

January 29<sup>th</sup>, 2024

Summer Aldrich  
Aldrich Pet Crematory  
PO Box 5427  
Kalispell, MT 59903

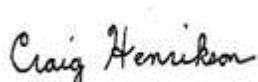
Sent via email: [Summaddi@mac.com](mailto:Summaddi@mac.com)

**RE: Final Permit Issuance for MAQP #5297-00**

Dear Ms. Aldrich:

Montana Air Quality Permit (MAQP) #5297-00 is deemed final as of January 27, 2024, by DEQ. This permit is for Aldrich Pet Crematory, a pet crematorium. All conditions of the Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the DEQ,



Craig Henrikson  
Acting Permitting Services Section Supervisor  
Air Quality Bureau  
(406) 444-6711

CH:  
Enclosures

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

Montana Air Quality Permit #5297-00

Aldrich Pet Crematory  
PO Box 5427  
Kalispell, MT 59903

January 27, 2024



## MONTANA AIR QUALITY PERMIT

Issued To: Aldrich Pet Crematory  
PO Box 5427  
Kalispell, MT 59903

MAQP: #5297-00  
Application Complete: 11/02/2023  
Preliminary Determination Issued: 12/11/2023  
DEQ's Decision Issued: 01/11/2024  
Permit Final: 01/27/2024

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Aldrich Pet Crematory (APC), pursuant to Sections 75-2-204 and 211 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 Facilities

#### A. Permitted Equipment

On October 20, 2023, the Department of Environmental Quality (DEQ) received an application from APC to install and operate a new IEB-20 pet cremation unit.

#### B. Plant Location

The APC facility is located at 164 Dode Road in Kalispell, MT. The legal description of the site is the NW ¼ of Section 34, Township 29 N, Range 21 W, in Flathead County, Montana. Coordinates for the site are Latitude 48.23867 degrees and Longitude -114.26254 degrees.

### Section II: Conditions and Limitations

#### A. Emission Limitations

1. The design capacity of the APC facility shall not exceed 150 lb/hr (ARM 17.8.749).
2. APC shall not incinerate/cremate any material other than animal remains and/or any corresponding container unless otherwise approved by DEQ in writing (ARM 17.8.749).
3. The secondary chamber shall be maintained above 1500 °F (Fahrenheit) during incineration for any one-hour averaging period with no single reading less than 1450 °F. The operating temperatures shall be maintained during operation and for one half hour after the feed has stopped (ARM 17.8.752).
4. APC shall use pipeline quality natural gas as a supplemental fuel and maintain good combustion practices to minimize emissions (ARM 17.8.752).
5. APC 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 upon request (ARM 17.8.749 and ARM 17.8.752).

6. APC shall not cause or authorize to be discharged to the atmosphere from each incinerator/crematorium:
  - a. Any visible emissions that exhibit and opacity of 10% or greater (ARM 17.8.749 and ARM 17.8.752).
  - b. Any particulate emissions in excess of 0.10 grains per dry standard cubic foot (gr/dscf), corrected to 12% CO<sub>2</sub> (ARM 17.8.749).

B. 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 further testing (ARM 17.8.105).

C. Monitoring Requirements

1. APC shall install, calibrate, maintain, and operate continuous monitoring and recording equipment to measure the secondary chamber exit temperature of each incinerator (ARM 17.8.752).
2. APC shall record the daily quantity of material incinerated/cremated and the daily hour of operation for the incinerator (ARM 17.8.749).

D. Operational Reporting Requirements

1. APC shall supply the DEQ with annual production information for all emission points, as required by the DEQ in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.

Production information shall be gathered on a calendar-year basis and submitted to the DEQ by the date required in the emission inventory request. Information shall be in the units required by the DEQ. This information may be used to calculate operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

APC shall submit the following information annually to the DEQ by March 1 of each year; the information may be submitted along with the annual emission inventory (ARM 17.8.505).

- a. Daily quantities of material incinerated/cremated
- b. Daily hours of operation for the incinerator

2. APC shall notify the DEQ of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include ***the addition of a new emissions unit***, 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 the DEQ, in writing, 10 days prior to startup 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(l)(d) (ARM 17.8.745).
3. All records compiled in accordance with this permit must be maintained by APC as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the DEQ, and must be submitted to the DEQ upon request. These records may be stored at a location other than the plant site upon approval by the DEQ (ARM 17.8.749).

E. Notification

1. APC shall provide DEQ with written notification of commencement of construction of the new incinerator within 30 days after commencement of construction.
2. APC shall provide DEQ with written notification of the actual start-up date of the new incinerator within 15 days of actual startup.

SECTION III: General Conditions

- A. Inspection – APC shall allow the 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 APC fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving APC 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 DEQ's decision may request, within 15 days after the DEQ 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 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 the 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, the DEQ's decision on the application is final 16 days after the 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 the DEQ at the location of the source.
- G. Permit Fee – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by APC 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 Analysis  
Aldrich Pet Crematory  
MAQP #5297-00

I. Introduction/Process Description

Aldrich Pet Crematory (APC) owns and operates a pet crematorium capable of incinerating up to 150 pounds per hour (lb/hr). The facility is located in the NW ¼ of Section 34, Township 29 N, Range 21 W, in Flathead County, Montana. Coordinates for the site are Latitude 48.23867 degrees and Longitude -114.26254 degrees.

A. Permitted Equipment

APC is proposing to install and operate a new Matthews Environmental Solutions multiple chamber cremation unit with a maximum design capacity of 150 pounds per hour (lb/hr).

B. Source Description

The cremation unit uses natural gas as a fuel source and is capable of incinerating up to 150 lb/hr of animal remains.

C. Public Comments (None Received)

Person/Group Commenting	Permit Reference	Comment	DEQ Response

D. 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 DEQ. Upon request, the DEQ 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 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 the DEQ.

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

APC 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 DEQ upon request.

4. ARM 17.8.110 Malfunctions. (2) The 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 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 PM<sub>10</sub>
11. ARM 17.8.230 Fluoride in Forage

APC 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. (2) Under this rule, APC 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 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 facility is not an NSPS affected source because it does not meet the definition of 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. 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 DEQ. APC 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 DEQ by each source of air contaminants holding an air quality permit (excluding an open burning permit) issued by the 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. The 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 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. APC does not have a PTE greater than 25 tons per year of any pollutant; however, in accordance with MCA 75-2-215, an air quality permit must be obtained prior to the construction and operation of any incinerator, regardless of potential incinerator emissions. Because APC 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.
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. APC 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. APC submitted an affidavit of publication of public notice for the October 15, 2023, issue of the *Daily Inter Lake*, a newspaper of general circulation in the Town of Kalispell in Flathead County, as proof of compliance with the public notice requirements.

6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the 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 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 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 APC 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 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 the DEQ.
  15. ARM 17.8.770 Additional Requirements for Incinerators. This rule specifies the additional information that must be submitted to the DEQ for incineration facilities subject to 75-2-215, Montana Code Annotated (MCA).
  16. ARM 17.8.771 Mercury Emission Standards for Mercury-Emitting Generating Units. This rule identifies mercury emission limitation requirements, mercury control strategy requirements, and application requirements for mercury-emitting generating units.
- 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 DEQ 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 #5297-00 for APC, 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 located in a serious PM<sub>10</sub> 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 DEQ determined that APC will be a minor source of emissions as defined under Title V.

H. MCA 75-2-103, Definitions provided, 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, APC 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 hazardous air pollutants from the incineration of solid waste.

DEQ determined that the information submitted in the MAQP application was 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 an emissions inventory and ambient air quality modeling for this MAQP application. Based on the results of the emission inventory, modeling, and the health risk assessment, DEQ determined that APC 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 design of the incinerator and operating

the incinerator according to the manufacturer-recommended operation procedures constitutes BACT.

### III. BACT Determination

A BACT determination is required for each new or modified source. APC 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.

