November 14th, 2023

Matthew Balliet
Montana Air National Guard
120th Airlift Wing
2800 Airport Avenue B
Great Falls, MT 59404-5570

Sent via email: matthew.balliet.2@us.af.mil

RE: Final Permit Issuance for MAQP #2930-07

Dear Mr. Balliet:

Montana Air Quality Permit (MAQP) #2930-07 is deemed final as of November 14th, 2023, by DEQ. This permit is for Montana Air National Guard, a fuel combustion facility. All conditions of the Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For DEQ,

Julie A. Merkel
Permitting Services Section Supervisor
Air Quality Bureau
(406) 444-3626

Tim Gauthier
Air Quality Engineering Scientist
Air Quality Bureau
(406) 444-2467

MONTANA AIR QUALITY PERMIT

Issued To: Montana Air National Guard
2800 Airport Avenue B
Great Falls, MT 59404-5570

MAQP: #2930-07
Modification Request Received: 08/16/2023
Department Decision: 10/26/2023
Permit Final: 11/14/2023
AFS #013-0023

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Montana Air National Guard (MANG), pursuant to Sections 75-2-204 and 211, 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. Facility Location

The legal description of the MANG facility is in Sections 16 and 21, Township 20 North, Range 3 East, Cascade County, Montana. The emissions at the MANG facility are primarily a result of fuel combustion in various boilers, heaters, emergency generators, a grit blasting operation, and the engine test cell. A complete list of permitted equipment is contained in the permit analysis.

B. Current Permit Action

On August 16th, 2023, the Department received a request to modify MAQP #2930-06. The intent of this permit action is to update assumptions, equipment, processes, emission factors, and permit language that was specific to the previous F-15 mission and inclusion of non-permitted Aerospace Ground Equipment (AGE). This modification also requests the removal of equipment exempt from permitting, based on correspondence between MANG and the Department. It also provides for the addition of several fugitive emission units. **MAQP #2930-07** replaces MAQP #2930-06.

Summary of changes:

- Update the assumed Engine Test cell emission factors at the existing Engine Test Cell to confirmed emission factors.
- Modify the Engine Test Cell compliance methodology to an annual fuel throughput limit consistent with its maximum capacity.
- Remove legacy fuel consumption limits applicable to exempted AGE and clarify permitted fuel throughput limits for the one stationary AGE unit at the Engine Test Cell.
- Remove conditions applicable to exempt equipment, specifically conditions related to the Civil Engineering woodworking dust collection system.
- Update the number of external combustion devices at the facility (boilers, heaters, and furnaces), total rated heat input capacity of the emissions source, and update emission factors to those listed in the current version of AP-42.

- Remove six stationary emergency RICE from the facility inventory that continually qualify as portable non-road engines.
- Update stationary RICE emission factor to units of lb/hp-hr.
- Remove fuel delivery trucks that were permitted as tanks. These mobile sources should not have been permitted.
- Remove six jet fuel tanks from the facility inventory.
- Remove one solvent based maintenance parts washer.
- Add six solvent-based maintenance parts washers.
- Add three abrasive media glove boxes with controls.
- Remove legacy portable AGE equipment lists that are ten years outdated.

MAQP #2930-07 replaces MAQP #2930-06.

Section II: Conditions and Limitations

A. Operational Requirements

1. MANG shall only burn natural gas in all boilers, heaters, and furnaces (ARM 17.8.1204).

2. The engine test cell is limited to 15,000 gallons per year of fuel consumption during any rolling 12-month period (ARM 17.8.1204).

3. A submerged fill pipe shall be used while loading gasoline into stationary tanks with a capacity of 250 gallons or more unless the tanks are equipped with a vapor control system (ARM 17.8.324).

4. Fuel consumption is limited to the following amount calculated over a rolling 12-month period (ARM 17.8.749):

   Jet fuel by turbine units: 1,000 gallons

5. The grit blast room (unit) shall be vented to a cyclone (ARM 17.8.752).

B. Emission Limitations

1. MANG 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).

2. MANG shall not 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 (ARM 17.8.304).

3. The sulfur content of liquid or solid fuel shall be limited to 1 pound per million British thermal units (lb/MMBtu) (ARM 17.8.322).

4. The sulfur content of gaseous fuel shall be limited to 50 grains/100 cubic

feet (ft^3) calculated as hydrogen sulfide at standard conditions (ARM 17.8.322).

C. Testing Requirements

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

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

D. Operational Reporting Requirements

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

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

   a. Gallons of fuel utilized for engine testing at the engine test cell.
   b. Gallons of fuel consumed for jet fuel by turbine units.

2. MANG shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745 that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted to the Department, in writing, 10 days prior to start-up or use of the proposed de minimis change or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).

3. MANG shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit as required in ARM 17.8.1204. The annual certification shall comply with the certification requirements of ARM 17.8.1207. The annual certification shall be submitted with the annual emission inventory information.

4. All records compiled in accordance with this permit must be maintained by MANG 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 Department, and must be submitted to the Department upon request (ARM 17.8.749).

Section III: General Conditions

A. Inspection – MANG shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.

B. Waiver – The permit and all the terms, conditions, and matters stated herein shall be deemed accepted, if MANG fails to appeal as indicated below.

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving MANG 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 as specified in Section 75-2-401, *et seq.*, MCA.

E. Appeals – Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.

F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.

G. Construction Commencement – Construction must begin within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked.

H. Permit Fees – Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by MANG may be grounds for revocation of this permit, as required by that Section and rules adopted thereunder by the Board.

MONTANA AIR QUALITY PERMIT (MAQP) ANALYSIS
Montana Air National Guard
MAQP #2930-07

I. Introduction/Process Description

A. Permitted Equipment

The following is a list and description of permitted equipment at the Montana Air National Guard (MANG) facility:

1. Boilers, heaters, furnaces

   Each of the individual boilers, heaters, and furnaces all have less than 10 million British thermal units per hour (MMBtu/hr) heat input rating. The total heat input from all 128 units is approximately 34.715 MMBtu/hr.

2. Spray booth

   The spray booth is used for surface coating of miscellaneous surfaces. Four types of spray are used, which include solvent-based paint, water-based paint, primer, and thinner. The maximum amount of spray used in the booth is 0.5 gallons per hour (gal/hr).

3. Engine test cell

   An engine test generally lasts about 80 minutes and is conducted in the test cell at four different modes of operation, which include idle mode, approach mode, intermediate mode, and military mode.

4. Emergency generators and engines

   Six of the emergency generators are powered by diesel fuel.

5. Storage tanks

   The storage tanks consist of 6 jet fuel underground tanks, 1 gasoline tank, and 1 diesel tank.

