December 6, 2024

Frank Banesse Jr.
222395636 Delaware, LLC
At Home on the Range Pet Crematory
2 Daniels Way
Cranston, RI 02921

Sent via email: fbanesse@gatewayservicesinc.com

RE: Final Permit Issuance for MAQP #3259-06

Dear Frank Banesse Jr.:

Montana Air Quality Permit (MAQP) #3259-06 is deemed final as of December 5, 2024, by DEQ. This permit is for At Home on the Range Pet Crematory, a crematorium. All conditions of the Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For DEQ,

Eric Merchant
Permitting Services Section Supervisor
Air Quality Bureau
(406) 444-3626

Emily Hultin
Air Quality Engineering Scientist
Air Quality Bureau
(406) 444-2049

Montana Department of Environmental Quality
Air, Energy & Mining Division
Air Quality Bureau

Montana Air Quality Permit #3259-06

222395636 Delaware, LLC
At Home on the Range Pet Crematory
Section 17, Township 1 South, Range 3 East
2 Daniels Way, Cranston, RI 02921

December 5, 2024

MONTANA AIR QUALITY PERMIT

Issued to: 222395636 Delaware, LLC
At Home on the Range Pet Crematory
2 Daniels Way
Cranston, RI 02921

MAQP #3259-06
Administrative Amendment (AA) Request
Received: 11/08/2024
Department's Decision on AA: 11/19/2024
Permit Final: 12/05/2024

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to 222395636 Delaware, LLC, for the At Home on the Range Pet Crematory Facility (AHRPC), 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

The facility is located in Section 17, Township 1 South, Range 3 East, in Gallatin County, Montana. The physical address is 8400 Amsterdam Road, Manhattan, MT 59741. A complete description of the permitted equipment is contained in Section I.A of the permit analysis.

B. Current Permit Action

On November 8, 2024, the Montana Department of Environmental Quality (DEQ) received notification of the intent to transfer ownership from At Home on the Range Pet Crematory to 222395636 Delaware, LLC. The facility will remain named At Home on the Range Pet Crematory. Throughout the permit, references to "the Department" were also changed to "DEQ".

SECTION II: Limitations and Conditions

A. Operational Requirements

1. AHRPC shall not incinerate/cremate any material other than paper documents, animal remains, and any corresponding animal remains container, unless otherwise approved by DEQ. AHRPC shall provide written notice to DEQ and obtain approval from DEQ if material other than what would normally be termed paper documents, animal remains, and/or animal remains container is to be incinerated (ARM 17.8.749).

2. Units #1, #2, #3, #4 and #5 shall be equipped with auxiliary fuel burners. The auxiliary fuel burners shall be used to preheat the secondary chamber of the crematoriums to the minimum required operating temperature prior to igniting the primary chamber burner. The operating temperatures shall be maintained during operation and for one-half hour after waste feed has stopped. The secondary chamber operating temperature of the

crematoriums shall be maintained above 1500°F for any one-hour averaging period with no single reading less than 1400°F (ARM 17.8.752).

3. AHRPC shall operate units #1, #2, #3, #4, and #5 as specified in this Air Quality Permit #3259-06. Further, AHRPC shall develop crematorium operation procedures, print those procedures in a crematorium operation procedures manual and require all personnel who operate the crematorium to familiarize themselves with the operating procedures. A copy of this manual shall be supplied to DEQ (ARM 17.8.752).

B. Emission Limitations

AHRPC shall not cause or authorize to be discharged into the atmosphere from units #1, #2, #3, #4 and #5:

1. Visible emissions that exhibit an opacity of 10% or greater averaged over six consecutive minutes (ARM 17.8.752); and

2. Any particulate emissions in excess of 0.10 gr/dscf, corrected to 12% CO_2 (ARM 17.8.752).

C. Testing Requirements

1. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

2. DEQ may require testing (ARM 17.8.105).

D. Monitoring Requirements

AHRPC shall install, calibrate, maintain, and operate continuous monitoring and recording equipment, or use another measurement/recording system as may be approved by DEQ, on units #1, #2, #3, #4, and #5 to measure the secondary chamber exit gas temperature. AHRPC shall also record the daily quantity of material incinerated/cremated and the daily hours of operation of each crematorium (ARM 17.8.749).

