

DEPARTMENT OF ENVIRONMENTAL QUALITY

PERMITTING AND COMPLIANCE DIVISION

Air and Waste Management Bureau



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STATE OF MONTANA

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HELENA, MONTANA 59620-0901

September 21, 1998

Charles Donaldson
Donaldson Brothers Ready Mix
477 Highway 93 North
Hamilton, Montana 59840

Dear Mr. Donaldson:

Air Quality Permit #3017-00 is deemed final as of September 20, 1998 by the Department of Environmental Quality. This permit is for a portable screen and associated equipment. All conditions of the department's decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the department,

A handwritten signature in cursive script, appearing to read "Richard Knatterud".

Richard Knatterud
Air Permitting Section Supervisor

RK:bjd

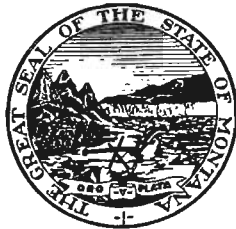
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Air Quality Permit #3017-00

Donaldson Brothers Ready Mix
477 Highway 93 North
Hamilton, Montana 59840

September 20, 1998



AIR QUALITY PERMIT

Issued To: Donaldson Brothers Ready Mix Permit #3017-00
477 Highway 93 North Application Complete: 07/06/98
Hamilton, Montana 59840 Preliminary Determination: 07/27/98
Department Decision: 09/04/98
Permit Final: 09/20/98
AFS# 777-3017-00

An air quality permit is hereby granted to Donaldson Brothers Ready Mix (Donaldson) pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.701 *et seq.*, as amended, for the following:

Section I: Permitted Facilities

- A. Equipment: A portable 1989 Fabtec screen, Model MKIII, (Maximum production 100 TPH) and associated equipment.
- B. Original Location: NE¼ of SW¼, Section 30, Township 7 North, Range 20 West, Ravalli County.

Section II: Limitations and Conditions

- A. Operational
 - 1. Donaldson shall not cause or authorize to be discharged into the atmosphere from any screen, conveyor transfers and associated equipment any visible fugitive emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304 and ARM 17.8.715).
 - 2. Donaldson 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 17.8.715).
 - 3. Donaldson 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.2 (ARM 17.8.715).
 - 4. Water spray bars shall be available on site at all times and operated as necessary, to maintain compliance with the opacity limitation in Section II.A.1 (ARM 17.8.715).
 - 5. Total particulate emissions from this screen, in conjunction with total particulate emissions from any additional equipment at any individual site, shall be less than 250 tons per year (ARM 17.8.801).
 - 6. The 1989 Fabtec screen is limited to a production of 2400 tons per 24 hour rolling period (ARM 17.8.715).

- B. All tests shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- C. The department may require testing (ARM 17.8.105).
- D. Reporting Requirements
 - 1. If this screening plant is moved to another location, a notice of Intent to Transfer location of air quality permit must be sent to the Montana Department of Environmental Quality (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. This Change of Location notice must be published at least fifteen (15) days prior to the move. The Intent to Transfer form and the proof of publication of the Change of Location form must be submitted to the department prior to the move. These forms are available from the department (ARM 17.8.734).
 - 2. Donaldson 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 Donaldson as a permanent business record for at least five 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 17.8.710).
 - 3. Donaldson 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 17.8.505).

Donaldson shall notify the department of any construction or improvement project conducted pursuant to ARM 17.8.705(1)(q) that would change the facility's annual emission inventory. The notice must be included with the annual emission inventory submitted to the department and must include information sufficient to calculate the facility's estimated actual emissions (ARM 17.8.708).

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 17.8.701, *et seq.* (ARM 17.8.717).
- 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 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 17.8.716 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, failure to pay by the permittee of an annual operation fee may be grounds for revocation of this permit, 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
Donaldson Brothers Ready Mix
Permit Number 3017-00

I. Introduction/Process Description

A. Permitted Equipment

A portable 1989 Fabtec Screen, Model MKIII (maximum production 100 TPH), and associated equipment. The facility will originally locate at the NE¼ of SW¼, Section 30, Township 7 North, Range 20 West, Ravalli, Montana.

B. Process Description

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

For a typical operational setup, the dump truck dumps raw pit material into the feed hopper, which conveys the material to the screen. The screen sorts the pit material and the conveyors transfer the sorted material to stockpiles. A loader moves the piles and loads haul trucks which transport the material to the job site.

C. Discussion

In the preliminary determination of this permit, the department had a condition that limited screening production within a 24-hour period when operated in conjunction with equipment permitted under permit #3016-00. The department removed this limitation because it implied approval of this equipment operating together; this may not always be the case at every site of operations, including the original site. The department will make determinations of dual and/or multiple permit operations on a case-by-case basis when the transfer notification is submitted.

