

**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**

Allied Waste Systems of Montana, LLC  
Missoula Municipal Solid Waste Landfill  
SE¼ of the NE¼ of Section 8 and 9, Township 13 North, Range 19 West, Missoula County  
P.O. Box 8449; 3737 Old Coal Mine Road  
Missoula, MT 59802

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

| <b>Facility Compliance Requirements</b>                                           | <b>Yes</b> | <b>No</b> | <b>Comments</b>                           |
|-----------------------------------------------------------------------------------|------------|-----------|-------------------------------------------|
| 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         |                                           |
| <b>Applicable Air Quality Programs</b>                                            |            |           |                                           |
| ARM Subchapter 7 – Montana Air Quality Permit (MAQP)                              | X          |           | Missoula County permit MC2831-03          |
| New Source Performance Standards (NSPS)                                           | X          |           | 40 CFR 60, Subpart IIII, and Subpart JJJJ |
| National Emission Standards for Hazardous Air Pollutants (NESHAPS)                | X          |           | 40 CFR 61, Subpart M                      |
| Approval and Promulgation of State Plans for Designated Facilities and Pollutants | X          |           | 40 CFR 62, Subpart OOO                    |

| Facility Compliance Requirements                                                                                            | Yes | No | Comments                                           |
|-----------------------------------------------------------------------------------------------------------------------------|-----|----|----------------------------------------------------|
| Maximum Achievable Control Technology (MACT)                                                                                | X   |    | 40 CFR 63,<br>Subpart AAAA,<br>and Subpart<br>ZZZZ |
| 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 operating permit application submitted by BFI Waste Systems of North America, Inc. (BFI) and received by the Department of Environmental Quality (DEQ) on June 10, 1997, the Title V operating permit renewal application received on February 6, 2004, an amendment request received on September 20, 2004; a de minimis request submitted April 18, 2008, the amendment request, renewal application and supplemental information submitted by Allied Systems of Montana, LLC (Allied) received on January 20, 2009, April 10, 2009, April 20, 2009, and February 28, 2014, the renewal applications received on March 10, 2015, May 3, 2021 and April 15, 2025; and the administrative amendment received on January 8, 2024 and April 8, 2024.

### B. Facility Location

Allied owns and operates the Missoula Landfill. This facility is located in the SE<sup>1</sup>/<sub>4</sub> of the NE<sup>1</sup>/<sub>4</sub> of Sections 8 and 9, Township 13 North, Range 19 West, in Missoula County, Montana. Missoula County is designated unclassifiable/attainment for all National Ambient Air Quality Standards (NAAQS) for all criteria pollutants except for particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>) and carbon monoxide (CO). Missoula is designated attainment under a maintenance plan for CO and attainment under a Limited Maintenance Plan for PM<sub>10</sub>. The landfill is on the north-northwestern edge of Missoula.

### C. Facility Background Information

Montana Air Quality Permit (MAQP)/Missoula County Air Pollution Control Program (APCP): On December 25, 1994, DEQ issued BFI **MAQP #2831-00** to operate a John Zink Company enclosed landfill flare system that included all the equipment downstream of the gas extraction system at BFI's landfill. BFI uses the landfill flare system to combust landfill gas collected by a gas extraction system. The collected gas is composed mainly of methane (approximately 50%), carbon dioxide (approximately 40%), and other trace gases. The gas extraction system was installed to comply with the Resource Conservation and Recovery (RCRA) Subtitle D regulations, prevent the mitigation of gas into adjacent soils, and remove excess gas from within the waste mass to prevent vegetative stress, control odors, and maintain ground water quality.

On March 20, 1996, BFI requested that MAQP #2831-00 be modified to extend the deadline on the initial testing requirements. BFI had been having difficulties keeping the flare operating continuously. This permit modification issued on April 18, 1996, **MAQP #2831-01**, provided BFI with additional time to perform the initial testing required to monitor compliance with permit conditions. BFI was required to monitor compliance with the emissions limits on October 1, 1996. This modification did not result in an increase in any emissions from the facility.

