

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

**Air, Energy & Mining Division
1520 E. Sixth Avenue
P.O. Box 200901
Helena, Montana 59620-0901**

City of Billings
Billings Regional Landfill
Section 29 & 30, Township 1 South, Range 26 East
4848 Midland 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		40 CFR 61, Subpart M; 40 CFR 62, Subpart OOO; 40 CFR 63, Subpart AAAA
Ambient Monitoring Required		X	
COMS Required		X	
CEMS Required		X	
Schedule of Compliance Required	X		40 CFR 62, Subpart OOO
Annual Compliance Certification and Semiannual Reporting Required	X		40 CFR 61, Subpart M; 40 CFR 62, Subpart OOO; 40 CFR 63, Subpart AAAA
Monthly Reporting Required		X	
Quarterly Reporting Required		X	
Applicable Air Quality Programs			
ARM Subchapter 7 – Montana Air Quality Permit (MAQP)		X	
National Emission Standards for Hazardous Air Pollutants (NESHAPS)	X		40 CFR 61, Subpart M
Approvals and Promulgation of State Plans for Designated Facilities and Pollutants	X		40 CFR 62, Subpart OOO

Maximum Achievable Control Technology (MACT)	X		40 CFR 63, Subpart AAAA
Major New Source Review (NSR) – includes Prevention of Significant Deterioration (PSD) and/or Non-attainment Area (NAA) NSR		X	
Risk Management Plan Required (RMP)		X	
Acid Rain Title IV		X	
Compliance Assurance Monitoring (CAM)		X	
State Implementation Plan (SIP)	X		General SIP

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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 emissions units affected by the operating permit proposed for this facility. The document is intended for reference during review of the proposed permit by the 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 application submitted by City of Billings – Billings Regional Landfill on March 14, 2017, July 28, 2017, and December 28, 2017. City of Billings – Billings Regional Landfill submitted an Administrative Amendment on February 8, 2019. On June 26, 2021, the Department received a request for a significant modification.

B. Facility Location

The facility is located at 5240 Jellison Road, in Billings, Montana. The legal description of the site is Sections 28 and 29, Township 1 South, Range 26 East, Yellowstone County, Montana. The approximate latitude/longitude coordinates are latitude 45.7254 decimal degrees and longitude -108.545 decimal degrees. The site elevation is approximately 3,120 feet.

C. Facility Background Information

The City of Billings (COB) owns and operates the Billings Regional Landfill (BRL), a municipal solid waste landfill. The landfill receives municipal solid waste from several locations near the Billings area. A gas extraction system collects landfill gas and associated liquid condensate. The gas is processed and injected into a natural gas distribution line for sale.

Title V Operating Permit

The initial Title V **Operating Permit #OP5176-00** was issued to COB-BRL on July 15, 2018, for the operation of the municipal solid waste landfill.

On February 2, 2019, the Department received an Administrative Amendment request from COB to update the Responsible Official from Bruce McCandless to Chris Kulkulski.

Operating Permit #OP5176-01 replaced Operating Permit #OP5176-00.

D. Current Permit Action

On June 26, 2021, the Department received a request for a significant modification to #OP5176-01 from COB to include 40 CFR 63 Subpart AAAA as an applicable regulation to the BRL since the non-methane organic compound (NMOC) annual emission rate reached or exceeded the 50 megagram per year threshold of applicability, and to add Debi Meling as an Alternative Responsible Official. The new Federal Plan in 40 CFR 62, Subpart OOO has been included in the permit because it became effective on June 21, 2021, replacing 40 CFR 60, Subpart Cc. **Operating Permit #OP5176-02** replaces Operating Permit #OP5176-01.

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)

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

F. Compliance Designation

On July 25, 2019, DEQ conducted an onsite inspection of the BRL and found the COB in compliance with #OP5176-01.

SECTION II. SUMMARY OF EMISSIONS UNITS

A. Facility Process Description

The COB owns and operates the BRL located in Billings, MT. COB began using the landfill in the late 1960's for disposal of municipal solid waste (MSW). The landfill currently accepts yard, wood, and inert waste as well as construction and demolition waste, asbestos, clean and contaminated dirt, and industrial waste.

B. Emissions Units and Pollution Control Device Identification

The emitting unit is the landfill itself, which is subject to 40 CFR 60, Subpart Cc.

Emissions Unit ID	Description	Pollution Control Device/Practice
EU001	MSW Landfill	None
EU002	Fugitive Dust	Reasonable Practices

C. Categorically Insignificant Sources/Activities

Emissions Unit ID	Description
EU001	Shop Heater
EU002	Scale House Heaters
EU003	Used Oil Heaters

SECTION III. PERMIT CONDITIONS

A. Emission Limits and Standards

BRL is subject to 40 CFR 61, Subpart M, 40 CFR 62, Subpart OOO, and 40 CFR 63, Subpart AAAA.

Under 40 CFR 61, Subpart M, the provisions are applicable to those sources specified in 40 CFR 61.154 – standard of active waste disposal sites.

Beginning June 21, 2021, the BRL became an affected facility of 40 CFR Part 62, Subpart OOO which is the federal plan for 40 CFR 60, Subpart Cf. Subpart OOO replaces 40 CFR 60, Subpart Cc.

On December 31, 2019, the BRL reached the 50 Megagram per year (Mg/yr) emission threshold for non-methane organic compounds (NMOC) which triggered applicability with 40 CFR Part 63, Subpart AAAA – National Emission Standards for Hazardous Air Pollutants (NESHAP): MSW Landfill. As required upon reaching 50 MG/yr of NMOC, BRL submitted a Gas Collection and Control System (GCCS) Design Plan for the BRL on January 20, 2021. BRL provided additional information on January 20, 2021, addressing several Department concerns. The Department approved the GCCS Design Plan for the BRL on February 3, 2021.