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 17.8, Sub-Chapter 1, General Provisions, including, but not limited to:

1. 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.

2. 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.*, MCA.

Donaldson 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.

3. ARM 17.8.111, 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.

B. ARM 17.8, Sub-Chapter 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-10.

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

C. ARM 17.8, Sub-Chapter 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 to an outdoor atmosphere from any source installed after Nov. 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
2. ARM 17.8.308, Particulate Matter, Airborne. Under this section, Donaldson 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 17.8.340, Standard 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 the information submitted by Donaldson, the portable 1989 Fabtec Screening plant is not an NSPS affected source (40 CFR Part 60, Subpart A General Provisions, and Subpart OOO Non-Metallic Mineral Processing Plants) because the screening plant does not meet the definition of a nonmetallic mineral processing plant.

D. ARM 17.8, Sub-Chapter 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. Donaldson 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. Donaldson submitted the appropriate permit application fee.
2. ARM 17.8.505, Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the department. This operation fee is based on the actual or estimated amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, 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.

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

1. ARM 17.8.704, General Procedures for Air Quality Preconstruction Permitting. An air quality preconstruction permit shall contain requirements and conditions applicable to both construction and subsequent use.
2. ARM 17.8.705, When Permit Required--Exclusions. Permits are required for sources that have the potential to emit greater than twenty-five (25) tons/year of any pollutant. Donaldson has the potential to emit more than twenty-five tons per year of particulate matter; therefore, a permit is required.
3. ARM 17.8.706, 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. Donaldson has submitted their application for an air quality permit as required for the operation of a portable screening plant and associated equipment.
4. ARM 17.8.710, 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. Donaldson has demonstrated compliance with applicable rules and standards as required for permit issuance.

5. ARM 17.8.715, Emission Control Requirements. Donaldson is required to install, on a new or altered source, the maximum air pollution control capability which is technically practicable and economically feasible, except that a Best Available Control Technology (BACT) shall be utilized. A BACT review was conducted for the new or altered source and is discussed in Section IV of the permit analysis.
 6. ARM 17.8.716, 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.
 7. ARM 17.8.717, 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.
 8. ARM 17.8.720, Public Review of Permit Applications. This rule requires that Donaldson notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. Donaldson has submitted an affidavit of publication from *Ravalli Republic* published on July 2, 1998, as proof of compliance with the public notice requirements.
 9. ARM 17.8.731, 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.
 10. ARM 17.8.733, 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 those 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.
- F. 17.8, Sub-Chapter 8, Prevention of Significant Deterioration (PSD), including, but not limited to:
1. ARM 17.8.801, Definitions. This rule is a list of applicable definitions used in this sub-chapter.
 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 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 listed and does not have the potential to emit more than 250 tons per year (excluding fugitive emissions) of any air pollutant.

III. Emission Inventory Permit #3017-00

Source	TSP	PM-10	Tons/Year NO _x	VOC	CO	SOX
1989 Fabtec Screen	32.85	3.29				
Material Transfer	5.69	0.31				
Pile Forming	2.19	0.875				
Bulk Loading	2.19	0.875				
Haul Roads	2.74	1.23				
Total	45.66	6.58	0.00	0.00	0.00	0.00
PSD	32.85					

1989 Fabtec Screen

Process Rate: 100 tons/hr
Hours of operation: 8760 hr/yr

TSP Emissions:

Emission Factor: 0.15 lbs/ton (AP-42, Table 11.19.2-2, 7/94)
Control Efficiency: 50%
Calculations: 0.150 lbs/ton * 100 tons/hr = 15.00 lbs/hr
15.00 lbs/hr * 8760 hr/yr * 0.0005 tons/lb = 65.70 tons/yr
65.70 tons/yr * (1.00 - 0.50) = 32.85 tons/yr

PM-10 Emissions:

Emission Factor: 0.015 lbs/ton (AP-42, Table 11.19.2-2, 7/94)
Control Efficiency: 50%
Calculations: 0.0150 lbs/ton * 100 tons/hr = 1.50 lbs/hr
1.50 lbs/hr * 8760 hr/yr * 0.0005 tons/lb = 6.57 tons/yr
6.57 tons/yr * (1.00 - 0.50) = 3.29 tons/yr

Material Transfer

Process Rate: 100 tons/hr
Number of Transfers: 1 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: 50%
Calculations: 0.026 lbs/ton * 100 tons/hr * 1 transfers = 2.60 lbs/hr
2.60 lbs/hr * 8760 hr/yr * 0.0005 tons/lb = 11.39 tons/yr
11.39 tons/yr * (1.00 - 0.50) = 5.69 tons/yr