On August 21, 1997, BFI was issued **MAQP #2831-02** as a modification. The modification changed the facility's name from Browning-Ferris Industries of Montana, Inc. to BFI Waste Systems of North America, Inc. Also, BFI is subject to the requirements of 40 Code of Federal Regulations (CFR) 60, Subpart WWW that were promulgated by EPA on March 12, 1996; therefore, DEQ added Section II.A.5 to MAQP # 2831-02. In addition, the rule citations were updated to reflect the new rule citations.

On May 5, 2003, BFI was issued **APCP #MC2831-00** by the Missoula-County Air Pollution Program. This permit modification made the APCP the permitting authority for BFI. According to APCP, MC2831-00 replaced Montana Air Quality Permit #2831-02. DEQ did not revoke MAQP #2831-02.

In 2007 BFI changed its name to Allied Systems of Montana, LLC. To reflect this change Missoula County issued **APCP #MC2831-01** on January 25, 2008. The permit modification reflected the name change and updated the permit language. APCP #MC2831-01 replaced APCP #MC2831-00.

On April 18, 2008, Allied submitted a notification of de minimis change to permit #MC2831-01 to incorporate vertical expansion of the landfill. The proposed vertical expansion of the landfill increased the total waste design capacity by 0.9 million megagrams (Mg) from a total design capacity of 7.5 million Mg to 8.4 million Mg. EPA's LandGEM Landfill Gas Emissions Model, Version 3.02 was used by Allied to estimate potential emissions of the proposed landfill expansion. Modeling results indicated peak potential emissions from the landfill of non-methane organic compounds would occur in the year 2021 at a rate of 21.12 tons per year (TPY), an increase of 1.66 TPY increase from pre-expansion estimated potential emissions. The modeling results indicated that the corresponding peak landfill gas flow rate to the flare associated with the post-expansion model would be 1,612 cubic feet per minute (ft<sup>3</sup>/min), which is within the permitted 2,000 ft<sup>3</sup>/min limitation. Based on this information it was concluded that flare emissions associated with the vertical expansion would not increase as a result of the expansion.

APCP rules do not provide for de minimis changes to permitted activities; however, the proposed expansion did not violate a permit condition or increase the facilities potential to emit. Therefore, no revisions to APCP #MC2831-01 were necessary as a result of the proposed expansion.

On October 13, 2009, Allied requested a permit modification to include a portable 52 horsepower (hp) engine used for warming up mobile equipment at the site during cold weather. To reflect these change Missoula County issued **APCP #MC2831-02** on January 8, 2010. APCP #MC2831-02 replaced APCP #MC2831-01.

On July 16, 2015, Allied submitted a complete permit application for a new John Zinc ZTOF Enclosed Flare to incinerate gases generated at the landfill. The new flare will have a rated fuel use of 1,500 standard cubic feet per minute at 50% methane. The old flare was in need of replacement due to age, and the new flare will be smaller and more appropriately sized for gas generated at the landfill. To reflect the new flare, Missoula County issued **APCP #MC2831-03** on September 16, 2015. APCP #MC2831-03 replaced permit APCP #MC2831-02.

On March 18, 2020, Allied submitted a complete permit application to add an 80-horsepower (60 kW) generator and a 23-horsepower (17 kW) generator to the APCP permit #MC2831-03.

The generators are propane-fueled and will be used as emergency generators. To reflect the new emergency generators, APCP issued Missoula County Air Quality Permit **#MC2831-04** on May 20, 2021, to replace permit #MC2831-03.

