



Montana Department of
ENVIRONMENTAL QUALITY

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February 20, 2013

Colin Zeman
Franzen-Davis Funeral Home and Crematory LLC
118 North 3rd Street
Livingston, MT 59047

Dear Colin Zeman:

Montana Air Quality Permit #3030-02 is deemed final as of February 20, 2013, by the Department of Environmental Quality (Department). This permit is for the Franzen-Davis Funeral Home and Crematory. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

Julie Merkel
Air Permitting Supervisor
Air Resources Management Bureau
(406) 444-3626

Shawn Juers
Environmental Engineer
Air Resources Management Bureau
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JM:SJ
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #3030-02

Franzen-Davis Funeral Home and Crematory LLC
118 North 3rd Street
Livingston, MT 59047

February 20, 2013



MONTANA AIR QUALITY PERMIT

Issued To: Franzen-Davis Funeral Home and Crematory LLC
118 North 3rd Street
Livingston, MT 59047

MAQP: #3030-02
Administrative Amendment (AA)
Request Received: 01/16/2013
Department Decision: 2/1/2013
Permit Final: 2/20/2013
AFS #: 067-0010

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Franzen-Davis Funeral Home and Crematory, Inc (Franzen-Davis), pursuant to Sections 75-2-204, 211, and 215 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

Section I: Permitted Facility

A. Plant Location

The facility is located at 118 North 3rd Street in Livingston, Montana. The legal description is Block 60 of Section 13, Township 2 South, Range 9 East, Park County. A complete listing of the permitted equipment can be found in Section I of the permit analysis.

B. Current Permit Action

On January 16, 2013, the Department of Environmental Quality – Air Resources Management Bureau (DEQ) received notification from Franzen-Davis that the facility was acquired by Colin Zeman on December 31st, 2012. The new legal entity name was changed.

Section II: Conditions and Limitations

A. Operational Requirements

1. Franzen-Davis shall operate the 1998 Industrial Equipment & Engineering Company (I.E.&E.) incinerator (#1 Cremator) as specified in their application for their Montana Air Quality and all supporting documentation (ARM 17.8.710).
2. Franzen-Davis shall not incinerate/cremate any material other than human remains and the corresponding container (ARM 17.8.710).
3. The secondary chamber operating temperature of the 1998 I.E. &E. incinerator (#1 Cremator) shall be maintained above 1400 °F. The operating temperature shall be maintained during operation and for ½ hour after the feed has stopped (ARM 17.8.710).

B. Emission Limitations and Conditions

Franzen-Davis shall not cause or authorize to be discharged into the atmosphere from the 1998 I.E. &E. incinerator (#1 Cremator):

1. Any visible emissions that exhibit an opacity of 10% or greater (ARM 17.8.715);
and

2. Any particulate emissions in excess of 0.10 gr/dscf corrected to 12% CO₂ (ARM 17.8.715).

C. Monitoring Requirements

Franzen-Davis shall install, calibrate, maintain and operate continuous monitoring and recording equipment on the 1998 I.E.&E. incinerator (#1 Cremator) to measure the secondary chamber exit temperature. Franzen-Davis shall also record the daily quantity of material incinerated/cremated and daily hours of operation of the 1998 I.E.&E. Incinerator (#1 Cremator) .

D. Operational Reporting Requirement

1. Franzen-Davis shall supply the department with annual production information for all emission points, as required by the department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in Section I of the permit analysis. Production information shall be gathered on a calendar-year basis and submitted to the department by the date required in the emission inventory request. Information shall be in the units required by the department.

In addition, Franzen-Davis shall submit the following information annually to the department, by March 1 each year. This information is required for the annual emission inventory, as well as to verify compliance with permit conditions (ARM 17.8.505).

- a. Amount of material incinerated/cremated (lb/year)
- b. Annual hours of operation of the incinerator/crematorium

2. Franzen-Davis shall notify the department of any construction or improvement project conducted, pursuant to ARM 17.8.705(1)(r), that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit.

The notice must be submitted to the department, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.705(1)(r)(iv) (ARM 17.8.705).

3. All records compiled in accordance with this permit must be maintained by Franzen-Davis as a permanent business record for at least 5 years following the date of the measurement, shall be submitted to the department upon request, and shall be available at the plant site for inspection by the department (ARM 17.8.710).

