



FALKIRK MINE

November 8, 2023

Mr. Jonathan Emmer
Reclamation Director
ND State Public Service Commission
600 East Boulevard, Dept. 408
Bismarck, ND 58505

RE: Revision 35, Technical Review Responses to Permit NAFK-9503

Dear Mr. Emmer:

Falkirk submits the following responses to the technical review items noted in your October 23, 2023 letter to existing Permit NAFK-9503.

Section 2.6 – Surface Water Information and Monitoring Plan

- 1. Page 12 within Section 2.6.5 (Surface Water Probable Hydrologic Consequences) states: “As part of Revision 35 to this permit, watersheds with control points R27, R28, R29, R30, R32, R37, and R38 were re-analyzed in their pre-mine conditions.” However, according to Table 1 in Section 2.6.5c (Surface Water Probable Hydrologic Consequences Data) several other control points (R1, R2, R12, R14, R15, and R16) were also updated in their post-mine conditions with Revision 35. Please update the narrative on page 12 within Section 2.6.5 (Surface Water Probable Hydrologic Consequences) to include all control points that were re-evaluated and updated as part of Revision 35. Furthermore, please include within the narrative the model that was used for the re-analyzing of the control points. (JAR)***

Page 12 of Section 2.6.5, Surface Water Probable Hydrologic Consequences was updated to specify that HEC-HMS was used to re-analyze the listed control points in their pre-mine condition. Page 13 of Section 2.6.5, Surface Water Probable Hydrologic Consequences was updated to specify that HEC-HMS was used to analyze control points in their post-mine condition. Also, the effected post-mine control points which were analyzed in as part of Revision 35 were listed on page 13.

- 2. Please update the narrative in the 2nd sentence of the 3rd paragraph on page 13 of Section 2.6.5 (Surface Water Probable Hydrologic Consequences) to include the two control points that were reduced from moderate to minor and removed from the narrative. (JAR)***

Paragraph 3 of Section 2.6.5, Surface Water Probable Hydrologic Consequences was updated to include the two control points which were reduced from moderate to minor.

- 3. Please update Section 2.6.5a (Pre-Mining Watershed Map Probable Hydrologic Consequences) to delineate the “Terrain Modification Boundary” linework to remain outside the 159.6 acres that is to be removed from Permit NAFK-9503 located in the SW¼ of Section 32. (BSM)***

Falkirk Mine
2801 1st Street SW
Underwood, ND 58576
P: 701.442.5751 F: 701.250.2473
NACoal.com

The Falkirk Mining Company, a subsidiary company of The North American Coal Corporation

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Falkirk Mining Company
Jason Frye

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The terrain modification boundary has been updated in Section 2.6.5a, Pre-Mining Watershed Map Probable Hydrologic Consequences.

- 4. Section 2.6.5a (Pre-Mining PHC Map) displays the scale bar within the map portion in gray tones, which makes it difficult to distinguish. Please consider relocating the scale bar within the legend and using the color black to make the scale bar more legible. (BSM)**

The bar scale has been deleted from Section 2.6.5a, Pre-Mining Watershed Map Probable Hydrologic Consequences. The drawing scale is shown in the title block.

- 5. Section 2.6.5b (Post-Mining PHC Map) displays “Terrain Modification Boundary” within the map Legend but it is missing from the map. Please revise the map to delineate the “Terrain Modification Boundary”. (BSM)**

The terrain modification boundary has been corrected in Section 2.6.5b, Post-Mining Watershed Map Probable Hydrologic Consequences.

- 6. Section 2.6.5b (Post-Mining PHC Map) displays the scale bar within the map portion and in gray tones, making it difficult to distinguish. Please consider relocating the scale bar within the legend and using the color black to make the scale bar more legible. (BSM)**

The bar scale has been deleted from Section 2.6.5b, Post-Mining Watershed Map Probable Hydrologic Consequences. The drawing scale is shown in the title block.

- 7. Please add section numbers and section lines to Section 2.6.9a (Post Mining Drainage Map). (JAR, BSM, PJR)**

Section lines and section numbers have been added to Section 2.6.9a, Post-Mining Drainages Map.

