



Montana Department of
ENVIRONMENTAL QUALITY

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August 7, 2008

George Niemi
Kootenai Paving and Construction, Inc.
PO Box 643
Libby, MT 59923

Dear Mr. Niemi:

Air Quality Permit #3099-03 is deemed final as of August 7, 2008, by the Department of Environmental Quality (Department). This permit is for a portable drum mix asphalt plant. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

Vickie Walsh
Air Permitting Program Supervisor
Air Resources Management Bureau
(406) 444-3490

Christine A. Weaver
Air Quality Specialist
Air Resources Management Bureau
(406) 444-5287

VW:cw:vs
Enclosures

Montana Department of Environmental Quality
Permitting and Compliance Division

Air Quality Permit #3099-03

Kootenai Paving and Construction, Inc.
PO Box 643
Libby, MT 59923

August 7, 2008



AIR QUALITY PERMIT

Issued To: Kootenai Paving and Construction, Inc. Permit #3099-03
P.O. Box 1525 Application Complete: 05/16/08
Libby, Montana 59923 Preliminary Determination Issued: 06/20/08
Department Decision Issued: 07/22/08
Permit Final: 08/07/08
AFS #: 777-3099

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

SECTION I: Permitted Facilities

A. Plant Location

Kootenai operates a portable drum mix asphalt plant and associated equipment at various locations throughout the State of Montana. Permit #3099-03 applies while operating in any location within the State of Montana, except within those areas having a Department of Environmental Quality (Department)-approved permitting program or areas considered tribal lands. *A Missoula County air quality permit will be required for all locations within Missoula County, Montana.*

Addendum #3 applies to the Kootenai facility while operating at any location in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas during the summer months (April 1 – September 30) and at sites approved by the Department during the winter months (October 1 – March 31), including the initial site location, Section 34, Township 31 North, Range 31 West, in Lincoln County, Montana. A complete list of the permitted equipment is included in Section I.A of the permit analysis.

B. Current Permit Action

On May 16, 2008, the Department received a request from Kootenai for a permit modification. Specifically, this permit modification removes a generator and adds two newer diesel-fired generators with engines that total no more than 619-horsepower (hp). Further, the Department updated the emission inventory for the permitted facility to reflect up-to-date published emission factors for hot-mix asphalt plants and added appropriate conditions and limitations consistent with other asphalt batching plants.

Lastly, the Department updated Addendum 3 to reflect the new daily emission rate, including the addition of new operational restrictions on the facility in conformance with the current Department modeling guidance for portable sources operating in or within 10 km of certain PM₁₀ nonattainment areas during the winter season.

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 foot (gr/dscf) (ARM 17.8.340 and 40 CFR 60, Subpart I).
2. Kootenai shall not cause or authorize to be discharged into the atmosphere from the asphalt plant stack any visible emissions that exhibit an opacity of 20% or greater

averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart I).

3. Kootenai 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 opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart I).
4. All visible emissions from any non-NSPS affected equipment shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
5. Kootenai 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).
6. Kootenai shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.5 (ARM 17.8.749).
7. A device to measure the pressure drop (magnehelic gauge, manometer, etc.) on the control device (baghouse) 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 (ARM 17.8.749).
8. Total asphalt plant production shall be limited to 788,400 tons during any rolling 12-month time period (ARM 17.8.749).
9. 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).
10. Kootenai shall not operate more than two diesel-fired generators at any given time, and the maximum rated design capacity for the generator engines shall not exceed 619-hp (ARM 17.8.749).
11. Operation of each diesel-fired generator shall be limited to 6,000 hours during any rolling 12-month time period (ARM 17.8.749 and ARM 17.8.1204).
12. If the permitted equipment is used in conjunction with any other equipment owned or operated by Kootenai, 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 time period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).
13. Kootenai shall comply with all applicable standards and limitations and the reporting, recordkeeping, and notification requirements contained in 40 CFR 60, Subpart I, *Standards of Performance for Hot Mix Asphalt Facilities* as it applies to this asphalt operation (ARM 17.8.340 and 40 CFR 60, Subpart I).
14. Kootenai shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR 60,

Subpart III, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* and 40 CFR 63, Subpart ZZZZ, *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, for any applicable diesel engine (ARM 17.8.340; 40 CFR 60, Subpart III; ARM 17.8.342 and 40 CFR 63, Subpart ZZZZ).

B. Testing Requirements

1. An EPA Methods 1-5 and 9 source test must be performed on the asphalt plant every 4 years after the initial source test has been completed or according to another testing/monitoring schedule as may be approved by the Department to demonstrate compliance with Section II.A.1, II.A.2, and II.A.3 (ARM 17.8.106 and ARM 17.8.749).
2. The asphalt plant baghouse pressure drop and temperature must be recorded daily and kept on-site, according to Section II.C.5. Pressure drop and temperature must also be recorded during the test and reported as part of the test results (ARM 17.8.749).
3. Since asphalt production will be limited to the average production rate during the test, it is suggested the test be performed at the highest production rate practical (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. 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 and a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.749 and ARM 17.8.765).

2. Kootenai shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but not be limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.

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

3. Kootenai shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include ***the addition of a new emissions unit***, 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. The notice must be submitted to the Department, in writing, 10 days prior to startup 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).

4. If either of the diesel-fired generators are replaced with another de minimis-friendly unit, Kootenai shall provide notification to the Department in conformance with Section II.C.3 as well as 40 CFR Part 60 and Part 63 (ARM 17.8.745, ARM 17.8.340, and ARM 17.8.342).
5. Kootenai shall maintain on-site records showing:
 - a. Daily production for the asphalt plant (tons of asphalt produced),
 - b. Daily hours of operation for each of the generators, and
 - c. Daily pressure drop and temperature readings across the asphalt plant baghouse.

