November 5, 2024

Michael Duplantis
Crusoe Energy Systems, Inc.
Piano Man Site
1641 California Street
Suite 400
Denver, CO 80202

Sent via email: mduplantis@crusoe.ai

RE: Final Permit Issuance for MAQP #5313-00

Dear Mr. Duplantis:

Montana Air Quality Permit (MAQP) #5313-00 is deemed final as of November 5, 2024, by DEQ. This permit is for Crusoe Energy Piano Man site, an electrical generation facility for a data center. All conditions of the Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For DEQ,

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

Troy M Burrows
Air Quality Scientist
Air Quality Bureau
(406) 444-1452

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

Montana Air Quality Permit #5313-00

Crusoe Energy Systems, Inc.
Piano Man Site
1641 California Street
Suite 400
Denver, CO 80202

November 5, 2024

Issued To: Crusoe Energy Systems, Inc.
1641 California St. Suite 400
Denver, CO 80202

MAQP: #5313-00
Application Complete: 8/26/2024
Preliminary Determination Issued: 9/30/2024
Department's Decision Issued: 10/18/2024
Permit Final: 11/5/2024

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Crusoe Energy Systems, Inc. (Crusoe), 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

Crusoe proposes to install and operate a maximum of four (4) Waukesha 9394 GSI engines rated at 2500 brake-horsepower (bhp)/engine or less.

The engines would be used to generate electricity to power a data center through the combustion of field gas gathered from multiple well pads that would otherwise be flared from an existing oil and gas facility. Each engine utilizes an air to fuel ratio (AFR) controller and Non-Selective Catalytic Reduction (NSCR) to reduce emissions.

B. Plant Location

This facility is to be located approximately 7.9 miles north of Fairview, Montana, in Section 18, Township 25 North, Range 58 East, in Richland County, 47.92216°N, latitude and -104.27816°W, longitude, and is known as the Piano Man site.

Section II: Conditions and Limitations

A. Emission Limitations

1. Crusoe shall not have on site more than four (4) natural gas-fired generator engines rated at 2,500 bhp/engine or less (ARM 17.8.749).

2. Emissions from each individual Waukesha 9394 GSI engine located at the Piano Man Site shall not exceed the following (ARM 17.8.752):

PM, PM_{10}, $PM_{2.5}$ – 0.83 lb/hr
NO_X – 0.83 lb/hr or 0.15 gr/bhp-hr
CO – 1.65 lb/hr or 0.30 gr/bhp-hr
VOC – 0.17 lb/hr or 0.03 gr/bhp-hr
SO_2 – 0.08 lb/hr
HAPs – 0.24 lb/hr

3. Crusoe shall operate and maintain a NSCR unit and an AFR controller within the parameters recommended by the equipment manufacturer on each Waukesha 9394 GSI engine (ARM 17.8.752).

4. Crusoe shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any sources installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).

5. Crusoe 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 (ARM 17.8.308).

6. Crusoe shall treat all unpaved portions of the haul roads, access roads, parking lots, or general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.5 (ARM 17.8.749).

7. Crusoe shall comply with all applicable standards and limitations, and the reporting, recordkeeping and notification requirements contained in Title 40 Code of Federal Regulations (CFR) 60, Subpart A, Subpart JJJJ (ARM 17.8.340 and 40 CFR 60, Subpart(s) A and JJJJ).

8. Crusoe shall comply with all applicable standards and limitations, and the reporting, recordkeeping and notification requirements contained in 40 CFR 63, Subpart A, Subpart ZZZZ (ARM 17.8.340 and 40 CFR 63, Subpart(s) A and ZZZZ).

B. Testing Requirements

1. Crusoe shall demonstrate compliance with the NO_X, CO, and VOC limits in Section II.A.2 via source testing conducted within 180 days after equipment commencement. Source testing shall be conducted for NO_X, CO, and VOCs simultaneously. Compliance test results are determined by the average of three 1-hour or longer runs. Results shall be submitted to the Montana Department of Environmental Quality (DEQ) to demonstrate compliance with the emission limitations in Section II.A.2 (ARM 17.8.105 and ARM 17.8.749).

2. Following the calendar date of the initial compliance demonstration, compliance with the applicable emission limits shall be demonstrated via source testing for NOx, CO, and VOCs simultaneously within 8,760 operating hours or 3 years, whichever comes first. Source testing shall follow the applicable methods defined in 40 CFR 60 Subpart JJJJ, or equivalent methods as approved in writing by the DEQ. Future compliance demonstration shall be required at the same frequency for each engine on site from the date of the last compliance demonstration (ARM 17.8.105, ARM 17.8.749, ARM 17.8.340, 40 CFR 60 Subpart JJJJ, and 40 CFR 60 Subpart XXXX).

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

4. The DEQ may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. Crusoe 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,

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 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 required in ARM 17.8.745(l)(d) (ARM 17.8.745).

2. All records compiled in accordance with this permit must be maintained by Crusoe 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 DEQ, and must be submitted to DEQ upon request. These records may be stored at a location other than the plant site upon approval by DEQ (ARM 17.8.749).

3. Crusoe shall annually certify that emissions generated at the Piano Man Generation Site are less than those that would require the source to obtain an air quality operating permit as required by ARM 17.8.1204(3)(b). The annual certification shall comply with the certification requirements of ARM 17.8.1207. The annual certification shall be submitted along with the annual emissions inventory information (ARM 17.8.749 and ARM 17.8.1204).

D. Notification

1. Crusoe shall notify DEQ in writing of the date of commencement of operation of any emitting source within 30-days following the date of commencement.

SECTION III: General Conditions

A. Inspection – Crusoe 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 Crusoe fails to appeal as indicated below.

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Crusoe 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 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 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, failure to pay the annual operation fee by Crusoe may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.

H. Duration of Permit – Construction or installation must begin, or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).

Montana Air Quality Permit (MAQP) Analysis
Crusoe Energy Systems, Inc. – Piano Man Site
MAQP #5313-00

I. Introduction/Process Description

This facility is to be located approximately 7.9 miles north of Fairview, Montana, in Section 18, Township 25 North, Range 58 East, in Richland County, 47.92216°N, latitude and -104.27816°W, longitude, and is known as the Piano Man Site.

A. Permitted Equipment

Crusoe proposes to install and operate a maximum of four (4) Waukesha 9394 GSI engines rated at 2500 brake-horsepower (bhp)/engine or less.

B. Source Description

The engines would be used to generate electricity to power a data center through the combustion of field gas from multiple well pads that would otherwise be flared from an existing oil and gas facility. Each engine utilizes an air/fuel ratio (AFR) controller and Non-Selective Catalytic Reduction (NSCR) to reduce emissions.

