

**MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY
OPERATING PERMIT TECHNICAL REVIEW DOCUMENT**

**Permitting and Compliance Division
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ExxonMobil Billings Terminal
Section 25, Township 1 North, Range 26 East, Yellowstone County, Montana
607 ExxonMobil Road
Billings, MT 59101

The following table summarizes the air quality programs testing, monitoring, and reporting requirements applicable to this facility.

Facility Compliance Requirements	Yes	No	Comments
Source Tests Required	X		
Ambient Monitoring Required		X	
COMS Required		X	
CEMS Required	X		
Schedule of Compliance Required		X	
Annual Compliance Certification and Semiannual Reporting Required	X		
Monthly Reporting Required		X	
Quarterly Reporting Required		X	
Applicable Air Quality Programs			
ARM Subchapter 7 – Montana Air Quality Permit (MAQP)	X		#2967-01
New Source Performance Standards (NSPS)	X		40 CFR 60, Subpart XX
National Emission Standards for Hazardous Air Pollutants (NESHAPS)		X	Except for 40 CFR 61, Subpart M
Maximum Achievable Control Technology (MACT)	X		40 CFR 63, Subparts R and EEEE
Major New Source Review (NSR) – includes Prevention of Significant Deterioration (PSD) and/or Non-attainment Area (NAA) NSR	X		In conjunction with refinery
Risk Management Plan Required (RMP)		X	
Acid Rain Title IV		X	
Compliance Assurance Monitoring (CAM)		X	
State Implementation Plan (SIP)	X		

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SECTION I. GENERAL INFORMATION

A. Purpose

This document establishes the basis for the decisions made regarding the applicable requirements, monitoring plan, and compliance status of emission units affected by the operating permit proposed for this facility. The document is intended for reference during review of the proposed permit by the U.S. Environmental Protection Agency (EPA) and the public. It is also intended to provide background information not included in the operating permit and to document issues that may become important during modifications or renewals of the permit. Conclusions in this document are based on information provided in the original Title V application submitted by ExxonMobil Billings Terminal (ExxonMobil) on June 29, 2007, the modification application material received by the Department of Environmental Quality (Department) on February 16 and February 24, 2011, the administrative amendment request for a change in responsible official received by the Department on May 11, 2011, and the Title V Renewal application received October 29, 2012. On January 12, 2015, a request was received to update the company name and title of the current responsible official.

B. Facility Location

ExxonMobil is located in Section 25, Township 1 North, Range 26 East, which is approximately 2 miles East of Billings in Yellowstone County.

C. Facility Background Information

Montana Air Quality Permit

The Department received a complete application for a Montana Air Quality Permit (MAQP) on March 5, 1998. ExxonMobil applied for the permit to establish federally enforceable limits for the product loading rack in order to meet synthetic minor requirements of the Title V Operating Permit program. **MAQP #2967-00** was issued May 3, 1998.

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 permit action modified MAQP #2967-00 to include the addition of ethanol handling capabilities within existing permit conditions as well as updated the rule references, permit format, and the emissions inventory. **MAQP #2967-01** was issued final on May 24, 2011.

Title V Operating Permit

Following further evaluation of ExxonMobil 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 (OP #1564-01). Because the ExxonMobil Billings Refinery and the ExxonMobil Billings Terminal are two separate business units, the facility maintains two separate permits to facilitate internal administration; however, pursuant to ARM 17.8.1201(23) and

17.8.801(7), the federal clean air act, and several interpretive letters and memos, the Terminal and Refinery are determined to be one facility. Therefore, modifications at either the Terminal or the Refinery are looked at in aggregate for NSR permitting. **Title V Operating Permit #OP2967-00** was issued final and effective on May 6, 2008.

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 permit action modified MAQP #2967-00 to include the addition of ethanol handling capabilities within existing permit conditions as well as updated the rule references, permit format, and the emissions inventory.

