

## AIR QUALITY PERMIT

Issued To: Dickman Excavating Permit #2961-00  
130 Gibson Flats Road Application Complete: 7/24/96  
Great Falls, MT 59405 Preliminary Determination Issued: 7/29/96  
Department's Decision Issued: 8/14/96  
Permit Final: 8/30/96

An air quality permit with conditions is hereby granted to the above-named permittee, hereinafter referred to as "Dickman," pursuant to Section 75-2-204 and 211, MCA, as amended, and Administrative Rules of Montana (ARM) Subchapter 11, PERMIT, CONSTRUCTION AND OPERATION OF AIR CONTAMINANT SOURCES, ARM 16.8.1101, *et seq.*, as amended, for the following:

### Section I: Permitted Facilities

- A. Equipment: A portable 1946 Cedar Rapids Jaw Crusher (maximum production rate 50 TPH); a 1946 Telsmith Cone Crusher (maximum production rate 50 TPH); a 1946 single screen; four 1946 home-built conveyors; a 1946 home-built feeder; a 1946 75KW Gen Set diesel generator; and associated equipment.
- B. Original Location: NW¼, SE¼, Section 34, Township 20, Range 4 East, Cascade County, Montana.

### Section II: Limitations and Conditions

- A. Operational
  1. All visible emissions from the portable 1946 Cedar Rapids Jaw Crusher, and the 1946 Telsmith Cone Crusher shall not exhibit an opacity of 20% or greater averaged over six (6) consecutive minutes (ARM 16.8.1404).
  2. Dickman shall not cause or authorize to be discharged into the atmosphere from any other equipment, such as the 1946 single screen, the four 1946 home-built conveyors, feeders, or transfer points, any visible emissions that exhibit an opacity of 20% or greater averaged over six (6) consecutive minutes (ARM 16.8.1401).
  3. Dickman 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 16.8.1401).
  4. Dickman 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.3 (ARM 16.8.1103).
  5. Water spray bars shall be operated as necessary to maintain compliance with the opacity limitations in Section II.A.1 and 2 (ARM 16.8.1103).
  6. Total particulate emissions from this crusher in conjunction with total particulate emissions from any additional equipment at any individual site shall be less than 250 tons per year (ARM 16.8.945).

B. Reporting Requirements

1. If this crushing plant is moved to another location, a Notice of Intent to Transfer Location of Air Quality Permit shall be published in a newspaper of general circulation in the area to which the transfer is to be made. This notice shall be published at least fifteen (15) days prior to the move. Proof of publication and a change of location form shall be submitted to the Montana Department of Environmental Quality, Permitting and Compliance Division (PCD) prior to the move. These forms are available from the PCD (ARM 16.8.1114).
2. Dickman shall maintain on-site records showing daily hours of operation and daily production rates for the last twelve (12) months. The records compiled in accordance with this permit shall be maintained by Dickman as a permanent business record for at least five (5) years following the date of the measurement, shall be submitted to the department upon request, and shall be available at the plant for inspection by the department (ARM 16.8.1109).
3. Dickman shall supply the department with annual production information for all emission points, as required by the department, in the annual emission inventory request. The request will include but is not limited to all sources of emissions identified in the most recent emission inventory report and sources identified in Section I.A of this permit.

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 units as required by the department (ARM 16.8.1903).

C. Notification

Dickman shall provide the department with written notification of the following dates within the specified time periods (ARM 16.8.1109):

1. Anticipated startup date between 30 and 60 days prior to the actual startup date;
2. Actual startup date within 15 days after the actual startup date.

D. The department may require testing (ARM 16.8.704).

E. All tests shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 16.8.709).

### Section III: General Conditions

- A. Inspection - The recipient shall allow the department's representatives access to the source at all reasonable times for the purpose of making inspections, 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 the recipient fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations - Nothing in this permit shall be construed as relieving the permittee of the responsibility for complying with any applicable federal, or Montana statute, rule or standard, except as specifically provided in ARM 16.8.1101, *et seq.* (ARM 16.8.1117).
- 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 who are jointly or severally adversely affected by the department's decision may request, within fifteen (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 department's decision on the application is not final unless fifteen (15) days have elapsed and there is no request for a hearing under this section. The filing of a request for a hearing postpones the effective date of the department's decision until the conclusion of the hearing and issuance of a final decision by the Board.
- F. Permit Inspection - As required by ARM 16.8.1115 Inspection of Permit, a copy of the air quality permit shall be made available for inspection by department personnel at the location of the permitted source.
- G. Construction Commencement - Construction must begin within three years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked.
- H. Permit Fees - Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, the continuing validity of this permit is conditional upon the payment by the permittee of an annual operation fee, as required by that Section and rules adopted thereunder by the Board.
- 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.

