



Public Service Commission

State of North Dakota

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October 7, 2010

Mr. D. Randall Crooke
Environmental Manager
Falkirk Mining Company
P.O. Box 1087
Underwood, ND 58576-1087

Dear Mr. Crooke:

The Reclamation Division has conducted a completeness review of the application for Revision No. 20 to Permit NAFK-9503. The following items must be corrected prior to the revision being deemed complete:

Application Form and Section 1.1.1 – Introductory Information

1. Page 1 of the application form indicates that 16,522.3 acres are being added to the permit. However, there are currently 12,386.35 acres in the permit according to records in the Reclamation Division. These two numbers totaled equal 28,908.65 acres. This value is 401.75 acres less than what Section 1.2.1 lists as the total permit acres. This appears to be the amount of acres being added in Section 12, T145N, R83W and Section 7, T145N, R82W, (Tracts 176-180). Please review and correct this discrepancy. If these additional 400+ acres are being added to the permit, then the application form must be adjusted accordingly and permitting fees (\$5/acre) for the additional acres must be paid. (SAS, GAW, & MSK)
2. The notary public signature on page 2 (page 46 in Section 1.1.1 in the electronic version) shows that her commission expires on February 9, 2010 while the notary stamp indicates February 9, 2011 is the expiration date. Please correct this information on the form. (SAS & GAW)
3. The attachment to the revision application form in Section 1.1.1 lists Section 6, T145N, R82W, or portions of Section 6 as a parcel of land that is being added to the permit with Revision No. 20. The described legal description (Section 6) is located north of Weller Slough and is already part of Permit NAFK-8705. It appears this listing should be for

Section 7, T145N, R82W. Please make the necessary corrections to this section, as well as to several narrative sections within the application that references the inclusion of Section 6 into the permit. (BEB, SAS, & GAW)

4. Please update the List of Changes in Section 1.1.3 to indicate that the Overburden Characteristics Narrative information in Section 2.3.5 was revised with Revision No. 20. (BEB)
5. Item No. 28 of the List of Changes in Section 1.1.3 indicates that Operational Well Information in Section 2.2.11 was replaced; however, this particular section was eliminated from the permit. Please revise the List of Changes to denote that Section 2.2.11 was eliminated and is now vacant. (BEB)

Section 1.2 – Legal Information

6. The Metes and Bounds description does not close, please correct to ensure the additional acreage being added to the permit is correct. (MSK)
7. The listing of the areas being added to the permit with this revision on page 78 includes Section 6, T145N, R82W. However, this section is not highlighted on the newspaper publication map and is already part of Permit NAFK-8705. It appears this should be Section 7. Please correct as necessary throughout this section. (SAS, GAW, & BEB)
8. The public notice indicates that 16,522.3 acres are being added to the permit. However, the difference between the current permitted acres (12,386.35 acres) and the new total permitted acres from page 5 of Section 1.2.1 (29,310.4 acres) suggests that 16,924.05 acres are being added. Please review and correct the notice as needed, including any change when the metes and bounds legal description is corrected so it closes. (SAS & GAW)
9. In the public notice, please include a narrative describing the mining operational changes being proposed with the revision as required by NDAC 69-05.2-10. (GAW)
10. Please revise the public notice to mention if mining operations will be conducted within 100 feet of the outside right-of-way of any public roads, or if any public roads will be relocated as required by NDAC 69-05.2-10-01(d). (GAW)
11. In the public notice, please revise the legal description of Tract 141 to clarify that the 2 acres that are not being permitted are located in the E½ of Section 20. The legal description as written indicates that the 2 acres are located in the SW¼ of the SE¼ of the NW¼ of Section 20. (GAW)
12. It was noticed that the surface owner notification letter for Tract 109, S½NE¼ of Section 12, T144N, R84W, was mailed to both Eleanor H. Sheldon and Kay M. Hegvik. However, the Surface Ownership Map, Section 1.5.3, and the public notice only list Kay

Hegvik as the surface owner of this tract. Please review and correct as necessary.
(GAW)

