Montana Department of
ENVIRONMENTAL QUALITY
Brian Schweitzer, Governor
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PRELIMINARY DETERMINATION
ON PERMIT APPLICATION

Date of Mailing: September 18, 2009

Name of Applicant: Exxon Mobil Corporation/ExxonMobil Refining & Supply Company

Source: Billings Refinery

Proposed Action: The Department of Environmental Quality (Department) proposes to issue a permit, with conditions, to the above-named applicant. The application was assigned Permit Application Number 1564-21.

Proposed Conditions: See attached.

Public Comment: Any member of the public desiring to comment must submit such comments in writing to the Air Resources Management Bureau (Bureau) of the Department at the above address. Comments may address the Department's analysis and determination, or the information submitted in the application. In order to be considered, comments on this Preliminary Determination are due by October 5, 2009. Copies of the application and the Department's analysis may be inspected at the Bureau's office in Helena. For more information, you may contact the Department.

Departmental Action: The Department intends to make a decision on the application after expiration of the Public Comment period described above. A copy of the decision may be obtained at the above address. The permit shall become final on the date stated in the Department's Decision on this permit, unless an appeal is filed with the Board of Environmental Review (Board).

Procedures for Appeal: Any person jointly or severally adversely affected by the final action may request a hearing before the Board. Any appeal must be filed by the date stated in the Department's Decision on this permit. The request for a hearing shall contain an affidavit setting forth the grounds for the request. Any hearing will be held under the provisions of the Montana Administrative Procedures Act. Submit requests for a hearing in triplicate to: Chairman, Board of Environmental Review, P.O. Box 200901, Helena, MT 59620.

For the Department,

Vickie Walsh
Air Permitting Program Supervisor
Air Resources Management Bureau
(406) 444-3490

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VW:SH
Enclosures

DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Air Resources Management Bureau
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P.O. Box 200901, Helena, Montana 59620-0901
(406) 444-3490

DRAFT ENVIRONMENTAL ASSESSMENT (EA)

Issued For: Exxon Mobil Corporation
700 Exxon Road
P.O. Box 1163
Billings, MT 59103

Permit Number: #1564-21

Preliminary Determination Issued: September 18, 2009
Department Decision Issued:
Final Permit Issued:

1. Legal Description of Site: S½ of Section 24 and N½ of Section 25, Township 1 North, Range 26 East, Yellowstone County, Montana.

2. Description of Project: ExxonMobil is requesting to modify their current permit to reflect decommissioning of the existing B-8 boiler, construction and operation of a temporary natural gas-fired boiler (B-8 Temp) for a period of up to twelve months, and construction of a new permanent B-8 natural gas and/or refinery fuel gas-fired boiler.

3. Objectives of Project: The decommissioning of the existing B-8 boiler is part of a NO_x reduction strategy as required by the US EPA CD (United States et al. v. Exxon Mobil Corporation et al., dated December 13, 2005).

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 to ExxonMobil. However, the Department does not consider the "no-action" alternative to be appropriate because ExxonMobil 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 including a BACT analysis would be contained in MAQP #1564-21.

6. Regulatory Effects on Private Property: The Department considered alternatives to the conditions imposed in this permit as part of permit development. The Department determined that the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and to 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.

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

This permitting action could have a minor effect on terrestrial and aquatic life and habitats, as the proposed project would include replacement of the existing B-8 boiler, potentially resulting in increased emissions. Impacts to terrestrial an aquatic life and habitats may occur as a result of these increased emissions. However, the emissions increases fall below significance levels identified within the rules associated with PSD. Additionally, the project would ultimately take place on industrial property that has already been disturbed. Therefore, only minor impacts to terrestrial and aquatic life and habitats are anticipated.

B. Water Quality, Quantity, and Distribution

While deposition of pollutants would occur, the Department determined that any impacts from deposition of pollutants would be minor. Furthermore, this action would not result in a change in the quality or quantity of ground water. There also would not be any changes in drainage patterns or new discharges associated with this project. Therefore, minor impacts to water quality, quantity, and/or distribution are anticipated.