Kootenai shall maintain the on-site records for the last 12 months. The records compiled in accordance with this permit shall be maintained by Kootenai as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site or company office for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).

6. Kootenai shall document, by month, the asphalt production from the facility. By the 25th day of each month, Kootenai shall calculate the asphalt production from the facility for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.9. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
7. Kootenai shall document, by month, the hours of operation of each diesel generator. By the 25th day of each month, Kootenai shall calculate the hours of operation for each diesel generator for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.12. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
8. Kootenai shall annually certify that its emissions are less than those that would require the facility to obtain an air quality operating permit as required by ARM 17.8.1204(3)(b). The annual certification shall comply with the certification requirements of ARM 17.8.1207. The annual certification shall be submitted along with the annual emissions inventory information (ARM 17.8.749 and ARM 17.8.1204).

SECTION III: Addendum 3

Kootenai shall comply with all conditions in Addendum 3 to Permit #3099-03 when operating in or within 10 km of certain PM₁₀ nonattainment areas as described in Addendum 3 (ARM 17.8.749).

SECTION IV: General Conditions

- A. Inspection – Kootenai 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 Kootenai fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Kootenai of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided for in ARM 17.8.740, et seq. (ARM 17.8.756)
- D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401, et seq., MCA.
- E. Appeals – Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. 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 Kootenai 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. Kootenai shall comply with the conditions contained in this permit while operating in any location in Montana, except within those areas that have a Department-approved permitting program or areas considered tribal lands.

PERMIT ANALYSIS
Kootenai Paving and Construction, Inc.
Permit Number #3099-03

I. Introduction/Process Description

A. Permitted Equipment:

Kootenai Paving and Construction, Inc. (Kootenai) operates a portable parallel flow drum mix asphalt plant, consisting of the following equipment:

- 1984 ADECO drum mix asphalt plant with a GENCO burner (maximum production capacity 200 tons per hour (TPH), controlled by a 1975 Barber Green baghouse,
- 1984 ADECO 3-bin aggregate feed system,
- 30,000 gallon 1986 asphalt storage tank with propane-fired Power Flame heater,
- Two diesel-fired generators, with the engines' combined rated horsepower (hp) of no more than 619-hp, and
- Associated equipment.

B. Source Description:

Kootenai uses this asphalt plant and associated equipment to produce asphalt for use in construction, repair, and maintenance of roads and highways.

At the start of the asphalt production process, aggregate and sand materials are loaded into a feeder. The appropriate amount of material is continuously conveyed from the feeder to the drum dryer. Within the drum dryer, the aggregate is heated and mixed with a controlled amount of hot asphalt product to produce a specific grade of asphalt. After the mixing has occurred in the drum dryer, it is conveyed to an unheated storage silo and loaded into trucks for delivery to the site. A Barber Green baghouse is used to control the particulate emissions from the drum dryer.

C. Permit History

On October 1, 2000, Kootenai Paving, LLC was issued **Permit #3099-00** with **Addendum 1** for the operation of a portable 1983 Aedco drum mix asphalt, with an attached 1983 Barber Green Baghouse, a 1948 Diesel generator, and associated equipment.

On July 27, 2001, Kootenai Paving, LLC requested that Permit #3099-00 be modified and Addendum 1 be renewed to allow the permitted facility to operate at Section 34, Township 31 North, Range 31 West, in Lincoln County, Montana. Because this location is in or within Libby 10 kilometers (km) of the particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) Nonattainment Area (NAA), SCREEN VIEW modeling was conducted to establish site specific conditions to demonstrate compliance with ambient standards. **Permit #3099-01** replaced Permit #3099-00, and **Addendum 2** replaced Addendum 1.

On January 19, 2006, the Department of Environmental Quality (Department) received

notification that Kootenai Paving LLC has changed the corporate name to Kootenai. The permit action changed the corporate name and updated the permit to reflect current permit language and rule references used by the Department. **Permit #3099-02** replaced Permit #3099-01.

C. Current Permit Action

On May 16, 2008, the Department received a request from Kootenai for a permit modification. Specifically, this permit modification removes a generator and adds two newer diesel-fired generators with engines that total no more than 619-hp. Further, the Department updated the emission inventory for the permitted facility to reflect up-to-date published emission factors for hot-mix asphalt plants and added appropriate conditions and limitations consistent with other asphalt batching plants. In addition, the permit analysis was corrected to reflect the correct year for the Barber Green asphalt plant and baghouse.

Lastly, the Department updated Addendum 3 to reflect the new daily emission rate, including the addition of new operational restrictions on the facility with consideration of the current Department modeling guidance for portable sources operating in or within 10 km of certain PM₁₀ nonattainment areas during the winter season. **Permit #3099-03** replaced Permit #3099-02, and **Addendum 3** replaced Addendum 2.

E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT)/Reasonably Available Control Technology (RACT) determinations, air quality impacts, and environmental assessments, is included in the permit analysis associated with each change to the permit.

II. Applicable Rules and Regulations

The following are partial quotations 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. 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 is a list of applicable definitions used in this sub-chapter, unless indicated otherwise in a specific sub-chapter.
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).
Kootenai 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 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. No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant which would otherwise violate an air pollution control regulation. No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created.

B. ARM 17.8, 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 PM-10

Kootenai must comply 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 to an 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, Kootenai 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 section.
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 section.
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). Kootenai is considered an NSPS-affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts.