6. Aerospace ground equipment

   A variety of aerospace ground equipment (AGE) (such as air compressors, generators, deicers, etc.) is used at the base. Most of the AGE equipment is considered maintenance equipment and therefore, is exempt from permitting. One piece of AGE equipment is located at the Engine Test Cell. This piece of AGE equipment is a turbine unit that uses jet fuel. Any other AGE equipment operated in a capacity other than maintenance purposes is subject to MAQP requirements.

7. Degreaser

There are six solvent-based degreasers ranging in capacities of 4-95 gallons at the facility. The degreasers are located in six different maintenance shops throughout the installation.

8. Grit Blast Room and Glove Boxes

The grit blast room incorporates a 1992 Pauli and Griffen Co., Model #15-12-20/part #011-000 Grit Blast Unit that serves as a dry strip process utilizing plastic media (beads) to separate paint from military equipment and materials. Particulate emissions from the source are controlled by a media reclaimer and baghouse filters with 90% or greater PM control efficiency (combined).

Three abrasive blast media glove boxes are present at the facility. These units utilize plastic media or glass beads and have control cyclone media reclaimers and bag filters with 90% or greater PM control efficiency (combined).

B. Source Description

MANG is located within Sections 16 and 21, Township 20 North, Range 3 East, Cascade County, Montana.

MANG provides a trained and equipped combat-ready air defense for mobilization in time of war or national emergency. The base provides facilities where personnel refuel, maintain, perform light repairs, and stage the aircraft onto the runways of the adjacent airport. To support these functions, the base contains facilities for the maintenance of vehicles and other support equipment, a number of small office buildings, and a supply and shipping warehouse.

The emissions from MANG are primarily a result of fuel combustion in various boilers, heaters, emergency generators, and the engine test cell. Approximately 52 tests are performed in the engine test cell each year.

C. Permit History

MAQP #2930-00 was issued to MANG on June 14, 1996. The permit established enforceable limits for carbon monoxide (CO) and oxides of nitrogen (NO_x) emissions from the engine test cell and aerospace ground equipment for the purposes of bringing the potential to emit of the facility to less than 100 tons/year (tpy) for each regulated pollutant. This permit established MANG as a synthetic minor source and, as such, the facility was not required to obtain a Title V Operating Permit.

On December 22, 2000, MANG was issued MAQP #2930-01 for the installation and operation of a grit blasting room. The grit blasting room serves as a dry strip process utilizing plastic media (beads) to separate paint from military equipment and materials. Particulate emissions from the source are controlled by a cyclone.

Because potential emissions from the grit blast room exceeded 15 tpy, the permit action was a permit alteration. **MAQP #2930-01** replaced MAQP #2930-00.

On November 16, 2001, MANG submitted a request to modify MAQP #2930-01. In January 2001, MANG began the transition of flying the F-16's with the 100-Pratt and Whitney (PW)-200 engines to flying the F-16's with the new F110-General Electric (GE)-100 engines. Evaluations of the new GE engine in the engine test cell began in August 2001. MANG requested to decrease the permit limit on hours of operation in the engine test cell in order to keep the potential emissions below the Title V operating permit threshold. **MAQP #2930-02** replaced MAQP #2930-01.

On June 13, 2008, MANG submitted information to the Department of Environmental Quality – Air Resources Management Bureau (Department) regarding a change in operations at the Great Falls facility resulting from the Base Realignment and Closure (BRAC) Commission's final and approved recommendations. The facility is in the process of transitioning from the F-16 fighter aircraft with the F110-GE-100 engines to the larger F-15 fighter aircraft with two 100-PW-200 engines. Prior to 2001, the facility was permitted for the engines used in the F-15 aircraft. This request was to return to using those engines and return to the permitted conditions associated with those engines. After reviewing the information, the Department determined that a modification would be required to change the conditions in the MAQP. **MAQP #2930-03** replaced MAQP #2930-02.

On July 8, 2010, the Department received a request from MANG for a modification to MAQP #2930-03. The modification request was based on MANG's position that the AGE should be removed from the facility's MAQP because the equipment is non-road, mobile equipment. A justification was sent along with the request.

Through a series of correspondence and a site visit, the Department determined that most of the AGE equipment is used for maintenance purposes at the facility. In accordance with the Administrative Rules of Montana (ARM) 17.8.744(1)(l), an MAQP is not required for equipment used to perform routine maintenance, repair, or replacement. Therefore, the AGE equipment that falls into the "maintenance" category is exempt from an MAQP.

However, any AGE equipment, including but not limited to the air compressor/generator engine operated at the engine test cell facility would not be considered maintenance equipment because it is an inherent part of the test cell process and would therefore be subject to permitting. The Department removed the AGE equipment from the MAQP as appropriate. **MAQP #2930-04** replaced MAQP #2930-03.

On January 11, 2012, the Department received a request to administratively amend MAQP #2930-05 to change existing federally enforceable limits. MANG's request was made as part of a project undertaken by the Department to address those sources with existing federally enforceable permit limits that were established to keep potential emissions below the 100 tpy major source Title V Operating Permit thresholds. The Department encouraged synthetic minor sources to take new permit limits to further reduce emissions from just below 100 tpy to just below 80 tpy. The permit limit change consequently altered the oversight category for this facility to a

level that is only subject to the State Compliance Monitoring Strategy. MANG's MAQP was amended to incorporate limits and conditions to maintain allowable emissions below this threshold. Specifically, the current permit action placed more stringent limitations upon the Engine Test Cell. A ratio was developed utilizing potential emissions and desired emissions. This ratio was then applied to previous hourly limitations to result in limitations set to maintain allowable emissions below 80 tpy. In addition, the permit updated the rule references, permit format, and a portion of the emissions inventory. As a note, calculation errors within the previous summary emissions inventory table were also corrected. **MAQP #2930-05** replaced MAQP #2930-04.

On February 27, 2014, the Department received a request to administratively amend MAQP #2930 to change existing federally enforceable limits. MANG's mission underwent changes due to an aircraft conversion from the F-15 fighter aircraft to an airlift mission with the C-130 Hercules air frame. The C-130 aircraft were equipped with 4 turboprop engines and the change in engine test cell protocols for this different engine type required a change in MAQP conditions to accommodate them. The proposed changes in power settings and allowable hours per year resulted in an overall decrease in facility emissions. Therefore, in accordance with ARM 17.8.764(1)(b), the permit action was an administrative permit action that updated the enforceable permit conditions regarding the engine test cell hours. Facility emissions continued to remain below 80 tpy of any individual pollutant. **MAQP #2930-06** replaced MAQP #2930-05.

D. Current Permit Action

On August 16th, 2023, the Department received a request to modify MAQP #2930-06. The intent of this permit action is to update assumptions, equipment, processes, emission factors, and permit language that was specific to the previous F-15 mission and inclusion of non-permitted AGE equipment. This modification also requests the removal equipment to be exempt from permitting, based on correspondence between MANG and the Department. It also provides for the addition of several fugitive emission units.

