

AIR QUALITY PERMIT

Issued To: Great Falls Redi-Mix, Inc.
P.O. Box 1989
Great Falls, MT 59403

Permit #2862-01
Application Deemed Complete: 2/21/00
Preliminary Determination: 3/13/00
Department Decision: 3/31/00
Permit Final: 4/16/00
AFS #: 013-0020

An air quality permit, with conditions, is hereby granted to Great Falls Redi-Mix, Inc. (Great Falls Redi-Mix) 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:

1. A 1967 Madsen 5000-Pound Special Batch Asphalt Plant, serial #553 (maximum production rate 170 TPH), and associated equipment. Particulate emissions will be controlled by a Venturi scrubber.
2. A 1963 Johnson Concrete Batch Plant, serial #63063-1 (maximum production rate 60 yd³/hr) and associated equipment.

B. Original Location: SW¹/₄, Section 15, Township 20 North, Range 3 East, in Cascade County, Montana.

C. Current Permit Action:

The current permit action is considered a permit alteration involving replacement of the 1959 Madsen 2000-Pound Special Batch Asphalt Plant with a 1967 Madsen 5000-Pound Batch Asphalt Plant. The 1967 Madsen 5000-Pound Batch Asphalt Plant will be added to the existing equipment covered in permit #2862-00. Permit **#2862-01** replaces permit #2862-00.

Section II: Limitations and Conditions

A. General Facility Emissions Limitations

1. Great Falls Redi-Mix 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).
2. Great Falls Redi-Mix 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.1 (ARM 17.8.715).

3. If the permitted equipment is used in conjunction with any other equipment owned and operated by Great Falls Redi-Mix, at the same site, production shall be limited to correspond with an emissions level that does not exceed 250 tons/year during any rolling twelve (12) month time period. Any calculations used to establish production levels shall be approved by the Department of Environmental Quality (department) (ARM 17.8.710).

B. Batch Asphalt Plant Emissions Limitations

1. Asphalt plant particulate matter emissions shall be limited to 0.10 gr/dscf (ARM 17.8.715).
2. Great Falls Redi-Mix shall not cause or authorize to be discharged into the atmosphere, from the asphalt plant, stack emissions that exhibit 20% opacity or greater averaged over six (6) consecutive minutes (ARM 17.8.304 and ARM 17.8.715).
3. Great Falls Redi-Mix shall not cause or authorize to be discharged into the atmosphere from systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filter; systems for mixing hot mix asphalt; and the loading, transfer, and storage systems associated with emissions control systems, any visible emissions that exhibit opacity of 20% or greater averaged over (6) consecutive minutes (ARM 17.8.308 and ARM 17.8.715).
4. The asphalt plant production shall be limited to 337,450 tons during any twelve (12) month rolling time period (ARM 17.8.710).
5. A Venturi scrubber for air pollution control, with a device to measure the pressure drop (magnehelic guage, monometer, etc.) must be installed and maintained. Pressure drop must be measured in inches of water. Temperature indicators at the control device inlet and outlet must be installed and maintained. Pressure drop on the control device and temperature must be recorded daily and kept on site according to Section II.E.3 (ARM 17.8710).
6. Once a stack test is performed, the asphalt plant production rate shall be limited to the average production rate during the last source test demonstrating compliance (ARM 17.8.710).

C. Concrete Batch Plant Emissions Limitations

1. Great Falls Redi-Mix shall install, operate, and maintain the particulate containment boot, and all other emission control equipment specified in the application for their Montana Air Quality Permit and all supporting documentation (ARM 17.8.710).
2. Great Falls Redi-Mix shall not cause or authorize to be discharged into the atmosphere from the ready mix plant:

- a. Any vent emission which exhibits greater than 20% opacity averaged over six (6) consecutive minutes (ARM 17.8.304);
- b. Any fugitive emissions from any truck loading or unloading which exhibit greater than 20% opacity averaged over six (6) consecutive minutes (ARM 17.8.304); or
- c. Any fugitive emissions from any transferring operations which exhibit greater than 20% opacity averaged over six (6) consecutive minutes (ARM 17.8.304).

