Air Quality Permit

Issued to: Montana Department of Livestock Permit #2834-03

Veterinary Diagnostic Laboratory Administrative Amendment (AA) Request

P.O. Box 997 Received: 12/7/07

Bozeman, MT 59771 Department Decision on AA: 12/19/07

Final Permit: 1/4/08 AFS: 031-0011

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to the Montana Department of Livestock-Veterinary Diagnostic Laboratory (VDL), pursuant to Sections 75-2-204, 211 and 215, 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 Facilities

A. Plant Location

An animal crematorium located in the SE ¼ of the NE ¼ of Section 14, Township 2 South, Range 5 East, at the Marsh Laboratory, Montana State University, Bozeman, in Gallatin County, Montana. A complete listing of the permitted equipment can be found in Section I of the Permit Analysis.

B. Current Permit Action

On December 7, 2007, the Department of Environmental Quality (Department) received a request for an administrative amendment to MAQP #2834-02 to allow the disposal of Ethidium Bromide gels, a substance used in DNA testing, in VDL's incinerator. The total potential to emit of the compound is less than the 15 tons per year de minimis threshold; however, because the current permit conditions do not allow VDL to incinerate any material other than animal carcasses and their corresponding container, an administrative permit amendment is required as specified in ARM 17.8.745(2). Based on the information received, the Department determined that the disposal of Ethidium Bromide gels would not change the nature, character, or composition of its emissions from its design or permitted operation as described in 75-2-215, MCA. Also, the permit was updated to reflect the current permit language and rule references used by the Department.

SECTION II: Limitations and Conditions

A. Operational Requirements

- 1. VDL shall not incinerate/cremate any material other than animal carcasses and their corresponding container, which includes plastic bags, and up to 4.68 milliliters (ml) per year of Ethidium Bromide (ARM 17.8.749).
- 2. The incinerator/crematorium shall be equipped with an auxiliary fuel burner. The auxiliary fuel burner shall be used to preheat the secondary chamber of the incinerator/crematorium to the minimum required operating temperature prior to igniting the primary chamber burner (ARM 17.8.752).
- 3. The secondary chamber operating temperature of the incinerator/crematorium shall be maintained above 1500° Fahrenheit (° F). The operating temperature shall be maintained during operation and for ½ hour after the feed has stopped (ARM

17.8.749).

- 4. VDL shall develop incinerator/crematorium operation procedures, print those procedures in an incinerator/crematorium operation procedures manual, and require all personnel that operate the incinerator/crematorium to familiarize themselves with the operation procedures. A copy of this manual shall be supplied to the Department (ARM 17.8.752).
- 5. The incinerator/crematorium shall operate no more than 624 hours per calendar year. This shall not include start up (the period when the incinerator is being preheated prior to charging) or shut down (the period after combustion has ceased and the unit is cooling down) (ARM 17.8.749).

B. Emission Limitations

VDL shall not cause or authorize to be discharged into the atmosphere from the incinerator/crematorium:

- 1. Visible emissions that exhibit an opacity of 10% or greater (ARM 17.8.752); and
- 2. Any particulate emissions in excess of 0.10 grains per dry standard cubic foot (gr/dscf) corrected to 12% carbon dioxide (CO₂) (ARM 17.8.752).

C. Monitoring Requirements

- 1. VDL shall maintain a log of the secondary chamber exit temperature during operation of the unit. VDL shall also record the daily quantity of material incinerated/cremated and daily hours of operation of the incinerator/crematorium (ARM 17.8.749).
- 2. The records compiled in accordance with this permit shall be maintained by VDL 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 17.8.749).

D. Operational Reporting Requirement

1. VDL 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 covered by this permit.

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 units as required by the Department (ARM 17.8.505).

2. VDL shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745, 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 17.8.745(1)(d) (ARM 17.8.745).

E. Testing Requirements

- 1. The Department may require further testing (ARM 17.8.105).
- 2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

Section III: General Conditions

- A. Inspection VDL 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 (CEMS, 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 VDL fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving VDL 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 therefore, 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, as amended by the 1991 Legislature, failure to pay the annual operation fee by VDL may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.

Permit Analysis Montana Department of Livestock Veterinary Diagnostic Laboratory Permit #2834-03

I. Introduction/Process Description

A. Permitted Equipment

The Montana Department of Livestock-Veterinary Diagnostic Laboratory (VDL) operates a Therm-Tec A-4-p-s pathogenic waste incinerator. The incinerator is used as an animal crematorium.

B. Source Description

VDL operates an incinerator/crematorium under Montana Air Quality Permit (MAQP) #2834-03. The location is in the SE ¼ of the NE ¼ of Section 14, Township 2 South, Range 5 East, at the Marsh Laboratory, Montana State University, Bozeman, in Gallatin County, Montana. The Therm-Tec A-4-p-s pathogenic waste incinerator is capable of incinerating up to 400 lbs/hr of animal carcasses.