PERMIT ANALYSIS  
Dickman Excavating  
Permit Number 2961-00

I. Introduction/Process Description

A. Permit History

On July 24, 1996, Dickman submitted a complete permit application to operate a portable 1946 Cedar Rapids Jaw Crusher, (maximum production rate 50 TPH); a 1946 Telsmith Cone Crusher, (maximum production rate 50PH); a 1946 single screen; four 1946 home-built conveyors; a 1946 home-built feeder; a 1946 75KW Gen Set diesel generator; and associated equipment. The facility will operate at the NW¼, SE¼, Section 34, Township 20, Range 4 East, Cascade County, Montana.

B. Process Description

Dickman proposes to use this crusher plant and associated equipment to crush and sort sand and gravel materials that will be used in their construction operations.

For a typical operational setup, the material is conveyed from the feeder to the jaw and cone crushers. Material leaving the crushers is sent to the single screen. From the screen the material is stockpiled. The material is then transported to the site where it will be used.

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

A. ARM 16.8.701 *et seq.* (Subchapter 7), General Provisions, including, but not limited to:

1. ARM 16.8.704 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.
2. ARM 16.8.707 Circumvention No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant which would otherwise violate an air pollution control regulation. No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created.
3. ARM 16.8.709 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.*, MCA.

Dickman shall comply with all requirements contained in the Montana Source Testing 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 Testing Protocol and Procedures Manual is available from the department upon request.

B. ARM 16.801 *et seq.* (Subchapter 8), Ambient Air Quality, including but not limited to:

1. ARM 16.8.811 Ambient Air Quality Standards for Carbon Monoxide
2. ARM 16.8.816 Ambient Air Quality Standards for Nitrogen Dioxide
3. ARM 16.8.818 Ambient Air Quality Standards for Settled Particulate Matter
4. ARM 16.8.820 Ambient Air Quality Standards for Sulfur Dioxide
5. ARM 16.8.821 Ambient Air Quality Standards for PM-10

Dickman must comply with the applicable ambient air quality standards. Reference Section V, Existing Air Quality and Air Quality Impacts.

C. ARM 16.8.901 *et seq.* (Subchapter 9), Prevention of Significant Deterioration of Air Quality, including but not limited to:

1. ARM 16.8.945 Definitions This rule is a list of applicable definitions used in this subchapter.
2. ARM 16.8.953 Review of Major Stationary Sources and Major Modification-- Source Applicability and Exemptions The requirements contained in ARM 16.8.954-16.8.962 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 that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source because it is not a listed source and does not have the potential to emit more than 250 tons per year or more of any air pollutant.

D. ARM 16.8.1101 *et seq.* (Subchapter 11) Permit, Construction and Operation of Air Contaminant Sources, including but not limited to:

1. ARM 16.8.1102 When Permit Required-Exclusions Permits are required for mineral crushers that have the potential to emit greater than five tons/year of any pollutant. Dickman has the potential to emit more than five tons per year of particulate matter, PM-10, and NOx, therefore a permit is required.
2. ARM 16.8.1103 Emission Control Requirements Dickman is required to install on the new or altered source the maximum air pollution control capability which is technically practicable and economically feasible. A Best Available Control Technology (BACT) review was conducted for the new or altered source and can be found in Section IV.
3. ARM 16.8.1105 New or Altered Sources and Stacks, Permit Application Requirements This rule requires that an application for an air quality permit be submitted for a new or altered source or stack. Dickman has submitted their application for an air quality permit as required for the construction and operation of a portable 1946 Cedar Rapids Jaw and Telsmith Cone crushers (maximum production rate 50 TPH); and associated equipment.
4. ARM 16.8.1107 Public Review of Permit Applications This rule requires that Dickman notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application of its application for permit. Dickman has submitted an affidavit of publication from The Great Falls Tribune as proof of compliance with the public notice requirements.
5. ARM 16.8.1109 Conditions for Issuance of Permit This rule requires that the source demonstrate compliance with applicable rules and standards before a permit can be issued. Also, a permit may be issued with such conditions as are necessary to assure compliance with all applicable rules and standards as required for permit issuance. The source has demonstrated compliance with the applicable rules and standards as required for permit issuance.
6. ARM 16.8.1111 Duration of Permit. An air quality permit shall be valid until revoked or modified as provided in the is 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.
7. ARM 16.8.1113 Modification of Permit An air quality permit may be modified for changes in any applicable rules and standards adopted by the board or changed conditions of operation at a source or stack which do not result in an increase in emissions because of the changed conditions of operation. A source may not increase its emissions beyond those found in its permit unless the source applies for and receives another permit.

