

AIR QUALITY PERMIT

Issued To: Ames Construction, Inc.
3737 West 2100 South
West Valley City, Utah 84120

Permit: #3879-00
Application Complete: 09/22/06
Preliminary Determination Issued: 10/10/06
Department's Decision Issued: 10/26/06
Permit Final: 11/14/06
AFS #: 777-3879

An air quality permit, with conditions, is hereby granted to Ames Construction, Inc. (ACI) 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

ACI is permitted to operate six water pumps (diesel-fired engines & centrifugal pumps) with a combined maximum capacity up to 534-horsepower (hp). A complete description of the permitted equipment is contained in Section I.A of the permit analysis.

B. Plant Location

Permit #3879 applies while operating at any location in Montana, except those areas having a Department of Environmental Quality (Department)-approved permitting program, areas considered tribal lands, or areas in or within ten kilometers (km) of certain particulate matter with an aerodynamic diameter of ten microns or less (PM₁₀) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana. An addendum to Permit #3879-00 will be required for locations in or within ten km of certain PM₁₀ nonattainment areas.*

SECTION II: Conditions and Limitations

A. Emission Limitations

1. ACI shall not operate more than six water pumps (diesel-fired engines driving centrifugal pumps) at any given time and the combined maximum-rated design capacity shall not exceed 534-hp (ARM 17.8.749).
2. Visible emissions from any water pump (diesel-fired engine driving a centrifugal pump) shall not exhibit an opacity of 20% or greater averaged over six-consecutive minutes (ARM 17.8.304).
3. ACI 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).
4. ACI shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section II.A.3 (ARM 17.8.749).

5. If the permitted equipment is used in conjunction with any other equipment owned or operated by ACI, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).

B. Testing Requirements

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

C. Operational Reporting Requirements

1. If the water pumps (diesel-fired engines driving centrifugal pumps) are moved to another location, an Intent to Transfer form must be sent to the Department. In addition, a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The Intent to Transfer form and the proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.765).
2. ACI 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 not be 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. Information shall be in the units required by the Department. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

3. ACI 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 startup or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(l)(d) (ARM 17.8.745).
4. ACI shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. The records compiled in accordance with this permit shall be maintained by ACI as a permanent business record for at least five 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).

D. Notification

Within 15 days of the actual start-up of each of the pumps covered under Permit #3879-00, ACI shall submit written notification to the Department of the initial start-up date of the pumps (ARM 17.8.749).

SECTION III: General Conditions

- A. Inspection – ACI 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 ACI fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving ACI of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided for 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 therefor, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the 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. Permit Fee – Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by ACI may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Construction Commencement – Construction must be begin within three years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked (ARM 17.8.762).
- I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.

- J. ACI shall comply with the conditions contained in this permit while operating in any location in Montana, except within those areas that have a Department-approved permitting program.

Permit Analysis
Ames Construction, Inc.
Permit #3879-00

I. Introduction/Process Description

A. Permitted Equipment

Ames Construction, Inc. (ACI) owns and operates six portable water pumps (diesel-fired engines driving centrifugal pumps) with a combined maximum rated design capacity up to 534-horsepower (hp). The pumps will originally locate in a 32 mile stretch of railroad right of way being constructed from south of Roundup, MT to south of Broadview, MT. The railroad right of way area will include the following: Portions of Sections 13, 14, 22, 23 and 27, Township 4 North, Range 23 East, Yellowstone County; Portions of Sections 12, 13, 14, 15, 16, 17, and 18, Township 4 North, Range 24 East, Yellowstone County; Portions of Sections 5,6, and 7, Township 4 North, Range 25 East, Yellowstone County; Portions of Sections 1, 2, 3, 9, 10, 16, 21, 28, 29, 31, and 32, Township 5 North, Range 25 East, Musselshell County; and Portions of Sections 14, 15, 21, 22, 29, 31, and 32, Township 6 North, Range 26 East, Musselshell County.

The water pumps are allowed to move to various locations throughout Montana, except those areas with a Department of Environmental Quality (Department) – approved permitting program. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* ACI will be required to obtain an addendum to Permit #3879-00 to operate at locations in or within ten kilometers (km) of certain particulate matter with an aerodynamic diameter of ten microns or less (PM₁₀) nonattainment areas

B. Source Description

The water pumps are used at construction sites to provide water for construction purposes and for dust suppression. The pumps move ground water to excavated and lined ponds where it is stored for water trucks to transport the water to the location where it is needed.