E. Testing Requirements

1. The department may require testing (ARM 17.8.105).

2. All tests shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

SECTION III: General Conditions

- A. Inspection – Franzen-Davis shall allow the Department’s representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (continuous emissions monitoring system (CEMS), continuous emissions rate monitoring system (CERMS)) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver – The permit and the terms, conditions, and matters stated herein shall be deemed accepted if Franzen-Davis fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Franzen-Davis of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties, or other enforcement action as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals – Any person or persons jointly or severally adversely affected by the Department’s decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefor, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department’s decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department’s decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department’s decision on the application is final 16 days after the Department’s decision is made.
- F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by the Department at the location of the source.
- G. Permit Fee – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by Franzen-Davis may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Duration of Permit – Construction or installation must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).

Montana Air Quality Permit (MAQP) Analysis
Franzen-Davis Funeral Home and Crematory, LLC
MAQP #3030-02

I. Introduction/Process Description

Franzen-Davis Funeral Home and Crematory, LLC (Franzen-Davis) owns and operates a human crematorium. The facility is located at 118 North 3rd Street in Livingston, Montana. The legal description is Block 60 of Section 13, Township 2 South, Range 9 East, Park County.

A. Permitted Equipment / Source Description

A 1998 Industrial Equipment and Engineering Company (I.E.&E.) pathological incinerator used as a human crematorium. The incinerator/crematorium is fired on natural or liquid petroleum gas and has a maximum design capacity of 100 lb/hr of human remains.

B. Permit History

On November 4, 1998, Franzen-Davis submitted a complete permit application for an air quality pre-construction permit to install and operate an I.E.&E. incinerator/crematorium at their existing funeral home located at 118 North 3rd Street in Livingston, Montana. **Permit #3030-00** was issued to Franzen-Davis on January 6, 1999.

In 1999, the U.S. Environmental Protection Agency (EPA) informed the Montana Department of Environmental Quality (Department) that any condition in an air quality pre-construction permit would be considered a federally enforceable condition. However, there are certain state rules that were never intended to be federally enforceable. The Department notified all facilities holding pre-construction permits that they could request deletion of those conditions based on ARM 17.8.717 and 17.8.315. Removing either of these conditions does not relieve the facility from complying with the rule upon which the permit condition was based; removal only ensures that enforcement of the condition remains solely with the department. The permit action removed the condition, based on ARM 17.8.315, from Franzen-Davis' permit and updated the rule references. **Permit #3030-01** replaced Permit #3030-00.

C. Current Permit Action

On January 16, 2013, the Department received notification from Franzen-Davis that the facility was acquired by Colin Zeman on December 31st, 2012. The new legal entity name was changed, and **MAQP #3030-02** replaces MAQP #3030-01

F. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT)/Reasonably Available Control Technology (RACT) determinations, air quality impacts, and environmental assessments, is included in the analysis associated with each change to the permit.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department. Upon request, the Department will provide references for location of complete copies of all applicable rules and regulations or copies where appropriate.

A. ARM 17.8, Subchapter 1 – General Provisions, including but not limited to:

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

Franzen-Davis shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

B. ARM 17.8, Subchapter 2 – Ambient Air Quality, including, but not limited to the following:

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
9. ARM 17.8.222 Ambient Air Quality Standard for Lead
10. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀

Franzen-Davis must maintain compliance with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 – Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.

2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter.
 3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.
 4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.
 5. ARM 17.8.316 Incinerators. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any incinerator, particulate matter in excess of 0.10 grains per standard cubic foot of dry flue gas, adjusted to 12% carbon dioxide and calculated as if no auxiliary fuel had been used. Further, no person shall cause or authorize to be discharged into the outdoor atmosphere from any incinerator emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes.
 6. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this rule.
 7. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device as described in (1) of this rule.
 8. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). This source shall comply with the standards and provisions of 40 CFR Part 60 as applicable.
 9. ARM 17.8.341 Emission Standards for Hazardous Air Pollutants. This source shall comply with the standards and provisions of 40 CFR Part 61, as applicable.
 10. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. The source, as defined and applied in 40 CFR Part 63, shall comply with the requirements of 40 CFR Part 63, as applicable.
- D. ARM 17.8, Subchapter 5 – Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:
1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. No fee is required for this administrative action; therefore, Franzen-Davis submitted the appropriate permit application fee for the current permit action.
 2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit (excluding an open burning permit) issued by the Department. The air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that prorate the required fee amount.