APC proposes to install and operate a crematorium equipped with a secondary chamber designed to reduce the amount of pollutants, including HAPs, emitted from the incinerator. Previous research conducted by DEQ indicates crematoriums of this size have not been required to install additional air pollution control equipment beyond that provided by the controlled air design of the incinerator, which maintains an appropriate and stable unit temperature and retention of combustion gases within the secondary chamber to maximize pollutant destruction.

With the estimated particulate matter emissions being less than 1 ton/year, the incremental cost per ton of additional control would be very high and not in line with control costs of other similar sources. In addition, the incinerator is limited by this permit to 0.10 grains per dry standard cubic foot for particulate matter and to 10% opacity (visible emissions). Furthermore, the health risk assessment shows negligible risks from the small amount of HAP emissions from this incinerator as proposed.

BACT for products of combustion/incineration (carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), volatile organic compounds (VOC), and sulfur dioxide (SO<sub>2</sub>) and HAPs resulting from crematorium operations is proper crematorium design and operation.

Proper design includes relying on good turbulence, high temperature and the residence time within the secondary chamber. Turbulence is achieved with proper introduction of air into the combustion chambers. Temperature is achieved by including the requirement that the secondary chamber must be maintained at an operating temperature of 1500 °F with no single reading less than 1450 °F. Residence time is achieved by sizing the secondary chamber large enough to support final combustion within the secondary combustion chamber.

This design incorporates no heat recovery from the secondary combustion chamber and therefore, the stack volume operates effectively as an extension of the secondary combustion chamber volume. When the volume of the secondary combustion chamber and stack are combined the average residence time is over 1 second. Furthermore, natural gas combustion inherently results in low emissions of air pollutants due to characteristics of the fuel fired.

Potential PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>x</sub>, CO, VOC, and SO<sub>2</sub> emissions from the combustion of natural gas to operate the crematorium are less than 1 ton/year. Because potential emissions of all regulated pollutants resulting from natural gas combustion are low, incorporation of available pollutant-specific control technologies would result in high cost per ton removed

values thereby making pollutant-specific add-on controls for PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>x</sub>, CO, VOC, and SO<sub>2</sub> economically infeasible in this case.

Based on these conclusions, DEQ determined that proper unit design, along with the combustion of pipeline quality natural gas, and proper operation and maintenance of the crematorium with no additional control constitutes BACT.

#### IV. Emission Inventory

CONTROLLED	tons/year					
	PM <sub>Tot</sub>	NO <sub>X</sub>	CO	VOC	SO <sub>2</sub>	HAPs
<i>Crematorium*<sup>3</sup></i>	<b>0.37</b>	<b>1.13</b>	<b>0.97</b>	<b>0.98</b>	<b>0.71</b>	<b>0.43</b>
<i>Natural Gas Fuel Combustion*<sup>3</sup></i>	<b>0.06</b>	<b>0.79</b>	<b>0.66</b>	<b>0.04</b>	<b>0.00</b>	<b>—</b>
<b>Total Emissions</b>	<b>0.43</b>	<b>1.91</b>	<b>1.63</b>	<b>1.02</b>	<b>0.72</b>	<b>0.43</b>

**Notes:**

1. Values in table reflect "controlled" cells from subsequent worksheets
2. Emissions calculated from new permit application.
3. Emission based on 8,760 hours (maximum potential to emit).

**Crematorium**

Hours of Operation = 8,760.00 body/year	8760	body/year
pounds per ton = 0.000500 lb/ton	0.0005	lb/ton
Control Efficiency	0%	percent reduction
Pounds per Year of HAPs (from Health Risk Assessment)	14.57	lb/yr
PM Emissions:		
PM Emissions = 0.372 ton/yr	0.37	ton/yr
PM-10 Emissions:		
Emission Factor = 0.085 lb/150 lb body AP-42 Chapter 2.3	0.085	lb/150 lb body AP-42 Chapter 2.3
Calculation: ((0.085 lb/150 lb body) * (8,760 body/year) * (ton/2000 lb) = 0.372 ton/yr	0.37	ton/yr
PM2.5 Emissions		
Emission Factor = 0.085 lb/150 lb body AP-42 Chapter 2.3	0.085	lb/150 lb body AP-42 Chapter 2.3
Calculation: ((0.085 lb/150 lb body) * (8,760 body/year) * (ton/2000 lb) = 0.372 ton/yr	0.37	ton/yr
NOx Emissions:		
Emission Factor = 0.257 lb/150 lb body AP-42 Chapter 2.3	0.257	lb/150 lb body AP-42 Chapter 2.3
Calculation: ((0.257 lb/150 lb body) * (8,760 body/year) * (ton/2000 lb) = 1.126 ton/yr	1.13	ton/yr
CO Emissions:		
Emission Factor = 0.221 lb/150 lb body AP-42 Chapter 2.3	0.221	lb/150 lb body AP-42 Chapter 2.3
Calculation: ((0.221 lb/150 lb body) * (8,760 body/year) * (ton/2000 lb) = 0.968 ton/yr	0.97	ton/yr
VOC Emissions:		
Emission Factor = 0.224 lb/150 lb body AP-42 Chapter 2.3	0.224	lb/150 lb body AP-42 Chapter 2.3
Calculation: ((0.224 lb/150 lb body) * (8,760 body/year) * (ton/2000 lb) = 0.981 ton/yr	0.98	ton/yr
SOx Emissions:		
Emission Factor = 0.163 lb/150 lb body AP-42 Chapter 2.3	0.163	lb/150 lb body AP-42 Chapter 2.3
Calculation: ((0.163 lb/150 lb body) * (8,760 body/year) * (ton/2000 lb) = 0.714 ton/yr	0.71	ton/yr
HAPs Emissions:		
Emission Factor = 14.57 lb/hr Health Risk Assessment Value	14.57	lb/hr Health Risk Assessment Value
Calculation: ((14.570 lb/hr) * (8,760 body/year) * (ton/2000 lb) / (150 lb body/lb) = 0.425 ton/yr	0.43	ton/yr

#### Natural Gas Fuel Combustion

Maximum Natural Gas Firing Rate (MMBTU/hr)	1.8 MMBTU/hr
Natural Gas Heating Value (BTU/ft3)	1.0000 MMBTU/ft3
Maximum Operating PTE (hours)	8760.00 hours
PMTotal Emissions:	
Assumes Pmtotal is the sum of PMCond. and PMFilt.	1.20E-01 ton/yr
PMCond. Emissions:	
Emission Factor = 7.6 lb/mmscf AP-42 Chapter 1.4	7.60 lb/mmscf AP-42 Chapter 1.4
Calculation: $((7.60 \text{ lb/mmscf}) * (8,760.00 \text{ hours}) * (1.8 \text{ MMBTU/hr}) * (\text{ton}/2000 \text{ lb}) = 0.060 \text{ ton/yr}$	0.06 ton/yr
PMFilt. Emissions:	
Emission Factor = 7.6 lb/mmscf AP-42 Chapter 1.4	7.60 lb/mmscf AP-42 Chapter 1.4
Calculation: $((7.60 \text{ lb/mmscf}) * (8,760.00 \text{ hours}) * (1.8 \text{ MMBTU/hr}) * (\text{ton}/2000 \text{ lb}) = 0.060 \text{ ton/yr}$	0.06 ton/yr
NOx Emissions:	
Emission Factor = 100 lb/mmscf AP-42 Chapter 1.4	100.00 lb/mmscf AP-42 Chapter 1.4
Calculation: $((7.60 \text{ lb/mmscf}) * (8,760.00 \text{ hours}) * (1.8 \text{ MMBTU/hr}) * (\text{ton}/2000 \text{ lb}) = 0.788 \text{ ton/yr}$	0.79 ton/yr
CO Emissions:	
Emission Factor = 84 lb/mmscf AP-42 Chapter 1.4	84.00 lb/mmscf AP-42 Chapter 1.4
Calculation: $((7.60 \text{ lb/mmscf}) * (8,760.00 \text{ hours}) * (1.8 \text{ MMBTU/hr}) * (\text{ton}/2000 \text{ lb}) = 0.662 \text{ ton/yr}$	0.66 ton/yr
VOC Emissions:	
Emission Factor = 5.5 lb/mmscf AP-42 Chapter 1.4	5.50 lb/mmscf AP-42 Chapter 1.4
Calculation: $((7.60 \text{ lb/mmscf}) * (8,760.00 \text{ hours}) * (1.8 \text{ MMBTU/hr}) * (\text{ton}/2000 \text{ lb}) = 0.043 \text{ ton/yr}$	0.04 ton/yr
SO2 Emissions:	
Emission Factor = 0.6 lb/mmscf AP-42 Chapter 1.4	0.60 lb/mmscf AP-42 Chapter 1.4
Calculation: $((7.60 \text{ lb/mmscf}) * (8,760.00 \text{ hours}) * (1.8 \text{ MMBTU/hr}) * (\text{ton}/2000 \text{ lb}) = 0.005 \text{ ton/yr}$	0.00 ton/yr