C. Current Permit Action

On October 23, 2006, ACI submitted comments on the preliminary determination for Permit #3879-00. ACI requested that the Department remove Section 15, Township 4 North, Range 23 East, Yellowstone County as a portion of the railroad right of way. In addition, ACI requested that the Department add Section 31, Township 6 North, Range 26 East, Musselshell County as a portion of the railroad right of way. The Department inadvertently added Section 15 and omitted Section 31 while drafting the preliminary determination. The Department made the corrections prior to issuing its decision.

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. Upon request, the Department will provide references for location of complete copies of all applicable rules and regulations or copies where appropriate.

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

1. 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).

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

4. 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 four hours.
5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

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

1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
4. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
5. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀

ACI 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 six 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, ACI 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. This rule incorporates, by reference, 40 CFR 60, Standards of Performance for New Stationary Sources (NSPS). This facility is not an NSPS affected source because it does not meet the definition of any NSPS subpart defined in 40 CFR 60.

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

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. ACI submitted the appropriate permit application fee for the current permit action.
2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department; the air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

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

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

1. 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 alteration to construct, alter, or use any air contaminant sources that have the potential to emit (PTE) greater than 25 tons per year of any pollutant. ACI's water pumps have a PTE greater than 25 tons per year of oxides of nitrogen (NO_x); 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, alteration, or use of a source. ACI 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. ACI submitted an affidavit of publication of public notice for the September 6, 2006, issue of the *Roundup Record-Tribune*, a newspaper of general circulation in the Town of Roundup in Musselshell County, as proof of compliance with the public notice requirements.
6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the 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 ACI 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 altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than one 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. (1) This rule states that an air quality permit may be transferred from one location to another if the Department receives a complete notice of intent to transfer location, the facility will operate in the new location for less than one year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) 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 Modification--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source since it is not a listed source and the facility's PTE is less than 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 stationary source having:

- a. PTE > 100 tons per year of any pollutant;
 - b. PTE > 10 tons per year of any one hazardous air pollutant (HAP), PTE > 25 tons per year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
 - c. PTE > 70 tons per year of particulate matter with an aerodynamic diameter of ten microns or less (PM₁₀) in a serious PM₁₀ nonattainment area.
2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #3879-00 for ACI, the following conclusions were made.
- a. The facility's PTE is less than 100 tons per year for all regulated pollutants.
 - b. The facility's PTE is less than 10 tons per year for any one HAP and less than 25 tons per year of all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is not subject to any current NSPS.
 - e. This facility is not subject to any current National Emission Standards for Hazardous Air Pollutants (NESHAP) standards.
 - f. This source is neither a Title IV affected source nor a solid waste combustion unit.
 - g. This source is not an EPA designated Title V source.

Based on these facts, the Department determined that the ACI facility will be a minor source of emissions as defined by Title V.

III. BACT Determination

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

Because of the limited amount of emissions produced by the water pumps and the lack of readily available and cost effective add-on controls, add-on controls would be cost prohibitive for the water pumps. Therefore, the Department determined that proper operation and maintenance with no additional controls constitutes BACT for the water pumps in this case.

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

IV. Emission Inventory

Source	tons/year					
	PM	PM ₁₀	NO _x	VOC	CO	SO _x
Water Pumps (diesel-fired engines up to 534-hp with centrifugal pumps)	5.15	5.15	72.51	5.85	15.62	1.38
A complete emission inventory for Permit #3879-00 is on file with the Department.						

V. Air Quality Impacts

Based on the relatively small amount of emissions resulting from the ACI operation and the limits and conditions that would be included in Permit #3879-00, the Department believes that the allowable/permitted emissions from this source would not cause or contribute to an exceedance of any ambient air quality standard while operating in any area classified as attainment or unclassified for the ambient air quality standards.