Summary of changes:

- Update the assumed Engine Test cell emission factors at the existing Engine Test Cell to confirmed emission factors.
- Modify the Engine Test Cell compliance methodology to an annual fuel throughput limit consistent with its maximum capacity.
- Remove legacy fuel consumption limits applicable to exempted AGE and clarify permitted fuel throughput limits for the one stationary AGE unit at the Engine Test Cell.
- Remove conditions applicable to exempt equipment, specifically conditions related to the Civil Engineering woodworking dust collection system.
- Update the number of external combustion devices at the facility (boilers, heaters, and furnaces), total rated heat input capacity of the emissions source, and update emission factors to those listed in the current version of AP-42.
- Remove six stationary emergency RICE from the facility inventory that

continually qualify as portable non-road engines.

- Update stationary RICE emission factor to units of lb/hp-hr.
- Remove fuel delivery trucks that were permitted as tanks. These mobile sources should not have been permitted.
- Remove six jet fuel tanks from the facility inventory.
- Remove one solvent based maintenance parts washer.
- Add six solvent-based maintenance parts washers.
- Add three abrasive media glove boxes with controls.
- Remove legacy portable AGE equipment lists that are ten years outdated.

MAQP #2930-07 replaces MAQP #2930-06.

E. Additional Information

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

F. Response to Public Comments

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.[1] That decision is being appealed to the Montana Supreme Court and final resolution is yet unsettled. While litigation is ongoing, and consistent with the court order, DEQ has started a process to assess and improve our environmental review processes, including consideration of future climate impact analyses.

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

G. Response to Montana Air National Guard Comments

Permit Reference	Comment	Department Response
Section II.D Operational Reporting Requirements, Number 1.a	Revise to read "Gallons of fuel utilized for engine testing at the engine test cell."	Changed as requested.
Introduction/Process Description Item A.7	Revise to read "There are six solvent-based degreasers ranging in capacities of 4-95 gallons at the facility. The degreasers are located in six different maintenance shops throughout the installation."	Changed as requested.

II. Applicable Rules and Regulations

The following are partial explanations of some rules and regulations applicable to the facility. The complete rules are stated in the ARM and are available, upon request, from the Department. Upon request, the Department will provide references for the location of any applicable rule or regulation and provide copies where appropriate.

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

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.

3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq*., Montana Code Annotated (MCA).

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

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.

5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in a reduction in 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 that a public nuisance is created.

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

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 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter

6. ARM 17.8.221 Ambient Air Quality Standard for Visibility
7. ARM 17.8.222 Ambient Air Quality Standard for Lead
8. ARM 17.8.223 Ambient Air Quality Standard for PM_{10}

MANG 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. (1) This rule requires that no person may cause or authorize emissions to be discharged to an outdoor atmosphere from any source installed on or before November 23, 1968, that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes. (2) This rule requires that no person may cause or authorize emissions to be discharged to an 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, MANG 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 or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section.

4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.

5. 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 section.

6. 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 truck or trailer is equipped with a vapor loss control device as described in (1) of this rule.

7. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 Code of Federal Regulations (CFR) Part 60, Standards of Performance for New Stationary Sources (NSPS).

   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 D – Standard of Performance for Fossil Fuel-Fired Steam Generators. This subpart does not apply to the proposed boilers because they do not have the capabilities of firing fossil fuel at a heat input rate of more than 250 million Btu per hour.

c. 40 CFR 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE). Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are manufactured after April 1, 2006, and are not fire pump engines, and owners and operators of stationary CI ICE that modify or reconstruct their stationary CI ICE after July 11, 2005, are subject to this subpart. Based on the information submitted by MANG, the emergency diesel generator G-7 (398 HP) is subject to this subpart.

8. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. This rule incorporates, by reference, 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Categories. MANG is considered a NESHAP-affected facility under 40 CFR Part 63 and is subject to the requirements of the following subparts.

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

b. 40 CFR 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants (HAPs) for Stationary Reciprocating Internal Combustion Engines (RICE). An owner or operator of a stationary reciprocating internal combustion engine (RICE) at a major or area source of HAP emissions is subject to this rule except if the stationary RICE is being tested at a stationary RICE test cell/stand. An area source of HAP emissions is a source that is not a major source.

Based on the information submitted by MANG, the RICE equipment to be used under MAQP #2930-07 is subject to this subpart because it operates a compression ignition RICE at an area source of HAP emissions.

c. 40 CFR 63, Subpart CCCCCC – National Emissions Standards for Hazardous Air Pollutants for Gasoline Dispensing Facilities. This subpart establishes national emission limitations and management practices for hazardous air pollutants (HAP) emitted from the loading of gasoline storage tanks at gasoline dispensing facilities (GDF).

D. ARM 17.8, Subchapter 5 – Air Quality Permit Application, Operation and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. A permit fee is not required for the current permit action because the permit action is considered an administrative permit change.

2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department. This operation fee is based on the actual or estimated amount of air pollutants emitted during the previous calendar year.

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

E. ARM 17.8, Subchapter 7 – Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter unless indicated otherwise in a specific subchapter.

2. ARM 17.8.743 Montana Air Quality Permits – When Required. This rule requires a person to obtain an air quality permit or permit modification to construct, modify, or use any air contaminant sources that have the potential to emit (PTE) greater than 25 tpy of any pollutant. MANG has a PTE greater than 25 tpy of particulate matter (PM), NO_x, volatile organic compounds (VOCs), and 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. A permit application was not required for the current permit action because the permit change is considered an administrative permit change. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. An affidavit of publication of public notice dated August 15th, 2023, was sent to the Department by MANG on August 16th, 2023.

6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit

and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.

7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.

8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.

9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving MANG of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*.

10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.

11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.

12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).

13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.

14. ARM 17.8.765 Transfer of Permit. This rule states that an air quality permit may

be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.

F. ARM 17.8, Subchapter 8, Prevention of Significant Deterioration of Air Quality, including, but not limited to:

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.

2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the Federal Clean Air Act (FCAA) that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source because it is not a listed source and does not have the potential to emit more than 250 tpy (excluding fugitive emissions) of any air pollutant.

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

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:

a. PTE > 100 tpy of any pollutant.

b. PTE > 10 tpy of any one hazardous air pollutant (HAP), or PTE > 25 tpy of a combination of all HAPs, or lesser quantity as the Department may establish by rule.

c. Sources with the PTE > 70 tpy of PM_{10} in a serious PM_{10} non-attainment area.

2. ARM 17.8.1204, Air Quality Operating Permit Program Applicability. 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 #2930-07 for MANG, the following conclusions were made:

a. The facility's PTE is less than 100 tpy for all criteria pollutants.

b. The facility's PTE is less than 10 tpy of any one HAP and less than 25 tpy of all HAPs.

c. This source is not located in a serious PM_{10} non-attainment area.

d. This facility is subject to 40 CFR 60, Subpart IIII.

e. This facility is subject to area source provisions of current NESHAP standards (40 CFR 63, Subpart ZZZZ and 40 CFR 63, Subpart CCCCCC).

