Montana Department of
ENVIRONMENTAL QUALITY

Brian Schweitzer, Governor

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January 24, 2006

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LEGISLATIVE ENVIRONMENTAL
POLICY OFFICE

Darcy Neigum, Director of Operations
Rocky Mountain Power, Inc.
Hardin Generating Station
P.O. Box 5558
Bismarck, ND 58506-5558

Dear Mr. Neigum:

Air Quality Permit #3185-03 is deemed final as of January 24, 2006, by the Department of Environmental Quality (Department). This permit is for the addition of a temporary auxiliary 11.8 million British thermal units per hour (MMBtu/hr) boiler necessary for startup of the PC-fired Boiler (Boiler). All conditions of the Department's decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

David L. Klemp
Air Permitting Supervisor
Air Resources Management Bureau
(406) 444-3490

DK:lr
Enclosure

DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Air Resources Management Bureau
P.O. Box 200901, Helena, Montana 59620
(406) 444-3490

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Rocky Mountain Power, Inc.
Hardin Generating Station
P.O. Box 5558
Bismarck, ND 58506-5558

Air Quality Permit Number: #3185-03

Preliminary Determination Issued: December 21, 2005
Department Decision Issued: January 6, 2006
Permit Final: January 24, 2006

1. *Legal Description of Site*: RMP electrical power generating facility is located approximately 1.2 miles northeast of Hardin, Montana. The legal description of the site is the Northwest ¼ of Section 12, Township 1 South, Range 33 East, in Big Horn County, Montana. The RMP facility covers approximately 30 acres.

2. *Description of Project*: On December 20, 2005, the Department received a complete permit application from RMP to add a temporary auxiliary 11.8 million MMBtu/hr boiler necessary for startup of the PC –fired Boiler (Boiler). The temporary auxiliary boiler would be used to provide supplemental heat when the Boiler is operating on natural gas for activities such as steam blows or freeze protection during tuning or startup of the Boiler. Once startup has progressed to the point that the Boiler is fired on coal, there will be no need for the auxiliary boiler. The auxiliary boiler would not be operated at the same time the Boiler is combusting coal, therefore overall potential emissions at the facility would not increase.

3. *Benefits and Purposes (Objectives) of Project*: The temporary auxiliary boiler would be used to provide supplemental heat when the Boiler is operating on natural gas for activities such as steam blows or freeze protection during tuning or startup of the Boiler.

4. *Alternatives Considered*: In addition to the proposed action, the Department also considered the "no-action" alternative. The no-action alternative would deny issuance of the Montana Air Quality Permit modification to RMP. Under the "no action" alternative, RMP would not be able to install the temporary auxiliary boiler; therefore, hindering startup activities. However, the Department does not consider the "no-action" alternative to be appropriate because RMP demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.

5. *A Listing of Mitigation, Stipulations, and Other Controls*: A list of enforceable conditions would be included in Permit #3185-03.

6. *Regulatory Effects on Private Property*: The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and would not unduly restrict private property rights.

7. The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The "no action" alternative was discussed previously.

Potential Physical and Biological Effects							
		Major	Moderate	Minor	None	Unknown	Comments Included
A.	Terrestrial and Aquatic Life and Habitats			✓			yes
B.	Water Quality, Quantity, and Distribution			✓			yes
C.	Geology and Soil Quality, Stability, and Moisture			✓			yes
D.	Vegetation Cover, Quantity, and Quality			✓			yes
E.	Aesthetics			✓			yes
F.	Air Quality			✓			yes
G.	Unique Endangered, Fragile, or Limited Environmental Resources			✓			yes
H.	Demands on Environmental Resources of Water, Air, and Energy			✓			yes
I.	Historical and Archaeological Sites			✓			yes
J.	Cumulative and Secondary Impacts			✓			yes

SUMMARY OF COMMENTS ON POTENTIAL PHYSICAL AND BIOLOGICAL EFFECTS: The following comments have been prepared by the Department.

A. Terrestrial and Aquatic Life and Habitats

The impacts from this project to terrestrial and aquatic life and habitats would be minor because the temporary auxiliary boiler would be constructed/installed on an already disturbed area of the facility. With respect to impacts from air emissions on terrestrial and aquatic life and habitats from the temporary auxiliary boiler, the emissions from each criteria pollutant (NO_x, for example) would be limited to less than 1 ton per year. In addition, the temporary auxiliary boiler would be prohibited from operating when the PC-fired Boiler was combusting coal. Therefore, the cumulative impact would be negligible.

