4. Surface Control
5. Coal Ownership

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1. *In accordance with Rule 2.03.4(3)(a), for each person (officer and director of the entities) who owns or controls the applicant, please provide their name, address,*



- and taxpayer identification number.*
2. *The information required by Rule 2.03.4(3)(a) and (b) is required. For each person who is the owner and controller of the applicant, please supply all the information required under this rule for all owned or previously owned or controlled surface coal mining and reclamation operation in the United States within the five years preceding the date of the application.*
  3. *Please update Exhibits 42 or 42a with any ownership (surface and or coal), changes as well as pages 2.03-7 through 2.03-12, Map #1 and Map #2 as necessary.*

**Rule 2.03.5 Compliance**

DRMS notes that the compliance statement; section Volume 1 pg 2.03-13 was last updated in 2013.

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4. *Please update as necessary with any new information and submit as revised pages.*

**Rule 2.03.6 Right of Entry**

DRMS finds that the submitted Public Notice provides the complete and detailed legal description of the permit boundary as per Rule 2.03.6(1). Unless there are ownership changes to Maps 1 and 2 and changes to Quit Claim Deeds and Leases (pgs 2.03-13 through 18), this rule is adequately addressed.

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5. *Please update as necessary with any new information and submit as revised pages.*

**Rule 2.03.7 Relationship to Areas Designated Unsuitable for Mining**

DRMS notes that as per Rule 2.03.7(3) Williams Fork Mine addresses the above mentioned rule in Volume 1 pg. 2.03-18 The site is mostly reclaimed and reclamation activities are anticipated for completion over the course of the 2023 field season. There were no plans to conduct surface mining activities, conduct or locate surface operations or facilities within 300 feet of an occupied dwelling or 100 feet of any roads.

This rule is adequately addressed.

**Rule 2.03.8 Permit Term**

Volume 1 pg. 2.03-19 of the Williams Fork Permit provides an overview of the project plan including the operations, and reclamation phases. This section of the permit was last updated in 2018 and since then, most of the site has been reclaimed.

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6. *Please update as necessary with the new reclamation information and submit as revised pages.*

**Rule 2.03.9 Insurance Information**

This rule is adequately addressed.

**Rule 2.03.10 Other Licenses and Permits**

Volume 1 pg. 2.03-19 to 20, Exhibit 2 *Permits and Licenses for Surface Mining and Reclamation*, adequately addresses this rule, however.

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7. *The pages for this citation appears incorrect. Please provide these pages as revised pages.*

**Rule 2.03.11 Public Office for Filling**

This rule is adequately addressed in the Permit.

**Rule 2.03.12 Proof of Publication**

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8. *Please provide the affidavit of publication to DRMS.*

**Rule 2.04.3 General Requirements: Site Description and Land Use Information**

No adequacy issues noted. The information required by this rule is discussed on page 2.04-1, Map 3, and Tables 1 and 2.

**Rule 2.04.4 Cultural and Historic Resource Information**

No adequacy issues noted. The information required by this rule is discussed on pages 2.04-1, -1a, and -2, Maps 4 and 5, Table 2, and Exhibit 6 (2001).

**Rule 2.04.5 General Description of Hydrology and Geology**

No adequacy issues noted. The information required by this rule is discussed on pages 2.04-2 through 5, Maps 6, 7 and 11, Tables 3 parts 1 through 3, 3A parts 1 through 3, and Tables 5-7, and Exhibit 7 (2001).

**Rule 2.04.6 Geology Description**

The information required by this rule is discussed on pages 2.04-6 through 10, Maps 7, 11, 12, 22, and 30, Tables 8 - 10, Figures 3 - 11 and Exhibit 8 (2001). Note Maps 7a, b, and c where not reviewed as they could not be found in the permit file.