C. Additional Information

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

II. Applicable Rules and Regulations

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

   Crusoe 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 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 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_{10}
11. ARM 17.8.230 Fluoride in Forage

Crusoe 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, Crusoe 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). Crusoe is considered an NSPS affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts.

    a. 40 CFR 60, Subpart A – General Provisions apply to all equipment or facilities subject to an NSPS Subpart as listed below:

    b. 40 CFR 60, Subpart JJJJ Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. The proposed engines will be ordered after June 12, 2006, and manufactured after either July 1, 2007, or July 2, 2008, as applicable based on horsepower. Therefore, the engines operated at this facility are subject to this regulation.

10. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. The source, as defined and applied in 40 CFR Part 63, shall comply with the requirements of 40 CFR Part 63, as listed below:

a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to a NESHAP Subpart as listed below:

b. 40 CFR 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. Subpart ZZZZ applies to the new reciprocating engines but compliance with Subpart ZZZZ is demonstrated by compliance with 40 CFR 60 Subpart JJJJ.

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. Crusoe 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 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 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. Crusoe has a PTE greater than 25 tons per year of Oxides of Nitrogen (NO_X) and Carbon Monoxide (CO); therefore, an air quality permit is required.

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. Crusoe 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. Crusoe submitted an affidavit of publication of public notice for the *August 24, 2024,* issue of the *Sidney Herald*, a newspaper of general circulation in the Town of Sidney in Richland 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 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 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 Crusoe 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 17.8.760 Additional Review of Permit Applications. This rule describes DEQ's responsibilities for processing permit applications and making permit decisions on those applications that require an environmental impact statement.

12. 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.

13. 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).

14. 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.

15. 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.

16. 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, Montana Code Annotated (MCA).

17. 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 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 #5313-00 for Crusoe, the following conclusions were made:

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

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

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

   d. This facility is subject to current NSPS (40 CFR 60, Subparts A and JJJJ).

   e. This facility is subject to current NESHAP (40 CFR 63, Subparts A and ZZZZ).

   f. This source is not a Title IV affected source.

   g. This source is not a solid waste combustion unit.

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

   Based on these facts, DEQ determined that Crusoe will be a minor source of emissions as defined under Title V. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, Crusoe will be required to obtain a Title V Operating Permit.

III. BACT Determination

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

A BACT analysis was submitted by Crusoe in permit application #5313-00, addressing some available methods of controlling pollutant emissions from the Piano Man Site. The following control options have been reviewed by DEQ to make the BACT determination,

NO_X

Identify
The following options were reviewed for NOx control.

Water/steam injection
Dry low NO_X combustion
Selective catalytic reduction (SCR)
Selective non-catalytic reduction (SNCR)

Non-selective catalytic reduction (NSCR)
Oxidation catalyst
EMx catalyst system

Eliminate Infeasible Options

Waukesha Engines – Both the water/steam injection and the dry low NO_X combustion are technologies that would require modifications to the existing engines and are considered technically infeasible for the proposed engines. SCR and SNCR require specific exhaust temperatures for optimal destruction and the exhaust temperatures for the proposed engines are not within the required range for either SCR or SNCR. They are deemed technically infeasible since the exhaust temperature from the proposed engines would be below the recommended ranges. Oxidation catalyst is best suited for lean burn engines and therefore is also eliminated from consideration due to the proposed Waukesha engines being four-stroke rich-burn (4SRB).

Rank and Evaluate the Remaining Control Technologies

The two remaining identified technologies include NSCR and EMx catalyst. Each of these are considered feasible. EMx is able to operate at the exhaust temperature from the proposed engines, but the costs associated with EMx are more than the costs associated with a non-selective catalyst.

Select the BACT

The NSCR is estimated to provide up to 90 percent emission reduction. Therefore, NSCR with air fuel ratio controller (AFR) is selected as BACT for NOx for the Waukesha engines.

VOC and CO Emissions

Identify

VOC and CO emissions primarily occur as the result of incomplete combustion. Similar to NOx control, catalysts that react with CO and VOC's can be used to convert these pollutants to CO_2.

There are no options eliminated for VOC and CO emissions, as the same control technology as is used for NO_x control is applied here.

Evaluate:

Finding the optimum point in a slightly rich environment can produce very high destruction efficiencies for both CO, VOC's, and NO_X at the same time. Just as for NO_X, the use of an AFR is necessary to control the concentration in a slightly rich environment.

Select the BACT

Therefore, employing NSCR which uses a 3-way catalyst to treat CO, VOC's and NO_X is selected as BACT for the Waukesha engines.

Emission levels associated with NSCR and an AFR for the proposed Waukesha engine models for each pollutant are proposed as follows:

Waukesha 9394 GSI Engine
PM, PM_{10}, $PM_{2.5}$ – 0.38 lb/hr
SO2 – 0.08 lb/hr

NO_X – 0.15 gr/bhp-hr
CO – 0.30 gr/bhp-hr
VOC – 0.03 gr/bhp-hr
HAPs – 0.24 lb/hr

SO_2 and PM_{10}

ARM 17.8.752 requires a BACT analysis for SO_2 emissions. Annual uncontrolled SO_2 emissions from the proposed operations are minimal; therefore, any add-on SO_2 control would be cost-prohibitive and deemed economically infeasible for the proposed project on a cost per ton of SO_2 removed basis. Therefore, a top-down BACT analysis is not presented. The proposed SO_2 BACT is the combustion of low sulfur natural gas with no add-on controls. The proposed SO_2 BACT conforms to previous BACT determinations made by DEQ for similar compressor engines.

ARM 17.8.752 requires a BACT analysis for PM_{10} emissions. Annual uncontrolled PM_{10} emissions are predicted to be very low, and any add-on control would be cost-prohibitive and deemed economically infeasible for the proposed project on a cost per ton of PM_{10} removed basis. Therefore, a top-down BACT analysis for PM_{10} emissions is not presented. Crusoe proposes BACT as combustion of low-ash natural gas with no add-on controls. The proposed PM_{10} BACT conforms to previous BACT determinations made by DEQ for similar compressor engines.

