

## AIR QUALITY PERMIT

Issued To: John J. Thompson, Inc. Permit #3265-00  
P.O. Box 999 Permit Application Complete: 06/09/03  
Lincoln, MT 59639 Preliminary Determination Issued: 06/17/03  
Department's Decision Issued: 07/03/03  
Permit Final: 07/19/03  
AFS #777-3265

An air quality permit, with conditions, is granted to John J. Thompson, Inc. (Thompson) pursuant to Section 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and the Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

### Section I: Permitted Facilities

#### A. Permitted Equipment

Thompson operates a portable crushing/screening plant and associated equipment. A list of permitted equipment is included in Section I.A of the Permit Analysis.

#### B. Plant Location

The original location for this operation is the NE¼, of Section 22, Township 14 North, Range 9 West, in Lewis and Clark County, Montana. However, Permit #3265-00 also applies while operating at any location in Montana, except within those areas that have a Department of Environmental Quality (Department) approved permitting program or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.*

### Section II: Conditions and Limitations

#### A. Emission Limitations

1. All visible emissions from any Standards of Performance for New Stationary Source (NSPS) affected crusher shall not exhibit an opacity of 15% or greater averaged over 6-consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart OOO).
2. All visible emissions from any other NSPS affected equipment, such as screens or conveyor transfers, shall not exhibit an opacity of 10% or greater averaged over 6-consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart OOO).
3. All visible emissions from any non-NSPS affected equipment shall not exhibit an opacity of 20% or greater averaged over 6-consecutive minutes (ARM 17.8.304 and ARM 17.8.752).
4. Water and spray bars shall be available on site at all times and operated as necessary to maintain compliance with the opacity limitations in Sections II.A.1., II.A.2. and II.A.3. (ARM 17.8.749 and ARM 17.8.752).

5. Thompson 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 and ARM 17.8.752).
6. Thompson shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section II.A.5. (ARM 17.8.752).
7. Crushing production is limited to 876,000 tons during any rolling 12-month time period (ARM 17.8.749).
8. Screening production is limited to 876,000 tons during any rolling 12-month time period (ARM 17.8.749).
9. The generator used with this facility shall not have a designated capacity greater than 300-hp (224-kW) (ARM 17.8.749).
10. If the permitted equipment is used in conjunction with any other equipment owned or operated by Thompson, 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. Within 60 days after achieving maximum production, but no later than 180 days after initial start-up, an Environmental Protection Agency (EPA) Method 9 opacity test and/or other methods and procedures as specified in 40 CFR 60.675 must be performed on all NSPS affected equipment to demonstrate compliance with the emission limitations contained in Section II.A.1. and II.A.2. (ARM 17.8.340 and 40 CFR 60, General Provisions and Subpart OOO).
2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures manual (ARM 17.8.106).
3. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. If this crushing/screening plant is 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. Thompson 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. Thompson shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. All records compiled in accordance with this permit shall be maintained by Thompson as a permanent business record for at least 5 years following the date of the measurement, shall be submitted to the Department upon request, and shall be available at the plant site for inspection by the Department (ARM 17.8.749).
4. Thompson shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745(1) 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 emissions 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).
5. Thompson shall document, by month, the crushing production from the facility. By the 25<sup>th</sup> day of each month, Thompson shall total the crushing production of the facility during the previous 12 months to verify compliance with the limitation in Section II.A.7. A written report of the compliance verification shall be submitted along with the annual emissions inventory (ARM 17.8.749).
6. Thompson shall document, by month, the screening production from the facility. By the 25<sup>th</sup> day of each month, Thompson shall total the screening production of the facility during the previous 12 months to verify compliance with the limitation in Section II.A.8. A written report of the compliance verification shall be submitted along with the annual emissions inventory (ARM 17.8.749).