D. Testing Requirements

1. Within 60 days after achieving maximum production rate, but no later than 180 days after initial start up of the equipment listed in Section I.A.1, an EPA Methods 1-5 source test shall be performed on the asphalt plant. Testing shall continue on an every-four-year-basis, after the initial source test, to demonstrate compliance with Section II.B.1. Also, an EPA Method 9 opacity test shall be performed, in conjunction with all particulate tests, to demonstrate compliance with the conditions specified in Section II.B.2 (ARM 17.8.105 and ARM 17.8.710).
2. Pressure drop on the control devices and temperature must be recorded during the test and reported as part of the test results specified in Section II.B.5 (ARM 17.8.710).
3. Since plant production will be limited to the average production rate, during the test, it is suggested that the test be performed at the highest production rate practical (ARM 17.8.710).
4. Great Falls Redi-Mix may retest at any time in order to test at a higher production rate (ARM 17.8.710).
5. All source tests must be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
6. The department may require further testing (ARM 17.8.105).

E. Reporting Requirements

1. Great Falls Redi-Mix shall supply the department with annual production information for all emission points, as required by the department, in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the emission inventory report and sources identified in Section II.A, II.B, and II.C 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).

2. If this asphalt plant and the concrete batch plant are 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 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 department of prior to the move. These forms are available from the department (ARM 17.8.734).
3. Great Falls Redi-Mix shall maintain on-site records showing daily hours of operation, daily production rates, and daily pressure drop and temperature readings, for the last twelve (12) months. The records compiled in accordance with this permit shall be maintained by Great Falls Redi-Mix 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 site for inspection by the department (ARM 17.8.710).
4. Great Falls Redi-Mix shall notify the department of any construction or improvement project conducted pursuant to ARM 17.8.705(1)(r) 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, ten (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 anticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.705(1)(r)(iv)(ARM 17.8.705).
5. Great Falls Redi-Mix shall document, by month, the production of the asphalt plant. By the 25th of each month, Great Falls Redi-Mix shall total the monthly throughput of the asphalt plant during the previous twelve months to verify compliance with the limitation in Section II.B.4. A written report of the compliance verification shall be submitted along with the annual emissions inventory (ARM 17.8.710).
6. Great Falls Redi-Mix shall annually certify, as required by ARM 17.8.1204(3)(b), that its actual emissions are less than those that would require the source to obtain an air quality Title V operating permit. The annual certification shall comply with the certification requirements of ARM 17.8.1207. The annual certification shall be submitted no later than March 1 and may be submitted with the annual emission inventory information.

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 and 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 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 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 (3) years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked.
- H. Permit Fees - Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay 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.
- J. Great Falls Redi-Mix shall comply with the conditions contained in this permit while operating at any location in the state of Montana, except within those areas that have a department approved permitting program.

PERMIT ANALYSIS
Great Falls Redi-Mix, Inc.
Permit Number 2862-01

I. Introduction/Process Description

A. Equipment List

The following equipment is permitted under permit #2862-01;

1. A 1967 Madsen 5000 Pound Batch Asphalt Plant, serial #553 (maximum production rate 170 TPH), Venturi scrubber, and associated equipment.
2. A 1963 Johnson Concrete Batch Plant, serial #63063-1 (maximum production rate 60 yd³/hr).

B. Process Description

1. Batch Asphalt Plant

A typical operation begins by loading the aggregate into hoppers and then conveying it to the rotary dryer. The material is completely dried and conveyed to the pugmill where it is mixed with hot asphalt oil. The mixture is then loaded into haul trucks and taken to the current project site. A Venturi scrubber with an approximate 95% efficiency is used to control particulate emissions from the pugmill.

2. Concrete Batch Plant

The concrete batch plant operations begin by washing coarse and fine aggregate for concrete production and storing it on site. The material will be transferred by loader from the stockpiles to a conveyor and into the elevated bins. The bins will dump onto a weigh hopper along with cement and water being added to the weigh hopper. Concrete is then transferred to the haul truck.

C. Permit History

Great Falls Redi-Mix was initially issued a permit to operate a batch asphalt plant and a concrete batch plant by Cascade County.

On September 21, 1996, Great Falls Redi-Mix was issued permit #2862-00 for the operation of a 1959 Madsen 2000 Special Batch Asphalt Plant, serial #383 (maximum production rate 65 TPH), and associated equipment. The batch asphalt plant included a venturi scrubber to control particulate emissions. As part of this permit action, Great Falls Redi-Mix was also permitted to operate a 1963 Johnson Concrete Batch Plant, serial #63063-1 (maximum production rate 60 yd³/hr). This permitting action reflected the transfer in permitting authority from Cascade County to the State of Montana.

D. Current Permit Action

The current permit action is considered a permit alteration involving replacement of the 1959 Madsen 2000-Pound Special Batch Asphalt Plant with a 1967 Madsen 5000-Pound Batch Asphalt Plant. The 1967 Madsen 5000-Pound Batch Asphalt Plant will be added to the existing equipment covered in permit #2862-00. Permit **#2862-01** replaces permit #2862-00.