The control options selected have controls and control costs comparable to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

IV. Emission Inventory

CONTROLLED	**tons/year**							
Emission Source	**PM**	**PM_{10}**	**$PM_{2.5}$**	**NO_X**	**CO**	**VOC**	**SO_2**	**HAPs**
2,500 bhp Compressor Engines (4) (combined)	6.66	6.66	6.66	14.45	28.91	2.89	1.402	4.18
Total Emissions	**6.66**	**6.66**	**6.66**	**14.45**	**28.91**	**2.89**	**1.402**	**4.18**

Calculations:

Waukesha Engine(s), 10,000

Note: Emissions are based on the power output of the engine (2500 bhp).		
Operational Capacity of Engine = 4 engines	4	**engines**
Brake horsepower	10,000	**bhp**
Pounds per gram	0.002204	**lb/gr**
Hours of Operation = 8,760.00 hr/yr	8760	**hr/yr**
PM Emissions:		
PM Emissions = 6.66 ton/yr (Assume all PM < 1.0 um)	6.66	**ton/yr**
PM-10 Emissions:		
Emission Factor = 0.38 lb/hr (BACT)	0.38	**lb/hr**
Calculation: ((4 engines) * (8,760 hr/yr) * (0.38 lb/hr) / (ton/2000 lb) = 6.66 ton/yr	6.66	**ton/yr**

PM2.5 Emissions		
Emission Factor = 0.38 lb/hr (BACT)	0.38	**lb/hr**
Calculation: ((4 engines) * (8,760 hr/yr) * (0.38 lb/hr) / (ton/2000 lb) = 6.66 ton/yr	6.66	**ton/yr**
NOx Emissions:		
Emission Factor = 0.15 gr/bhp-hr (BACT)	0.15	**gr/bhp-hr**
Calculation: ((0.15 gr/bhp-hr) * (10,000 bhp) * (8,760 hr/yr) * (0.0022 lb/gr) / (ton/2000 lb) = 14.45 ton/yr	14.45	**ton/yr**
CO Emissions:		
Emission Factor = 0.3 gr/bhp-hr (BACT)	0.3	**gr/bhp-hr**
Calculation: ((0.30 gr/bhp-hr) * (10,000 bhp) * (8,760 hr/yr) * (0.0022 lb/gr) / (ton/2000 lb) = 28.91 ton/yr	28.91	**ton/yr**
VOC Emissions:		
Emission Factor = 0.03 gr/bhp-hr (BACT)	0.03	**gr/bhp-hr**
Calculation: ((0.03 gr/bhp-hr) * (10,000 bhp) * (8,760 hr/yr) * (0.0022 lb/gr) / (ton/2000 lb) = 2.89 ton/yr	2.89	**ton/yr**
SO_X Emissions:		
Emission Factor = 0.08 lb/hr (BACT)	0.08	**lb/hr**
Calculation: ((4 engines) * (8,760 hr/yr) * (0.08 lb/hr) / (ton/2000 lb) = 1.402 ton/yr	1.402	**ton/yr**
HAPs Emissions		
Emission Factor = 0.24 lb/hr	0.24	**lb/hr**
Calculation: ((4 engines) * (8,760 hr/yr) * (0.24 lb/hr) / (ton/2000 lb) = 4.205 ton/yr	4.18	**ton/yr**

V. Existing Air Quality

Richland County is currently designated as attainment/unclassifiable for all pollutants.

VI. Ambient Air Impact Analysis

DEQ determined, based on amount of allowable emission, that the impacts from this permitting action will be minor. DEQ believes, as regulated, the proposed permit action will not cause or contribute to a violation of any ambient air quality standard.

VII. Taking or Damaging Implication Analysis

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

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

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

Crusoe Energy Systems, Inc.

DRAFT Environmental Assessment for the

Proposed Montana Air Quality Permit #5313-00

Montana Department of Environmental Quality
Air Quality Bureau
Air Permitting Services Section

ENVIRONMENTAL ASSESSMENT

APPLICANT: Crusoe Energy Systems, Inc.		
SITE NAME: Piano Man Site		
PROPOSED PERMIT NUMBER: Montana Air Quality Permit Number 5313-00		
APPLICATION DATE: August 22, 2024		
APPLICATION COMPLETE DATE: August 26, 2024		
LOCATION: Section 18, Township 25 North, Range 58 East (47.92216, -104.27816)		**COUNTY: Richland**
PROPERTY OWNERSHIP:	**FEDERAL ____ STATE ____ PRIVATE _X_**	
EA PREPARER:	**Troy M. Burrows**	
EA Draft Date	**EA Final Date**	**Permit Final Date**
September 30, 2024	**10/18/2024**	**11/5/2024**

Table of Contents

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 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 statutory requirements do not allow sufficient time for the agency to prepare an EIS. 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 (. § 75-2-201, et seq., Montana Code Annotated (MCA). DEQ may not approve a proposed project contained in an application for an air quality permit unless the project complies with the requirements set forth in the Clean Air Act of Montana and the administrative rules adopted thereunder. DEQ's approval of an air quality permit application does not relieve the Crusoe Energy Systems, Inc. (Crusoe), from complying with any other applicable federal, state, or county laws, regulations, or ordinances. Crusoe is responsible for obtaining any other permits, licenses, approvals, that are required for any part of the proposed project. DEQ will decide whether to approve the permit in accordance with the requirements of the Clean Air Act of Montana. 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: Crusoe has applied for a new Montana air quality permit under the Clean Air Act of Montana for the installation of Crusoe proposes to install and operate a maximum of four (4) Waukesha 9394 GSI engines rated at 2500 brake horsepower (bhp)/engine or less. The engines would be used to generate electricity to power a data center through the combustion of field gas gathered from multiple well pads that would otherwise be flared from an existing oil and gas facility. Each engine utilizes an air to fuel ratio (AFR) controller and Non-Selective Catalytic Reduction (NSCR) to reduce emissions. The proposed action would be located approximately 7.9 miles north of Fairview, Montana, in Section 18, Township 25 North, Range 58 East, Richland County, 47.92216°N, latitude and -104.27816°W, longitude. 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.

PURPOSE AND BENEFIT FOR PROPOSED ACTION: DEQ's purpose in conducting this environmental review is to act upon Crusoe's air quality permit application to authorize the operation of a maximum of four (4) Waukesha 9394 GSI engines rated at 2500 bhp/engine or less and the air contaminants in connection with the before mentioned equipment. DEQ's action on the permit application is governed by the Clean Air Act of Montana, § 75-2-201, et seq., Montana Code Annotated (MCA) and the Administrative Rules of Montana (ARM) 17.8.740, *et seq.*

The benefits of the proposed action include the following: Crusoe is proposing to install the engines to generate electricity to power a data center through the combustion of field gas gathered from multiple well pads that would otherwise be flared from an existing oil and gas facility..

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.

