

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

**STATE OF MONTANA
Department of Environmental Quality
1520 E. Sixth Avenue
P.O. Box 200901
Helena, Montana 59620**

Department of the Air Force
Malmstrom Air Force Base, Montana
341 CES/CEV
39 – 78th Street North
Malmstrom AFB, MT
Section 2, Township 20 North, Range 4 East, Cascade County, MT

The following table summarizes the air quality programs testing, monitoring, and reporting requirements applicable to Malmstrom Air Force Base, Montana (Malmstrom).

Facility Compliance Requirements	Yes	No	Comments
Source Tests Required	X		Methods 5, 6, 7, and 9
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 Preconstruction Permitting	X		#1427-07
New Source Performance Standards (NSPS)		X	
National Emission Standards for Hazardous Air Pollutants (NESHAPS)		X	Except Subpart M
Maximum Achievable Control Technology (MACT)	X		40 CFR 63, Subpart DDDDD
Major New Source Review (NSR)/Prevention of Significant Deterioration (PSD)	X		NO _x Emissions Exceed 250 tpy
Risk Management Plan Required (RMP)		X	
Acid Rain Title IV		X	
State Implementation Plan (SIP)	X		General SIP

TABLE OF CONTENTS

SECTION I. GENERAL INFORMATION..... 3

- A. PURPOSE..... 3
- B. FACILITY LOCATION..... 3
- C. FACILITY BACKGROUND INFORMATION..... 3
- D. CURRENT PERMIT ACTION 6
- F. COMPLIANCE DESIGNATION..... 7

SECTION II. SUMMARY OF EMISSION UNITS..... 8

- A. FACILITY PROCESS DESCRIPTION..... 8
- B. EMISSION UNITS AND POLLUTION CONTROL DEVICE IDENTIFICATION 8
- C. CATEGORICALLY INSIGNIFICANT SOURCES/ACTIVITIES 8

SECTION III. PERMIT CONDITIONS 10

- A. EMISSION LIMITS AND STANDARDS 10
- B. MONITORING REQUIREMENTS 10
- C. TEST METHODS AND PROCEDURES 11
- D. RECORDKEEPING REQUIREMENTS 11
- E. REPORTING REQUIREMENTS 12
- G. DRAFT PERMIT COMMENTS 12

SECTION IV. NON-APPLICABLE REQUIREMENT ANALYSIS 13

SECTION V. FUTURE PERMIT CONSIDERATIONS 14

- A. MACT STANDARDS 14
- B. NESHAP STANDARDS 14
- C. NSPS STANDARDS..... 14
- D. RISK MANAGEMENT PLAN (RMP) 15

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 emission units affected by the operating permit proposed for this facility. The document is intended for reference during review of the proposed permit by the United States Environmental Protection Agency (EPA) and the public. It is also intended to provide background information not included in the operating permit and to document issues that may become important during modifications or renewals of the permit. Conclusions in this document are based on information provided in the original application submitted by the Department of the Air Force, Malmstrom Air Force Base (Malmstrom) on July 12, 1995, an additional submittal on June 19, 1998, an application submitted for a significant modification on November 26, 2002, and the current application for a significant modification submitted to the Department of Environmental Quality (Department) on February 11, 2004, with additional information received on July 28, 2004 (Administrative Amendment request).

B. Facility Location

Malmstrom is located at 39 – 78th Street North, Malmstrom Air Force Base, Montana, within Section 2, Township 20 North, Range 4 East, Cascade County, Montana.

