



Montana Department of  
**ENVIRONMENTAL QUALITY**

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May 24, 2011

Mr. James Rose, West Coast / Rockies Manager  
Exxon Mobil Corporation (Billings)  
607 Exxon Road  
Billings, Montana 59101

Dear Mr. Rose:

Air Quality Permit #2967-01 is deemed final as of May 24, 2011, by the Department of Environmental Quality (Department). This permit is for Exxon Mobil Corporation (Billings) for the Billings Bulk Terminal. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

Conditions: See attached.

For the Department,

Vickie Walsh  
Air Permitting Program Supervisor  
Air Resources Management Bureau  
(406) 444-9741

Skye Hatten, P.E.  
Environmental Engineer  
Air Resources Management Bureau  
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VW:SH  
Enclosure

Montana Department of Environmental Quality  
Permitting and Compliance Division

Montana Air Quality Permit #2967-01

Exxon Mobil Corporation (Billings)  
607 Exxon Road  
Billings, Montana 59101

May 24, 2011



## MONTANA AIR QUALITY PERMIT

Issued to: Exxon Mobil Corporation  
Billings Bulk Terminal  
607 Exxon Road  
Billings, MT, 59101

MAQP: #2967-01  
Application Complete: February 24, 2011  
Preliminary Determination Issued: April 5, 2011  
Department Decision Issued: May 6, 2011  
Permit Final: May 24, 2011  
AFS #: 111-0012

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Exxon Mobil Corporation (ExxonMobil), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

### SECTION I: Permitted Facilities

#### A. Plant Location

ExxonMobil operates a bulk marketing distribution terminal, located in the S½ of Section 24 and N½ of Section 25, Township 1 North, Range 26 East, which is approximately two miles East of Billings in Yellowstone County. The facility is adjacent to and South the ExxonMobil Refinery at 700 ExxonMobil Road. A complete listing of the emissions points is contained in Section I.B of the Permit Analysis.

#### B. Current Permit Action

On February 16, 2011 and February 24, 2011, the Montana Department of Environmental Quality (Department) received elements to fulfill a complete permit modification application from ExxonMobil. The application proposed modifications of piping and related components at the truck loading rack for the purpose of blending ethanol with gasoline for truck loadout and for loading denatured ethanol to tanker trucks. The proposed project would add pipe fittings, flanges, pumps, and other piping components. Changes to the permit include the addition of ethanol handling capabilities within existing permit conditions. The current permit action modifies MAQP #2967-00 to include the addition of ethanol handling capabilities within existing permit conditions as well as updates the rule references, permit format, and the emissions inventory.

### SECTION II: Conditions and Limitations

#### A. Facility Wide

1. ExxonMobil shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any sources installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
2. ExxonMobil shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).

3. ExxonMobil shall treat all unpaved portions of the haul roads, access roads, parking lots, or general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.4 (ARM 17.8.749).
4. ExxonMobil shall comply with all applicable standards and limitations, and the reporting, recordkeeping and notification requirements contained in 40 CFR 60, Subpart XX, Standards of Performance for Bulk Gasoline Terminals (ARM 17.8.340 and 40 CFR 60, Subpart XX).
5. ExxonMobil shall comply with all applicable standards, limitations, reporting, recordkeeping, and notification requirements of ARM 17.8.342, as specified in 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants, Subpart A and Subpart R (ARM 17.8.342, ARM 17.8.752, and 40 CFR 63, Subpart A and Subpart R):
  - a. Subpart A - General Provisions applies to all equipment or facilities subject to a NESHAP for source categories subpart as listed below.
  - b. Subpart R - National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations) shall apply to, but not be limited to, the product loading rack and vapor combustion unit.