C. Geology and Soil Quality, Stability, and Moisture

The proposed project constitutes of replacement of an existing boiler on the same existing industrial site. Therefore, no additional disturbance would be created as a result of the proposed project. While deposition of pollutants would occur, the Department determined that any impacts from deposition of pollutants would be minor. Additionally, no unique geologic or physical features would be disturbed. Overall, we believe that any impact to the geology and soil quality, stability, and moisture would be minor.

D. Vegetation Cover, Quantity, and Quality

The proposed project would affect an existing, industrial property that has already been disturbed. No additional vegetation on the site would be disturbed for the project. However, possible increases in actual emissions of NO_x, SO_2, VOC, PM/PM_{10}, and CO from historical

emission levels may result in minor impacts to the diversity, productivity, or abundance of plant species in the surrounding areas. Overall, any impacts to vegetation cover, quantity, and quality would be minor.

E. Aesthetics

The proposed modification to the facility would be constructed in the area that has previously been disturbed and would not result in any additional disturbance. Additionally, the proposed project entails replacement of an existing boiler. Therefore, no impacts to aesthetics is anticipated.

F. Air Quality

This proposed project would include slight increases of NO_x, SO_2, VOC, PM/PM_{10}, and CO emissions. However, the emissions do not exceed "significant" threshold levels as outlined in the rules associated with PSD. ExxonMobil would be required to maintain compliance with the Billings/Laurel SO_2 State Implementation Plan (SIP), current permit conditions, and state and federal ambient air quality standards. Additionally, modeled levels of pollutants for the proposed project show compliance with the NAAQS and the MAAQS. While deposition of pollutants are anticipated, the Department has determined that any air quality impacts as a result of the deposition would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department, in an effort to assess any potential impacts to any unique endangered, fragile, or limited environmental resources in the initial proposed area of operation (S½ of Section 24 and N½ of Section 25, Township 1 North, Range 26 East, Yellowstone County, Montana), contacted the Natural Resource Information System – Montana Natural Heritage Program. Search results concluded there are seven species of concern within the area. The search area, in this case, is defined by the section, township, and range of the proposed site, with an additional 1-mile buffer. The known species of concern include seven vertebrate animals: Bald Eagle (Threatened/Sensitive), Spotted Bat (Sensitive), Spiny Softshell (Sensitive), Greater Short-horned Lizard (Sensitive), Common Sagebrush Lizard, Western Hog-nosed Snake (Sensitive), and Milksnake (Sensitive).

This permitting action is not expected to have any impacts to terrestrial and aquatic life and/or their habitat; therefore, it is unlikely that unique, rare, threatened, or endangered species would experience any impacts. The project would occur at a previously disturbed industrial site, within allowable levels of emissions. However, there is a minor increase in potential air emissions, as described in Section 7.F. of this permit, which may have a minor impact on the surrounding area.

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

As described in Section 7.B of this EA, this permitting action would have little or no effect on the environmental resource of water as there would be no discharges to groundwater or surface water associated with this permitting action.

As described in Section 7.F of this EA, the impact on the air resource in the area of the facility would be minor because the facility would be required to maintain compliance with other limitations affecting the overall emissions from the facility.

A minor impact to the energy resource is expected during the construction process involved with replacement of the boiler; however, this impact is temporary. No major new energy consuming equipment would be added, only exchanged, and no utility upgrade would be required as a result of these changes. Overall, the impact to the energy resource would be minor.

I. Historical and Archaeological Sites

In an effort to identify any historical and archaeological sites near the proposed project area for previous projects, the Department contacted the Montana Historical Society, State Historic Preservation Office (SHPO). According to SHPO records, there have not been any previously recorded historic or archaeological sites within the proposed area. The project would occur within the boundaries of a previously disturbed industrial site. There is a low likelihood cultural properties will be impacted; therefore, any impacts to historical and archeological would be considered minor.