C. Facility Background Information

Montana Air Quality Permit History

Preconstruction Permit #1427 (Permit #1427-00) was issued to the US Air Force - Malmstrom AFB on October 28, 1980. The application required a Prevention of Significant Deterioration (PSD) review by the state of Montana for SO₂, particulate, and NO_x. The application was deemed complete September 4, 1979. The application was for the construction of a new heating plant at Malmstrom. Malmstrom proposed 3 high temperature hot water generators (heating plant boilers #1, #2, and #3) to be used as a heating plant for the base. The boilers have been installed on the base. Each boiler is 85 million BTU heat output per hour, with an input design capacity of 106.25 million BTU/hr. Malmstrom identified that the 3 boilers would be capable of combusting coal. Two of the boilers would also have natural gas capabilities. The coal would generally be used only during the coldest periods of the year. At other times, the boilers would be operated using natural gas.

The Department of Health and Environmental Sciences, predecessor to the Department, determined the boilers are not subject to New Source Performance Standards (NSPS) because the size of the boilers is below the cut off contained in Subpart D and Da and the date of installation is before the effective date for Subpart Dc. Also the "boilers" do not actually produce steam, they produce hot water.

Malmstrom was also required to obtain an EPA PSD permit for this project since the state of Montana did not have a fully delegated program at the time the permit application was processed. The **EPA PSD permit** was issued pursuant to 40 CFR 52.21 (as amended 43 FR 26388). This permit was issued June 1, 1981. The EPA PSD permit contains emission limits. One of the limits states that the maximum operating level of the system shall not be greater than the combined capacities of any 2 of the 3 boilers operating simultaneously.

In 1994, Malmstrom requested a permit alteration to remove the 85% control efficiency requirement contained in Permit #1427. The permit application was given #1427-01. An incompleteness letter was sent to Malmstrom. Malmstrom chose not to respond and to have the application withdrawn. The application was withdrawn by Malmstrom and Permit #1427-01 was not issued.

Permit #1427-02 accomplished numerous permitting goals at Malmstrom. Specifically, the requirement that the dry scrubbers maintain a control efficiency of 85% for SO₂ was removed. That level of efficiency was not practical when the facility is burning low sulfur coal or being operated at low loads. Because the emissions under this scenario are below the limits identified in the Department permit, the Department has determined that the SO₂ emission limits contained in the permit are sufficient to maintain the ambient air quality of the area. Permit Alteration #1427-02 also identified the fuels that each of the boilers are capable of burning.

In addition, Permit #1427-02 allowed Malmstrom to bypass the scrubbers and baghouses on the boilers during startup, until the scrubber inlet temperature reaches approximately 350° F. At temperatures below this level, the moisture in the lime slurry will not be completely evaporated and will cause blinding of the bags. All emission limits are still in effect during periods of scrubber bypass.

Further, Permit #1427-02 authorized the modification of the #1 boiler to enable the boiler to fire coal and natural gas simultaneously. Prior to Permit #1427-02, the boiler could not physically fire both fuels at once. The permit also established limits for NO_x emissions and modified the SO₂ limits for the boilers. The SO₂ emission limit was changed from 37 lb/hour to 33.8 lb/hour and a limit of 0.320 lb/MMBtu was added to be consistent with the BACT determination at the time of EPA's PSD permit issuance. The permit also limited the total fuel consumption for the boilers. The fuel consumption limitation (along with the NO_x and SO₂ limits) ensures that emissions of any pollutant from the 3 boilers will be less than 250 tons/year, and established the installation of the boilers as a "synthetic minor" modification. Therefore, the installation of the boilers will not be subject to the requirements of the PSD program and it will be possible for EPA to revoke the PSD permit issued on June 1, 1981.

Permit #1427-02 also included the medical waste incinerator and the classified document incinerator to the list of permitted equipment on the base. Even though a permit was not required by the state at the time of construction, the Department determined a permit was necessary to meet the requirements of ARM 17.8.705 and for Malmstrom to operate the incinerators. The conditions applicable to the incinerators were included as part of that permit action.

Finally, Permit #1427-02 included the tanks installed in 1987, which Malmstrom was not required to permit at the time of construction. The Department determined that a permit was necessary to meet the requirements of ARM 17.8.705 and to operate the tanks. The conditions applicable to the tanks were included as part of the permit.