#### B. Loading Rack

1. The total Volatile Organic Compound (VOC) emissions to the atmosphere from the vapor recovery unit (VRU) due to loading liquid product into cargo tanks shall not exceed 10.0 milligrams per liter (mg/L) of gasoline and/or ethanol loaded (ARM 17.8.342 and ARM 17.8.749).
2. ExxonMobil shall be limited to a maximum of 230,000,000 gallons of gasoline and/or ethanol throughput for the loadout operation during any rolling twelve (12) month period (ARM 17.8.749).
3. ExxonMobil shall be limited to a maximum of 130,000,000 gallons of distillate products, including jet, avgas and additives, throughput for the loadout operation during any rolling twelve (12) month period (ARM 17.8.749).
4. The product loading rack shall be operated and maintained as follows:
  - a. ExxonMobil's product loading rack shall be equipped with a vapor collection system designed to collect the organic compound vapors displaced from tank trucks during gasoline and/or ethanol product loading (ARM 17.8.342).
  - b. ExxonMobil's collected gasoline and/or ethanol vapors shall be routed to the VRU at all times (ARM 17.8.749).

- c. The vapor collection and liquid loading equipment shall be designed and operated to prevent gauge pressure in the gasoline and/or ethanol tank truck from exceeding 4,500 Pascals (Pa) (450 millimeters [mm] of water) during product loading. This level shall not be exceeded when measured by the procedures specified in the test methods and procedures in 40 CFR 60.503(d) (ARM 17.8.342).
- d. No pressure-vacuum vent in the permitted terminal's vapor collection system shall begin to open at a system pressure less than 4,500 Pa (450 mm of water) (ARM 17.8.342).
- e. The vapor collection system shall be designed to prevent any VOC vapors collected at one loading position from passing to another loading position (ARM 17.8.342).
- f. Loadings of liquid products into gasoline (including (incl.) ethanol) cargo tanks shall be limited to vapor-tight gasoline (incl. ethanol) cargo tanks using the following procedures (ARM 17.8.342):
  - i. ExxonMobil shall obtain annual vapor tightness documentation described in the test methods and procedures in 40 CFR 63.425(e) for each gasoline (incl. ethanol) cargo tank that is to be loaded at the product loading rack;
  - ii. ExxonMobil shall require the cargo tank identification number to be recorded as each gasoline (incl. ethanol) cargo tank is loaded at the terminal;
  - iii. ExxonMobil shall cross-check each tank identification number obtained during product loading with the file of tank vapor tightness documentation within 2 weeks after the corresponding cargo tank is loaded;
  - iv. ExxonMobil shall notify the owner or operator of each non-vapor-tight cargo tank loaded at the product loading rack within 3 weeks after the loading has occurred; and
  - v. ExxonMobil shall take the necessary steps to ensure that any non-vapor-tight cargo tank will not be reloaded at the product loading rack until vapor tightness documentation for that cargo tank is obtained which documents that:
    - 1. The gasoline (incl. ethanol) cargo tank meets the applicable test requirements in 40 CFR 63.425(e) to this permit;
    - 2. For each gasoline (incl. ethanol) cargo tank failing the test requirements in 40 CFR 63.425(f) or (g), the gasoline (incl. ethanol) cargo tank must either:

- a. Before the repair work is performed on the cargo tank, meet the test requirements in 40 CFR 63.425 (g) or (h), or
  - b. After repair work is performed on the cargo tank before or during the tests in 40 CFR 63.425 (g) or (h), subsequently passes, the annual certification test described in 40 CFR 63.425(e).
- g. ExxonMobil shall ensure that loadings of gasoline (incl. ethanol) cargo tanks at the product loading rack are made only into cargo tanks equipped with vapor collection equipment that is compatible with the terminal's vapor collection system (ARM 17.8.342).
- h. ExxonMobil shall ensure that the terminal's and the cargo tank's vapor recovery systems are connected during each loading of a gasoline (incl. ethanol) cargo tank at the product loading rack (ARM 17.8.342).
- i. Loading of cargo tanks shall be restricted to the use of submerged fill and dedicated normal service (ARM 17.8.749).
- j. ExxonMobil shall perform a monthly leak inspection of all equipment in gasoline (incl. ethanol) service. The inspection must include, but is not limited to, all valves, flanges, pump seals, and open-ended lines. For purposes of this inspection, detection methods incorporating sight, sound, or smell are acceptable. Each piece of equipment shall be inspected during the loading of a gasoline (incl. ethanol) cargo tank (ARM 17.8.342).
- k. A log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline (incl. ethanol) service at the facility (ARM 17.8.342).
- l. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak, except as provided in m below (ARM 17.8.342).
- m. Delay of repair of leaking equipment will be allowed upon a demonstration to the Department that repair within 15 days is not feasible. The owner or operator shall provide the reason(s) a delay is needed and the date by which each repair is expected to be completed (ARM 17.8.342).
- n. ExxonMobil shall not allow gasoline and/or ethanol to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following (ARM 17.8.342):