## V. Existing Air Quality

The APC facility is located in the NW 1/4 of Section 34, Township 29 N, Range 21 W, in Flathead County, Montana. Coordinates for the site are Latitude 48.23867 degrees and Longitude -114.26254 degrees. The immediate area in which the proposed facility is planned is designated as a serious nonattainment area for PM<sub>10</sub>. APC's maximum potential emissions of any pollutant, including PM<sub>10</sub>, are not expected to have an impact on existing air quality.

## VI. Ambient Air Impact Analysis

Potential emissions from the proposed facility are significantly less than DEQ's regulatory permitting threshold; therefore a comprehensive impact analysis is not required to ensure associated emissions do not negatively affect or impede conformance to the Nonattainment or Maintenance Area compliance plans. APC applied for this MAQP in accordance with ARM 17.8.770 and MCA 75-2-215 for this unit.

The Health Risk Assessment in Section VII of this permit analysis showed that there is a negligible human health risk associated with the proposed project. The DEQ determined, based on the Health Risk Assessment and the small potential to emit for all criteria pollutants, that the impacts from this permitting action will be minor. The DEQ believes it will not cause or contribute to a violation of any ambient air quality standard.

## VII. Human Health Risk Assessment

A health risk assessment was conducted to determine if the proposed crematorium complies with the negligible risk requirement of MCA 75-2-215. The environmental effects unrelated to human health were not considered in determining compliance with the negligible risk standard but were evaluated as required by the Montana Environmental Policy Act, in determining compliance with all applicable rules or other requirements requiring protection of public health, safety, welfare, and the environment.

DEQ conducted SCREEN3 Modeling, an EPA-approved screening model, using the indicated inputs obtained from the emission inventory and a HAP emission rate of 4.89E-06 grams per second (g/s), which is the sum of all toxic pollutant and/or HAP emissions from the proposed crematorium. The maximum 1-hour modeled concentration was then converted to an annual average and used in the risk assessment. The individual one-hour results for each pollutant were calculated by multiplying the maximum modeled annual concentration of toxic and/or HAPs in micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ), by the percentage of each individual pollutant identified within the emission inventory. The emission factors employed in development of the emission inventory were obtained from AP-42; as such include pollutant contributions of fuel utilized in firing the crematory.

Pursuant to ARM 17.8.770(1)(c), pollutants may be excluded from the human health risk assessment if DEQ determines that exposure from inhalation is the only appropriate pathway to consider in the human health risk assessment and if the ambient concentrations of the pollutants (calculated using the potential to emit; enforceable limits or controls) are less than the levels specified in Table 1 or Table 2 of ARM 17.8.770.

The proposed APC incinerator has a stack height of 20 feet (ft), with vertical discharge, a stack exit temperature of  $\sim 1100$  °F, and an exit velocity of 20 feet/second with a 20-inch diameter stack. Ambient air modeling was accomplished using SCREEN3 software; an EPA approved ambient air dispersion. The SCREEN3 Modeling results are provided below:

Screen3 Modeling			
Calculation Procedure	Max Concentration ( $\mu\text{g}/\text{m}^3$ )	Distance to Max (m)	Terrain Height (m)
Simple Terrain	0.0429	19	0
Distance to nearest structure (m)			50

Although not all pollutants exceeded the levels specified in Table 1 or Table 2 of ARM 17.8.770, DEQ conducted a full risk assessment. DEQ included those pollutants for which emissions factors are available for crematory operations. Although additional species of pollutants have been identified in documented emission factors for the combustion of natural gas, prior analyses indicate those pollutants would pass the human health risk assessment. Therefore, emission factors based on stack test data specific to crematory emissions were used. For those pollutants reviewed, the calculated cancer risks demonstrate there is not more than a negligible health, safety, and welfare risk to the public and to the environment, as defined in ARM 17.8.740(16).

As documented in the Negligible Risk Assessment table and in accordance with DEQ's negligible risk requirement, as defined in ARM 17.8.740(16), no individual pollutant concentration exceeds the Cancer Risk threshold of 1.00E-06, the sum of all the Cancer Risk concentrations (1.43E-07) do not exceed 1.00E-05. Further, the sum of the Chronic Non-cancer Reference Exposure Level (CNCREL) hazard quotient of 0.00384 is less than 1.0 as required to demonstrate compliance with the negligible risk requirement.