On July 17, 1996, the Department received information regarding minor facility changes. The facility changes were assigned Permit #1427-03. Subsequent to receipt of this information, the Department determined that the facility changes did not require any permit action, therefore, Permit #1427-03 was not issued.

Permit Modification #1427-04 removed the Medical Waste Incinerator from Malmstrom's permit. Disposal of the medical red bag waste is accomplished through a private contractor, and the gas supply for the incinerator has been disconnected.

In addition, Permit Modification #1427-04 removed 2 large fuel storage tanks (S-1 and S-2), subject to 40 CFR Part 60, Subpart Kb, from Malmstrom's permit and emission inventory. Malmstrom decommissioned the 2 large (1,050,000 gallons each) above ground fuel storage tanks (S-1 and S-2) with the relocation of the 43rd Air Refueling Group. The remaining tanks (H-1 and H-2) are each 210,000-gallon and primarily support the helicopters used by the 341st missile wing.

Further, the permit modification also established a new testing campaign to begin by January 31, 2001, and to perform compliance testing on a once every 4-year basis thereafter. Malmstrom requested a 1-year extension to conduct emission testing on the base's heating plant boilers. The reasoning behind the request was that the boilers (coal-fired), located at Malmstrom, have been selected for outsourcing and will be operated by a private (non-government) contractor. The contractor that was awarded the bid for services will begin operation of the facilities on January 15, 2000.

Permit Alteration #1427-04 resulted in an overall decrease in the allowable emissions from the facility. Permit #1427-04 replaced Permit #1427-02.

On December 22, 1999, the Department received, from Malmstrom, a request for modification of Permit #1427-04. Condition II.A.18 in Permit #1427-04, regarding jet fuel storage tanks H-1 and H-2, required that Malmstrom comply with 40 CFR Part 60 Standards of Performance for New Stationary Sources, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels. However, based on information in the permit modification request, it was evident that changes in Air Force policy and practice make 40 CFR Part 60, Subpart Kb, no longer applicable to jet fuel storage tanks H-1 and H-2.

Section I.B.5 of the permit analysis to Permit #1427-04 listed 2-210,000 gallon storage tanks used for the storage of JP-4 and JP-8 jet fuel. Because of the physical characteristics of JP-4 jet fuel, and because Malmstrom had the option of storing JP-4 jet fuel in the previously mentioned fuel storage tanks, the tanks were subject to the requirements of 40 CFR Part 60, Subpart Kb. However, according to current Air Force policy, the Air Force no longer utilizes JP-4 jet fuel and has reverted to the storage and use of JP-8 jet fuel only in the 2 affected storage tanks. JP-8 jet fuel has a vapor pressure <3.5 kPa; therefore, storage of JP-8 or a similar jet fuel with a vapor pressure <3.5 kPa will render the jet fuel storage tanks H-1 and H-2 as non-affected sources under 40 CFR Part 60, Subpart Kb, 60.110b. Therefore, because of the physical characteristics of JP-8 jet fuel, and because current Air Force policy dictates the storage of JP-8 jet fuel only, the fuel storage tanks H-1 and H-2 are no longer subject to the requirements of 40 CFR Part 60, Subpart Kb.

The permit action removed permit condition II.A.18 in Permit #1427-04 and relieved Malmstrom from the responsibility of compliance with 40 CFR Subpart Kb for jet fuel storage tanks H-1 and H-2. Further, the permit action added, in place of permit condition II.A.18 in Permit #1427-04, a condition requiring the storage of JP-8 jet fuel or a similar jet fuel with a vapor pressure <3.5 kPa only. Finally, the permit action updated the equipment list in section I.B of the permit analysis to Permit #1427-04 to properly identify the 210,000-gallon fuel storage tanks H-1 and H-2. Permit #1427-05 replaced Permit #1427-04.