- i. Minimize gasoline/ethanol spills;
  - ii. Clean up spills as expeditiously as practicable;
  - iii. Cover all open gasoline/ethanol containers with a gasketed seal when not in use; and
  - iv. Minimize gasoline/ethanol sent to open waste collection systems that collect and transport gasoline/ethanol to reclamation and recycling devices, such as oil/water separators.
5. ExxonMobil shall implement and maintain a leak inspection, recording, and repair program to minimize fugitive VOC emissions from piping components (ARM 17.8.752).

#### C. Monitoring and Testing Requirements

1. ExxonMobil shall meet the requirements of all applicable testing and procedures of ARM 17.8.342, which adopts 40 CFR 63, MACT, Subpart R, NESHAPs for Gasoline Distribution Facilities. This shall apply to, but not be limited to, the bulk gasoline and distillate truck loading rack, the vapor processing system, and all gasoline equipment (ARM 17.8.342 and 40 CFR 63, Subpart R).
2. Compliance with the product loading rack VRU VOC emissions limitation contained in Section II.B.1 shall be demonstrated by utilizing data taken from ExxonMobil's VOC continuous emissions monitoring system (CEMS) on the VRU (ARM 17.8.342 and 40 CFR 63, Subpart R).
3. CEMS are to be in operation at all times when the emission units are operating, except for quality assurance and control checks, breakdowns and repairs (ARM 17.8.749).
4. All gaseous CEMS shall be required to comply with quality assurance/quality control procedures in 40 CFR 60, Appendix F (ARM 17.8.749).
5. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
6. The Department may require further testing (ARM 17.8.105).

#### D. Operational Reporting Requirements

1. ExxonMobil shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.

Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used to calculate operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

2. ExxonMobil shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include *the addition of a new emissions unit*, change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation. The notice must be submitted to the Department, in writing, 10 days prior to startup or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).
3. All records compiled in accordance with this permit must be maintained by ExxonMobil as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).
4. ExxonMobil shall document, by month, the gasoline (incl. ethanol) and distillate throughput for the truck loadout operation. By the 25<sup>th</sup> day of each month, ExxonMobil shall total the gasoline (incl. ethanol) and distillate throughput for the truck loadout operation for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitations in Sections II.B.2 and II.B.3. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
5. ExxonMobil shall document the total new VOC fugitive emissions as monitored within the leak inspection, recording, and repair program required under Section II.B.5. The information shall be maintained on site (ARM 17.8.749).

E. Additional Reporting Requirements - NSPS, NESHAP, and MACT

1. ExxonMobil shall keep all records and furnish all reports to the Department as required by 40 CFR 63, Subpart R, NESHAPs for Gasoline Distribution Facilities. These reports shall include information described in 40 CFR 63.424, 63.427 and 63.428 (ARM 17.8.342 and 40 CFR 63, Subpart R).

F. Notification

ExxonMobil shall provide the Department with written notification of the following dates within the specified time periods:

1. Pretest information forms must be completed and received by the Department no later than 25 working days prior to any proposed test date, according to the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

2. The Department must be notified of any proposed test date 10 working days before that date according to the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

### SECTION III: General Conditions

- A. Inspection – ExxonMobil shall allow the Department’s representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (continuous emission monitors (CEMS), continuous emission rate monitor system (CERMS)) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver – The permit and the terms, conditions, and matters stated herein shall be deemed accepted if ExxonMobil fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving ExxonMobil of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties, or other enforcement action as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals – Any person or persons jointly or severally adversely affected by the Department’s decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department’s decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department’s decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department’s decision on the application is final 16 days after the Department’s decision is made.
- F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy of the MAQP shall be made available for inspection by the Department at the location of the source.
- G. Permit Fee – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by ExxonMobil may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.

- H. Duration of Permit – Construction or installation must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).

