

AIR QUALITY PERMIT

Issued To: Border States Paving, Inc.
P.O. Box 2586
Fargo, ND 58108

Permit #3347-00
Application Complete: 7/06/04
Preliminary Determination Issued: 8/13/04
Department Decision Issued: 8/31/04
Permit Final: 09/16/04
AFS #777-3347

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

Section I: Permitted Facilities

A. Permitted Equipment

Border operates a portable drum mix asphalt plant and associated equipment. A list of permitted equipment is included in Section I.A of the Permit Analysis

- B. The initial location of the permitted facility is the SE $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 1, Township 14 North, Range 59 East, in Wibaux County, Montana. Border operates a portable drum mix asphalt plant and associated equipment. Permit #3347-00 applies while operating at any location within Montana, except within those areas having a Department of Environmental Quality (Department) approved permitting program, those areas considered to be tribal lands, or those areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas. An addendum to this air quality permit is required if Border intends to locate in or within 10 km of certain PM₁₀ nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.*

Section II: Conditions and Limitations

A. Emission Limitations

1. Asphalt plant particulate matter emissions shall be limited to 0.04 grains per dry standard cubic feet (gr/dscf) (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart I).
2. Border 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 6 consecutive minutes (ARM 17.8.340 and ARM 17.8.752).
3. Border 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 filler; systems for mixing hot mix asphalt; and the loading, transfer, and storage systems associated with emission control systems, any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.340 and ARM 17.8.752).
4. Border shall not cause or authorize the use of any street, road, or parking lot

without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308 and ARM 17.8.752).

5. Border 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.4. (ARM 17.8.752).
6. A baghouse for air pollution control, with a device to measure the pressure drop (magnehelic gauge, manometer, etc.), must be installed and maintained on the asphalt drum and lime silo. Pressure drop must be measured in inches of water. Temperature indicators at the control device inlet and outlet must be installed and maintained (ARM 17.8.752).
7. Once a stack test is performed, the asphalt production rate shall be limited to the average production rate during the last source test demonstrating compliance (ARM 17.8.749).
8. Border shall only use propane, natural gas, fuel oil, or on-specification waste oil to fire the hot mix dryer (ARM 17.8.749).
9. Asphalt plant production shall not exceed 1,037,500 tons during any rolling 12-month time period (ARM 17.8.749).
10. Border shall not operate more than one diesel engine/generator at any given time and the maximum rated design capacity of the generator shall not exceed 1014-horsepower (HP) (ARM 17.8.749).
11. Border shall not operate the diesel generator for more than 2,075 hours during any rolling 12-month time period (ARM 17.8.749).
12. If the permitted equipment is used in conjunction with any other equipment owned or operated by Border, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month period. Any calculation used to establish production levels shall be approved by the Department (ARM 17.8.749).
13. Border shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR Part 60, Subpart I, as it applies to this asphalt operation (ARM 17.8.340 and 40 CFR 60 Subpart I).

B. Testing Requirements

1. Within 60 days after achieving the maximum production rate, but not later than 180 days after initial start up, an Environmental Protection Agency (EPA) Methods 1-5 and 9 source test shall be performed on the asphalt plant to demonstrate compliance with Section II.A.1, Section II.A.2 and Section II.A.3, respectively. Testing shall continue on an every 4-year basis or according to another testing/monitoring schedule as may be approved by the Department (ARM 17.8.105 and ARM 17.8.749).
2. Pressure drop on the control device and temperature must be recorded daily and

kept on site according to Section II.C.2 (ARM 17.8.749).