### Section III: General Conditions

- A. Inspection – Thompson 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 Thompson fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Thompson 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 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 postpones the effective date of the Department’s decision until conclusion of the hearing and issuance of a final decision by the Board. The Department’s decision on the application is not final until 15 days have elapsed and there is no request for a hearing under this section.
- 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 Thompson 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 3 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. Thompson 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  
John J. Thompson, Inc.  
Permit #3265-00

I. Introduction/Process Description

A. Permitted Equipment

- 1965 Pioneer jaw crusher and 3-deck screen plant (100 tons per hour (TPH))
- 1971 Cat diesel generator (300-horsepower (hp) (224-kilowatt (kW)))
- Associated equipment

B. Source Description

John J. Thompson, Inc. (Thompson) proposes to use this crushing/screening plant to crush and sort sand and gravel. For a typical operation, raw material is loaded into the feed hopper. From the feed hopper, the material is conveyed to the crushing and screening plant. After the crushing and screening plant, the material is conveyed to a stockpile for use. Thompson will use the material produced by this facility in various construction projects.

II. Applicable Rules and Regulations

The following are partial quotations of some applicable rules and regulations, which apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available upon request from the Department of Environmental Quality (Department). Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

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

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct test, 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).

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

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

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
5. ARM 17.8.223 Ambient Air Quality Standard for PM<sub>10</sub>

Thompson must maintain compliance with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 – Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Thompson 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 17.8.310 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.
4. 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). The owner or operator of any stationary source or modification, as defined and applied in 40 CFR 60, NSPS, shall comply with the standards and provisions of 40 CFR 60. In order for a crushing/screening plant to be subject to 40 CFR 60, Subpart OOO requirements, two specific criteria must be met. First the crushing/screening plant must meet the definition of an affected facility and second, the equipment in question must have been constructed or modified after August 31, 1983. Based on the information submitted by Thompson, the crushing/screening equipment to be used with Permit #3265-00 may be subject to NSPS requirements (40 CFR 60, Subpart A General Provisions, and Subpart OOO, Non-Metallic Mineral Processing Plants). For the equipment identified in Section I.A. of this analysis, NSPS would not

apply.

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. Thompson 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 facility to obtain an air quality permit or permit alteration if they construct, alter or use any asphalt plant, crusher or screen that has the potential to emit (PTE) greater than 15 tons per year of any pollutant. Thompson has the potential to emit more than 15 tons per year of particulate matter (PM), and nitrogen oxides (NO<sub>x</sub>); 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 are not subject to the Montana Air Quality Permit Program.
5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. This rule requires that a permit application be submitted prior to installation, alteration or use of a source. Thompson 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. Thompson submitted an affidavit of publication of public notice for the May 14, 2003, issue of the *Independent Record*, a newspaper of general circulation in the Town of Lincoln in Lewis and Clark 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 the 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 Thompson 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 17.8.762 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 1 year after the permit is issued.
  11. 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).
  12. 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.
  13. 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 listed and does not have the potential to emit more than 250 tons per year of any air 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/year of any pollutant;
  - b. PTE > 10 tons/year of any one Hazardous Air Pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
  - c. PTE > 70 tons/year of PM<sub>10</sub> in a serious PM<sub>10</sub> 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 #3265-00 for Thompson, the following conclusions were made.
  - a. The facility's PTE is less than 100 tons/year for any pollutant.
  - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.
  - c. This source is not located in a serious PM<sub>10</sub> nonattainment area.
  - d. This facility is not subject to any current NSPS.
  - e. This facility is not subject to any current NESHAP standards.
  - f. This source is not a Title IV affected source nor a solid waste combustion unit.
  - g. This source is not an EPA designated Title V source.

Based on these conclusions, the Department has determined that Thompson will be a minor source of emissions as defined under Title V. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, Thompson may be required to obtain a Title V Operating Permit.

III. BACT Determination

A BACT determination is required for each new or altered source. Thompson 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.