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.

h. As allowed by ARM 17.8.1204(3), the Department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable limitations which limit that source's potential to emit.

i. In applying for an exemption under this section, the owner or operator of the source shall certify to the Department that the source's potential to emit, does not require the source to obtain an air quality operating permit.

ii. Any source that obtains a federally enforceable limit on potential to emit shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.

MANG has taken federally enforceable permit limits to keep potential emissions below major source permitting thresholds. Therefore, the facility is not a major source and, thus, a Title V operating permit is not required.

The Department determined that the annual reporting requirements contained in the permit are sufficient to satisfy this requirement.

3. ARM 17.8.1207 Certification of Truth, Accuracy, and Completeness. The compliance certification submittal required by 17.8.1204(3) shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this subchapter shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

III. Emission Inventory

SOURCE	Tons/Year						
	PM	**PM_{10}**	**$PM_{2.5}$**	**NO_x**	**VOC**	**CO**	**SO_x**
Boilers, Heaters, Furnaces	1.13	1.13	1.13	11.50	0.57	12.50	0.09
Spray Booth	0	0	0	0	11.69	0	0
Engine Test Cell	0.03	0.03	0.03	0.36	0.40	0.62	0.05
Stationary Emergency Generators	0.70	0.70	0.70	10.23	0.80	2.64	0
Storage Tanks	0	0	0	0	0.43	0	0
Aerospace Ground Equipment	0	0	0	0	0	0.01	0
Degreasers	0	0	0	0	0.46	0	0
Abrasive Blasting	2.38	2.38	2.38	0	0	0	0
Total	4.24	4.24	4.24	22.09	14.35	15.77	0.14

Boilers, Heaters, Furnaces

$PM/PM_{10}/PM_{2.5}$ Emissions:

Emission Factor: 7.6 lb/$MMft^3$ gas {AP-42, 1.4-2, Rev 7/98}
Fuel Consumption: 298 $MMft^3$
Calculations: 7.6 lb/$MMft^3$ gas * 298 $MMft^3$ * 0.0005 ton/lb = 1.13 ton/yr

NO_X Emissions:

Uncontrolled NOx Emissions:

Emission Factor: 100.0 lb/$MMft^3$ gas {AP-42, 1.4-1, Rev 7/98}
Fuel Consumption: 172.3 $MMft^3$/yr
Calculations: 100.0 lb/$MMft^3$ gas * 172.3 $MMft^3$ * 0.0005 ton/lb = 8.614 ton/yr

Low NOx Emissions:

Emission Factor: 50.0 lb/$MMft^3$ gas {AP-42, 1.4-1, Rev 7/98}
Fuel Consumption: 117.0 $MMft^3$/yr
Calculations: 50.0 lb/$MMft^3$ gas * 117.0 $MMft^3$ * 0.0005 ton/lb = 2.926 ton/yr

Ultra Low NOx Emissions:

Emission Factor: 32.0 lb/$MMft^3$ gas {AP-42, 1.4-1, Rev 7/98}
Fuel Consumption: 0.3 $MMft^3$/yr
Calculations: 32.0 lb/$MMft^3$ gas * 0.3 $MMft^3$ * 0.0005 ton/lb = 0.005 ton/yr

Total NOx Emissions:

Calculations: 8.614 ton/yr + 2.926 ton/yr + 0.005 ton/yr = 11.5 ton/yr

VOC Emissions:

Emission Factor: 3.83 lb/$MMft^3$ gas {AP-42, 1.4-4, Rev 7/93}
Fuel Consumption: 298 $MMft^3$/yr
Calculations: 3.83 lb/$MMft^3$ gas * 298 $MMft^3$ * 0.0005 ton/lb = 0.566 ton/yr

CO Emissions:

Emission Factor:	84 lb/MMft^3 gas {AP-42, 1.4-1, Rev 7/93}
Fuel Consumption	298 MMft^3/yr
Calculations:	298 MMft^3/yr * 84 lb/MMft^3 gas * 0.0005 ton/lb = 12.5 ton/yr

SO_X Emissions:

Emission Factor:	0.60 lb/MMft^3 gas {AP-42, 1.4-2, Rev 7/98}
Fuel Consumption:	298 MMft^3/yr
Calculations:	298 MMft^3/yr * 0.60 lb/MMft^3 gas * 0.0005 ton/lb = 0.089 ton/yr

Spray Booth

Maximum amount sprayed in spray booth = 0.5 gal/hr

	Solvent Base	Water Base	Primer	Thinner	Total
Amount (gal/yr)	1226	1226	263	1664	4379
Density (lb/gal)	7.9	7.6	9.4	7.4	-
% VOC (w/w)	80	17	70	100	-
VOC (lb/gal)	1.77	0.36	0.40	2.81	5.34
VOC (lb/yr)	7748	1584	1731	12314	23376

VOC Emissions:

Emission Factor:	5.34 lb/gal {Permit Application - Average % VOC of solvents used}
Hours of Operation:	8760 hr/yr
Spray Consumed:	0.5 gal/hr
Calculations:	0.5 gal/hr * 5.34 lb/gal * 8760 hr/yr * 0.0005 ton/lb = 11.69 ton/yr

Engine Test Cell

Emission factors provided by MANG for NO_x, CO, and VOC from Table 4-1, Aircraft Engine Emission Factors for Aircraft Engine Testing, Air Emissions Guide for Air Force Stationary Sources, AFCEC, June 2021. Gallon/yr values are as proposed by MANG and conditioned by the MAQP.

NOx = (0.04799 lb/gal) * (15106 gal/yr) / (2000 lbs/ton) = 0.36 TPY

CO = (0.08175 lb/gal) * (15106 gal/yr) / (2000 lbs/ton) = 0.62 TPY

PM = (0.00452 lb/gal) * (15106 gal/yr) / (2000 lbs/ton) = 0.03 TPY

PM_{10} = (0.00452 lb/gal) * (15106 gal/yr) / (2000 lbs/ton) = 0.03 TPY

$PM_{2.5}$ = (0.00407 lb/gal) * (1506 gal/yr) / (2000 lbs/ton) = 0.03 TPY

SOx = (0.00718 lb/gal) * (15106 gal/yr) / (2000 lbs/ton) = 0.05 TPY

VOC = (0.05291 lb/gal) * (15106 gal/yr) / (2000 lbs/ton) = 0.40 TPY

Stationary Emergency Generators

There are five stationary diesel engines powering emergency generators.