On November 26, 2002, the Department received a permit modification request from Malmstrom for the replacement of an 11.954 MMBTU/hr boiler with two 2.1 MMBTU/hr units in Building 1075. The request also included the installation of a 200 kilowatt emergency/backup diesel generator in Building 780. Permit #1427-06 replaced Permit #1427-05.

On March 25, 2004, the Department received a complete permit application to modify Malmstrom's air quality Permit #1427-06. Malmstrom proposed process changes to current operations at heating plant boilers #1 and #3. The proposed changes included the following:

- Replacement of the existing motors driving the induced draft fans with new variable frequency drive motors.
- Replacement of the existing ash unloading system with a new ash unloading system.
- Modification of exhaust gas ductwork to increase spray dryer absorber (SDA) control efficiency of sulfur dioxide (SO₂) emissions.
- Installation of ductwork to provide effluent heat to the opacity monitors for the purpose of decreasing false increased opacity readings during foggy weather conditions.

- Removal of the existing 35 million British thermal unit per hour (MMBtu/hr) heat input capacity natural gas-fired burner from Boiler #1 and replacement of this burner with two 25 MMBtu/hr heat input capacity natural gas-fired low NO_x burners.
- Installation of two 25 MMBtu/hr heat input capacity natural gas-fired low NO_x burners on Boiler #3.
- Installation of a load simulator for the purpose of testing and evaluating the new low NO_x burners described above.

As detailed in a Department internal file memorandum dated January 16, 2004, and subsequent Department correspondence to Malmstrom dated March 15, 2004, the Department determined that Malmstrom is a major source as defined under the New Source Review (NSR) permitting program. However, potential emissions from the above detailed modifications were below the NSR – Prevention of Significant Deterioration (NSR/PSD) significance threshold for all pollutants. Therefore, the permit action was not subject to NSR/PSD review.

Title V Operating Permit History

Operating Permit **OP1427-00** was issued as final on July 2, 2000.

Correspondence from Malmstrom received on January 10, 2001, requested an administrative amendment to Permit OP1427-00. The letter addressed a reporting requirement, III.B.21.c, that Malmstrom perceived was an error, and subsequently requested that the requirement be removed from the permit. Upon review of the permit, the Department determined that the above referenced requirement was appropriate, but had erroneously requested a summary of any maintenance work performed on the heating plant boilers. The Department has modified the permit requirement III.B.21.c to require Malmstrom to submit a summary of any maintenance performed on the dry lime scrubbers or the baghouses used to control emissions from heating plant boilers # 1 and #3. Permit **OP1427-01** replaced Permit OP1427-00.

On July 26, 2002, the Department received correspondence from Malmstrom for an administrative amendment to OP1427-01, for a change in the responsible official and contact person. The permit was updated to reflect that change. Permit **OP1427-02** replaced Permit OP1427-01.

On November 26, 2002, the Department received correspondence from Malmstrom requesting the addition of a 200-kilowatt emergency/backup diesel generator in Building 780 (EU011) and the removal of the 11.954 MMBTU/hr boiler from Building 1075 (previously identified as EU004). This boiler was replaced by two 2.1 MMBTU/hr units, which are insignificant emitting units. Permit **OP1427-03** replaced Permit OP1427-02.

D. Current Permit Action

On June 4, 2004, Malmstrom was issued final Montana Air Quality Permit #1427-07 for proposed process changes to heating plant boilers #1 and #3. The permitted changes include the following:

- Replacement of the existing motors driving the induced draft fans with new variable frequency drive motors.
- Replacement of the existing ash unloading system with a new ash unloading system.
- Modification of exhaust gas ductwork to increase spray dryer absorber (SDA) control efficiency of sulfur dioxide (SO₂) emissions.
- Installation of ductwork to provide effluent heat to the opacity monitors for the purpose of decreasing false increased opacity readings during foggy weather conditions.