E. Additional Information

Additional Information such as applicable rules and regulations, BACT/RACT determinations, air quality impacts, and environmental assessments, are included in the analysis associated with each change to the permit.

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

1. ARM 17.8.101 Definitions. This rule is a list of applicable definitions used in this subchapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the department.
3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, MCA.

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

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

5. 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. Sub-Chapter 2 - Ambient Air Quality, including, but not limited to:

The following ambient air quality standards or requirements may apply, 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 Standards for Settled Particulate Matter; and
5. ARM 17.8.223, Ambient Air Quality Standards for PM-10.

Great Falls Redi-Mix must comply with the applicable ambient air quality standards. Reference Section V, Existing Air Quality and Air Quality Impacts.

C. 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 into the outdoor atmosphere from any source installed after November 23, 1968, emissions that exhibit an opacity of 20% or greater averaged over six (6) consecutive minutes.
2. ARM 17.8.308, Particulate Matter-Airborne. This section requires an opacity limitation of 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter.
3. ARM 17.8.309, Particulate Matter, Fuel Burning Equipment. This section requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section.
4. ARM 17.8.310, Particulate Matter, Industrial Processes. This section requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.
5. ARM 17.8.322, Sulfur Oxide Emissions-Sulfur in Fuel. Commencing July 1, 1971, no person shall burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard condition.
6. ARM 17.8.340, Standards of Performance for New Stationary Sources. The owner and 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. This facility consists of a 1967 5000-Pound Madsen Batch Asphalt Plant and a 1963 Johnson Batch Concrete Plant; therefore, NSPS requirements (40 CFR Part 60, Subpart A General Provisions, and Subpart I Hot Mix Asphalt Facilities) do not apply to this source.

D. 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. Great Falls Redi-Mix 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. Great Falls Redi-Mix has submitted the appropriate application fee for the alteration of permit #2862-00.
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.

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. 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. This rule requires a facility to obtain an air quality permit or permit alteration if they construct, alter, or use an air contaminant source which has the potential to emit more than twenty five (25) tons/year of any pollutant from a concrete ready mix plant and more than five (5) tons/year of any pollutant from an asphalt plant. Great Falls Redi-Mix has the potential to emit more than twenty five (25) tons per year of particulate matter from their concrete ready mix plant, and more than five (5) tons per year of particulate matter, PM-10, NO_x, VOC, and CO from their asphalt plant; 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. Great Falls Redi-Mix has submitted their application for an air quality permit as

required for the construction and operation of a portable 1967 Madsen 5000-Pound Special Batch Asphalt Plant, serial #553 (maximum production rate 170 TPH); and associated equipment.

4. ARM 17.8.707, Waivers. ARM 17.8.706 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.
5. 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. The source has demonstrated compliance with the applicable rules and standards as required for permit issuance.
6. ARM 17.8.715, Emission Control Requirements. Great Falls Redi-Mix 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 of this permit analysis.
7. 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.
8. ARM 17.8.717, Compliance with Other Statutes and Rules. This rule states that the issuance of this permit does not relieve the permit holder from the responsibility of complying with all other applicable federal and Montana statutes, rules, and standards.
9. ARM 17.8.720, Public Review of Permit Applications. This rule requires that Great Falls Redi-Mix 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. Great Falls Redi-Mix submitted an affidavit of publication on February 21, 2000, from the Great Falls Tribune, as proof of public notice.
10. 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 (1) year after the permit is issued.
11. 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 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.

12. ARM 17.8.734, 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.

F. Sub-Chapter 8 - Prevention of Significant Deterioration of Air Quality, including, but not limited to:

1. ARM 17.8.801, Definitions. This rule is a list of applicable definitions used in this subchapter.
2. ARM 17.8.818, Review of Major Stationary Sources and Major Modification--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819-17.8.827 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 a listed source and does not have the potential to emit more than 250 tons per year or more of any air pollutant.

