MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY
OPERATING PERMIT TECHNICAL REVIEW DOCUMENT

Air, Energy & Mining Division
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Flathead Electric Cooperative – Flathead Electric LFGE Facility
Section 1, Township 29N, Range 22 West
4098 Highway 93 North, Kalispell, Montana 59901

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		MAQP#4245-02
New Source Performance Standards (NSPS)	X		40 CFR 60, Subpart JJJJ
National Emission Standards for Hazardous Air Pollutants (NESHAPS)	X		40 CFR 63, Subpart ZZZZ
Maximum Achievable Control Technology (MACT)		X	
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 Flathead Electric Cooperative (Flathead LFGE) on August 7, 2024.

B. Facility Location

This facility is located in Flathead County, in Section 1, Township 29N, Range 22W.

C. Facility Background Information

MAQP History

MAQP #4245-00 was originally issued to Flathead Electric LFGE Facility (Flathead LFGE) on September 23, 2008, for the operation of landfill gas to energy facility by the Montana Department of Environmental Quality (DEQ). The facility consisted of single engine/generator to be fueled on landfill gas produced by and collected at the Flathead County Solid Waste District's landfill. Any LFG not used as a fuel for the engine/generator, would be destroyed in an existing enclosed flare owned and permitted by the Flathead County Solid Waste District.

MAQP #4245-01, was issued on July 27, 2010, by DEQ. On September 17, 2009, DEQ received a request from the Flathead County Solid Waste District (District), the owner of the Flathead County Landfill (FCLF), to transfer equipment associated with the LFG gas collection and control system (GCCS) to the LFGE facility located at Flathead County Solid Waste District's existing landfill. MAQP #4245-01 replaced MAQP #4245-00.

The Environmental Protection Agency (EPA) has removed the "emergency" affirmative defense provisions from the Clean Air Act's (CAA) title V operating permit program regulations. These provisions established an affirmative defense that sources could have asserted in enforcement cases brought for noncompliance with technology-based emission limitations in operating permits, provided that the exceedances occurred due to qualifying emergency circumstances. These provisions, which have never been required elements of state operating permit programs, are being removed because they are inconsistent with the EPA's interpretation of the enforcement structure of the CAA. Each state which has emergency provisions within their title V operating permit programs will need to remove the language and provisions in title V operating permits at their next renewal or during normal permit revisions. The emergency provisions formerly located in this section are no longer applicable to this Title V operating permit.

MAQP #4245-02, was issued on October 21, 2022, by DEQ. On July 28, 2022, DEQ received an application from Flathead LFGE for the addition of one (1) CAT 3520C Genset. The

application was considered an Energy Development Project and was subject to a 30-day appeal period. The emissions from the additional genset increased the facilities Potential to Emit (PTE) Carbon Monoxide (CO) over 100 tons per year (t/yr). With the increase in PTE, Flathead LFGE will be required to apply for a Title V Operating Permit within one year after startup of the new genset. MAQP #4245-02 replaced MAQP #4245-01.

D. Current Permit Action

DEQ has prepared a Title V Operating Permit, #OP4245-00, for the Flathead Electric Cooperative LFGE Facility (Flathead LFGE).

On October 21, 2022, Flathead LFGE was issued MAQP #4245-02. Under MAQP #4245-02, Flathead LFGE added a landfill gas-fired CAT 3520C Genset to existing permitted operations. Emissions from the Genset (EU002) increased the facilities Potential to Emit (PTE) of Carbon Monoxide (CO) to more than 100 tons per year (t/yr). Therefore, pursuant to the applicable requirements of ARM 17.8.1204, Air Quality Operating Permit Program Applicability, and ARM 17.8.1205(2)(a), Flathead LFGE was required to apply for a Title V Operating Permit within one year after startup of the new Genset.

LFGE submitted the application for the current permit action on August 7, 2024, as required. #OP4245-00 consolidates all applicable requirements into the Title V Operating Permit.

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 DEQ is required to complete a Taking and Damaging Checklist. As required by 2-10-101 through 2-10-105, MCA, the DEQ 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?
		6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)

YES	NO	
	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 DEQ determined there are no taking or damaging implications associated with this permit action.

F. Compliance Designation

Flathead LFGE was reviewed for compliance with MAQP #4245-02 on April 9, 2025, and was found to be compliant with the limits and conditions contained in MAQP #4245-02. The compliance monitoring period was from December 8, 2021, through April 9, 2025.

SECTION II. SUMMARY OF EMISSIONS UNITS

A. Facility Process Description

Flathead Electric Cooperative owns and operates a landfill gas to energy (Flathead LFGE) facility. The facility utilizes a landfill gas (LFG) pressurization and cooling skid. The purposes of the skid are to raise the pressure of the LFG to a pressure acceptable for use in the engine/generator and to remove moisture from the LFG. The skid will produce about 610 square cubic foot per minute (scfm) of LFG at about 2.5 pounds per standard inch gauge (psig).