13. It was noticed that Dean A. Swanson is listed as a Remainderman for Tract 98, SW¼ of Section 1, T144N, R84W according to the surface owner notification letters that Falkirk mailed. However, he is listed as the surface owner on the Surface and Coal Ownership Map, Section 1.5.3. The surface owner notification letter indicates that this property is owned by George W. Swanson Life Estate, c/o George L. Swanson, Attorney in Fact. Please review and correct as necessary. (GAW)
14. Tract 120 shows two coal leases, each for 50%, with one signed by James B. LeRoy and Debra D. LeRoy (Lease #03688) and the other signed by David J. LeRoy and Dorothy M. LeRoy (Lease #03689) according to Section 1.5.1. However, David and Dorothy LeRoy are not listed as coal owners in the public notice or in Section 1.5.1 in the permit, but are on the Ownership Map in Section 1.5.3. If David and Dorothy LeRoy are coal owners, then please list them within Section 1.5.1 of the permit and in the public notice. If they are not owners, please remove them from the Ownership Map. (SAS)
15. In Section 1.5.1 and the public notice, Tract 176 is listed as being in T146N-R82W but Section 1.5.3 shows it located in T145N-R82W. Please review and correct. (SAS)
16. In the past we have allowed companies to list only the surface and coal ownerships of the lands being added in the revision in the public notice and not list all the tracts that are already permitted (Tracts 1-87). Additionally, the first paragraph of the public notice only lists those sections and portions of sections being added to the permit with this revision. We believe it may cause less confusion for the public and surface and coal owners if Falkirk only lists the owners for areas being added to the permit. (SAS)

Section 1.5 Permit Area Surface and Coal Interests

17. The coal leases for the following tracts were signed in 1962 with a 20 years lease term and "...as long as thereafter as coal...is produced." No coal was produced prior to the 20-year expiration term. Please provide documentation that shows that these leases are still in effect:
 - a) Tract 89 (Lease #03321)
 - b) Tracts 93, 108, 109 (Lease #03337)
 - c) Tract 111 (25% of coal, Lease #3337)
 - d) Tracts 96 and 149 (Lease #03345)
 - e) Tract 98 (Lease #03342)
 - f) Tracts 104, 105, and 106 (Lease #03317)
 - g) Tract 105 (Lease #03325)
 - h) Tract 112 (Lease #03340)

The sublease surface and coal lease agreement (Lease #321871) that transferred many of the above tract leases to Falkirk states that it "...shall continue in force and effect until all of the leases have expired or until terminated in accordance with the provisions set forth

in this agreement, whichever first occurs.” Since the above lease agreements provided in the permit had expired according to their provisions **prior to** the date of the sublease, it appears this sublease agreement would not apply. Please provide documentation that shows that the leases and/or subleases are still in effect. (SAS)

18. Tract 176 shows that the coal lease assignment number as 311459 but that lease number is not on that assignment. It appears the correct assignment number is 03324. Please verify the lease assignment number to show how Falkirk Mining Company received this lease. (SAS)

Section 2.2 – Description of Ground Water Hydrology

19. There are a half-dozen or more links directing the reader to the table in Section 2.2.14 that are provided within the Ground Water Use narrative on page 5-7 of Section 2.2.5 and we are unable to get any of those links to work. Please enable or repair the links. (BEB)
20. Please incorporate the location of the D-D’ cross-section transect into the Location of All Wells and Cross-Section Reference Map of Section 2.2.8. The actual cross-section for the D-D’ transect is provided in the permit in Section 2.2.9. (BEB)
21. We are unable to locate baseline water quality information for several of the monitoring wells being activated with Revision No. 20 as described in the Ground Water Monitoring Plan narrative of Section 2.2.6. The Water Quality Data spreadsheet of Section 2.2.31 (Sorted by Well Number) provides water quality data for only new Monitoring Well 307-3, and none of the other 34 new monitoring wells. The Water Quality Data spreadsheet of Section 2.2.31 (Sorted by Stratigraphic Unit) provides the water quality data for the remaining monitoring wells that were not included in the (Sorted by Well Number) spreadsheet, with the exception of all of the monitoring wells that are screened in the Tavis Creek Bed. Ground water Monitoring Wells 344-2, 347-2, 348-2, 349-2, 350-2, 351-1, 352-2, 353-2, 354-2, 356-2, and 357-1 are all screened in the Tavis Creek Bed and we are unable to locate the baseline water quality data for these wells in the permit. Please address. (BEB)