8. ARM 16.8.1114 Transfer of Permit An air quality permit may be transferred from one location to another if written notice of intent to transfer is sent to the department.
  9. ARM 16.8.1115 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.
  10. ARM 16.8.1117 Compliance with Other Statutes and Rules This rule requires the permit holder to comply with all other applicable federal and Montana statutes, rules and standards.
  11. ARM 16.8.1118 Waivers ARM 16.8.1105 requires the permit application be submitted 180 days before construction begins. This rule allows the department to waive this time limit. The department hereby waives this limit.
  12. ARM 16.8.1119 General Procedures for Air Quality Preconstruction Permitting An air quality preconstruction permit shall contain requirements and conditions applicable to both construction and subsequent use.
- E. ARM 16.8.1401 *et seq.* (Subchapter 14) Emission Standards, including but not limited to:
1. ARM 16.8.1401 Particulate Matter-Airborne This rule requires an opacity limitation of 20% for all fugitive emissions, and that no person shall authorize the production, handling, transportation, or storage of any material unless reasonable precautions to control airborne particulate matter are taken.
  2. ARM 16.8.1403 Particulate Matter, Industrial Processes This rule requires a limitation of particulate emissions be calculated using the process weight rule. Total allowable particulate emissions shall be determined by using the maximum thru-put rates supplied in the permit application.
  3. ARM 16.8.1404 Visible Air Contaminants This rule requires that no person may cause or authorize to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
  4. ARM 16.8.1423 Standards of Performance for New Stationary Sources The owner or operator of any stationary source or modification, as defined and applied in 40 CFR Part 60, shall comply with the standards and provisions of 40 CFR Part 60. Based on information submitted by Dickman, the 1946 Cedar Rapids and TelSmith Cone crushing plant is not an NSPS source. Therefore, NSPS (40 CFR, Part 60, Subpart A, General Provisions, and Subpart OOO Non-Metallic Mineral Processing Plants) does not apply to this facility.
- F. ARM 16.8.1901 *et seq.* (Subchapter 19), Air Quality Permit Application, Operation, and Open Burning Fees, including but not limited to:
1. ARM 16.8.1903 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; and the air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

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

2. ARM 16.8.1905 Air Quality Permit Application Fees Dickman shall 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. Dickman has submitted the appropriate permit application fee.



### III. Emission Inventory Permit 2962-00

Source		TSP	PM-10	NOX	Tons/Year		
					VOC	CO	SOX
1946 Cedar Rapids Jaw Crusher	7.88	0.53					
1946 TelSmith Cone Crusher	7.88	0.53					
Diesel Generator (75 KW)		0.97	0.97	13.62	1.09	2.94	0.91
Screen		32.85	3.29				
Material Transfer	28.47	1.53					
Pile Forming		2.19	0.88				
Bulk Loading		2.19	0.88				
Haul Roads		2.74	1.23				
Total		85.18	9.83	13.62	1.09	2.94	0.91

#### 1946 Cedar Rapids Jaw Crusher

Process Rate: 50 tons/hr  
 Hours of operation: 8760 hr/yr

#### TSP Emissions:

Emission Factor: 0.036 lbs/ton (AP-42, Table 11.19.2-2, 7/94)  
 Control Efficiency: 0%  
 Calculations:  
 $0.036 \text{ lbs/ton} * 50 \text{ tons/hr} = 1.80 \text{ lbs/hr}$   
 $1.80 \text{ lbs/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ tons/lb} = 7.88 \text{ tons/yr}$   
 $7.88 \text{ tons/yr} * (1.00 - 0.00) = 7.88 \text{ tons/yr}$

#### PM-10 Emissions:

Emission Factor: 0.0024 lbs/ton (AP-42, Table 11.19.2-2, 7/94)  
 Control Efficiency: 0%  
 Calculations:  
 $0.0024 \text{ lbs/ton} * 50 \text{ tons/hr} = 0.12 \text{ lbs/hr}$   
 $0.12 \text{ lbs/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ tons/lb} = 0.53 \text{ tons/yr}$   
 $0.53 \text{ tons/yr} * (1.00 - 0.00) = 0.53 \text{ tons/yr}$