PM-10 Emissions:

Emission Factor: 0.0014 lbs/ton (AP-42, Table 11.19.2-2, 7/94)
Control Efficiency: 50%
Calculations: 0.0014 lbs/ton * 100 tons/hr * 1 transfers = 0.14 lbs/hr
0.14 lbs/hr * 8760 hr/yr * 0.0005 tons/lb = 0.61 tons/yr
0.61 tons/yr * (1.00 - 0.50) = 0.31 tons/yr

Pile Forming

Process Rate: 100 tons/hr
Number of Piles: 1 Pile
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: 50%
 Calculations: 0.01 lbs/ton * 100 tons/hr * 1 pile = 1.00 lbs/hr
 1.00 lbs/hr * 8760 hr/yr * 0.0005 tons/lb = 4.38 tons/yr
 4.38 tons/yr * (1.00 - 0.50) = 2.19 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: 50%
 Calculations: 0.004 lbs/ton * 100 tons/hr * 1 pile = 0.40 lbs/hr
 0.40 lbs/hr * 8760 hr/yr * 0.0005 tons/lb = 1.75 tons/yr
 1.75 tons/yr * (1.00 - 0.50) = 0.875 tons/yr

Bulk Loading

Process Rate: 100 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 weight, pg. 8.23-4, 8/82)
 Control Efficiency: 50%
 Calculations: 0.01 lbs/ton * 100 tons/hr * 1 load = 1.00 lbs/hr
 1.00 lbs/hr * 8760 hr/yr * 0.0005 tons/lb = 4.38 tons/yr
 4.38 tons/yr * (1.00 - 0.50) = 2.19 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: 50%
 Calculations: 0.004 lbs/ton * 100 tons/hr * 1 load = 0.40 lbs/hr
 0.40 lbs/hr * 8760 hr/yr * 0.0005 tons/lb = 1.75 tons/yr
 1.75 tons/yr * (1.00 - 0.50) = 0.875 tons/yr

Haul Roads

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

TSP Emission Factor is based on AP-42, Section 11.2.1

TSP Emissions:
 TSP Emission Factor (Rated Load Capacity <50 tons): 6 Lbs/VMT
 E(TSP) = (5 VMT/day)(6.00 Lbs/VMT)(0.5)
 E(TSP) = 15.00 Lbs/day
 or 2.74 tons/yr

PM-10 Emission Factor is based on AP-42, Section 11.2.1

PM10 Emissions:
 PM10 Emission Factor (Rated Load Capacity <50 tons): 2.70 Lbs/VMT
 E(PM10) = (5 VMT/day)(2.70 Lbs/VMT)(0.5)
 E(PM10) = 6.75 Lbs/day
 or 1.23 tons/yr

IV. BACT Determination

A Best Available Control Technology (BACT) determination is required for any new or altered source. Donaldson 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 utilized.

The 1989 Fabtec screen is limited to a production rate of 2400 tons in a rolling 24-hour period. All visible emissions from this screen are limited to 20% opacity. Also, Donaldson 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, Donaldson shall use water spray bars and dust suppressant as necessary to maintain compliance with the opacity and reasonable precautions limitations. The department has determined that the production rate limitation and use of water spray bars and dust suppressant to maintain compliance with the opacity requirements and reasonable precautions limitations, 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 screen and associated equipment, originally located in the NE $\frac{1}{4}$ of SW $\frac{1}{4}$, Section 30, Township 7 North, Range 20 West, Ravalli 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. 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
Air and Waste Management Bureau
P.O. Box 200901, Helena, Montana 59620
(406) 444-3490

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued For: Donaldson Brothers Ready Mix.
477 HWY 93 North
Hamilton MT 59840

Air Quality Permit Number: 3017-00

Preliminary Determination on Permit Issued: 07/27/98

Department Decision on Permit Issued: 09/04/98

Final Permit Issued: 09/20/98

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

Legal Description of Site: (portable source, original location) NE¼ of SW¼, Section 30, Township 7 North, Range 20 West, in Ravalli County, Montana.

Description of Project: This permit is for a 1989 Fabtec screen (maximum production 100 TPH) and associated equipment to operate in Donaldson's north pit. This pit is contracted under the mined land reclamation contract #00441, Amendments 1 and 3.

Benefits and Purpose of Proposal: This plant sorts sand and gravel for use in industry.

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 #3017-00.

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

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

Potential Impact on Human Environment

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

SUMMARY OF COMMENTS ON POTENTIAL IMPACTS: The following comments have been prepared by the Department.

POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT

1. Terrestrial and Aquatic Life and Habitats

Impacts to terrestrial and aquatic life and habitats will be insignificant. This facility operates on small portions of land.

2. Water Quality, Quantity and Distribution

As a result of mining and crushing activities, the existing operations at the original site include ponds used to capture pit water and water from dredge mining. Sediment largely settles out in the ponds. The pond water has the potential to discharge into local surface and ground water. This discharged water may increase sediment or other pollutant concentrations over background levels in local, undisturbed surface and ground water. Donaldson must acquire MPDES process and storm water discharge permits to operate the site and discharge to state surface waters. A Montana ground water pollution control system permit may be required for certain discharges to ground water. These permits establish limits on discharge which protect quality of waters at a particular site. When permits are issued, there are likely to be insignificant effects on quality or use of adjacent waters. Continued use of these ponds must also be addressed in Donaldson's mined land reclamation contract.

3. Geology and Soil Quality, Stability and Moisture

Mining activities occurring at the original location of this facility are addressed in the mined land reclamation contract issued by the Industrial and Energy Minerals Bureau of the department. Expansion beyond the contracted boundary has occurred. This issue will be addressed through the amendment of the mined land reclamation contract and possibly through enforcement by the department.

4. Vegetation Cover, Quantity and Quality

Issuance of this air quality permit will not have a direct impact on the vegetation at any site where operations will occur. Insignificant, indirect impacts would occur from associated mining activities. These are mitigated for the current site through the revegetation and reclamation requirements of Donaldson's mined land reclamation contract #00441, Amendments 1 and 3. This contract will address any further issues arising from the expansion when future amendments to this contract have been completed.

5. Aesthetics

At the existing location, the equipment listed in this permit will be visible and will create additional noise in the area. Due to the small size of equipment to be used, noise will be minimally disruptive in the context of background noise and distance to adjacent homeowners. Current operations do not occur during the night hours, which further reduces the disruptive nature of noises associated with this type of equipment. Therefore, the department believes any impacts will be insignificant.

6. Air Quality

This permit includes conditions limiting the opacity from the operation, as well as requiring water spray bars to control air pollution. In addition to water spray bars, Donaldson is required to use water or chemical dust suppressants on all haul roads. Therefore, air quality impacts from the operation are nonsignificant.

7. Unique Endangered, Fragile or Limited Environmental Resources

The department is unaware of any unique, endangered, fragile or limited environmental resources associated with the original location at which this equipment currently operates. It has been determined that the closest sensitive species in the area is the Fringed Myotis. This species has been located in Section 36 of Township 7N, Range 21W which is southwest of the section in which Donaldson's north pit is located. The gravel pits have been in operation for many years at this site. Birds, wildlife, and plant species that live in the area surrounding the pit and near the Bitterroot River should not be impacted by air emissions.

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

Wetlands may have been intersected by Donaldson's pit expansion onto the flood plain. Disturbance to wetlands is regulated by the U. S. Army Corp of Engineers (USACOE). Mr. Donaldson has been informed (Rod Samdahl letter August 10, 1998) that a permit from the USACOE may be required. If a permit is required, Donaldson will be required to have appropriate mitigating plans for the disturbed wetlands. The department would incorporate these requirements into the mined land reclamation contract if the USACOE determines wetland disturbance would occur as a result of future plans.

Demands on air are addressed in permit #3017-00. Energy demands are expected to be nonsignificant because this facility is small by industry standards.

9. Historical and Archaeological Sites

Historical and archaeological sites may be present at the locations where operations will be performed. If artifacts are found during the course of mining, operations should be routed around the site of discovery for a reasonable time until salvage can be made. The State Historic Preservation Office should be promptly notified.

10. Cumulative and Secondary Impacts

Donaldson has expanded the pit beyond the boundary permitted in their mined land reclamation contract #00441, Amendments 1 and 3. The expansion issue will be addressed through the mined land reclamation contract amendment required by the Industrial and Energy Minerals Bureau of the department. This contract amendment will include an environmental assessment which will address issues from a mining perspective. The potential of existing wetland intersection by the expansion onto the flood plain will be addressed through determinations made by the USACOE. The department may also address issues of concern through enforcement actions.

As a result of mining and crushing activities, the existing operations at the original site include ponds used to capture pit water and water from dredge mining. Sediment largely settles out in the ponds. The pond water has the potential to discharge into local surface and ground water. This discharged water may increase sediment or other pollutant concentrations over background levels in local, undisturbed surface and ground water. Donaldson must acquire MPDES process and storm water discharge permits to operate the site and discharge to state surface waters. A Montana ground water pollution control system permit may be required for certain discharges to ground water. These permits establish limits on discharge which protect quality of waters at a particular site. When permits are issued, there is likely to be an insignificant effect on quality or use of adjacent waters. Continued use of these ponds must also be addressed in Donaldson's amended mined land reclamation contract.