VI. Ambient Air Impact Analysis

The Department determined, based on the relatively small amount of emissions resulting from the ACI operation and the limits and conditions that would be included in Permit #3879-00, that the impact from this permitting action will be minor. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

VII. Taking or Damaging Implication Analysis

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

VIII. Environmental Assessment

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

DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Air Resources Management Bureau
P.O. Box 200901, Helena, MT 59620
(406) 444-3490

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Ames Construction, Inc.
3737 West 2100 South
West Valley City, Utah 84120

Air Quality Permit number: 3879-00

Preliminary Determination Issued: October 10, 2006

Department Decision Issued: October 26, 2006

Permit Final: November 14, 2006

1. Legal Description of Site: Permit #3879-00 would apply while operating at any location in Montana, except those areas having a Department-approved permitting program, areas considered tribal lands, or areas in or within ten km of certain PM₁₀ nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* The water pumps will originally locate in a 32 mile stretch of railroad right of way being constructed from south of Roundup, MT to south of Broadview, MT. The railroad right of way area will include the following: Portions of Sections 13, 14, 22, 23 and 27, Township 4 North, Range 23 East, Yellowstone County; Portions of Sections 12, 13, 14, 15, 16, 17, and 18, Township 4 North, Range 24 East, Yellowstone County; Portions of Sections 5,6, and 7, Township 4 North, Range 25 East, Yellowstone County; Portions of Sections 1, 2, 3, 9, 10, 16, 21, 28, 29, 31, and 32, Township 5 North, Range 25 East, Musselshell County; and Portions of Sections 14, 15, 21, 22, 29, 31, and 32, Township 6 North, Range 26 East, Musselshell County.
2. Description of Project:

ACI would operate up to six diesel-fired engines driving up to six centrifugal water pumps and the combined maximum rated design capacity of the engines is not to exceed 534-hp. The water pumps would be operated near construction sites to provide water for construction purposes and for dust suppression. The pumps move ground water to excavated and lined ponds where it is stored for water trucks to transport the water to the location where it is needed.
3. Objectives of Project: The proposed water pumps would create business and revenue for ACI and provide for varied construction activity, state-wide.
4. Alternatives Considered: In addition to the proposed action, the Department also considered the “no-action” alternative. The “no-action” alternative would deny issuance of the air quality preconstruction permit to the proposed facility. However, the Department does not consider the “no-action” alternative to be appropriate because ACI has demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the “no-action” alternative was eliminated from further consideration.
5. A Listing of Mitigation, Stipulations, and Other Controls: A list of enforceable conditions, including a BACT analysis, would be included in Permit #3879-00.

6. Regulatory Effects on Private Property: The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.
7. The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The “no-action” alternative was discussed previously.

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Terrestrial and Aquatic Life and Habitats			X			Yes
B	Water Quality, Quantity, and Distribution			X			Yes
C	Geology and Soil Quality, Stability and Moisture			X			Yes
D	Vegetation Cover, Quantity, and Quality			X			Yes
E	Aesthetics			X			Yes
F	Air Quality			X			Yes
G	Unique Endangered, Fragile, or Limited Environmental Resources			X			Yes
H	Demands on Environmental Resource of Water, Air and Energy			X			Yes
I	Historical and Archaeological Sites			X			Yes
J	Cumulative and Secondary Impacts			X			Yes

SUMMARY OF COMMENTS ON POTENTIAL PHYSICAL AND BIOLOGICAL EFFECTS: The following comments have been prepared by the Department.

A. Terrestrial and Aquatic life and Habitats

Terrestrials would use the same area as the portable water pumps. The portable water pumps would be considered a minor source of emissions, by industrial standards, with intermittent and seasonal operations. Therefore, only minor effects on terrestrial life and habitats would be expected as a result of pollutant deposition from operating the water pumps.

Impacts on aquatic life and habitats could result from pollutant deposition, but such impacts would be minor as the facility would be a minor source of emissions (with seasonal and intermittent operations) and only minor amounts of groundwater would be extracted for dust suppression purposes in the general area that the water pumps would operate. Since only a minor amount of air emissions would be generated, only minor deposition would occur. Therefore, only minor and temporary impacts to aquatic life and habitat would be expected from the proposed water pumps.

Overall, any impacts to terrestrial and aquatic life and habitats would be minor.

B. Water Quality, Quantity and Distribution

Groundwater would be extracted and used for dust suppression construction sites near the areas that the water pumps would operate. However, water use would only cause a minor disturbance to these areas, since only relatively small amounts of water would be needed. At most, only minor surface and groundwater quality impacts would be expected as a result of using water for

dust suppression because only small amounts of water would be required for dust suppression and deposition of air pollutant emissions would be minor (as described in Section 7.F of this EA).

