

AIR QUALITY PERMIT

Issued To: Kootenai Sand and Gravel, Inc.
P.O. Box 915
Eureka, MT 59917

Permit #3802-01
Application Complete: 3/20/07
Preliminary Determination Issued: 4/10/07
Department Decision Issued: 4/26/07
Permit Final: 05/12/07
AFS #777-3802

An air quality permit, with conditions, is hereby granted to Kootenai Sand and Gravel, Inc. (Kootenai), pursuant to Sections 75-2-204 and 211, 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. Plant Location

Permit #3802-01 applies while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department)-approved permitting program, those areas considered tribal lands, or those areas in or within 10 kilometers (km) of nonattainment areas for particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀). *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* Kootenai will be required to obtain an addendum to this air quality permit to operate at locations in or within 10 km of any PM₁₀ nonattainment area.

Kootenai's initial operating site was in Section 11, Township 36 North, Range 27 West, in Lincoln County, Montana, near the town of Eureka. A complete list of the permitted equipment is contained in Section I.A of the permit analysis.

B. Current Permit Action

On March 20, 2007, the Department received a complete application for permit modification from Kootenai. Specifically, Kootenai proposed the addition of a Kolberg feeder and screen plant (150 ton per hour (TPH)); a CEC 450 cone crusher and screen plant (150 TPH); a wash plant and sand screw (150 TPH); a CEC Roadrunner Screen-It plant (150 TPH); a 350-horsepower (hp) diesel-fired power plant; a 76-hp turbo-charged diesel engine; a 45-hp gasoline-fired power plant; and associated material handling conveyors.

Section II: Limitations and Conditions

A. Operational Limitations and Conditions

1. Kootenai shall not cause or authorize to be discharged into the atmosphere, from any Standards of Performance for New Stationary Source (NSPS)-affected crusher, any visible emissions that exhibit an opacity of 15% or greater averaged over 6 consecutive minutes (ARM 17.8.340 and 40 Code of Federal Regulations (CFR) Part 60, Subpart OOO).
2. Kootenai shall not cause or authorize to be discharged into the atmosphere from

any other NSPS-affected equipment, such as screens or conveyor transfers, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart OOO).

3. Kootenai shall not cause or authorize to be discharged into the atmosphere, from any non-NSPS-affected equipment, any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.308 and ARM 17.8.752).
4. Water and water spray bars shall be available on site at all times and operated, as necessary, to maintain compliance with the opacity limitations in Sections II.A.1, II.A.2, and II.A.3 (ARM 17.8.752).
5. Kootenai shall not cause or authorize to be discharged into the atmosphere from any street, road, or parking lot, any visible fugitive emissions that exhibit an opacity of 20% or greater (ARM 17.8.308 and ARM 17.8.752).
6. Kootenai shall treat all unpaved portions of the haul roads, access roads, parking lots, or 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 17.8.752).
7. Kootenai shall not operate more than 5 screening systems at any given time and the total combined maximum rated material throughput design capacity of the screens shall not exceed 530 TPH (ARM 17.8.749).
8. Total screening production from the facility shall be limited to 4,642,800 tons during any rolling 12-month time period (ARM 17.8.749).
9. Kootenai shall not operate more than two crushers at any given time and the combined maximum rated material throughput design capacity of the crushers shall not exceed 185 TPH (ARM 17.8.749).
10. Total crushing production from the facility shall be limited to 1,620,600 tons during any rolling 12-month time period (ARM 17.8.749).
11. Kootenai shall not operate more than three diesel engines/generators at any given time and the combined maximum rated design capacity of the diesel-fired engines/generators shall not exceed 546-hp (ARM 17.8.749).
12. Kootenai shall not operate more than two gasoline-fired engines/generators at any given time and the combined maximum rated design capacity of the gasoline-fired engines/generators shall not exceed 65 hp (ARM 17.8.749).
13. Total combined operation of the gasoline-fired engines/generators identified in Section II.A.12 shall not exceed 4450 hours during any rolling 12-month time period (ARM 17.8.749 and ARM 17.8.1204).
14. 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 of emissions during any rolling 12-month time period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).
15. Kootenai shall comply with all applicable standards and limitations, and the

reporting, recordkeeping, monitoring, and notification requirements contained in 40 CFR 60, Subpart OOO (ARM 17.8.340 and 40 CFR 60, Subpart OOO).

B. Testing Requirements

1. Within 60 days after achieving the maximum production rate, but no later than 180 days after initial startup, an Environmental Protection Agency (EPA) Method 9 opacity test and/or other methods and procedures, as specified in 40 CFR Part 60.675, must be performed on any NSPS affected equipment added to the facility under Permit #3802-01 to demonstrate compliance with the emissions limitations contained in Sections II.A.1 and II.A.2 (ARM 17.8.340, 40 CFR Part 60, Subpart A and Subpart OOO).
2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
3. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. If this portable crushing/screening 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 to which 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 (ARM 17.8.765).
2. Kootenai shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. All 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 submitted to the Department upon request, and must be available at the plant site for inspection by the Department (ARM 17.8.749).
3. 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 is not limited to, all sources of emissions identified in the most recent emission inventory report and sources 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 units as 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. Kootenai 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. The 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. Kootenai shall document, by month, the screening production from the facility. By the 25th day of each month, Kootenai shall calculate the screening 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.8. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
6. Kootenai shall document, by month, the crushing production from the facility. By the 25th day of each month, Kootenai shall calculate crushing 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.10. 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 combined hours of operation of the gasoline-fired engines/generators. By the 25th day of each month, Kootenai shall calculate the combined hours of operation for the gasoline engines/generators for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.13. 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).