The potential exists for noise and aesthetic impacts by future activities associated with this operation. These issues are usually addressed through the mined land reclamation contract and may be addressed through the upcoming amendment of this contract and the accompanying environmental assessment. Therefore, future noise and aesthetic impacts should not be significant.

There is potential for other portable operations to locate at any of the sites where nonmetallic mineral processing may occur. However, any such operation would have to apply for and hold the appropriate permits/contracts from the department prior to operation. These permits/contracts will address the environmental impacts associated with such operations at this or any other site. All sites are limited to a total particulate emissions of 250 tons/year or less from the plant and associated equipment.

There may be dust created by traffic on haul roads; however, the authorizing agent of the road is required to take reasonable precautions to reduce fugitive emissions. Therefore, the dust should not result in a significant impact.

POTENTIAL IMPACT ON HUMAN ENVIRONMENT

1. Social Structures and Mores
2. Cultural Uniqueness and Diversity
8. Distribution of Population

There will be no disruption of native or traditional lifestyles or communities from this operation. The cultural uniqueness and diversity of the area will not be impacted by this operation. No change in housing will be required due to this operation. This operation is small by industrial standards and operates on small portions of land.

3. Local and State Tax Base and Tax Revenue
7. Quantity and Distribution of Employment
9. Demands of Government Services

This permitting action will not have significant effects to the local and state tax base and tax revenue. This permitting action does not represent an increase in the operations or activities at this site. Activities associated with this type of operation usually do not greatly effect the quality and distribution of employment in the area. The demands for government services are not significantly affected by this permitting action.

4. Agricultural or Industrial Production
10. Industrial and Commercial Activity

Operations will not displace any agricultural production. This operation is small by industrial standards and will, therefore, not have a significant impact on local industrial production. More than likely, the activities will only employ people from the company. It is possible that company employees may travel with the equipment, if moved to other locations, and stay in that area during a short-term project. No additional industrial or commercial activity is expected as a result of the operations.

5. Human Health

This permit incorporates conditions to ensure that the operations will be conducted in compliance with all applicable rules and standards. These conditions are designed to be protective of human health; therefore, any impacts will be nonsignificant.

6. Access to and Quality of Recreational and Wilderness Activities

The operation will not affect any access to recreational and wilderness activities, as any existing access will remain in place. Individuals may use the Bitterroot River for recreation purposes. However, there is a buffer of trees and vegetation between the river and the pit which further minimize the impact. Therefore, effects to the quality of recreation will not be significant.

11. Locally Adopted Environmental Plans and Goals

There will be no affect to the locally adopted environmental plans and goals because this plant will operate at sites where mining activity is contracted.

12. Cumulative and Secondary Impacts

Donaldson has expanded the pit beyond the boundary permitted in their current mined land reclamation contract (#00441, Amendments 1 and 3). This issue will be addressed through future amendments to this contract which will include an environmental assessment and through possible enforcement by the department.

The potential exists for noise and aesthetic impacts by future activities associated with this operation. These issues are usually addressed through the mined land reclamation contract and may be addressed through the upcoming amendment of Donaldson's contract and the accompanying environmental assessment. Therefore, future aesthetic impacts should not be significant.

There is potential for other portable operations to locate at any of the sites where nonmetallic mineral processing may occur. However, any such operation would have to apply for and hold the appropriate permits/contracts from the department prior to operation. These permits/contracts will address the human health impacts associated with such operations at this or any other site. All sites are limited to total particulate emissions of 250 tons/year or less from the plant and associated equipment.

There may be dust created by traffic on haul roads; however, the authorizing agent of the road is required to take reasonable precautions to reduce fugitive emissions. Therefore, the dust should not result in a significant impact.

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 there will be no significant impacts. In addition, the controls contained in permit #3017-00 will further limit the emissions.

Other groups or agencies contacted or which may have overlapping jurisdiction:
Department of Environmental Quality, Industrial and Energy Minerals Bureau.
Department of Environmental Quality, Water Protection Bureau.
Montana Natural Heritage Program.

Individuals or groups contributing to this EA:
Department of Environmental Quality, Permitting and Compliance Division.
Department of Environmental Quality, Industrial and Energy Minerals Bureau.
Department of Environmental Quality, Water Protection Bureau.

EA prepared by: Lana Hedlund
Date: September 3, 1998