3. Pressure drop on the control device and temperatures must be recorded during the compliance source test and reported as part of the test results (ARM 17.8.749).
4. All compliance source tests must be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
5. Since asphalt production will be limited to the average production rate during the compliance source test, it is suggested the test be performed at the highest production rate practical (ARM 17.8.749).
6. Border may retest at any time in order to test at a higher production rate (ARM 17.8.749).
7. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. If this asphalt plant is moved to another location, an Intent to Transfer Form must be sent to the Department. In addition, a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area where the transfer is to be made, at least 15 days prior to the move. The Intent to Transfer Form and the proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department upon request (ARM 17.8.765).
2. Border shall maintain on-site records showing daily hours of operation, daily production rates, and daily pressure drop and temperature readings for the last 12 months. The records compiled in accordance with this permit shall be maintained by Border as a permanent business record for at least 5 years following the date of the measurement, must be submitted to the Department upon request, and must be available at the plant for inspection by the Department (ARM 17.8.749).
3. Border 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 Section I.A of the permit analysis.

Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

4. Border shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745, that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. This notice must be submitted to the Department, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745 (1)(d) (ARM 17.8.745).

5. Border shall document, by month, the asphalt production of the facility. By the 25th day of each month, Border shall total the asphalt production of the facility during the previous 12 months to verify compliance with the limitation in Section II.A.9. A written report of the compliance verification shall be submitted along with the annual emissions inventory (ARM 17.8.749).
6. Border shall document, by month, the hours of operation of the diesel generator. By the 25th day of each month, Border shall total the hours of operation of the diesel generator during the previous 12-months to verify compliance with the limitation in Section II.A.11. A written report of the compliance verification shall be submitted along with the annual emissions inventory (ARM 17.8.749).

Section III: General Conditions

- A. Inspection - Border shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver - The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if Border fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations - Nothing in this permit shall be construed as relieving Border of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement - Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties, or other enforcement, as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals – Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made .
- F. Permit Inspection - As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. Permit Fee - Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by Border may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.

- H. Construction Commencement - Construction must begin within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked (ARM 17.8.762).
- I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.
- J. Border shall comply with the conditions contained in this permit while operating in any location in Montana, except within those areas having a Department approved permitting program.

PERMIT ANALYSIS
Border States Paving, Inc.
Permit #3347-00

I. Introduction/Process Description

A. Permitted Equipment

Border States Paving, Inc. (Border) owns and operates a portable drum mix asphalt plant (maximum capacity 500-tons per hour (TPH)). Equipment used at the facility includes, but is not limited to, the following:

1. (1) 1985 (BETA/BMG) continuous parallel flow drum mix asphalt plant (up to 500 (TPH)) with baghouse (fired on propane, natural gas, fuel oil, and on-specification waste oil)
2. (1) Diesel Generator (up to 1014 Horsepower (HP)) used to fire the asphalt plant
3. Associated equipment (including, but not limited to, a cold feeder, lime silo, elevator, screens, bins, mixer, and conveyors)

B. Source Description

For a typical operational set-up, stockpiled aggregate is loaded into the cold feeder. The aggregate is dispensed from the bins, and dumped onto feeder conveyors that transfer the aggregate to the drum mix dryer. The aggregate travels through the rotating drum where asphalt oil and lime is added to the dryer. The dryer drum mixes the asphalt oil, lime, and the aggregate. The resulting hot-mix asphalt is loaded into a hot mix asphalt storage silo where it is stored until the asphalt is dumped into trucks for transport to the project site.

II. Applicable Rules and Regulations

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

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

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

101, *et seq.*, Montana Code Annotated (MCA).

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

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation, or to continue for a period greater than 4 hours.
5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created.

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

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

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

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

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Border shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.
4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.
5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set

forth in this section.

6. ARM 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). This facility is an NSPS affected facility under 40 CFR Part 60, Subpart I (Standards of Performance for Hot Mix Asphalt Facilities), because the facility was constructed after June 11, 1973. Therefore, the facility is subject to the requirements of 40 CFR Part 60, Subpart I.