E. Operational Reporting Requirement

1. AHRPC shall supply DEQ with annual production information for all emission points, as required by DEQ 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 DEQ by the date required in the emission inventory request. Information shall be in units as required by DEQ (ARM 17.8.505).

2. AHRPC shall notify DEQ of any construction or improvement project conducted pursuant to ARM 17.8.745, that would include ***the addition of a new emissions unit***, 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. The notice must be submitted to DEQ, 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).

3. The records compiled in accordance with this permit shall be maintained by AHRPC as a permanent business record for at least five years following the date of the measurement, shall be submitted to DEQ upon request, and shall be available at the plant site for inspection by DEQ (ARM 17.8.749).

F. Notification

AHRPC shall provide DEQ written notification of the transfer date of the company, within 15 days after the actual transfer date.

SECTION III: General Conditions

A. Inspection – AHRPC shall allow DEQ'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 such as continuous emission monitoring systems (CEMS) or continuous emission rate monitoring systems (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 AHRPC fails to appeal as indicated below.

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving AHRPC 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 DEQ's decision may request, within 15 days after DEQ renders it's 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 DEQ'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 DEQ'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, DEQ's decision on the application is final 16 days after DEQ'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 DEQ, 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 AHRPC may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.

H. Construction Commencement – Construction must begin within three years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked (ARM 17.8.762).

Montana Air Quality Permit (MAQP) Analysis
222395636 Delaware, LLC
At Home on the Range Pet Crematory Facility
MAQP #3259-06

I. Introduction

A. Permitted Equipment

222395636 Delaware LLC, (222395636) operates a 2003 Shenandoah Model C6 animal crematory (Unit #1 - a maximum burn rate of 50 pounds per hour (lbs/hr, a 2005 Therm Tec Model G-8 animal crematory (Unit #2 - a maximum burn rate of 100 lbs/hr, a 2015 American Crematory Equipment CO. Model A-250P-Quad crematory (Unit #3 – a maximum burn rate of 150 lbs/hr), and a 2017 Therm-Tec Model G-30-P (Unit #4) – a maximum burn rate of 320 lbs/hr. This permit modification adds a Therm Tec Model S-18-P16 rated for a maximum of 300 lbs/hr. This facility will be used for the destruction/incineration of animal remains and/or paper documents. The facility has indicated they no longer conduct incineration of paper documents and the combustion of animal remains in the risk assessment analysis results in higher levels of hazardous air pollutants than paper documents; therefore, only the animal incineration analysis is included. The facility is located in Section 17, Township 1 South, Range 3 East, Gallatin County, Montana. The physical address is 8400 Amsterdam Road, Manhattan, Montana, 59741.

B. Source Description

Units #1, Unit #2, Unit #3, Unit #4, and Unit #5 incorporate primary and secondary combustion chambers on each of the units and are fueled by liquefied petroleum gas (LPG). The units will be used to incinerate animal remains and/or paper documents.

C. Permit History

On June 6, 2003, At Home on the Range Pet Crematorium (AHRPC) was issued a final **Montana Air Quality Permit** (MAQP) **#3259-00** for the operation of unit #1 for the incineration of animal remains and any associated container.

On February 13, 2004, DEQ issued an administrative permit amendment to allow for the routine incineration of paper documents, such as confidential information from banks, law offices, and other businesses. In accordance with the Administrative Rules of Montana (ARM) 17.8.745(2) a permit may be amended under the provisions of ARM 17.8.764 if the amendment does not violate any existing statute, rule, or the state implementation plan (SIP). Routine incineration of these materials would result in an increase in potential emissions of less than the de minimis threshold; however, Section II.A.1 of MAQP #3259-00 specifically prohibited incineration of these materials without approval from the DEQ. Therefore, in accordance with the provisions of ARM 17.8.745(2), AHRPC needed to obtain an administrative permit amendment prior to routine operations of this type.