D. Notification

1. Within 30 days of commencement of construction of the CEC 450 cone crusher and associated screen, Kootenai shall notify the Department of the date of commencement of construction of the affected equipment (ARM 17.8.340 and 40 CFR 60, Subpart A and Subpart OOO).
2. Within 15 days of the actual start-up date of the CEC 450 cone crusher and associated screen, Kootenai shall submit written notification to the Department of the initial start-up date of the affected equipment (ARM 17.8.340 and 40 CFR 60, Subpart A and Subpart OOO).
3. Within 30 days of commencement of construction of the CEC Roadrunner Screen-It Plant, Kootenai shall notify the Department of the date of commencement of construction of the affected equipment (ARM 17.8.340 and 40 CFR 60, Subpart A and Subpart OOO).
4. Within 15 days of the actual start-up date of the CEC 450 cone crusher, Kootenai

shall submit written notification to the Department of the initial start-up date of the affected equipment (ARM 17.8.340 and 40 CFR 60, Subpart A and Subpart OOO).

5. Within 30 days of commencement of construction of the CEC 30" by 50' conveyors, Kootenai shall notify the Department of the date of commencement of construction of the affected equipment (ARM 17.8.340 and 40 CFR 60, Subpart A and Subpart OOO).
6. Within 15 days of the actual start-up date of the CEC 30" by 50' conveyors, Kootenai shall submit written notification to the Department of the initial start-up date of the affected equipment (ARM 17.8.340 and 40 CFR 60, Subpart A and Subpart OOO).
7. Within 15 days of the actual start-up date of all other equipment added to the facility under Permit #3802-01, Kootenai shall submit written notification to the Department of the initial start-up date of the affected equipment (ARM 17.8.340 and 40 CFR 60, Subpart A and Subpart OOO).

Section III: 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 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 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 Fees - 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 at any location in Montana, except within those areas having a Department-approved permitting program.

PERMIT ANALYSIS
Kootenai Sand & Gravel, Inc.
Permit Number 3802-01

I. Introduction/Process Description

A. Permitted Equipment

Kootenai Sand & Gravel, Inc. (Kootenai), owns and operates a portable non-metallic mineral processing plant (crushing/screening plant) consisting of a Cedarapids roll crusher with a 2-deck screen (35 tons per hour (TPH)); a CEC 450 cone crusher and screen plant (150 tph); a Kolman feeder with a Grizzly screen (45 TPH); a Kolberg feeder and screen plant (150 TPH); a CEC Roadrunner Screen-It plant (150 tph); a wash plant and sand screw (150 tph); a 350-horsepower (hp) diesel-fired power plant; a 120-hp diesel-fired power plant; a 76-hp turbo-charged diesel-fired engine; a 45-hp gasoline-fired power plant; a 20-hp gasoline-fired power plant; and associated material handling equipment.

Permit #3802-01 applies while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department)-approved permitting program, those areas considered tribal lands, or those areas in or within 10 kilometers (km) of nonattainment areas for particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀). *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* Kootenai will be required to obtain an addendum to this air quality permit to operate at locations in or within 10 km of any PM₁₀ nonattainment area.

B. Source Description

Kootenai proposes to use this crushing/screening plant and associated equipment to crush sand and gravel materials for use in various construction operations. For a typical operational setup, materials are loaded into the crushing/screening plant(s) by a feeder. Materials are crushed by the crusher and sent to the screens. Materials are screened, separated, and sent to a stockpile for sale and use in construction operations.

C. Permit History

On April 29, 2006, Kootenai was issued a final Montana air quality permit for the operation of a portable crushing/screening facility consisting of a Kolman Feeder with Grizzly Screen (45 TPH); a Cedarapids roll crusher with a 2-deck screen (35 TPH); a 120-hp diesel power plant; a 20-hp gasoline-fired power plant; and associated equipment. The permit was assigned **Permit #3802-00**.

D. Current Permit Action

On March 20, 2007, the Department received a complete application for a permit modification from Kootenai. Specifically, Kootenai proposed the addition of a Kolberg feeder and screen plant (150 TPH); a CEC 450 cone crusher and screen plant (150 TPH); a wash plant and sand screw (150 TPH); a CEC Roadrunner Screen-It plant (150 TPH); a 350-hp diesel-fired power plant; a 76-hp turbo-charged diesel engine; a 45-hp gasoline-fired power plant; and associated material handling conveyors. **Permit #3802-01** replaces Permit #3802-00.

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 analysis associated with each change to the permit.

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. 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 subchapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, 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. (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 which, without resulting in reduction in 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

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 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 (PM). (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 rule.
4. ARM 17.8.310 Particulate Matter, Industrial Processes. This rule requires that no person shall cause or allow 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 rule.
6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank truck or trailer is equipped with a vapor loss control device as described in (1) of this rule.
7. ARM 17.8.340 Standards of Performance for New Stationary Sources. This rule incorporates, by reference, 40 Code of Federal Regulations (CFR) 60, Standards of Performance for New Stationary Sources (NSPS). The owner or operator of any stationary source or modification, as defined and applied in 40 CFR Part 60, NSPS, shall comply with the standards and provisions of 40 CFR Part 60.

In order for a crushing/screening plant to be subject to NSPS requirements, two specific criteria must be met. First, the crushing/screening plant must meet the definition of an affected facility and, second, the equipment in question must

have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted by Kootenai, the crushing/screening equipment is NSPS- affected because of the size and date of manufacture of the equipment (40 CFR Part 60, Subpart A-General Provisions, and Subpart OOO-Non-Metallic Mineral Processing Plants).