Thompson shall not cause or authorize to be discharged into the atmosphere from any NSPS affected crusher, any visible emissions that exhibit an opacity of 15% or greater averaged over 6 consecutive minutes. Thompson shall not cause to be discharged into the atmosphere from any other NSPS affected equipment, such as screens or conveyor transfers, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes. Thompson shall not cause to be discharged into the atmosphere from any non-NSPS affected equipment, any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes. Thompson must also take reasonable precautions to limit the fugitive emissions of airborne particulate matter from haul roads, parking areas, and the general plant property. Thompson is required to use water spray bars and water and/or chemical dust suppressant, as necessary, to maintain compliance with the opacity and reasonable precaution limitations. The Department determined that using water spray bars and/or chemical dust suppressant to maintain compliance with the opacity requirements and reasonable precaution limitations constitutes BACT for these sources.

Because of the relatively small amount of emissions produced by the diesel generator, add-on control would be cost prohibitive. Thus, the Department determined that no additional control would constitute BACT for the generator. The control options selected have control and control costs similar to other recently permitted similar sources and are capable of achieving the appropriate emissions standards.

IV. Emission Inventory -- Permit #3265-00

Source	Tons/Year					
	PM	PM <sub>10</sub>	NO <sub>x</sub>	VOC	CO	SO <sub>x</sub>
1965 Pioneer jaw crusher (100 TPH)	1.10	0.53				
1965 Pioneer 3-deck screen (100 TPH)	6.90	3.29				
Material transfer (7)	4.45	2.15				
Pile forming (3)	5.52	2.63				
Bulk loading (1)	1.84	0.88				
1971 Cat diesel generator (300-hp (224-kW))	0.92	0.92	31.54	0.84	7.23	2.65
Haul roads	2.74	1.23				
<b>Total</b>	<b>24.47</b>	<b>11.63</b>	<b>31.54</b>	<b>0.84</b>	<b>7.23</b>	<b>2.65</b>

- A complete emission inventory for Permit #3265-00 is on file with the Department.

V. Ambient Air Impact Analysis

Permit #3265-00 is issued for the operation of a portable crushing/screening plant to be originally located at NE¼ of Section 22, Township 14 North, Range 9 West, in Lewis and Clark County, Montana. Permit #3265-00 will cover the plant while operating at any location within Montana, excluding those counties that have a Department approved permitting program. In the view of the Department, the amount of controlled emissions generated by this facility will not exceed any set ambient standard. In addition, this source is temporary and portable and any air quality impacts will be minimal.

VI. 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.

VII. 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**  
**P.O. Box 200901, Helena, Montana 59620**  
**(406) 444-3490**

**FINAL ENVIRONMENTAL ASSESSMENT (EA)**

Issued To: John J. Thompson, Inc.  
P.O. Box 999  
Lincoln, MT 59639

Air Quality Permit Number: 3265-00

Preliminary Determination Issued: June 17, 2003

Department's Decision: July 3, 2003

Permit Final: July 19, 2003

1. Legal Description of Site: The crushing/screening plant would initially operate at the NE¼ of Section 22, Township 14 North, Range 9 West, in Lewis and Clark County, Montana. However, Permit #3265-00 would also apply while operating at any location in Montana, except within those areas having a Department approved permitting program or those areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>) nonattainment areas. A Missoula County air quality permit would be required for locations within Missoula County, Montana.
2. Description of Project: The Department proposes to issue a permit for the operation of the following:
  - 1965 Pioneer jaw crusher and 3-deck screen plant (100 tons per hour (TPH))
  - 1971 Cat diesel generator (300-horsepower (hp) (224-kilowatt (kW)))
  - Associated equipment
3. Objectives of the Project: Thompson, in an effort to increase business for the company, submitted a complete application for a crushing/screening plant. The issuance of Permit #3265-00 would allow Thompson to operate the crushing/screening equipment at various locations throughout Montana, including the initial site location.
4. Alternatives Considered: In addition to the proposed action, the Department considered the “no-action” alternative. The “no-action” alternative would deny issuance of the Montana Air Quality permit to the proposed facility. However, the Department does not consider the “no-action” alternative to be appropriate because Thompson 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 #3265-00.
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
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 Resource				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 & Biological Effects:**

A. Terrestrial and Aquatic Life and Habitats

Terrestrials would use the areas in which the crushing/screening operations occur. However, the crushing/screening operations are portable and the impacts would be limited by the short-term nature of the operation. Furthermore, since the Thompson site is a pre-existing pit, additional impacts to the terrestrial and aquatic life and habitats are not expected as a result of the crushing/screening operations.