Section 3.6 – Operations – Surface Water Management

- 8. Surface water discharges from sediment ponds P-R12-01 and P-R12-02 will pass through a drainageway south of the Glenda G Scholl farmstead in the N½NW¼ of Section 18. This drainageway is used to support livestock operations within 500 feet of the farmstead. Please clarify if discharges through this drainage might adversely affect Scholl farmstead agricultural operations. The last sentence on page 5 of Section 3.6.1 (Surface Water Management), states that downstream conditions and Falkirk’s procedures for discharge management to minimize downstream impacts is fully discussed in Section 2.6.5 as probable hydrologic consequences but potential adverse impacts to the Scholl farmstead operations are not discussed in Section 2.6.5. Please clarify if the drainageway near the Scholl farmstead in Section 18 is being used to support agricultural operations and provide an assessment of**

any potential adverse effects from pond discharging operations and measures that will be taken to minimize adverse effects. (GAW)

The last sentence on page 5 of Section 3.6.1a, Surface Water Management Plan has been updated to state that Section 2.6.5, Surface Water Probable Hydrologic Consequences contains only general information regarding minimizing the impacts of sedimentation pond discharges, and that pond-specific impacts will be addressed in the sedimentation pond's section of the permit. The narratives in Section 3.6.45, Design of Sedimentation Pond P-R12-01 and Section 3.6.48, Design of Sedimentation Pond P-R12-02 have been updated to address anticipated downstream impacts as a result of the construction of these impoundments.

- 9. Please update Section 3.6.1a (Total Water Management Plan Map) to delineate the "Terrain Modification Boundary" linework to remain outside the 159.6 acres that is to be removed from permit NAFK-9503 located in the SW¼ of Section 32. (BSM)***

The terrain modification boundary has been updated in Section 3.6.1a, Total Water Management Plan Map.

- 10. Ponds P-R12-03, P-R32-01, and P-RW36-03 were deleted from Section 3.6.1d (Pond and Diversion Construction and Reclamation Schedule) as part of Revision 35. However, these ponds are depicted as future ponds on the Total Water Management Plan Map (Section 3.6.1). Please update the map to remove ponds P-R12-03, P-R32-01, and P-RW36-03 if they are no longer scheduled to be constructed. (JAR)***

As part of Revision 35, ponds P-R12-03, P-R32-01, and P-RW36-03 were deleted from Section 3.6.1a, Total Water Management Plan Map.

Section 4.1 – Post-Mining Land Use and Revegetation

- 11. The updated narrative in the 4th paragraph on page 4 of Section 4.1.1 (Post-Mining Land Use Narrative) does not contain the section which will be removed as part of Revision 35 to NAFK-9503. Please add Section 32 that will be removed as part of Revision 35 to the narrative. (JAR)***

Please see the updated Post-Mining Land Use narrative on page 4 in Section 4.1.1.

- 12. The updated narrative in the 2nd paragraph on page 9 of Section 4.1.1 (Post-Mining Land Use Narrative) is missing the word "acre" following 1.1 in the first sentence. Furthermore, acres is misspelled in the last sentence of the same paragraph. Please correct these errors. (BSM)***

Please see the updated Post-Mining Land Use narrative on page 9 in Section 4.1.1.

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13. Please consider providing an asterisk at the bottom of the Land Use Acreage Comparison Table, Section 4.1.3 (Land Use Acreage Comparison Table), to clarify that 3.4 acres of temporary wetlands are being replaced in Permit NAFK-9601 so that it is clear why there is a loss of wetland acreage in Permit NAFK-9503. (GAW)

Please see the updated Land Use Acreage Table in Section 4.1.3.

14. Please review the locations of the replacement woodlands plantings in the SE¼ of Section 33 and NW¼ of Section 6 on the Post-Mining Land Use Map, Section 4.1.2, to ensure the sites continue to be the preferred locations. Falkirk might consider consolidating some of these plantings to aid management during the revegetation responsibility period. (GAW)

Please see the updated Post-Mining Land Use Map in Section 4.1.2.

15. Please update Section 4.2.6b (Post-Mining Contour Map) to delineate the dark blue, continuous dashed boundary line shown on the map that is not depicted in the Legend. (BSM)

Please see the updated Post-Mining Contour Map in Section 4.2.6b.

Sincerely,
THE FALKIRK MINING COMPANY



Jason Frye
Environmental Specialist

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