

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

**Air, Energy and Mining Division  
1520 E. Sixth Avenue  
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Helena, Montana 59620-0901**

**Montana Waste Systems  
High Plains Sanitary Landfill and Recycling Center  
Section 35, Township 22 North, Range 4 East, Cascade County  
P.O. Box 2645, Great Falls, Montana 59403**

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	Below Threshold
New Source Performance Standards (NSPS)	X		40 CFR 60, Subpart WWW
National Emission Standards for Hazardous Air Pollutants (NESHAPS)	X		40 CFR 61, Subpart M
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 renewal application submitted by Montana Waste Systems High Plains Sanitary Landfill and Recycling Center (High Plains) on February 26, 2010. The renewal application incorporated information from the original operating permit application submitted to the Department on March 13, 1997, administrative permit amendment application received by the Department on February 7, 2001, permit renewal application received by the Department on February 13, 2004, and an additional information submittal on March 1, 2004, permit renewal applications on February 26, 2010, and on February 8, 2016.

### B. Facility Location

This facility is located in Section 35, Township 22 North, Range 4 East in Cascade County, Montana. Cascade County is designated as an Unclassifiable/Attainment area for National Ambient Air Quality Standards (NAAQS) for all criteria pollutants except for CO. The landfill is located approximately nine miles north of Great Falls, Montana, about one mile east of US Route 87.

### C. Facility Background Information

#### Permit History

Operating Permit **#OP2981-00** established the basis for the decisions made regarding the applicable requirements, monitoring plan, and compliance status of emission units affected by the operating permit proposed for this facility. Operating Permit OP#2981-00 was issued effective on August 16, 1999.

On February 7, 2001, the Department received a request for the change of ownership of Permit #OP2981-00 from Waste Management of Great Falls and the High Plains Sanitary Landfill to Montana Waste Systems and the High Plains Sanitary Landfill. Operating Permit **#OP2981-01** replaced Permit #OP2981-00.

High Plain's Operating Permit #OP2831-01 was applicable for five years and expired on August 16, 2004. High Plains applied for a renewal of their Title V Operating Permit on February 13, 2004. Operating Permit **#OP2981-02** replaced Operating Permit #OP2981-01.

Plain's Operating Permit #OP2831-02 was applicable for five years and expired on August 26, 2010. High Plains applied for a renewal of their Title V Operating Permit on February 26, 2010. The renewed permit also incorporated updated rule references and current permit language. Operating Permit **#OP2981-03** replaced Operating Permit #OP2981-02.

**D. Current Permit Action**

The current permit action is a renewal of High Plain’s Title V Operating Permit #OP2981-03 for the Great Falls Landfill. High Plain’s Operating Permit #OP2831-03 was applicable for five years and expires on August 6, 2016. High Plains applied for a renewal of their Title V Operating Permit on February 8, 2016. The renewed permit also incorporates updated rule references and current permit language. Operating Permit #OP2981-04 replaces Operating Permit #OP2981-03.

**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**

The facility was last inspected on May 28, 2014, for air quality purposes. The facility Full Compliance Evaluation report indicated the period covered was from June 6, 2012, to September 23, 2014. All material reviewed indicated that the facility was in compliance with all the applicable requirements.

As of April 2016, High Plains has reported for the last 2 consecutive years that the Non-Methane Organic Compounds (NMOC) emissions from the landfill have exceeded 50 megagrams per year. According to 40 CFR 60, Subpart WWW, High Plains must either install a collection and control system, or demonstrate through Tier 2 or Tier 3 sampling that the NMOC emissions rate is less than the 50 megagrams per year.

## SECTION II. SUMMARY OF EMISSIONS UNITS

### A. Facility Process Description

As its primary service, High Plains receives and landfills municipal solid waste (MSW). The facility is permitted under Montana Solid Waste License #225. In addition to MSW, the facility is allowed to receive and landfill asbestos, and to receive and treat petroleum-contaminated soils. The site opened in 1980.

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

Montana Waste Systems operates the High Plains municipal solid waste landfill in Great Falls, Montana. The emitting units are the landfill itself, which is subject to 40 CFR 60 Subpart WWW, and the fugitive dust from vehicle traffic.

### 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 units located at the facility.

IEU1	4,000 gallon diesel fuel tank
IEU2	Wire feed welder

## SECTION III. PERMIT CONDITIONS

### A. Emission Limits and Standards

The landfill is subject to 40 CFR 60, Subpart WWW requirements and the 40 CFR 61, Subpart M.

### B. Monitoring Requirements

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

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

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

### C. Test Methods and Procedures

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

### D. Recordkeeping Requirements

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

### E. Reporting Requirements

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

Department and to annually certify compliance with the applicable requirements contained in the permit. The reports must include a list of all 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 *Great Falls Tribune* newspaper on or before August 2, 2016. The Department provided a 30-day public comment period on the draft operating permit from August 2, 2016, to September 1, 2016. ARM 17.8.1232 requires the Department to keep a record of both comments and issues raised during the public participation process. The comments and issues received by September 1, 2016, 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 High Plains so they may have an opportunity to respond to these comments as well.