Montana Air Quality Permit Analysis  
 Exxon Mobil Corporation  
 Billings Bulk Terminal  
 Montana Air Quality Permit (MAQP) #2967-01

I. Introduction/ Process Description

A. Site Location

Exxon Mobil Corporation (ExxonMobil) operates a bulk marketing distribution terminal which stores and transfers petroleum products (gasoline and distillate) received from the ExxonMobil's Billings Refinery in addition to ethanol and distributes them to regional markets via tank truck. This facility is located in Section 25, Township 1 North, Range 26 East, which is approximately two miles East of Billings in Yellowstone County. The facility is adjacent to and South of ExxonMobil's Refinery at 700 ExxonMobil Road.

B. Existing Source & Process Description

<u>Source</u>	<u>Install.</u>	<u>Product Stored, Capacity, Type of Tank</u>
Loading Rack	pre-1968-	Vapor Recovery Unit (VRU) installed 1994
Tank 201	1985	Additive, 360 barrels (bbls), Cone Fixed Roof
Tank 202	1985	Additive, 360 bbls, Cone Fixed Roof
Tank 203	1981	Additive, 140 bbls, Horizontal
Tank 204	NA	Interface, 70 bbls, Horizontal
Tank 206	1992	Additive, 100 bbls, Horizontal
Tank 208	NA	Additive, 70 bbls, Horizontal
Tank 209	NA	Additive, 70 bbls, Horizontal

Fugitive Emissions\*

Miscellaneous Emissions\*

\* See Section III - emission inventory

Products manufactured in the refinery are pumped to the terminal for storage or loaded directly into cargo tank trucks for delivery to the retail point. Products loaded at the facility include motor gasoline (premium and regular unleaded and leaded regular), two grades of aviation gasoline, jet fuel, several different grades of diesel, heating oil, and interface. Interface consists of the mixture of water and hydrocarbons that results from draining any water from the storage tanks and any product drained from the cargo tanks prior to being loaded at the loading rack. Denatured ethanol, stored at the ExxonMobil Corporation Billings Refinery, is also loaded at the facility by way of transportation through existing piping to the terminal. The terminal is capable of either loading pure denatured ethanol or blending this ethanol with gasoline.

Several additives are added at the point of loading to enhance certain desirable product characteristics. Additive arrives at the terminal via rail or truck. Additive destined for use at other ExxonMobil Montana terminals is brought by railcar, stored at Billings and loaded directly into cargo tank trucks for over the road transport.

Loading is accomplished at three lanes at the loading rack. Product is pumped from storage on the terminal's property or directly from refinery storage. All of the distillate products (jet, diesel, and heating oil) are loaded directly from refinery storage.

The loading rack is controlled by a John Zink Adsorption/Absorption Gasoline Vapor Recovery Unit. The effective hydrocarbon vapor recovery system utilizes the processes of physical adsorption in combination with absorption to recover gasoline vapors and return the recovered product into storage. ExxonMobil installed the VRU in 1994 which has a performance guarantee for hydrocarbon emissions not to exceed 10 milligrams per liter (mg/l) of product loaded at the loading rack for any consecutive (6) hour period during normal operations.

Loading occurs by each cargo tank truck getting a “permissive” based on information about individual tank truck tightness testing maintained in an on-site electronic database. Without the permissive the truck cannot be loaded without intervention by an ExxonMobil employee. Once a permissive has been received, this process only requires seconds, the vapor recovery system will be engaged and the normal loading will commence. This system was installed to facilitate Clean Air Act, NSPS, DOT and state tightness certification requirements.

### C. Permit History

The terminal has not held any air quality permits from the Department of Environmental Quality (Department) for the loading rack because it was built prior to 1968 and did not trigger any permitting requirements until the operating permit program was initiated. In 1993, both the Department and Yellowstone County received a letter requesting a permit determination for adding a loading arm and a vapor combustion unit. The Department determined that a permit was unnecessary as did Yellowstone County.

The terminal is defined as a major source because the loading rack has a potential to emit in excess of 100 tons per year (tpy) of VOCs. ExxonMobil requested to separate the terminal from the refinery for Title V permitting requirements. The Department reviewed ExxonMobil’s request and agreed to separate the two facilities because the SIC codes for refineries and bulk terminals are different and the refinery and bulk terminal are not under common control. The terminal is located contiguous and adjacent to the refinery and under common ownership, however, the SIC codes for the refinery and the bulk terminal are different. The refinery SIC code is 2911 (petroleum refining) and the bulk terminal code is 5171 (petroleum and bulk stations and terminals). ExxonMobil is a publicly held corporation and, as such, has common ownership but the corporate structure is designed such that common control is different for the two facilities.