- E. ARM 17.8, Subchapter 7 – Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:
1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit modification to construct, modify, or use any air contaminant sources that have the potential to emit (PTE) greater than 25 tons per year of any pollutant. However, because the Montana Code Annotated, 75-2-215, requires that a solid waste incinerator be required to obtain an MAQP, Franzen-Daivs is required to maintain an MAQP.
 3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
 4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
 5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. Franzen-Davis submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. As the current action is an administrative action, no public notice was required.
 6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
 7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
 8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
 9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Franzen-Davis of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*

10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
 11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
 12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
 13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
 14. ARM 17.8.765 Transfer of Permit. This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.
 15. ARM 17.8.770 Additional Requirements for Incinerators. This rule specifies the additional information that must be submitted to the Department for incineration facilities subject to 75-2-215, Montana Code Annotated (MCA).
- F. ARM 17.8, Subchapter 8 – Prevention of Significant Deterioration of Air Quality, including, but not limited to:
1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
 2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification, with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source because this facility is not a listed source and the facility's PTE is below 250 tons per year of any pollutant (excluding fugitive emissions).

G. ARM 17.8, Subchapter 12 – Operating Permit Program Applicability, including, but not limited to:

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any source having:
 - a. PTE > 100 tons/year of any pollutant;
 - b. PTE > 10 tons/year of any one hazardous air pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
 - c. PTE > 70 tons/year of particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) in a serious PM₁₀ nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program. (1) Title V of the FCAA amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #3030-02 for Franzen-Davis, the following conclusions were made:
 - a. The facility’s PTE is less than 100 tons/year for any pollutant.
 - b. The facility’s PTE is less than 10 tons/year for any one HAP and less than 25 tons/year for all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is not subject to any current NSPS.
 - e. This facility is not subject to any current NESHAP standards.
 - f. This source is not a Title IV affected source, or a solid waste combustion unit.
 - g. This source is not an EPA designated Title V source.

Based on these facts, the Department determined that Franzen-Davis will be a minor source of emissions as defined under Title V.

III. BACT Determination

A BACT determination is required for each new or modified source. Franzen-Davis shall install on the new or modified source the maximum air pollution control capability which is technically practicable and economically feasible, except that BACT shall be utilized.

A BACT analysis was not required for the current permit action because the current permit action is considered an administrative permit action.

IV. Emission Inventory

No change in emissions inventory was made for this administrative action.

	Tons/Year					
	TSP	PM-10	SO _x	NO _x	VOC	CO
I.E.&E. Incinerator	1.75	1.30	1.75	0.66	0.66	0.00
Natural Gas Fuel	<u>0.03</u>	<u>0.03</u>	<u>0.01</u>	<u>0.83</u>	<u>0.04</u>	<u>0.17</u>
Total	1.78	1.33	1.76	1.49	0.70	0.17

I.E.&E. Incinerator

TSP Emissions

Emission Factor: 8.00 lb/ton {AFSSCC 5-02-005-05, pg 227}
 Control Efficiency: 0.0%
 Fuel Consumption: 438.00 tons/year (Maximum Rated Design)
 Calculations: 438.00 tons/year*8 lb/ton*0.0005 ton/lb = 1.75 tons/yr

PM-10 Emissions:

Emission Factor: 5.92 lb/ton {AFSSCC 5-02-005-05, pg 227}
 Control Efficiency: 0.0%
 Fuel Consumption: 438.00 tons/year (Maximum Rated Design)
 Calculations: 438.00 tons/year*6 lb/ton*0.0005 ton/lb = 1.30 tons/yr

NO_x Emissions:

Emission Factor: 3.00 lb/ton {AFSSCC 5-02-005-05, pg 227}
 Control Efficiency: 0.0%
 Fuel Consumption: 438.00 tons/year (Maximum Rated Design)
 Calculations: 438.00 tons/year*3.00 lb/ton*0.0005 ton/lb = 0.66 tons/yr