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9. *On page 2.04-7 (first paragraph) the interval thickness between the Middle Sandstone and the Twentymile Sandstone incorrectly references Figure 7. The figure that should be referenced is Figure 8. Please update Figure 8 and provide a revised page.*

#### **Rule 2.04.7 Hydrology Description**

No adequacy issues noted. The information required by this rule is discussed on pages 2.04-11 through 19, Maps 7, 10 - 15, 17 and 18, Tables 11 – 20, Figures 23 and 24 and Exhibit 10 (2001). The Annual Hydrology Reports provide information on ongoing water quality monitoring.

#### **Rule 2.04.8 Climate Information**

Section 2.04-26 through 2.04-27 provides the narrative and Tables 31 through 34 compile associated data, precipitation data in Table 31 and the temperature data in Table 32 ranges from 1951-1970. Table 33 also contains outdated information. The wind data in Tables 32 and 33. The wind data in Figures 36, 37 and Table 34 reflects the pre mine timeframe of the 70s/80s. In short 2.04.8(1) is complied with however with outdated information with respect to current climate. The current information provided in the tables and figures is for the most part accurately reflected in the narrative. Please update and submit additional pages as per the information below.

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10. *Please update the temperature, precipitation and wind data to include data from 1980 through 2022.*
11. *Please update the narrative with a discussion of information from 1980 through 2022.*
12. *Wind direction figures and tables suggest that strong "south-westerly" winds characterize the area as per the permit narrative "westerly" winds. Please clarify the discrepancy with revised text.*

#### **Rule 2.04.9 Soil Resource Information**

Permit Section 2.04-27 discusses soils information. Maps 19 and 19a depict the soil types found throughout the site and Exhibits 12 and 13 provide additional information. The soil resources described in Exhibit 12 appear different from what is shown on Map 19a. Soil type 69A is illustrated on map 19a, but only 69 is listed in Exhibit 12 (these type have the same soil series name), Soils 101E and 101F are depicted Map 19a, but the narrative only describes soil 101 in Exhibit 12.

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13. *For type 101 the narrative in Exhibit 12, only Rule 2.04.9(1)(b)(iv) is complied with, the parameters in Rule 2.04.9(1)(b) are not described. Please provide the additional information as revised text or pages to comply with the entirety of the rule.*

#### **Rule 2.04.10 Vegetation Information**

Section 2.04-27 through 2.04-37 discusses vegetation information, associated Map 20, Figure 38, Exhibits 14, 15 and 24, and Tables 35-40 present the data. Page 2.04-31 (top), "The plant material was oven-dried at a temperature of 100[square] C". This should be a degree symbol, but it is replaced with a blank square box probably as a place holder or by mistake. On the same page, in the third paragraph, DRMS is still referred to as Division of Minerals and Geology. Bottom of Page 2.04-34 when describing the Threatened and Endangered Plant Species in the area, "Ute ladies tresses" (*Spiranthes diluvialis*) is listed. In the next sentence, appears to mistakenly refer to Ute ladies tresses as *Spiranthus deluvialis*.

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*14. Please submit revised pages with corrected information.*

Page 2.04-35, last sentence says that there are four vegetation communities. The beginning of the next page indicates only three bulleted communities, stating that Figure 38 reflects the communities. The three communities listed are reflected in Fig 38, with "Upland Sagebrush Stand" being the fourth.

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*15. Please add this community to their narrative's bulleted list and submit as a revised page.*

**Rule 2.04.11 Fish and Wildlife Information**

Section 2.04.11, 2.04-38 through 2.04-45 discusses wildlife information, associated Tables 35-40, Figure 38, Exhibits 15 and 21, and Map 20 present the data. The last time each category of animals listed in this section where updated appears to have been in 2004 for statistics such as number of sightings, number of dens observed in the area, etc.