- Removal of the existing 35 million British thermal unit per hour (MMBtu/hr) heat input capacity natural gas-fired burner from Boiler #1 and replacement of this burner with two 25 MMBtu/hr heat input capacity natural gas-fired low NO_x burners.
- Installation of two 25 MMBtu/hr heat input capacity natural gas-fired low NO_x burners on Boiler #3.
- Installation of a load simulator for the purpose of testing and evaluating the new low NO_x burners described above.

The permit action discussed above results in the modification of allowable fuels for Boiler #3 from coal only to coal and/or natural gas. This change is reflected in Section III.B of Operating Permit #OP1427-04.

Further, on July 30, 2004, the Department received official notification of a change in responsible official from former Colonel C. Donald Alston to incoming Colonel Everett H. Thomas. The current permit action includes Colonel Everett H. Thomas as the responsible official. Operating Permit #**OP1427-04** replaces Operating Permit #OP1427-03.

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 105, MCA, the Department has conducted a private property taking and damaging assessment and has determined there are no taking or damaging implications. The checklist was completed on August 9, 2004.

F. Compliance Designation

Malmstrom was last inspected on July 19, 2004, and, pending further records review, was found to be in compliance with all applicable requirements.

SECTION II. SUMMARY OF EMISSION UNITS

A. Facility Process Description

Malmstrom Air Force Base houses the 341st Missile Wing and the 819th Red Horse Engineering Squadron. The 341st Missile Wing operates 200 Minuteman missile launch facilities and 20 Minuteman missile alert facilities. The main function of the Red Horse Engineering Squadron is to maintain readiness for deployment to other geographical areas.

B. Emission Units and Pollution Control Device Identification

The emission units regulated by this permit are the following (ARM 17.8.1211):

Emissions Unit ID	Description	Pollution Control Device/Practice
EU001	Heating Plant Boiler #1, Coal / Natural Gas (Maximum Capacity 106.25 MMBtu/hr)	Dry Lime Scrubber and Fabric Filter Baghouse
EU002	Heating Plant Boiler #2, Natural Gas (Maximum Capacity 106.25 MMBtu/hr)	Natural Gas Combustion Only
EU003	Heating Plant Boiler #3, Coal / Natural Gas (Maximum Capacity 106.25 MMBtu/hr)	Dry Lime Scrubber and Fabric Filter Baghouse
EU005	Auxiliary Power Generator (diesel) Bldg. 82110	NA
EU006	Coal Yard Handling System	Fabric Filter Baghouse
EU007	Landfill #1	NA
EU008	Landfill #2	NA
EU009	Classified Documents Incinerator	NA
EU010	JP-8 Fuel Storage Tanks (H-1 and H-2)	Internal Floating Roof
EU011	Building 780 Emergency/Backup Diesel Generator	Limited Operation

C. Categorically Insignificant Sources/Activities

The following table of insignificant sources and/or activities was provided by Malmstrom to assist in understanding the facility's layout. Because there are no requirements to update such a list, the emission units and/or activities may change from those specified in the table.

Emissions Unit ID	Description
IEU01	Aircraft Maintenance
IEU02	Aircraft Refueling
IEU03	Ground Vehicle Maintenance
IEU04	Privately Owned Vehicle Refueling
IEU05	Government Owned Vehicle Refueling
IEU06	Summer Hot Water Generators
IEU07	Refrigeration and Air Conditioning
IEU08	Redhorse Auxiliary Generators
IEU09	Craft / Hobby Centers
IEU010	Open Grill Restaurants
IEU011	Small Arms Firing
IEU012	Welding
IEU013	Woodworking
IEU014	Explosive Ordinance Disposal
IEU015	Oil / Water Separators
IEU016	Fire Training
IEU017	Pesticide Use

IEU018	Painting of Structures
IEU019	Fuel Storage Tanks (excluding JP-8 fuel storage tanks H-1 and H-2)
IEU020	Spray Painting Booths
IEU021	Miscellaneous Chemical Use
IEU022	Solvent Degreasing
IEU023	Waste Oil Burner
IEU024	Building 1075 Natural Gas Boilers
IEU025	Asphalt Content Tester