VOC Emissions:

Emission Factor: 3.00 lb/ton {AFSSCC 5-02-005-05, pg 227}
 Control Efficiency: 0.0%
 Fuel Consumption: 438.00 tons/year (Maximum Rated Design)
 Calculations: 438.00 tons/year*3.00 lb/ton*0.0005 ton/lb = 0.66 tons/yr

CO Emissions:

Emission Factor: 0.00 lb/ton {AFSSCC 5-02-005-05, pg 227}
 Control Efficiency: 0.0%
 Fuel Consumption: 438.00 tons/year (Maximum Rated Design)
 Calculations: 438.00 tons/year*0 lb/ton*0.0005 ton/lb = 0.00 tons/yr

SO_x Emissions:

Emission Factor: 8.00 lb/ton {AFSSCC 5-02-005-05, pg 227}
 Control Efficiency: 0.0%
 Fuel Consumption: 438.00 tons/year (Maximum Rated Design)
 Calculations: 438.00 tons/year*8.00 lb/ton*0.0005 tons/lb = 1.75 tons/yr

Natural Gas Fuel

TSP Emissions

Emission Factor: 3.00 lb/MMscf {AFSSCC 1-02-006-03, pg 23}
 Control Efficiency: 0.0%
 Fuel Consumption: 16.64 MMscf/yr (Maximum Rated Design)
 Calculations: 16.64 MMscf/yr*3 lbs/MMscf*0.0005 ton/lb = 0.03 tons/yr

PM-10 Emissions:

Emission Factor: 3.00 lb/MMscf {AFSSCC 1-02-006-03, pg 23}
 Control Efficiency: 0.0%
 Fuel Consumption: 16.64 MMscf/yr (Maximum Rated Design)
 Calculations: 16.64 MMscf/yr*3 lb/MMscf*0.0005 ton/lb = 0.03 tons/yr

NO_x Emissions:

Emission Factor: 100.00 lb/MMscf {AFSSCC 1-02-006-03, pg 23}
 Control Efficiency: 0.0%
 Fuel Consumption: 16.64 MMscf/yr (Maximum Rated Design)
 Calculations: 16.64 MMscf/yr*100.00 lb/MMscf*0.0005 ton/lb=0.83 tons/yr

VOC Emissions:

Emission Factor: 5.30 lb/MMscf {AFSSCC 1-02-006-03, pg 23}
 Control Efficiency: 0.0%
 Fuel Consumption: 16.64 MMscf/yr (Maximum Rated Design)
 Calculations: 16.64 MMscf/yr*5.30 lbs/MMscf*0.0005 ton/lb= 0.04 tons/yr

CO Emissions:
 Emission Factor: 20.00 lb/MMscf {AFSSCC 1-02-006-03, pg 23}
 Control Efficiency: 0.0%
 Fuel Consumption: 16.64 MMscf/yr (Maximum Rated Design)
 Calculations: 16.64 MMscf/yr*20 lb/MMscf*0.0005 ton/lb = 0.17 tons/yr

SO_x Emissions:
 Emission Factor: 0.60 lb/MMscf {AFSSCC 1-02-006-03, pg 23}
 Control Efficiency: 0.0%
 Fuel Consumption: 16.64 MMscf/yr (Maximum Rated Design)
 Calculations: 16.64 MMscf/yr*0.60 lb/MMscf*0.0005 tons/lb = 0.01 tons/yr

HAZARDOUS AIR POLLUTANTS

Bromoform
 Emission Factor: 2.90E-05 lb/ton {AFSSCC 5-02-005-05, pg 227}
 Control Efficiency: 0.0%
 Fuel Consumption: 438.00 ton/yr (Maximum Rated Design)
 Calculations: 438.00 ton/yr*0.00003 lb/ton*0.0005 tons/lb = 6.35E-06 tons/yr

Carbon Tetrachloride
 Emission Factor: 5.74E-05 lb/ton {AFSSCC 1-02-009-01}
 Control Efficiency: 0.0%
 Fuel Consumption: 438.00 ton/yr (Maximum Rated Design)
 Calculations: 438.00 ton/yr*0.00006 lb/ton*0.0005 ton/lb = 1.26E-05 tons/yr

