



Brian Schweitzer, Governor  
Richard H. Opper, Director

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July 16, 2010

Ms. Dicki Gregg  
Permit Coordinator  
Western Energy Company  
P.O. Box 99  
Colstrip, MT 59323

RE: Area B (SMP 84003B) Amendment Application; Second Round Technical Deficiencies

Dear Dicki:

The Department has completed its review of Western Energy Company's response to the First Round of Technical Deficiency comments (received on March 18, 2010). Western Energy adequately addressed many of the deficiencies; however, several deficiencies need to be further addressed before the Department can determine the application acceptable.

17.24.303(1)(r): The table shows that all coal will be removed from B-Extension in the year 2018. However this table also shows that approximately 127 acres will be disturbed in B-Extension in years 2019, 2020, and 2021. Are these 380 acres of disturbance related to highwall reduction or some other disturbance? As noted, the permit refers to B-Extension; however, recently Western energy has used B-East and B-West. Terminology must be consistent throughout the permit.

Western Energy updated the permit disturbance tables on pages 18, 19 and 19a. However, the updates included unexpected changes to B-Extension values which differ from the 11/07 version in the permit. Proposed new disturbance with this amendment ranges from approximately 549 acres (assuming the permit is correct) to 804 acres (assuming new B-East and revised B-Extension values are correct). Proposed new mining ("Total Coal mined") has a similar discrepancy. Western Energy must clear up the confusion and provide a clear summary of the changes proposed with the amendment. Additionally, Western Energy must ensure that all maps – for both portions of Area B – are appropriately updated.

17.24.303(1)(r): The mine sequence table includes changes in B-Extension. The B-Extension map does not have cut numbers. WECO must submit a current mine plan that correlates to the cut numbers in this table.

17.24.303(1)(r): The mine sequence table displays cuts with an "B" and "C" suffix. These labels are not found on the proposed mine plan. WECO must modify the mine plan map to show these cuts or update the table appropriately.

17.24.303(1)(r): The table shows that no mining will occur in Area B during 2011. Pursuant to 17.24.521(2) WECO must request a temporary cessation for Area B prior to ceasing mining operations for a period of 30-days or more.

17.24.304(1): The permit must be updated to show the location of the current information (ex. the acreages do not match, the wildlife survey baseline buffer cannot be located, prime farmland determination, etc). At a minimum a reference needs to be added to clarify where the reader may locate the necessary materials.

17.24.304(1)(j): Exhibits E-1 and E-2 have not been updated to show the new buffers.

17.24.308(1)(a): On page 96 WECO states "All highwall reduction will be constructed as convex-concave slopes." The text must be revised to better describe the highwall reduction and not depend on convex-concave slopes.

17.24.308(1)(f): The Department's original comment, "The commitments contained in the paragraph on page 101 are unnecessary and this paragraph can be removed," were directed only at the paragraph requiring Western Energy to include weed control activities in annual reports. Please re-insert the original first paragraph which refers to Western Energy's weed control plan, or rewrite the current paragraph to refer to the Rosebud County Weed Board approved weed control plan.

17.24.310: Improper rule citations must be corrected; there are numerous instances where 26.4.... rule nomenclature is used. These must be updated to 17.24... throughout the permit.

17.24.312: Improper rule citations must be corrected. Also it is difficult to evaluate compliance with this rule until 304(1)(j) is updated. A plan showing how Western Energy will minimize the impacts to and enhance wildlife habitats must be incorporated into this section.

17.24.313(1)(j): Table 21 contains "xx" and "tbd" apparently this is still a draft table as there is no explanation for these symbols.

17.24.313(1)(h)(i): (Revegetation types) In Table 21, Pre-mine and Post-mine Vegetation Type Acres, pre-mine permit acres have decreased from 9369 acres in the current permit to 6114 acres, and pre-mine disturbed acres have decreased from 8127 to 5685. Please reconcile these numbers.

Also in Table 21, acres of upland big sagebrush, skunkbush sumac, and deciduous tree/shrub have been decreased in favor of more upland grassland acres. The shrub dominant vegetation types are important for wildlife and vegetation diversity, and the amount of disturbed acres should be better approximated in post-mine reclamation. Please revise the reclamation targets in this table.

Western Energy must commit to creating wildlife habitat enhancement features in a specific percentage of each post-mine vegetation type.

In the wetland/wet meadow section on page 131, please include the number of wetland acres pre-mine, in both the original permit and amendment areas. Describe how and where these acres will be replaced in the reclamation, as per ARM 17.24.751(2)(f).