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

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

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

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

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a facility to obtain an air quality permit or permit alteration to construct, modify, or use any asphalt plant, crusher or screen that has the Potential to Emit (PTE) greater than 15 tons per year of any pollutant. ABC has a PTE greater than 15 tons per year of particulate matter (PM), particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀), nitrogen oxides (NO_x), carbon monoxide (CO), and sulfur oxides (SO_x); therefore, an air quality permit is required.
3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
4. ARM 17.8.745 Montana Air Quality Permit--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that are not

subject to the Montana Air Quality Permit Program.

5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. This rule requires that a permit application be submitted prior to installation, alteration or use of a source. Border submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. Border submitted an affidavit of publication of public notice for the June 28, 2004, issue of the *Wibaux Pioneer-Gazette*, a newspaper of general circulation in the Town of Wibaux in Wibaux County, as proof of compliance with the public notice requirements.
6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Border of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).

13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an air quality permit may be transferred from one location to another if the Department receives a complete notice of Intent to Transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.

F. ARM 17.8, Subchapter 8 – Prevention of Significant Deterioration of Air Quality, including, but not limited to:

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
2. ARM 17.8.818 Review of Major Stationary Sources and Major Modification-- Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source since it is not a listed source and the facility's PTE is less than 250 tons per year (excluding fugitive emissions) 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 FCAA is defined as any stationary source having:
 - a. PTE > 100 tons/year of any pollutant;
 - b. PTE > 10 tons/year of any one Hazardous Air Pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
 - c. PTE > 70 tons/year of PM₁₀ in a serious PM₁₀ nonattainment area.
2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #3347-00 for Border, the following conclusions were made:

- a. The facility's PTE is less than 100 tons/year for any criteria pollutant.
- b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.
- c. This source is not located in a serious PM₁₀ nonattainment area.
- d. This facility is subject to a current NSPS (40 CFR Part 60, Subpart I) standards.
- e. This facility is not subject to any current NESHAP standards.
- f. This source is not a Title IV affected source nor a solid waste combustion unit.
- g. This source is not an EPA designated Title V source.

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

III. BACT Determination

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

Border proposed to control particulate emissions from the BETA/BGM hot mix asphalt plant with a Custom Welding and Machine baghouse. All visible emissions from the BETA/BGM hot plant including systems for handling, storing, and weighing hot aggregate, systems for loading, transferring, and storing mineral filler, systems for mixing hot mix asphalt, and the loading, transfer, and storage systems associated with emission control systems are limited to 20% opacity. In addition, all asphalt particulate emissions are limited to 0.04 grains per dry standard cubic foot (gr/dscf). Further, Border must take reasonable precautions to limit the fugitive emissions of airborne particulate matter on haul roads, access roads, parking lots, and the general plant area. Reasonable precautions include treating 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 meet the fugitive dust opacity requirements. The Department determined that using and properly maintaining a baghouse to maintain compliance with the corresponding limitations in Section I.A of the permit and using water and chemical dust suppressant to comply with the reasonable precautions limitation will constitute BACT for the Border asphalt plant, in this case.

Because of the limited amount of emissions produced by the diesel generator and the current manufacture options for readily available/cost effective add-on controls, additional add-on controls would be cost prohibitive. Therefore, the Department determined that proper operation and maintenance with no additional controls would constitute BACT for the portable generator. The control options selected contain control equipment and control costs comparable to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

IV. Emission Inventory

Source	Tons/Year					
	PM	PM ₁₀	NO _x	VOC	CO	SO _x
1985 BETA/BMG Asphalt Plant w/Baghouse	19.03	9.51	28.53	16.60	67.44	30.09
Elevator, Screens, Bins, and Mixer	19.45	15.56				
Cold Aggregate Handling	25.94	20.75				
Diesel Generator (up to 1014 HP)	2.31	2.31	32.61	2.60	7.03	2.16
Lime Usage from Storage Silo (4 TPH)	0.01	0.01				
Haul Roads	2.74	1.23				
Total	69.48	49.37	61.14	19.20	74.47	32.25

- A complete emission inventory for Permit #3347-00 is on file with the Department. Limitations of 2,075 hours were placed upon both the drum mix asphalt plant and diesel generator in order to keep the facility below the 50 tons per year for PM₁₀ emissions.

