



Montana Department of
ENVIRONMENTAL QUALITY

Brian Schweitzer, Governor

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September 13, 2011

Joe Lierow, Environmental Coordinator
ExxonMobil Refining & Supply Company
Billings Refinery
P.O. Box 1163
Billings, Montana 59103-1165

Dear Mr. Lierow:

Montana Air Quality Permit #1564-24 is deemed final as of September 13, 2011, by the Department of Environmental Quality (Department). This permit is for the addition of back up diesel engines. 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,

Vickie Walsh
Air Permitting Program Supervisor
Air Resources Management Bureau
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Ed Warner
Environmental Engineer
Air Resources Management Bureau
(406) 444-2467

VW: EW
Enclosures

**DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Air Resources Management Bureau
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FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued To: ExxonMobil

Montana Air Quality Permit number: 1564-24

Preliminary Determination Issued: 8/2/11

Department Decision Issued: 8/26/11

Permit Final: 9/13/11

1. *Legal Description of Site:* southern half of Section 24 and the northern half of Section 25, Township 1 North, Range 26 East, in Yellowstone County, Montana.
2. *Description of Project:* ExxonMobil proposes to add the following portable diesel-fired engines that are part of three independent projects at the facility:
 - Project #1: Two (2) portable emergency backup diesel engines not to exceed 500-hp each and limited to 1,500 hours per year each. These engines are likely to drive either air compressors or electric generators and would be used as emergency backup engines to existing electrical equipment.
 - Project #2: Three (3) portable remediation activity diesel engines not to exceed 250-hp each. These engines would not have restrictions on the number of hours of operation per year and would likely drive either air compressors or other equipment used for remediation projects.
 - Project #3: Miscellaneous portable diesel engines not to exceed 500-hp each and limited to 2,100,000 hp-hrs. Hp-hrs is equal to an engine's maximum rated hp multiplied by its actual hours of operation. The sum of the hp-hrs from each engine in Project #3 would be limited to 2,100,000-hp-hrs. These portable limited-use engines would likely drive either air compressors or electrical generators on an as-needed basis.

All of the proposed engines would have an EPA certification of Tier 3 or higher.

3. *Objectives of Project:* The objectives of this project are to allow ExxonMobil to use portable diesel engines as backup equipment, remediation equipment, and other miscellaneous equipment at the facility.
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 air quality preconstruction permit to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because ExxonMobil has 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 included in MAQP #1564-24.

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 are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do 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
- B. Water Quality, Quantity and Distribution
- C. Geology and Soil Quality, Stability and Moisture
- D. Vegetation Cover, Quantity, and Quality

The proposed project would have a minor affect in these areas because the additional equipment would result in a minor increase in facility emissions. These increased emissions could result in increased pollutant deposition in the surrounding area which may result in a minor impact in the areas referred to in Sections 7.A-D of this EA. However, the emissions increases fall below significance levels identified within the rules associated with the Prevention of Significant Deterioration (PSD) permitting program. The Department has determined that any impacts would be minor due to the dispersion characteristics of the pollutants, the relatively low level of potential emissions, and conditions that would be placed in MAQP #1564-24.

- E. Aesthetics

The engines would be visible and would therefore have a minor impact on the aesthetics. The facility is an existing industrial source, so the engines would have only a minor impact on the overall aesthetics.

F. Air Quality

The proposed project would result in an increase in emissions of air pollutants. However, the emissions increases fall below significance levels identified within the rules associated with PSD. MAQP #1564-24 would contain conditions limiting the engine operations and requiring that they meet or exceed EPA Tier 3 emission standards. ExxonMobil would be required to maintain compliance with the Billings/Laurel SO₂ State Implementation Plan (SIP), current permit conditions, and state and federal ambient air quality standards.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department has contacted the Natural Resource Information System – Montana Natural Heritage Program during previous permitting activities at this facility 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). 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 expected to have minor impacts to terrestrial and aquatic life and/or their habitat based on minor increases in facility emissions; 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 Resource of Water, Air and Energy

This project would have no impact on resources of water and energy. There would be no discharges to ground or surface waters. The diesel generators would not require any energy resources because they would power themselves. No utility upgrades would be required for this project. The engines would have a minor impact on air resources because they would be a source of air pollutant emissions. MAQP #1564-24 would have conditions and limitations that would ensure that this impact would be minor.

I. Historical and Archaeological Sites

In an effort to identify any historical and archaeological sites near the proposed project area, the Department contacted the Montana Historical Society, State Historic Preservation Office (SHPO) during previous projects. According to SHPO records, there have not been any previously recorded historic or archaeological sites within the proposed area. This project would occur within the boundaries of a previously disturbed industrial site. No new land would be disturbed for this project. The Department has determined that there would be no impact to historical or archaeological sites.

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, SO₂, VOC, PM/PM₁₀, and CO emissions. 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 proposed project could have a minor impact on local and state tax base and revenue because several of the proposed engines would be rental units and tax revenue would be generated from the rental fees.

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 project would occur entirely within an existing industrial site. This 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 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 #1564-24.

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 SO₂ 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, SO₂, VOC, PM/PM₁₀/PM_{2.5}, and CO emissions. 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.

Recommendation: No Environmental Impact Statement (EIS) is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is for the operation of various diesel engines. MAQP #1564-24 includes conditions and limitations to ensure the facility will operate in compliance with all applicable rules and regulations. In addition, there are no significant impacts associated with this proposal.

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

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: Ed Warner
Date: July 21, 2011