SECTION III. PERMIT CONDITIONS

A. Emission Limits and Standards

The Department determined that the emission limits that apply to the Heating Plant Boilers #1, #2, and #3 (EU001, EU002, EU003) are as follows: particulate matter = 4.0 lb/hr; sulfur dioxide emissions = 0.320 lb/MMBtu or 33.90 lb/hr; oxides of nitrogen emissions = 0.50 lb/MMBtu or 53.0 lb/hr. The previously cited emission limits were established in Malmstrom's Preconstruction Permit #1427-05.

The Department has determined that the particulate matter emission limit that applies to the Auxiliary Power Generator Building 82110 (EU005) and the Building 780 Emergency/Backup Generator (EU011) is established using the particulate matter fuel burning calculation for new fuel burning equipment (ARM 17.8.309).

The Department has determined that the emission limit that applies to the Coal Yard Handling System (fabric filter baghouse) (EU006) is 0.02 grains/dscf. The previously cited emission limit was established in Malmstrom's Preconstruction Permit #1427-05.

The Department has determined that the emission limit that applies to the Classified Documents Incinerator (EU009) is 0.01 grains/dscf. The previously cited emission limit was established in Malmstrom's Preconstruction Permit #1427-05.

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

The permit includes periodic monitoring or recordkeeping for each applicable requirement. The information obtained from the monitoring and recordkeeping will be used by Malmstrom 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.

Heating Plant Boilers #1, #2, #3 (EU001, EU002, EU003)

The Department has determined that an annual Reference Method 9 visual observation, Stack testing in accordance with Method 5 every 4 years, Method 6 every 2 years, and Method 7 every 2 years are sufficient to demonstrate compliance with the opacity, particulate, Sulfur Dioxide, and Oxides of Nitrogen emission limits, respectively, for the Heating Plant Boilers #1, #2, #3.

Further, the boilers are limited to a maximum heat content of 999,000 MMBtu/year and 212 MMBtu/hr by conditions in Preconstruction Permit #1427-05. This limit was placed on the equipment to ensure that emissions are not significantly greater than those on which the permit analysis was performed.

Finally, the Department has determined that record keeping shall be sufficient to demonstrate compliance with the fuel use (type) and Sulfur in fuel limits for the boilers.

Auxiliary Power Generator Building 82110 (EU005); and
Building 780 Emergency/Backup Generator (EU011)

The Department has determined that Reference Method 9 visual observations, as required by the Department, is sufficient to demonstrate compliance with the opacity limit for these generators. Further, the Department has determined that the burning of diesel fuel only shall be sufficient to demonstrate compliance with the particulate, and sulfur in fuel, limits and requirements for these generators. Finally, the Department has placed a 500-hour per year operating limit on the Auxiliary Power Generator Building 82110 to ensure its use as an emergency backup power unit and the Building 780 Emergency/Backup Generator is limited to use only when electric power from the local utility is interrupted or as necessary for routine maintenance of the generator.

Coal Yard Handling System (EU006)

The Department has determined that while the base is utilizing coal to fire the heating plant boilers an annual Reference Method 9 visual observation and Stack testing in accordance with Method 5, as required by the department, are sufficient to demonstrate compliance with the opacity and particulate limits for the Coal Yard Handling System.

Landfill #1 and Landfill #2 (EU007, EU008)

The Department has determined that normal operations shall be sufficient to demonstrate compliance with the opacity limitation for Landfill #1 and Landfill #2.

Classified Documents Incinerator (EU009)

The Department has determined that Reference Method 9 visual observations and Stack testing in accordance with Method 5, as required by the Department, are sufficient to demonstrate compliance with the opacity and particulate limits for the Classified Documents Incinerator.