- a. 40 CFR 60, Subpart A – General Provisions apply to all equipment or facilities subject to an NSPS Subpart as listed below:
- b. 40 CFR 60, Subpart I –Standards of Performance of Hot Mix Asphalt Facilities. In order for an asphalt plant to be subject to this subpart, the facility must meet the definition of an affected facility and the affected equipment must have been constructed, reconstructed, or modified after June 11, 1973. Based on the information submitted by Kootenai, the portable asphalt equipment to be used under Permit #3099-03 is subject to this subpart.
- c. 40 CFR 60, Subpart IIII - Stationary Compression Ignition Internal Combustion Engines, applies to any diesel generator manufactured after April 1, 2006, or modified or reconstructed after July 11, 2005. This NSPS will apply if the engine remains or will remain at a permitted location for more than 12 months, or a shorter period of time for an engine located at a seasonal source. A seasonal source remains at a single location on a permanent basis (at least 2 years) and operates 3 months or more each year.

Since the permit is written to allow Kootenai to operate any two diesel generators powered by engines with a combined horsepower rating up to a total of 619-hp (generators totaling up to 412-kW), this regulation may apply for future engines if the engine(s) remain on-site for over the specified time frames.

7. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. The source, as defined and applied in 40 CFR Part 63, shall comply with the requirements of 40 CFR Part 63, as listed below:

- a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to an NESHAPs Subpart as listed below:
- b. 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. As an area source, any diesel RICE engine operated by Kootenai that is new or reconstructed after June 12, 2006, will be subject to this MACT standard if the engine remains or will remain at the permitted location for more than 12 months, or a shorter period of time for an engine located at a seasonal source. A seasonal source remains at a single location on a permanent basis (at least 2 years) and operates 3 months or more each year.

As an area source, the diesel RICE at Kootenai will be subject to this rule. However, although diesel RICE engines are an affected source, per 40 CFR 63.6590(b)(3) they do not have any requirements unless they are new or reconstructed after June 12, 2006. Since the permit is written to allow Kootenai to operate any two diesel generators powered by engines with a combined horsepower rating up to a total of 619-hp (generators totaling up to 412-kW), MACT requirements may apply if the engine remains on-site for over the specified timeframes.

- 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. Kootenai 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. Kootenai 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 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 which 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 person to obtain an air quality permit or permit alteration to construct, alter, or use any asphalt plant, crusher or screen that has the potential to emit (PTE) greater than 15 tons per year of any pollutant. Kootenai has a PTE greater than 15 tons per year of total particulate matter (PM), PM₁₀, oxides of nitrogen (NO_x), volatile organic compounds (VOC), carbon monoxide (CO), and oxides of sulfur (SO_x); therefore, a permit is required.
3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, alteration, or use of a source. Kootenai 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. Kootenai submitted an affidavit of publication of public notice for the May 14, 2008 issue of the *Western News*, a newspaper of general circulation in the Town of Libby in Lincoln 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 Kootenai 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 sub-chapter.
2. ARM 17.8.818 Review of Major Stationary Sources and Major Modification-- Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this sub-chapter would otherwise allow.

This facility is not a major stationary source because it is not listed and does not have the potential to emit 250 tons per year or more (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 ton/year of any pollutant.
 - b. PTE > 10 ton/year of any one Hazardous Air Pollutant (HAP), PTE > 25 ton/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule.
 - c. Sources with the PTE > 70 ton/year of PM₁₀ in a serious PM₁₀ 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. In reviewing and issuing Air Quality Permit #3099-03 for Kootenai, the following conclusions were made:
 - a. The facility's PTE is less than 100 ton/year for all criteria pollutants, after imposition of operational limitations.
 - b. The facility's PTE is less than 10 ton/year of any one HAP and less than 25 ton/year of all HAPs.

- c. This source is not located in a serious PM₁₀ nonattainment area.
- d. This source is subject to a current NSPS, 40 CFR 60, Subpart I (Standards of Performance of Hot Mix Asphalt Facilities) and is potentially subject to 40 CFR 60, Subpart IIII (Stationary Compression Ignition Internal Combustion Engines).
- e. This facility is potentially subject to area source provisions of a NESHAP standard, 40 CFR 63, Subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines).
- f. This source is not a Title IV affected source or a solid waste combustion unit.
- g. This source is not an EPA designated Title V source.

Kootenai is not subject to Title V Operating Permit requirements because it requested federally enforceable restrictions to limit the facility below Title V major source thresholds. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, Kootenai will be required to obtain an Operating Permit.

- h. ARM 17.8.1204(3). 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 PTE.
 - i. In applying for an exemption under this section the owner or operator of the facility shall certify to the Department that the source's PTE does not require the source to obtain an air quality operating permit.
 - ii. Any source that obtains a federally enforceable limit on PTE shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.

- 3. ARM 17.8.1207 Certification of Truth, Accuracy, and Completeness. The compliance certification submittal by ARM 17.8.1204(3) shall contain certification by a responsible official of truth, accuracy, and completeness. 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. BACT Analysis

A BACT determination is required for any new or altered source. Kootenai shall install on the new or altered source the maximum air pollution control capability which is technically practicable and economically feasible, except that BACT shall be utilized. The diesel generators are the only newly permitted pieces of equipment for this site, and therefore the only ones reviewed for conformance with BACT under this permit action.

For the diesel-fired generator engines, firing low sulfur diesel fuel that is typically available constitutes BACT for SO₂. Due to the relatively small amount of PM, PM₁₀, NO_x, CO, VOC, and SO_x emissions produced by this equipment, add-on controls would be cost prohibitive. Thus, the

Department determined that no additional control would constitute BACT for the generator engines. This determination is similar to other recently permitted similar sources.