Unit No.	Capacity (BHP)	Potential (BHP-hr/yr)
176545	86	43000
176546	380	190000
176547	277	138500
176549	335	167500
629585	398	199000
Total	1476	738000

Emissions:

Unit No.	CO	NOx	PM	PM_{10}	$PM_{2.5}$	VOC
176545	0.17	0.77	0.05	0.05	0.05	0.06
176546	0.73	3.39	0.24	0.24	0.24	0.27
176547	0.53	2.47	0.17	0.17	0.17	0.19
176549	0.64	2.99	0.21	0.21	0.21	0.23
629585	0.57	0.61	0.03	0.03	0.03	0.05
Total	2.64	10.23	0.7	0.7	0.7	0.8

Unit 176549 Calculations:

CO Emissions:
Emission Factor: 0.00768 lb/HP-hr {AFCEC Stationary, June 2021, Table 3-4}
Rated HP: 335 HP
Calculations: 335 HP * 0.00768 lb/HP-hr * 500 hr/yr / 2000 lb/ton = 0.64 ton/yr

NOx Emissions:
Emission Factor: 0.0357 lb/HP-hr
Rated HP: 335 HP
Calculations: 277 HP * 0.0357 lb/HP-hr * 500 hr/yr / 2000 lb/ton = 2.99 ton/yr

$PM/PM_{10}/PM_{2.5}$ Emissions:
Emission Factor: 0.00251 lb/HP-hr
Rated HP: 335 HP
Calculations: 335 HP * 0.00251 lb/HP-hr * 500 hr/yr / 2000 lb/ton = 0.21 ton/yr

VOC Emissions:
Emission Factor: 0.00279 lb/HP-hr
Rated HP: 335 HP
Calculations: 335 HP * 0.00279 lb/HP-hr * 500 hr/yr / 2000 lb/ton = 0.23 ton/yr

Storage Tanks

Total potential loss calculated by MANG using APIMS method.

Unit Name	No. of Units	Fuel Type	Tank Size (gal)	Capacity (gal)	Total Potential Loss (lb/yr)
120-0017	6	Jet	25000	150000	73.2
120POL-0235-1-AST-D	1	Diesel	10000	10000	5.3
120POL-0236-1-AST-G	1	Gasoline	5000	5000	767.0
Total (ton/yr)					0.432

Aerospace Ground Equipment

There is one piece of AGE. That is unit 744280, which takes jet fuel and has a capacity of 40.3 gallons per hour. The potential is for 353,028 gallons per year, but that is limited to 1,000 gallons per year by an enforceable condition listed above. All of the calculations below use the following source for emission factor: "AFCEC June 2021 Air Emissions Guide for Air Force Mobile Sources, Table 3-3. Military Aircraft GSE Emission Factors [A/M32A-95, page 162]".

NOx Emissions:
Emission Factor: 1.470 lb/hr
Time of Use: 25 hr/yr
Calculations: 1.470 lb/hr * 25 hr/yr * 0.0005 ton/lb = 0.0018 ton/yr

SOx Emissions:
Emission Factor: 0.264 lb/hr
Time of Use: 25 hr/yr
Calculations: 0.264 lb/hr * 25 hr/yr * 0.0005 ton/lb = 0.0003 ton/yr

CO Emissions:
Emission Factor: 5.860 lb/hr
Time of Use: 25 hr/yr
Calculations: 5.860 lb/hr * 25 hr/yr * 0.0005 ton/lb = 0.0073 ton/yr

VOC Emissions:
Emission Factor: 0.074 lb/hr
Time of Use: 25 hr/yr
Calculations: 0.074 lb/hr * 25 hr/yr * 0.0005 ton/lb = 0.0001 ton/yr

$PM/PM_{10}/PM_{2.5}$ Emissions:
Emission Factor: 0.110 lb/hr
Time of Use: 25 hr/yr
Calculations: 0.110 lb/hr * 25 hr/yr * 0.0005 ton/lb = 0.0001 ton/yr

Degreasers

Unit	Density (lb/gal)	Consumption (gal/yr)	VOC Content (%)	Emission Rate (ton/yr)

176729	6.42	100	100	0.321
176731	6.42	8	100	0.026
176732	6.42	8	100	0.026
176733	6.42	19	100	0.060
719089	7.92	9.6	50	0.019
737482	6.42	0.8	100	0.003
Total				0.455

VOC Emissions (Unit 176729):

Calculation: 6.42 lb/gal * 100 gal/yr * 100% * 0.0005 ton/lb = 0.321 ton/yr

Abrasive Blasting

Grit Blasting Room

Maximum Process Rate: 600 lb grit blast material/hr
Emission Factor: 0.10 (approximately 10% of grit blast media throughput is released to cyclone: Manufacturers Information)
Control Efficiency: 99.7% Cyclone Control: Manufacturers Information

$PM/PM_{10}/PM_{2.5}$ Emissions:

600 lb/hr * 0.10 * 8760 hr/yr * 0.0005 ton/lb = 262.8 ton/yr
262.8 ton/yr * (1 – 0.997) = 0.79 ton/yr

Gloveboxes

Maximum process rates for these gloveboxes were estimated using Emission Factor Documentation for AP-42 Section 13.2.6 Abrasive Blasting, 9/97.

SKAT Blast 1536 Champion:

Maximum Process Rate: 150 lb/hr
Emission Factor: 0.10 (approximately 10% of grit blast media throughput is released to cyclone: Manufacturers Information)
Control Efficiency: 99.7% with HEPA filter system

$PM/PM_{10}/PM_{2.5}$ Emissions

150 lb/hr * 0.10 * 8760 hr/yr * 0.0005 ton/lb = 65.7 ton/yr
65.7 ton/yr * (1 - 0.997) = 0.20 ton/yr

PRC 4848 Unit #1:

Maximum Process Rate: 150 lb/hr
Emission Factor: 0.69 lbs / 1000 lb abrasive {AP-42 Table 13.2.6-1 9/97}
Control Efficiency: unknown
$PM/PM_{10}/PM_{2.5}$ Emissions

150 lb/hr * 8760 hr/yr * 0.69 lbs / 1000 lb * 0.0005 ton/lb = 0.45 ton/yr

PRC 4848 Unit #2:

Maximum Process Rate:	312 lb/hr
Emission Factor:	0.69 lbs / 1000 lb abrasive {AP-42 Table 13.2.6-1 9/97}
Control Efficiency:	unknown

$PM/PM_{10}/PM_{2.5}$ Emissions

312 lb/hr * 8760 hr/yr * 0.69 lbs / 1000 lb * 0.0005 ton/lb = 0.94 ton/yr

Total $PM/PM_{10}/PM_{2.5}$ Emissions

0.79 ton/yr + 0.20 ton/yr + 0.45 ton/yr + 0.94 ton/yr = 2.38 ton/yr

IV. BACT Analysis

A BACT determination is required for any new or modified source. MANG 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 used.

A BACT analysis was not required for the current permit action. The action is being issued as a modification, but it is administrative in nature and thus did not require a BACT analysis.