V. Existing Air Quality

Permit #3347-00 is issued for the operation of a portable drum mix asphalt plant to be originally located in the SE ¼ of the NW ¼ of Section 1, Township 14 North, Range 59 East, in Wibaux County, Montana. Permit #3347-00 will also cover the plant while operating at any location within Montana, excluding those areas that have a Department approved permitting program, those areas considered tribal lands, or those areas in or within 10 kilometers (km) of certain PM₁₀ nonattainment areas. In the view of the Department, the amount of controlled emissions generated by this facility will not exceed any set ambient standard. In addition, this source is portable and any air quality impacts will be minimal.

VI. Air Quality Impacts

Permit #3347-00 will cover the operations of this portable drum mix asphalt plant while operating in those areas within Montana, classified as being in attainment with federal ambient air quality standards, and those areas still undefined (not yet classified). This facility is a portable source that will operate on an intermittent and temporary basis at a given location, so any impacts to air quality will be minor and short-lived. The conditions in Permit #3347-00 will be protective of air quality while Border is operating at locations not located in or within 10 km of certain PM₁₀ nonattainment areas.

VII. Ambient Air Quality Impacts

This permit is for a portable drum mix asphalt plant to be located at various locations around Montana. This permit contains operational conditions and limitations that will protect air quality for any given site and the surrounding area. Also, this facility is a portable source that will operate on an intermittent and temporary basis, so any effects to air quality will be minor and short-lived. Further, the amount of controlled particulate emissions generated by this project will not cause concentrations of PM₁₀ in the ambient air that exceed the set standard. In addition, this source is portable and any air quality impacts will be minor.

VIII. Taking or Damaging Implication Analysis

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

IX. 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
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FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Border States Paving, Inc.
P.O. Box 2586
Fargo, ND 58108

Air Quality Permit Number: 3347-00

Preliminary Determination Issued: 08/10/04
Department Decision Issued: 08/31/04
Permit Final: 09/16/04

1. *Legal Description of Site:* The portable asphalt plant would initially locate at the SE ¼ of the NW ¼ of Section 1, Township 14 North, Range 59 East, in Wibaux County, Montana. Permit #3347-00 would apply while operating at any location in Montana, except within those areas having a Department approved permitting program, those areas considered tribal lands, or those areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana. An addendum to this air quality permit will be required for locations in or within 10 km of certain PM₁₀ nonattainment areas.*
2. *Description of Project:* Border proposes the construction and operation of a portable asphalt plant that would consist of a portable 1985 BETA/BMG continuous parallel flow drum mix asphalt plant (up to 500 (TPH)) with baghouse (fired on propane, natural gas, fuel oil, and on specification waste oil), a diesel generator (up to 1014 Horsepower (HP)), and associated equipment (including, but not limited to, a cold feeder, lime silo, elevator, screens, bins, mixer, and conveyors).
3. *Objectives of Project:* The object of the project would be to produce business and revenue for the company by the sale and use of asphalt. The issuance of Permit #3347-00 would allow Border to operate the permitted equipment at various locations throughout Montana, including the proposed initial site location.
4. *Additional Project Site Information:* In many cases, the drum mix asphalt plant operation may move to a general site location, or open cut pit, which has been previously permitted through the Industrial and Energy Minerals Bureau (IEMB). If this were the case, a more extensive EA for the site would have been conducted and would be found in the Mined Land Reclamation Permit for that specific site.
5. *Alternatives Considered:* In addition to the proposed action, the Department considered the “no-action” alternative. The “no-action” alternative would deny issuance of the air quality permit to the proposed facility. However, the Department does not consider the “no-action” alternative to be appropriate because Border demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the “no-action” alternative was eliminated from further consideration.