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

1. ARM 17.8.1201, Definitions. (23) Major Source under Section 7412 of the Federal Clean Air Act (FCAA) is defined as any stationary source having:
 - a.
 - i. Potential To Emit (PTE) > 10 tons/year of any one hazardous air pollutant (HAP), or
 - ii. PTE > 25 tons/year of a combination of all HAPs, or
 - iii. lesser quantity as the department may establish by rule.
 - b. PTE > 100 tons/year of any pollutant.
 - c. Sources with the PTE > 70 tons/year of PM-10 in a serious PM-10 nonattainment area.
2. ARM 17.8.1204, Air Quality Operating Permit Program Applicability. Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. The modification of Air Quality Permit #2862-01 for Great Falls Redi-Mix was made to ensure that:
 - a. The facility's PTE is less than 100 tons/year for all criteria pollutants.
 - b. The facility's PTE is less than 10 tons/year of any one HAP and less than 25 tons/year of all HAPs.
 - c. This source is not located in a serious PM-10 nonattainment area.
 - d. This facility is not subject to any current NESHAP standards.
 - e. This source is not a Title IV affected source nor a solid waste

combustion unit.

- f. This source is not an EPA designated Title V source.

Great Falls Redi-Mix is not subject to Title V Operating Permit requirements because federally enforceable limitations have been established which limit the source's potential to emit below the major source threshold.

- g. The department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable limitations which limit that source's potential to emit...
- i. In applying for an exemption under this section, the owner or operator of the source shall certify to the department that the source's potential to emit..., does not require the source to obtain an air quality operating permit.
 - ii. Any source that obtains a federally enforceable limit on potential to emit shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.

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

3. ARM 17.8.1207, Certification of Truth, Accuracy, and Completeness

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

III. Emission Inventory Permit 2862-01

Source	Tons/Year					
	TSP	PM-10	NOx	VOC	CO	SOx
Asphalt Plant Drum Dryer with a Venturi Scrubber	22.91	18.33	5.06	8.60	9.45	0.56
Elvtr, Scrns, Bns, & Mxr	6.33	5.06				
Cold Aggregate Handling	8.44	6.75				
Keto Diesel Generator (125 kw)	1.62	1.62	22.76	1.81	4.90	1.51
Haul Roads	2.74	1.23				
Cement Handling Emissions	17.00	8.50				
Wgh Hppr Ldng Snd Aggrgte	8.09	4.05				
Dmpng Snd/Aggr Stck Pls	4.03	1.61				
Trk Mxr Ldng Cmnt/Snd	4.77	2.39				
Total=	75.92	49.53	27.82	10.41	14.35	2.07
PSD=	39.91					

- A complete emission inventory for permit #2862-01 is on file with the department.

IV. BACT Determination

A Best Available Control Technology (BACT) determination is required for any new or altered source. Great Falls Redi-Mix shall install on the new or altered source the maximum air pollution control capability which is technically practicable and economically feasible, except that best available control technology shall be utilized.

Great Falls Redi-Mix proposes to control particulate emissions from the 1967 Madsen 5000-Pound Batch Asphalt Plant with a Venturi scrubber. The department has determined, to maintain compliance with the emissions limitations and the opacity limitations in Section II.B.1 and II.B.2, the Venturi scrubber will constitute BACT.

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 batch asphalt plant and a concrete batch plant, located in the SW1/4 of Section 15, Township 20 North, Range 3 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.

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: Great Falls Redi-Mix, Inc.
P.O. Box 1989
Great Falls, Montana 59403

Permit Number: 2862-01

Preliminary Determination on Permit Issued: March 13, 2000
Department Decision Issued: March 31, 2000
Final Permit Issued: April 16, 2000

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

Legal Description of Original Location: Section 15 (SW1/4), Township 20 North, Range 3 East, in Cascade County, Montana.

Description of Project: This permit action is for the replacement of the existing 1959 Madsen 2000-Pound Batch Asphalt Plant, serial #383 (maximum production rate 65 TPH), with a 1967 Madsen 5000-Pound Batch Asphalt Plant; serial #553 (maximum production rate 170 TPH), and associated equipment.

Benefits and Purpose of Proposal: This plant will supply concrete and asphalt to customers of Great Falls Redi-Mix, Inc.

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, and a Best Available Control Technology analysis is contained in permit #2862-01.

Description and analysis of regulatory impacts on private property rights: The department has considered alternatives to the conditions imposed as part of the permit development. The department has determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrates 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			

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

Terrestrials will use the areas in which the asphalt operations occur. However, the asphalt operations alone will present only minor affects to the terrestrial life.

2. Water Quality, Quantity and Distribution

Water will be used as pollution control, but will only cause a minor disturbance to the area. No surface water or ground water quality problems are expected as a result of using water for pollution control. Any accidental spills or leaks from equipment will be handled according to the appropriate environmental regulations in an effort to minimize any potential adverse impact on the immediate and surrounding area.

3. Geology and Soil Quality, Stability and Moisture

The soils in the affected pit area will be impacted by the asphalt operations. The potential impacts will be minor due to the relatively small size of the operation.