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 emissions units. Furthermore, they do not require extensive testing or monitoring to assure compliance with the applicable requirements for emissions 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 an 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 emissions 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 five 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

In accordance with ARM 17.8.1232, a public notice was published in the *Billings Gazette* newspaper on or before August 20, 2021. The Department provided a 30-day public comment period on the draft operating permit from August 20, 2021, to September 20, 2021. ARM 17.8.1232 requires the Department to keep a record of both comments and issues raised during the public participation process. The comments and issues received by September 20, 2021, will be summarized, along with the Department's responses, in the following table. All comments received during the public comment period will be promptly forwarded to COB so they may have an opportunity to respond to these comments as well.

Summary of Public Comments

Person/Group Commenting	Comment	Department Response
	No Comments Received	

G. Draft Permit Comments

Summary of Permittee Comments

Permit Reference	Permittee Comment	Department Response
	No Comments Received	

Summary of EPA Comments

Permit Reference	EPA Comment	Department Response
	No Comments Received	

SECTION IV. NON-APPLICABLE REQUIREMENT ANALYSIS

The following table outlines those requirements that BRL 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 Requirements		Reason
State	Federal	
ARM17.8.201 Definitions ARM 17.8.202 Incorporation by Reference ARM 17.8.204 Ambient Air Monitoring ARM 17.8.205 Enforceability ARM 17.8.206 Methods and Data ARM 17.8.210 Ambient Standards for SO ₂ ARM 17.8.211 Ambient Standards for NO _x ARM 17.8.212 Ambient Standards for CO ARM 17.8.213 Ambient Standards for Ozone ARM 17.8.214 Ambient Standards for HS ARM 17.8.220 Ambient Standards for Settled Particulate ARM 17.8.221 Ambient Standards for Visibility ARM 17.8.222 Ambient Standards for Lead ARM 17.8.223 Ambient Standards for PM ₁₀ ARM 17.8.230 Fluoride in Forage ARM 17.8.401 Definitions ARM 17.8.601 Definitions ARM 17.8.602 Incorporations by Reference ARM 17.8.801 through 17.8.808 ARM 17.8.825 - 17.8.826 ARM 17.8.1001 Definitions ARM 17.8.1002 Incorporations by Reference ARM 17.8.1004 When Air Quality Preconstruction Permit Required ARM 17.8.1103 Applicability - Visibility Requirements ARM 17.8.1101 Definitions		These rules consist of either a statement of purpose, applicability statement, regulatory definitions or a statement of incorporation by reference. These types of rules do not have specific requirements associated with them.

Applicable Requirements		Reason
State	Federal	
ARM 17.8.403 Exemptions ARM 17.8.604 Prohibited Open Burning - When Permit Required ARM 17.8.605 Special Burning Periods ARM 17.8.606 Minor Open Burning Source Requirements ARM 17.8.611 Emergency Open Burning Permits ARM 17.8.612 Conditional Air Quality Open Burning Permits ARM 17.8.613 Christmas Tree Waste Open Burning Permits ARM 17.8.614 Commercial Film Production Open Burning Permits ARM 17.8.615 Firefighter Training ARM 17.8.828 Innovative Control Technology ARM 17.8.1005 Additional Conditions of Air Quality Preconstruction Permit ARM 17.8.1006 Review of Specified Sources for Air Quality Impact ARM 17.8.1007 Baseline for Determining Credit for Emissions and Air Quality Offsets ARM 17.8.1108 Notification of Permit Application ARM 17.8.1109 Adverse Impact and Federal Land Manager		These are procedural rules that have specific requirements that may become relevant to a major source during the permit span

Applicable Requirements		Reason
State	Federal	
	40 CFR 50 National Primary and Secondary Ambient Air Quality Standards 40 CFR 51 Requirements for Preparation, Adoption, and Submittal of Implementation Plans 40 CFR 64 Compliance Assurance Monitoring 40 CFR 65 Delayed Compliance Orders 40 CFR 67 Federal Approval of State Noncompliance Penalty Program 40 CFR 71 Federal Operating Permits Program 40 CFR 81 Non-Attainment Designations	These rules do not have specific requirements for major sources because they are requirements for EPA or state and local authorities. Furthermore, these rules can be used as authority to impose specific requirements on a major source.
	40 CFR 52 Approval and Promulgation of Implementation Plans 40 CFR 61 National Emission Standards for Hazardous Air 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.
	40 CFR 66 Assessment and Collection of Noncompliance Penalties 40 CFR 70 State Operating Permit Programs	These rules do not have specific requirements and may or may not be relevant to a major source and should never be listed in the applicable requirements or non-applicable requirements.

SECTION V. FUTURE PERMIT CONSIDERATIONS

A. MACT Standards (Part 63)

As of the issuance of the #OP5176-02, the Department is unaware of any new or future MACT standards that may be promulgated that will affect this facility. The facility is currently subject to 40 CFR 63 Subpart AAAA

B. NESHAP Standards (Part 61)

As of the issuance of the #OP5176-02, the Department is unaware of any new or future NESHAP Standards that may be promulgated that will affect this facility. The facility is currently subject to 40 CFR 61, Subpart M.

C. NSPS Standards

As of the issuance of the #OP5176-02, the Department is unaware of any new or future NSPS standards that may be promulgated that will affect this facility. The facility is currently subject to 40 CFR 62, Subpart OOO (the federal plan for 40 CFR 60 Subpart Cf).

D. Risk Management Plan

As of this date (08/14/17), 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 June 21, 1999; three 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.

This facility does not trigger any CAM requirements, therefore CAM is not applicable.

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.

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 GHG may still be required to comply with BACT for GHG emissions.