Section 2.3 Description of Geology

22. Sample analysis was included for the following drill holes in Section 2.3.8 but the drill hole locations did not appear to have been placed on the Section 2.8.3 Drill Hole Location Map, although we may have overlooked one or more locations: RD07034C, RD07095C, RD07097C, RD07099C, RD07117C, RD07133C, RD08117C, RD09036C, RD09059C, RD03258C, and RD03310C. Please review the drill hole data and, if necessary, remove any analysis reports for drill holes that are not located within the permit area. (WTG)
23. Please replace page 637 of Section 2.3.8 with a clean copy of page 1 analysis for drill hole RD09036C (the current page has a note over a portion of the data). (WTG)

24. It does not appear that overburden analysis has been included for drill hole RD03011C. Please review the drill hole data and provide the analysis if necessary. (WTG)
25. Section 2.3.4 provides a summary table of the coal core analyses information for permitted and proposed mining acreage within the permit area and summary information in this section is referenced to, and derived from copies of the coal core analyses forms that are provided in Section 2.3.9; however, a substantial amount of the information required to be provided in Section 2.3.9 is absent. None of the coal core analysis forms for any of the 2005 drilling project is included in Section 2.3.9 and only coal core analysis information for twelve holes that were drilled in 2009 is provided. Please provide copies of the 2005 and 2009 coal core sample analyses forms in Section 2.3.9 and check to ensure that all of the required coal core analyses forms from all of the drillholes are accounted for in this section. [NDAC 69-05.2-08-05(2)(d)] (BEB)
26. NDAC 69-05.2-08-05(2)(f) requires the submission of an overburden thickness isopach map to the top of the deepest seam to be mined. Please modify the Overburden Thickness Isopach Map of Section 2.3.12 to provide overburden thickness down to the Coal Lake Coulee seam for those areas in the W1/2 of Section 1, T145N, R84W and the SW1/4 of Section 36, T146N, R84W in which the Coal Lake Coulee seam is proposed to be mined beginning in 2013. (BEB)

Section 2.5 – Alluvial Valley Floors

27. In addition to the Reclamation Division's July 28, 2010, Amendment to the Alluvial Valley Floor determination letter, please provide a copy in the permit of the Reclamation Division's original August 31, 2009, AVF determination letter. (BEB)
28. The Alluvial Valley Floor Study Areas Location Map in Section 2.5.1 denotes the 1999 and 2003 AVF Study Area Boundaries but does not provide the 4th Addition AVF Study Area Boundary (2008) for which the August 31, 2009, determination was based upon. Maps denoting all of the various AVF Study Areas (1999, 2003, 2008) are available in Plates 1, 2, or 3 of the 2008 AVF report and a map depicting the most recent study area in addition to the previous study area locations needs to be incorporated into the permit. (BEB)

Section 2.7 – Pre-Mining Land Use and Vegetation

29. Falkirk is proposing new native grassland reference areas as indicated on page 13 of Section 2.7.1 and pages 495-502 of Appendix 2.7.3. Please update the permit with information required by NDAC 69-05.2-08-08(2) and item 6 of the Pre-Mining Assessment section of our Standards for Evaluation of Revegetation Success and Recommended Procedures for Pre- and Post-Mining Vegetation Assessments. A map showing the location of the reference area and the boundaries of the ecological site is needed along with a narrative discussing how the proposed reference areas adequately represent the permit area. The narrative should also discuss how the reference area site adequately characterizes the mapping unit(s) they are to represent and there should be a

comparison of the reference area data with the pre-mine soil series. There should also be a discussion about whether the major ecological sites for each tract of pre-mine native grassland are represented by reference areas and management of the reference area. (GAW)

