

**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  
SE<sup>1/4</sup> of the NE<sup>1/4</sup> 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.

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		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, Subpart AAAA, and Subpart 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 (Department) 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, and the renewal applications received on March 10, 2015, and May 3, 2021.

### B. Facility Location

Allied owns and operates the Missoula Landfill. This facility is located in the SE<sup>1/4</sup> of the NE<sup>1/4</sup> of Sections 8 and 9, Township 13 North, Range 19 West, in Missoula County, Montana. Missoula County is designated as an Unclassifiable/Attainment area for 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 considered a maintenance area for carbon monoxide (CO). 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, the Department issued **BFI MAQP #2831-00** to operate a John Zink Company enclosed landfill flare system that included all of 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 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, the Department 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. The Department 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.

## 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. The Department 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.

The Department 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, the Department received an application from Allied to modify Operating Permit #OP2831-03. Upon review of the application, the Department 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, the Department 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, the Department 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 the Department.

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

On May 3, 2021, the Department received an application from Allied to both renew their operating permit and include a minor modification. The application requests 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 updates reference to the Missoula City-County Air Pollution Control Program's revised permit #MC2831-04. **Operating Permit #OP2831-07** replaces Operating Permit #OP2831-06 and updates 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 the Department.

#### **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 September 25, 2020, the APCP conducted a full compliance evaluation and Allied was found to be in compliance with the limits and conditions of Missoula County Permit #MC2831-04 and Title V Operating Permit #OP2831-06, the permits that were in place at the time.

## 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 will be 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 will flow 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 2000 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 will be 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 facility.

Emissions Unit ID	Description
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  $2.16 \times 10^6$  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 (mg/m <sup>3</sup> )
<i>Annual Testing</i>	
1,1,2,2 - Tetrachloroethane	80
1,1 - Dichloroethane (ethylidene 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

Pollutants	Flare Inlet Concentration (mg/m <sup>3</sup> )
Vinyl Chloride	190
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 additions 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, the Department 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 the Department 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 the Department 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 July 29, 2021. The Department provided a 30-day public comment period on the draft operating permit from July 29, 2021, to August 30, 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 August 30, 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 Allied so they may have an opportunity to respond to these comments as well.

#### **Summary of Public Comments**

Person/Group Commenting	Comment	Department Response
	No Comment	

#### **G. Draft Permit Comments**

#### **Summary of Permittee Comments**

Permit Reference	Permittee Comment	Department Response
Section III.B	Remove reference to 40 CFR 60 Subpart WWW since the facility is no longer subject to Subpart WWW, but the newly adopted federal plan in 40 CFR 62 Subpart OOO.	The Department has removed reference to Subpart WWW.
Section III.B	Include applicable requirements of 40 CFR Part 63, Subpart AAAA.	The Department has included Subpart AAAA as an applicable requirement.

### **Summary of EPA Comments**

Permit Reference	EPA Comment	Department Response
	No Comments	

#### **SECTION IV. NON-APPLICABLE REQUIREMENT ANALYSIS**

Section 7.0 of Allied's May 3, 2021, Title V Operating Permit Renewal application indicated there were no requested changes to the applicable requirements. Section IV of the operating permit "Non-applicable Requirements" contains the requirements that the Department previously determined were non-applicable in the March 10, 2015, permit renewal application. The following table summarizes the requirements that Allied identified as non-applicable but for which the Department did not grant a permit shield or disagreed with the applicability determination.

<b>Applicable Requirements</b>		<b>Reason</b>
<b>State</b>	<b>Federal</b>	

Applicable Requirements		Reason
State	Federal	
<p>ARM17.8.201 Definitions</p> <p>ARM 17.8.202 Incorporation by Reference</p> <p>ARM 17.8.204 Ambient Air Monitoring</p> <p>ARM 17.8.205 Enforceability</p> <p>ARM 17.8.206 Methods and Data</p> <p>ARM 17.8.210 Ambient Standards for SO<sub>2</sub></p> <p>ARM 17.8.211 Ambient Standards for NO<sub>x</sub></p> <p>ARM 17.8.212 Ambient Standards for CO</p> <p>ARM 17.8.213 Ambient Standards for Ozone</p> <p>ARM 17.8.214 Ambient Standards for HS</p> <p>ARM 17.8.220 Ambient Standards for Settled Particulate</p> <p>ARM 17.8.221 Ambient Standards for Visibility</p> <p>ARM 17.8.222 Ambient Standards for Lead</p> <p>ARM 17.8.223 Ambient Standards for PM<sub>10</sub></p> <p>ARM 17.8.230 Fluoride in Forage</p> <p>ARM 17.8.401 Definitions</p> <p>ARM 17.8.601 Definitions</p> <p>ARM 17.8.602 Incorporations by Reference</p> <p>ARM 17.8.801 through 17.8.808</p> <p>ARM 17.8.825 - 17.8.826</p> <p>ARM 17.8.1001 Definitions</p> <p>ARM 17.8.1002 Incorporations by Reference</p> <p>ARM 17.8.1004 When Air Quality Preconstruction Permit Required</p> <p>ARM 17.8.1103 Applicability - Visibility Requirements</p> <p>ARM 17.8.1101 Definitions</p>		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	
<p>ARM 17.8.403 Exemptions</p> <p>ARM 17.8.604 Prohibited Open Burning - When Permit Required</p> <p>ARM 17.8.605 Special Burning Periods</p> <p>ARM 17.8.606 Minor Open Burning Source Requirements</p> <p>ARM 17.8.611 Emergency Open Burning Permits</p> <p>ARM 17.8.612 Conditional Air Quality Open Burning Permits</p> <p>ARM 17.8.613 Christmas Tree Waste Open Burning Permits</p> <p>ARM 17.8.614 Commercial Film Production Open Burning Permits</p> <p>ARM 17.8.615 Firefighter Training</p> <p>ARM 17.8.828 Innovative Control Technology</p> <p>ARM 17.8.1005 Additional Conditions of Air Quality Preconstruction Permit</p> <p>ARM 17.8.1006 Review of Specified Sources for Air Quality Impact</p> <p>ARM 17.8.1007 Baseline for Determining Credit for Emissions and Air Quality Offsets</p> <p>ARM 17.8.1108 Notification of Permit Application</p> <p>ARM 17.8.1109 Adverse Impact and Federal Land Manager</p>		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)

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. The Department 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 #OP2831-07, 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

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 #OP2831-07, the Department 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 #OP2831-07, 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.