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 Kootenai 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 required 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 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, 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 PM, PM₁₀, carbon monoxide (CO), and oxides of nitrogen (NO_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 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, modification, 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 February 16, 2007, issue of the *Tobacco Valley News*, a newspaper of general circulation in the city of Eureka 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 accordance with Section III.H of the permit is 3 years after Permit #3802-01 is issued.
12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of Kootenai, 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 Modifications-- 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 because it is not a listed source and does not have a PTE greater 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.
 - 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 #3802-01 for the Kootenai facility, the following conclusions were made:
 - a. The facility's allowable PTE is less than 100 tons/year for any 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 not subject to any current NESHAP standards.
- e. The facility is subject to NSPS standards (40 CFR 60, Subpart A, General Provisions, and Subpart OOO, Non-Metallic Mineral Processing Plants).
- 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 determined that Kootenai is not subject to the Title V Operating Permit Program. However, in the event that the EPA makes minor sources that are subject to NSPS obtain a Title V Operating Permit, Kootenai may be subject to the Title V Operating Permit Program.

- 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 that limit that source's potential to emit.
 - i. In applying for an exemption under this rule, the owner or operator of the source shall certify to the Department that the source's potential to emit does not require the source to obtain an air quality operating permit.
 - ii. Any source that obtains a federally enforceable limit on potential to emit shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.

Kootenai has accepted operating limits for the permitted gasoline-fired power plants (2) thereby limiting CO emissions to a level that is less than 80% of the major source Title V Operating Permit Program threshold. The Department determined that the annual reporting requirements contained in the permit are sufficient to satisfy these requirements.

- 3. ARM 17.8.1207 Certification of Truth, Accuracy, and Completeness. The compliance certification submittal required by ARM 17.8.1204(3) shall contain a certification of truth, accuracy, and completeness by a responsible official. This certification and 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 that is technologically practicable and economically feasible, except that BACT shall be used.

Under the current permit action, Kootenai proposed the installation and operation of an additional crusher, 3 additional screens, a wash plant and associated sand screw, additional material handling conveyors, two additional diesel-fired power plants, and an additional gasoline-fired power plant to existing and permitted operations. A BACT analysis was submitted by Kootenai in the application for the current permit action, addressing some available methods of controlling particulate emissions from the crushing, screening, and associated material handling activities as well as gaseous emissions from the proposed diesel and gasoline-fired power plants. The Department has reviewed these methods, as well as previous BACT determinations. The following control options have been reviewed by the Department in order to make the following BACT determinations.

A. Particulate Matter Emissions: Crushing, Screening, and Associated Material Handling Emissions

Two types of emissions controls are readily available and used for dust suppression of particulate matter emissions at the site, fugitive emissions for the surrounding area of operations, and for equipment emissions from the crushing/screening operation. These two control methods are water and chemical dust suppressant. Chemical dust suppressant could be used on the area surrounding the crushing/screening operation and for emissions from the crushing, screening, and associated material handling operations. However, because water is more readily available, is more cost effective, is equally effective as chemical dust suppressant, and is more environmentally friendly, water has been identified as the most appropriate method of pollution control of particulate emissions for the general plant area. In addition, water suppression has been required of recently permitted similar sources. However, Kootenai may use chemical dust suppressant to assist in controlling particulate emissions from the surrounding plant area.

Kootenai shall not cause or authorize to be discharged into the atmosphere from any NSPS-affected crusher, any visible emissions that exhibit an opacity of 15% or greater averaged over 6 consecutive minutes. Also, Kootenai shall not cause or authorize to be discharged into the atmosphere from any NSPS affected screen or material handling equipment, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes. Further, Kootenai shall not cause or authorize to be discharged into the atmosphere from any non-NSPS affected equipment, any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.

Kootenai must also take reasonable precautions to limit the fugitive emissions of airborne particulate matter from haul roads, access roads, parking areas, and the general area of operation. Kootenai is required to have water spray bars and water available on site (at all times) and to apply the water, as necessary, to maintain compliance with the opacity and reasonable precaution limitations. Kootenai may also use chemical dust suppression, in order to maintain compliance with emission limitations in Section I.A of Permit #3802-01. The Department determined that using water spray bars, water, and chemical dust suppressant to maintain compliance with the opacity requirements and reasonable precaution limitations constitutes BACT for the proposed new equipment and fugitive sources of particulate matter emissions under the current permit action.

B. Combustion Source Gaseous and Particulate Emissions: Diesel and Gasoline-Fired Generators

Because of the limited amount of emissions produced by the diesel and gasoline-fired

generators/engines and the lack of readily available and cost-effective add-on controls, the Department determined that the requirement for 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 diesel and gasoline-fired generators/engines. In addition, Kootenai has accepted federally enforceable operating limits for the gasoline-fired generators for the purpose of avoiding major Title V operating Permit Program applicability thereby further limiting emissions from the affected sources.

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

Emitting Unit	Controlled Emissions (ton/yr)					
	PM	PM ₁₀	NO _x	CO	VOC	SO _x
Crusher #1 – Roll (35 ton/hr)	0.18	0.08	0.00	0.00	0.00	0.00
Crusher #2 – Cone (150 ton/hr)	0.79	0.35	0.00	0.00	0.00	0.00
Screen #1 – Kolman (45 ton/hr)	0.43	0.15	0.00	0.00	0.00	0.00
Screen #2 – Cedar Rapids (35 ton/hr)	0.34	0.11	0.00	0.00	0.00	0.00
Screen #3 – Kolberg (150 ton/hr)	1.45	0.49	0.00	0.00	0.00	0.00
Screen #4 – CEC 450 (150 ton/hr)	1.45	0.49	0.00	0.00	0.00	0.00
Screen #5 – CEC Roadrunner (150 ton/hr)	1.45	0.49	0.00	0.00	0.00	0.00
Material Transfer (7) @ 35 ton/hr	0.15	0.05	0.00	0.00	0.00	0.00
Material Transfer (7) @ 150 ton/hr	0.64	0.21	0.00	0.00	0.00	0.00
Pile Forming	11.04	5.26	0.00	0.00	0.00	0.00
Bulk Loading	0.003	0.003	0.00	0.00	0.00	0.00
Haul Roads and Vehicle Traffic	2.74	1.23	0.00	0.00	0.00	0.00
Diesel-Fired Power Plant (120 hp)	1.16	1.16	16.29	3.51	1.30	1.08
Diesel-Fired Power Plant (350 hp)	3.37	3.37	47.52	10.24	3.79	3.14
Diesel-Fired Engine (76 hp)	0.73	0.73	10.32	2.22	0.82	0.68
Gasoline-Fired Power Plant (20 hp) ^a	0.03	0.03	0.49	19.54	0.67	0.03
Gasoline-Fired Power Plant (45 hp) ^a	0.07	0.07	1.10	43.95	1.50	0.06
Total Facility Emissions^b	26.02	14.27	75.73	79.47	8.08	4.99

^a Emissions based on enforceable combined (2 gasoline-fired power plants) operating limit of 4450 hr/yr. This condition limits total facility CO emissions to a level less than 80% of the Title V major source permitting threshold.