6. *A Listing of Mitigation, Stipulations, and Other Controls:* A list of enforceable conditions and a permit analysis, including a BACT analysis, would be contained in Permit #3347-00.
7. *Regulatory Effects on Private Property:* The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and would not unduly restrict private property rights.
8. *The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The “no action alternative” was discussed previously.*

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

Summary of Comments on Potential Physical and Biological Effects: The following comments have been prepared by the Department.

A. Terrestrial and Aquatic Life and Habitats

Terrestrials would use the same area as the asphalt plant operations and the nearest aquatic life would be in Beaver Creek, located approximately 1/10 mile away. The asphalt plant operations would be considered a minor source of emissions (by industrial standards) with intermittent and seasonal operations. Therefore, any effects to terrestrial and aquatic life would be minor and short-lived. Further, the facility would be distant enough away from any water resources as to minimize impacts upon aquatic life. Silt fencing would also be used to protect surrounding water resources from sedimentation runoff and fugitive emissions. Therefore, only minor effects on terrestrial life and aquatic life would be expected as a result of equipment operations or from pollutant deposition.

B. Water Quality, Quantity, and Distribution

Water would be used for dust suppression on the surrounding roadways and areas of operation and for pollution control for equipment operations. However, water use would only cause minor impacts upon water quality, quantity, and distribution at the site because the equipment would only have seasonal and intermittent operations, only

relatively small amounts of water would be needed for pollution control, and a corresponding water lease agreement and storm water discharge permit have been acquired by Border.

Surface water resources would be protected by the pollution prevention measures identified in the storm water discharge permit to protect both aquatic and water resources. Water would be made readily available through the water lease agreement and would be used, as necessary, to comply with emissions limitations and conditions established in Section I.A of this Permit. Thus, any impacts from the proposed project would be minor and short-lived.

C. Geology and Soil Quality, Stability, and Moisture

The soils at the proposed site would be impacted by the asphalt plant operations due to the construction and use of the asphalt plant. Minimal disturbance to soil would occur as a result of construction and use of the facility because the facility would be operating on an intermittent and temporary basis, and pollutant deposition upon the surrounding soils would be minimal. Further, considering the facility's portable and temporary nature, the areas industrial usage and good pollutant dispersion would exist within the area, the fact that the facility would typically operate within an existing permitted open cut pit, any effects (upon geology and soil quality, stability, and moisture) from operating this facility would be minor and short-lived.

D. Vegetation Cover, Quantity, and Quality

As described in Section 8.F of this EA, the impacts from the air emissions of this facility would be minor. As a result, the corresponding deposition of the air pollutants on the surrounding vegetation would also be minor. Also, equipment construction and operations would result in only minor soil and water disturbance (as described in Sections 8.B and 8.C) because the facility would be portable and temporary in nature and corresponding permits would be acquired before operation commences. Therefore, because the facility would locate in an area where good pollutant dispersion would occur, would locate in an area where little vegetation would be effected, and would be a minor source of emissions and temporary in nature, impacts from the emissions of the asphalt plant on vegetation would be minor.

E. Aesthetics

The asphalt plant operations would be visible and would create additional noise in the area. The facility would be located adjacent to Route 261 that connects with Interstate 94, 1/3 mile to the south. Permit #3347-00 would include conditions to control emissions, including visible emissions, from the plant. The asphalt plant operations would have a minor amount of emissions, would be portable, would have seasonal and intermittent operations, and would locate near an existing highway. Also, the nearest residence has been identified as over 1/2 mile away for the proposed site, which would operate on private land. Noise would be noticeable, but minor, due to the location of the site in relation to existing activity and surrounding land use. Therefore, impacts upon aesthetics would be minor and short-lived.

F. Air Quality

The air quality impacts from the asphalt plant operations would be minor because Permit #3347-00 would include conditions limiting the opacity from the plant, as well as requiring a baghouse and other means to control air pollution. Additionally, the facility

is considered a minor source of air pollution by industrial standards and would initially be located in an area where good air pollutant dispersion would occur. Therefore, the air impacts would be minor.