The landfill gas (LFG) collection system is comprised of approximately 25 vertical extraction wells that actively collect LFG from a waste prism, headers, and lateral piping that convey extracted LFG to an enclosed flare system. The LFG collection system will be expanded as the landfill expands. If the production of LFG exceeds the permitted amount of landfill gas allowed to be combusted by the flare or if new pollutants not previously analyzed are emitted, modification of the permit may be required.

Operation of the enclosed flare emits a variety of regulated air pollutants. Emissions are also generated by combustion of collected LFG used to operate two Caterpillar G3520C engines/generators that produce electricity for sale. LFG that is not used as fuel for the engines is destroyed by the enclosed flare. The primary emissions consist of carbon monoxide (CO), oxides of nitrogen (NOX), and volatile organic compounds (VOC). Minimal particulate matter emissions (<3 tpy) are also produced and limited by knockout drums and demisters used to remove particulate matter from the LFG prior to flaring and/or operation of the engines.

In addition, pursuant to the applicable requirements of § 75-2-215, MCA, and ARM 17.8.770, a health risk assessment has been completed to risks associated with VOC and Hazardous Air Pollutant (HAP) emissions generated by the enclosed flare. A description of the health risk assessment is contained in the Montana Air Quality Permit (MAQP)

Flathead LFGE is under agreement with the Flathead County Landfill (FCLF) to collect landfill gas (LFG) produced by FCLF, for generation of electricity for sale.

B. Emissions Units and Pollution Control Device Identification

Emissions Unit ID	Description	Pollution Control Device/Practice
EU-001	CAT 3520C GENSET1	None
EU-002	CAT 3520C GENSET2	None
EU-003	PEI Enclosed Flare	None

C. Categorically Insignificant Sources/Activities

Flathead LFGE did not identify any insignificant sources.

SECTION III. PERMIT CONDITIONS

A. Emission Limits and Standards

Flathead LFGE was required to obtain a Title V Operating permit because the addition of GENSET 2 (EU002) increased facility carbon monoxide (CO) emissions above the applicable Title V operating permit program threshold of 100 tons per year. Applicable emission limits and standards included in the Title V operating permit were established by Flathead LFGE's MAQP #4245-02, applicable NSPS requirements (40 CFR 60, Subpart JJJJ), and applicable NESHAP requirements (40 CFR 63, Subpart ZZZZ). All applicable emission limits and standards are listed in the operating permit along with the applicable citation of authority for each condition/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 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 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 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 DEQ 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 DEQ 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 DEQ 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 *Daily Inter Lake* newspaper on or before June 9, 2025. DEQ provided a 30-day public comment period on the draft operating permit from June 9, 2025, through July 9, 2025. ARM 17.8.1232 requires DEQ to keep a record of both comments and issues raised during the public participation process. The comments and issues received by June 19, 2025, will be summarized, along with DEQ's responses, in the following table. All comments received during the public comment period will be promptly forwarded to FEC so they may have an opportunity to respond to these comments as well.

Summary of Public Comments

Person/Group Commenting	Comment	DEQ Response
No Public Comments Received		

G. Draft Permit Comments

Summary of Permittee Comments

Permit Reference	Permittee Comment	DEQ Response
Operating Permit, Section I.	Section I. – FEC requests the update to "Facility Contact" to Jason Williams	DEQ updated the "Facility Contact"

Summary of EPA Comments

Permit Reference	EPA Comment	DEQ Response
No EPA Comments Received		

SECTION IV. NON-APPLICABLE REQUIREMENT ANALYSIS

Pursuant to ARM 17.8.1221, Flathead LFGE did not request a permit shield for any regulatory requirements and/or regulatory orders.

SECTION V. FUTURE PERMIT CONSIDERATIONS

A. MACT Standards (Part 63)

As of the issuance date of draft Operating Permit #OP4245-00, DEQ 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 ZZZZ.

B. NESHAP Standards (Part 61)

As of the issuance date of draft Operating Permit #OP4245-00, DEQ is unaware of any new or future NESHAP Standards that may be promulgated that will affect this facility.

C. NSPS Standards

This facility is subject to 40 CFR 60, Subpart JJJJ. As of the issuance date of draft Operating Permit #OP4245-00, DEQ is unaware of any new or future NSPS Standards that may be promulgated that will affect this facility.

D. Risk Management Plan

As of this date (06/09/2025), 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.

Flathead LFGE does not currently have any emitting units that meet all the applicability criteria in ARM 17.8.1503 under Operating Permit #OP4245-00 and is therefore not currently required to develop a CAM Plan.

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 (CO_2e) 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 CO_2e 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 CO_2e 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 CO_2e 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 CO_2e 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.