^b The estimate of total facility emissions does not include emissions from the permitted wash plant and associated sand screw. Because these sources constitute a wet process, the Department determined that PM and PM₁₀ emissions from these source are negligible.

Crusher #1 – Roll (35 TPH)

Process Rate: 35 ton/hr (Company Information)
Hours of operation: 8760 hr/yr (Annual Capacity)

PM Emissions:

Emission Factor: 0.0012 lbs/ton (AP-42, Table 11.19.2-2, Controlled Emissions, 8/04)
Calculations: 0.0012 lbs/ton * 35 ton/hr = 0.04 lb/hr
0.04 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.18 ton/yr

PM₁₀ Emissions:

Emission Factor: 0.00054 lbs/ton (AP-42, Table 11.19.2-2, Controlled Emissions, 8/04)
Calculations: 0.00054 lbs/ton * 35 ton/hr = 0.02 lb/hr
0.02 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.08 ton/yr

Crusher #2 – Cone (150 TPH)

Process Rate: 150 ton/hr (Company Information)
Hours of operation: 8760 hr/yr (Annual Capacity)

PM Emissions:

Emission Factor: 0.0012 lbs/ton (AP-42, Table 11.19.2-2, Controlled Emissions, 8/04)
Calculations: 0.0012 lbs/ton * 150 ton/hr = 0.18 lb/hr
0.18 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.79 ton/yr

PM₁₀ Emissions:

Emission Factor: 0.00054 lbs/ton (AP-42, Table 11.19.2-2, Controlled Emissions, 8/04)
Calculations: 0.00054 lbs/ton * 150 ton/hr = 0.08 lb/hr
0.08 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.35 ton/yr

Screen #1 – Kolman (45 ton/hr)

Process Rate: 45 ton/hr (Company Information)
Hours of operation: 8760 hr/yr (Annual Capacity)

PM Emissions:

Emission Factor: 0.0022 lbs/ton (AP-42, Table 11.19.2-2, Controlled Emissions, 8/04)
Calculations: 0.0022 lbs/ton * 45 ton/hr = 0.10 lb/hr
0.10 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.43 ton/yr

PM₁₀ Emissions:

Emission Factor: 0.00074 lbs/ton (AP-42, Table 11.19.2-2, Controlled Emissions, 8/04)
Calculations: 0.00074 lbs/ton * 45 ton/hr = 0.03 lb/hr
0.03 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.15 ton/yr

Screen #2 – Cedar Rapids (35 ton/hr)

Process Rate: 35 ton/hr (Company Information)
Hours of operation: 8760 hr/yr (Annual Capacity)

PM Emissions:

Emission Factor: 0.0022 lbs/ton (AP-42, Table 11.19.2-2, Controlled Emissions, 8/04)
Calculations: 0.0022 lbs/ton * 35 ton/hr = 0.08 lb/hr
0.08 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.34 ton/yr

PM₁₀ Emissions:

Emission Factor: 0.00074 lbs/ton (AP-42, Table 11.19.2-2, Controlled Emissions, 8/04)
Calculations: 0.00074 lbs/ton * 35 ton/hr = 0.03 lb/hr
0.03 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.11 ton/yr

Screen #3 – Kolberg (150 ton/hr)

Process Rate: 150 ton/hr (Company Information)
Hours of operation: 8760 hr/yr (Annual Capacity)

PM Emissions:

Emission Factor: 0.0022 lbs/ton (AP-42, Table 11.19.2-2, Controlled Emissions, 8/04)
Calculations: 0.0022 lbs/ton * 150 ton/hr = 0.33 lb/hr
0.33 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 1.45 ton/yr

PM₁₀ Emissions:

Emission Factor: 0.00074 lbs/ton (AP-42, Table 11.19.2-2, Controlled Emissions, 8/04)
Calculations: 0.00074 lbs/ton * 150 ton/hr = 0.11 lb/hr
0.11 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.49 ton/yr

Screen #4 – CEC 450 (150 ton/hr)

Process Rate: 150 ton/hr (Company Information)
 Hours of operation: 8760 hr/yr (Annual Capacity)

PM Emissions:

Emission Factor: 0.0022 lbs/ton (AP-42, Table 11.19.2-2, Controlled Emissions, 8/04)
 Calculations: 0.0022 lbs/ton * 150 ton/hr = 0.33 lb/hr
 0.33 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 1.45 ton/yr

PM₁₀ Emissions:

Emission Factor: 0.00074 lbs/ton (AP-42, Table 11.19.2-2, Controlled Emissions, 8/04)
 Calculations: 0.00074 lbs/ton * 150 ton/hr = 0.11 lb/hr
 0.11 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.49 ton/yr

Screen #5 – CEC Roadrunner (150 ton/hr)

Process Rate: 150 ton/hr (Company Information)
 Hours of operation: 8760 hr/yr (Annual Capacity)

PM Emissions:

Emission Factor: 0.0022 lbs/ton (AP-42, Table 11.19.2-2, Controlled Emissions, 8/04)
 Calculations: 0.0022 lbs/ton * 150 ton/hr = 0.33 lb/hr
 0.33 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 1.45 ton/yr