As a Title V source, the application for corresponding modification of the Title V permit was made concurrently with the MAQP, therefore, the application covered both the MAQP and Title V modification request. On May 11, 2011, the Department received an administrative amendment request to update the responsible official from Jim B. Rose to Brian R. Clark. The modification and the administrative amendment were rolled into one action by the Department. The Operating Permit number therefore skipped from #OP2967-00 to #OP2967-02 when posted Draft and when posted for the EPA Review Period to recognize the two separate permit requests.

On August 10, 2011, the Department received an additional Administrative Amendment request to change the responsible official from Brian R. Clark to Geoffrey A. Craft, effective immediately. The Department, before issuing the permit Decision, also incorporated this responsible official change to the permit. Therefore, the responsible official listed in the permit was changed going from the EPA review period to Decision, and the permit number was updated again to **#OP2967-03** to recognize the second administrative amendment being incorporated into the action. All three actions were incorporated into the permit before the permit was issued Decision.

On February 10, 2012, the Department received an Administrative Amendment request to change the responsible official from Geoffrey A. Craft to Karen S. Tyrone, effective immediately. **Operating Permit #OP2967-04** replaced Operating Permit #OP2967-03.

On October 29, 2012, the Department received a renewal application for renewal of the Title V Operating Permit. **Operating Permit #OP2967-05** replaced Operating Permit #OP2967-04.

On July 22, 2014, the Department received an Administrative Amendment request to change the responsible official from Karen S. Tyrone to Kevin J. Badgett. **Operating Permit #OP2967-06** replaced Operating Permit #OP2967-05.

On January 12, 2015, the Department received an Administrative Amendment to update the company name and title of the responsible official. The responsible official Mr. Kevin Badgett, will be employed by Americas Fuels Operations, Midstream, ExxonMobil Refining and Supply Company, a division of Exxon Mobil Corporation. **Operating Permit #OP2967-07** replaced Operating Permit #OP2967-06.

D. Current Permit Action

On April 20, 2015, the Department received an Administrative Amendment to update the responsible official. On June 1, 2015, the Department received the email address for Ms. Tran. Ms. Loan K. Tran replaces Mr. Kevin Badgett as the responsible official. **Operating Permit #OP2967-08** replaces Operating Permit #OP2967-07.

E. Taking and Damaging Analysis

HB 311, the Montana Private Property Assessment Act, requires analysis of every proposed state agency administrative rule, policy, permit condition or permit denial, pertaining to an environmental matter, to determine whether the state action constitutes a taking or damaging of private real property that requires compensation under the Montana or U.S. Constitution. As part of issuing an operating permit, the Department is required to complete a Taking and Damaging Checklist. As required by 2-10-101 through 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)].
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		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)

F. Compliance Designation

The Department conducted a full compliance evaluation for the period from May 22, 2012, to July 24, 2014, for the ExxonMobil Billings Terminal.

The Department found no record of any exceedances or violations at the Exxon Terminal during this reporting period. There were no complaints documented with DEQ for the period covered by the latest Compliance Monitoring Report. The ExxonMobil Terminal has submitted reports to DEQ as required. These reports have indicated that the ExxonMobil Terminal was in compliance with the requirements of MAQP #2967-01 and Operating Permit #OP2967-05.

SECTION II. SUMMARY OF EMISSION UNITS

A. Facility Process Description

The Billings Terminal is operated by ExxonMobil Oil Corporation and the nearby ExxonMobil Billings Refinery (Refinery) is operated by Exxon Mobil Corporation. The Refinery transfers products to the Terminal for additive blending and distribution over the Terminal Loading rack. The Terminal is considered a support facility to the Refinery; therefore, the Refinery and the Terminal are considered one facility for air permitting purposes. The facility maintains two separate permits to facilitate internal administration.

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, 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. 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 two 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) and leaded regular mogas are loaded directly from Refinery storage.

The loading rack is controlled by a John Zink Adsorption/Absorption Gasoline Vapor Recovery Unit (VRU). 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. Exxon 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 tightness certification contained in an on-board microchip. Without the permissive the truck cannot be loaded without intervention by an Exxon 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, New Source Performance Standards (NSPS), U.S. Department of Transportation (DOT), and state tightness certification requirements.