IV. Emission Inventory

Emitting Unit	Potential to Emit TPY (restricted)					
	PM	PM ₁₀	NO _x	CO	VOC	SO _x
Drum Mix Asphalt Plant Dryer	33.95	9.07	21.68	51.25	12.61	4.34
Hot Oil Heater	0.02	0.02	0.67	0.09	0.02	
Cold Aggregate Storage Piles	1.27	0.60				
Cold Aggregate Screens and Storage Bins	4.26	2.60				
Cold Aggregate Handling/Conveyors	3.55	1.30				
Lime Silo (None)	--	--				
Asphalt Product Silo Filling	0.03	0.10				
Drum Mix Plant Asphalt Load-Out	0.2	0.13				
Diesel Generator (519 hp engine)	3.42	3.42	48.27	10.41	3.90	3.18
Diesel Generator (100 hp engine)	0.66	0.66	9.30	2.01	0.75	0.63
Haul Roads/Vehicle Traffic	12.68	3.60				
Total	60.04	21.50	79.92	64.74	23.63	8.15

* A complete emission inventory for Permit #3099-03 is on file with the Department. Kootenai has limitations on asphalt production and diesel generator operation to maintain emissions below major source thresholds.

Estimated PM_{2.5} Emission Inventory

Emitting Unit	PM _{2.5} PTE ton/yr (restricted)
Drum Mix Asphalt Plant Dryer	7.65
Hot Oil Heater	0.02
Diesel Generator	4.08
Total	11.75

Note: The PM_{2.5} emission estimates are based on available AP-42 factors.

V. Existing Air Quality

Permit #3099-03 is issued for the operation of a portable asphalt facility to operate at various locations throughout Montana. This facility would be allowed to operate at any area designated as attainment or unclassified for all National Ambient Air Quality Standards (NAAQS); excluding those counties that have a Department-approved permitting program, those areas considered tribal lands, or those areas in or within 10 km of certain PM₁₀ nonattainment areas. A *Missoula County air quality permit would be required for locations within Missoula County, Montana.*

Addendum #3 of Permit #3099-03 would cover this portable asphalt plant while operating at Section 34, Township 31 North, Range 31 West, in Lincoln County, Montana, or any other location approved by the Department, in writing. Addendum #3 of Permit #3099-03 would also allow for summertime operations (April 1 – September 30) at any location within 10 kilometers of certain PM₁₀ nonattainment areas, including, but not limited to Libby, Thompson Falls, Kalispell, Whitefish, Columbia Falls, and Butte.

VI. Air Quality Impacts

Permit #3099-03 is for a portable drum mix asphalt plant, to be initially located in Section 34, Township 31 North, Range 31 West, in Lincoln County, Montana. This permit contains operational conditions and limitations that will protect air quality for any given operating site and the surrounding area. Also, this facility is a portable source that will operate on an intermittent

and temporary basis; therefore, any impacts to air quality will be minor and short-lived.

The Department believes that the amount of controlled particulate emissions generated by this project will not cause concentrations of air pollutants in the ambient air that will exceed any set standard. Furthermore, Addendum 3 to Permit #3099-03 contains more stringent limitations for plant operations at proposed locations in or within 10 km of PM₁₀ nonattainment areas.

VII. Ambient Air Impact Analysis

The Department determined, based on ambient air modeling, that the impact from this permitting action will be minor. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

VIII. Taking or Damaging Implication Analysis

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

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

IX. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.

Addendum 3
Kootenai Paving and Construction, Inc.
Permit #3099-03

An addendum to air quality Permit #3099-03 is issued to Kootenai Paving and Construction, Inc. (Kootenai) pursuant to Section 75-2-204 and 75-2-211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.734, as amended, for the following:

I. Permitted Equipment

Kootenai operates a portable parallel flow drum mix asphalt plant, consisting of the following equipment:

- 1984 ADECO drum mix asphalt plant with a GENCO burner (maximum production capacity 200 tons per hour (TPH)), controlled by a 1975 Barber Green baghouse,
- 1984 ADECO 3-bin aggregate feed system,
- 30,000 gallon 1986 asphalt storage tank with propane-fired Power Flame heater,
- Two diesel-fired generators, with the engines' combined rated horsepower (hp) of no more than 619-hp, and
- Associated equipment.

II. Seasonal and Site Restrictions

Addendum 3 applies to the Kootenai facility while operating at any location in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas. Additionally, seasonal and site restrictions apply to the facility as follows:

- A. During the winter season (October 1-March 31) – The only location(s) in or within 10 km of certain PM₁₀ nonattainment areas where Kootenai may operate is:
- Section 34, Township 31 North, Range 31 West in Lincoln County, Montana; and
 - Any other site that may be approved, in writing, by the Department of Environmental Quality (Department).
- B. During the summer season (April 1-September 30) – Kootenai may operate at any location within 10 kilometers of certain PM₁₀ nonattainment areas, including, but not limited to Libby, Thompson Falls, Kalispell, Whitefish, Columbia Falls, and Butte.
- C. Kootenai shall comply with the limitations and conditions contained in Addendum 3 to Permit #3099-03 while operating in or within 10 km of any of the previously listed PM₁₀ nonattainment areas. Addendum 3 shall be valid until revoked or modified. The Department of Environmental Quality (Department) reserves the authority to modify Addendum 3 at any time, based on local conditions of any future site. These conditions may include, but are not limited to, local terrain, meteorological conditions, proximity to residences or other businesses, etc.