On October 12, 2021, Allied Waste requested an administrative amendment to Missoula County Air Quality Permit **#MC2831-04** to remove 40 CFR Subpart WWW from the permit and incorporate 40 CFR 62 Subpart 000 into the permit. On June 21, 2021, the rule 40 CFR 62 Subpart 000 went into effect and 40 CFR Subpart WWW was no longer applicable. In addition, as part of the rulemaking package, EPA revised the Landfill National Emission Standards for Hazardous Air Pollutants (NESHAP) (40 CFR 63 Subpart AAAA). No later than September 27, 2021, affected facilities must comply with the revised Landfill NESHAP requirements instead of the superseded Landfill NESHAP requirements. Missoula Landfill is applicable to the Landfill NESHAP requirements; therefore, Allied Waste requested that these regulations be incorporated into the Missoula City-County Air Quality permit. Since National Emission Standard for Asbestos, 40 CFR Part 61 Subpart M applies to the landfill, this was also incorporated in the revised permit. Missoula City-County Air Quality Permit **#MC2831-05** incorporated these changes and replaced permit **#MC2831-04**.

On January 1, 2025, Allied Waste requested an emissions increase to Missoula County Air Quality Permit #MC2831-05 for the enclosed landfill gas flare to increase emissions from 1,500 standard cubic feet per minute to 1,750 standard cubic feet per minute. Missoula City-County Air Quality Permit **#MC2831-06** incorporated these changes and replaced permit **#MC2831-05**. Missoula City-County Air Quality Permit #MC2831-07 was received by DEQ. #MC2831-07 corrected identifies the new standard cubic feet of gas flowing to the flare as 1,750 standard cubic feet per minute (2.52x10<sup>6</sup> standard cubic feet per day). Missoula City-County Air Quality Permit **#MC2831-07** replaced **#MC2831-06**.

#### Title V Operating Permit

**Title V Operating Permit #OP2831-00** was issued final and effective on July 30, 1999. On February 6, 2004, BFI applied for a renewal of their Title V Operating Permit. BFI's Operating Permit #OP2831-00 was applicable for 5 years and expired on July 30, 2004. This action also incorporated changes made under MAQP #2831-02. **Operating Permit #OP2831-01** replaced Operating Permit #OP2831-00.

On September 20, 2004, BFI submitted a request for an administrative amendment to correct and clarify language in Section III.B.11 of Operating Permit #OP2831-01. Section III.B.11 stated, "BFI shall maintain on-site continuous recording charts of the flowrate to the flare and stack temperature of the flare as required by Section III.B.7. The charts shall be reviewed weekly and include the date, time, and reviewer's initials. The temperature shall be logged daily and include the date, time, and reviewer's initials (ARM 17.8.1212)." The condition refers to the flow chart recorder which continually records the temperature, date, and time. However, although the temperature chart may have been checked every day, it was not removed and signed every day (those actions took place on a weekly basis when the chart was changed). The system is designed to shut down during any temperature deviation outside the permitted temperature boundaries; therefore BFI felt it was essentially impossible for the system to operate out of compliance with the temperature requirements and that daily initialization (and therefore, removal) was unnecessary and redundant. DEQ agreed and changed the language to reflect the weekly chart review and initialization, which satisfies the intent of the original condition.

**Operating Permit #OP2831-02** on October 29, 2004, and replaced Operating Permit #OP2831-01.

On January 20, 2009, Allied applied for a renewal of their Title V Operating Permit. Allied's Operating Permit #OP2831-02 was applicable for 5 years and expired on July 20, 2009. The application requested updates to administrative information pertinent to the name change from BFI to Allied and addressed requested updated language for notifications and submittals. Also, Allied requested removal of the Oil Effluent Water Separator language and conditions in the permit (Condition A.13 and Section III.A) to reflect the fact the facility no longer operates this unit. Also Allied proposed updated language for Sections III.B.7 and B.11 to more accurately reflect changes proposed for Operating Permit #OP2831-02. Finally, Allied requested that Appendix A, Insignificant Emissions Units, be updated to reflect current operations at the facility.

DEQ determined that the vertical expansion to the landfill, submitted as a de minimis change on April 18, 2008, did not result in a significant change in potential to emit and that it did not constitute a minor modification. However, pursuant to 40 CFR 60, Subpart WWW the proposed changes did constitute a modification. **Operating Permit #OP2831-03** and this document were updated to reflect the changes in operation at the facility as described and replaced Operating Permit #OP2831-02.