ExxonMobil applied for Montana Air Quality Permit (MAQP) #2967-00 to establish federally enforceable limits for the product loading rack in order to reduce the potential to emit of the facility and synthetic minor out of the operating permit program.

Previously, this terminal was not required to obtain a Montana Air Quality Permit. At the time of issuance, it was noted that although the terminal may be issued a synthetic minor permit, it may later have to apply for an operating permit if EPA determines facilities subject to MACT standards (40 CFR 63 Subpart R - National Emission Standards for Gasoline Distribution Facilities) are required to obtain an operating permit.

Following further evaluation, the Department determined the facility was not appropriately permitted under the synthetic minor regulations. The Department determined the Billings Terminal meets the definition of a “support facility” to the separately permitted ExxonMobil Refinery (OP1564). As a support facility to a major source, ExxonMobil was required to obtain a Title V Operating Permit. **Operating Permit #OP2967-00** was issued final on May 6, 2008.

D. Current Permit Action

On February 16, 2011 and February 24, 2011, the Department received elements to fulfill a complete permit modification application from ExxonMobil. The application proposed modifications of piping and related components at the truck loading rack for the purpose of blending ethanol with gasoline for truck loadout and for loading denatured ethanol to tanker trucks. The proposed project would add pipe fittings, flanges, pumps, and other piping components. Changes to the permit include the addition of ethanol handling capabilities within existing permit conditions. The current permit action modifies MAQP #2967-00 to include the addition of ethanol handling capabilities within existing permit conditions as well as updates the rule references, permit format, and the emissions inventory.

**MAQP #2967-01** replaces MAQP #2967-00.

E. Response to Public Comments

<b>Person/Group Commenting</b>	<b>Permit Reference</b>	<b>Comment</b>	<b>Department Response</b>
ExxonMobil	Section II.C(2)	The condition as stated in the permit includes the requirement to conduct initial source testing “within 180 days of final permit issuance of MAQP #2967-00 and every four years after the initial test.” A VOC CEMS is installed on the VRU per 40 CFR 63, Subpart R. ExxonMobil requested to have this requirement replaced with a VOC CEMS requirement with reflection on the requirement of annual RATA testing.	The Department has removed the “testing once every four years” requirement and replaced it with a requirement for VOC CEMS on the VRU as required under 40 CFR 63, Subpart R. Additionally, the Department added subsequent conditions pertaining to operation and quality assurance/quality control of the CEMS (i.e. RATA per 40 CFR 60, Appendix F).
ExxonMobil	Permit Analysis, Section B, Third Paragraph	ExxonMobil requested the process description be updated to reflect “three lanes at the loading rack” instead of “two.”	The Department has made the change as requested.
ExxonMobil	Permit Analysis, Section B, Fifth Paragraph	ExxonMobil requested replacement of “Loading occurs by each cargo tank truck getting a “permissive” based on information about tightness certification contained in an on-board microchip.” with “Loading occurs by each cargo tank truck getting a “permissive” based on information about individual tank truck tightness testing maintained in an on-site electronic database.”	The Department has made the change as requested.

F. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT)/Reasonably Available Control Technology (RACT) determinations, air quality impacts, and environmental assessments, is included in the analysis associated with each change to the permit.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations which apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department. Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

A. ARM 17.8, Subchapter 1 – General Provisions, including but not limited to:

1. ARM 17.8.101 Definitions. This section includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emissions of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment, including instruments and sensing devices, and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

ExxonMobil shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Testing Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by phone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation, or to continue for a period greater than 4 hours.
5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

B. ARM 17.8, Subchapter 2 – Ambient Air Quality, including, but not limited to the following:

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
9. ARM 17.8.222 Ambient Air Quality Standard for Lead
10. ARM 17.8.223 Ambient Air Quality Standard for PM<sub>10</sub>

ExxonMobil must maintain compliance with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 – Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged to an outdoor atmosphere from any source installed after Nov. 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, ExxonMobil shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.
4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.
5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this rule.
6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device as described in (1) of this rule.

7. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). ExxonMobil is considered an NSPS affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts.

- a. 40 CFR 60, Subpart A – General Provisions apply to all equipment or facilities subject to an NSPS Subpart as listed below:
- b. 40 CFR 60, Subpart XX – Standard of Performance for Bulk Gasoline Terminals applies to the total of all the loading racks at a bulk gasoline terminal which deliver liquid product into gasoline tank trucks, the construction or modification of which is commenced after December 17, 1980. Because the gasoline and ethanol to be loaded at this facility meet the definition triggering applicability to 40 CFR 60, Subpart XX, and may be pumped through any of the loading racks and arms, Subpart XX applies to this facility.

40 CFR 60, Subpart K – Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and prior to May 19, 1978 does not apply as the storage vessels included in this permit do not meet the applicability requirements.

40 CFR 60, Subpart Ka - Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and prior to July 23, 1984 does not apply as the storage vessels included in this permit do not meet the applicability requirements.

40 CFR 60, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984 does not apply as the storage vessels included in this permit do not meet the applicability requirements. Gasoline (incl. ethanol) storage vessels applicable to 40 CFR 60, Subpart Kb, are included under the refinery permit (MAQP #1564).

8. ARM 17.8.341 Standards of Performance for Hazardous Air Pollutants. The source shall comply with the standards and provisions of 40 CFR Part 61, as appropriate.

- a. 40 CFR 61, Subpart A – General Provisions apply to all equipment or facilities subject to a NESHAP Subpart as listed below:
- b. 40 CFR 61, Subpart FF – National Emission Standard for Benzene Waste Operations applies to the ExxonMobil Refinery, and because it is collocated with the refinery, to the bulk terminal as well.

9. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. The source, as defined and applied in 40 CFR Part 63, shall comply with the requirements of 40 CFR Part 63, as listed below:

- a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to a NESHAP Subpart as listed below:
- b. 40 CFR 63, Subpart R – National Emission Standards for Gasoline Distribution Facilities shall apply to the bulk loading terminal. Although the terminal by itself does not emit HAPs in major source quantities, it is a major source of HAP emissions because it is located within a contiguous area and is under common control with the ExxonMobil Refinery.
- c. 40 CFR 63, Subpart EEEE – National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline) shall apply to the bulk loading terminal. Because the bulk loading terminal transfers applicable non-gasoline organic liquids, and because it is a major source of HAP emissions by virtue of its association with the adjacent refinery, Subpart EEEE applies.

D. ARM 17.8, Subchapter 5 – Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:

- 1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an MAQP application. A permit application is incomplete until the proper application fee is paid to the Department. ExxonMobil submitted the appropriate permit application fee for the current permit action.
- 2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an MAQP (excluding an open burning permit) issued by the Department. The air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, as described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that prorate the required fee amount.

E. ARM 17.8.701, *et seq.* (Subchapter 7), Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:

- 1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
- 2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an MAQP or permit modification to construct, modify, or use any air contaminant sources that have the potential to emit (PTE) greater than 25 tons per year of any pollutant. ExxonMobil has a PTE greater than 25 tons per year of Volatile Organic Compounds (VOCs); therefore, an MAQP is required.

3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the MAQP program.
4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the MAQP Program.
5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. ExxonMobil submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. ExxonMobil submitted an affidavit of publication of public notice for the February 13, 2011 issue of the *Billings Gazette*, a newspaper of general circulation in the City of Billings in Yellowstone County, as proof of compliance with the public notice requirements.
6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
8. ARM 17.8.755 Inspection of Permit. This rule requires that MAQPs shall be made available for inspection by the Department at the location of the source.
9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving ExxonMobil of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
10. ARM 17.8.762 Duration of Permit. An MAQP shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
11. ARM 17.8.763 Revocation of Permit. An MAQP may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).

12. ARM 17.8.764 Administrative Amendment to Permit. An MAQP may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
13. ARM 17.8.765 Transfer of Permit. This rule states that an MAQP may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.

F. ARM 17.8, Subchapter 8 – Prevention of Significant Deterioration (PSD) of Air Quality, including, but not limited to:

1. ARM 17.8.801, Definitions. This rule is a list of applicable definitions used in this subchapter.
2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification, with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

The Department has determined that ExxonMobil is not subject to PSD permitting for the projects proposed within this permitting action. Emissions increases are below significance levels.