PM₁₀ Emissions:

Emission Factor: 0.00074 lbs/ton (AP-42, Table 11.19.2-2, Controlled Emissions, 8/04)
 Calculations: 0.00074 lbs/ton * 150 ton/hr = 0.11 lb/hr
 0.11 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.49 ton/yr

Material Transfer @ 35 ton/hr (7 Transfers)

Process Rate: 35 ton/hr (Company Information)
 Number of Transfers: 7 Transfers (Company Information)
 Hours of operation: 8760 hr/yr (Annual Capacity)

PM Emissions:

Emission Factor: 0.00014 lbs/ton (AP-42, Table 11.19.2-2, Controlled Emissions, 8/04)
 Calculations: 0.00014 lbs/ton * 35 tons/hr * 7 Transfers = 0.03 lb/hr
 0.03 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.15 ton/yr

PM₁₀ Emissions:

Emission Factor: 4.60E-05 lbs/ton (AP-42, Table 11.19.2-2, Controlled Emissions, 8/04)
 Calculations: 0.000046 lbs/ton * 35 tons/hr * 7 Transfers = 0.01 lb/hr
 0.01 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.05 ton/yr

Material Transfer @ 150 ton/hr (7 Transfers)

Process Rate: 150 ton/hr (Company Information)
 Number of Transfers: 7 Transfers (Company Information)
 Hours of operation: 8760 hr/yr (Annual Capacity)

PM Emissions:

Emission Factor: 0.00014 lbs/ton (AP-42, Table 11.19.2-2, Controlled Emissions, 8/04)
 Calculations: 0.00014 lbs/ton * 150 tons/hr * 7 Transfers = 0.15 lb/hr

$$0.15 \text{ lb/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 0.64 \text{ ton/yr}$$

PM₁₀ Emissions:

Emission Factor: 4.60E-05 lbs/ton (AP-42, Table 11.19.2-2, Controlled Emissions, 8/04)
 Calculations: 0.000046 lbs/ton * 150 tons/hr * 7 Transfers = 0.05 lb/hr
 0.05 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.21 ton/yr

Pile Forming (4 Piles)

Process Rate: 150 ton/hr (Company Information)
 Number of Piles: 4 Piles (Company Information)
 Hours of operation: 8760 hr/yr (Annual Capacity)

PM Emissions:

Emission Factor: 0.0084 lbs/ton (AP-42, Table 8.23-4, moisture >4% by weight, 8/82)
 Control Efficiency: 50% water spray (BACT Requirement)
 Calculations: 0.0084 lbs/ton * 150 ton/hr * 4 Piles = 5.04 lb/hr
 5.04 lbs/hr * 8760 hr/yr * 0.0005 ton/lb = 22.08 ton/yr (uncontrolled)
 22.08 ton/yr * (50% Control) = 11.04 ton/yr

PM₁₀ Emissions:

Emission Factor: 0.004 lbs/ton (AP-42, Table 8.23-4, moisture >4% by weight, 8/82)
 Control Efficiency: 50% water spray (BACT Requirement)
 Calculations: 0.004 lbs/ton * 150 tons/hr * 4 Piles = 2.40 lb/hr
 2.40 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 10.51 ton/yr (uncontrolled)
 10.51 ton/yr * (50% Control) = 5.26 ton/yr

Bulk Loading (3)

Process Rate: 150 ton/hr (Company Information)
 Number of Loads: 3 loads (Company Information)
 Hours of operation: 8760 hr/yr (Annual Capacity)

PM Emissions (assume PM = PM₁₀):

Emission Factor: 1.60E-06 lbs/ton (AP-42, Table 11.19.2-2, Controlled Emissions, 8/04)
 Calculations: 0.0000016 lb/ton * 150 ton/hr * 3 loads = 0.0007 lb/hr
 0.0007 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.003 ton/yr

PM-10 Emissions (assume PM₁₀ = PM):

Emission Factor: 1.60E-06 lbs/ton (AP-42, Table 11.19.2-2, Controlled Emissions, 8/04)
 Calculations: 0.0000016 lb/ton * 150 ton/hr * 3 loads = 0.0007 lb/hr
 0.0007 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.003 ton/yr

Haul Roads

Vehicle Miles Traveled (VMT): 5 VMT/day (Estimated)
 Control Efficiency: 50% watering (Reasonable Precautions)
 Rated Load Capacity: <50 tons (Company Information)

PM Emissions:

Emission Factor: 6.00 lb/VMT (DEQ Policy)
 Calculations: E(PM)= (5 VMT/day)(6.00 lb/VMT)(50% Control)
 E(PM)= 15.00 lb/day
 2.74 ton/yr

PM₁₀ Emissions:

Emission Factor: 2.70 lb/VMT (DEQ Policy)

Calculations: $E(\text{PM}_{10}) = (5 \text{ VMT/day})(2.70 \text{ Lb/VMT})(50\% \text{ Control})$
 $E(\text{PM}_{10}) = 6.75 \text{ lb/day}$
 1.23 ton/yr

Diesel Generator/Power Plant (120 hp)

Generator Capacity: 120 hp (Company Information)
 Hours of Operation: 8760 hr/yr (Annual Capacity)

PM Emissions (assume all PM = PM₁₀)

Emission Factor: 0.0022 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
 Calculations: $120 \text{ hp} * 0.0022 \text{ lb/hp-hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 1.16 \text{ ton/yr}$

PM₁₀ Emissions

Emission Factor: 0.0022 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
 Calculations: $120 \text{ hp} * 0.0022 \text{ lb/hp-hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 1.16 \text{ ton/yr}$

NOx Emissions

Emission Factor: 0.0310 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
 Calculations: $120 \text{ hp} * 0.0310 \text{ lb/hp-hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 16.29 \text{ ton/yr}$