B. Water Quality, Quantity, and Distribution

Water quality, quantity, and distribution would not be affected by the proposed installation of the temporary auxiliary boiler as it would not increase water use on the RMP site. With respect to impacts from air emissions on water quality, quantity, and distribution from the temporary auxiliary boiler, the emissions would be extremely low and would have little, if any effect, on water quality. In addition, the temporary auxiliary boiler would be prohibited from operating when the PC-fired Boiler was combusting coal. Therefore, the cumulative impact would be negligible.

C. Geology and Soil Quality, Stability, and Moisture

The impacts from this project to geology and soil quality, stability, and moisture would be minor because the temporary auxiliary boiler would be constructed/installed on an already disturbed area of the facility. With respect to impacts from air emissions on geology and soil quality, stability,

and moisture from the temporary auxiliary boiler, the emissions would be extremely low and would have little, if any effect, on geology and soils. In addition, the temporary auxiliary boiler would be prohibited from operating when the PC-fired Boiler was combusting coal. Therefore, the cumulative impact would be negligible.

D. Vegetation Cover, Quantity, and Quality

The impacts from this project to vegetation cover, quantity, and quality would be minor because the temporary auxiliary boiler would be constructed/installed on an already disturbed area of the facility. With respect to impacts from air emissions on vegetation cover, quantity, and quality from the temporary auxiliary boiler, the emissions would be extremely low and would have little, if any effect, on vegetation. In addition, the temporary auxiliary boiler would be prohibited from operating when the PC-fired Boiler was combusting coal. Therefore, the cumulative impact would be negligible.

E. Aesthetics

The impacts to the aesthetics of the area from the installation of the temporary auxiliary boiler would be minor because it would be located inside the existing plant site and would only operate for a maximum of 1000 hours per year.

F. Air Quality

The air quality impacts of the proposed temporary auxiliary boiler would be minor because it is a very small unit, the emissions from each criteria pollutant (NO_x, for example) would be limited to less than 1 ton per year, and it would be prohibited from operating when the PC-fired Boiler was combusting coal. The air quality modeling analysis performed for Permit #3185-02 showed compliance with the NAAQS, MAAQS, and PSD increment. The addition of this unit would not affect this analysis because emissions during startup from the PC-fired Boiler burning natural gas with the temporary auxiliary boiler burning No. 2 fuel oil would still be far less than worst-case emissions modeled (with the PC-fired Boiler combusting coal at maximum capacity).

G. Unique, Endangered, Fragile, or Limited Environmental Resources

For the original permitting action (#3185-00), the Department contacted the Montana Natural Heritage Program of the Natural Resource Information System (NRIS) to identify any species of special concern in the immediate area of the RMP project. The Natural Heritage Program files identified four species of special concern in the 1-mile buffer area surrounding the section, township, and range of the RMP facility. The four animal species identified were the *haliaeetus leucocephalus* (bald eagle), *heterodon nasicus* (western hognose snake), *sorex merriami* (merriam's shrew), and *sorex preblei* (preble's shrew). A bald eagle nest is estimated to be located approximately 0.5-mile north-northeast of the property boundary for the RMP site. A western hognose snake was sighted approximately 2 miles southwest of the RMP site. The sightings of merriam's shrew and preble's shrew are historic sightings (both dated 1884) located approximately 2.5 miles southeast of the RMP site. None of the species identified were located within the same section, township, and range of the RMP site.

The impacts from this project to unique, endangered, fragile, or limited resources would be minor because the temporary auxiliary boiler would be constructed/installed on an already disturbed area of the facility. With respect to impacts from air emissions on unique, endangered, fragile, or limited resources from the temporary auxiliary boiler, the emissions would be extremely low and would have little, if any effect, on geology and soils. In addition, the temporary auxiliary boiler would be prohibited from operating when the PC-fired Boiler was combusting coal. Therefore, the cumulative impact would be negligible.

To determine the impact on the bald eagle population for previous permitting actions, the Department consulted the U.S. Department of Interior, Bureau of Reclamation Montana Bald Eagle Management Plan (MBEMP). With the identified nest being slightly more than 0.5 mile away from the RMP property boundary, the RMP site would fall into a MBEMP "Zone III" Classification, representing home range for the bald eagles. Zone III is classified as the area from 0.5 mile to 2.5 miles in radius from the nest site (Zone II from 0.25 to 0.5 miles, Zone I from 0 to 0.25 miles). Zone III represents most of the home range used by eagles during nesting season, usually including all suitable foraging habitat within 2.5 miles of all nest sites in the breeding area that have been active within five years. The objectives in Zone III areas include maintaining suitability of foraging habitat, minimizing disturbance within key areas, minimizing hazards, and maintaining the integrity of the breeding area. The nest is located in a group of cottonwood trees located in the marshy area next to the Bighorn River. That area would remain unchanged by the facility operation, except for a possible cumulative moderate impact by air pollutants (by the facility as a whole), as described in Section 7.F of this EA. The proposed change would probably not impact the nest area at all, as emissions would be so low and the temporary auxiliary boiler is limited to operating not more than 1000 hours per year. Therefore, the impact on bald eagles would be minor.