B. Water Quality, Quantity, and Distribution

Although there would be an increase in air emissions in the area where the crushing/screening operations commence, there would only be minor impacts on the water quality, quantity, and distribution because of the relatively small size and temporary nature of the operation. While deposition of pollutants would occur, the Department determined that any impacts from deposition of pollutants would be minor. As described in 7.F. of this EA, due to the conditions placed in Permit #3265-00 and the size and nature of the facility, the maximum impacts from the air emissions from this facility would be minor.

Water would be required for dust suppression on surrounding roadways and areas of operation, but would only cause a minor disturbance to the area. Also relatively small amounts of water would be needed for adequate dust suppression. Therefore, the crushing/screening plant would have only minor impacts to water quality, quantity, and distribution in the proposed area of operation.

C. Geology and Soil Quality, Stability, and Moisture

There would be minor impacts to the geology and soil quality, stability, and moisture near the crushing/screening area due to facility construction, increased vehicle traffic, the use of water to control dust, and deposition of pollutants from the crushing/screening operation. As explained in Section 7.F. of this EA, the relatively small size and temporary nature of the operation and conditions placed in Permit #3265-00 would minimize the impacts from deposition. As a result, pollution deposition and water used to control emissions would result in only minor disturbance to the soil.

The soils in the affected area would be impacted by the crushing/screening operations due to the construction and use of the crushing/screening facility. However, given the relatively small size and portable and temporary nature of the operation, any impacts would be minor.

D. Vegetation Cover, Quantity, and Quality

There would be minor impacts on the vegetative cover, quantity, and quality because small amounts of vegetation would likely be disturbed from the crushing/screening operation. Because the crushing/screening operation would be located in an existing and previously disturbed open cut pit, any physical effects on vegetation cover, quantity, and quality would be minor.

Pollutant deposition would occur on the surrounding vegetation. However, as explained in Section 7.F. of this EA, the Department determined that, due to the relatively small size of the operation, dispersion characteristics of pollutant emissions, and conditions placed in Permit #3265-00, any impacts from the deposition of pollutants would be minor. Also, 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 be minor.

E. Aesthetics

The crushing/screening operations would be visible and would create additional noise in the area of operation. Permit #3265-00 would include conditions to control emissions, including visible emissions, from the plant. Because the crushing/screening operations are relatively small, and would be a minor and temporary source of air pollution, any aesthetic impacts would be minor.

F. Air Quality

Air quality impacts from the crushing/screening facility would be minor because the crushing/screening facility would be a relatively small and temporary source. Deposition of pollutants would occur as a result of operating the crushing/screening facility. However, the Department determined that any air quality impacts from deposition would be minor due to dispersion characteristics of pollutants, the atmosphere (wind speed, direction, temperature, etc.), the source (stack height, stack temperature, etc.), and conditions placed in Permit #3266-00. Permit #3265-00 would include conditions limiting the opacity from the plant. In addition, Permit #3265-00 would include conditions requiring that reasonable precautions be taken to control emissions from haul roads, access roads, parking lots, and the general work area. Further, Permit #3265-00 would also limit total emissions from the crushing/screening facility and any additional Thompson equipment operated at the same site to 250 tons per year or less excluding fugitive emissions.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department contacted the Montana Natural Heritage Program (MNHP) to identify any species of special concern associated with the initial proposed site location. Search results indicated that there are no such environmental resources in the area. Area, in this case, is defined by the township and range of the initial proposed site, with an additional one-mile buffer. The initial location has been identified by Thompson as the NE<sup>1</sup>/<sub>4</sub> of Section 22, Township 14 North, Range 9 West, in Lewis and Clark County, Montana.