V. Existing Air Quality

The surrounding area is considered attainment/unclassified for the Montana and National Ambient Air Quality Standards (MAAQS and NAAQS).

VI. Air Quality Impacts

The Department determined that there will be no negative impacts from this permitting action because there will be no increase in emissions. Therefore, the Department believes this action will not cause or contribute to a violation of any ambient air quality standard.

VII. Ambient Air Impact Analysis

Based on the information provided and the conditions established in MAQP #2930-07, the Department determined that there will be no negative ambient air impacts from this permitting action. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

VIII. Taking or Damaging Implication Analysis

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

implications.

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the pubic 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 Department determined there are no taking or damaging implications associated with this permit action.

VII. Environmental Assessment

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

Montana Air National Guard

Final Environmental Assessment for

Montana Air Quality Permit #2930-07

Air Quality Bureau

APPLICANT: Montana Air National Guard (MANG)		
SITE NAME: 120 Airlift Wing		
PROPOSED PERMIT NUMBER: Montana Air Quality Permit (MAQP) #2930-07		
APPLICATION RECEIVED: August 16th, 2023		
APPLICATION DEEMED COMPLETE: August 16th, 2023		
LOCATION: Sections 16 and 21, Township 20 North, Range 3 East		**COUNTY: Cascade**
PROPERTY OWNERSHIP:	**FEDERAL ____ STATE _ X ___ PRIVATE ____**	
EA PREPARER:	**T. Gauthier**	
EA Draft Date	**EA Final Date**	**Permit Final Date**
September 15th, 2023	**October 26th, 2023**	**November 14th, 2023**

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) as the potential project emissions exceed the 5 tons per year threshold of regulated pollutants for modifications of permitted facilities (ARM 17.8.743). DEQ's approval of an air quality permit application does not relieve MANG from complying with any other applicable federal, state, or county laws, regulations, or ordinances. MANG 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

MANG has applied for an MAQP modification under the CAA to update assumptions, equipment, processes, emission factors, and permit language that was specific to the previous F-15 mission and inclusion of non-permitted AGE equipment. This modification also requests the removal of equipment exempt from permitting, based on correspondence between MANG and the Department, and the addition of several fugitive emission units. This MANG permit action has been assigned MAQP #2930-07. The changes associated with this modification are detailed below in Table 1.

All information included in the EA is derived from the permit application, discussions with the applicant, prior permits, and other research tools.

Table 1: Proposed Action Details

Proposed Action	
General Overview	The following bullets describe the changes associated with this permit modification: • Update the assumed Engine Test cell emission factors at the existing Engine Test Cell to confirmed emission factors. • Modify the Engine Test Cell compliance methodology to an annual fuel throughput limit consistent with its maximum capacity. • Remove legacy fuel consumption limits applicable to exempted AGE and clarify permitted fuel throughput limits for the one stationary AGE unit at the Engine Test Cell. • Remove conditions applicable to exempt equipment,

	specifically conditions related to the Civil Engineering woodworking dust collection system. • Update the number of external combustion devices at the facility (boilers, heaters, and furnaces), total rated heat input capacity of the emissions source, and update emission factors to those listed in the current version of AP-42. • Remove six stationary emergency RICE from the facility inventory that continually qualify as portable non-road engines. • Update stationary RICE emission factor to units of lb/hp-hr. • Remove fuel delivery trucks that were permitted as tanks. These mobile sources should not have been permitted. • Remove six jet fuel tanks from the facility inventory. • Remove one solvent based maintenance parts washer. • Add six solvent-based maintenance parts washers. • Add three abrasive media glove boxes with controls. • Remove legacy portable AGE equipment lists that are ten years outdated.
Proposed Action Estimated Disturbance	
Disturbance	The proposed action will not cause any new disturbance.
Proposed Action	
Duration	**Construction:** 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. **Operational Life:** Although equipment may have functional lives of 20 to 30 years depending on equipment maintenance efforts, the 120th Airlift Wing has been permitted since 1996 and would be expected to remain operational as long as the military mission requires it.
Construction Equipment	No construction is required.
Personnel Onsite	**Operations:** No change is staff is necessary to accommodate the modifications as presented.
Location and Analysis Area	**Location**: The proposed action is located at the 120th Airlift Wing. located at the Great Falls International Airport, Sections 16 and 21, Township 20 North, Range 3 East, in Cascade County, Montana. **Analysis Area**: The area being analyzed as part of this environmental review includes the immediate project area (Figure 1), as well as neighboring lands surrounding the analysis area, as reasonably appropriate for the impacts being considered.
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 Department's Decision.

Conditions Incorporated into the Proposed Action	The conditions developed in the Preliminary Determination of the MAQP, dated September 15th, 2023, set forth in Sections II.A-D.

Figure 1: 120th Airlift Wing

PURPOSE AND BENEFIT FOR PROPOSED ACTION

DEQ's purpose in conducting this environmental review is to act upon MANG's air quality permit application No. 2930-07 to update assumptions, equipment, processes, emission factors, and permit language that was specific to the previous F-15 mission.

The benefits of the proposed action, if approved, include allowing the facility to continue operating within the 100 tons/year threshold for all criteria pollutants and updating equipment identifiers to reflect more accurately what is on-site. There are no proposed increases in total site PTE, with every pollutant decreasing. The only addition is $PM_{2.5}$ as it was not previously tracked in this permit, which amounts to 4.56 tons/year.

Authority to MANG for operation with the proposed action in effect would continue until the permit is revoked, either at the request of MANG 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. MANG 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*.

MANG must cooperate fully with, and follow the directives of, any federal, state, or local entity that may have authority over MANG's 120th Airlift Wing. These permits, licenses, and other authorizations may include: City of Great Falls, Cascade County Weed Control Board, Occupational Safety and Health Administration (worker safety), DEQ AQB (air quality) and Water Protection Bureau (groundwater and surface water discharge; stormwater), and Montana Department of Transportation and Cascade County (road access).

The proposed modification will not affect the geographical footprint of the facility.

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 proposed action would not impact the geology, soil quality, stability, and moisture of the proposed project area. The proposed action would be within an existing facility and no new construction or ground disturbance to the area would be required. In addition, deposition resulting from the proposed action is not expected to impact the geology, or the quality, stability,

or moisture content of local soil.

Direct Impacts: No impact would be expected.

Secondary Impacts: No impact would be expected.

2. WATER QUALITY, QUANTITY, AND DISTRIBUTION:

The proposed action would not significantly change emissions from an already existing facility. The proposed action would have no effect on the water quality, water quantity, and distribution, as there would be no discharge to groundwater or surface water associated with this project. The proposed action would not require surface or groundwater use and there would be no change in drainage patterns.

Direct Impacts: No impact would be expected.

Secondary Impacts: No impact would be expected.