On December 30, 2013, DEQ received an application from Allied to modify Operating Permit #OP2831-03. Upon review of the application, DEQ determined that the Missoula City County Air Quality Permit APCP #MC2831-02 would need to be modified prior to modification of Title V #OP2831-03. Allied withdrew the application to modify Title V #OP2831-03 although the permit increment **#OP2831-04** was maintained.

On February 28, 2014, DEQ received an application from Allied to amend Operating Permit #OP2831-03. The requested changes to the permit included the following:

- changed the name of the responsible official to Mike Huyke
- changed the name of the alternate responsible official to Kirk Treece
- updated the facility contact person's phone number
- omitted the number of gas extraction wells in the General Information Section
- changed permit conditions III.B.7 and III.B.11 due to the fact that Allied upgraded the continuous recording device from a paper chart recorder to an electronic recorder

In addition, the permit action updated references to the Missoula City-County Air Pollution Control Program. **Operating Permit #OP2831-05** replaced Operating Permit #OP2831-04.

On March 10, 2015, DEQ received an application from Allied to renew Operating Permit #OP2831-05. #OP2831-06 included updated flare conditions as required by APCP #MC2831-03. Additionally, #OP2831-06 updated the responsible official from Mr. Mike Huycke to Mr. Gregg Brummer and removed Mr. Kirk Treece as the alternate responsible official. As of the date of the decision on #OP2831-06, Allied had not filled the alternate responsible official position. **Operating Permit #OP2831-06** replaced Operating Permit #OP2831-05 and updated the permit to reflect current permit language and rule references used by DEQ.

On May 3, 2021, DEQ received an application from Allied to both renew their operating permit and include a minor modification. The application requested the following changes:

- Include one 80-horsepower (hp) (60 kW) new emergency generators as permitted by APCP #MC2831-04,
- Include one 23-hp (17 kW) new emergency generator as permitted by APCP #MC2831-04.
- Change the Responsible Official to Mr. Don Moss.
- Change the Alternate Responsible Official to Mr. William Bromann.

In addition, the permit action updated reference to the Missoula City-County Air Pollution Control Program's revised permit #MC2831-04. **Operating Permit #OP2831-07** replaced Operating Permit #OP2831-06 and updated the permit to reflect current permit language, including the new applicable Federal Plan of 40 CFR 62 Subpart OOO that replaced 40 CFR 60 Subpart WWW, includes applicable 40 CFR 63 Subpart AAAA, and rule references used by DEQ.

On January 8, 2024, DEQ received an administrative amendment request from Allied Waste Systems, LLC., to change the Responsible Official. DEQ made the requested change as well as updated the operating permit and technical review document to reflect current DEQ naming conventions. **Operating Permit #OP2831-08** replaced Operating Permit #OP2831-07.

On April 8, 2024, DEQ received an Administrative Amendment request to update the Responsible Official. This permitting action identified Catherine Bernhardt as the new Responsible Official.

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. **Operating Permit #OP2831-09** replaced Operating Permit #OP2831-08.

On December 9, 2024, DEQ received an Administrative Amendment request to add an Alternate Responsible Official and change the Facility Contact. This permitting action identified Brent Leach as the Alternate Responsible Official as well as changed the Facility Contact to Jeremy Welch. **Operating Permit #OP2831-10** replaced Operating Permit #OP2831-09.

#### **D. Current Permit Action**

On January 1, 2025, Missoula City-County Air Quality Permit #MC2831-07, was issued to Allied Waste authorizing an increase in the flow of gas from the landfill to the flare from 1,500 standard cubic feet per minute (scfm) to 1,750 scfm. On April 15, 2025, DEQ received an application from Allied Waste Systems, LLC., for modification of their Title V operating permit to increase the flow of gas from the landfill to the flare from 1,500 standard cubic feet per

minute (scfm) to 1,750 scfm. **Operating Permit #OP2831-11** replaces Operating Permit #OP2831-10.

## E. Taking and Damaging Analysis

As required by 2-10-105, MCA, 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?                                                                                                                                                                     |
|     | 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, DEQ determined there are no taking or damaging implications associated with this permit action.