Further, for all incinerator operations, Montana Code Annotated (MCA) 75-2-215 required that DEQ reach a determination that the projected emissions and ambient concentrations constituted a negligible risk to public health, safety, and welfare.

Under MAQP #3259-00, DEQ completed a health risk assessment based on an emission inventory and ambient air quality modeling for the incineration of animal remains. Based on the results of the emission inventory, modeling, and the health risk assessment, DEQ determined that AHRPC's proposal complied with this requirement. Because potential emissions from the incineration of paper documents generally resulted in lower potential emissions when compared with animal remains incineration (see Section IV, Emission Inventory, of the Permit Analysis of MAQP #3259-01), DEQ determined that animal remains incineration represented the worst-case risk. Therefore, because the unit #1 passed the health risk assessment when incinerating animal remains, DEQ determined that a subsequent health risk assessment for paper documents incineration was unnecessary under this permit action. This permit action modified Section II.A.1 of the permit, to allow for routine incineration of paper documents. **MAQP #3259-01** replaced MAQP #3259-00.

On October 6, 2005, DEQ received a complete permit application to add unit #2 to the existing permitted equipment. Additionally, AHRPC requested the permit analysis be fixed to properly reflect the size of unit #1, as a maximum burn rate of 50 lbs/hr and a maximum batch load of 200 lb. Unit #1 was originally listed as having a maximum burn rate of 200 lbs/hr and a maximum batch load of 200 lb. Therefore, DEQ updated the permit analysis to properly reflect the equipment size and updated the permit to reflect the current permit language and rule references used by DEQ. **MAQP #3259-02** replaced MAQP #3259-01.

On October 6, 2015, DEQ received a complete permit application to add unit #3, a 2015 American Crematory Equipment CO. Model A-250P-Quad crematory to the existing permitted equipment inventory. **MAQP #3259-03** replaced MAQP #3259-02.

On March 13, 2017, DEQ received a permit application to add a new animal crematorium to the existing site. The new unit was a Therm-Tec Model G-30-P (or equivalent) rated for 320 lbs/hr and throughout the permit is identified as "Unit #4". This unit was the fourth animal crematorium permitted at the site. Additional information was received on March 31, 2017, confirming that all three existing units were still physically installed at the site as one of the existing units was not included in the *Emitting Unit Listing* of the Application. **MAQP #3259-04** replaced MAQP #3259-03.

On January 24, 2020, DEQ received a permit application to add a new animal crematorium to the existing site. The new unit would be a Therm-Tec Model S18-P6 (or equivalent) rated for 300 lbs/hr and throughout the permit is identified as "Unit #5". This unit would be the fifth animal crematorium permitted at the site. This unit has six individual primary combustion chambers which utilize a common secondary combustion chamber. Additional information was received on February 4, 2020, confirming that the new unit is also capable of operating above 1500ºF for one hour averaging periods. **MAQP #3259-05** replaced MAQP #3259-04.

D. Current Permit Action

On November 8, 2024, DEQ received notification of the intent to transfer ownership from At Home on the Range Pet Crematory to 222395636 Delaware, LLC. The facility will remain named At Home on the Range Pet Crematory. Throughout the permit, references to "the Department" were also changed to "DEQ". **MAQP #3259-06** replaces MAQP #3259-05.

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, 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 ARM and are available, upon request, from DEQ. Upon request, DEQ will provide references for locations 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 DEQ, 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 DEQ.

3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by DEQ, 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).

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

4. ARM 17.8.110 Malfunctions. (2) DEQ 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 four 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
11. ARM 17.8.230 Fluoride in Forage

AHRPC must maintain compliance with all applicable ambient air quality standards. As part of the risk assessment required for this project, DEQ conducted Screen modeling, an EPA-approved air dispersion model. This analysis demonstrated that the proposed project would present a negligible risk to human health from the emissions of hazardous air pollutants (HAP).