HAP Category / Pollutant Name	CAS #	Fraction of all HAPS	Calculated HAP Concentration	ARM 17.8.770 De Minimis Levels				Cancer URF (2)	Cancer Risk (3)	CNCREL (4) (ug/m3)	CNCREL Quotient (5)
				Table 1 Cancer Annual	Table 2 Noncancer Chronic Annual	Table 2 Noncancer Acute Annual					
<b>Heavy Metals</b>											
Antimony (less than)	7440360	1.97E-04	8.45E-05	N/A	2.00E-03	N/A	N/A	N/A	N/A	0.015	5.60E-04
Arsenic (less than)	7440382	1.96E-04	8.40E-05	2.33E-05	5.00E-03	N/A	0.0043	3.61E-08	0.015	5.60E-04	
Beryllium	7440417	1.79E-05	7.57E-07	4.17E-05	N/A	N/A	0.0024	1.84E-09	0.02	3.83E-05	
Cadmium	7440439	1.43E-04	6.16E-05	5.56E-05	N/A	N/A	0.0018	1.11E-08	0.01	6.16E-04	
Chromium	7440473	3.90E-04	1.67E-05	8.33E-05	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chromium, hex	18540299	1.76E-04	7.56E-05	N/A	N/A	N/A	0.012	9.07E-08	0.1	7.56E-05	
Cobalt (less than)	7440484	1.14E-05	4.90E-07	N/A	N/A	N/A	N/A	N/A	0.1	4.90E-06	
Lead	7439921	8.63E-04	3.71E-05	N/A	1.50E-02	N/A	N/A	N/A	0.15	2.47E-04	
Nickel	7440020	4.98E-04	2.14E-05	3.85E-04	2.40E-03	1.00E-02	N/A	N/A	0.09	2.38E-04	
Selenium	7782492	5.69E-04	2.44E-05	N/A	5.00E-03	2.00E-02	N/A	N/A	20	1.22E-06	
Zinc	7440666	4.60E-03	1.98E-04	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Polyyclic Organic Matter (POM)</b>											
2-methylnaphthalene	91576	5.63E-07	2.42E-08	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3-methylchloranthrene (less than)	56495	2.11E-08	9.07E-10	N/A	N/A	N/A	0.0063	5.71E-12	N/A	N/A	
7,12 Dibenz(a)anthracene (less than)		1.88E-07	8.06E-09	N/A	N/A	N/A	0.071	5.72E-10	N/A	N/A	
Anthracene (less than)	120127	2.82E-08	1.21E-09	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benzene	71432	4.93E-05	2.12E-06	1.20E-02	7.10E-01	N/A	0.0000078	1.65E-11	30	7.05E-08	
Dichlorobenzene	25321226	2.82E-05	1.21E-06	9.09E-03	8.00E+00	N/A	0.000011	1.33E-11	800	1.51E-09	
Hexane	110543	4.23E-02	1.81E-03	N/A	2.00E+00	N/A	N/A	N/A	700	2.59E-06	
Naphthalene	91203	1.43E-05	6.15E-07	N/A	1.40E-01	N/A	0.000034	N/A	3	2.05E-07	
Phenanthrene	85018	3.99E-07	1.71E-08	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Toluene	108883	7.98E-05	3.43E-06	N/A	4.00E+00	N/A	N/A	N/A	5000	6.85E-10	
Acenaphthene	83329	1.45E-06	6.21E-08	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Acenaphthylene	208968	1.59E-06	6.83E-08	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benz(a)anthracene (less than)	56553	6.37E-08	2.73E-09	5.88E-05	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benz(a)pyrene (less than)	50328	1.90E-07	8.15E-09	5.88E-05	N/A	N/A	0.0011	8.96E-12	N/A	N/A	
Benz(b)fluoranthene (less than)	205992	1.04E-07	4.46E-09	5.88E-05	N/A	N/A	0.00011	4.90E-13	N/A	N/A	
Benz(g,h)perylene (less than)	191242	1.90E-07	8.15E-09	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benz(k)fluoranthene (less than)	207089	9.26E-08	3.97E-09	5.88E-05	N/A	N/A	0.00011	4.37E-13	N/A	N/A	
Chrysene (less than)	218019	3.52E-07	1.51E-08	N/A	N/A	N/A	0.000011	1.66E-13	N/A	N/A	
Dibenzo(a,h)anthracene (less than)	53703	8.28E-08	3.55E-09	5.88E-05	N/A	N/A	0.000011	3.91E-13	N/A	N/A	
Fluorene	86737	5.44E-06	2.33E-07	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fluoranthene	206440	2.67E-06	1.15E-07	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Indeno(1,2,3- <i>cd</i> )pyrene (less than)	193395	1.00E-07	4.31E-09	5.88E-05	N/A	N/A	0.00011	4.74E-13	N/A	N/A	
Phenanthrene	85018	2.99E-05	1.28E-06	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pyrene	129000	2.11E-06	9.07E-08	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Dibenzofuran</b>											
1,2,3,4,6,7,8-Heptachlorodibenzofuran (less than)	67562394	2.98E-08	1.28E-09	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2,3,4,7,8,9-Heptachlorodibenzofuran (less than)	55673897	1.81E-09	7.78E-11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2,3,4,7,8-Hexachlorodibenzofuran	70648269	1.24E-08	5.34E-10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2,3,6,7,8-Hexachlorodibenzofuran	57117449	1.11E-08	4.77E-10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2,3,7,8,9-Hexachlorodibenzofuran	72918219	2.18E-08	9.35E-10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,3,4,6,7,8-Hexachlorodibenzofuran	60851345	4.49E-09	1.93E-10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,2,3,7,8-Pentachlorodibenzofuran (less than)	57117416	1.92E-09	8.23E-11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,3,4,7,8-Pentachlorodibenzofuran (less than)	57117314	5.77E-09	2.48E-10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,3,7,8-Tetrachlorodibenzofuran	51207319	6.77E-09	2.91E-10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Listed Non-POM Organic HAPs</b>											
Acetaldehyde	75070	1.70E-03	7.28E-05	4.55E-02	9.00E-02	N/A	N/A	N/A	N/A	9	8.09E-06
Formaldehyde	50000	4.43E-04	1.90E-05	7.69E-03	3.60E-02	3.70E+00	0.000013	2.47E-10	9.8	1.94E-06	
<b>Listed Acids</b>											
Hydrogen chloride (hydrochloric acid)	7647010	9.39E-01	4.03E-02	N/A	2.00E-01	3.00E+01	N/A	N/A	20	2.02E-03	
Hydrogen fluoride	7664393	8.61E-03	3.69E-04	N/A	5.90E-02	5.80E+00	N/A	N/A	14	2.64E-05	
<b>Dioxins</b>											
2,3,7,8-tetrachlorodibenzo-p-dioxin	1746016	1.04E-09	4.44E-11	N/A	N/A	N/A	33	1.47E-09	0.00004	1.11E-06	
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	35822469	4.94E-08	2.12E-09	N/A	N/A	N/A					
SUM of Hexachlorodibenzo-p-dioxin				6.52E-10	N/A	N/A	1.3	8.47E-10	N/A	N/A	
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	39227286	3.59E-09	1.54E-10	N/A	N/A	N/A					
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	57653857	5.18E-09	2.22E-10	N/A	N/A	N/A					
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	19408743	6.42E-09	2.75E-10	N/A	N/A	N/A					
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	40321764	3.04E-09	1.30E-10	N/A	N/A	N/A					
								1.429E-07		0.00383605	

### VIII. 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 and is located in the attached Environmental Assessment.

### IX. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.



## Aldrich Pet Crematory

# Final Environmental Assessment for Montana Air Quality Permit #5297-00

Montana Department of Environmental Quality  
Air Quality Bureau  
Air Permitting Services Section  
**ENVIRONMENTAL ASSESSMENT**

<b>APPLICANT:</b> Dean and Summer Aldrich		
<b>SITE NAME:</b> Aldrich Pet Crematory (APC)		
<b>PROPOSED PERMIT NUMBER:</b> Montana Air Quality Permit (MAQP) #5297-00		
<b>APPLICATION RECEIVED:</b> 10/20/2023		
<b>APPLICATION DEEMED COMPLETE:</b> 11/02/2023		
<b>LOCATION:</b> NW ¼ of Section 34, Township 29 N, Range 21 W, in Flathead County, Montana	<b>COUNTY:</b> Flathead	
<b>PROPERTY OWNERSHIP:</b>	<b>FEDERAL</b> <input type="checkbox"/> <b>STATE</b> <input type="checkbox"/> <b>PRIVATE</b> <input checked="" type="checkbox"/>	
<b>EA PREPARER:</b>	T. Gauthier – Air Quality Engineering Scientist	
<b>EA Draft Date</b>	<b>EA Final Date</b>	<b>Permit Final Date</b>
December 11 <sup>th</sup> , 2023	January 11 <sup>th</sup> , 2024	January 27 <sup>th</sup> , 2024

### COMPLIANCE WITH THE MONTANA ENVIRONMENTAL POLICY ACT

The Montana Department of Environmental Quality (DEQ) prepared this Environmental Assessment (EA) in accordance with requirements of the Montana Environmental Policy Act (MEPA). An EA functions to determine the need to prepare an Environmental Impact Statement (EIS) through an initial evaluation and determination of the significance of impacts associated with the proposed action. However, an agency is required to prepare an EA whenever, as here, statutory requirements do not allow sufficient time for the agency to prepare an EIS (ARM 17.4.607(3)(c)). This document may disclose impacts over which DEQ has no regulatory authority.

## COMPLIANCE WITH THE CLEAN AIR ACT OF MONTANA

The state law that regulates air quality permitting in Montana is the Clean Air Act of Montana (CAA), §§ 75-2-101, *et seq.*, Montana Code Annotated (MCA). DEQ may not approve a proposed action contained in an application for an air quality permit unless the project complies with the requirements set forth in the CAA and the administrative rules adopted thereunder, ARMs 17.8.101 *et. seq.* The project is subject to approval by the DEQ Air Quality Bureau (AQB) because it is considered an incinerator per Montana Code Annotated (MCA) 75-2-103 and required to obtain an MAQP under MCA 75-2-215 (ARM 17.8.743, MCA 75-2-103, and MCA 75-2-215). DEQ's approval of an air quality permit application does not relieve APC from complying with any other applicable federal, state, or county laws, regulations, or ordinances. APC is responsible for obtaining any other permits, licenses, or approvals (from DEQ or otherwise) that are required for any part of the proposed action. Any action DEQ takes at this time is limited to the pending air quality permit application currently before DEQ's AQB and the authority granted to DEQ under the Clean Air Act of Montana. This action is not indicative of any other action DEQ may take on any future (unsubmitted) applications made pursuant to any other authority (*e.g.* Montana's Water Protection Act). DEQ will decide whether to issue the pending air quality permit pursuant to the requirements of the CAA alone. DEQ may not withhold, deny, or impose conditions on the permit based on the information contained in this Environmental Assessment. § 75-1-201(4), MCA.