III. Limitations and Conditions

A. Operational Limitations and Conditions: **Summer Season (April 1 through September 30)**

1. Asphalt plant particulate matter emissions shall be limited to 0.04 grains per dry standard cubic foot (gr/dscf) (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart I).
2. Kootenai shall not cause or authorize emissions to be discharged from the asphalt plant stack that exhibit an opacity of 10% or greater (ARM 17.8.749).
3. Kootenai 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; or the loading, transfer, and storage systems associated with emission control systems, any visible emissions that exhibit an opacity of 10% or greater (ARM 17.8.749).
4. Kootenai shall treat all unpaved portions of the access roads, parking lots, and general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the 10% opacity limitation (ARM 17.8.749).
5. During the summer season, asphalt plant production shall be limited to 3500 tons during any day (ARM 17.8.749).
6. During the summer season, operation of each diesel-fired generators is limited to no more than 17.5 hours during any day (ARM 17.8.749).

B. Operational Limitations and Conditions: **Winter Season (October 1 through March 31)**

1. Asphalt plant particulate matter emissions shall be limited to 0.04 gr/dscf (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart I).
2. Kootenai shall not cause or authorize emissions to be discharged from the asphalt plant stack that exhibit an opacity of 10% or greater (ARM 17.8.749).
3. Kootenai 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; or the loading, transfer, and storage systems associated with emission control systems, any visible emissions that exhibit an opacity of 10% or greater (ARM 17.8.749).
4. Kootenai shall treat all unpaved portions of the access roads, parking lots, and general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the 10% opacity limitation (ARM 17.8.749).
5. During the winter season, asphalt plant production shall be limited to 1600 tons during any day (ARM 17.8.749).
6. During the winter season, operation of each diesel-fired generator is limited to no more than 8 hours during any day (ARM 17.8.749).

C. Reporting Requirements

1. If this crushing/screening plant is moved to another nonattainment location, an Intent to Transfer form must be sent to the Department and a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.749 and ARM 17.8.765).
2. Production information for the sites covered by this addendum must be maintained for five years and submitted to the Department with the annual emission inventory upon request. The information must include (ARM 17.8.749):
 - a. Daily tons of asphalt produced
 - b. Daily hours of operation for the asphalt plant
 - c. Daily hours of operation for each generator engine
 - d. Type and amount of fuel used for the:
 - i. Asphalt plant (hot-mix dryer)
 - ii. Hot oil heater
 - iii. Diesel generators
 - e. Fugitive dust information consisting of the total miles driven on unpaved roads for all plant vehicles.
3. Kootenai shall document, by day, the daily asphalt production. Kootenai shall sum the total asphalt production for the previous day to verify compliance with the limitations in Section(s) III.A.6 & III.B.6. A written report of compliance verification and the emissions inventory shall be submitted to the Department annually. The report for the previous calendar year may be submitted along with the annual emission inventory (ARM 17.8.749).
4. Kootenai shall document, by day, the total hours of operation of each diesel generator engine. Kootenai shall sum the total hours of operation of each diesel generator engine for the previous day to verify compliance with the limitation in Section(s) III.A.7 & III.B.7. A written report of compliance verification and the emissions inventory shall be submitted to the Department annually. The report for the previous calendar year may be submitted along with the annual emission inventory (ARM 17.8.749).

Addendum 3 Analysis
Kootenai Paving and Construction, Inc.
Permit #3099-03

I. Permitted Equipment

Kootenai Paving and Construction, Inc. (Kootenai) operates a portable parallel flow drum mix asphalt plant, consisting of the following equipment:

- 1984 ADECO drum mix asphalt plant with a GENCO burner (maximum production capacity 200 tons per hour (TPH)), controlled by a 1975 Barber Green baghouse,
- 1984 ADECO 3-bin aggregate feed system,
- 30,000 gallon 1986 asphalt storage tank with propane-fired Power Flame heater,
- Two diesel-fired generators, with the engines' combined rated horsepower (hp) of no more than 619-hp, and
- Associated equipment.

II. Process Description

At the start of the asphalt production process, aggregate and sand materials are loaded into a feeder. The appropriate amount of material is continuously conveyed from the feeder to the drum dryer. Within the drum dryer the aggregate is heated and mixed with a controlled amount of hot asphalt product to produce a specific grade of asphalt. After the mixing has occurred in the drum dryer, it is conveyed to an unheated storage silo and loaded into trucks for delivery to the site. A Barber Green baghouse is used to control the particulate emissions from the drum dryer.

III. Permit History

On October 1, 2000, Kootenai Paving, LLC was issued a permit for the operation of a portable 1983 Aedco drum mix asphalt plant (maximum capacity 200 TPH) with an attached 1983 Barber Green Baghouse, a 1948 Diesel generator (250 kilowatts (KW)), and associated equipment. The facility was originally located at Section 34, Township 31 North, Range 31 West, in Lincoln County, Montana. Because Kootenai Paving, LLC proposed operation at the above site at various times throughout the year, including during the winter months of October 1, 2000, through March 31, 2001, the operation of the plant required that site-specific conditions be established using SCREEN VIEW Modeling.

On July 27, 2001, Kootenai Paving, LLC requested that Permit #3099-00 be modified and Addendum 1 be renewed to allow the permitted facility to operate at Section 34, Township 31 North, Range 31 West, in Lincoln County, Montana. Because this location is in or within 10 kilometers (km) of the Libby particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment area (NAA), SCREEN VIEW modeling was conducted to establish site specific conditions to demonstrate compliance with ambient standards.

On January 19, 2006, the Department of Environmental Quality (Department) received notification that Kootenai Paving, LLC changed the corporate name to Kootenai. The current permit action will change the corporate name and update the permit to reflect current permit language and rule references used by the Department.

