



**DRAFT ENVIRONMENTAL ASSESSMENT  
for the proposed permit modification  
ExxonMobil Corporation  
Billings Refinery  
Billings, Montana**

**Hazardous Waste Section  
PO Box 200901  
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## ACRONYMS

ARM – Administrative Rules of Montana

CFR – Code of Federal Regulations

DEQ – Montana Department of Environmental Quality

EA – Environmental Assessment

EIS – Environmental Impact Statement

MCA – Montana Code Annotated

MEPA – Montana Environmental Policy Act

NELTU – New East Land Treatment Unit

OELTU – Old East Land Treatment Unit

Hazardous Waste Permit Modification Rules – 40 Code of Federal Regulations Part 270.42  
(Incorporated by Reference in ARM 17.53.1201)

# 1. NEED FOR PROPOSED ACTION

## 1.1 SUMMARY

This draft environmental assessment (Draft EA) was prepared, in accordance with the Montana Environmental Policy Act (MEPA), for a hazardous waste permit modification for the ExxonMobil Corporation refinery located in Billings, Montana (ExxonMobil Billings Refinery).

On January 19, 2021, the Department of Environmental Quality (DEQ) received a permit modification application from ExxonMobil Corporation (ExxonMobil). The purpose of the permit modification is to allow changes to the Old East Land Treatment Unit (OELTU) and the New East Land Treatment Unit (NELTU), and to allow construction of a railyard in the area (Proposed Action). Construction work includes leveling the area for track installation, which will require removal of soil within a portion of the OELTU and placing the excavated soil on the NELTU. Groundwater monitoring wells may also need to be relocated. The OELTU, NELTU, and proposed railyard location are shown in **Figure 1**. ExxonMobil conducted a public comment period for the permit modification request from January 22, 2021 to March 23, 2021. No comments were received. DEQ has prepared this Draft EA to assess the impacts of the hazardous waste permit modification.

## 1.2 LOCATION DESCRIPTION AND STUDY AREA

The ExxonMobil Billings Refinery is located at 700 ExxonMobil Road, Billings, Montana. The legal description is Section 25, Township 1 North, Range 26 East. LAT 45.8125; LONG 108.43389. Yellowstone County, Montana (**Figure 1**).

The Proposed Action encompasses approximately 35 acres east of the active portion of the refinery (**Figure 2**).

## 1.3 COMPLIANCE WITH MEPA

Under MEPA, set forth in ARM 17.4.601, Montana agencies are required to prepare an environmental review for state actions that may have an impact on the human environment. The Proposed Action is considered a state action that may have an impact on human health and the environment. Therefore, DEQ must prepare an environmental assessment. This Draft EA analyzes the Proposed Action and reasonable alternatives to the Proposed Action and discloses potential impacts that may result from such actions. DEQ will determine the need for additional environmental reviews based on consideration of the criteria set forth in ARM 17.4.608.