C. Permit History

MAQP #2834-00 was issued to VDL on January 21, 1995, for the construction and operation a pathogenic waste incinerator to be used as an animal crematorium. On October 15, 1998, the Department of Environmental Quality (Department) received a request from VDL to modify MAQP #2834-00. This modification changed the method of recording the temperature and the minimum temperature required of the incinerator. The Department allowed VDL to manually record the temperature of the incinerator during its operation. The Department also reduced the minimum operating temperature to 1500° Fahrenheit (° F). This temperature coincides with the manufacturer's setting on the unit and is adequate to ensure proper combustion within the incinerator. The rule references and the permit format were also updated. MAQP #2834-01 replaced MAQP #2834-00.

On March 20, 2001, the Department issued its decision to modify MAQP #2834-01. The Department modified MAQP #2834-01 in order to remove certain state rules that were never intended to be federally enforceable. This action was in response to a decision by the U.S. Environmental Protection Agency (EPA) in 1999 that any condition included in an air quality preconstruction permit would be considered a federally enforceable condition. The Department notified all facilities holding preconstruction permits that they could request deletion of those conditions based on the Administrative Rules of Montana (ARM) 17.8.717 and 17.8.315. Removing either of these conditions did not relieve the facility from complying with the rule upon which the permit condition was based; removal only ensured that enforcement of the condition remained solely with the Department. The permit action removed the condition, based on ARM 17.8.315, from VDL's permit. Furthermore, the rule references and permit format were updated. MAQP #2834-02 replaced MAQP #2834-01.

D. Current Permit Action

On December 7, 2007, the Department received a request for an administrative amendment to MAQP #2834-02 to allow the disposal of Ethidium Bromide gels, a substance used in DNA testing, in VDL's incinerator. The total potential to emit of the compound is less than the 15 tons per year de minimis threshold; however, because the current permit conditions do not

allow VDL to incinerate any material other than animal carcasses and their corresponding container, an administrative permit amendment is required as specified in ARM 17.8.745(2). Based on the information received, the Department determined that the disposal of Ethidium Bromide gels would not change the nature, character, or composition of its emissions from its design or permitted operation as described in 75-2-215, Montana Code Annotated (MCA). Also, the permit was updated to reflect the current permit language and rule references used by the Department. MAQP #2834-03 replaces MAQP #2834-02.

E. 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, are 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 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. <u>ARM 17.8.101 Definitions</u>. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. <u>ARM 17.8.105 Testing Requirements</u>. 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. <u>ARM 17.8.106 Source Testing Protocol</u>. 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.*, MCA.
 - VDL 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. <u>ARM 17.8.110 Malfunctions</u>. (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 Standards 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

VDL must maintain compliance with the applicable ambient air quality standards.

- C. ARM 17.8, Subchapter 3 Emission Standards, including, but not limited to:
 - 1. <u>ARM 17.8.304 Visible Air Contaminants</u>. 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. <u>ARM 17.8.308 Particulate Matter, Airborne</u>. (1) This section 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. <u>ARM 17.8.310 Particulate Matter, Industrial Process</u>. 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. This section does not apply to VDL's incinerator/crematorium because VDL has applied for and received an air quality permit in accordance with ARM 17.8.770 and MCA 75-2-215.
 - 6. <u>ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel</u>. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this rule.
 - 7. <u>ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources</u>. This rule incorporates, by reference, 40 Code of Federal Regulation (CFR) Part 60, Standards of Performance for New Stationary Sources (NSPS). This facility is not an NSPS affected source because it does not meet

the definition of an affected facility under any NSPS subpart defined in 40 CFR Part 60

- D. ARM 17.8, Subchapter 5 Air Quality Permit Application, Operation and Open Burning Fees, including, but not limited to:
 - 1. <u>ARM 17.8.504 Air Quality Permit Application Fees</u>. 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. A permit fee is not required for the current permit action because the permit action is considered an administrative permit change.
 - 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 pro-rate the required fee amount.

- E. ARM 17.8, Subchapter 7 Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:
 - 1. <u>ARM 17.8.740 Definitions</u>. 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 alteration to construct, alter, or use any air contaminant sources that have the potential to emit (PTE) greater than 25 tons per year of any pollutant. VDL does not have the PTE greater than 25 tons per year of any pollutant; however, in accordance with Section 75-2-215, MCA, an air quality permit must be obtained prior to the construction and operation of any incinerator, regardless of potential incinerator emissions. Because VDL must obtain an air quality permit, all normally applicable requirements apply in this case.
 - 3. <u>ARM 17.8.744 Montana Air Quality Permits--General Exclusions</u>. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
 - 4. <u>ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes.</u> 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, alteration, or use of a source. A permit application was not required for the current permit action because the permit change is considered an administrative permit change.