## F. Compliance Designation

On July 13, 2023, the Missoula City-County Health Department conducted a full compliance evaluation and Allied was found to be in full compliance with Title V permit #OP-2831-10 and MCCP #MC2831-07, the permits that were in place at the time of the inspection.

## SECTION II. SUMMARY OF EMISSIONS UNITS

### A. Facility Process Description

Allied operates a landfill flare system to combust landfill gas collected by a gas extraction system.

#### Gas Extraction System

The gas extraction system originally consisted of approximately 25 gas extraction wells drilled in the existing used landfill area. As the landfill expanded in size, more gas extraction wells have been connected to the extraction system. Each gas extraction well consists of 36-inch diameter wellbore, a six-inch diameter perforated high density polyethylene (HDPE) well pipe, a gravel pack, bentonite well seals to isolate the well and prevent air from being drawn into the landfill as vacuum is applied, and a control valve to control the vacuum applied to each well. Each of the extraction wells are connected to an underground piping system that transports the landfill gas and associated liquid condensate into a condensate sump. Periodically, the condensate sumps are pumped into a municipal sewer system. (Note: Previous experience has indicated that the condensate can be treated effectively without causing any adverse impacts on the local wastewater system.) Finally, the landfill gas flows to the blower building.

#### Blower Building

Landfill gas entering the blower building first flows through a knock-out pot to remove any remaining condensate and then through one of two centrifugal blowers. A fail-closed valve will be located between the knock-out pot and the blowers and will automatically shut if the flare ceases to operate, to isolate the landfill gas from the blowers. The building will be equipped with ventilators to prevent an explosive environment from developing, posted with signs, and secured from the public.

#### Flare System

Start-up of the enclosed flare will begin with a small blower located at the base of the flare purging the flare chamber of fugitive hydrocarbon vapors. After the purge cycle is complete, the pilot management system will ignite a propane stream with a spark from an electronic transformer. Once an ultraviolet (UV) flame scanner verifies the presence of the flame, the landfill gas inlet valve will be opened, and one of the two blowers will be started. This will cause landfill gas to enter the flare chamber through a set of burner tips. A flow meter and recorder will be used to monitor the flowrate (maximum of 1,750 standard cubic feet per minute (scfm)) of the landfill gas into the flare chamber. Allied has the ability with this data to calculate the daily volume to the flare. To prevent a flame from traveling upstream into the blower system, a flame arrester will be located between the blower building and the flare chamber.

A UV flame scanner is used to detect the presence of a flame in the flare chamber. When a flame is not detected the flare system will automatically shut down and begin an automated restart sequence.

The flare stack temperature will be continuously monitored by a thermocouple mounted near the flare exit and recorded on a circular chart recorder. When the thermocouple detects that combustion is occurring outside of a specified temperature range (1400-2000°F), the temperature controller will transmit signals to an air damper located at the base of the flare.

The air damper's actuator will either open the damper to allow more quench air into the flare and decrease the chamber temperature or close the damper to raise the chamber temperature.

The Standard Industrial Classification (SIC) for this facility is "Municipal Solid Waste Landfill" which has a SIC Code of "4953."

## **B. Emissions Units and Pollution Control Device Identification**

Allied operates a municipal solid waste landfill in Missoula, Montana, and emissions are controlled with an enclosed flare. The landfill is subject to 40 CFR 60, Subpart WWW. The flare is also an emitting unit that must maintain compliance with the opacity, nitrogen oxides (NO<sub>x</sub>), CO, volatile organic compounds (VOC), and hydrochloric acid (HCl) limitations.

In addition to the landfill, the facility also has fugitive emissions from its roads, and emissions from the following three generators:

- A portable 52 hp diesel generator used to warm up mobile equipment at the site during cold weather and initially permitted on 2009 by APCP in #MC2831-02.
- An 80 hp emergency propane-fired generator permitted in 2020 by APCP in #MC2831-04.
- A 23 hp emergency propane-fired generator permitted in 2020 by APCP in #MC2831-04.