G. ARM 17.8, Subchapter 12 –Operating Permit Program Applicability, including, but not limited to:

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any source having:
  - a. PTE > 100 tons/year of any pollutant;
  - b. PTE > 10 tons/year of any one hazardous air pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
  - c. PTE > 70 tons/year of particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>) in a serious PM<sub>10</sub> nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program. (1) Title V of the FCAA amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #2967-01 for ExxonMobil, the following conclusions were made:
  - a. The facility's PTE is greater than 100 tons/year for VOCs (including ExxonMobil Refinery).
  - b. The facility's PTE is greater than 10 tons/year for any one HAP and greater than 25 tons/year for all HAPs (including ExxonMobil Refinery).
  - c. This source is not located in a serious PM<sub>10</sub> nonattainment area.
  - d. This facility is subject to current NSPS requirements.
  - e. This facility is subject to current NESHAP standards (Subpart R).
  - f. This source is not a Title IV affected source, or a solid waste combustion unit.
  - g. This source is not an EPA designated Title V source.

Based on these facts, the Department determined that ExxonMobil is subject to the Title V operating permit program.

### III. BACT Determination

A BACT determination is required for each new or modified source. ExxonMobil shall install on the new or modified source the maximum air pollution control capability which is technically practicable and economically feasible, except that BACT shall be utilized.

A BACT analysis was submitted by ExxonMobil in permit application #2967-01, addressing some available methods of controlling VOC emissions from the two emissions sources affected by the proposed project: the set of new fugitive VOC piping components and the truck loading rack. The Department reviewed these methods, as well as previous BACT determinations. The following control options have been reviewed by the Department in order to make the following BACT determination.

#### New Fugitive VOC Piping Components

Total VOC emissions resulting from the addition of piping components is expected to be no more than 0.35 tons per year. Installation of add-on controls for capturing these emissions was found to be technically and economically infeasible due to this low emission rate as well as difficulty associated with capturing emissions from a large number of minute sources dispersed over a large area. Currently, emissions from these sources are minimized by way of a program of leak inspection, recording, and repair. This program has been deemed BACT for the fugitive VOC piping components associated with the proposed project.

#### Truck Loading VOC Emissions

Based on 40 CFR 63 National Emission Standards for Hazardous Air Pollutants (NESHAP), Subpart R applicability, emissions to the atmosphere from the vapor collection and processing systems due to loading of gasoline cargo tanks shall not exceed 10 milligrams (mg) of total organic

compounds per liter of gasoline loaded to cargo tanks. Additionally, product may only be loaded into vapor-tight cargo tanks following procedures provided in this permit and applicable portions of 40 CFR 63, Subpart R. In accordance with 40 CFR Part 63, these control measures qualify as Maximum Available Control Technology (MACT) and are also deemed BACT for truck loading VOC emission control.

The control options selected have controls and control costs comparable to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

IV. Emission Inventory

Fugitive VOC Emissions

**Table 1. Fugitive VOC Sources and Emissions**

Component Type	Number of Components	EF <sup>1</sup> (kg/hr-component)	EF <sup>1</sup> (lb/hr-component)	VOC Emissions (lb/hr)	VOC Emissions (lb/yr)
Valves	500	4.30E-05	9.46E-05	4.73E-02	414.3
Pump Seals	4	5.40E-04	1.19E-03	4.75E-03	41.6
Fittings (Connectors and Flanges)	956	8.00E-06	1.76E-05	1.68E-02	147.4
Other <sup>2</sup>	38	1.30E-04	2.86E-04	1.09E-02	95.2
<b>Total VOC Fugitive Emissions (tons/yr) =</b>					<b>0.35</b>

- 1) Emissions factors from “EPA Protocol for Equipment Leak Emission Estimates,” November 1995 (EPA-453/R-95-017), Table 2.3 Marketing Terminal Average Emission Factors for Light Liquid.
- 2) “Other” components are: 20 pressure relief valves, 6 in-line static mixers, 11 meters, and 1 air eliminator.