CO Emissions

Emission Factor: 0.00668 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
 Calculations: $120 \text{ hp} * 0.00668 \text{ lb/hp-hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 3.51 \text{ ton/yr}$

VOC Emissions

Emission Factor: 0.00247 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
 Calculations: $120 \text{ hp} * 0.00247 \text{ lb/hp-hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 1.30 \text{ ton/yr}$

SOx Emissions

Emission Factor: 0.00205 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
 Calculations: $120 \text{ hp} * 0.00205 \text{ lb/hp-hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 1.08 \text{ ton/yr}$

Diesel Generator/Power Plant (350 hp)

Generator Capacity: 350 hp (Company Information)
 Hours of Operation: 8760 hr/yr (Annual Capacity)

PM Emissions (assume all PM = PM₁₀)

Emission Factor: 0.0022 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
 Calculations: $350 \text{ hp} * 0.0022 \text{ lb/hp-hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 3.37 \text{ ton/yr}$

PM₁₀ Emissions

Emission Factor: 0.0022 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
 Calculations: $350 \text{ hp} * 0.0022 \text{ lb/hp-hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 3.37 \text{ ton/yr}$

NOx Emissions

Emission Factor: 0.0310 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
 Calculations: $350 \text{ hp} * 0.0310 \text{ lb/hp-hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 47.52 \text{ ton/yr}$

CO Emissions

Emission Factor: 0.00668 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
 Calculations: $350 \text{ hp} * 0.00668 \text{ lb/hp-hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 10.24 \text{ ton/yr}$

VOC Emissions

Emission Factor: 0.00247 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Calculations: $350 \text{ hp} * 0.00247 \text{ lb/hp-hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 3.79 \text{ ton/yr}$

SOx Emissions

Emission Factor: 0.00205 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Calculations: $350 \text{ hp} * 0.00205 \text{ lb/hp-hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 3.14 \text{ ton/yr}$

Diesel Engine (76 hp)

Engine Capacity: 120 hp (Company Information)
Hours of Operation: 8760 hr/yr (Annual Capacity)

PM Emissions (assume all PM = PM₁₀)

Emission Factor: 0.0022 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Calculations: $76 \text{ hp} * 0.0022 \text{ lb/hp-hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 0.73 \text{ ton/yr}$

PM₁₀ Emissions

Emission Factor: 0.0022 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Calculations: $76 \text{ hp} * 0.0022 \text{ lb/hp-hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 0.73 \text{ ton/yr}$

NOx Emissions

Emission Factor: 0.0310 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Calculations: $76 \text{ hp} * 0.0310 \text{ lb/hp-hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 10.32 \text{ ton/yr}$

CO Emissions

Emission Factor: 0.00668 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Calculations: $76 \text{ hp} * 0.00668 \text{ lb/hp-hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 2.22 \text{ ton/yr}$

VOC Emissions

Emission Factor: 0.00247 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Calculations: $76 \text{ hp} * 0.00247 \text{ lb/hp-hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 0.82 \text{ ton/yr}$

SOx Emissions

Emission Factor: 0.00205 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Calculations: $76 \text{ hp} * 0.00205 \text{ lb/hp-hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 0.68 \text{ ton/yr}$

Gasoline-Fired Power Plant (20 hp)

Generator Capacity: 20 hp (Company Information)
Hours of Operation: 4450 hr/yr (Permit Limit)

PM Emissions (assume all PM = PM₁₀)

Emission Factor: 0.000721 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Calculations: $20 \text{ hp} * 0.000721 \text{ lb/hp-hr} * 4450 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 0.03 \text{ ton/yr}$

PM₁₀ Emissions

Emission Factor: 0.000721 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Calculations: $20 \text{ hp} * 0.000721 \text{ lb/hp-hr} * 4450 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 0.03 \text{ ton/yr}$

NOx Emissions

Emission Factor: 0.0110 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Calculations: $20 \text{ hp} * 0.0110 \text{ lb/hp-hr} * 4450 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 0.49 \text{ ton/yr}$

CO Emissions

Emission Factor: 0.4390 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Calculations: $20 \text{ hp} * 0.4390 \text{ lb/hp-hr} * 4450 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 19.54 \text{ ton/yr}$

VOC Emissions

Emission Factor: 0.0150 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Calculations: $20 \text{ hp} * 0.0150 \text{ lb/hp-hr} * 4450 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 0.67 \text{ ton/yr}$

SOx Emissions

Emission Factor: 0.000591 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Calculations: $20 \text{ hp} * 0.000591 \text{ lb/hp-hr} * 4450 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 0.03 \text{ ton/yr}$

Gasoline-Fired Power Plant (45 hp)

Generator Capacity: 45 hp (Company Information)
Hours of Operation: 4450 hr/yr (Permit Limit)

PM Emissions (assume all PM = PM₁₀)

Emission Factor: 0.000721 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Calculations: $45 \text{ hp} * 0.000721 \text{ lb/hp-hr} * 4450 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 0.07 \text{ ton/yr}$

PM₁₀ Emissions

Emission Factor: 0.000721 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Calculations: $45 \text{ hp} * 0.000721 \text{ lb/hp-hr} * 4450 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 0.07 \text{ ton/yr}$

NOx Emissions

Emission Factor: 0.0110 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Calculations: $45 \text{ hp} * 0.0110 \text{ lb/hp-hr} * 4450 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 1.10 \text{ ton/yr}$

CO Emissions

Emission Factor: 0.4390 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Calculations: $45 \text{ hp} * 0.4390 \text{ lb/hp-hr} * 4450 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 43.95 \text{ ton/yr}$

VOC Emissions

Emission Factor: 0.0150 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Calculations: $45 \text{ hp} * 0.0150 \text{ lb/hp-hr} * 4450 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 1.50 \text{ ton/yr}$

SOx Emissions

Emission Factor: 0.000591 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Calculations: $45 \text{ hp} * 0.000591 \text{ lb/hp-hr} * 4450 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 0.06 \text{ ton/yr}$

V. Existing Air Quality

Permit #3802-01 is issued for the modification of a portable crushing/screening facility. Permit #3802-01 allows Kootenai to operate at any location in Montana, which is 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.* Kootenai will be required to obtain an addendum to this air quality permit to operate at locations in or within 10 km of PM₁₀ nonattainment areas (such as Libby, Kalispell, Whitefish, Polson or Ronan).