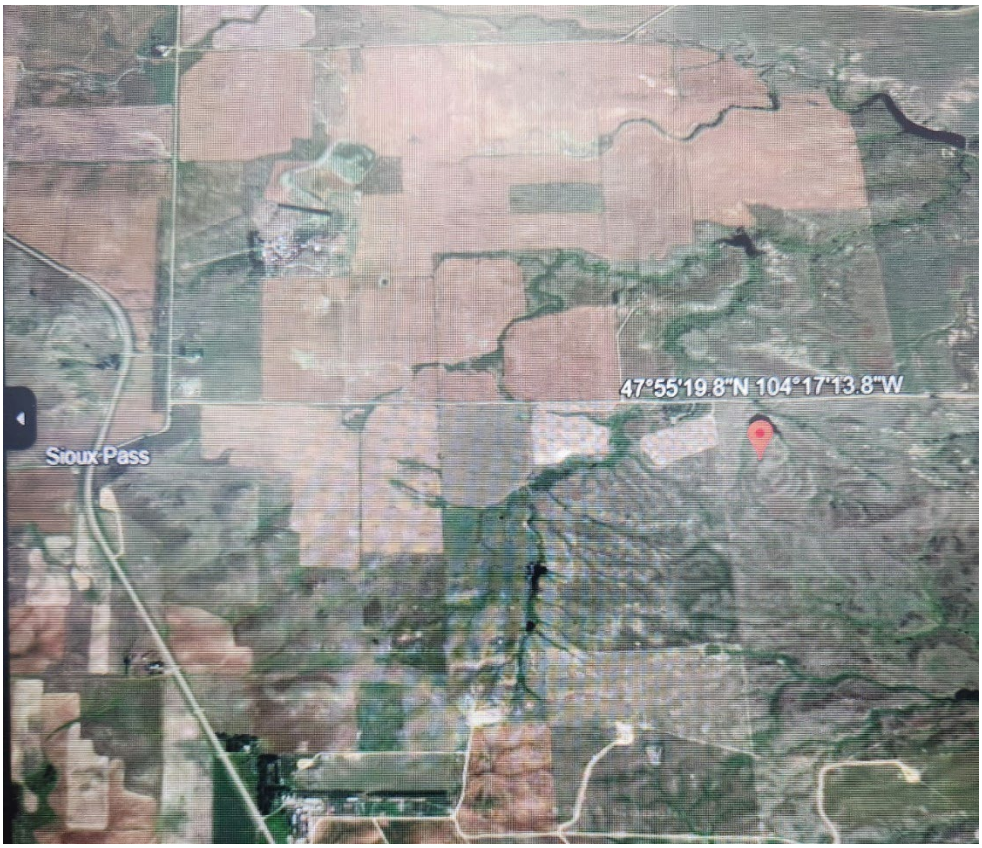
Crusoe must conduct its operations according to the terms of its permit. Crusoe further agrees to be legally bound by the permit, The Clean Air Act of Montana, § 75-2-201, et seq., Montana Code Annotated (MCA) and the Administrative Rules of Montana (ARM) 17.8.740, *et seq*.

Crusoe must cooperate fully with, and follow the directives of any federal, state, or local entity that may have authority over Crusoe's generating operations.

Table 1: Proposed Action Details

Summary of Proposed Action	
General Overview	Crusoe's air quality permit application proposes operation of the following equipment: • A maximum of four (4) 2,500 bhp generator engines The facility would be permitted to operate until Crusoe requested permit revocation or until the permit were revoked by DEQ due to gross non-compliance with the permit conditions.
Proposed Action Estimated Disturbance	
Disturbance	Minimal disturbance is estimated with the current permit action. The site would occupy approximately 3 acres.
Proposed Action	
Duration	**Construction:** Pursuant to ARM 12.2.762(2), commencement of construction or installation of a new or modified facility or emitting unit must occur within three years of issuance of the final air quality permit. **Construction Period:** The construction period could begin as soon as the air quality permit (and any other permits identified in this EA) is approved. **Operation Life:** Pursuant to ARM 17.8.762(1), the air quality permit is in effect until the permit is amended or modified at the request of the permittee or DEQ has determined the need for revocation.
Construction Equipment	Cranes, delivery trucks, various other types of smaller equipment
Personnel Onsite	**Construction:** Various numbers of installation personnel depending on which piece of equipment are being installed. **Operations:** No changes to the existing well pad operation employees.
Location and Analysis Area	**Location**: Section 18, Township 25 North, Range 58 East, in Richland County, MT. 47.92216, -104.27816 **Analysis Area**: The area being analyzed as part of this environmental review includes the immediate project area (Figure 1), as well as contiguous and adjacent lands surrounding the project area, as reasonably appropriate for the impacts being considered.
Air Quality	This EA will be attached to the air quality permit, which would include all enforceable conditions for operation of the emitting units.
Conditions incorporated into the Proposed Action	The conditions developed in DEQ's Preliminary Determination on Montana Air Quality Permit #5313-00, dated September TBD, 2024, set forth in Sections II.A-D.

Figure 1: Map of general location of the proposed project.



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

The impact analysis will identify and evaluate whether the impacts are direct or secondary impacts to the physical environment and human population in the area affected by the proposed project. Direct impacts occur at the same time and place as the action that causes the impact. Secondary impacts are 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 would occur, the impacts will be described.

Cumulative impacts are the collective impacts on the human environment within the borders of Montana that could result from 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 impacts must also be considered when these actions are under concurrent consideration by any state agency through pre-impact statement studies, separate impact statement evaluation, or permit processing procedures. The activities identified in Table 1 were analyzed as part of the cumulative impacts assessment for each resource.

The duration is quantified as follows:

- Construction Impacts (short-term): These are impacts to the environment during the construction period. When analyzing duration, please include a specific range of time.

- Operation Impacts (long-term): These are impacts to the environment during the operational period. When analyzing duration, please include a specific range of time.

The intensity of the impacts is measured using the following:

- No impact: There would be no change from current conditions.

- Negligible: An adverse or beneficial effect would occur but would be at the lowest levels of detection.

- Minor: The effect would be noticeable but would be relatively small and would not affect the function or integrity of the resource.

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

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

Direct Impacts:

Proposed Action: The affected area consists primarily of agricultural and grazing lands with nearby, dispersed oil and gas operations. Construction of the proposed facility would require new land disturbance associated with groundwork and installation of permitted equipment on approximately 3 acres of private land previously disturbed by agricultural and grazing operations. No unique or important geological formations exist in the affected area and no impacts to bedrock would be expected from construction activities associated with the proposed project. Therefore, no impacts to geology would be expected.

Soils in the affected area are made up primarily of Vida-Zahill loams with a 2-8% slope. Characteristics of this soil classification include of very deep, well drained soils that formed in till. The operation of heavy equipment necessary to construct the proposed facility, including excavation activities, would adversely and directly impact soil quality, stability and moisture in the affected area. However, because the proposed project is small by industrial standards ($\leq$ 3 acres) and because the affected property constitutes previously disturbed land, any expected adverse direct impacts to soil quality, stability, and moisture from construction of the proposed facility would be short-term and minor. No beneficial direct impacts to soil quality, stability and moisture would be expected because of the proposed project.