RMP would be responsible for compliance with any applicable statutes and regulations, including the Bald Eagle Protection Act, the Migratory Bird Treaty Act, and the Endangered Species Act.

The proposed project would have a minor impact on limited, non-renewable resources because the temporary auxiliary boiler would use a maximum of 8500 gallons of No. 2 fuel oil per year, which was not a resource previously being consumed on the plant site.

H. Demands on Environmental Resource of Water, Air, and Energy

As described in Section 7.B of this EA, demands on water resources would not be affected by the installation of the temporary auxiliary boiler as it would not increase water use on the RMP site.

As described in Section 7.F of this EA, the impact on the air resource in the area from the temporary auxiliary boiler would be minor because it is a very small unit, the emissions from each criteria pollutant would be limited to less than 1 ton per year, and it would be prohibited from operating when the PC-fired Boiler was combusting coal.

The impacts to the energy resource from the proposed modification would be minor because a small amount of No. 2 fuel oil (maximum of 8500 gallons per year) would potentially be consumed to operate the temporary auxiliary boiler.

I. Historical and Archaeological Sites

The impacts on historical and archaeological sites would be minor because the temporary auxiliary boiler would be constructed/installed on an already disturbed area of the facility.

During the analysis for Permit #3185-00, the Department contacted the Montana Historical Society – State Historic Preservation Office (SHPO) in an effort to identify any historical, archaeological, or paleontological sites or findings near the proposed project. SHPO's records indicate that there are currently no previously recorded cultural properties within the project site. Because of the fact that industrial activities and land disturbances have occurred in the area, SHPO commented that the likelihood of finding undiscovered or unrecorded historical properties is practically zero. SHPO further commented "a recommendation for a cultural resource inventory is unwarranted at this time."

J. Cumulative and Secondary Impacts

Overall, the cumulative impacts from this modification on the physical and biological aspects of the human environment would be minor. The potential emissions from the temporary auxiliary boiler would be extremely low and would have little effect on the physical and biological aspects of the human environment. In addition, the temporary auxiliary boiler would be prohibited from operating when the PC-fired Boiler was combusting coal. Therefore, the cumulative impact would be negligible.

8. The following table summarizes the potential social and economic effects of the proposed project on the human environment. The "no action" alternative was discussed previously.

Potential Social and Economic Effects							
		Major	Moderate	Minor	None	Unknown	Comments Included
A.	Social Structures and Mores				✓		yes
B.	Cultural Uniqueness and Diversity				✓		yes
C.	Local and State Tax Base and Tax Revenue				✓		yes
D.	Agricultural or Industrial Production			✓			yes
E.	Human Health			✓			yes
F.	Access to and Quality of Recreational and Wilderness Activities				✓		yes
G.	Quantity and Distribution of Employment				✓		yes
H.	Distribution of Population				✓		yes
I.	Demands for Government Services			✓			yes
J.	Industrial and Commercial Activity				✓		yes
K.	Locally Adopted Environmental Plans and Goals				✓		yes
L.	Cumulative and Secondary Impacts			✓			yes

SUMMARY OF COMMENTS ON POTENTIAL SOCIAL AND ECONOMIC EFFECTS: The following comments have been prepared by the Department.

A. Social Structures and Mores

The proposed installation of the temporary auxiliary boiler at the RMP facility would not cause a disruption to any native or traditional lifestyles or communities (social structures or mores) in the area because proposed installation would occur within the RMP site and would not change the nature or use of that site. The proposed installation would be consistent with the RMP facility and the former and current use of the industrial park surrounding the facility. The proposed installation would also not affect the greater surrounding area (predominately agricultural and/or associated with the outskirts of the City of Hardin).

B. Cultural Uniqueness and Diversity

The proposed installation of the temporary auxiliary boiler at the RMP facility would not cause a disruption to any cultural uniqueness or diversity in the area because proposed installation would occur within the RMP site and would not change the nature or use of that site. The proposed installation would be consistent with the RMP facility and the former and current use of the industrial park surrounding the facility. The proposed installation would also not affect the greater surrounding area.

C. Local and State Tax Base and Tax Revenue

The proposed installation of the temporary auxiliary boiler would have no effect on the state tax base and tax revenue because it would not change the amount of taxes owed by the RMP facility.