## **C. Categorically Insignificant Sources/Activities**

The Administrative Rules of Montana (ARM) 17.8.1201(22)(a) defines an insignificant emissions unit as one that emits less than 5 tons per year of any regulated pollutant, has the potential to emit less than 500 pounds per year of lead or any hazardous air pollutant, and is not regulated by an applicable requirement other than a generally applicable requirement. The following are the insignificant emitting unit located at the Allied facility.

| <b>Emissions Unit ID</b> | <b>Description</b>                                                                          |
|--------------------------|---------------------------------------------------------------------------------------------|
| IEU01                    | Commercial Fuel Combustion (engine) <0.50 million British thermal units per hour (MMBtu/hr) |
| IEU03                    | Liquefied Petroleum Gas (LPG) Propane Tanks <40,000 gallon capacity                         |
| IEU04                    | Natural gas combustion heaters < 5 MMBtu/hr                                                 |
| IEU05                    | Space heaters < 0.50 MMBtu/hr                                                               |
| IEU06                    | 5 hp Gas-Fired Reciprocating Internal Combustion Engine (Generator).                        |

### SECTION III. PERMIT CONDITIONS

#### A. Emissions Limits and Standards

The following emitting units are required to be installed and operated with the equipment listed below.

The landfill is subject to 40 CFR 60, Subpart WWW, and 40 CFR 62, Subpart OOO requirements. The flare is operated as the control device for the landfill. The landfill gas sent to the flare is required to be operated at a minimum of 1400 degrees Fahrenheit and is limited to  $2.52 \times 10^6$  standard cubic feet per day (scfd). The flare is limited to 10% opacity and 0.10 grains per dry standard cubic foot (gr/dscf) of particulate matter corrected to 12% carbon dioxide (CO<sub>2</sub>), emissions are limited as follows: NO<sub>x</sub> emissions-2.70 pounds per hour (lb/hr), CO emissions-9.00 lb/hr, VOC emissions-0.09 lb/hr, and HCl emissions-0.35 lb/hr. The source demonstrated compliance with these limitations in the initial compliance test conducted on December 16 and 17, 2015. The inlet concentrations of certain pollutants are also limited with the maximum allowable values shown below in Table 1.

Table 1. Flare Inlet Concentration Limitations

| Pollutants                                   | Flare Inlet Concentration<br>(mg/m <sup>3</sup> ) |
|----------------------------------------------|---------------------------------------------------|
| <i>Annual Testing</i>                        |                                                   |
| 1,1,2,2 - Tetrachloroethane                  | 80                                                |
| 1,1 - Dichloroethane (ethyldiene dichloride) | 100                                               |
| 1,1 - Dichloroethylene (vinylidene chloride) | 10                                                |
| 1,2 - Dichloroethane (ethylene dichloride)   | 20                                                |
| 1,2 - Dichloropropane (propylene dichloride) | 10                                                |
| Acrylonitrile                                | 140                                               |
| Benzene                                      | 60                                                |
| Carbon Disulfide                             | 20                                                |
| Carbon Tetrachloride                         | 0.3                                               |
| Carbonyl Sulfide                             | 10                                                |
| Chlorobenzene                                | 10                                                |
| Chloroethane (ethyl chloride)                | 30                                                |
| Chloroform                                   | 1                                                 |
| Chloromethane (methyl chloride)              | 20                                                |
| Dichlorobenzene                              | 10                                                |
| Dichloromethane (methylene chloride)         | 50                                                |
| Dimethyl Sulfide (methyl sulfide)            | 20                                                |
| Ethylbenzene                                 | 20                                                |
| Ethylene dibromide                           | 0.1                                               |
| Hexane                                       | 230                                               |
| Hydrogen Sulfide                             | 490                                               |
| Methyl Isobutyl Ketone                       | 80                                                |
| Methyl Mercaptan                             | 50                                                |
| Perchloroethylene (tetrachloroethylene)      | 250                                               |
| Toluene                                      | 1470                                              |
| Trichloroethylene (trichloroethene)          | 150                                               |
| Vinyl Chloride                               | 190                                               |

| Pollutants                           | Flare Inlet Concentration<br>(mg/m <sup>3</sup> ) |
|--------------------------------------|---------------------------------------------------|
| Xylenes                              | 520                                               |
| Dichlorodifluoromethane <sup>e</sup> | 780                                               |
| <i>5-Year Testing</i>                |                                                   |
| Mercury (total)                      | 0.02                                              |

Allowable emissions represent a worst-case scenario based on a 10-fold increase in reported potential emissions.