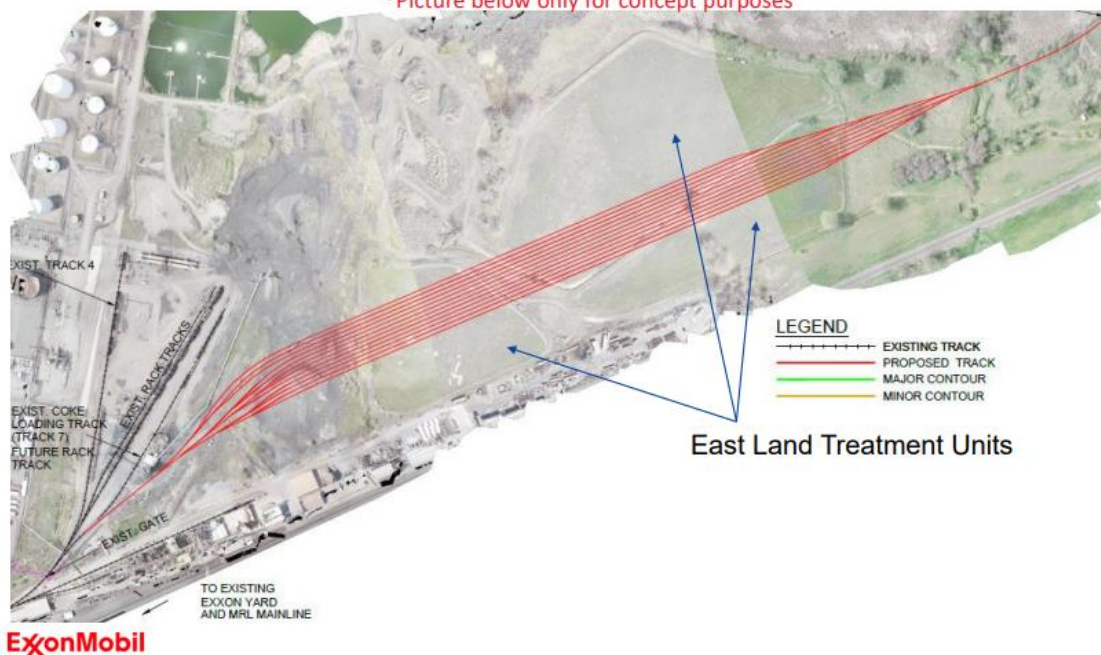


Figure 2: Proposed Railyard Site

## Conceptual Rails Project Map



\*Picture below only for concept purposes



### 1.4 MONTANA HAZARDOUS WASTE REGULATIONS

Rules administering hazardous waste management in Montana are set forth in the Administrative Rules of Montana (ARM), Title 17, Chapter 53, Sub-Chapters 1 through 12. Federal regulations for hazardous waste management are set forth in Title 40 of the Code of Federal Regulations (CFR), Parts 124 and 260 through 279, and are incorporated by reference in ARM. For ease of reading this document, when federal regulations under Title 40 of the CFR have been incorporated by referent into ARM, only the federal citation is used.

### 1.5 PUBLIC INVOLVEMENT

DEQ is releasing this Draft EA to present its initial findings described in *Section 4*. A 30-day public comment period begins upon release of the document. The public comment period ends on May 10, 2021. A notice of availability for the Draft EA was sent to interested parties. A public notice was published in the Billings Gazette. The public notice and Draft EA may be viewed at: <https://deg.mt.gov/public/publiccomment>. A hard copy of the Draft EA is available by contacting Ann Kron, DEQ, at 406-444-5824 or email at [akron@mt.gov](mailto:akron@mt.gov).

## 2. DESCRIPTION OF ALTERNATIVES

This Section describes the Proposed Action and No Action alternatives. MEPA requires the evaluation of reasonable alternatives to the Proposed Action. Reasonable alternatives are achievable under current technology and are economically feasible, as determined by the economic viability of similar projects with similar goals, conditions, and physical locations. Reasonable alternatives are determined without regard to the economic strength of the applicant, but may not include an alternative facility or an alternative to the proposed project itself.

According to ARM 17.4.609(3)(f), an environmental assessment (EA) must include reasonable alternatives whenever reasonable and prudent. DEQ has not considered any other alternatives to the Proposed Action because ExxonMobil's permit modification request and their operation and maintenance comply with the applicable laws and rules pertaining to hazardous waste permits in Montana.

### 2.1 NO ACTION ALTERNATIVE

Under the No Action Alternative, the permit modification would not be approved by DEQ. Therefore, the ExxonMobil would not be allowed to construct a railyard in their proposed location.

### 2.2 PROPOSED ACTION

ExxonMobil is requesting to modify their hazardous waste permit to allow changes to post-closure care requirements pertaining to their Old East and New East Land Treatment Units, including relocating groundwater monitoring wells, as described in *Section 1.1*.

## 3. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES BY RESOURCE

### 3.1 LOCATION DESCRIPTION AND STUDY AREA

The location description and study area are described in *Section 1.2* of this Draft EA. The study area includes land and resources in and around the Site. The affected environment is described in each subsequent section depending on the resource.