1946 Telsmith Cone Crusher

Process Rate: 50 tons/hr  
Hours of operation: 8760 hr/yr

TSP Emissions:

Emission Factor: 0.036 lbs/ton (AP-42, Table 11.19.2-2, 7/94)  
Control Efficiency: 0%  
Calculations:  $0.036 \text{ lbs/ton} * 50 \text{ tons/hr} = 1.80 \text{ lbs/hr}$   
 $1.80 \text{ lbs/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ tons/lb} = 7.88 \text{ tons/yr}$   
 $7.88 \text{ tons/yr} * (1.00 - 0.00) = 7.88 \text{ tons/yr}$

PM-10 Emissions:

Emission Factor: 0.0024 lbs/ton (AP-42, Table 11.19.2-2, 7/94)  
Control Efficiency: 0%  
Calculations:  $0.0024 \text{ lbs/ton} * 50 \text{ tons/hr} = 0.12 \text{ lbs/hr}$   
 $0.12 \text{ lbs/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ tons/lb} = 0.53 \text{ tons/yr}$   
 $0.53 \text{ tons/yr} * (1.00 - 0.00) = 0.53 \text{ tons/yr}$

Diesel Generator (75 KW)

Hours of operation: 8760 hr/yr  
Number of Generators: 1 Generator

TSP Emissions

Emission Factor: 0.222 lbs/hr (AP-42, Table 3.3-1)  
Calculations:  $0.222 \text{ lbs/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ tons/lb} = 0.97 \text{ tons/yr}$

PM-10 Emissions:

Emission Factor: 0.222 lbs/hr (AP-42, Table 3.3-1)  
Calculations:  $0.222 \text{ lbs/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ tons/lb} = 0.97 \text{ tons/yr}$

NOx Emissions:

Emission Factor: 3.11 lbs/hr (AP-42, Table 3.3-1)  
Calculations:  $3.11 \text{ lbs/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ tons/lb} = 13.62 \text{ tons/yr}$

VOC Emissions:

Emission Factor: 0.248 lbs/hr (AP-42, Table 3.3-1)  
Calculations:  $0.248 \text{ lbs/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ tons/lb} = 1.09 \text{ tons/yr}$

CO Emissions:

Emission Factor: 0.671 lbs/hr (AP-42, Table 3.3-1)

Calculations: 0.671 lbs/hr \* 8760 hr/yr \* 0.0005 tons/lb = 2.94 tons/yr

SOx Emissions:

Emission Factor: 0.207 lbs/hr (AP-42, Table 3.3-1)  
Calculations: 0.207 lbs/hr \* 8760 hr/yr \* 0.0005 tons/lb = 0.91 tons/yr

Screen

Process Rate: 50 tons/hr  
Hours of operation: 8760 hr/yr  
Number of Screens: 1 Screen

TSP Emissions:

Emission Factor: 0.15 lbs/ton (AP-42, Table 11.19.2-2, 7/94)  
Control Efficiency: 0%  
Calculations: 0.15 lbs/ton \* 50 tons/hr \* 1 screen = 7.50 lbs/hr  
7.50 lbs/hr \* 8760 hr/yr \* 0.0005 tons/lb = 32.85 tons/yr  
32.85 tons/yr \* (1.00 - 0.00) = 32.85 tons/yr

PM-10 Emissions:

Emission Factor: 0.015 lbs/ton (AP-42, Table 11.19.2-2, 7/94)  
 Control Efficiency: 0%  
 Calculations:  $0.015 \text{ lbs/ton} * 50 \text{ tons/hr} * 1 \text{ screen} = 0.75 \text{ lbs/hr}$   
 $0.75 \text{ lbs/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ tons/lb} = 3.29 \text{ tons/yr}$   
 $3.29 \text{ tons/yr} * (1.00 - 0.00) = 3.29 \text{ tons/yr}$

Material Transfer

Process Rate: 50 tons/hr  
 Number of Transfers: 5 Transfers  
 Hours of operation: 8760 hr/yr

TSP Emissions:

Emission Factor: 0.026 lbs/ton (AP-42, Table 11.19.2-2, 7/94)  
 Control Efficiency: 0%  
 Calculations:  $0.03 \text{ lbs/ton} * 50 \text{ tons/hr} * 5 \text{ transfers} = 6.50 \text{ lbs/hr}$   
 $6.50 \text{ lbs/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ tons/lb} = 28.47 \text{ tons/yr}$   
 $28.47 \text{ tons/yr} * (1.00 - 0.00) = 28.47 \text{ tons/yr}$

PM-10 Emissions:

Emission Factor: 0.0014 lbs/ton (AP-42, Table 11.19.2-2, 7/94)  
 Control Efficiency: 0%  
 Calculations:  $0.001 \text{ lbs/ton} * 50 \text{ tons/hr} * 5 \text{ transfers} = 0.35 \text{ lbs/hr}$   
 $0.35 \text{ lbs/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ tons/lb} = 1.53 \text{ tons/yr}$   
 $.53 \text{ tons/yr} * (1.00 - 0.00) = 1.53 \text{ tons/yr}$

Pile Forming

Process Rate: 50 tons/hr  
 Number of Piles: 1 Piles  
 Hours of operation: 8760 hr/yr

TSP Emissions:

Emission Factor: 0.01 lbs/ton (AP-42, Table 8.23-1, moisture content >4% by weight, pg. 8.23-4, 8/82)  
 Control Efficiency: 0%  
 Calculations:  $0.01 \text{ lbs/ton} * 50 \text{ tons/hr} * 2 \text{ piles} = 0.50 \text{ lbs/hr}$   
 $0.50 \text{ lbs/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ tons/lb} = 2.19 \text{ tons/yr}$   
 $2.19 \text{ tons/yr} * (1.00 - 0.00) = 2.19 \text{ tons/yr}$

PM-10 Emissions:

Emission Factor: 0.004 lbs/ton (AP-42, Table 8.23-1, moisture content >4% by weight, pg. 8.23-4, 8/82)

Control Efficiency: 0%  
Calculations:  $0.004 \text{ lbs/ton} * 50 \text{ tons/hr} * 2 \text{ piles} = 0.20 \text{ lbs/hr}$   
 $0.20 \text{ lbs/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ tons/lb} = 0.88 \text{ tons/yr}$   
 $0.88 \text{ tons/yr} * (1.00 - 0.00) = 0.88 \text{ tons/yr}$

Bulk Loading

Process Rate: 50 tons/hr  
Number of Loads 1 Load  
Hours of operation: 8760 hr/yr

TSP Emissions:

Emission Factor: 0.01 lbs/ton (AP-42, Table 8.23-1, moisture content >4% by 8/82)

weight, pg. 8.23-4,

Control Efficiency: 0%  
Calculations:  $0.01 \text{ lbs/ton} * 50 \text{ tons/hr} * 1 \text{ load} = 0.50 \text{ lbs/hr}$   
 $0.50 \text{ lbs/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ tons/lb} = 2.19 \text{ tons/yr}$   
 $2.19 \text{ tons/yr} * (1.00 - 0.00) = 2.19 \text{ tons/yr}$

PM-10 Emissions:

Emission Factor: 0.004 lbs/ton (AP-42, Table 8.23-1, moisture content >4% by 8.23-4, 8/82)  
Control Efficiency: 0%  
Calculations: 0.004 lbs/ton \* 50 tons/hr \* 1 load = 0.20 lbs/hr  
0.20 lbs/hr \* 8760 hr/yr \* 0.0005 tons/lb = 0.88 tons/yr  
0.88 tons/yr \* (1.00 - 0.00) = 0.88 tons/yr

weight, pg.

Haul Roads

Vehicle miles traveled: 5 VMT/day {Estimated}  
Control Efficiency: 50% {Watering}

TSP Emissions:

TSP Emission Factor is based on AP-42, Section 11.2.1  
TSP Emission Factor (Rated Load Capacity <50 tons): 6 Lbs/VMT

$$E(\text{TSP}) = (5 \text{ VMT/day})(6.00 \text{ Lbs/VMT})(0.5) = 15.00 \text{ lbs/day or } 2.74 \text{ tons/yr}$$

PM10 Emissions:

PM-10 Emission Factor is based on AP-42, Section 11.2.1  
PM10 Emission Factor (Rated Load Capacity <50 tons): 2.70 Lbs/VMT

$$E(\text{PM10}) = (5 \text{ VMT/day})(2.70 \text{ Lbs/VMT})(0.5) = 6.75 \text{ Lbs/day or } 1.23 \text{ tons/yr}$$

#### IV. BACT Determination

A Best Available Control Technology (BACT) determination is required for any new or altered source. Dickman shall install on the new or altered source the maximum air pollution control capability which is technologically practicable and economically feasible, except that Best Available Control Technology shall be used.