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*16. Please updated to recent numbers.*

*17. Wildlife habitat is a planned post mining land use, therefore please update the species list and provide a site specific list of threatened and endangered species from:*

<https://ecos.fws.gov/ipac/>

**Rule 2.04.12 Prime Farmland**

Section 2.04.12, discusses prime farmland. DRMS also consulted the Proposed Decision and Findings (2003), for Permit Renewal RN4 for the Eagle Mine Complex. These findings follow:

The Division has made a negative determination for the presence of prime farmland within the permit area. The decision was based on a letter from the Soil Conservation Service dated February 2, 1982. Although soil types 03B and fine sandy loam O-56 are found adjacent to the Williams Fork River, this area is not considered prime farmland. Approximately 50 percent of the 03B soil was disturbed prior to the enactment of SMCRA and is considered an industrial site. Therefore, no areas designated as prime farmland are found within the Eagle Mines permit area (2.07.6(2)(k)).

**Rules 2.05.3(1) and (2) Operation Plan**

Permit section 2.05 presents a thorough discussion of the operations, facilities and reclamation plans, describing mining methods, equipment and anticipated production tonnage. A thorough treatment of production methods and equipment as well as maps depicting underground workings exists in the permit. Facilities are mapped (M 22, M25, M26 and M27) and described (Table 56). Portions of this section were updated in 2018.

This aspect of the Rules is adequately addressed with the exception of the following minor text updates:

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*18. Please update references to No 5 Portal area, waste disposal site, various wells and other infrastructure with updated reclamation information (pg 2.05 -3. Paragraphs 1, 5).*

*19. Please update reference to the Shop/Warehouse on pg 2.05-7.*

20. *Please update reclamation activities in the Facilities Area on page 2.05-9.*
21. *Please update references to No 5 No 5A Mine Fresh Water Systems as appropriate on page 2.05-11.*
22. *Please update references to reclamation and update reclaimed facilities with appropriate dates as necessary.*
23. *In general the page references in the application do not coincide with the actual pagination in the permit Operations Plan.*

**Rule 2.05.3(3) and (4) Mine Facilities and Rule 4.04**

Permit section Volume I Section 2.05 addresses the above cited rule. Facilities are listed and described as is the reclamation of facilities. Roads, ponds, impoundments and drainage control systems are discussed in this section of the permit. The following references are applicable (Figure 55, 56), Pond Flow Schematic (Figures 53 and 54), Exhibit 18 for pond design calculations are certified by a PE and Maps 26 and 27.

The above referenced rules are adequately addressed in the permit.

**Rule 2.05.3(5) and (6) Topsoil and Overburden**

Overburden is addressed on page 2.05-18 of the Williams Fork Operations Plan. Topsoil salvage (Section 2.06.3) and overburden storage are discussed in Exhibits 13 and 14, and Tables 58 through 62 of the permit as well as in the Reclamation Plan, Section 2.05.4 of the permit. Refuse disposal area specifications are found in Exhibits 20 and 21 and reclamation of the area is discussed in the Reclamation Plan. Blasting was not indicated for underground mining at the site.

The above referenced rules are adequately addressed in the permit with the exception of:

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24. *There seems to be a page missing in the Operation Plan as page 2.05-19.1 does not follow correctly on to page 2.05-20 in discussion stockpile perennial seed mixture. Please update this page with appropriate text.*
25. *Page reference provided in the application appears to be inaccurate as numerous page citations are erroneous. Please double check the citations and correct for future application.*
26. *Topsoil volumes may need to be updated as reclamation of the portal utilized topsoil.*

**Rule 2.05.3(8) Coal Mine Waste and Non Coal Waste**

Section 2.05.3-51 through 53, Maps 25 and 28 and Exhibits 9, 21 and 41 provide information referencing the waste facilities. Plans have been certified by a professional engineer.

The above referenced rules are adequately addressed in the permit.

**Rule 2.05.4 Reclamation Plan**

The permit provides a series of area specific reclamation plans. Sections 2.04.4 of Volume 1, Exhibits 20, 24, 37 The, Section 2.05.4 of the permit and the Reclamation Plan Map updated in 2020 (Map 29), address reclamation at the site. Areas requiring backfilling are presented in Table 63. Reclamation Plan

Map (Map 29) shows AOC and cross sections are presented in Exhibit 20. Revegetation and seeding is discussed and tables 64, 65 and Table 66 provide seeding information. Table 67 details portal reclamation.