### 3.2 IMPACTS

**Tables 1 and 2** show a summary of the impacts of the No Action Alternative and the Proposed Action.

**Table 1. IMPACTS ON PHYSICAL AND BIOLOGICAL ENVIRONMENT**

<b>Resource</b>	<b>Alternative 1 :No Action</b>	<b>Alternative 2 :Proposed Action</b>
Air Quality	No impact.	Minor impact. Dust may be present during construction of the railyard. (See Section 3.2.1)
Water Quality, Quantity, and Distribution	No impact.	No impact. Groundwater will continue to be closely monitored to ensure groundwater is not further degraded on site, as required by the hazardous waste permit.
Geology, and Soil Quality, Stability, and Moisture	No impact.	Minor impact. Soil will be moved within the site, and compacted to allow track laydown. (See Section 3.2.2)
Historical and Archaeological Sites	No impact.	No impact. Historical and archaeological sites are not present at the site.
Aesthetics and Noise	No impact.	Minor impact. Railyard activity and railcar storage would have a minor impact. (See Section 3.2.3)
Terrestrial and Aquatic Life and Habitats	No impact.	Minor impact. Wildlife tend to avoid railyard sites due to human scent and activities and would relocate. (See Section 3.2.4)
Vegetation Cover, Quantity, and Quality	No impact.	Minor impact. Most of the vegetation would be replaced with rail track and gravel. (See Section 3.2.5)
Unique, Endangered, Fragile, or Limited Environmental Resources	No impact.	No impacts. The site is currently zoned industrial, and the Proposed Action will not place further demand on environmental resources.
Demands on Environmental Resource of Water, Air, or Energy	No impact.	Minor impact. Movement of railcars within the railyard would have a minor impact on energy. (See Section 3.2.6)
Sage Grouse Executive Order	No impact.	No impacts. The site is not located in core, general, or connectivity sage grouse habitat, as designated by the Sage Grouse Habitat Conservation Program.

### **3.2.1 AIR QUALITY**

Impacts to air quality are anticipated to be minor during construction of the railyard. The hazardous waste permit requires control of dust and odor. After construction, a protective cover will be established which will minimize airborne dispersal of soil.

### **3.2.2 GEOLOGY AND SOIL QUALITY, STABILITY, AND MOISTURE**

In order to construct the railyard, soil must be moved within the construction area to ensure the ground is level for laying down rail track. Any soil moved within the construction area that has visible contamination must be segregated and disposed off-site. Additional clean soil may also need to be brought in from outside of the construction area. Soil must also be compacted. Soil will then be covered with rail track, gravel, and/or vegetation to prevent windblown soil dispersal. The impact to soil quality, stability, and moisture is anticipated to be minor.

### **3.2.3 AESTHETICS AND NOISE**

Construction of a railyard and storage of railcars will have a minor effect on aesthetics, and activity from operation of a railyard will have a minor effect on noise. The area is zoned industrial with no residential housing adjacent to the site. The site is located directly east of the active portion of the refinery. Effects of aesthetics from rail storage and the increase in noise would be minimal.

### **3.2.4 TERRESTRIAL AND AQUATIC LIFE AND HABITATS**

Impacts to wildlife and habitats from the Proposed Action would be minor. Transient wildlife tends to avoid railyard sites due to human scent and activities. Montana Fish, Wildlife & Parks (FWP) manages the overall wildlife populations of the region. Railyard activities would not impact nearby waters based on requirements for berms and elimination of runoff.

ExxonMobil does not plan to expand the railyard beyond their boundaries. The project site is bound to the west by the active refinery; to the north by refinery retention ponds, green space, and the Yellowstone river; to the east by green space; and to the south by industrial commercial facilities and the Interstate-90 corridor. Adequate similar habitat exists in the region to accommodate any species forced to relocate due to the Proposed Action.

### **3.2.5 VEGETATION COVER, QUANTITY, AND QUALITY**

A protective cover of the hazardous waste treatment areas is required in ExxonMobil's hazardous waste permit. Currently, the protective cover is a vegetative cap. The Proposed Action would modify the protective cover to be rail track, gravel, and/or vegetation. This would cause a reduction in vegetative cover, while still meeting permit requirements for a protective cap; therefore, impact would be minor.