B. Emission Units and Pollution Control Device Identification

Emission Unit ID	Description	Pollution Control Device/Practice
EU001	Gasoline Loading Operations/Vapor Recovery Unit	Carbon Adsorption Recovery Unit
EU002	Loading Rack Fugitive Emissions	None

C. Categorically Insignificant Sources/Activities

Emissions Unit ID	Description
IEU01	Tanks 201, 202, 204, 206, 207, and 211
IEU02	Miscellaneous Fugitive Emissions
Tank 210	3,000 gallon underground oil/water separator
Natural Gas Fired Shop Heater	Maximum heat input of 45,000 BTU/hr
Natural Gas Fired Comfort Heater	Maximum heat input of 110,000 BTU/hr
Natural Gas Fired Space Heater	Maximum heat input of 150,000 BTU/hr
Diesel Fuel Fired Pressure Washer Water Heater	Maximum heat input of 420,000 BTU/hr

SECTION III. PERMIT CONDITIONS

A. Emission Limits and Standards

There are no emission limits or standards identified in this permit that were not previously applicable to the facility. All of the emission limits are listed in the operating permit along with the applicable rule citation for each limit.

B. Monitoring Requirements

ARM 17.8.1212(1) requires that all monitoring and analysis procedures or test methods required under applicable requirements are contained in operating permits. In addition, when the applicable requirement does not require periodic testing or monitoring, periodic monitoring must be prescribed that is sufficient to yield reliable data from the relevant time period that is representative of the source's compliance with the permit.

The requirements for testing, monitoring, recordkeeping, reporting, and compliance certification sufficient to assure compliance do not require the permit to impose the same level of rigor for all emission units. Furthermore, they do not require extensive testing or monitoring to assure compliance with the applicable requirements for emission units that do not have significant potential to violate emission limitations or other requirements under normal operating conditions. When compliance with the underlying applicable requirement for a insignificant emissions unit is not threatened by lack of regular monitoring and when periodic testing or monitoring is not otherwise required by the applicable requirement, the status quo (**i.e., no monitoring**) will meet the requirements of ARM 17.8.1212(1). Therefore, the permit does not include monitoring for insignificant emission units.

The permit includes periodic monitoring or recordkeeping for each applicable requirement. The information obtained from the monitoring and recordkeeping will be used by the permittee to periodically certify compliance with the emission limits and standards. However, the Department may request additional testing to determine compliance with the emission limits and standards.

C. Test Methods and Procedures

The operating permit may not require testing for all sources if routine monitoring is used to determine compliance, but the Department has the authority to require testing if deemed necessary to determine compliance with an emission limit or standard. In addition, the permittee may elect to voluntarily conduct compliance testing to confirm its compliance status.

D. Recordkeeping Requirements

The permittee is required to keep all records listed in the operating permit as a permanent business record for at least 5 years following the date of the generation of the record.

E. Reporting Requirements

Reporting requirements are included in the permit for each emissions unit and Section V of the operating permit "General Conditions" explains the reporting requirements. However, the permittee is required to submit semi-annual and annual monitoring reports to the Department

and to annually certify compliance with the applicable requirements contained in the permit. The reports must include a list of all emission limit and monitoring deviations, the reason for any deviation, and the corrective action taken as a result of any deviation.

F. Public Notice

As an administrative action, no public notice was required.

SECTION IV. NON-APPLICABLE REQUIREMENT ANALYSIS

Pursuant to ARM 17.8.1221, ExxonMobil requested a permit shield for all non-applicable regulatory requirements and regulatory orders identified in the tables in Section 8 of the permit application. In addition, the ExxonMobil permit application identified a permit shield request for applicable requirements for both the facility and for certain emission units. The Department has determined that the requirements identified in the permit application for the individual emission units are non-applicable. These requirements are contained in the permit in Section IV - Non-applicable Requirements.