A significant amount of reclamation has occurred since 2018 and this portion of the permit was updated with MT8 in 2022.

This rule is adequately addressed.

**Rule 2.05.4 (8) Waste, Coal Mine and Non Coal**

Moffat Co mining utilized a solid waste disposal area and a refuse pile during mining. Both areas have been reclaimed. The solid waste disposal area was reclaimed and the refuse pile was capped and seeded.

This rule is adequately addressed.

**Rule 2.05.5 Postmining Land Use**

This section of the rules is adequately addressed.

**Rule 2.05.6(2) Wildlife Plan**

Exhibit 15A discusses threatened and endangered species, provides a map for certain species and a list of species. DRMS was not able to locate the reference provided for the Wildlife Plan (p2.05.6-1 through 3).

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*27. Please check the reference and either provide appropriate revised pages or a corrected reference providing the information as per Rules 2.05.6(2) and 4.18.*

**Rule 2.05.6(3) Protection of Hydrological Balance**

The information required by this rule is discussed on pages 2.05-36 through 47.1, Maps 13, 23, and 26, Tables 12, 26, 27, 73 – 77, Figures 10-22, 42, 58A-Z, and 58AA-AP and Exhibit 18 (2018), Exhibit 29 (2005), Exhibit 30 (2001) and Exhibit 31 (2001).

In this section Exhibit 42 is referenced numerous times. Exhibit 42 in the permit system addresses Officers and Directors and not aspects of the protecting the hydrological balance. It is unclear to the reviewer what exhibit should be referenced in this section although Exhibit 32 might be a possible reference.

Moffat County Mining has a drainage and sediment control plan in place as outlined in section 2.05 of the permit document and illustrated on Map 26 and Exhibit 18. A rigorous NPDS monitoring plan is also in place requiring monthly sampling as well as a groundwater monitoring plan, and an Annual Hydrology Report. Mine and predicted inflows are discussed as are aquifer impacts and the effects of mine and postmining discharge on surface water quality.

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28. *Please check the reference and either provide appropriate revised pages or a corrected reference providing the information as per Rules 2.05.6(3).*

**Rule 2.05.6(4) Protection of Public Parks and Historic Places**

This rule is adequately addressed.

**2.05.6(6) Mitigation of Impacts Subsidence Survey and Monitoring**

Permit sections 2.05.6, Table 78 and maps 24, 25, 30, 31A and 31 address the above mentioned topics.

This rule is adequately addressed.

**Rule 2.06.8 Alluvial Valley Floors**

Permit sections 2.05 and 2.06.8 detail the presence and characteristics of alluvial valley floors near the site.

This rule is adequately addressed.

**Rule 3.02.2 Performance Bond**

DRMS understands that no additional disturbance is anticipated with the renewal. DRMS has the following questions concerning costs for reclamation:

DRMS updated the reclamation cost estimate in July of 2022 to reflect updated Means rates. This May 2023 update for MCM included permitting actions reflecting reclamation tasks identified in the permit for that included an increase or decrease in liability since the last site wide cost estimated updated with MT8. The updated required surety for RN 8 is \$1,968,446. The current bond held is \$1,708,602.00. This Permit Renewal RN8 revised cost estimate represents a difference of \$259,844.00 by which Moffat County Mining must increase its surety to cover the reclamation costs associated with the RN8 permitting action.

The decision date for the permit renewal is 4 July 2023. Please respond to these preliminary adequacy questions by 4 June 2023 to assure adequate time for any additional adequacy before a findings is made and a decision is proposed.

Sincerely

Robin Reilley, M.S. GISP  
Environmental Protection Specialist II  
[Robin.reilley@state.co.us](mailto:Robin.reilley@state.co.us)