Secondary Impacts:

Proposed Action: Following construction of the proposed facility, no additional or new ground disturbing activities would occur. Operation of the proposed facility would result in the emission of airborne pollutants. As permitted, the proposed project would not be expected to cause or contribute to a violation of the applicable primary or secondary national ambient air quality standards (NAAQS). See permit analysis for more detailed information regarding air quality impacts. Secondary NAAQS provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. Therefore, any adverse secondary impacts to geology, soil quality, stability and moisture would be minor. No beneficial secondary impacts would be expected because of the proposed project.

2. WATER QUALITY, QUANTITY, AND DISTRIBUTION:

Direct Impacts:

Proposed Action: A small, unnamed water body and several ephemeral streams exist in the vicinity of the affected area. A limited amount of water may be required to control fugitive dust emissions from construction activities. Water used to control fugitive dust would likely be sourced off-site and transported to the affected site or sourced from local water resources. Further, due to the relatively small size and anticipated limited duration of the construction phase of the proposed project a relatively limited amount of water would be necessary. Therefore, any adverse direct impacts to water quantity would be short-term and negligible. Fugitive dust from construction activities may adversely impact the quality of water within the affected nearby waterbody and affected ephemeral streams. However, Crusoe would be required to use reasonable precautions to control fugitive dust resulting from construction and ongoing facility operations. Therefore, fugitive dust generated during construction activities would not be expected to cause or contribute to a violation of the applicable NAAQS for particulate matter. Secondary NAAQS provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, water resources, and buildings. Therefore, any adverse direct impacts to water quality would be short-term and negligible to minor. Water would not be required for ongoing normal facility operations; therefore, no impacts to water distribution would be expected because of the proposed project.

Secondary Impacts:

Proposed Action: Following construction of the proposed facility, no additional or new ground disturbing activities would occur. The ongoing use of unpaved roads to access the proposed facility would occur and would be expected to generate fugitive dust. Further, operation of the permitted equipment would result in the emission of other regulated airborne pollutants. As permitted, the proposed project would not be expected to cause or contribute to a violation of the applicable primary or secondary NAAQS. See permit analysis for more detailed information regarding air quality impacts. Secondary NAAQS provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. Therefore, any adverse secondary impacts to geology, soil quality, stability and moisture would be negligible to minor. No beneficial secondary impacts would be expected because of the proposed project.

3. AIR QUALITY:

Direct Impacts:

Proposed Action: Air quality in the area affected by the proposed project is currently unclassifiable or in compliance with/attainment for the applicable NAAQS. Existing sources of air pollution in the area are limited and generally include fugitive dust associated with high wind events and exposed ground, vehicle travel on unpaved roads (fugitive dust), vehicle exhaust emissions, and various agricultural practices (vehicle exhaust emissions and fugitive dust). No significant point-sources of air pollution exist in the area affected by the proposed project. Fugitive dust emissions resulting from construction of the proposed facility may adversely impact air quality. However, Crusoe must use reasonable precautions to limit fugitive dust generated during normal facility operations. Further, no air quality restrictions exist for the affected area; therefore, the proposed project would not be expected to cause or contribute to a violation of the applicable NAAQS for particulate matter (fugitive dust). Therefore, any impacts

would be short-term, negligible, consistent with existing impacts, and mitigated by implementation of enforceable reasonable precautions.

Secondary Impacts:
Proposed Action: Operation of the proposed engines would emit the following air pollutants at the identified emission rate:

PM, PM_{10}, $PM_{2.5}$ – 0.38 lb/hr
SO2 – 0.08 lb/hr
NO_X – 0.15 gr/bhp-hr
CO – 0.30 gr/bhp-hr
VOC – 0.030 gr/bhp-hr
HAPs – 0.24 lb/hr

Emissions from the proposed project would use best available control technology or BACT and would not be expected to cause or contribute to a violation of the health and welfare-based NAAQS. See permit analysis for more information regarding air quality impacts. Secondary NAAQS provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. See permit analysis for more detailed information regarding air quality impacts

Further, the proposed project would generate electricity to power a data center through the combustion of field gas gathered from multiple well pads that would otherwise be flared from an existing oil and gas facility, thereby eliminating or limiting emissions associated with flaring activities. Any beneficial impacts to air quality from eliminating or limiting the flaring of field gas would be long-term and minor. Additional adverse secondary impacts to air quality may occur in the event of equipment malfunction; however, any such emissions would be in violation of the permit and must be corrected expeditiously. Therefore, any adverse secondary impacts to air quality from facility operations would be long-term and minor.

4. VEGETATION COVER, QUANTITY AND QUALITY:

Direct Impacts:
Proposed Action: The affected area consists primarily of agricultural and grazing lands with nearby, dispersed oil and gas operations. Construction of the proposed facility would require new land disturbance associated with groundwork and installation of permitted equipment on approximately 3 acres of private land previously disturbed by agricultural and grazing operations. Emissions from the proposed project would not be expected to cause or contribute to a violation of the health and welfare-based NAAQS. Secondary NAAQS provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. Therefore, any adverse direct impacts would be short-term and negligible to minor.

Secondary Impacts:
Proposed Action: Construction and operation of the proposed facility may result in the propagation of noxious weeds. Crusoe would be expected to manage and control noxious weeds in the affected area. Therefore, any adverse secondary impacts would be long-term, mitigated by noxious weed control activities, and minor. No beneficial secondary impacts would be expected because of the proposed project.

5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Direct Impacts:
Proposed Action: Affected terrestrial and avian species may be displaced from the affected site during construction activities. The affected area consists primarily of agricultural and grazing lands with nearby, dispersed oil and gas operations. Further, construction of the proposed facility would require new land disturbance associated with groundwork and installation of permitted equipment on approximately 3 acres of private land previously disturbed by agricultural and grazing operations. Therefore, any species displaced by construction activities would likely relocate to nearby, similar habitats. Any adverse direct impacts would be short-term, similar to existing impacts, and minor. No direct impacts to aquatic life and habitats would be expected because of the proposed project. No beneficial direct impacts would be expected because of the proposed project.

Secondary Impacts:
Proposed Action: The affected area consists primarily of agricultural and grazing lands with nearby, dispersed oil and gas operations. Because the landscape surrounding the affected site is previously disturbed any species displaced by facility operations would be expected to relocate to similar, nearby habitats. Emissions from the proposed project would not be expected to cause or contribute to a violation of the health and welfare-based NAAQS. Secondary NAAQS provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. Therefore, any adverse secondary impacts would be long-term and negligible to minor. No secondary impacts to aquatic life and habitats would be expected because of the proposed project.