JP-8 Fuel Storage Tanks (EU10)

The Department has determined that normal operations shall be sufficient to demonstrate compliance with the opacity limitation for the JP-8 storage fuel tanks (H-1 and H-2). Further, the Department has determined that recordkeeping will be sufficient to satisfy the fuel use requirement for the JP-8 storage fuel tanks (H-1 and H-2).

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, Malmstrom may elect to voluntarily conduct compliance testing to confirm its compliance status.

D. Recordkeeping Requirements

Malmstrom is required to keep all records listed in the operating permit as a permanent business record for at least 5 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, Malmstrom is required to submit semi-annual and annual monitoring reports to the Department and to annually certify compliance with the applicable requirements contained in the permit. The reports must include a list of all emission limit and monitoring deviations, the reason for any deviation, and the corrective action taken as a result of any deviation.

F. Public Notice

In accordance with ARM 17.8.132, a public notice was published in the *Great Falls Tribune* newspaper on or before August 12, 2004. The Department provided a 30-day public comment period on the draft operating permit from August 12, 2004, through September 13, 2004. 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 13, 2004, are summarized, along with the Department's responses, in the following table.

Summary of Public Comments

Person/Group Commenting	Comment	Department Response
NA	NA	NA

G. Draft Permit Comments

Summary of Permittee Comments

Permit Reference	Permittee Comment	Department Response
OP1427-04 Section III.A.14	Typographical Error - "For the reports due by January 31"...should be changed to "for the reports due by February 15..."	The Department corrected the typographical error, as requested, prior to issuance of the proposed permit.
TRD1427-04 Section V.C	Typographical Error - "As of July 1, 2003"... should be changed to "As of August 12, 2004..."	The Department corrected the typographical error to indicate "As of September 14, 2004," prior to issuance of the proposed permit. This is the date of proposed permit issuance.

Summary of EPA Comments

Permit Reference	EPA Comment	Department Response
NA	NA	NA

SECTION IV. NON-APPLICABLE REQUIREMENT ANALYSIS

Pursuant to ARM 17.8.1221, Malmstrom requested a permit shield for all non-applicable regulatory requirements and regulatory orders identified in Table 8-1 of the original permit application.

The following table outlines those requirements that Malmstrom had identified as non-applicable in the original permit 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.

Rule Citation	Reason
40 CFR Part 50 40 CFR Part 51 40 CFR Part 58 40 CFR Part 71	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 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 and is always relevant to a major source and should never be listed in the applicable or non-applicable requirements.
ARM 17.8.120 ARM 17.8.611 ARM 17.8.612	This rule is procedural and has specific requirements that may become relevant to a major source during the permit span.
ARM 17.8.340	Shield granted under 40 CFR Part 60
ARM 17.8.210 ARM 17.8.211 ARM 17.8.212 ARM 17.8.213 ARM 17.8.222 ARM 17.8.223 ARM 17.8.304 ARM 17.8.309 ARM 17.8.310 ARM 17.8.341	These rules are applicable to the source and may contain specific requirements for compliance. These rules are applicable to the source and may contain specific requirements for compliance.
40 CFR Part 60, Subpart A	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.

SECTION V. FUTURE PERMIT CONSIDERATIONS

A. MACT Standards

Recently, the Department requested a determination of rules applicability from the EPA. Specifically, the request concerned source applicability under the Maximum Achievable Control Technology (MACT) requirements contained in 40 Code of Federal Regulations (CFR), Part 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters (Boiler MACT). Based on EPA's response, the Department determined that boilers, such as the hot water heaters in Malmstrom's heating plant, may be subject to the Boiler MACT. EPA has promulgated the Boiler MACT and the final rule was published in the federal register on September 13, 2004. The Boiler MACT will be final and effective on November 12, 2004.

By definition, the owner or operator of an affected unit(s), that is located at a major source of Hazardous Air Pollutants (HAPs), is subject to the Boiler MACT requirements. The Department believes that the heating plant boilers at Malmstrom are affected units, as defined in the Boiler MACT. Further, based on calculations using EPA emission factors for organic compounds from coal combustion, the Department determined that Malmstrom is a major source of HAPs.