IV. Current Permit Action

On May 16, 2008, the Department received a request from Kootenai for a permit modification. Specifically, this permit modification removes the old generator and adds two diesel-fired generators with engines with a combined rated horsepower no greater than 619-hp. Further, the Department updated the emission inventory for the permitted facility to reflect up-to-date published emission factors for hot-mix asphalt plants and added appropriate conditions and limitations consistent with other asphalt batching plants. In addition, the permit analysis was corrected to reflect the correct model year for the Barber Green asphalt system.

Lastly, the Department updated Addendum 3 to reflect the new daily emission rate, including the addition of new operational restrictions on the facility in conformance with the current Department modeling guidance for portable sources operating in or within 10 km of certain PM₁₀ nonattainment areas during the winter season.

V. Applicable Rules and Regulations

The following are partial quotations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the 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.

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

- A. ARM 17.8.749 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. Kootenai demonstrated compliance with applicable rules and standards as required for permit issuance.
- B. 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.
- C. ARM 17.8.765 Transfer of Permit. An Air Quality Permit may be transferred from one location to another if:
 1. Written notice of Intent to Transfer location and public notice is sent to the Department.
 2. The source will operate in the new location for a period of less than 1-year.
 3. The source will not have any significant impact on any nonattainment area or any Class I area.

Kootenai will have to submit proof of compliance with the transfer and public notice

requirements when they transfer to the location covered by this Addendum and will only be allowed to stay in the new location for a period of less than 1 year. Also, the conditions and controls of this Addendum will keep Kootenai from having a significant impact on the Libby PM₁₀ nonattainment area, or any other nonattainment area covered by this permit.

VI. Emission Inventory - Addendum

Summer Season

Emitting Unit	lb/day*					
	PM	PM ₁₀	NO _x	CO	VOC	SO _x
Drum Mix Asphalt Plant Dryer	186.00	80.50	192.50	455.00	112.00	38.50
Hot Oil Heater	0.10	0.10	3.60	0.50	0.14	
Cold Aggregate Storage Piles	11.20	5.43				
Cold Aggregate Screens and Storage Bins	37.80	23.10				
Cold Aggregate Handling/Conveyors	31.50	11.55				
Asphalt Product Silo Filling	0.35	0.88		4.20	42.00	
Drum Mix Plant Asphalt Load-Out	1.75	1.23		4.55	14.35	
Diesel Generator	19.95	19.95	281.58	60.73	22.75	18.55
Diesel Generator	3.85	3.85	54.25	11.73	4.38	3.68
Haul Roads/Vehicle Traffic	50.75	14.35				
Total	343.25	160.94	531.93	536.71	195.62	60.73

Note: Summer Season Emission Inventory (April 1 through September 30)

*Restricted to maintain emissions below modeling threshold of 547 lb/day. A complete emissions inventory is on file with the Department.

Winter Season

Emitting Unit	lb/day*					
	PM	PM ₁₀	NO _x	CO	VOC	SO _x
Drum Mix Asphalt Plant Dryer	186.00	36.80	88.00	208.00	51.20	17.60
Hot Oil Heater	0.10	0.10	3.60	0.50	0.14	
Cold Aggregate Storage Piles	5.15	2.45				
Cold Aggregate Screens and Storage Bins	17.28	10.56				
Cold Aggregate Handling/Conveyors	14.40	5.28				
Asphalt Product Silo Filling	0.13	0.40		1.92	19.20	
Drum Mix Plant Asphalt Load-Out	0.83	0.54		2.08	6.56	
Diesel Generator	9.12	9.12	128.72	27.76	10.40	8.48
Diesel Generator	1.76	1.76	24.80	5.36	2.00	1.68
Haul Roads/Vehicle Traffic	23.63	6.72				
Total	258.40	73.73	245.12	245.62	89.50	27.76

Note: Winter Season Emission Inventory (October 1 through March 31)

*Restricted to maintain PM₁₀ emissions below modeling threshold of 82 lb/day. A complete emissions inventory is on file with the Department.

VII. Existing Air Quality and Impacts

On July 1, 1987, the Environmental Protection Agency (EPA) promulgated new National Ambient Air Quality Standards (NAAQS) for PM₁₀. Due to exceedances of the national standards for PM₁₀, the cities of Kalispell (and the nearby Evergreen area), Columbia Falls, Butte, Whitefish, Libby, Missoula, and Thompson Falls were designated by EPA as nonattainment for PM₁₀. As a result of this designation, the EPA required the Department and the City-County Health Departments to submit PM₁₀ State Implementation Plans (SIP). The SIPs consisted of emission control plans that controlled fugitive dust emissions from roads, parking lots, construction, and demolition, since technical studies determined these sources to be the major contributors to PM₁₀ emissions.

This permit is for a portable asphalt plant. Addendum 3 to Permit #2735-03 contains operational conditions and limitations that will protect air quality for operations in or within 10 km of any PM₁₀ nonattainment area during the summertime and at specific locations in or within 10 km of certain PM₁₀ nonattainment areas, as approved by the Department, during the wintertime. In the view of the Department, the amount of controlled particulate emissions generated by this facility 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 minimal.

VIII. Taking or Damaging Implication Analysis

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

IX. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.