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

Direct Impacts:
According to a Montana Natural Heritage Program, there is one (1) *species of concern* located or potentially located in the affected area; Whooping Crane (bird). Preferred whooping crane habitats include wetlands, marshes, mudflats, wet prairies and fields, some of which occur within the affected area. More specifically, the affected area largely consists of grasslands and interspersed coulees supporting agricultural and grazing operations with dispersed oil and gas operations. Further, a small, unnamed water body and several ephemeral streams exist in the vicinity of the affected area. While these habitats may have the potential to support whooping cranes, it is unlikely the affected area would support the permanent presence of this species of concern.

Construction of the proposed facility would require new land disturbance associated with groundwork and installation of permitted equipment on approximately 3 acres of private land previously disturbed by agricultural and grazing operations, which may displace any whooping crane that may be located within or use the affected area for part of its life cycle. However, by their nature, whooping cranes constitute a highly mobile species and the area directly affected by the proposed project is surrounded by similar habitats. Therefore, if a whooping crane were to be displaced by construction activities, it would likely relocate to nearby, similar habitats. Therefore, any adverse direct impacts to whooping cranes would be short-term, consistent with existing impacts in the affected area, and negligible.

Secondary Impacts:
Proposed Action: According to a Montana Natural Heritage Program, there is one (1) species of concern located or potentially located in the affected area; Whooping Crane (bird). Operation of the proposed facility would not require new land disturbance. Further, emissions from the proposed project would not be expected to cause or contribute to a violation of the health and welfare-based NAAQS. Secondary NAAQS provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. Therefore, any adverse secondary impacts would be long-term and negligible to minor.

7. HISTORICAL AND ARCHAEOLOGICAL SITES:

Direct Impacts:
Proposed Action: According to the State Historical Preservation Society, there have been no previously recorded historical or archaeological sites identified within the project area. Therefore, no adverse direct impacts would be expected because of the proposed project.

Secondary Impacts:
Proposed Action: According to the State Historical Preservation Society, there have been no previously recorded historical or archaeological sites identified within the project area. Therefore, no adverse secondary impacts to historical and archaeological sites would be expected because of the proposed project.

8. SAGE GROUSE EXECUTIVE ORDER:

Direct Impacts:
Proposed Action: The proposed project is not located in the Greater Sage Grouse habitat area; therefore, no direct impacts to sage grouse would be expected because of the proposed action.

Secondary Impacts:
Proposed Action: The current permit action is not located in the Greater Sage Grouse habitat area; therefore, no secondary impacts to sage grouse would be expected because of the proposed action.

9. AESTHETICS:

Direct Impacts:
Proposed Action: The affected area consists primarily of agricultural and grazing lands with nearby, dispersed oil and gas operations. Construction of the proposed facility would require new land disturbance associated with groundwork and installation of permitted equipment on approximately 3 acres of private land previously disturbed by agricultural and grazing operations. Therefore, any adverse direct impacts would be short-term, consistent with existing impacts, and negligible to minor. No beneficial direct impacts would be expected because of the proposed project.

Secondary Impacts:
Proposed Action: The affected area consists primarily of agricultural and grazing lands with

nearby, dispersed oil and gas operations. Emissions from the proposed project would not be expected to cause or contribute to a violation of the health and welfare-based NAAQS. Secondary NAAQS provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. Therefore, any adverse secondary impacts would be long-term, consistent with existing impacts in the affected area, and negligible to minor. No beneficial secondary impacts would be expected because of the proposed project.

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

Direct Impacts:

Proposed Action:. Some direct impacts to land, water and air would be expected because of the proposed project, as identified by the corresponding impacts analyses above. Further, construction of the proposed facility would involve the operation of heavy equipment and the combustion of fossil fuels would be required for the operation of such equipment. However, because the proposed project is small by industrial standards, any fossil fuel use would be relatively limited. Therefore, any adverse direct impacts to energy resources would be short-term and negligible. No beneficial direct impacts would be expected because of the proposed project.

Secondary Impacts:

Proposed Action: Some secondary impacts to land, water and air would be expected because of the proposed project, as identified by the corresponding impacts analyses above. Further, the proposed project would generate electricity to power a data center through the combustion of field gas gathered from multiple well pads that would otherwise be flared from an existing oil and gas facility. Therefore, any adverse secondary impacts to energy resources would be limited by the use of available field gas to power operations. Any secondary impacts associated with the use of field gas that would otherwise be flared would be long-term, minor, and beneficial.

11. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES:

Direct Impacts:

Proposed Actions: Fugitive dust emissions resulting from construction of the proposed facility may adversely impact air quality in the affected area. However, Crusoe must use reasonable precautions to limit fugitive dust generated from construction activities; therefore, the proposed project would not be expected to cause or contribute to a violation of the applicable NAAQS for particulate matter (fugitive dust). See permit analysis for more detailed information regarding air quality impacts. Secondary NAAQS provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. Therefore, any adverse direct impacts to other environmental resources would be short-term and minor. No beneficial direct impacts would be expected because of the proposed project.

Secondary Impacts:

Proposed Action: Proposed operations would not be expected to cause or contribute to a violation of the health and welfare-based NAAQS. See permit analysis for more detailed information regarding air quality impacts. Secondary NAAQS provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

Therefore, any adverse secondary impacts to other environmental resources would be long-term and minor. No beneficial secondary impacts would be expected because of the proposed project.

12. HUMAN HEALTH AND SAFETY:

Direct Impacts:
Proposed Action: Construction activities involve the potential for adverse direct impacts to human health and safety. However, construction operations would be subject to OSHA standards, which are designed to be protective of human health and safety. Further, residents of the affected area would not be allowed on-site during construction of the proposed facility.

Also, fugitive dust emissions resulting from construction of the proposed facility may adversely impact air quality in the affected area. However, Crusoe must use reasonable precautions to limit fugitive dust generated from construction activities; therefore, the proposed project would not be expected to cause or contribute to a violation of the applicable NAAQS for particulate matter (fugitive dust). See permit analysis for more detailed information regarding air quality impacts. Primary NAAQS provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Therefore, any adverse direct impacts to human health and safety would be short-term and negligible to minor.

Secondary Impacts:
Proposed Action: Operation of the proposed engines would emit regulated air pollutants. However, emissions from the proposed project would use best available control technology or BACT and thus would not be expected to cause or contribute to a violation of the health and welfare-based NAAQS. See permit analysis for more information regarding air quality impacts. Primary NAAQS provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Therefore, any adverse secondary impacts to human health and safety would be long-term and negligible to minor.

13. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION:

Direct Impacts:
Proposed Action: Construction of the proposed facility would displace land currently used for agricultural and grazing operations located near an existing industrial facility. Therefore, some adverse direct impacts to agricultural activities and production would occur. However, the proposed project is small by industrial standards (≤ 3 acres) and the area surrounding the affected site would remain suitable for ongoing agricultural and industrial activities and production. Therefore, any adverse direct impacts to agricultural activities and production would be short-term, consistent with existing impacts, and negligible to minor.