 (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. An affidavit of publication of public notice was not required for the current

- 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. <u>ARM 17.8.752 Emission Control Requirements</u>. 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. <u>ARM 17.8.755 Inspection of Permit</u>. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
- 9. <u>ARM 17.8.756 Compliance with Other Requirements</u>. This rule states that nothing in the permit shall be construed as relieving VDL of the responsibility for complying with any applicable federal or Montana statue, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*.
- 10. <u>ARM 17.8.759 Review of Permit Applications</u>. 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. <u>ARM 17.8.762 Duration of Permit</u>. 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 altered 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. <u>ARM 17.8.763 Revocation of Permit</u>. 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. <u>ARM 17.8.765 Transfer of Permit</u>. 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. <u>ARM 17.8.770 Additional Requirements for Incinerators</u>. This rule specifies the additional information that must be submitted to the Department for incineration facilities subject to 75-2-215, MCA.
- F. ARM 17.8, Subchapter 8 Prevention of Significant Deterioration of Air Quality, including, but not limited to:
 - 1. <u>ARM 17.8.801 Definitions</u>. 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 since 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. <u>ARM 17.8.1201 Definitions</u>. (23) A Major Source under Section 7412 of the FCAA is defined as any stationary 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 (PM $_{10}$) in a serious PM $_{10}$ 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 #2834-03 for VDL, 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 PM_{10} nonattainment area.
 - d. The facility is not subject to any current NSPS.
 - e. This facility is not subject to any current National Emission Standards for Hazardous Air Pollutants (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 the VDL incinerator/crematorium is a minor source of emissions as defined under Title V.

H. MCA 75-2-103, Definitions provides, in part, as follows:

- 1. "Incinerator" means any single or multiple-chambered combustion device that burns combustible material, alone or with a supplemental fuel or catalytic combustion assistance, primarily for the purpose of removal, destruction, disposal, or volume reduction of all or any portion of the input material.
- 2. "Solid waste" means all putrescible and nonputrescible solid, semisolid, liquid, or gaseous wastes, including, but not limited to...air pollution control facilities...
- I. MCA 75-2-215, Solid or hazardous waste incineration additional permit requirements:
 - 1. MCA 75-2-215 requires air quality permits for all new commercial solid waste incinerators. VDL has obtained an air quality permit.
 - 2. MCA 75-2-215 requires the applicant to provide, to the Department's satisfaction, a characterization and estimate of emissions and ambient concentrations of air pollutants, including hazardous air pollutants from the incineration of solid waste. The Department determined that the information submitted in the original application is sufficient to fulfill this requirement.
 - 3. MCA 75-2-215 requires that the Department reach a determination that the projected emissions and ambient concentrations constitute a negligible risk to public health, safety and welfare. The Department completed a health risk assessment based on an emissions inventory and ambient air quality modeling for this proposal. Based on the results of the emission inventory, modeling, and the health risk assessment, the Department has determined that VDL's proposal complies with this requirement. This information is contained in MAOP #2834-00 issued to VDL.
 - 4. MCA 75-2-215 requires the application of pollution control equipment or procedures that meet or exceed the BACT. The Department has determined that the proposed incinerator constitutes BACT.

III. BACT Analysis

A BACT determination is required for each new or altered source. VDL shall install on the new or altered source the maximum air pollution control capability which is technically practicable and economically feasible, except that BACT shall be utilized. In addition, MCA 75-2-215 requires a BACT determination for all pollutants, not just criteria pollutants. However, 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

A more complete emission inventory is contained in MAQP #2834-00.

TSP	PM-10	SOx	NOx	CO
		Tons/Ye	ear	

Incinerator 0.31 0.31 0.03 0.14 0.10

Ethidium Bromide Gels

VDL proposes to burn 90 microliters (μ L) per week (or 4.68 milliliters (ml) per year) of Ethidium Bromide gels. The Ethidium Bromide solution has 1 gram of Ethidium Bromide per ml of solution, which equates to 5.16E-6 tons/year, well below the de minimis threshold of 15 tons/year of any pollutant.

V. Air Quality Impacts

The area in and around Bozeman is currently classified as attainment/unclassified for the National Ambient Air Quality Standards. Based on the amount of emissions from this facility, the Department believes it will continue to operate in compliance with all applicable standards.

VI. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

VII. Environmental Assessment

An environmental assessment was not required for the current permit action because it is considered an administrative permit action.

Analysis Prepared By: Moriah Peck, E.I.

Date: 12/10/07