Overall, any impacts to the above-cited physical and biological resource of the human environment of the project area would be minor because the overall characteristics of the area would not change as a result of operating the portable water pumps and any associated impacts would be minor.

C. Geology and Soil Quality, Stability and Moisture

Operating the portable water pumps would have only minor impacts on soils in any proposed site location because the water pumps would be a minor source of emissions. In some instances ground would be excavated and lined to form ponds to store groundwater for later use; however, only small amounts of water would be used for dust suppression, and the water pumps would have seasonal and intermittent operations. Therefore, any impacts to geology and soil quality, stability, and moisture at any proposed operational site would be minor.

D. Vegetation Cover, Quantity, and Quality

Because the facility would be a minor source of emissions, by industrial standards, and ground disturbance would be minor and random for the water pumps to operate, any impacts to vegetation cover quantity, and quality would be minor. As described in Section 7.F of this EA, the amount of air emissions from the proposed water pumps would be minor. As a result, the corresponding deposition of air pollutants on the surrounding vegetation would also be minor. In addition, because the water usage would be minimal, as described in Section 7.B, and the associated soil disturbance would be minimal, as described in Section 7.C, corresponding vegetative impacts would also be minor.

E. Aesthetics

The portable water pumps would be visible and would create additional noise while operating. However, Permit #3879-00 would include conditions to control visible emissions from the water pumps and the general area of operation. Also, because the water pumps are portable and would operate on an intermittent and seasonal basis, any aesthetic impacts would be minor and short-lived.

F. Air Quality

The air quality impacts from the portable water pumps would be minor because Permit #3879-00 would include conditions limiting the opacity from the water pump engines and requiring dust suppression for the general area of operation. Further, Permit #3879-00 would limit total emissions from the portable water pumps and any additional equipment owned and operated by ACI to 250 tons per year or less at any given operating site, excluding fugitive emissions.

The water pumps would be used on a temporary and intermittent basis, thereby further reducing potential air quality impacts from the water pumps engines. Additionally, the small and intermittent amounts of deposition generated from the water pumps would be minimal because the pollutants emitted would be widely dispersed (from such factors as wind speed and wind direction) and would result in only minor impacts to the surrounding environment. Overall, any air quality impacts resulting from the proposed water pumps would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

Emissions from the proposed project may impact unique, endangered, fragile, or limited environmental resources located in a given proposed project area. However, as detailed in Section V of the permit analysis, any emissions and resulting impacts from the project would be minor due to the low concentration of those pollutants emitted.

Permit #3879-00 would cover the proposed water pumps while located at various locations throughout the state. In an effort to identify any unique endangered, fragile, or limited environmental resources in the proposed initial area, the Department contacted the Montana Natural Heritage Program, Natural Resource Information System (NRIS). The NRIS search identified *Calcarius mccownii* (McCown's Longspur), *Calcarius ornatus* (Chestnut-collared Longspur), *Numenius americanus* (Long-billed Curlew), *Melanerpes erythrocephalus* (Red-headed Woodpecker), *Corynorhinus townsendii* (Townsend's Big-eared Bat), and *Centrocercus urophasianus* (Greater Sage-Grouse) as species of special concern located within the proposed project area. In this case, the project area was defined by the section(s), township(s), and range(s) of the proposed location with an additional 1-mile buffer zone.

Given the temporary and portable nature of the water pumps, the Department determined that any impacts to any species of special concern would be minor and short-lived. Further, operational conditions and limitations in Permit #3879-00 would be protective of these resources by limiting overall impacts to the surrounding environment.

H. Demands on Environmental Resource of Water, Air and Energy

Due to the relatively small size of the water pump engines, operating the water pumps would result in only minor demands on the environmental resources of water, air, and energy for normal operations. Small quantities of groundwater would be extracted and used for dust suppression in the general area of operations. Energy requirements would be minor due to the relatively small amount of diesel fuel required to operate the water pumps. In addition, the water pumps would operate on an intermittent and seasonal basis thereby minimizing energy demands. Further, impacts to air resources would be minor because the source would be small by industrial standards, would operate on an intermittent and seasonal basis, and would generate relatively minor amounts of regulated pollutants through normal operations.