## SUMMARY OF THE PROPOSED ACTION

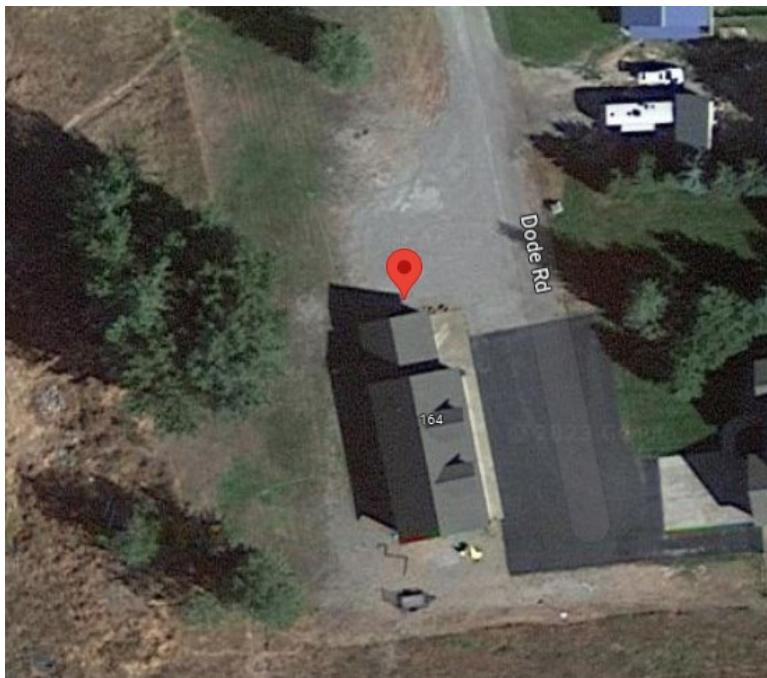
APC has applied for a new Montana Air Quality Permit, #5297-00, under the Clean Air Act of Montana for the installation of one (1) animal remains incinerator/crematorium. The proposed action would be located in NW ¼ of Section 34, Township 29 N, Range 21 W, in Flathead County, Montana. APC's estimated emissions are less than 2 tons per year (tpy) for combined cremation and natural gas emissions for all criteria pollutants. Both natural gas combustion and cremation emissions were calculated using AP-42 emission factors. All information included in the EA is derived from the permit application, discussions with the applicant, analysis of aerial photography, topographic maps, and other research tools.

**Table 1: Proposed Action Details**

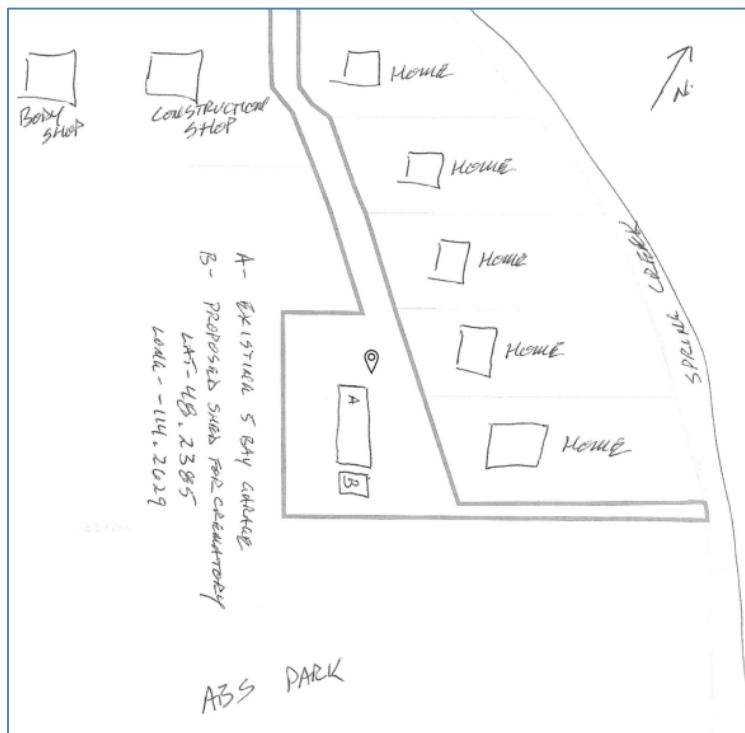
Proposed Action	
General Overview	<p>The APC air quality permit application consists of the following equipment:</p> <p>One animal remains incinerator/crematorium unit</p> <p>The new construction will require a small concrete slab to be poured and a building to house the incinerator/crematorium unit. According to the application, the concrete footprint would be approximately 20 feet by 40 feet.</p> <p>The facility would be permitted to operate until APC requested permit revocation or until the permit is revoked by DEQ due to gross non-compliance with the permit conditions.</p>

Proposed Action Estimated Disturbance	
Disturbance	Disturbance for construction would be approximately 0.1 acres.
Proposed Action	
Duration	<p><b>Construction:</b> Construction or commencement for the new or modified sources must start within three years of issuance of the final air quality permit, otherwise the authority to construct expires.</p> <p><b>Construction Period:</b> The construction period could begin as soon as the air quality permit (and any other permits identified in this EA) were in place.</p> <p><b>Operation Life:</b> The facility is expected to remain operational as long as economic conditions are favorable.</p>
Construction Equipment	Typical construction equipment, including cranes, delivery trucks, and various other types of smaller equipment
Personnel Onsite	<p><b>Construction:</b> An undisclosed number of construction personnel could be onsite at any given time during construction.</p> <p><b>Operations:</b> No change is staff is necessary to accommodate the crematorium installation.</p>
Location and Analysis Area	<p><b>Location:</b> The proposed action is located in the NW ¼ of Section 34, Township 29 N, Range 21 W, in Flathead County, Montana. This parcel is shown in Figures 1 and 2 below.</p> <p><b>Analysis Area:</b> The area being analyzed as part of this environmental review includes the immediate project area (Figures 1 and 2), as well as neighboring lands surrounding the analysis area, as reasonably appropriate for the impacts being considered.</p>
Air Quality	The Draft EA will be attached to the Preliminary Determination Air Quality Permit which would include all enforceable conditions for operation of the emitting units. Any revisions to the EA would be addressed and included in the Final EA attached to the DEQ's Decision.
Conditions Incorporated into the Proposed Action	The conditions developed in the Preliminary Determination of the MAQP dated December 11, 2023, set forth in Sections II.A-D.

**Figure 1: View of the Existing 5-Bay Garage adjacent to the Proposed Crematory Building**



**Figure 2: Project Schematic**



## **PURPOSE AND BENEFIT FOR PROPOSED ACTION**

DEQ's purpose in conducting this environmental review is to act upon APC's air quality permit to authorize one animal remains incinerator/crematorium and associated emissions. DEQ's action on the permit application is governed by the Clean Air Act of Montana, § 75-2-201, *et seq.*, MCA and the Administrative Rules of Montana (ARM) 17.8.740, *et seq.*

The benefits of the proposed action, if approved, include authorizing APC to operate their new animal remains incinerator/crematorium.

Authority to APC for operation of the incinerator/crematorium would continue until the permit is revoked, either at the request of APC or by DEQ because of non-compliance with the conditions within the air quality permit.