**Summary of Public Comments**

Person/Group Commenting	Comment	Department Response
	None received	

**G. Draft Permit Comments**

**Summary of Permittee Comments**

Permit Reference	Permittee Comment	Department Response
	None received	

**Summary of EPA Comments**

Permit Reference	EPA Comment	Department Response
	None received	

## SECTION IV. NON-APPLICABLE REQUIREMENTS ANALYSIS

Pursuant to ARM 17.8.1221, High Plains requested a permit shield for all non-applicable regulatory requirements and regulatory orders identified in Table 7-1 of the Title V Operating Permit Renewal application.

The following table outlines those requirements that High Plains had identified as non-applicable in the permit renewal application but, after Department review, will not be included in the operating permit as non-applicable. The table includes both the applicable requirement and reason that the Department did not identify this requirement as non-applicable. The non-applicable requirements listed in the Title V Operating Permit renewal application are identified in Section IV of Title V Operating Permit #OP2981-04.

Rule Citation	Reason
40 CFR Part 50 40 CFR Part 51 40 CFR Part 53 40 CFR Part 54 40 CFR Part 56 40 CFR Part 58 40 CFR 63, Subpart E 40 CFR Part 64 40 CFR Part 67 40 CFR Part 71 40 CFR Part 81 ARM 17.8.130 ARM 17.8.142 ARM 17.8.510 ARM 17.8.806 ARM 17.8.807 ARM 17.8.808 ARM 17.8.825 ARM 17.8.826 ARM 17.8.1108 ARM 17.8.1109 ARM 17.8.1210 ARM 17.8.1211 ARM 17.8.1212 ARM 17.8.1213 ARM 17.8.1214 ARM 17.8.1215 ARM 17.8.1222 ARM 17.8.1223 ARM 17.8.1225 ARM 17.8.1228 ARM 17.8.1231 ARM 17.8.1233	Although these rules contain requirements for the regulatory authorities and not major sources, these rules can be used as authority to impose specific requirements on a major source.
40 CFR Part 66 40 CFR Part 70	This rule does not have specific requirements and may or may not be relevant to a major source and should never be listed in the applicable or non-applicable requirements.
40 CFR Part 52 40 CFR Part 62	This rule does not have specific requirements that are always relevant to a major source and should never be listed in the applicable or non-applicable requirements.

<p>40 CFR 63, Subpart B  40 CFR 63, Subpart D  ARM 17.8.120  ARM 17.8.121  ARM 17.8.131  ARM 17.8.140  ARM 17.8.141  ARM 17.8.511  ARM 17.8.514  ARM 17.8.515  ARM 17.8.605  ARM 17.8.606  ARM 17.8.611  ARM 17.8.612  ARM 17.8.613  ARM 17.8.614  ARM 17.8.615  ARM 17.8.804  ARM 17.8.805  ARM 17.8.828  ARM 17.8.905  ARM 17.8.906  ARM 17.8.1005  ARM 17.8.1006  ARM 17.8.1007  ARM 17.8.1224  ARM 17.8 Subchapter 15</p>	<p>This rule is procedural and has specific requirements that may become relevant to a major source during the permit span.</p>
<p>ARM 17.8.204 - ARM 17.8.230  ARM 17.8.326  ARM 17.8.801  ARM 17.8.802</p>	<p>These rules are applicable to the source and may contain specific requirements for compliance.</p>
<p>40 CFR 63, Subpart C  ARM 17.8.201  ARM 17.8.202  ARM 17.8.301  ARM 17.8.302  ARM 17.8.330  ARM 17.8.501  ARM 17.8.601  ARM 17.8.602  ARM 17.8.801  ARM 17.8.802  ARM 17.8.901  ARM 17.8.902  ARM 17.8.904  ARM 17.8.1001  ARM 17.8.1002  ARM 17.8.1004  ARM 17.8.1101  ARM 17.8.1102  ARM 17.8.1103  ARM 17.8.1201  ARM 17.8.1202  ARM 17.8.1203  ARM 17.8.1234</p>	<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.</p>

## SECTION V. FUTURE PERMIT CONSIDERATIONS

### A. MACT Standards (Part 63)

As of the issuance date of draft Operating Permit #OP2981-04, no MACT Standards have been promulgated that will affect this facility. .

### B. NESHAP Standards (Part 61)

As of the issuance date of draft Operating Permit #OP2981-04, the Department is unaware of any future NESHAP Standards that may be promulgated that will affect this facility. However the facility is currently subject to 40 CFR Subpart M, National Emission Standard for Asbestos.

### C. NSPS Standards

The facility is currently subject to 40 CFR 60, Subpart WWW. In accordance with 40 CFR 60, Subpart WWW, High Plains currently is trying to demonstrate that they are below 50 megagrams Non-Methane Organic Compounds (NMOC) per year otherwise High Plains will be required to install a collection and control system. EPA is also currently updating a new NSPS Standard for Municipal Solid Waste Landfills which will be 40 CFR 60, Subpart XXX. This new subpart may lower the threshold which requires a collection and control system.

### D. Risk Management Plan

As of the issuance date of draft Operating Permit #OP2981-04, 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.

High Plains does not currently have any emitting units that meet all the applicability criteria in ARM 17.8.1503, 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<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 PSD may still be required to comply with BACT for GHG emissions.