3. AIR QUALITY:

The air quality of this area is classified as either better than National Standards or unclassifiable/attainment for the National Ambient Air Quality Standards (NAAQS) for criteria pollutants. Table 2 below shows the changes in PTE due to this action.

Table 2: Potential to Emit changes

Pollutant	Potential to Emit (tpy)
CO	-10.24
NO_X	-37.27
PM	-23.51
PM_{10}	-12.55
$PM_{2.5}$[1]	+4.24
SO_x	-11.72
VOC	-8.18
GHGs, as CO_2e	N/A

[1] $PM_{2.5}$ was not measured when the previous emissions inventory was created, therefore this "increase" is simply based on what is reported. It is extremely likely that the level of $PM_{2.5}$ was higher at the time of previous reporting since both total particulate matter and PM_{10} levels decreased by a considerably greater amount.

DEQ reviewed historical wind patterns at the Great Falls International Airport because the 120th Airlift Wing is located adjacent to the airport. Prevailing winds are primarily from the southwest throughout the year, sometimes exceeding twenty miles per hour. Winds from April through September average about ten miles per hour, while winds from October through March average about thirteen miles per hour.

There are four facilities in the surrounding area, all to the northeast:

- Great Falls Elevator, ag storage, MAQP #2854
- Keith Schnider, incinerator, MAQP #5244
- Croxford Funeral Home and Crematory, incinerator, MAQP #3032
- Hilcrest Lawn Memorial Association, incinerator, MAQP #4058

Because no emissions increased for the 120th Airlift Wing, the current permitting action should not affect the overall concentration of either pollutant in the area.

Air quality standards, set by the federal government and DEQ are enforced by the AQB and allow for pollutants at the levels permitted within the MAQP. Operation of the 120th Airlift Wing will continue to include emissions of particulate matter (PM) species, oxides of NO_X, CO, sulfur dioxide (SO_2), and volatile organic compounds (VOCs). These emissions come from fuel combustion, tank losses, degreasers, and abrasive blasting.

Air pollution control equipment must be operated at the maximum design for which it is intended ARM 17.8.752(2). Limitations would be placed on the allowable emissions for the new emission sources. A Best Available Control Technology (BACT) analysis was not required for this modification. This permit limit covers NO_X, CO, SO_2, VOCs, PM, and CO with associated ongoing compliance demonstrations, as determined by DEQ.

Direct Impacts: No impact on air quality based on no emissions increases.

Secondary Impacts: No impact on air quality based on no emissions increases.

4. VEGETATION COVER, QUANTITY AND QUALITY:

The proposed action would not directly impact vegetative cover, quantity or quality, because it would not result in new construction or ground disturbance and no discharge or use of water is required as part of this project. The air quality permit associated with this action would contain conditions and limitations to minimize the effect of the emissions on the surrounding environment.

Direct Impacts: No short-term impact on vegetation cover, quantity, and quality.

Secondary Impacts: No impact would be expected.

5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

The existing facility is located at the airport where there is regular traffic. Emissions or deposition of pollutants would be minor due to dispersion characteristics of the pollutants, the atmosphere, and the conditions in the permit. There is no increase in emissions.

Direct Impacts: No impact on terrestrial, avian, and aquatic life and habitats.

Secondary Impacts: No impact would be expected.

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

The Department contacted the Montana Natural Heritage Program, Natural Resource Information System (NRIS) to identify any unique endangered, fragile, or limited environmental resources in the area. In this case, the project area was defined by a three-mile radius around the latitude and longitude coordinates of the proposed location.

Species of concern (SOC) include: bald eagle, veery, great blue heron, hoary bat, spiny softshell, little Indian breadroot, bobolink, American white pelican, white-faced ibis, North American porcupine, rufous hummingbird, long-billed curlew, Barrow's goldeneye, northern leopard frog, Caspian tern, black-crowned night-heron, common tern, golden eagle, sharp-tailed grouse, black-tailed prairie dog, black-necked stilt, ferruginous hawk, Cassin's finch, black tern, brown creeper, northern goshawk, evening grosbeak, gray-crowned rosy-finch, black-and-white warbler, Clark's grebe, common loon, hooded merganser, piping plover, trumpeter swan, black-footed ferret, burbot, monarch, hare's-foot locoweed, spotted bat, plains hog-nosed snake, Merriam's shrew, suckle cuckoo bumble bee, short-eared owl, eastern bluebird, eastern red bat, black-billed cuckoo, western milksnake, small yellow lady's-slipper, ovenbird, Berry's mountain snail, Townsend's big-eared bat, dwarf shrew, smooth goosefoot, Crawe's sedge, long-legged myotis, little brown myotis, Hayden's shrew, fleshy stitchwort, Lewis's woodpecker, silver-haired bat, loggerhead shrike, long-eared myotis, common poorwill, thick-billed longspur, American bittern, fringed myotis, Schweinitz's flatsedge, long-sheath waterweed, pinyon jay, greater short-horned lizard, Sprague's pipit, green-tailed towhee, Baird's sparrow, sage thrasher, swift fox, Brewer's sparrow.

The proposed action would be located at an existing facility, would not require additional ground disturbance or significant construction, would not be likely to result in measurable impacts to local ecosystems, and no endangered or fragile or limited environmental resource occurrences were identified in the study area. Therefore, the Department has determined that the proposed action would not impact species of special concern or fragile or limited environmental resources.

Direct Impacts: No impact would be expected.

Secondary Impacts: No impact would be expected.

7. HISTORICAL AND ARCHAEOLOGICAL SITES:

The Department contacted the Montana Historical Society (SHPO) on August 31st, 2023, to identify any historical and archaeological sites near the proposed project area. SHPO responded on September 1st, 2023, and their records indicated that Site 24CA1290 is the historic 32 (120th

FW) building. SHPO additionally said that a few cultural resource inventories have been done in the area previously. SHPO asserted that as long as there will be no disturbance or alteration to structure over fifty years of age, they feel that there is a low likelihood that cultural properties will be impacted, and that a cultural resource inventory is unwarranted as this time. The Department concurs that there will be no disturbance to structures, therefore there would be no potential to impact historical or archaeological sites.

Direct Impacts: No impact would be expected.

Secondary Impacts: No impact would be expected.

8. SAGE GROUSE EXECUTIVE ORDER:

The site is not within a Greater Sage Grouse General Habitat Area as defined by Executive Order No. 12-2015.

Direct Impacts: No impact would be expected.

Secondary Impacts: No impact would be expected.

9. AESTHETICS:

The proposed action would include a change in the equipment on site. However, all of the changes are within the existing property of Montana Air National Guard. Figure 2 below shows neighbors relatively close to the site: the airport to the north and northwest, and residential homes to the east and northeast.

Direct Impacts: No impact based on no increase in emissions and no new construction.

Secondary Impacts: No impact based on no increase in emissions and no new construction.