The operations would be limited, by Permit #3347-00, to total emissions of 250 tons/year or less of any regulated pollutant from non-fugitive sources at the plant, including any additional equipment owned and operated at the site. Furthermore, the facility emissions would be subject to BACT. For example, the plant would be required to use water to reduce emissions from equipment operations, storage piles, and haul roads. Also, the operation would have temporary and intermittent use, thereby further reducing potential air quality impacts from the facility. Therefore, air quality impacts would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department, in an effort to assess any potential impacts to unique endangered, fragile, or limited environmental resources in the initial proposed area of operation, contacted the Montana Natural Heritage Program (MNHP). MNHP search results concluded there are no such environmental resources found within the defined search area. The area, in this case, is defined as the township and range of the proposed site, with an additional one-mile buffer. Based on the small size and temporary nature of equipment operations and the minimal disturbance to the environment (water, air, and soils) from the proposed project, the Department determined no impacts to unique endangered, fragile, or limited environmental resources would occur.

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

Due to the relatively small size of the facility, the asphalt plant operations would only require small quantities of water, air, and energy for proper operation. Small quantities of water would be used for dust suppression and would control fugitive emissions being generated at the site. Energy requirements would also be small because the facility is small by industrial standards and would be powered by one industrial diesel generator, with seasonal and intermittent operations. In addition, impacts to air resources would be minor because the source is small by industrial standards, with intermittent and seasonal operations, and because air pollutants generated by the facility would be widely dispersed. Furthermore, facility emissions would be controlled. Therefore, any impacts to water, air, and energy resources would be minor.

I. Historical and Archaeological Sites

The Department contacted the Montana Historical Society - State Historical Preservation Office (SHPO) in an effort to identify any historical and/or archaeological sites that may be present in the proposed area of construction/operation. Search results concluded that while there are previously recorded historical or archaeological resources of concern within the same section, (lithic scatter - i.e. rock chips from Native American tool making), no resources have been identified within the same quarter section of the proposed initial area of operations. According to correspondence from the Montana State Historic Preservation Office, given the previous disturbance in the area, there would be a low likelihood of adverse disturbance to any known archaeological or historic site. Therefore, no impacts upon historical or archaeological sites would be expected as a result of the proposed asphalt plant operations.

J. Cumulative and Secondary Impacts

The asphalt plant operations would cause minor cumulative and secondary impacts to the

physical and biological aspects of the human environment because the facility would have seasonal and intermittent use and because the facility is considered a minor source of air pollutants by industrial standards. The facility would generate emissions of PM, PM₁₀, NO_x, VOC, CO, and SO_x. Noise would also be generated from the site. Emissions and noise would cause minimal disturbance at the initial site location. Additionally, this facility, in combination with the other emissions from the site would not be permitted to exceed 250 tons per year of non-fugitive emissions. Overall, any cumulative and secondary impacts would be minor.

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

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

SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS:

The Department has prepared the following comments.

A. Social Structures and Mores

The asphalt plant operation would cause no disruption to the social structures and mores in the area because the source is a minor source of emissions and temporary in nature. Additionally, the equipment would initially locate near Route 261 and Interstate 94, and would be separated from the general population. Also, the facility would be a minor source of air pollution and would be required to operate under the conditions in Permit #3347-00. Thus, no native or traditional communities would be affected by the proposed project operations and no impacts upon social structures or mores would result. The predominant use of the surrounding area would not change as a result of this project, which has previously been used for asphalt plant production.

B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of the area would not be impacted by the proposed asphalt plant operations because the site would be separated from the residential areas. Additionally, the facility would be considered a portable/temporary source with seasonal

and intermittent operations resulting in short-term and minor impacts. Also, the predominant use of the site and surrounding area would not change as a result of this project.