Further, industrial activities and production in the affected area would increase due to construction of the affected site. However, the scope of the proposed operation is relatively small by industrial standards. Therefore, any direct impacts to industrial activities and production in the affected area would be short-term, minor and beneficial. No impacts to commercial activities or production are anticipated because of the proposed project.

Secondary Impacts:
Proposed Action: Operation of the proposed facility would displace current agricultural and grazing operations. Therefore, some adverse secondary impacts to agricultural activities and production would occur. However, the proposed project is small by industrial standards (≤ 3 acres) and the area surrounding the affected site would remain suitable for ongoing agricultural and industrial activities and production. Further, industrial activities and production in the affected area would increase because of the proposed project. Therefore, any secondary impacts to industrial activities and production would be long-term, minor, and beneficial. No secondary impacts to commercial activities and production are anticipated because of the proposed project.

14. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Direct Impacts:
Proposed Action: Crusoe would use existing staff or contracted services to construct the proposed facility. Therefore, any direct impacts to the quantity and distribution of employment in the affected area would be negligible and beneficial.

Secondary Impacts:
Proposed Action: Crusoe would use existing staff to operate the proposed facility. Therefore, any secondary impacts to the quantity and distribution of employment in the affected area would be negligible and beneficial.

15. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Direct Impacts:
Proposed Action: Construction of the proposed facility may increase local sales of goods and services. However, because the proposed project would be small by industrial standards the amount of time and resources necessary to accommodate construction of the proposed facility would be relatively limited. Therefore, any direct impacts to the local and state tax base and tax revenues would be short-term, negligible to minor, and beneficial.

Secondary Impacts:
Proposed Action: Local, state and federal governments would be responsible for appraising the property, setting tax rates, collecting taxes, from the companies, employees, or landowners benefitting from the proposed operation. Further, Crusoe would be responsible for accommodation of any increased taxes associated with operation of the proposed facility. Therefore, any secondary impacts would be negligible to minor, consistent with existing impacts in the affected area, and beneficial.

16. DEMAND FOR GOVERNMENT SERVICES:

Direct Impacts:
Proposed Action: The air quality preconstruction permit has been prepared by state government employees as part of their day-to-day, regular responsibilities. Therefore, any adverse direct impacts to demands for government services is consistent with existing impacts and negligible. No beneficial direct impacts would be expected because of the proposed project.

Secondary Impacts:
Proposed Action: Following construction of the proposed facility, initial and ongoing compliance inspections of facility operations would be accomplished by state government employees as part of their typical, regular duties and required to ensure the facility is operating within the limits and conditions listed in the air quality permit. Therefore, any adverse secondary impacts to demands for government services would be consistent with existing impacts and negligible. No beneficial secondary impacts would be expected because of the proposed project.

17. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

Direct Impacts:
Proposed Action: DEQ is unaware of any locally adopted environmental plans and goals in the area affected by the proposed action; therefore, no direct impacts to locally adopted environmental plans and goals would be expected because of the proposed project.

Secondary Impacts:
Proposed Action: DEQ is unaware of any locally adopted environmental plans and goals in the area affected by the proposed action; therefore, no secondary impacts to locally adopted environmental plans and goals would be expected because of the proposed project.

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

Direct Impacts:
Proposed Action: The affected area consists primarily of agricultural and grazing lands with nearby, dispersed oil and gas operations. No recreational or wilderness areas occur in the vicinity of the proposed project; therefore, no direct impacts to access and quality of recreational and wilderness activities would be expected because of the construction phase of the proposed project.

Secondary Impacts:
Proposed Action: The affected area consists primarily of agricultural and grazing lands with nearby, dispersed oil and gas operations. No recreational or wilderness areas occur in the immediate area; therefore, no secondary impacts to access and quality of recreational and wilderness activities would be expected because of proposed facility operations.

19. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Direct Impacts:
Proposed Action: Crusoe would employ existing staff and/or contracted services to construct the facility and the proposed project would not be expected to otherwise result in an increase or decrease in the local population. Therefore, no direct impacts to density and distribution of population and housing would be expected because of the proposed project.

Secondary Impacts:
Proposed Action: Crusoe would employ existing staff to operate the facility and the proposed project would not be expected to otherwise result in an increase or decrease in the local population. Therefore, no secondary impacts to density and distribution of population and housing would be expected because of the proposed project.

20. SOCIAL STRUCTURES AND MORES:

Direct Impacts:
Proposed Action: The existing nature of the area affected by the proposed project is agricultural or industrial (oil and gas); therefore, construction of the facility would not be expected to affect the existing customs and values of the affected population. Therefore, no direct impacts to the existing social structures and mores of the affected population would be expected because of the proposed project.

Secondary Impacts:
Proposed Action: The existing nature of the area affected by the proposed project is agricultural or industrial (oil and gas); therefore, operation of the facility would not be expected to affect the existing customs and values of the affected population. Therefore, no secondary impacts to the existing social structures and mores of the affected population would be expected because of the proposed project.

21. CULTURAL UNIQUENESS AND DIVERSITY:

Direct Impacts:
Proposed Action: The existing nature of the area affected by the proposed project is agricultural or industrial (oil and gas). Further, Crusoe would employ existing staff and/or contracted services to construct the facility and thus the proposed project would not be expected to otherwise result in an increase or decrease in the local population. Therefore, no direct impacts to the existing cultural uniqueness and diversity of the affected population would be expected because of the proposed project.

Secondary Impacts:
Proposed Action: The existing nature of the area affected by the proposed project is agricultural or industrial (oil and gas). Further, Crusoe would employ existing staff to operate the facility and thus the proposed project would not be expected to otherwise result in an increase or decrease in the local population. Therefore, no secondary impacts to the existing cultural uniqueness and diversity of the affected population are anticipated as a result of the proposed action.

22. PRIVATE PROPERTY IMPACTS:

The proposed action would take place on privately owned property. The area where the proposed action is planned to be constructed is sparsely populated with the nearest residence located approximately 3,600 feet to the north and would not be expected to cause any impacts. 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. See Section VII, Taking or Damaging Implication Analysis, for further information.

23. GREENHOUSE GAS ASSESSMENT

The analysis area for this resource is limited to the activities regulated by the issuance of MAQP 5313-00 permit, which is construction and operation of 4 Waukesha 9394 GSI engines rated at 2500 hp or less/engine. The amount of Natural Gas fuel utilized at this site may be impacted by

a number of factors including seasonal weather impediments and equipment malfunctions. To account for these factors DEQ has calculated the range of emissions using a factor of +/- 10% of the Applicant's estimate.