I. Historical and Archaeological Sites

In an effort to identify any historical and archaeological sites near the proposed, initial project area, the Department contacted the Montana Historical Society, State Historic Preservation Office (SHPO). According to SHPO records, there have been a few previously recorded historic or archaeological sites within the designated search locations and a few previously conducted cultural resource inventories completed. SHPO stated that the project would have the potential to impact cultural properties and recommended that a cultural resource inventory be conducted to determine whether cultural sites exist. However neither SHPO nor the Department has the authority to require Ames to conduct a cultural resource inventory. Because of the relatively small size of the project and because the water pumps are portable and would operate on an intermittent and seasonal basis, the Department determined that the chance of the proposed project impacting any historical and archaeological sites would be minor.

J. Cumulative and Secondary Impacts

Operating the portable water pumps would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment of a given proposed area of

operation because the water pumps would generate emissions of regulated air pollutants and noise would be generated. Emissions and noise would cause minor disturbance to a given area because the water pumps are relatively small by industrial standards. Additionally, the water pumps, in combination with the other emissions from equipment operations at the operational site, would not be permitted to exceed 250 tons per year of non-fugitive emissions.

Overall, any cumulative or secondary impacts to the physical and biological aspects of the human environment of the project area would be minor because the proposed water pumps would typically operate on an intermittent and seasonal basis and would generate relatively minor amounts of regulated pollutants. Therefore, the overall industrial nature of the area would not change for extended periods of time as a result of operating the portable water pumps and any associated impacts would be minor.

8. The following table summarizes the potential economic and social effects of the proposed project on the human environment. The “no-action” alternative was discussed previously.

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Social Structures and Mores				X		Yes
B	Cultural Uniqueness and Diversity				X		Yes
C	Local and State Tax Base and Tax Revenue			X			Yes
D	Agricultural or Industrial Production			X			Yes
E	Human Health			X			Yes
F	Access to and Quality of Recreational and Wilderness Activities			X			Yes
G	Quantity and Distribution of Employment				X		Yes
H	Distribution of Population				X		Yes
I	Demands for Government Services			X			Yes
J	Industrial and Commercial Activity			X			Yes
K	Locally Adopted Environmental Plans and Goals			X			Yes
L	Cumulative and Secondary Impacts			X			Yes

SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS: The following comments have been prepared by the Department.

A. Social Structures and Mores

Operation of the portable water pumps would cause no disruption to the social structures and mores in any given area of operation because the water pumps would be a minor industrial source of emissions and would operate on a temporary and intermittent basis. Further, Permit #3879-00 would include conditions limiting the opacity from the water pumps and requiring dust suppression for the general area of operation, which would limit any possible effects to social structures and mores.

B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of any given area of operation would not be impacted by the proposed water pumps because the water pumps would be portable and would be operated on a seasonal and intermittent basis, and would utilize a relatively small number of employees for

normal operations. The predominant use of surrounding areas would not change as a result of operating the water pumps. Therefore, cultural uniqueness and diversity would not be impacted.

C. Local and State Tax Base and Tax Revenue

The portable water pumps would have little, if any, impact on the local and state tax base and tax revenue because the water pumps would be a minor industrial source and would conduct only seasonal and intermittent operations. The water pumps would require the use of only a few employees. Thus, only minor impacts to the local and state tax base and revenue could be expected from the employees. Furthermore, the impacts to local tax base and revenue would be minor because the water pumps would be portable and the money generated for taxes would be widespread.

Overall, any impacts to the above-cited economic and social resource of the human environment of the project area would be minor because the overall characteristics of the area would not change as a result of the proposed project and any associated impacts would be minor.

D. Agricultural or Industrial Production

Operating the portable water pumps would result in only minor impacts to local industrial production since the water pumps would be a minor source of industrial activity and air emissions. Also, the water pumps would likely locate in areas adjacent to land that could be used for animal grazing and agricultural production. However, because minimal deposition of air pollutants would occur on the surrounding land, only minor and temporary impacts to the surrounding vegetation and land would occur thereby minimizing any minor impacts to surrounding agricultural land and practices in the proposed area of operations. In addition, the water pump operations would be temporary in nature and would be permitted with operational conditions and limitations that would minimize impacts to local agricultural areas.

Overall, any impacts to the above-cited economic and social resource of the human environment of the project area would be minor because the overall characteristics of the area would not change as a result of the proposed project and any associated impacts would be minor.