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. (2) Under this rule, AHRPC shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions 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 (gr/dscf) of dry flue gas, adjusted to 12% carbon dioxide (CO_2) 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 rule does not apply to the crematorium because AHRPC has applied for and received an air quality permit in accordance with ARM 17.8.770 and MCA 75-2-215.

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 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR 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 60.

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 DEQ. 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 DEQ by each source of air contaminants holding an air quality permit (excluding an open burning permit) issued by DEQ. 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. DEQ 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. 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 (tpy) of any pollutant. AHRPC does not have a PTE greater than 25 tpy of any pollutant; however, in accordance with MCA 75-2-215, an air quality permit is required for all incinerators, regardless of potential incinerator emissions. Because AHRPC must obtain an air quality permit, all normally applicable requirements apply in this case.

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. The current permit action was accomplished in accordance with the provisions of ARM 17.8.745(2).

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. 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 permit action because the permit change is considered an administrative permit change.

6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by DEQ 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 Best Available Control Technology (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 DEQ 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 AHRPC 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 DEQ'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 DEQ.

15. ARM 17.8.770 Additional Requirements for Incinerators. This rule specifies the additional information that must be submitted to DEQ 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. 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 Federal Clean Air Act (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 (tpy) 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 stationary source having:

a. PTE > 100 tpy of any pollutant;

b. PTE > 10 tpy of any one Hazardous Air Pollutant (HAP), PTE > 25 tpy of a combination of all HAPs, or lesser quantity as DEQ may establish by rule; or

c. PTE > 70 tpy of PM_{10} in a serious PM_{10} nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (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 Montana Air Quality Permit #3259-06 for AHRPC, the following conclusions were made:

a. The facility's PTE is less than 100 tons/year for any criteria pollutant.

b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.

c. This source is not located in a serious PM_{10} nonattainment area.

d. This facility is not subject to any current NSPS.

e. This facility is not subject to any current NESHAP.

f. This source is not a Title IV affected source, nor a solid waste combustion unit.

g. This source is not an EPA designated Title V source.

Based on these facts, DEQ determined that AHRPC is a minor source of emissions as defined under the Title V operating permit program.

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; therefore, AHRPC must obtain an air quality permit.

2. MCA 75-2-215 requires the applicant to provide, to DEQ's satisfaction, a characterization and estimate of emissions and ambient concentrations of air pollutants, including HAPs from the incineration of solid waste. DEQ determined that the information submitted in this application is sufficient to fulfill this requirement.

3. MCA 75-2-215 requires that DEQ reach a determination that the projected emissions and ambient concentrations constitute a negligible risk to public health, safety, and welfare. DEQ completed a health risk assessment based on the emissions inventory and ambient air quality modeling for this proposal. Based on the results of the emission inventory, modeling, and the health risk assessment, DEQ determined that AHRPC 's proposal complies with this requirement.

4. MCA 75-2-215 requires the application of pollution control equipment or procedures that meet or exceed BACT. DEQ determined that the proposed incinerator constitutes BACT.

III. Best Available Control Technology Analysis

A BACT determination is required for each new or modified source. AHRPC shall install on the new or modified source the maximum air pollution control capability that 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.

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

DEQ developed a criteria pollutant emission inventory for the combined units as shown below.

	Potential to Emit (Tons per Year)							
Criteria Pollutant Emission Source	PM	PM10	PM2.5	NOx	CO	SOx	VOC	Lead
Crematorium (Total of All Units)	9.409	2.277	2.450	7.173	5.944	4.372	6.044	0.147
Natural Gas Combustion	0.369	0.369	0.369	4.858	4.081	0.029	0.267	0.000

DEQ also developed a HAPs emission inventory for the incineration of animal remains using those emission factors contained in FIRE (the EPA emission factor repository) under SCC 5-02-005-05, pathological incineration. DEQ considered only those HAPs for which an emission factor was available and that have been analyzed for other permitted similar sources. The tables are broken into HAPs from natural gas combustion and for HAPs from combustion of the animal remains. This source uses propane but emission factors for natural gas are assumed equivalent to propane.

