

**FALKIRK MINE**

October 17, 2024

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

**RE: Revision 44, Technical Review Responses to Permit NAFK-8405**

Dear Mr. Emmer:

Falkirk submits the following responses to the technical review items to Permit NAFK-8405 in response to your letter dated September 23, 2024.

**Section 3.1.5 – Pit Layout and Facilities Map**

- 1. Section 3.1.5 (Pit Layout and Facilities Map) shows mining in the SW¼ of Section 35, T147N, R82W within 500 feet of an occupied dwelling. For compliance with NDCC 38-14.1-07(5), please either revise Section 3.1.5 to not show mining activities within 500 feet of an occupied dwelling or provide written approval from the dwelling owner. (GAW)***

Please see the updated Pit Layout and Facilities Map in Section 3.1.5. Mining was removed from the 500-foot setback in the SE ¼ of Section 35. Also, the 500-foot setback boundary was removed from the unoccupied dwelling in the S ½ of Section 35. The Falkirk Mine owns this property.

**Section 4.2.3 – Grading Sequence Map**

- 2. Section 4.2.3 (Grading Sequence Map) does not delineate Bond Release No. 4, which was approved on March 8, 2023, located in portions of Sections 22 and 27, T146N, R82W. Please update Section 4.2.3 to delineate Bond Release No. 4. (BSM)***

Please see the updated Grading Sequence Map in Section 4.2.3 that now delineates Bond Release No. 4.

**Section 4.2.4 – Reclamation Costs**

- 3. The second sentence of assumption No. 1 on Page 1 of Section 4.2.4 (Reclamation Costs - (Worst Case)) states “The projected operating cost per hour for each piece of equipment was based on October 30, 2023 variable cost values and the February 21, 2024 changes for computing equipment operating cost for Policy Memorandum No. 16 to Mine Operators – Reclamation Cost Estimating Guidelines.” Although a proposed draft was provided to the mines on February 21, 2024, please update the date within assumption No. 1 on Page 1 of Section 4.2.4 from “February 21, 2024” to “March 27, 2024” which was the official date of Commission approval. (BSM)***

Please see the updated Reclamation Cost narrative in Section 4.2.4.

- 4. The Associated Disturbance subsection on Pages 8 and 9 of Section 4.2.4 (Reclamation Costs - (Worst Case)) calculates the average push distance in feet for the D11 dozer, but the average push length for the miscellaneous projects and ponds do not appear to calculate correctly. Accordingly, please review and revise the average push lengths for the miscellaneous projects and ponds on Pages 8 and 9 of Section 4.2.4 or provide further details regarding the calculation. (BSM)***

Please see the updated Reclamation Cost narrative in Section 4.2.4. The average push length was removed for the miscellaneous projects and ponds. The average push length was not used in any cost calculations.

- 5. The Associated Disturbance subsection on Page 10 of Section 4.2.4 (Reclamation Costs - (Worst Case)) lists diversions D-E34-02, D-E34-03, D-W22-03, and DW22-01 for D11 dozer reclamation, but Section 4-2-4b (Worst Case Bond Map) does not delineate these diversions. Please update Section 4-2-4b to delineate diversions D-E34-02, D-E34-03, D-W22-03, and DW22-01. (BSM)***

Please see the updated Worst Case Bond Map in Section 4.2.4b.

- 6. The Earthwork Calculations subsection on Page 11 of Section 4.2.4 (Reclamation Costs - (Worst Case)) appears to have a typographic error where it lists diversion D-W29-04 which is not known to be in Permit NAFK-8705, nor is delineated on Section 4-2-b (Worst Case Bond Map). Please review and update accordingly. (BSM)***

Please see the updated Reclamation Cost in Section 4.2.4. Diversion D-W29-04 was changed to D-W29-03.

- 7. The Earthwork Calculations subsection on Page 12 of Section 4.2.4 (Reclamation Costs - (Worst Case)) depicts a quantity within the rows "TOTAL", "TOTALS", and "GRAND TOTAL SCRAPER" for the "Haul (ft.)" column, but it appears these numbers are not directly utilized or necessary. Please review and provide further details to the numbers calculated in rows "TOTAL", "TOTALS", and "GRAND TOTAL SCRAPER" for the "Haul (ft.)" column, or remove them completely if deemed not necessary. (BSM)***

Please see the updated Reclamation Cost narrative in Section 4.2.4. The haul (ft.) was removed from the total's column. The haul (ft.) was not used in any cost calculations.

- 8. The Seed Cost Summary subsection on Page 27 of Section 4.2.4 (Reclamation Costs - (Worst Case)) was updated, and it appears that the 2023 Variable Costs for seed have been***

***incorrectly placed in the “lbs./acre” column instead of the “x \$/lb.” column. Please review and correct this error. (BSM)***

Please see the updated Seed Summary Cost on page 27 in Section 4.2.4.

- 9. According to Section 3.6.1d (Pond Construction and Reclamation Schedule), pond P-E03-05 will be constructed in 2024 and reclaimed in 2035, but Section 4-2-4b (Worst Case Bond Map) does not delineate pond P-E03-05 at the worst-case bond time period. Please review and update Section 4-2-4b to include all active ponds that would require reclamation during the worst-case time period based on the most updated pond construction and reclamation schedules. (BSM)***

Please see the updated Reclamation Cost in Section 4.2.4 and the updated Worst Case Bond Map in Section 4.2.4b.

- 10. Please note that Page 2 of Section 4.2.4a (Worst Case Pit Cross-Section) is incorrectly labeled as “East Pits” instead of “Riverdale Pits.” Additionally, please review and update accordingly the letter designations for the cross-sections of the four pits depicted on Page 2 of Section 4.2.4a, verifying that they match the direction displayed on the plan view. For example, the plan view depicts pit E – E’ left to right, but the cross section view incorrectly depicts E’ – E left to right with the spoil piles still on the right side of the pit. Furthermore, please note that the bottom pit cross section was labeled H’ – I instead of H – H’. Please correct these errors on Page 2 of Section 4.2.4a. (BSM)***

Please see the updates on the Worst Case Pit Cross-Section Map in Section 4.2.4a.

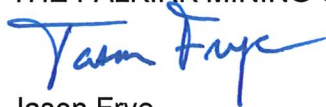
**Additional Updates:**

- Two SPGM storage areas were added in the E ½ of Section 16. These areas were included in the E16A grade approval request. Please see the updated Pit Layout and Facilities Map in Section 3.1.5
- A new sedimentation pond P-E05-01 was designed and added during technical review. Please see the Design of Sedimentation Pond P-E05-01 in Section 3.6.85 and Details of Sedimentation Pond P-E05-01 Map in Section 3.6.86a. Also, the Pit Layout and Facilities Map was updated in Section 3.1.5 and the Total Water Management Plan Map was updated in Section 3.6.1a.
- Please see the design update to sedimentation pond P-E04-02 on pages 3, 5, and 6 in Section 3.6.84 and the Details of Sedimentation Pond P-E04-02 Map in Section 3.6.84a. The updates include lowering the embankment height.

Mr. Jonathan Emmer  
October 17, 2024  
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Sincerely,

THE FALKIRK MINING COMPANY



Jason Frye  
Environmental Specialist

JF/tv  
Enc.