VI. Air Quality Impacts

The current permit action authorizes the modification of an existing portable crushing/screening plant to be located and operated at various locations around Montana. Based on the relatively small amount of emissions resulting from the modified portable crushing/screening operation and the limits and conditions that are included in Permit #3802-01, the Department believes that the allowable/permitted emissions from this source would not cause or contribute to an exceedance of any ambient air quality standard while operating in any area classified as attainment or unclassified for the ambient air quality standards.

VII. 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.

VIII. Environmental Assessment

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

Permit Analysis Prepared By: M. Eric Merchant, MPH

Date: April 4, 2007

ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Air Resources Management Bureau
1520 East Sixth Avenue
P.O. Box 200901
Helena, Montana 59620-0901
(406) 444-3490

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued For: Kooteani Sand & Gravel, Inc.
P.O. Box 915
Eureka, MT 59917

Permit Number: 3802-01

Preliminary Determination Issued: April 10, 2007

Department Decision Issued: April 26, 2007

Permit Final: May 14, 2007

1. *Legal Description of Site:* Permit #3802-01 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 km of PM₁₀ nonattainment areas. *A Missoula County air quality permit would be required for locations within Missoula County, Montana.* An addendum to this air quality permit would be required for locations in or within 10 km of PM₁₀ nonattainment areas.
2. *Description of Project:* The current permit action would add a Kolberg feeder and screen plant (150 TPH); a CEC 450 cone crusher and screen plant (150 TPH); a wash plant and sand screw (150 TPH); a CEC Roadrunner Screen-It plant (150 TPH); a 350-hp diesel-fired power plant; a 76-hp turbo-charged diesel engine; a 45-hp gasoline-fired power plant; and associated material handling conveyors to the previously permitted non-metallic mineral processing (crushing/screening) plant.
3. *Objectives of Project:* The objective of the project would be to provide operational flexibility through the incorporation of additional process equipment to facility operations. In addition, the proposed project would increase business and revenue for the company.
4. *Alternatives Considered:* In addition to the proposed action, the Department considered the "no-action" alternative. The "no-action" alternative would deny issuance of the Montana Air Quality 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 the enforceable permit conditions and a permit analysis, including a BACT analysis, would be contained in Permit #3802-01.
6. *Regulatory Effects on Private Property Rights:* The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and to demonstrate compliance with those requirements and would not unduly restrict private property rights.

7. 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 Resources			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 modified crushing/screening operations. The modified crushing/screening operations would be considered a minor source of emissions, by industrial standards, with intermittent and seasonal operations. Therefore, only minor effects on terrestrial life and habitats would be expected as a result of new equipment operations or from pollutant deposition.

Impacts on aquatic life and habitats could result from storm water runoff and pollutant deposition, but such impacts would be minor as the modified facility would be a minor source of emissions (with seasonal and intermittent operations) and only minor amounts of water would be used for pollution control. Since only a minor amount of air emissions would be generated from the proposed new equipment, only minor deposition of air pollutants would occur. Therefore, only minor and temporary impacts to aquatic life and habitat would be expected from the proposed new crushing/screening equipment.

Overall, any impacts to the above-cited physical and biological resource of the human environment of the project area would be minor because the proposed crushing/screening operation would typically operate within areas designated for such operations and the proposed new equipment would result in similar impacts to those impacts created by the existing equipment. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

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 the proposed new equipment operations. However, water use would only cause a minor disturbance to these areas, since only relatively small amounts of water would be needed. Only minor surface and groundwater quality impacts would be expected as a result of

using water for dust suppression because only small amounts of water would be required to control air pollutant emissions and deposition of air pollutant emissions would be minor (as described in Section 7.F of this EA).

Overall, any impacts to the above-cited physical and biological resource of the human environment of the project area would be minor because the proposed crushing/screening operation would typically operate within areas designated for such operations and the proposed new equipment would result in similar impacts to those impacts created by the existing equipment. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

C. Geology and Soil Quality, Stability, and Moisture

The proposed modification of existing crushing/screening operations would have only minor impacts on soils in any proposed site location (due to the construction and use of the new crushing/screening equipment) 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. Therefore, any impacts from the proposed new crushing/screening equipment to geology and soil quality, stability, and moisture at any proposed operational site would be minor.

Overall, any impacts to the above-cited physical and biological resource of the human environment of any given project area would be minor because the proposed crushing/screening operation would typically operate within areas designated for such operations and the proposed new equipment would result in similar impacts to those impacts created by the existing equipment. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

D. Vegetation Cover, Quantity, and Quality

Because the modified facility would remain a minor source of emissions, by industrial standards, and would typically operate in areas previously designated and used for non-metallic mineral processing operations, impacts from the emissions from the modified crushing/screening facility would be minor and typical. As described in Section 7.F of this EA, the amount of air emissions generated from the modified facility would be minor. As a result, the corresponding deposition of the air pollutants on the surrounding vegetation would also be minor. Also, because water use for pollution control would be minimal, as described in Section 8.B, and the associated soil disturbance from modified operations would be minimal, as described in Section 8.C, corresponding vegetative impacts would be minor.