D. Agricultural or Industrial Production

The impact from the proposed temporary auxiliary boiler on agricultural production would be minor because the emissions would be extremely low and would have little, if any effect, on vegetation and soils. In addition, the temporary auxiliary boiler would be prohibited from operating when the PC-fired Boiler was combusting coal. The temporary auxiliary boiler is proposed to be installed within an existing industrial site, and would not be taking agricultural land out of production. With respect to industrial production, the proposed temporary auxiliary boiler would be assisting the RMP facility in startup activities associated with the PC-fired Boiler. Therefore, the impact on industrial production would be minor.

E. Human Health

As described in Section 7.F of the EA, the air quality impacts (and therefore, the human health impacts) of the proposed temporary auxiliary boiler would be minor because it is a very small unit, the emissions from each criteria pollutant (NO_x, for example) would be limited to less than 1 ton per year, and it would be prohibited from operating when the PC-fired Boiler was combusting coal. The air quality modeling analysis performed for Permit #3185-02 showed compliance with the NAAQS, MAAQS, and PSD increment. The addition of this unit would not affect this analysis because emissions during startup from the PC-fired Boiler burning natural gas with the temporary auxiliary boiler burning No. 2 fuel oil would still be far less than worst-case emissions modeled (with the PC-fired Boiler combusting coal at maximum capacity).

F. Access to and Quality of Recreational and Wilderness Activities

The proposed installation of the temporary auxiliary boiler at the RMP facility would not affect access to and quality of recreational and wilderness activities because the boiler would be installed within an existing industrial site with extremely low potential emissions. In addition, the temporary auxiliary boiler would be prohibited from operating when the PC-fired Boiler was combusting coal. Therefore, the cumulative impact would be negligible.

G. Quantity and Distribution of Employment

There would be no effect on the employment of the area from the proposed installation of the temporary auxiliary boiler, as no new employees would be hired as a result of the project.

H. Distribution of Population

There would be no effect on the distribution of population in the area from the proposed installation of the temporary auxiliary boiler, as no new employees (thus no change in population moving in) would be hired as a result of the project.

I. Demands of Government Services

Demands on government services from the proposed installation of the temporary auxiliary boiler would be minor because the project would require some, but not extensive, government services. RMP would remain a tax paying entity for both state and local tax bases.

The acquisition of the appropriate permits by the facility for the proposed installation (including a state air quality permit), the permits for the associated activities of the project, and compliance verification with those permits would also require minor services from the government.

J. Industrial and Commercial Activity

The proposed installation at the RMP facility would represent no change in industrial activity in the area. The installation of the temporary auxiliary boiler would only assist the facility in starting up the PC-fired Boiler. The facility, as previously permitted, would operate 24 hours a day and 7 days per week generating electricity. Other industrial activity in the area includes the Cenex bulk storage facility, just south of the proposed RMP site.

K. Locally Adopted Environmental Plans and Goals

The nearest nonattainment areas with respect to air quality are the Laurel SO_2 Nonattainment Area and associated SO_2 state implementation plan area (including Billings, approximately 45 miles to the west) and the Lame Deer PM_{10} Nonattainment Area (approximately 46 miles to the east). Based on the air quality modeling performed for Permit #3185-02, the RMP project as a whole would not significantly impact either of those nonattainment areas and therefore, would have no effect on any locally adopted environmental goals and plans associated with those two areas. As previously described, the emissions during startup (when the proposed temporary auxiliary boiler would be used), would be far less than the "worst-case" emissions modeled for the RMP project.

The Department is unaware of any other locally adopted environmental plans and goals that would be affected by the proposed modification of the RMP facility.

L. Cumulative and Secondary Impacts

Overall, the cumulative and secondary impacts from this project on the social and economic aspects of the human environment would be very minor. The proposed temporary auxiliary boiler would be installed within the existing RMP facility and emissions from it would be extremely low. In addition, the temporary auxiliary boiler would be prohibited from operating when the PC-fired Boiler was combusting coal. Therefore, the cumulative impact would be negligible.

Recommendation: No EIS is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: The proposed project is for a very small emissions source that would be located within an existing industrial facility. In addition, the proposed temporary auxiliary boiler would be prohibited from operating when the PC-fired Boiler was combusting coal, therefore protecting the worst-case air quality modeling analysis. Overall impacts will be very minor.

Other groups or agencies contacted or that may have overlapping jurisdiction: Montana Historical Society – State Historic Preservation Office, Natural Resource Information System - Montana Natural Heritage Program, Montana Department of Revenue

Individuals or groups contributing to this EA: Department of Environmental Quality (Air Resources Management Bureau; Air, Energy, and Pollution Prevention Bureau; and Water Protection Bureau), Montana Historical Society – State Historic Preservation Office; Natural Resource Information System - Montana Natural Heritage Program; Department of Revenue

EA prepared by: Debbie Skibicki
Date: December 20, 2005