V. Air Quality Impacts

DEQ conducted SCREEN View air dispersion modeling, an EPA-approved screening model, for each of the five units. DEQ used the indicated combustion ratings for each of the five units, along with the stack diameter, stack heights, and expected discharge temperatures to model for hazardous air pollutants from both the combustion of animal remains as well as from the combustion of natural gas/propane. Since different approaches and different emission factors have been used over time, each of the five units were modeled with the same emission factors. The contribution from each unit was then combined for the HAPs from the combustion of natural gas/propane and combined for the HAPs from combustion of the animal remains and then used in the Health Risk Assessment described below.

Emitting Unit Characteristics

	Stack Height (Feet)	Inside Diameter (Feet)	ACFM (CFM)	Minimum Exhaust Temp (Temp F)	Loading (Lbs/hr)
Unit 1	17.99	0.9	1016	1413	50
Unit 2	24.6	1	1418	1413	100
Unit 3	17.99	1.67	2615	1413	150
Unit 4	27.8	2.33	4807	1413	320
Unit 5	28.5	3	5338	1434	300

Each of the five units were modeled in Screen View. An example of the calculations for Unit #5 is shown below for the Crematorium load.

SIMPLE TERRAIN INPUTS:
SOURCE TYPE = POINT
EMISSION RATE (G/S) = 0.411000E-03
STACK HEIGHT (M) = 8.6868
STK INSIDE DIAM (M) = 0.9144
STK EXIT VELOCITY (M/S)= 3.8722
STK GAS EXIT TEMP (K) = 1052.0389
AMBIENT AIR TEMP (K) = 293.0000
RECEPTOR HEIGHT (M) = 1.0000
URBAN/RURAL OPTION = RURAL
BUILDING HEIGHT (M) = 0.0000
MIN HORIZ BLDG DIM (M) = 0.0000
MAX HORIZ BLDG DIM (M) = 0.0000

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

STACK EXIT VELOCITY WAS CALCULATED FROM
VOLUME FLOW RATE = 2.5428505 (M**3/S)

BUOY. FLUX = 5.727 M**4/S**3; MOM. FLUX = 0.873 M**4/S**2.

*** FULL METEOROLOGY ***

****
*** SCREEN AUTOMATED DISTANCES ***
****

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST CONC U10M USTK MIX HT PLUME SIGMA SIGMA