Prepared by: Christine A. Weaver

Date: May 22, 2008

DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Air Resources Management Bureau
P.O. Box 200901, Helena, MT 59620
(406) 444-3490

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Kootenai Paving and Construction, Inc.
P.O. Box 643
Libby, Montana 59923

Air Quality Permit Number: #3099-03

Preliminary Determination Issued: June 20, 2008

Department Decision Issued: July 22, 2008

Permit Final: August 7, 2008

1. *Legal Description of Site:* This permit is for the operation of a portable asphalt plant originally located in Section 34, Township 31 North, Range 31 West, in Lincoln County, Montana. Permit #3099-03 would apply while operating at any location in Montana, except within those areas having a Department-approved permitting program or those areas considered tribal lands. Addendum 3 is included in this air quality permit, to allow Kootenai to operate in or within 10 km of certain PM₁₀ nonattainment areas. *A Missoula County air quality permit would be required for locations within Missoula County, Montana.*
2. *Description of Project:* This permit modification removes a diesel generator and adds two newer diesel generators with engines that total up to 619 hp. Further, the Department updated the emission inventory for the permitted facility to reflect up-to-date published emission factors for hot-mix asphalt plants and changed the allowable production rates to maintain the synthetic minor status.
3. *Objectives of the Project:* To permit newer diesel generators to allow operation of the facility with that power source.
4. *Alternatives Considered:* In addition to the proposed action, the Department also considered the "no-action" alternative. The "no-action" alternative would deny issuance of the air quality preconstruction permit to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because Kootenai demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.
5. *A listing of Mitigation, Stipulations, and Other Controls:* A list of enforceable conditions, including a Best Available Control Technology analysis, would be contained in Permit #3099-03.
6. *Regulatory Effects on Private Property:* The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.

7. The following table summarizes the potential effects of the proposed project on the human environment. The "no-action" alternative has been discussed previously.

Potential Physical and Biological Effects							
		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 areas in which the diesel generators operate. However, the diesel generators alone would present only minor effects to the terrestrial life in the area because of the temporary nature of the operation. Also, the area in question is an existing gravel pit permitted through the Industrial and Energy Minerals Bureau (IEMB). Therefore, only minor effects on terrestrial life and aquatic life would be expected as a result of the proposed changes of equipment operations or from pollutant deposition.

B. Water Quality, Quantity, and Distribution

Only minor effects on water quality would be expected as a result of additional pollutant deposition from the two diesel generators. No additional surface water or ground water quality impacts are expected as a result of using the diesel generators, or from any accidental spills or leaks, because it is previously disturbed industrial area. There are no proposed changes that would have an impact on surface water, groundwater, or drainage patterns on or off site. Overall, any associated impacts would be minor.

C. Geology and Soil Quality, Stability, and Moisture

The proposed addition of two diesel generators would have only minor impacts on soils in any proposed site location because the facility would remain a relatively small industrial operation, would continue to use only relatively small amounts of water for pollution control, and would only have seasonal and intermittent operations.

D. Vegetation Cover, Quantity, and Quality

The existing vegetative cover would be slightly impacted by the diesel generator emissions due to pollutant deposition and the type of pollutants generated by the generators. However, given that the operations would occur in a previously disturbed industrial gravel pit and the relatively small size and portable nature of the facility, any impacts would be minor.

E. Aesthetics

The new generators would be visible and would create additional noise in the area. However, Permit #3099-03 and Addendum 3 would include conditions to control emissions from the generators. The generators would have a minor amount of emissions, would be portable, would have seasonal and intermittent operations, and the primary location would be within an existing open cut pit. Therefore, any visual and noise impacts would be minor.

F. Air Quality

The air quality impacts from the new generators would be minor because Permit #3099-03 and Addendum 3 would include conditions limiting the plant operation. Additionally, the generators would be considered a minor source of air pollution by industrial standards and would be located in an area where good air pollutant dispersion would occur. Therefore, the air impacts would be minor.

The facility operations would be limited, by Permit #3099-03, to total emissions of 250 TPY or less of any regulated pollutant from non-fugitive sources at the plant, including any additional equipment operated at the site. Furthermore, the generator engines would be subject to BACT. Also, the generators would have temporary and intermittent use, and have annual restrictions on the hours of 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 contacted the Montana Natural Heritage Program (MNHP) in an effort to identify any species of special concern that may be found in the area where the proposed modification will occur. Search results have concluded that there are ten species of concern in the area. Area, in this case, will be defined by the township and range of the proposed site, with an additional 1-mile buffer. The species of special concern are the gray wolf, fisher, Canada lynx, wolverine, Bald Eagle, Bull Trout, Columbia River Redband Trout, Coeur d'Alene Salamander, Geyer's Biscuitroot, and Torrent Sculpin.

Since the gray wolf, fisher, Canada lynx, and wolverine are regional, it is unlikely that the proposed modifications to an existing facility would have any impact on these animals.

There are potential nesting sites for Bald Eagles within a 2.5-mile radius of the proposed initial area of operation. All breeding areas where nest sites are within 10 miles of the nearest neighbor may be considered a "cluster" (1994 Bald Eagle Management Plan). While the proposed area of operation may be within a nesting site cluster, the critical breeding time period is typically between February 1 and April 15. Because the diesel engines associated with the portable asphalt operations are temporary sources and typically operate seasonally, there is less potential for these diesel generators to have an effect on the breeding habits of bald eagles.

Since the Redband Trout, the Bull Trout, Coeur d'Alene Salamander, and Geyer's Biscuitroot are not located directly on, or in the immediate area surrounding the site, these species would not be directly affected by the proposed project.

Lastly, the Torrent Sculpin is a vertebrate animal (*Cottus rhotheus*) that is listed as a Species of Concern with habitat within the same section, township & range as the proposed project. However, the modifications allowed by this permitting action do not expand the footprint of the facility, and should have no impact on this species. Furthermore, the facility would be required to minimize impacts by operating under Addendum 3, of Permit #3099-03. Additionally, other similar facilities are already allowed to operate in the same area, so no new types of disturbances are being introduced into the area. Therefore, it is unlikely that any of the listed species of concern would be directly affected by the proposed project.