## **REGULATORY RESPONSIBILITIES**

In accordance with ARM 17.4.609(3)(c), DEQ must list any federal, state, or local, authorities that have concurrent or additional jurisdiction or environmental review responsibility for the proposed action and the permits, licenses, and other authorizations required. APC must conduct its operations according to the terms of its permit, the CAA, §§ 75-2-101, *et seq.*, MCA, and ARMs 17.8.101, *et seq.*

APC must cooperate fully with, and follow the directives of, any federal, state, or local entity that may have authority over APC's operations. These permits, licenses, and other authorizations may include: City of Kalispell, Flathead County, and DEQ Air Quality Bureau. The air quality permit being issued is a minor source.

## **EVALUATION AND SUMMARY OF POTENTIAL IMPACTS TO THE PHYSICAL AND HUMAN ENVIRONMENT IN THE AREA AFFECTED BY THE PROPOSED ACTION:**

The impact analysis will identify and evaluate direct and secondary impacts. Direct impacts are those that occur at the same time and place as the action that triggers the effect. Secondary impacts mean "a further impact to the human environment that may be stimulated or induced by or otherwise result from a direct impact of the action." ARM 17.4.603(18). Where impacts are expected to occur, the impacts analysis estimates the duration and intensity of the impact. The duration of an impact is quantified as follows:

- **Short-term:** Short-term impacts are defined as those impacts that would not last longer than the proposed operation of the site.
- **Long-term:** Long-term impacts are defined as impacts that would remain or occur following shutdown of the proposed facility.

The severity of an impact is measured using the following:

- **No Impact:** There would be no change from current conditions.
- **Negligible Impact:** An adverse or beneficial effect would occur but would be at the lowest levels of detection.
- **Minor Impact:** The effect would be noticeable but would be relatively small and would not

affect the function or integrity of the resource.

- **Moderate Impact:** The effect would be easily identifiable and would change the function or integrity of the resource.
- **Major Impact:** The effect would alter the resource.

## 1. TOPOGRAPHY, GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

The APC site is located in Kalispell, MT. The elevation at coordinates Latitude 48.23867, Longitude -114.26254 is estimated to be 2,923 feet. Kalispell has a warm-summer, humid continental climate with long, cold, and moderately snowy winters, hot and dry summers, and short springs and autumns. Snow usually occurs from late October/early November to March.

The Kalispell valley's geomorphology consists of a low-relief floodplain along the Flathead River, that broadens markedly south of Kalispell; flights of terraces along the main river valleys; and rolling uplands above the terraces that contain drumlinoid glacial landforms. The transition to the Swan Range is abrupt along the east side of the valley, whereas alluvial fan and glaciated surfaces form more gradual footslopes along the Whitefish and Salish mountains to the north and west.

The project will take place on privately owned land. A small concrete slab will be poured to accommodate the incinerator/crematorium, which will have construction activity including vehicle travel for delivery and the incinerator/crematorium installation. The soil on site includes bare riverbed rock.

**Direct Impacts:** The proposed project will have negligible impacts to topography, geology and soil quality, stability, and moisture.

**Secondary Impacts:** No secondary impacts to topography, geology, stability, and moisture would be expected with the proposed action.

## 2. WATER QUALITY, QUANTITY, AND DISTRIBUTION:

Operation of the incinerator/crematorium does not require water for any operational needs.

**Direct Impacts:** Negligible impacts to water quality, quantity, and distribution would be expected because the proposed project does not involve the use of water in any of the processes.

**Secondary Impacts:** No secondary impacts are anticipated with the proposed action.

## 3. AIR QUALITY:

Emissions from the incinerator/crematory unit would be minor. The incinerator/crematory unit would operate at a BACT limit temperature of no less than 1500 °F (with no single reading less than 1450 °F) and would ensure near complete destruction of the material being incinerated, producing minor amounts of pollutants. An emissions inventory for the proposed incinerator/crematory unit is located in Section IV of the Montana Air Quality Permit Analysis. The emissions associated with the new incinerator/crematory unit assume 12 hours of operation per day, 6 days a week, 52 weeks a year.

**Direct Impacts:** Minor impacts to air quality are expected with the proposed permit action. Only small amounts of pollutants would be emitted from the site.

**Secondary Impacts:** Negligible impacts could be expected with the proposed action.

#### **4. VEGETATION COVER, QUANTITY AND QUALITY:**

This project will take place on privately owned land that is already developed. Construction activities would involve vehicle travel for delivery and some construction activity to install the new incinerator/crematory unit. A new concrete slab will be poured and require a small soil disturbance.

**Direct Impacts:** Minor impacts to vegetative cover, quantity, and quality are possible because the proposed project is located in an already existing site. If the proposed equipment cannot be delivered to the installation area from the parking lot, it will need to be delivered to either the sides or back of the facility which could cause a temporary disturbance to the vegetative cover surrounding the building.

**Secondary Impacts:** Negligible impacts to land disturbance at the site based on the new concrete slab.

#### **5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:**

The project will take place on privately owned land that is already developed.

**Direct Impacts:** Negligible impacts to avian and aquatic habitats would be expected because the proposed project is located in an already existing and fully developed site with any new construction activities being conducted on already developed land and within the existing facility.

Impacts to terrestrial habitats are possible depending on where the proposed incinerator/crematory unit would be delivered prior to installation. Any impact from the delivery would be minor and temporary.

**Secondary Impacts:** No secondary impacts to terrestrial, avian and aquatic life and habitats stimulated or induced by the direct impacts analyzed above would be anticipated for the proposed action.

#### **6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:**

DEQ conducted a search using the MTNHP webpage. The search used a polygon with a three mile radius around the site coordinates, Latitude 48.23867 degrees and Longitude -114.26254 degrees.

The following are species of concern: Westslope cutthroat trout, bull trout, pygmy whitefish, pygmy water-lily, black tern, Columbia water-meal, bald eagle, great blue heron, veery, evening grosbeak, beaked spikerush, trumpeter swan, hoary bat, pileated woodpecker, Lewis's woodpecker, little brown myotis, long-eared myotis, brown creeper, Cassin's finch, grizzly bear,

pacific wren, hooked snowfly, Alberta snowfly, Ninepipes ambersnail, a cave obligate isopod, Wamstorffia moss, bat roost (non-cave), hooded merganser, Barrow's goldeneye, rufous hummingbird, western toad, horned grebe, silver-haired bat, Forster's tern, American white pelican, bobolink, Tennessee warbler, harlequin duck, long-billed curlew, common loon, Caspian tern, fisher, Clark's nutcracker, great gray owl, golden eagle, American goshawk, northern leopard frog, black swift, varied thrush, lake trout, vivid dancer, spiny baskettail, western pearlshell, sinuous snaketail, California darner, blue-eyed damer, threeridge valvata, black-necked stilt, northern hawk owl, Franklin's gull, loggerhead shrike, white-faced ibis, pointed broom sedge, small yellow lady's-slipper, Scribner's panic grass, Geyer's onion, western screech-owl, roundleaf sundew, water bulrush, giant helleborine, crested shieldfern, suckle cuckoo bumble bee, dwarf woolly-heads, flatleaf bladderwort, pale-yellow jewel-weed, north American porcupine, Crawe's sedge, yellow-billed cuckoo, panic grass, short-flowered Monkeyflower, long-legged myotis, fringed myotis, hoary marmot, meesia moss, long-sheath waterweed, floriferous monkeyflower, blunt-leaved pondweed, stalk-leaved monkeyflower, American bittern, water star-grass, arctic sweet coltsfoot, least moonwort, tufted club-rush, Townsend's big-eared bat, Kalm's lobelia, monarch, Yuma myotis, fleshy stitchwort, western moonwort, western skink, spiny-spore quillwort, linearleaf moonwort, adder's tongue, common poorwill, watershield, western pygmy shrew, northern alligator lizard, Canada lynx, snapping turtle, a scorpidium moss, ovenbird, chaffweed, wolverine, lake-bank sedge, pod grass, common tern, slender cottongrass, northern bog clubmoss, northern toadflax, and Spalding's catchfly.