(M)	(UG/M**3)	STAB	(M/S)	(M/S)	(M)	HT (M)	Y (M)	Z (M)	DWASH
1.	0.000	1	1.0	1.0	320.0	88.00	0.92	0.84	NO
100.	0.2256E-01	3	10.0	10.0	3200.0	14.58	12.59	7.65	NO
200.	0.2592E-01	4	15.0	15.0	4800.0	11.70	15.64	8.63	NO
300.	0.2335E-01	4	8.0	8.0	2560.0	16.74	22.79	12.42	NO
400.	0.1991E-01	4	8.0	8.0	2560.0	16.74	29.59	15.53	NO
500.	0.1785E-01	4	5.0	5.0	1600.0	23.22	36.43	18.85	NO
600.	0.1595E-01	4	4.5	4.5	1440.0	25.14	43.01	21.80	NO
700.	0.1436E-01	4	4.0	4.0	1280.0	27.54	49.51	24.69	NO
800.	0.1307E-01	4	3.5	3.5	1120.0	30.63	55.95	27.55	NO
900.	0.1198E-01	4	3.0	3.0	960.0	34.74	62.34	30.42	NO
1000.	0.1108E-01	4	3.0	3.0	960.0	34.74	68.54	32.97	NO
1100.	0.1029E-01	4	2.5	2.5	800.0	40.41	74.86	35.31	NO
1200.	0.9634E-02	4	2.5	2.5	800.0	40.41	80.95	37.21	NO
1300.	0.9018E-02	4	2.5	2.5	800.0	40.41	86.99	39.07	NO
1400.	0.8573E-02	4	2.0	2.0	640.0	48.34	93.24	41.44	NO
1500.	0.8250E-02	5	1.0	1.0	10000.0	61.86	75.25	31.80	NO
1600.	0.8484E-02	5	1.0	1.0	10000.0	61.86	79.61	32.82	NO
1700.	0.8662E-02	5	1.0	1.0	10000.0	61.86	83.96	33.83	NO
1800.	0.8791E-02	5	1.0	1.0	10000.0	61.86	88.29	34.82	NO
1900.	0.8877E-02	5	1.0	1.0	10000.0	61.86	92.60	35.81	NO
2000.	0.8925E-02	5	1.0	1.0	10000.0	61.86	96.90	36.77	NO
2100.	0.8935E-02	6	1.0	1.0	10000.0	52.81	67.74	25.54	NO
2200.	0.9122E-02	6	1.0	1.0	10000.0	52.81	70.56	26.04	NO
2300.	0.9282E-02	6	1.0	1.0	10000.0	52.81	73.37	26.53	NO
2400.	0.9419E-02	6	1.0	1.0	10000.0	52.81	76.17	27.01	NO
2500.	0.9533E-02	6	1.0	1.0	10000.0	52.81	78.96	27.49	NO
2600.	0.9627E-02	6	1.0	1.0	10000.0	52.81	81.74	27.96	NO
2700.	0.9703E-02	6	1.0	1.0	10000.0	52.81	84.52	28.42	NO
2800.	0.9762E-02	6	1.0	1.0	10000.0	52.81	87.28	28.88	NO
2900.	0.9805E-02	6	1.0	1.0	10000.0	52.81	90.04	29.33	NO
3000.	0.9835E-02	6	1.0	1.0	10000.0	52.81	92.78	29.78	NO
3500.	0.9638E-02	6	1.0	1.0	10000.0	52.81	106.40	31.60	NO
4000.	0.9333E-02	6	1.0	1.0	10000.0	52.81	119.83	33.31	NO
4500.	0.8976E-02	6	1.0	1.0	10000.0	52.81	133.10	34.93	NO
5000.	0.8598E-02	6	1.0	1.0	10000.0	52.81	146.22	36.46	NO

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 1. M:

138.	0.2749E-01	3	10.0	10.0	3200.0	14.58	17.03	10.29	NO

DWASH= MEANS NO CALC MADE (CONC = 0.0)
DWASH=NO MEANS NO BUILDING DOWNWASH USED
DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

****
*** SUMMARY OF SCREEN MODEL RESULTS ***
****

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	0.2749E-01	138.	0.

Natural Gas/Propane Loading Screen View Results
SIMPLE TERRAIN INPUTS:
SOURCE TYPE = POINT
EMISSION RATE (G/S) = 0.728000E-03
STACK HEIGHT (M) = 8.6868
STK INSIDE DIAM (M) = 0.9144
STK EXIT VELOCITY (M/S)= 3.8722
STK GAS EXIT TEMP (K) = 1052.0389
AMBIENT AIR TEMP (K) = 293.0000
RECEPTOR HEIGHT (M) = 1.0000
URBAN/RURAL OPTION = RURAL
BUILDING HEIGHT (M) = 0.0000
MIN HORIZ BLDG DIM (M) = 0.0000
MAX HORIZ BLDG DIM (M) = 0.0000

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

STACK EXIT VELOCITY WAS CALCULATED FROM
VOLUME FLOW RATE = 2.5428505 (M**3/S)

BUOY. FLUX = 5.727 M**4/S**3; MOM. FLUX = 0.873 M**4/S**2.

*** FULL METEOROLOGY ***

****
*** SCREEN AUTOMATED DISTANCES ***
****

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
1.	0.000	1	1.0	1.0	320.0	88.00	0.92	0.84	NO
100.	0.3996E-01	3	10.0	10.0	3200.0	14.58	12.59	7.65	NO
200.	0.4591E-01	4	15.0	15.0	4800.0	11.70	15.64	8.63	NO
300.	0.4136E-01	4	8.0	8.0	2560.0	16.74	22.79	12.42	NO
400.	0.3526E-01	4	8.0	8.0	2560.0	16.74	29.59	15.53	NO
500.	0.3162E-01	4	5.0	5.0	1600.0	23.22	36.43	18.85	NO
600.	0.2825E-01	4	4.5	4.5	1440.0	25.14	43.01	21.80	NO