Truck Loading VOC Emissions

The vapor pressure of ethanol is less than that of gasoline and therefore, no increases in VOC emissions are anticipated due to truck loading activities. Further, VOC emissions resulting from truck loading will continue to be controlled by a (VRU that limits VOC emissions from truck loading to no more than 10.0 milligrams per liter of gasoline loaded, as required within this permit as well as 40 CFR 63, Subpart R.

V. Existing Air Quality

ExxonMobil is located at 700 Exxon Road, Billings, Montana in the S<sup>1</sup>/<sub>2</sub> of Section 24 and the N<sup>1</sup>/<sub>2</sub> of Section 25, Township 1 North, Range 26 East in Yellowstone County. This area is considered attainment for all criteria pollutants, including ozone (for which VOC is a precursor). The Laurel SO<sub>2</sub> nonattainment area is nearby. The Laurel SO<sub>2</sub> nonattainment area is about 31.9 kilometers (19.8 miles) southwest from the center of the main operating facility.

VI. Ambient Air Impact Analysis

None of the pollutant emissions associated with the proposed project exceeded the PSD modification thresholds, thus eliminating the requirement for PSD air dispersion modeling. The Department determined that based on the relatively minor amount of emissions increase resulting from this permit action, in addition to the limits and conditions included in MAQP #2967-01, the impacts from this permitting action will be minor. The Department believes the current permit action will not cause or contribute to a violation of any ambient air quality standard.

VII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted the following private property taking and damaging assessment.

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].
	X	5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
	X	5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

VIII. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.

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

Issued For: Exxon Mobil Corporation  
607 Exxon Road  
Billings, MT 59101

Montana Air Quality Permit Number: #2967-01

Preliminary Determination Issued: April 5, 2011

Department Decision Issued: May 6, 2011

Final Permit Issued: May 24, 2011

1. Legal Description of Site: South  $\frac{1}{2}$  of Section 24 and North  $\frac{1}{2}$  of Section 25, Township 1 North, Range 26 East, Yellowstone County, Montana.
2. Description of Project: On February 16, 2011 and February 24, 2011, the Department received elements to fulfill a complete MAQP permit modification application from ExxonMobil. The application proposed modifications of piping and related components at the truck loading rack for the purpose of blending ethanol with gasoline for truck loadout and for loading denatured ethanol to tanker trucks. The proposed project would add pipe fittings, flanges, pumps, and other piping components. Changes to the permit include the addition of ethanol handling capabilities within existing permit conditions. The current permit action modifies MAQP #2967-00 to include the addition of ethanol handling capabilities within existing permit conditions as well as updates the rule references, permit format, and the emissions inventory.
3. Objectives of Project: The project allows ExxonMobil the flexibility of loading ethanol as well as gasoline.
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 MAQP 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 #2967-01.
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 installation of various fugitive VOC emitting components, potentially resulting in increased emissions. Impacts to terrestrial and aquatic life and habitats may occur as a result of these increased emissions. However, the emissions increases (approximately 0.35 TPY) fall well 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 installation of various fugitive VOC emitting components 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, the Department believes 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 VOC 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 installation of various VOC emitting components on the same existing industrial site. Therefore, no impacts to aesthetics would be anticipated.

F. Air Quality

This proposed project would include a slight increase of VOC emissions. However, the emissions do not exceed “significance” threshold levels as outlined in the rules associated with PSD. ExxonMobil would be required to maintain compliance with the Billings/Laurel SO<sub>2</sub> State Implementation Plan (SIP), current permit conditions, and state and federal ambient air quality standards. While deposition of pollutants would be 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 (S<sup>1</sup>/<sub>2</sub> of Section 24 and N<sup>1</sup>/<sub>2</sub> of Section 25, Township 1 North, Range 26 East, Yellowstone County, Montana), recently 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 would not be 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 permit limitations and conditions.

A minor impact to the energy resource is expected during the construction process involved with installation of fugitive VOC components; however, this impact is temporary. No major new energy consuming equipment would be added and no utility upgrade would be required. 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 previously 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 VOC 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 would be expected 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 bulk marketing distribution terminal; 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 terminal'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 terminal'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 MAQP 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 MAQP) and compliance verification with those permits.

J. Industrial and Commercial Activity

The terminal'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 #2967-01.

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<sub>2</sub> 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 VOC 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: March 28, 2011