Section 2.8 – Soil Resources

30. Please provide the suitable plant growth material volumes by ownership for the acreage added with Revision No. 20, as required by NDAC 69-05.2-09-11-5. (WTG)
31. It appears that the N½ of Section 1 may not have a minimum density of overburden drill holes as required by NDAC 69-05.2-08-05. Please review the drill hole data and add the drill hole location to the map if it has been overlooked, or explain how the drill hole density requirement of NDAC 69-05.2-08-05 has been or will be met. (WTG)

Section 3.1 – Operation Plan

32. It is not clear why Falkirk is proposing to permit the acreage located in the SW¼ of Section 29 and SE¼ of Section 30, T146N, R83W. NDAC 69-05.2-05-08(1) states that the “permit area shall be no larger than a logical pit sequence and include lands used for activities incidental to coal extraction.” The Extended Mine Plan does not show any mining in either of these tracts. The Pit Layout and Facilities Map and Water Management Plan Map do not show any disturbances in these tracts. This area is up gradient from the mining that is planned in Sections 31 and 36 to the south and it would appear that there is an adequate buffer in this area for associated disturbance. Please provide the appropriate justification for including these tracts in the permit area. (GAW)
33. In Section 3.1.1, please update the anticipated number of acres of land that will be disturbed by mining for the next ten years. (MSK)
34. Please update the permit narrative in Section 3.1.1 concerning the presence of abandoned mines. Falkirk has identified an abandoned underground mine on the Extended Mining Plan Map of Section 3.1.6 that encompasses portions of the NE1/4 of Section 2, T144N, R84W and the SW1/4 of Section 32, T145N, R83W. Please provide available information concerning this particular mine and any other abandoned underground or surface mines within or adjacent to the proposed permit area in the narrative of Section 3.1.1. [NDAC 69-05.2-08-02(1)(j & k)] (BEB)
35. Please update the Pit Layout and Facilities Map, Section 3.1.5, to show all land to be affected and proposed sequence of mining operations for the life of the permit as required by NDAC 69-05.2-09-01(2) and NDAC 69-05.2-09-02(4). The Pit Layout And Facilities Map should show the location of each support facility to be constructed, used or maintained within the permit area, NDAC 69-05.2-09-01(3 & 4), NDAC 69-05.2-09-02 (2, 4, 5, 6 & 7). The Post-Mining Land Use and Contour Maps show topographic and land use changes on areas where mining is not shown on the Pit Layout and Facilities Map. Please revise the maps and narrative as necessary. (GAW)

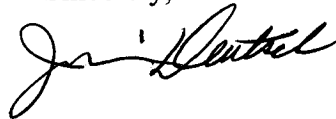
36. Numerous unleased federal tracts are located throughout the area being added to the permit. Please include a discussion indicating if Falkirk intends to lease and mine these tracts. Also provide a discussion regarding boxcut pits and final pit areas within the area being added to the permit with Revision No. 20.
37. Waste disposal areas are shown in reclaimed areas on the Pit Layout and Facilities Map, Section 3.1.5, please depict the current waste disposal areas on Section 3.1.5 as stated in Section 3.1.1. (MSK)
38. The Transportation Facilities Map, Section 3.5.2, uses the Post-Mine Topographical Map as the background. It is appropriate to use the Post-Mine Topographical Map where reclamation is complete and the post-mine topography has been graded and approved. However, for areas that are undisturbed, the Pre-Mine Topographical Map should be shown. (MSK)

Section 4.2 – Reclamation

39. The Post-Mining Contour and Area Slope Maps, Section 4.2.6b and 4.2.7b, respectively, and the Post-Mining Land Use Map, Section 4.1.2, show significant topographic or terrain modification changes on areas of unleased federal coal. Significant topographical changes should not be shown on areas where coal leases are not in place and disturbances must be kept to a minimum on areas where coal is not being mined. Please revise these maps to not show terrain modifications on areas that are not leased for mining. (GAW)

If you have any questions, please contact this office.

Sincerely,



James R. Deutsch
Director
Reclamation Division