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

The diesel engines would only require small quantities of air and energy for proper operation, due to the size of the facility. Generally, the operations are seasonal, which would result in even smaller demands on the environmental resources. Thus, any impacts would be minor.

I. Historical and Archaeological Sites

Operation of the two diesel engines, as part of the permitted asphalt operation, typically take place within a previously disturbed industrial open-cut pit. According to previous correspondence with the Montana State Historic Preservation Office, there would be low likelihood of disturbance to any known archaeological or historic site given any previous industrial disturbance in the area. Therefore, the addition of the two diesel engines would not affect any historic or archaeological site.

J. Cumulative and Secondary Impacts

The diesel engine operations would cause minor cumulative and secondary impacts to the physical and biological environment in the immediate area because their operations generate emissions of particulate matter, PM₁₀, NO_x, VOC, CO, SO_x, and noise. Such effects would typically be seasonal, because the source is a portable, temporary source.

The Department recognizes that the area in and around Libby is contaminated with asbestos materials. However, because the pit is currently available for use by other facilities, allowing Kootenai to add two diesel generators to their operations within the site would not result in any new impacts to the immediate and surrounding area. Air pollution from this facility would be controlled by Permit #3099-03 and Addendum 3.

There is a potential for other operations to locate at this site. However, any operations would have to apply for and receive the appropriate permits from the Department prior to operation.

These permits would address the environmental impacts associated with the operations at the proposed site. Kootenai's asphalt operations would be limited by Permit #3099-03 to total particulate emissions of 250 tons per year or less from non-fugitive asphalt operations and any other additional equipment used at the site.

8. The following table summarizes the potential effects of the proposed project on the human environment. The "no-action" alternative has been discussed previously.

Potential Social and Economic Effects							
		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 SOCIAL AND ECONOMIC EFFECTS:

The following comments have been prepared by the Department.

A. Social Structures and Mores

The addition of two diesel generators to the portable asphalt operation would cause no disruption to the social structures and mores in the area because the source is small and temporary.

B. Cultural Uniqueness and Diversity

The addition of two diesel generators to the portable asphalt operations would not have an adverse impact on the cultural uniqueness and diversity of the area of operation because the facility is a small, temporary source that would be operating in a permitted open cut pit.

C. Local and State Tax Base and Tax Revenue

The addition of two diesel generators to the portable asphalt operations would have little, if any, effects on local and state tax base and tax revenue because the facility would be temporary source. The issuance of Permit #3099-03 is not expected to create additional employment to the area. Potential impacts would only be minor and temporary.

D. Agricultural or Industrial Production

The addition of two diesel generators to the portable asphalt operations would occur within a previously disturbed industrial area. Because they would operate within a permitted open cut pit, upon completion of the operations, the area would be reclaimed, as specified, by the

Industrial and Energy Minerals Bureau (IEMB). Further, these portable operations are small by industrial standards and, thus, would have only a minor impact on local industrial production.

E. Human Health

Permit #3099-03 would incorporate conditions to ensure that the asphalt operations, including the new diesel generators, would be operated in compliance with all applicable rules and standards. These rules and standards are designed to be protective of human health. Since these conditions would be incorporated, only minor impacts would be expected from this asphalt plant.

F. Access to and Quality of Recreational and Wilderness Activities

The additional two diesel generators as part of the permitted asphalt operations would not affect any access to recreational and wilderness activities. However, minor effects to the quality of recreational activities might be created by the noise from the site.

G. Quantity and Distribution of Employment

The addition of two diesel generators to the asphalt operations would not affect the quantity of employment in the area because the issuance of Permit #3099-03 is not expected to create new employment for the area. The source is a small, portable source so potential change to the distribution of employment in the area would only be minor and temporary.

H. Distribution of Population

Given the relatively small size of the generators, and limited hours of operation, it is not expected that the activities from the asphalt operations would disrupt the normal population distribution in the area. Additionally, the source would be locating in an existing and active gravel pit. Thus, no new types of sources would be introduced to the area.

I. Demands of Government Services

Government services may be required for acquiring the appropriate permits from government agencies for the installation of the two diesel generators. Demands for government services would be minimal.

J. Industrial and Commercial Activity

The addition of two diesel generators for the asphalt operation would represent only a minor increase in the industrial activity in the given area because of the small size of the operations and the portable and temporary nature of the facility. No additional industrial or commercial activity is expected as a result of the diesel generators.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans or goals that would affect the proposed project. The state standards would protect the proposed site and the environment surrounding the site.

L. Cumulative and Secondary Impacts

The addition of two diesel generators to the existing asphalt operation would cause minor cumulative and secondary impacts to the social and economic environment in the immediate area. Such effects would typically be seasonal, because the source is a portable, temporary source. Because the source is a relatively small, temporary source only minor economic increases to the local economy could be expected. The Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as would be outlined in Permit #3169-03.

Recommendation: No EIS is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: All potential effects resulting from construction and operation of the proposed facility are minor; therefore, an EIS is not required. In addition, the source would be applying the Best Available Control Technology and operational requirements associated with a non-attainment area addendum to the permit. Permit #3099-03 includes conditions and limitations that, if properly applied, would safeguard the surrounding environment.

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

Individuals or groups contributing to this EA: Department of Environmental Quality - Permitting and Compliance Division (Air Resources Management Bureau) and Montana Natural Heritage Program.

EA prepared by: Christine A. Weaver

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