4. Vegetation Cover, Quantity and Quality

Existing vegetative cover will be affected by the proposed project. The potential impacts will be minor due to the relatively small size of the operation.

5. Aesthetics

The asphalt operations will be visible and will create additional noise in the area. Permit #2862-01 includes conditions to control emissions (including visible emissions) from the plant.

6. Air Quality

The air quality impacts from the asphalt operations are minor. Permit #2862-01 includes conditions limiting the opacity from the plant, as well as requiring water suppression, a wet scrubber, and other means to control air pollution.

7. Unique Endangered, Fragile or Limited Environmental Resources

The department has contacted the Montana Natural Heritage Program (MNHP) in an effort to identify any species of special concern that may be found in the proposed area. Search results have concluded there are no such resources in the area. Area, in this case, is defined by township and range of the proposed site with an additional one-mile buffer.

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

The asphalt operations will only demand small quantities of water, air, and energy for proper operation. Generally, the operations are seasonal, which result in smaller demands on the environmental resources.

9. Historical and Archaeological Sites

Asphalt operations will take place within a previously disturbed industrial open-cut pit. According to the Montana State Historic Preservation Office, there is low likelihood of disturbance to any known archaeological or historic site, given any previous industrial disturbance in the area. Therefore, the asphalt operation will not have an adverse affect on any known historic or archaeological site.

10. Cumulative and Secondary Impacts

The asphalt operations will cause a minor affect to both the physical environment and human environment. There is potential for other operations to locate at this site. However, any operations will have to apply for and hold the appropriate permits from the department prior to operation. This permit will address the environmental impacts associated with the operations at the proposed site. The asphalt operations are limited by permit #2862-01 to total particulate emissions of 250 tons/year or less from non-fugitive asphalt operations and any other additional equipment used at the site.

POTENTIAL IMPACT ON HUMAN ENVIRONMENT

1. Social Structures and Mores

In the view of the department, the asphalt operation will cause no disruption to native or traditional lifestyles or communities in the area of operation.

2. Cultural Uniqueness and Diversity

In the view of the department, the asphalt operations will not have an adverse impact on the cultural uniqueness and diversity of the proposed area of operation.

3. Local and State Tax Base and Tax Revenue

The proposed asphalt operations will have little, if any, affect on local and state tax base and tax revenue.

4. Agricultural or Industrial Production

The asphalt operations will take place in a previously disturbed industrial area. Therefore, the permitted operation will not adversely affect or displace any agricultural production.

In addition, the asphalt operations are small by industrial standards and therefore, will have only a minor impact on any local industrial production.

5. Human Health

Permit #2862-01 incorporates conditions to ensure that the asphalt operations will be operated in compliance with all applicable rules and standards. These rules and standards are designed to be protective of human health.

6. Access to and Quality of Recreational and Wilderness Activities

The asphalt operations will not affect any access to recreational and wilderness activities. However, minor affects to the quality of recreational activities may be created by the noise from the site.

7. Quantity and Distribution of Employment

The activities from the asphalt operations will not affect the quantity and distribution of employment in the area.

8. Distribution of Population

Given the relatively small size of the operation, it is not expected that the activities from the asphalt operations will disrupt the normal population distribution in the area.

9. Demands of Government Services

Minor increases will be seen in traffic on existing roads in the area while the asphalt operations are in progress. In addition, government services will be required for acquiring the appropriate permits from government agencies. Demands for government services will be minimal.

10. Industrial and Commercial Activity

The asphalt operations represent only a minor increase in the industrial activity in the given area. No additional industrial or commercial activity is expected as a result of the asphalt operations.

11. Locally Adopted Environmental Plans and Goals

The department is not aware of any locally adopted environmental plans or goals. The state standards will protect the proposed site and the environment surrounding the site.

12. Cumulative and Secondary Impacts

The asphalt operation will cause a minor affect to both the physical environment and human environment. There is potential for other operations to locate at this site. However, any operations will have to apply for and hold the appropriate permits from the department prior to operation. This permit will address the environmental impacts associated with the operations at the proposed site. The asphalt operations are limited by permit #2862-01 to total particulate emissions of 250 tons/year or less from non-fugitive asphalt 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: Since this plant is a portable source, there will not be any significant impact. Permit #2862-01 includes conditions and limitations, which, if properly applied, will safeguard any potential environmental threat created by the proposed asphalt/concrete batch operation.

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 Energy Minerals Bureau); State Historic Preservation Office (Montana Historical Society); and Montana Natural Heritage Program.

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

EA prepared by: Ron Lowney
Date: February 29, 2000.