Figure 2: 120th Airlift Wing and surrounding area

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

The proposed action would not place any additional demands for the environmental resources of air, because the existing facility would be a source of air pollutants. There is no increase in emissions being permitted with this action. This action also has no significant change in land, water, or energy. Therefore, the proposed action would not result in additional impacts on the demands for the environmental resources of water, air, and energy.

Direct Impacts: No impact would be expected.

Secondary Impacts: No impact would be expected.

11. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES:

No other environmental resources are known to have been identified in the area beyond those discussed above. Hence, there would be no impact to other environmental resources.

Direct Impacts: No impact would be expected.

Secondary Impacts: No impact would be expected.

12. HUMAN HEALTH AND SAFETY:

The proposed action would result in no impact to human health. As explained in Section 3 of this EA, pollutant emissions are not increasing, there is no contribution to a violation of any air quality standard, and the proposed action has been determined to comply with all applicable air quality rules and regulations. These rules, regulations, and standards are designed to be protective of human health.

Direct Impacts: No impact would be expected.

Secondary Impacts: No impact would be expected.

13. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION:

The land surrounding the proposed location is used by an international airport and residential homes. The proposed action would not require land use changes on the existing facility or surrounding properties. Therefore, the proposed action is not expected to impact industrial production in the area. The proposed project would not likely result in additional industrial sources (not directly associated with operations) moving to a given area. Overall, there would be no impact on agricultural or industrial production from the project.

Additional associated facilities (production field facilities) could locate to the area. However, any future facility would be required to apply for and receive the appropriate permits from the appropriate regulating authority. Impact from any future facilities would be assessed through the appropriate permitting process.

Direct Impacts: No impact would be expected.

Secondary Impacts: No impact would be expected.

14. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

The proposed action is not expected to have any impact on the overall distribution of employment as the changes to equipment are administrative in nature.

Direct Impacts: No impact would be expected.

Secondary Impacts: No impact would be expected.

15. LOCAL AND STATE TAX BASE AND TAX REVENUES:

The proposed action would not result in impacts to the local and state tax base and tax revenue because no new employees would be needed as a result of the proposed action.

Direct Impacts: No impact would be expected.

Secondary Impacts: No impact would be expected.

16. DEMAND FOR GOVERNMENT SERVICES:

The proposed action would result in minor impacts on the demands for government services because time would be required by government agencies to issue MAQP #2930-07 and to assure compliance with applicable rules, standards, and conditions. Overall, any demands for government services to regulate the facility or activities associated with the facility would be minor and consistent with current demands due to the existing industrial nature of the facility.

Direct Impacts: Minor impact would be expected.

Secondary Impact: No impact would be expected as a result of this action.

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:

The proposed action would not impact any access to recreational and wilderness activities because the proposed action occurs at an existing facility already used by the 120th Airlift Wing.

Direct Impacts: No impact would be expected.

Secondary Impacts: No impact would be expected.

19. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

No impacts to density and distribution of population and housing are anticipated as a result of the proposed action or the operation of the gathering plant.

Direct Impacts: No impact would be expected.

Secondary Impacts: No impact would be expected.

20. SOCIAL STRUCTURES AND MORES:

DEQ is not aware of any native cultural concerns that would be affected by the proposed action on this existing facility.

Direct Impacts: No impact would be expected.

Secondary Impacts: No impact would be expected.

21. CULTURAL UNIQUENESS AND DIVERSITY:

The proposed action would not be expected to cause any impact to the social and cultural resources in the area because the proposed action would not have increased emissions. Further, the predominant use of the surrounding area would not change as a result of implementing the proposed action.

Direct Impacts: No impact would be expected.

Secondary Impacts: No impact would be expected.

22. PRIVATE PROPERTY IMPACTS:

The proposed action would take place on Montana Air National Guard property. 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.

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?

YES	NO	
	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 Department 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.[1] That decision is being appealed to the Montana Supreme Court and final resolution is yet unsettled. While litigation is ongoing, and consistent with the court order, DEQ has started a process to assess and improve our environmental review processes, including consideration of future climate impact analyses.

[1] 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: The proposed action would identify the equipment that supports MANG's mission. If this were not done, the facility would continue to operate without a permit that clearly identifies their current operation.

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.

No other permit applications for this facility are currently pending before DEQ. Although additional permits may be necessary for this facility in the future, without a pending permit application containing the requisite information, DEQ cannot speculate about which permits may be necessary or which permits may be granted or denied. There may, therefore, be additional cumulative impacts associated with this facility in the future, but those impacts would be analyzed by future environmental reviews associated with those later permitting actions. This environmental review analyzes only the proposed action submitted by MANG, which is the air quality permit regulating the emissions from the equipment as listed in the "proposed action" section, above.

Overall, cumulative and secondary impacts on the physical and biological aspects of the human environment in the immediate area would not occur from the proposed action due to the scope and nature of the proposed action. The Department believes that the facility can be expected to operate in compliance with all applicable rules and regulations as would be outlined in MAQP #2930-07.

Additional facilities (compressor stations, gas plants, etc.) could locate to the area and withdraw natural gas from the nearby area and/or separate the components of natural gas. However, any future facility would be required to apply for and receive the appropriate permits from the appropriate regulating authority. Environmental impacts from any future facilities would be assessed through the appropriate permitting process.

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. Additionally, the EA for the MANG facility was reviewed extensively.

Internal efforts also included queries to: MANG, Montana Natural Heritage Program, and the State Historic Preservation Office (Montana Historical Society).

OTHER GOVERNMENTAL AGENCIES WITH JURSIDICTION:

The proposed action would be fully located on Montana Air National Guard 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: Montana Natural Heritage Program, the State Historic Preservation Office (Montana Historical Society), City of Great Falls, Cascade County Weed Control Board, Occupational Safety and Health Administration (worker safety), DEQ AQB (air quality) and Water Protection Bureau (groundwater and surface water discharge; stormwater), and Montana Department of Transportation and Cascade County (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 primary, secondary, and cumulative impacts associated with the proposed action would be limited. MANG proposes to modify operations at the 120th Airlift Wing as described in the application. The modification will occur completely on the 120th Airlift Wing Plant property and will support the development of the facility. The MANG project will be located adjacent to the Great Falls International Airport, in Cascade County, MT. There will be no construction disturbance. All on-going activities of the facility will be within the original site boundary.

DEQ has not identified any significant impacts associated with the proposed action for any environmental resource. Approving MANG'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 MANG 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 MANG. DEQ would make a decision on MANG's subsequent application based on the criteria set forth in the CAA.

DEQ's issuance of a modified MAQP to MANG 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 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 MEPA.

Environmental Assessment and Significance Determination Prepared By:

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Name	**Title**

EA Reviewed By:

Julie A Merkel	**Permitting Services Section Supervisor**
Name	**Title**