Chloroform
 Emission Factor: 5.45E-05 lb/ton {AFSSCC 1-02-009-01}
 Control Efficiency: 0.0%
 Fuel Consumption: 438.00 ton/yr (Maximum Rated Design)
 Calculations: 438.00 ton/yr*0.0000545 lb/ton*0.0005 ton/lb = 1.19E-05 tons/yr

1,2-Dichloropropane
 Emission Factor: 1.32E-03 lb/ton {AFSSCC 1-02-009-01}
 Control Efficiency: 0.0%
 Fuel Consumption: 438.00 ton/yr (Maximum Rated Design)
 Calculations: 438.00 ton/yr*0.001320000 lb/ton*0.0005 ton/lb = 2.89E-04 tons/yr

Ethylbenzene
 Emission Factor: 1.61E-03 lb/ton {AFSSCC 1-02-009-01}
 Control Efficiency: 0.0%
 Fuel Consumption: 438.00 ton/yr (Maximum Rated Design)
 Calculations: 438.00 ton/yr*0.001610000000 lb/ton*0.0005 ton/lb = 3.53E-04 tons/yr

Naphthalene
 Emission Factor: 1.16E-02 lb/ton {AFSSCC 1-02-009-01}
 Control Efficiency: 0.0%
 Fuel Consumption: 438.00 ton/yr (Maximum Rated Design)
 Calculations: 438.00 ton/yr*0.011600 lb/ton*0.0005 ton/lb = 2.54E-03 tons/yr

Tetrachloroethylene
 Emission Factor: 4.03E-05 lb/ton {AFSSCC 1-02-009-01}
 Control Efficiency: 0.0%
 Fuel Consumption: 438.00 ton/yr (Maximum Rated Design)
 Calculations: 438.00 ton/yr*0.0000 lb/ton*0.0005 tons/lb = 8.83E-06 tons/yr

1,1,2,2-Tetrachloroethane
 Emission Factor: 1.10E-04 lb/ton {AFSSCC 1-02-009-01}
 Control Efficiency: 0.0%
 Fuel Consumption: 438.00 ton/yr (Maximum Rated Design)
 Calculations: 438.00 ton/yr*0.0001 lb/ton*0.0005 tons/lb = 2.41E-05 tons/yr

Toluene
 Emission Factor: 4.62E-03 lb/ton {AFSSCC 1-02-009-01}
 Control Efficiency: 0.0%
 Fuel Consumption: 438.00 ton/yr (Maximum Rated Design)
 Calculations: 438.00 ton/yr*0.00462 lb/ton*0.0005 ton/lb = 1.01E-03 tons/yr

Vinylidene Chloride
 Emission Factor: 7.10E-05 lb/ton {AFSSCC 1-02-009-01}
 Control Efficiency: 0.0%
 Fuel Consumption: 438.00 ton/yr (Maximum Rated Design)
 Calculations: 438.00 ton/yr*0.0000710 lb/ton*0.0005 ton/lb = 1.55E-05 tons/yr

Xylene
 Emission Factor: 2.20E-03 lb/ton {AFSSCC 1-02-009-01}
 Control Efficiency: 0.0%
 Fuel Consumption: 438.00 ton/yr (Maximum Rated Design)
 Calculations: 438.00 ton/yr*0.002200000 lb/ton*0.0005 ton/lb = 4.82E-04 tons/yr

V. Existing Air Quality

The facility is located in an area currently unclassifiable for the National Ambient Air Quality Standards and Montana Ambient Air Quality Standards.

VI. Ambient Air Impact Analysis

The current action is an administrative action, with no change in allowable emissions occurring. Therefore, the Department determined the impacts from this permitting action would be expected to be minor. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

VII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted the following private property taking and damaging assessment.

YES	NO	
XX		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	XX	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	XX	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	XX	4. Does the action deprive the owner of all economically viable uses of the property?
	XX	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?
	XX	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	XX	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?
	XX	7a. Is the impact of government action direct, peculiar, and significant?
	XX	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	XX	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?
	XX	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.

VIII. Environmental Assessment

This permitting action will not result in an increase of emissions from the facility and is considered an administrative action; therefore, an Environmental Assessment is not required.

Analysis Prepared By: Shawn Juers

Date: 1/28/2013