The following table outlines those requirements that ExxonMobil had identified as non-applicable in the permit application but will not be included in the operating permit as non-applicable. The table includes both the applicable requirement and reason that the Department did not identify this requirement as non-applicable.

Applicable Requirement	Reason
Subchapter 2 Ambient Air Quality	
ARM 17.8.210 Ambient Air Quality Standards (AAQS) for Sulfur Dioxide ARM 17.8.211 AAQS for Nitrogen Dioxide ARM 17.8.212 AAQS for Carbon Monoxide ARM 17.8.213 AAQS for Ozone ARM 17.8.214 AAQS for Hydrogen Sulfide ARM 17.8.220 AAQS for Settled Particulate Matter ARM 17.8.221 AAQS for Visibility ARM 17.8.222 AAQS for Lead ARM 17.8.223 AAQS for PM ₁₀ ARM 17.8.230 Fluoride in Forage	These rules are always applicable to a major source and may contain specific requirements for compliance
Subchapter 3 Emission Standards	
ARM 17.8.324(2) Hydrocarbons - oil/water	This rule is potentially applicable to this source category
ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources	This rule incorporates by reference the NSPS standards and is inappropriate to shield
Subchapter 6 Open Burning	
Subchapter 6 Open Burning	These rules are always applicable to a major source and may contain specific requirements for compliance
Subchapter 9 Permit Requirements for Major Stationary Sources or Major Modifications Located Within Nonattainment Areas	
Subchapter 9 Nonattainment NSR	These regulations may become applicable during the life of the permit.
Subchapter 10 Montana Air Quality Permit Requirements for Major Stationary Sources or Major Modifications Located Within Attainment or Unclassified Areas	
Subchapter 10 PSD	These regulations may become applicable during the life of the permit.
Subchapter 12 Operating Permit Program	
ARM 17.8.1234 Acid Rain—Permits Regulation	This rule consists of a regulatory definition and statement of incorporation by reference

Applicable Requirement	Reason
Subchapter 13 Conformity	
Subchapter 13 Conformity	This rule applies only to the Department, EPA, and/or regional authorities
Subchapter 14 Conformity of General Federal Actions	
Subchapter 14 Conformity	This rule applies only to the Department, EPA, and/or regional authorities
Subchapter 15 Compliance Assurance Monitoring	
Subchapter 15 CAM	The source is not currently subject to CAM, however, Department policy does not provide shield from CAM requirements.
Federal Requirements	
40 CFR 62 Approval and Promulgation of State Plans for Designated Facilities and Pollutants	These rules contain requirements for regulatory authorities and not major sources; these rules can be used to impose specific requirements on a major source.

SECTION V. FUTURE PERMIT CONSIDERATIONS

A. MACT Standards

As of the draft date of this permit, the Department is unaware of any future requirement that may be promulgated during the permit term for which this facility must comply. The MACT standards 40 CFR 63, Subpart R (Gasoline Distribution MACT) and 40 CFR 63, Subpart EEEE (Organic Liquid Distribution MACT) currently apply to this facility.

B. NESHAP Standards

As of the draft date of this permit, the Department is unaware of any future NESHAP Standards that may be promulgated that will affect this facility. The NESHAP Standard 40 CFR 61, Subpart M (National Emission Standard for Asbestos) does apply to this facility at this time.

C. NSPS Standards

As of the draft date of this permit, the Department is unaware of any future NSPS Standard that may be promulgated that will affect this facility. The NSPS Standard 40 CFR 60, Subpart XX (Bulk Gasoline Terminals) does apply to this facility at this time.

D. Risk Management Plan

As of the draft date of this permit, this facility does not exceed the minimum threshold quantities for any regulated substance listed in 40 CFR 68.115 for any facility process. Consequently, this facility is not required to submit a Risk Management Plan.

If a facility has more than a threshold quantity of a regulated substance in a process, the facility must comply with 40 CFR 68 requirements no later than 3 years after the date on which a regulated substance is first listed under 40 CFR 68.130; or the date on which a regulated substance is first present in more than a threshold quantity in a process, whichever is later.