700.	0.2544E-01	4	4.0	4.0	1280.0	27.54	49.51	24.69	NO
800.	0.2316E-01	4	3.5	3.5	1120.0	30.63	55.95	27.55	NO
900.	0.2122E-01	4	3.0	3.0	960.0	34.74	62.34	30.42	NO
1000.	0.1962E-01	4	3.0	3.0	960.0	34.74	68.54	32.97	NO
1100.	0.1822E-01	4	2.5	2.5	800.0	40.41	74.86	35.31	NO
1200.	0.1706E-01	4	2.5	2.5	800.0	40.41	80.95	37.21	NO
1300.	0.1597E-01	4	2.5	2.5	800.0	40.41	86.99	39.07	NO
1400.	0.1519E-01	4	2.0	2.0	640.0	48.34	93.24	41.44	NO
1500.	0.1461E-01	5	1.0	1.0	10000.0	61.86	75.25	31.80	NO
1600.	0.1503E-01	5	1.0	1.0	10000.0	61.86	79.61	32.82	NO
1700.	0.1534E-01	5	1.0	1.0	10000.0	61.86	83.96	33.83	NO
1800.	0.1557E-01	5	1.0	1.0	10000.0	61.86	88.29	34.82	NO
1900.	0.1572E-01	5	1.0	1.0	10000.0	61.86	92.60	35.81	NO
2000.	0.1581E-01	5	1.0	1.0	10000.0	61.86	96.90	36.77	NO
2100.	0.1583E-01	6	1.0	1.0	10000.0	52.81	67.74	25.54	NO
2200.	0.1616E-01	6	1.0	1.0	10000.0	52.81	70.56	26.04	NO
2300.	0.1644E-01	6	1.0	1.0	10000.0	52.81	73.37	26.53	NO
2400.	0.1668E-01	6	1.0	1.0	10000.0	52.81	76.17	27.01	NO
2500.	0.1689E-01	6	1.0	1.0	10000.0	52.81	78.96	27.49	NO
2600.	0.1705E-01	6	1.0	1.0	10000.0	52.81	81.74	27.96	NO
2700.	0.1719E-01	6	1.0	1.0	10000.0	52.81	84.52	28.42	NO
2800.	0.1729E-01	6	1.0	1.0	10000.0	52.81	87.28	28.88	NO
2900.	0.1737E-01	6	1.0	1.0	10000.0	52.81	90.04	29.33	NO
3000.	0.1742E-01	6	1.0	1.0	10000.0	52.81	92.78	29.78	NO
3500.	0.1707E-01	6	1.0	1.0	10000.0	52.81	106.40	31.60	NO
4000.	0.1653E-01	6	1.0	1.0	10000.0	52.81	119.83	33.31	NO
4500.	0.1590E-01	6	1.0	1.0	10000.0	52.81	133.10	34.93	NO
5000.	0.1523E-01	6	1.0	1.0	10000.0	52.81	146.22	36.46	NO

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 1. M:

138.	0.4869E-01	3	10.0	10.0	3200.0	14.58	17.03	10.29	NO

DWASH= MEANS NO CALC MADE (CONC = 0.0)
DWASH=NO MEANS NO BUILDING DOWNWASH USED
DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

****
*** SUMMARY OF SCREEN MODEL RESULTS ***
****

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	0.4869E-01	138.	0.

Note: The emission rate is dependent on the total list of known HAPs produced during the combustion of animal remains, liquefied petroleum gas, and paper like material. A copy of the health

risk assessment can be seen in section VI. of this permit analysis. Additional documentation is on file with DEQ.

VI. Health Risk Assessment

A health risk assessment was not conducted as this is considered an administrative permit amendment.

VII. Taking or Damaging Implication Analysis

As required by 2-10-101 through 105, MCA, DEQ conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

YES	NO	
	X	1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

Based on this analysis, DEQ 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.

EA prepared by: Emily Hultin
Date: November 13, 2024