### **3.2.6 DEMANDS ON ENVIRONMENTAL RESOURCE OF WATER, AIR, AND ENERGY**

Movement of rail cars within the railyard would result in a minor increase in demands on energy. Water and air are not expected to be impacted.



**TABLE 2. IMPACTS ON SOCIAL, ECONOMIC, AND CULTURAL ENVIRONMENT**

<b>Resource</b>	<b>Alternative 1: No Action</b>	<b>Alternative 2 : Proposed Action</b>
Social Structures and Mores	No impact.	No impact. The site is currently zoned industrial and the Proposed Action is not expected to affect the community's social structures.
Cultural Uniqueness and Diversity	No impact.	No impact. The site is currently zoned industrial and structures. Areas of cultural and/or diversity significance are not present.
Local and State Tax Base and Tax Revenue	No impact	No impacts. The local and state tax base and tax revenue will not increase from those generated by the site's current use.
Agricultural or Industrial Production	No impact.	Minor impacts. Construction of a railyard may have a minor benefit to industrial production in the area due to railcar availability. (See Section 3.2.7)
Human Health & Safety	No impact.	Minor impact. Construction and operation/maintenance of a railyard would have a minor impact on worker safety and health. (See Section 3.2.8)
Access to Recreational and Wilderness Activities	No impact.	No impacts. Recreation and wilderness activities are not present at the site.
Quantity and Distribution of Employment	No impact.	Minor impact. A minor increase in employment may be present during construction and operation/maintenance of the railyard. (See Section 3.2.9)
Distribution of Population	No impact.	No impacts. The site is currently zoned industrial with no residential property adjacent to the area.
Demands for Government Services	Minor impact.	Minor impact. DEQ would continue to review submittals and conduct inspections of the site. (See Section 3.2.10)
Industrial and Commercial Activity	No impact.	Minor impacts. There would be minimal increase in industrial activity for railyard operation/maintenance. (See Section 3.2.11)
Local Environmental Plans and Goals	Minor impact.	Minor impacts. The hazardous waste permit will continue to require institutional controls at the site. (See Section 3.2.12)

### **3.2.7 AGRICULTURAL OR INDUSTRIAL PRODUCTION**

The additional of a railyard at the refinery may allow an increase in industrial production due to the accessibility of railcars. This may provide a minor beneficial impact to industrial production.

### **3.2.8 HUMAN HEALTH AND SAFETY**

Occupational Safety and Health Administration (OSHA) regulations must be followed to ensure worker safety while on site. Activities associated with construction and operation/maintenance of a railyard will have a minor impact on worker safety.

### **3.2.9 QUANTITY AND DISTRIBUTION OF EMPLOYMENT**

A minor increase in employment quantity will occur during construction and operation/maintenance of the railyard. This will have a minor beneficial impact on local employment.

### **3.2.10 DEMANDS FOR GOVERNMENTAL SERVICES**

The hazardous waste permit requires submittal of work plans, reports, and completion certification documentation for the Proposed Action. These submittals would be reviewed by DEQ. In addition, staff of DEQ's Hazardous Waste Section would conduct inspections of the activities associated with the Proposed Action. Therefore, a minor impact to government services is anticipated.

### **3.2.11 INDUSTRIAL AND COMMERCIAL ACTIVITY**

Construction and operation/maintenance of the railyard will have a minor increase in the industrial and commercial activity at the site. Railcars will be more readily available for transportation of goods in the area.

### **3.2.12 LOCAL ENVIRONMENTAL PLANS AND GOALS**

The hazardous waste permit requires ExxonMobil to maintain institutional measures to control or prevent present and future on-site use and access to contaminated soil and groundwater. Institutional controls prohibit current and future use of groundwater and restrict land use of contaminated areas on the site. Maintaining the current institutional controls are expected to have minor impacts on local environmental plans and goals.