E. CAM Applicability

An emitting unit located at a Title V facility that meets the following criteria listed in ARM 17.8.1503 is subject to Subchapter 15 and must develop a CAM Plan for that unit:

- The emitting unit is subject to an emission limitation or standard for the applicable regulated air pollutant (unless the limitation or standard that is exempt under ARM 17.8.1503(2));
- The emitting unit uses a control device to achieve compliance with such limit; and
- The emitting unit has potential pre-control device emission of the applicable regulated air pollutant that is greater than major source thresholds.

As a continuous emissions monitoring method is in place for the units covered by this permit, the Department has determined that CAM is not applicable to any units within this permit.

F. PSD and Title V Greenhouse Gas Tailoring Rule

On May 7, 2010, EPA published the “light duty vehicle rule” (Docket # EPA-HQ-OAR- 2009-0472, 75 FR 25324) controlling greenhouse gas (GHG) emissions from mobile sources, whereby GHG became a pollutant subject to regulation under the Federal and Montana Clean Air Act(s). On June 3, 2010, EPA promulgated the GHG “Tailoring Rule” (Docket # EPA-HQ-OAR-2009-0517, 75 FR 31514) which modified 40 CFR Parts 51, 52, 70, and 71 to specify which facilities are subject to GHG permitting requirements and when such facilities become subject to regulation for GHG under the PSD and Title V programs.

Under the Tailoring Rule, any PSD action (either a new major stationary source or a major modification at a major stationary source) taken for a pollutant or pollutants other than GHG that would become final on or after January 2, 2011, would be subject to PSD permitting requirements for GHG if the GHG increases associated with that action were at or above 75,000 TPY of carbon dioxide equivalent (CO₂e) and greater than 0 TPY on a mass basis. Similarly, if such action were taken, any resulting requirements would be subject to inclusion in the Title V Operating Permit. Facilities which hold Title V permits due to criteria pollutant emissions over 100 TPY would need to incorporate any GHG applicable requirements into their operating permits for any Title V action that would have a final decision occurring on or after January 2, 2011.

Starting on July 1, 2011, PSD permitting requirements would be triggered for modifications that were determined to be major under PSD based on GHG emissions alone, even if no other pollutant triggered a major modification. In addition, sources that are not considered PSD major sources based on criteria pollutant emissions would become subject to PSD review if their facility-wide potential emissions equaled or exceeded 100,000 TPY of CO₂e and 100 or 250 TPY of GHG on a mass basis depending on their listed status in ARM 17.8.801(22) and they undertook a permitting action with increases of 75,000 TPY or more of CO₂e and greater than 0 TPY of GHG on a mass basis. With respect to Title V, sources not currently holding a Title V permit that have potential facility-wide emissions equal to or exceeding 100,000 TPY of CO₂e and 100 TPY of GHG on a mass basis would be required to obtain a Title V Operating Permit.

Potential emissions at this facility, which must be considered along with emissions from the refinery, exceed the GHG major source threshold of 100,000 TPY of CO₂e for both Title V and PSD under the Tailoring Rule.

The Supreme Court of the United States (SCOTUS), in its *Utility Air Regulatory Group v. EPA* decision on June 23, 2014, ruled that the Clean Air Act neither compels nor permits EPA to require a source to obtain a PSD or Title V permit on the sole basis of its potential emissions of GHG. SCOTUS also ruled that EPA lacked the authority to tailor the Clean Air Act’s unambiguous numerical thresholds of 100 or 250 TPY to accommodate a CO₂e threshold of 100,000 TPY. SCOTUS upheld that EPA reasonably interpreted the Clean Air Act to require sources that would need PSD permits based on their emission of conventional pollutants to comply with BACT for GHG. As such, the Tailoring Rule has been rendered invalid and sources cannot become subject to PSD or Title V regulations based on GHG emissions alone. Sources that must undergo PSD permitting due to pollutant emissions other than PSD may still be required to comply with BACT for GHG emissions.