C. Local and State Tax Base and Tax Revenue

The asphalt plant operations would have little, if any, impact on the local and state tax base and tax revenue because the facility would be a temporary source and small by industrial standards. The facility operations would require the use of up to five new employees. Thus, only minor impacts to the local and state tax base and revenue could be expected from the employees and facility production. Furthermore, the impacts to local tax base and revenue is expected to be minor because the source would be portable and any money generated for taxes would be widespread.

D. Agricultural or Industrial Production

The asphalt plant operations would have only a minor impact on local industrial production since the facility is small by industrial standards and would operate in the area on a temporary and intermittent basis. Because of the portable nature of the equipment, only minor and temporary impacts upon surrounding agricultural land are expected to occur. As described in Section 8.D, impacts to vegetation would be minimal. Also, pollution control would be utilized on equipment operations and corresponding operational limits would be established to protect the environment. Therefore, any impacts to agricultural or industrial production would be minor and short-lived.

E. Human Health

Permit #3347-00 would incorporate conditions to ensure that the asphalt plant would be operated in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. As described in Section 8.F., the air emissions from this facility would be minimized by the use of a BACT and other emission limits established in Permit #3347-00. Therefore, only minor impacts would be expected upon human health from the proposed asphalt plant.

F. Access to and Quality of Recreational and Wilderness Activities

The asphalt plant would initially be operated at a site approximately ¼ mile away from the nearest household and approximately 1/3 mile north of Interstate 94. For the initially proposed site, operations would not affect access to recreational and wilderness activities in the area because the site is private property that currently has little wilderness or recreational value. Thus, no changes to recreational and wilderness activities, or access to those activities, would be expected from the operation of the asphalt plant. Additionally, noise impacts from the facility would be minimal because the site is relatively far away from the nearest household and would operate adjacent to an existing roadway, Route 261. Also, the facility would be a temporary source and would have minor amounts of emissions, as described in Section 8.F of this EA. Further, any changes in the quality of recreational and wilderness activities from noise, created by operating the equipment at the site, would be minor and intermittent.

G. Quantity and Distribution of Employment

The asphalt plant is a temporary source, which would have only minor effects on the quantity and distribution of employment in the area because Border would use up to five new employees for the project. Thus, because only a few new employees would be needed for such operations, any effect on the quantity and distribution of employment in

the area would be minor and short-lived.

H. Distribution of Population

The asphalt operation would be a minor industrial source of emissions and the facility would only require the addition of a few new employees to operate the facility. Since the proposed project is a portable source, with seasonal and intermittent operations, it would not be expected to create any new permanent employment in the area. Thus, no individuals are expected to permanently relocate to the area as a result of operating the asphalt plant. Therefore, the asphalt plant operations would not impact the normal population distribution in the initial area of operation or any future operating site.

I. Demands of Government Services

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

J. Industrial and Commercial Activity

The asphalt plant operations would represent only a minor increase in the industrial activity in a given area because of the size of the operations (relatively small by industrial standards) and the portable and temporary nature of the facility. No additional industrial or commercial activity would be expected as a result of the proposed operations.

K. Locally Adopted Environmental Plans and Goals

Border would be allowed, by permit, to operate in areas designated by EPA as attainment, or unclassified. Permit #3347-00 would contain limits, which would be protective of air quality and the ambient air quality standards while the facility is operating in these designated areas. Additionally, because the facility is a portable source that would operate at multiple sites on an intermittent and temporary basis, the Department determined that any impacts to existing air quality in these areas of operation would be minor and short-lived.

L. Cumulative and Secondary Impacts

The asphalt plant would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area because the source is a portable, temporary source. Minor increases in traffic would have minor effects on local traffic in the immediate area, thus having a minor effect on the social environment. Because the source is relatively small (by industrial standards) and temporary, only minor economic impacts to the local economy could be expected from the operation of the facility. Thus, minor and temporary cumulative effects would result to the local economy.

Recommendation: An EIS is not required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: All potential effects resulting from construction and operation of the proposed facility are minor; therefore, an EIS is not required.

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

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

EA prepared by: Ron Lowney

Date: August 10, 2004