**Direct Impacts:** No impacts to unique, endangered, fragile, or limited environmental resources would be expected because the proposed project is located in an already existing and fully developed site with minimal possible new disturbances occurring.

**Secondary Impacts:** No secondary impacts to unique, endangered, fragile, or limited environmental resources are anticipated for the proposed action.

## 7. HISTORICAL AND ARCHAEOLOGICAL SITES:

The Montana State Historic Preservation Office (SHPO) was contacted to conduct a file search for historical and archaeological sites within Section 34, Township 29 North, Range 21 West. SHPO provided a letter dated November 6<sup>th</sup>, 2023, that indicated there is one site within the designated search location. This site has been recorded as undetermined and is not in the proposed project area. It is SHPO's position that any structure over fifty years of age is considered historic and is potentially eligible for listing on the National Register of Historic Places. If any structures are within the Area of Potential Effect, and are over fifty years old, SHPO recommends that they be recorded, and a determination of their eligibility be made prior to any disturbance taking place.

However, should structures need to be altered, or if cultural materials are inadvertently discovered during this proposed action, SHPO requests their office be contacted for further investigation.

**Direct Impacts:** Although the search by SHPO has identified one site, the previously recorded site is not located within the proposed project area. Therefore, no impacts to historical and archeological sites would be expected.

**Secondary Impacts:** No secondary impacts to historical and archaeological sites are anticipated since the proposed construction and operation of the incinerator/crematorium are not located within the area of the previously recorded site.

## 8. SAGE GROUSE EXECUTIVE ORDER:

The project would not be in core, general or connectivity sage grouse habitat, as designated by the Sage Grouse Habitat Conservation Program (Program) at: <http://sagegrouse.mt.gov>.

**Direct Impacts:** The proposed action is not located within Sage Grouse habitat, so no direct impacts would occur.

**Secondary Impacts:** No secondary impacts to sage grouse or sage grouse habitat would be expected since the proposed action is not located within Sage Grouse habitat.

## 9. AESTHETICS:

Installation of the proposed incinerator/crematorium would add a new building and stack. Prevailing winds are primarily from the north-northeast and secondarily from the south, based on wind rose data for Glacier Park International Airport about 6 miles north of the facility. Average wind speed varies from 5.2 mph in January to 7.8 mph in April. The facility is located off of East Reserve Drive in Evergreen, MT and has residential homes to the north and east within 500 feet of the facility.

**Direct Impacts:** Minor impacts are expected with the installation of the proposed equipment. The only change to the aesthetics of the facility would be the small new building and a single stack.

**Secondary Impacts:** No secondary impacts to aesthetics and noise are anticipated with the proposed action.

## 10. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

The proposed incinerator/crematory unit will use natural gas as an energy source.

**Direct Impacts:** Negligible impacts on environmental resources of land, water, or air. Minor impacts to energy would be expected due to the incinerator/crematorium utilizing pipeline quality natural gas as a fuel source.

**Secondary Impacts:** No secondary impacts to land, water, air or energy resources are anticipated with the proposed action.

## 11. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES:

**Direct Impacts:** No impact on environmental resources outside those already identified in this environmental assessment.

**Secondary Impacts:** No impact on environmental resources outside those already identified in this environmental assessment.

## **12. HUMAN HEALTH AND SAFETY:**

A complete human health risk assessment was conducted for the crematory unit and is included in the MAQP Analysis, Section VII.

**Direct Impacts:** Impacts to human health and safety are anticipated to be short-term and minor as a result of this project.

**Secondary Impacts:** No secondary impacts to human health and safety are anticipated as a result of the proposed action.

## **13. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION:**

The site where the crematorium will be built has a fifty-foot radius according to a site schematic provided in the application. There is no agricultural activity at the site.

**Direct Impacts:** Negligible impacts to industrial, commercial, and agricultural activities are expected.

**Secondary Impacts:** No secondary impacts to industrial, commercial, and agricultural activities are expected.

## **14. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:**

There currently are approximately 14 permanent jobs located at the facility. The incinerator/crematorium will not require any additional personnel to operate.

**Direct Impacts:** No impact on quantity and distribution of employment.

**Secondary Impacts:** No impact on quantity and distribution of employment.

## **15. LOCAL AND STATE TAX BASE AND TAX REVENUES:**

The proposed action would be expected to have minor impacts on the local and state tax base and tax revenue.

**Direct Impacts:** Local, state, and federal governments would be responsible for appraising the property, setting tax rates, collecting taxes, from the companies, employees, or landowners benefiting from this operation. A minor impact is expected on the tax base and revenue with the proposed action.

**Secondary Impacts:** No secondary impacts to local and state tax base and tax revenues are anticipated as a result of the crematorium installation.

## **16. DEMAND FOR GOVERNMENT SERVICES:**

The proposed action is in a commercial and residential area.

**Direct Impacts:** Compliance review and assistance oversight by DEQ AQB would be conducted in concert with other area activity when in the vicinity. The proposed action would have only minor impacts on demand for government services, mainly through oversight by DEQ AQB.

**Secondary Impacts:** No secondary impacts are anticipated on government services with the proposed action and a minimal increase in impact would occur from the permitting and compliance needs associated with the development of the APC.

## **17. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:**

The Department is unaware of any locally adopted environmental plans or goals in the area. The permit requires compliance with state standards and goals. The state standards would be protective of the proposed site and the environment surrounding the site.

**Direct Impacts:** No impact would be expected.

**Secondary Impacts:** No impact would be expected.

## **18. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:**

**Direct Impacts:** Negligible impacts to access and quality of recreational and wilderness activities are anticipated as a result of the proposed action. The APC facility is located in an area that is primarily used for commercial businesses and residential homes.

**Secondary Impacts:** No secondary impacts to access and quality of recreational and wilderness activities are anticipated as a result of the proposed action.

## **19. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:**

**Direct Impacts:** The project would not add to the population or require additional housing, therefore, no impacts to density and distribution of population and housing are anticipated.

**Secondary Impacts:** No secondary impacts to density and distribution of population and housing are anticipated as a result of the proposed action or the operation of the APC which is expected to employ a portion of the existing staff.

## **20. SOCIAL STRUCTURES AND MORES:**

Based on the required information provided by APC, DEQ is not aware of any native cultural concerns that would be affected by the proposed installation on this existing facility.

**Direct Impacts:** The proposed action is located on an existing site, no disruption of native or traditional lifestyles would be expected, and therefore no impacts to social structure and mores are anticipated.

**Secondary Impacts:** No secondary impacts to social structures and mores are anticipated as a result of the proposed operations or from the development of the APC on existing property.

## 21. CULTURAL UNIQUENESS AND DIVERSITY:

Based on the required information provided by APC, DEQ is not aware of any unique qualities of the area that would be affected by the proposed action on this existing facility.

**Direct Impacts:** No impacts to cultural uniqueness and diversity are anticipated from this project.

**Secondary Impacts:** No secondary impacts to cultural uniqueness and diversity are anticipated as a result of the proposed action or from the development of the APC on existing property.

## 22. PRIVATE PROPERTY IMPACTS:

The proposed action would take place on privately-owned land. The analysis below in response to the Private Property Assessment Act indicates no impact. DEQ does not plan to deny the application or impose conditions that would restrict the regulated person's use of private property so as to constitute a taking. Further, if the application is complete, DEQ must take action on the permit pursuant to § 75-2-218(2), MCA. Therefore, DEQ does not have discretion to take the action in another way that would have less impact on private property—its action is bound by a statute.

There are private residences in the area of the proposed action. The closest residence is located approximately 100 feet to the east from the eastern property boundary. Other residences are located approximately 200-500 feet to the north from the northern property boundary.

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

Based on this analysis, the DEQ determined there are no taking or damaging implications associated with this permit action.