The proposed project would have no impact on any unique endangered, fragile, or limited environmental resources because it is an existing pit with no change to existing impacts.

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

The crushing/screening operations would require only small quantities of water, air, and energy for proper operation, due to the small size and temporary nature of the facility. Small amounts of water would be used for dust control from the equipment, the stockpiles, and the associated haul roads. Further, as described in Section 7.F. of this EA, pollutant emissions generated from the facility would have minimal impacts on air quality in the immediate and surrounding area because of the small size and intermittent operations of the equipment. Energy demands to operate the facility would also be minor because the operation would consist of relatively small equipment and because the operations would be intermittent. Therefore, any impacts to environmental resources of water, air, and energy, would be minor.

I. Historical and Archaeological Sites

The Department contacted the Montana Historical Society - State Historical Preservation Office (SHPO) in an effort to identify any historical and/or archaeological sites that may be present in the proposed area of construction/operation. According to the response from SHPO, there are no previously recorded historical or archeological sites within the designated search locale. Additionally, the crushing/screening operations would locate within previously disturbed industrial sites typically used for portable crushing/screening operations. According to past correspondence from the Montana State Historic Preservation Office, there is low likelihood of adverse disturbance to any archaeological or historic site, given previous industrial disturbance within an area. Therefore, the operation would not impact any known historic or archaeological sites.

J. Cumulative and Secondary Impacts

The crushing/screening operations would cause minor cumulative and secondary environmental impacts to the physical and biological aspects of the human environment because the facility would generally have only seasonal, intermittent, and temporary use, and because the facility is considered a minor source of air pollutants by industrial standards. The facility would generate emissions of particulate matter (PM) and PM<sub>10</sub>. Noise would also be generated from the sites, but would cause minimal disturbance because the area of operation is sparsely populated and because other noise sources would be located in the area. There is potential for other operations to locate at these sites. However, any operations would have to apply for and receive the appropriate permits from the Department prior to operation. These permits would address the environmental impacts associated with the operations at the proposed sites. The Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as would be outlined in Permit #3265-00.

8. Potential economic and social effects: 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
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 & Social Effects:**

A. Social Structures and Mores

The crushing/screening operation would cause no disruption to the social structures and mores in the area because the source is small and would initially be located in a sparsely populated and remote location typically used for such operations. The nearest community is Lincoln. Therefore, the crushing/screening of sand and gravel would have no impact upon native or traditional lifestyles or communities of the proposed areas of operation. The predominant use of the proposed initial site of operation would not change as a result of the current permit action.

B. Cultural Uniqueness and Diversity

The Department determined that the operations would not impact the cultural uniqueness and diversity of this area of operation because the facility is a small source that would be operating in a sparsely populated and remote location typically used for such operations. The area is an existing open cut pit that has been previously used for aggregate crushing/screening operations, and is privately owned. Therefore, because the operation would not change the predominant use of the area, the Department determined there would be no impact to the cultural uniqueness and diversity of the area of operation.

C. Local and State Tax Base and Tax Revenue

The crushing/screening operations would have a minor effect on the local and state tax base and tax revenue because the facility would be small by industrial standards. The facility is a temporary source; however, most of the crushing/screening that Thompson would conduct would be in the vicinity of the Lincoln area; therefore, impact to the local tax base and tax revenue would not change. Although portable, the crushing/screening operations would be steady and would employ people in the area. The addition of the crushing/screening operations may result in new employment with Thompson because one new employee may be hired to assist existing employees used for the operation. The addition of the crushing/screening plant would have a minor impact on local and state tax base and tax revenue.