E. Human Health

Permit #3879-00 would include limits and conditions to ensure that the water pumps would be operated in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. As described in Section 7.F. of this EA, the air emissions from the proposed water pumps would be minimized by limiting the opacity from the water pump engines and requiring dust suppression for the general area of operation. Also, the water pumps would operate on a temporary and intermittent basis and pollutants would be widely dispersed (See Section 7.F of this EA). Therefore, only minor impacts would be expected on human health from the proposed water pumps.

Overall, any impacts to the above-cited economic and social resource of the human environment of the project area would be minor because operating the proposed water pumps would not change the overall characteristics of any given area of operation and any associated impacts would be minor.

F. Access to and Quality of Recreational and Wilderness Activities

Noise from the water pumps would be minor because the water pumps would be small by industrial standards. As a result, the amount of noise generated from the water pumps would be

minimal for the area. Also, the water pumps would operate on a seasonal and intermittent basis. Therefore, any impacts to the quality of recreational and wilderness activities created by the water pumps would be expected to be minor and short-lived.

Overall, any impacts to the above-cited economic and social resource of the human environment of the project area would be minor because the proposed water pumps would not change the overall characteristics of any given area of operation and any associated impacts would be minor.

- G. Quantity and Distribution of Employment
- H. Distribution of Population

The proposed water pumps would require only a few employees to operate and would be operated on a seasonal and intermittent basis thereby resulting in little, if any, permanent immigration into or emigration out of a given area. Therefore, the proposed project would not impact the quantity and distribution of employment or the distribution of population at the initially proposed or any other given operating site.

- I. Demands for Government Services

Minor increases would be seen in traffic on existing roadways in the area while the water pumps are operating. In addition, government services would be required for acquiring the appropriate permits for the proposed water pumps and to verify compliance with the permits that would be issued. Overall, demands for government services would be minor.

- J. Industrial and Commercial Activity

The portable water pumps would represent only a minor increase in the industrial activity at any proposed area of operation because the water pumps would be a relatively small industrial source that would be portable and temporary in nature. Minor amounts of additional industrial or commercial activity would be expected as a result of the proposed operation because the water pumps would be used to provide water to additional equipment that would require water for dust suppression.

Overall, any impacts to the above-cited economic and social resource of the human environment of the project area would be minor because the overall characteristics of the area would not change as a result of the proposed water pumps and any associated impacts would be minor.

- K. Locally Adopted Environmental Plans and Goals

Permit #3879-00 would allow ACI to operate in areas designated by EPA as attainment or unclassified for the National and Montana ambient air quality standards. Permit #3879-00 would include limits and conditions that would protect air quality and keep water pumps emissions in compliance with any applicable ambient air quality standard. In addition to the air quality protection provided by Permit #3879-00, the water pumps would be a portable source and would have intermittent and seasonal operations, thus, any impacts from the water pumps would be minor and short-lived.

Overall, any impacts to the above-cited economic and social resource of the human environment of the project area would be minor because, the overall characteristics of the area would not change as a result of the proposed project and any associated impacts would be minor.

L. Cumulative and Secondary Impacts

Operating the portable water pumps would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate areas of operation because the water pumps would be a portable and temporary source. Minor industrial operations would be expected to result from the permitting and operation of the water pumps because the water pumps would be used to provide water to additional equipment that would require water for dust suppression. Minor increases in traffic would have minor effects on local traffic in the immediate area. Because the water pumps are relatively small and temporary, only minor economic impacts to the local economy would be expected from operating the water pumps. Further, the water pumps may be operated in conjunction with other equipment owned and operated by ACI; however, any cumulative impacts to the social and economic aspects of the human environment would be minor and short-lived. Overall, the proposed water pumps would result in only minor and temporary secondary and cumulative impacts to the social and economic aspects of the human environment of the initially proposed and any future operating site.

Overall, any cumulative or secondary impacts to the economic and social aspects of the human environment of the project area would be minor because the proposed water pumps would not change the overall industrial nature of the area and any associated impacts would be minor.

Recommendation: No Environmental Impact Statement (EIS) is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is for the construction and operation of six portable water pumps. Permit #3879-00 would include conditions and limitations to ensure the water pumps would operate in compliance with all applicable rules and regulations. In addition, there are no significant impacts associated with this proposal.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

Individuals or groups contributing to this EA: Department of Environmental Quality – Air Resources Management Bureau, Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

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