J. Cumulative and Secondary Impacts

Cumulative and secondary impacts from this project would be minor because there is only a minor increase in allowable NO_x, SO_2, VOC, PM/PM_{10}, and CO emissions, and actual increases are expected to be extremely small. Additionally, as described in Section 7.F of this EA, the impact on the air resource in the area of the facility would be minor because the facility would be required to maintain compliance with other limitations affecting the overall emissions from the facility. Any cumulative or secondary impacts as a result of this project are considered to be minor.

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

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

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

A. Social Structures and Mores

The proposed facility would not cause a disruption to any native or traditional lifestyles or communities (social structures or mores) in the area because the project would be constructed at a previously disturbed industrial site. The proposed project would not change the nature of the site.

B. Cultural Uniqueness and Diversity

The proposed project would not cause a change in the cultural uniqueness and diversity of the area because the land is currently used as a petroleum refinery; therefore, the land use would not be changing. The use of the surrounding area would not change as a result of this project.

C. Local and State Tax Base and Tax Revenue

The refinery's overall capacity would not change as a result of the proposed project. In addition, no new employees would be needed for this project. Therefore, no impacts to the local and state tax base and tax revenue are anticipated from this project.

D. Agricultural or Industrial Production

The proposed project would not result in a reduction of available acreage or productivity of any agricultural land; therefore, agricultural production would not be affected. The refinery's overall capacity would not change as a result of the proposed project. Therefore, industrial production would not be affected.

E. Human Health

As described in Section 7.F of this EA, the impacts from this facility on human health would be minor because the emissions from the facility would increase, but not significantly from prior levels. The air quality permit for this facility would incorporate conditions to ensure that the facility would be operated in compliance with all applicable rules and standards. These rules and standards are designed to be protective of human health.

F. Access to and Quality of Recreational and Wilderness Activities

This project would not have an impact on recreational or wilderness activities because the construction site is far removed from recreational and wilderness areas or access routes. This project would not result in any changes in access to and quality of recreational and wilderness activities.

G. Quantity and Distribution of Employment

The proposed project would not result in any impacts to the quantity or distribution of employment at the facility or surrounding community. No employees would be hired at the facility as a result of the project.

H. Distribution of Population

The proposed project does not involve any significant physical or operational change that would affect the location, distribution, density, or growth rate of the human population.

I. Demands for Government Services

The demands on government services would experience a minor impact. The primary demand on government services would be the acquisition of the appropriate permits by the facility (including local building permits, as necessary, and a state air quality permit) and compliance verification with those permits.

J. Industrial and Commercial Activity

The refinery's overall capacity would not change as a result of the proposed project. Therefore, no impacts on industrial activity at ExxonMobil would be expected. Industrial and commercial activity in the neighboring area is not anticipated to be affected by issuing MAQP #1564-21.

K. Locally Adopted Environmental Plans and Goals

The Department is unaware of any locally adopted environmental plans and goals that would be affected by the proposed change to the facility. The conditions associated with the Billings/Laurel SO_2 SIP would apply regardless of the status of the project.

L. Cumulative and Secondary Impacts

Cumulative and secondary impacts from this project would be minor because there is only a minor increase in allowable NO_x, SO_2, VOC, PM/PM_{10}, and CO emissions, and actual increases are expected to be extremely small. Additionally, as described in Section 7.F of this EA, the impact on the air resource in the area of the facility would be minor because the facility would be required to maintain compliance with other limitations affecting the overall emissions from the facility. Any cumulative or secondary impacts as a result of this project are considered to be minor.

Overall, any cumulative and secondary impacts from this project on the social and economic aspects of the human environment would be minor. The project is associated with an existing facility and would not change the culture or character of the area.

Recommendation: An Environmental Impact Statement (EIS) is not required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: The impacts resulting from this project would not be significant. The overall emissions increase would be minor.

Other groups or agencies contacted or which may have overlapping jurisdiction: None.

Individuals or groups contributing to this EA: Department of Environmental Quality – Air Resources Management Bureau, Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

EA prepared by: Skye Hatten
Date: September 1, 2009