Therefore, Malmstrom must submit a Boiler MACT applicability determination to the Department. Without justification to the contrary, Malmstrom will be subject to the requirements contained in the Boiler MACT. However, because the heating plant boilers incorporate a dry-lime scrubber and a fabric filter baghouse to control criteria pollutant emissions, the Department believes that the boiler operations at Malmstrom likely realize a high "co-benefit" control of various HAPs, including hydrochloric acid (HCl). Since HCl emissions account for the vast majority of potential HAPs from the heating plant boilers, Malmstrom may opt to incorporate a federally enforceable HCl emission limit into their air quality permit(s), rather than having to comply with the Boiler MACT.

B. NESHAP Standards

As of November 10, 2004, the Department is not aware of any NESHAP Standards that are applicable to this source, except for asbestos abatement projects as detailed below.

Asbestos abatement projects and building demolition/renovation activities will be conducted in accordance with applicable asbestos regulatory requirements. Those regulatory requirements include, but are not limited to 29 CFR 1926.1101; 40 CFR 763 Sections 120, 121, 124, and Subpart E; 40 CFR Part 61, Subpart M; State of Montana Asbestos Control Act 75-2-501 through 519 MCA, and State of Montana Occupational Health Rules ARM 17.74.301 through 406. State-accredited asbestos abatement personnel shall conduct the abatement of regulated asbestos-containing materials. Asbestos-containing waste materials shall be transported properly and disposed of in a State-approved landfill.

C. NSPS Standards

In the initial Title V Operating Permit Application, submitted on July 12, 1995, 4 jet fuel storage tanks (H-1, H-2, S-1, S-2) were reported as significant emitting units subject to the requirements of 40 CFR, Part 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage (NSPS). However, since submittal of the initial Title V application, Malmstrom has undergone extensive change in base practices resulting in a decreased demand for fuel use and storage at the base. Subsequently, on November 7, 1999, Malmstrom was issued a permit modification removing two of the previously listed NSPS affected storage tanks (S-1 and S-2) from base operation. Further, on December 22, 1999, the Department received a letter from Malmstrom indicating that Air Force policy has dictated a change in the type of fuel to be used and stored at the base from jet fuel JP-4 and JP-8 to jet fuel JP-8 only. Because the vapor pressure of JP-8 is less than 3.5 kPa the 2 remaining jet fuel storage tanks on base (H-1 and H-2) are no longer subject to NSPS requirements.

40 CFR Part 60, Subpart D, does not apply to the heating plant boilers #1, #2, and #3 because the boilers are hot water generators and do not generate steam nor do the boilers meet heat input capacity applicability.

40 CFR Part 60, Subpart Db, does not apply to the heating plant boilers #1, #2, and #3 because the boilers are hot water generators and do not generate steam.

40 CFR Part 60, Subpart Dc, does not apply to the heating plant boilers #1, #2, and #3 because the boilers are hot water generators and do not generate steam.

40 CFR Part 60, Subpart E, does not apply to the classified waste incinerator because the incinerator does not meet design capacity applicability.

40 CFR Part 60, Subpart Y, does not apply to the coal yard handling system because the source does not meet the definition of a coal preparation plant.

As of September 14, 2004, the Department is not aware of any additional NSPS affected sources at Malmstrom.

D. Risk Management Plan (RMP)

As of November 10, 2004, Malmstrom 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 RMP. Initially, it was determined that Malmstrom would require a RMP due to the storage of propane for use as fuel at the base. However, on August 5, 1999, legislation was signed removing propane, used solely as fuel, from RMP requirements.

If a facility has more than a threshold quantity of a regulated substance in a process, the facility is required to comply with 40 CFR 68 requirements no later than June 21, 1999; 3 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.