All visible emissions from the 1946 Cedar Rapids and Telsmith crushing plant and associated equipment are limited to 20% opacity. Also, Dickman must take reasonable precautions to limit the fugitive emissions of airborne particulate matter on haul roads, access roads, parking areas and general plant property. To achieve the permit emission limitations, Dickman shall use water spray bars and dust suppressant as necessary, to maintain compliance with the opacity requirements and reasonable precautions limitations. The department has determined that using water spray bars, dust suppressant, and reasonable precautions limitations to maintain compliance with the opacity requirements, constitutes BACT for this source.

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

#### V. Existing Air Quality and Impacts

This permit is for a portable crushing facility, originally located at the NW<sup>1</sup>/<sub>4</sub>, SE<sup>1</sup>/<sub>4</sub>, Section 34, Township 20, Range 4 East, in Cascade County, Montana. In the view of the department, the amount of controlled particulate emissions generated by this project will not cause concentrations of PM-10 in the ambient air that exceed the set standard when the limitations are met. In addition, this source is 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 has conducted a private property taking and damaging assessment and has 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) 444-3454

**FINAL ENVIRONMENTAL ASSESSMENT (EA)**

Issued For: Dickman Excavating  
130 Gibson Flats Road  
Great Falls, MT 59405

Permit Number: 2961-00

Preliminary Determination on Permit Issued: 7/29/96  
Department Decision on Permit Issued: 8/14/96  
Final Permit Issued: 8/30/96

Montana Environmental Policy Act (MEPA) Compliance: An environmental assessment required by the MEPA, was completed for this project as follows.

Legal Description of Site: (portable source, original location) NW¼, SE¼, Section 34, Township 20, Range 4 East, in Cascade County, Montana.

Description of Project: This permit is for the operation of a portable 1946 Cedar Rapids Jaw Crusher (maximum production rate 50 TPH); a 1946 Telsmith Cone Crusher (maximum production rate 50 TPH) and associated equipment.

Benefits and Purpose of Proposal: This plant crushes and sorts sand and gravel for use in various construction industries.

Description and analysis of reasonable alternatives whenever alternatives are reasonably available and prudent to consider: No reasonable alternatives available.

A listing and appropriate evaluation of mitigation, stipulations and other controls enforceable by the agency or another government agency: A list of enforceable conditions, including a BACT analysis, are contained in permit #2961-00.

Description and analysis of regulatory impacts on private property rights: The department has considered alternatives to the conditions imposed in this permit as part of the permit development. The department has 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.



Potential Impact on Physical Environment

		Major	Moderate	Minor	None	Unknown	Comments Attached
1	Terrestrial and Aquatic Life and Habitats			X			
2	Water Quality, Quantity and Distribution			X			
3	Geology and Soil Quality, Stability and Moisture			X			
4	Vegetation Cover, Quantity and Quality			X			
5	Aesthetics			X			
6	Air Quality			X			
7	Unique Endangered, Fragile or Limited Environmental Resource					X	
8	Demands on Environmental Resource of Water, Air and Energy			X			
9	Historical and Archaeological Sites					X	
10	Cumulative and Secondary Impacts			X			

Potential Impact on Human Environment

		Major	Moderate	Minor	None	Unknown	Comments Attached
1	Social Structures and Mores				X		
2	Cultural Uniqueness and Diversity				X		
3	Local and State Tax Base and Tax Revenue			X			
4	Agricultural or Industrial Production			X			
5	Human Health			X			
6	Access to and Quality of Recreational and Wilderness Activities			X			
7	Quantity and Distribution of Employment			X			
8	Distribution of Population			X			
9	Demands for Government Services			X			
10	Industrial and Commercial Activity			X			
11	Locally Adopted Environmental Plans and Goals			X			
12	Cumulative and Secondary Impacts			X			

Recommendation: No EIS is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: This plant is a portable source and any impacts will be minimal. In addition, the controls contained in permit #2961-00 will further limit the emissions.

Other groups or agencies contacted or which may have overlapping jurisdiction: Department of Environmental Quality, Reclamation.

Individuals or groups contributing to this EA: Department of Environmental Quality.

EA prepared by: Vickie Walsh

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