## **23. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:**

Due to the nature of the proposed action, no further direct or secondary impacts are anticipated from this project.

## **24. CLIMATE CHANGE-RELATED LITIGATION IN MONTANA**

DEQ is aware of the recent district court opinion in *Held v. State*, ruling the statutory prohibition on including greenhouse gas analyses in MEPA reviews unconstitutional.<sup>1</sup> While the *Held* order is on appeal, DEQ is seeking a stay of the district court's order until the Montana Supreme Court fully determines the issues on appeal. DEQ's brief in support of the motion, explains DEQ's position regarding this issue.

<sup>1</sup> Held v. State, No. CDV-2020-307 (Mont. 1st Jud. Dist. Ct. Aug. 14, 2023).

## **ADDITIONAL ALTERNATIVES CONSIDERED:**

**No Action Alternative:** In addition to the analysis above for the proposed action, DEQ is considering a “no action” alternative. The “no action” alternative would deny the approval of the proposed action. The applicant would lack the authority to conduct the proposed activity. Any potential impacts that would result from the proposed action would not occur. The no action alternative forms the baseline from which the impacts of the proposed action can be measured.

**Other Ways to Accomplish the Action:** If the permit is not granted, installation and operation of APC would not be allowed.

If the applicant demonstrates compliance with all applicable rules and regulations as required for approval, the “no action” alternative would not be appropriate. Pursuant to, § 75-1-201(4)(a), (MCA) DEQ “may not withhold, deny, or impose conditions on any permit or other authority to act based on” an environmental assessment.

## **CUMULATIVE IMPACTS:**

Cumulative impacts are the collective impacts on the human environment within the borders of the proposed action when considered in conjunction with other past and present actions related to the proposed action by location and generic type. Related future actions must also be considered when these actions are under concurrent consideration by any state agency through preimpact statement studies, separate impact statement evaluation, or permit processing procedures.

This environmental assessment analyzes the application submitted by APC.

DEQ considered potential impacts related to this project and potential secondary impacts. Due to the limited activities in the analysis area, cumulative impacts related to this proposed action would be minor and short-term.

## **PUBLIC INVOLVEMENT:**

Scoping for this proposed action consisted of internal efforts to identify substantive issues and/or concerns related to the proposed action. Internal scoping consisted of internal review of the EA document by DEQ Air Permitting staff.

Internal efforts also included queries to the following websites/ databases/ personnel:

- Montana State Historic Preservation Office
- Montana DEQ
- Montana Natural Heritage Program

A thirty-day public comment period occurs along with the Preliminary Determination on MAQP #5297-00 and is posted to the DEQ website.

## **OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION:**

The proposed action would be fully located on privately-owned land. All applicable local, state, and federal rules must be adhered to, which, at some level, may also include other local, state, federal, or tribal agency jurisdiction. Other Governmental Agencies which may have overlapping or sole jurisdiction include but may not be limited to: Flathead County, OSHA (worker safety), DEQ AQB (air quality), and MDT (road access).

## **NEED FOR FURTHER ANALYSIS AND SIGNIFICANCE OF POTENTIAL IMPACTS**

Under ARM 17.4.608, DEQ is required to determine the significance of impacts associated with the proposed action. This determination is the basis for the agency's decision concerning the need to prepare an environmental impact statement and also refers to DEQ's evaluation of individual and cumulative impacts. DEQ is required to consider the following criteria in determining the significance of each impact on the quality of the human environment:

1. The severity, duration, geographic extent, and frequency of the occurrence of the impact.

“Severity” is analyzed as the density of the potential impact while “extent” is described as the area where the impact is likely to occur. An example could be that a project may propagate ten noxious weeds on a surface area of 1 square foot. In this case, the impact may be a high severity over a low extent. If those ten noxious weeds were located over ten acres there may be a low severity over a larger extent.

“Duration” is analyzed as the time period in which the impact may occur while “frequency” is analyzed as how often the impact may occur. For example, an operation that occurs throughout the night may have impacts associated with lighting that occur every night (frequency) over the course of the one season project (duration).

2. The probability that the impact will occur if the proposed action occurs; or conversely, reasonable assurance in keeping with the potential severity of an impact that the impact will not occur.

3. Growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution of the impact to cumulative impacts.

4. The quantity and quality of each environmental resource or value that would be affected, including the uniqueness and fragility of those resources and values.
5. The importance to the state and to society of each environmental resource or value that would be affected.
6. Any precedent that would be set as a result of an impact of the proposed action that would commit the DEQ to future actions with significant impacts or a decision in principle about such future actions.
7. Potential conflict with local, state, or federal laws, requirements, or formal plans.

The significance determination is made by giving weight to these criteria in their totality. For example, impacts with moderate or major severity may be determined to be not significant if the duration of the impacts is considered to be short-term. As another example, however, moderate or major impacts of short-term duration may be considered to be significant if the quantity and quality of the resource is limited and/or the resource is considered to be unique or fragile. As a final example, moderate or major impacts to a resource may be determined to be not significant if the quantity of that resource is high or the quality of the resource is not unique or fragile.

Preparation of an EA is the appropriate level of environmental review under MEPA if statutory requirements do not allow sufficient time for an agency to prepare an environmental impact statement, pursuant to ARM 17.4.607. An agency determines whether sufficient time is available to prepare an environmental impact statement by comparing statutory requirements that establish when the agency must make its decision on the proposed action with the time required to obtain public review of an environmental impact statement plus a reasonable period to prepare a draft environmental review and, if required, a final environmental impact statement.

## **SIGNIFICANCE DETERMINATION**

The severity, duration, geographic extent, and frequency of the occurrence of the impacts associated with the proposed action would be limited. APC proposes to construct and operate the incinerator/crematorium on private land located in NW ¼ of Section 34, Township 29 N, Range 21 W, in Flathead County, Montana.

DEQ has not identified any significant impacts associated with the proposed action for any environmental resource. Approving APC's air quality permit application would not set precedent that commits DEQ to future actions with significant impacts or a decision in principle about such future actions. If APC submits another permit application, DEQ is not committed to approve those applications. DEQ would conduct a new environmental assessment for any subsequent air quality permit applications sought by APC. DEQ would make a decision on APC's subsequent application based on the criteria set forth in the Clean Air Act of Montana.

DEQ's issuance of a modified MAQP to APC for this proposed operation also does not set a precedent for DEQ's review of other applications, including the level of environmental review. A decision of on the appropriate level of environmental review is made based on case-specific considerations of the criteria set forth in ARM 17.4.608.

DEQ does not believe that the proposed action has any growth-inducing or growth-inhibiting aspects or that it conflicts with any local, state, or federal laws, requirements, or formal plans.

Based on a consideration of the criteria set forth in ARM 17.4.608, the proposed state action is not predicted to significantly impact the quality of the human environment. Therefore, at this time, preparation of an EA is determined to be the appropriate level of environmental review under the Montana Environmental Protection Act.

**Environmental Assessment and Significance Determination Prepared By:**

<u>T. Gauthier</u>	<u>Air Quality Engineering Scientist</u>
Name	Title

**EA Reviewed By:**

<u>J. Merkel</u>	<u>Permitting Services Section Supervisor</u>
Name	Title

## References

Air Quality Permit Application Received October 20<sup>th</sup>, 2023

Montana State Historical Preservation Office (SHPO) Report Received November 6<sup>th</sup>, 2023

Montana Natural Heritage Program (Website Search Downloads) Last Download November 6<sup>th</sup>, 2023

Montana Cadastral GIS Layer – Throughout Project Up Until Decision Issuance

Air Quality Bureau Permitted Source List-GIS Layer

Climate Information From Kalispell Wikipedia Page

Geology Information From Montana Ground-Water Assessment Found At  
<https://mbmoggwic.mtech.edu/gwcpmaps/gwaa02map06tiled.pdf>

Held v. State, No. CDV-2020-307 (Mont. 1st Jud. Dist. Ct. Aug. 14, 2023)