D. Agricultural or Industrial Production

The proposed crushing/screening project would be located in a previously developed gravel pit; therefore, the proposed operations would not displace any agricultural land. Because of the location and topography of the area, along with the seasonal, temporary, and intermittent use of the facility, only minor affects to surrounding mining land would result. Thompson would be responsible to comply with state and federal environmental regulations in regard to operations at the sites. Further, the crushing/screening operations would be small by industrial standards and, thus, would have only a minor impact on local industrial production.

E. Human Health

Permit #3265-00 would include conditions to ensure that the crushing/screening operations 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 this facility would be minimized by water and/or chemical dust suppression and opacity limitations established in Permit #3265-00. Therefore, any associated impacts to human health would be minor.

F. Access to and Quality of Recreational and Wilderness Activities

The proposed crushing/screening operations would not affect any access to recreational and wilderness activities because the site would be in a previously developed gravel pit that is privately owned. Minor effects on the quality of recreational activities would be created by noise from the sites; however, any impacts would be minor, intermittent, and temporary due to the portable nature of the crushing/screening operations.

G. Quantity and Distribution of Employment

The activities from the crushing/screening operations may result in an increased employment or a change in the distribution of employment in the area. Thompson would utilize current employees but may hire one new employee for the crushing/screening operation. Overall, the current permit action might cause a minor impact the quantity and distribution of employment in the proposed initial operating site.

H. Distribution of Population

The crushing/screening operations would not disrupt the normal population distribution in the area. Thompson employees may utilize temporary housing or hotels for the duration of projects that keep them from home. However, no impact to the distribution of population would result from the crushing/screening operations.

I. Demands of Government Services

Government services would be required for acquiring the appropriate permits from government agencies and determining compliance with those permits. Also, there would be an increase in vehicle traffic resulting from the operation of the crushing/screening facility. However, such demands on governmental services to regulate traffic would be minor due to the relatively small size and temporary nature of the operation. Overall, demands for government services would be minor.

J. Industrial and Commercial Activity

The crushing/screening operation would represent only a minor impact to the industrial activity in the given area because of the small size, portable, and temporary nature of the facility. No additional industrial or commercial activity would result from the crushing/screening operation.

K. Locally Adopted Environmental Plans and Goals

This facility would initially be located in an area that is unclassified/attainment for ambient air quality. The permitted production limits would be protective of air quality while the facility is operating in any location within Montana, except within those areas having a Department approved permitting program or within 10 km of certain PM<sub>10</sub> nonattainment areas. A Missoula County air quality permit will be required for locations within Missoula County, Montana.

L. Cumulative and Secondary Impacts

The crushing/screening operations would cause minor cumulative and secondary impacts to the economic and social aspects of the human environment because the facility would generally have only seasonal, intermittent, and temporary use, and because the facility is considered a minor source of air pollutants by industrial standards. There is potential for other operations to locate at these sites. However, any operations would have to apply for and receive the appropriate permits from the Department prior to operation. These permits would address the environmental impacts associated with the operations at this or any other site. The crushing/screening operations would be limited by Permit #3265-00 to total particulate emissions of 250 tons per year or less from non-fugitive crushing/screening operations and any other additional equipment used at the site.

Recommendation: No EIS is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: All potential effects resulting from construction and operation of the proposed facility would be minor; therefore, an EIS is not required. In addition, the source would be applying Best Available Control Technology and the analysis indicates compliance with all applicable air quality rules and regulations.

Other groups or agencies contacted or which may have overlapping jurisdiction: Department of Environmental Quality - Permitting and Compliance Division (Air and Waste Management Bureau and Industrial and Energy Minerals Bureau); Montana Natural Heritage Program; and the State Historic Preservation Office (Montana Historical Society).

Individuals or groups contributing to this EA: Department of Environmental Quality (Air and Waste Management Bureau and Industrial and Energy Minerals Bureau); Montana Natural Heritage Program; and the State Historic Preservation Office (Montana Historical Society).

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