## **3.3 REGULATORY RESTRICTIONS (TAKINGS)**

MEPA requires state agencies to evaluate regulatory restrictions proposed for imposition on private property rights because of actions by state agencies, including alternatives that reduce, minimize, or eliminate the regulation of private property (Section 75-1-201(1)(b)(iii), MCA). Alternatives and mitigation measures required by federal or state laws and regulations to meet minimum environmental standards, as well as actions proposed by or consented to by the applicant, are not subject to a regulatory restrictions analysis.

No aspect of the alternatives under consideration would restrict the use of private lands or regulate their use beyond the permitting process prescribed by DEQ's hazardous waste section. The conditions that would be imposed by DEQ in approving the permit modification request would be designed to ensure conformance of the Proposed Action to minimum environmental standards or to uphold criteria proposed and/or agreed to by ExxonMobil. Thus, no further DEQ analysis is required beyond the ExxonMobil Permit Modification Request review for protection of human health and the environment.

### **3.4 CUMULATIVE IMPACTS**

Cumulative impacts are the collective impacts on the human environment when a specific action is considered in conjunction with other past, present, and future actions by location and type. Cumulative impact analysis under MEPA requires an agency to consider all past and present state and non-state actions. Related future actions must also be considered when these actions are under concurrent consideration by any state agency through pre-impact statement studies, separate impact statement evaluation, or permit processing procedures. Cumulative impact analyses help to determine whether an action, combined with other activities, would result in significant impacts.

The Site is currently two regulated land treatment units, and industrial greenspace. The area is zoned industrial with no residential homes adjacent to the site. The cumulative impacts of the Proposed Action are not present.

## **4. FINDINGS**

The depth and breadth of the Proposed Action is typical of a large industrial facility. DEQ's analysis of potential impacts from the Proposed Action are sufficient and appropriate for the complexity, environmental sensitivity, degree of uncertainty, and mitigating factors provided by the Hazardous Waste Rules for each resource considered.

To determine whether preparation of an EIS is necessary, DEQ is required to assess the significance of impacts associated with the Proposed Action. The criteria that DEQ is required to consider in making this determination are set forth in ARM 17.4.608(1)(a) through (g):

- (a) The severity, duration, geographic extent, and frequency of occurrence of the impact;
- (b) The probability that the impact will occur if the Proposed Action occurs; or conversely, reasonable assurance in keeping with the potential severity of an impact that the impact will not occur;
- (c) Growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution of the impact to cumulative impacts;
- (d) The quantity and quality of each environmental resource or value that would be affected, including the uniqueness and fragility of those resources or values;
- (e) The importance to the state and to society of each environmental resource or value that would be affected;

- (f) Any precedent that would be set because of an impact of the Proposed Action that would commit DEQ to future actions with significant impacts or a decision in principle about such future actions; and
- (g) Potential conflict with local, state, or federal laws, requirements, or formal plans.

The Site's location is described in *Section 1.4* of this Draft EA, and includes approximately 35 acres of the ExxonMobil Refinery, Billings, Montana. ExxonMobil operations are required to continue to comply with the hazardous waste permit, and DEQ site inspections would continue indefinitely.

The Site is not within a sage grouse core habitat, general habitat, or connectivity area. It has no special agricultural designation. Operations would not adversely affect any threatened or endangered species.

The Proposed Action is not expected to impact surface water resources. The Proposed Action is not expected to impact groundwater.

DEQ has not identified any growth-inducing or growth-inhibiting aspects of the Proposed Action. DEQ's approval is not a decision regarding, in principle, any future actions that DEQ may perform. Furthermore, approval does not set any precedent or commit DEQ to any future action. Finally, the Proposed Action does not conflict with any local, state, or federal laws, requirements, or formal plans.

The Proposed Action would meet the requirements of the Hazardous Waste Rules, the Clean Air Act of Montana, the Montana Water Quality Act, ARM, and county ordinances. Based on a consideration of the criteria set forth in 40 CFR Part 270, DEQ has determined that ExxonMobil's request to modify their hazardous waste permit to allow construction of a railyard is not predicted to significantly impact the quality of the human environment. Therefore, preparation of an EA is the appropriate level of review under MEPA.

**Draft EA prepared by:**

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