In addition to these limitations and conditions Allied is required to maintain fugitive emissions from the facility below 20% opacity through reasonable precautions. Also Allied is authorized to operate one compression ignition reciprocating internal combustion engine that is not to exceed 52 hp, and two propane emergency generators (one no more than 80 hp and the other no more than 23 hp).

## 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 emissions 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 emissions limits and standards. However, DEQ may request additional testing to determine compliance with the emissions 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 DEQ has the authority to require testing if deemed necessary to determine compliance with an emissions 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 DEQ and to annually certify compliance with the applicable requirements contained in the permit. The reports must include a list of all emissions 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 Missoulian* newspaper on or before September 26, 2025. The DEQ provided a 30-day public comment period on the draft operating permit from September 26, 2025, through October 27, 2025. ARM 17.8.1232 requires the DEQ to keep a record of both comments and issues raised during the public participation process. The comments and issues received by October 27, 2025, will be summarized, along with the DEQ's responses, in the following table. All comments received during the public comment period will be promptly forwarded to Allied so they may have an opportunity to respond to these comments as well.

### Summary of Public Comments

| Person/Group<br>Commenting | Comment | DEQ Response |
|----------------------------|---------|--------------|
|                            |         |              |

## G. Draft Permit Comments

### Summary of Permittee Comments

| Permit Reference | Permittee Comment | DEQ Response |
|------------------|-------------------|--------------|
|                  |                   |              |

### Summary of EPA Comments

| Permit Reference | EPA Comment | DEQ Response |
|------------------|-------------|--------------|
|                  |             |              |

## **SECTION IV. FUTURE PERMIT CONSIDERATIONS**

### **A. MACT Standards (Part 63)**

The facility is subject to 40 CFR 63, Subpart AAAA – National Emissions Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills since the landfill emissions are 50 megagrams per year of non-methane organic compounds (NMOC) or greater. DEQ is unaware of any new or future MACT Standards that may be promulgated that will affect the facility.

### **B. NESHAP Standards (Part 61)**

As of the issuance date of draft Operating Permit #OP2831-08, 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 M.

### **C. NSPS Standards**

EPA has adopted a new NSPS Standard for MSW Landfills which is 40 CFR 60, Subpart XXX. This new subpart may apply if the Missoula landfill commences construction, reconstruction, or a modification after July 17, 2014. EPA adopted a Federal Plan of the associated emissions guidelines (40 CFR 60, Subpart Cf) in 40 CFR 62, Subpart OOO on June 21, 2021, which applies to the Missoula landfill until such time as Allied modifies their landfill. The Federal Plan lowers the threshold which requires a gas collection and control system when NMOC emissions reach 34 megagrams per year (MG)/yr or more.

The facility is subject to 40 CFR 60, Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines) and Subpart JJJJ (Standard of Performance for Stationary Spark Ignition Internal Combustion Engines).

As of the issuance date of draft Operating Permit #OP2831-08, DEQ is unaware of any other new or future NSPS Standards that may be promulgated that will affect this facility.

### **D. Risk Management Plan**

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; 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 emissions limitation or standard for the applicable regulated air pollutant (unless the emissions limit or standard 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 emissions of the applicable regulated air pollutant that is greater than major source thresholds.

Allied does not currently have any emitting units that meet all the applicability criteria in ARM 17.8.1503 under Operating Permit #OP2831-09 and is therefore not currently required to develop a CAM Plan for the Missoula landfill facility.

#### **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<sub>2</sub>e) 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<sub>2</sub>e 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<sub>2</sub>e 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<sub>2</sub>e 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<sub>2</sub>e 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.