17.24.313(h)(iii): (Seeding) In Table 22, Lowland Mixture, please include silver sagebrush in the seed mix. In Table 23, Upland Seed Mix, please include big sagebrush in the seed mix (see Area D upland seed mix as an example). Additionally, please specify the sub-species of big sagebrush to be used in the mix, most likely Wyoming (*Artemisia tridentata var wyomingensis*), as it is very important when seeding sagebrush to use one adapted to and native in the area.

For all post-mine vegetation types, Western Energy must specify the shrub seed or transplant amount (plants per acre), species, and method of planting. For example, the permit states that in the upland skunkbush sumac type, the conifer seed mix will be seeded at 50% of the normal rate. There is no

discussion of how shrubs will be established on the site, what species will be used, or how dense they will be seeded or planted.

Please include seeds/ft<sup>2</sup> in the seed mix tables, see example below.

Scientific Name	Common Name	Seeds/PLS lbs	PLS lbs/acre	Seeds/ft <sup>2</sup>	Percent of mix
<i>Agropyron dasytachyum</i>	Thickspike wheatgrass	154000	3	11	50%
<i>Agropyron smithii</i>	Western wheatgrass	110000	4	10	47%
<i>Achillia millefolium</i>	Common yarrow	2770000	0.01	1	3%
<b>Total:</b>			7.01	21	100%

Additionally, Western Energy must commit to a shrub establishment density for each reclamation type.

17.24.315: The following comments must be addressed regarding the Hydrologic Control Plan and Associated Ponds.

Ponds PO-010 and PO-010B: These ponds appear to be located in Area E. If so, the proposed modifications should be submitted as an MR to Permit # 81003E once plans for the upstream drainage are approved. The application should include the design narratives along with plan sheets for “Location and Drainage Area Map” and “Design Plan and Details”. After the plan is approved and the pond modifications constructed, the design sheets can be updated as necessary and submitted as the “As-Built Plan and Details”.

Ponds PO-10D, PO-11B, PO-21B, PO-21D, PO-21E, PO-21F: These are designated on the plan sheet “Area B East Hydrological Control Plan” but no further information is provided. Please provide a “Proposed Pond Design Narrative” for each pond that describes the proposed pond, approximate drainage area, when it will be constructed and when it will be reclaimed. Also provide labeling on the plan sheet that differentiates between constructed and proposed ponds

Pond PO-15: This pond was not addressed. There currently exists a “Proposed Pond Design Narrative” for this pond in the Permit Volume titled “Certified Pond Designs and As-Built”. Does that narrative reflect the current conditions and intent? If not please provide an updated narrative.

Table 31 “Sedimentation Pond Summary” should be updated.

17.24.322(2)(a)(i), (ii), and (iv): The basic parts of these regulations have not been addressed and the information that is referenced in the permit has not been updated since the 1980’s. For example, the drill hole location map was last updated in 1986. The permit must include reserve information in tons and what incrementally will transpire as a result of the amendment. We have no basis for an amendment without this information.

17.24.322(2)(a)(vi): The regulation requires analysis of chemical properties of the coal and the permit refers you to Appendix D which is spoil analysis.

17.24.322(2)(b): Western must include a map showing areas where the Rosebud seam is not recovered with an explanation of the number of tons left in-place and the reason these reserves were not recovered (ie: strip ratio, operations, quality). The Stocker and Robinson seams must also be addressed as they too will not be recovered.

17.24.501: Slope diversity and the number of side tributaries were improved in some eastern drainages, but was still limited mine-wide, especially in the central and western portions compared to pre-mine. In particular, the proposed PMT would lack the entrenched valley bottom coulees present in many portions of pre-mine topography, especially apparent in the upper valleys of Drainages 010 (west tributary), 019, and 021-1. Several proposed drainage valleys would have overly steep, uniform side slopes and narrow cross sections and would not adequately approximate broader pre-mine valley basin slopes (especially Drainages 011, 015, 020, 021 East tributaries).

17.24.313(1)(e),(1)(f); 314, 501, 631, and 634: PMT adjustments are needed in some of the profiled drainages to provide smooth concave longitudinal profiles blending with adjacent native channels above and below, and without abrupt slope transitions within the profile. Western Energy needs to adjust breaks in Drainages 010, 015, 020, and middle 021. More fill is needed along an overly steep transition to native in the upper reach of Drainage 021. Western Energy must compare pre-mine and PMT valley cross sections to provide similar valley bottom, terrace and slope characteristics.

Please contact the Department with any questions regarding these deficiencies.

Sincerely,



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FC: 620.112 (Application 00184)