For the purpose of this analysis, DEQ has defined greenhouse gas emissions as the following gas species: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and many species of fluorinated compounds. The range of fluorinated compounds includes numerous chemicals which are used in many household and industrial products. Other pollutants can have some properties that are similar to those mentioned above, but the EPA has clearly identified the species above as the primary GHGs of concern. Water vapor is also technically a greenhouse gas, but its properties are controlled by the temperature and pressure within the atmosphere, and it is not considered an anthropogenic species.

The combustion of natural gas fuel at the site would release GHGs, primarily carbon dioxide (CO_2), nitrous oxide (N_2O) and much smaller concentrations of uncombusted fuel components including methane (CH_4) and other volatile organic compounds (VOCs).

DEQ has calculated GHG emissions using the EPA Simplified GHG Calculator, version May 2023, for the purpose of totaling GHG emissions. This tool totals CO_2, N_2O, and CH_4 and reports the total as CO_2 equivalent (CO_2e) in metric tons of CO_2e. The calculations in this tool are widely accepted as a reliable calculation approach for developing a GHG inventory.

Direct Impacts

DEQ estimates that construction of the facility would produce minimal GHG emissions of less than 1 metric ton of CO2e. Operation of Natural Gas-fueled engines throughout the life of the proposed project would produce exhaust fumes containing GHGs.

Applicant estimates that between approximately 7,000 and 7,814 Btu of fuel would be combusted per horsepower hour of operation of each engine. With four (4) engines, the total would be 15 metric tons of CO_2e per year.

Secondary Impacts

GHG emissions contribute to changes in atmospheric radiative forcing, resulting in climate change impacts. GHGs act to contain solar energy loss by trapping longer wave radiation emitted from the Earth's surface and act as a positive radiative forcing component (BLM 2021). The impacts of climate change throughout the *state of Montana* may include *changes in flooding and drought, rising temperatures, and the spread of invasive species.*

Cumulative Impacts

Montana recently used the EPA State Inventory Tool (SIT) to develop a greenhouse gas inventory in conjunction with preparation of a possible grant application for the Community Planning Reduction Grant (CPRG) program. This tool was developed by EPA to help states develop their own greenhouse gas inventories, and this relies upon data already collected by the federal government through various agencies. The inventory specifically deals with carbon dioxide, methane, and nitrous oxide and reports the total as CO_2e. The SIT consists of eleven Excel based modules with pre-populated data that can be used as default settings or in some cases, allows states to input their own data when the state believes their own data provides a higher level of quality and accuracy. Once each of the eleven modules is filled out, the data

from each module is exported into a final "synthesis" module which summarizes all the data into a single file. Within the synthesis file, several worksheets display the output data in a number of formats such as emissions by sector and emissions by type of greenhouse gas.

DEQ has determined the use of the default data provides a reasonable representation of the greenhouse gas inventory for the various sectors of the state, and an estimated annual greenhouse gas inventory by year. The SIT data is currently only updated through the year 2020, as it takes several years to validate and make new data available within revised modules.

Future GHG emissions from operations, such as the proposed project, would be represented within the module Carbon Dioxide Emissions from Fossil Fuel Combustion. At present, the state of Montana accounts for 28.5 million metric tons of CO_2e ($MMTCO_2e$) annually[1]. This project would add 15 metric tons, or 0.0000526% of the total per year.

DEQ does not expect a significant loss of vegetation due to this project, and so DEQ does not expect the loss of vegetation to impact GHG emissions.

GHG emissions that would be emitted as a result of the proposed activities would add to GHG emissions from other sources. The current agricultural utilization or No Action Alternative of the site also produces GHGs.

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Direct Impacts:
DEQ is unaware of any other appropriate short-term social and economic circumstances in the affected area that may be directly impacted by the proposed project. Due to the nature of the proposed action, no further direct impacts would be expected because of the proposed project.

Secondary Impacts:
The proposed project would generate electricity to power a data center through the combustion of field gas gathered from multiple well pads that would otherwise be flared from an existing oil and gas facility, thereby eliminating or limiting emissions associated with uncontrolled field gas flaring activities. Further, the proposed operation would limit or eliminate economic expenditure necessary to operate the affected engines (i.e., fuel purchases). Any impacts to air quality from eliminating or limiting the flaring of field gas would be long-term, minor, and beneficial. Any impacts from limiting or eliminating economic expenditures to accommodate engine operations would be long-term, minor to moderate, and beneficial.

DEQ is unaware of any other appropriate long-term social and economic circumstances in the affected area that may be impacted by the proposed project. No further secondary impacts would be expected because of the proposed project.

ADDITIONAL ALTERNATIVES CONSIDERED:

No Action Alternative: In addition to the proposed action, and as required by MEPA, DEQ considered the "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.

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 Montana 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 review analyzes the proposed action submitted by the Crusoe.

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

PUBLIC INVOLVEMENT:

DEQ has allowed 15 days for public review and comment on this permit action. Scoping of the proposed action consisted of internal efforts to identify substantive issues and/or concerns related to the proposed operation. Internal scoping consisted of internal review of the environmental assessment document by DEQ Air Permitting staff.

Internal efforts also included queries to the following websites/ databases/ personnel:
- Montana State Historic Preservation Office
- Montana Department of Environmental Quality (DEQ)
- Montana Natural Heritage Program

OTHER GOVERNMENTAL AGENCIES WITH JURSIDICTION:

The proposed project 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: Richland County, OSHA (worker safety), DEQ AQB (air quality) and Water Protection Bureau (groundwater and surface water discharge; stormwater), DNRC (water rights), MDT (road access), the Montana State Historic Preservation Office (antiquities), the Montana Natural Heritage Program (species of concern).

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 DEQ to future actions with significant impacts or a decision in principle about such future actions; and

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.

Pursuant to ARM 17.4.607, preparation of an environmental assessment 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. 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. Crusoe proposes to construct and operate the proposed action on private land located in Section 18, Township 25 North, Range 58 East, in Richland County**,** Montana.

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

DEQ's issuance of an Air Quality Permit to Crusoe for this proposed operation does not set a precedent for DEQ's review of other applications, including the level of environmental review. The level of environmental review decision is made based on a case-specific consideration 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, currently, preparation of an environmental assessment is determined to be the appropriate level of environmental review under the Montana Environmental Protection Act.

Environmental Assessment and Significance Determination Prepared By:

Troy M. Burrows	**Air Quality Scientist 2**
Name	**Title**

EA Reviewed By:

Eric Merchant	**Air Permitting Section Supervisor**
Name	**Title**

Responses to Substantive Comments will be located in the Permit Analysis Section of the Air Quality Permit.