Overall, any impacts to the above-cited physical and biological resource of the human environment of the project area would be minor because the proposed crushing/screening operation would typically operate within areas designated for such operations and the proposed new equipment would result in similar impacts to those impacts created by the existing equipment. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

E. Aesthetics

The modified crushing/screening operation would be visible and would create additional noise while in operation. However, Permit #3802-01 would include conditions to control emissions, including visible emissions, from the proposed new equipment. Also, because the modified crushing/screening operation is portable and would operate on an intermittent and seasonal basis and would typically locate within a previously permitted open-cut pit, any visual and noise impacts would be minor and short-lived.

Overall, any impacts to the above-cited physical and biological resource of the human

environment of any given project area would be minor because the proposed crushing/screening operation would typically operate within areas designated for such operations and the proposed new equipment would result in similar impacts to those impacts created by the existing equipment. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

F. Air Quality

The air quality impacts from the modified crushing/screening operations would be minor because Permit #3802-01 would include conditions limiting the opacity from the proposed new equipment, as well as requiring water spray bars and other means to control air pollution. Further, Permit #3802-01 would limit total emissions from the proposed new equipment, any existing permitted equipment, and any additional equipment owned and operated by Kootenai to 250 tons/year or less at any given operating site, excluding fugitive emissions.

Further, the modified crushing/screening plant would be used on a temporary and intermittent basis and would typically operate within an area designated for such operations, thereby further reducing potential air quality impacts from the facility. Additionally, the small and intermittent amounts of deposition generated from the modified crushing/screening operations would be minimal because the pollutants emitted would be well controlled, widely dispersed (from such factors as wind speed and wind direction), and would result in only minor impacts to the surrounding environment. Overall, any air quality impacts resulting from the proposed modification of permitted crushing/screening operations would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

Emissions from the modified crushing/screening plant operations may impact unique, endangered, fragile, or limited environmental resources located in a given proposed project area. However, as detailed in Section V of the permit analysis, any emissions and resulting impacts from the project would be minor due to the low concentration of those pollutants emitted.

Permit #3802-01 would regulate the proposed modified crushing/screening operations while located at various locations throughout the state. Most operations would take place within existing and previously disturbed industrial gravel pits thereby resulting in only minor impacts to the industrial area. Further, given the temporary and portable nature of the operations, any impacts would be minor and short-lived. In addition, operational conditions and limitations in Permit #3802-01 would be protective of these resources by limiting overall impacts to the surrounding environment.

Overall, any impacts to the above-cited physical and biological resource of the human environment of any given project area would be minor because the proposed crushing/screening operation would typically operate within areas designated for such operations and the proposed new equipment would result in similar impacts to those impacts created by the existing equipment. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

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

Due to the relatively small size of the facility, including the proposed new equipment, the crushing/screening operation would result in only minor demands on the environmental resources of water, air, and energy for normal operations. Small quantities of water would be used for dust suppression and would control particulate emissions generated through new and existing equipment operations and vehicle traffic at the site. Energy requirements would be accommodated through the

operation of the permitted and proposed new diesel and gasoline-fired electric generator(s) and would be minor due to the relatively small amount of fuel required to operate the generator(s). In addition, the crushing/screening plant would operate on an intermittent and seasonal basis thereby minimizing energy demands. Further, impacts to air resources from the new equipment would be minor because the source would remain small by industrial standards, would operate on an intermittent and seasonal basis, and would generate relatively minor amounts of regulated pollutants through normal operations.

Overall, any impacts to the above-cited physical and biological resource of the human environment of any given project area would be minor because the proposed crushing/screening operation would typically operate within areas designated for such operations and the proposed new equipment would result in similar impacts to those impacts created by the existing equipment. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

I. Historical and Archaeological Sites

Typically, the modified crushing/screening plant would operate within a previously disturbed open-cut pit used for such purposes. According to past correspondence from the Montana Historical Society, State Historic Preservation Office (SHPO), there would be a low likelihood of disturbance to any known archaeological or historical site given any previous industrial disturbance in any given area of operation. Therefore, it is unlikely that the proposed modified crushing/screening plant would impact any historical or archaeological sites in a given area of operation.

J. Cumulative and Secondary Impacts

The proposed modification to the existing crushing/screening operation would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment of a given proposed area of operation because the proposed new equipment would generate emissions of regulated air pollutants and noise would be generated from new equipment operations. Emissions and noise would cause minor disturbance to a given area because the equipment is relatively small by industrial standards and the facility would be expected to operate in areas designated and typically used for such operations. Additionally, this facility, in combination with the other emissions from equipment operations at the operational site, would not be permitted to exceed 250 tons per year of non-fugitive emissions.

Overall, any cumulative or secondary impacts to the above-cited physical and biological resource of the human environment of any given project area would be minor because the proposed modified crushing/screening operations would typically operate within areas designated for such operations and the proposed new equipment would result in similar impacts to those impacts created by the existing equipment. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

8. 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 following comments have been prepared by the Department.

A. Social Structures and Mores

The modified crushing/screening operation would cause no disruption to the social structures and mores in a given area of operation because the modified source would be a minor industrial source of emissions, would initially and typically operate in an existing industrial gravel pit used for such purposes, and would operate on a temporary and intermittent basis. Further, the proposed new equipment would be required to operate according to the limits and conditions that would be included in Permit #3802-01, which would limit any impacts to social structures and mores.

B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of any given area of operation would not be impacted by the proposed modification of the crushing/screening plant because the proposed facility would remain a portable source, the facility would conduct seasonal and intermittent operations, and the facility would utilize a relatively small number of employees for normal operations. The predominant use of the surrounding area would not change as a result of the modification of this crushing/screening operation. Therefore, the cultural uniqueness and diversity of any given area of operation would not be impacted.

C. Local and State Tax Base and Tax Revenue

The proposed modified crushing/screening operations would have little, if any, impact on the local and state tax base and tax revenue of any given area of operation because the facility would be a minor industrial source, would remain a portable source, and would conduct only seasonal and intermittent operations. Further, the facility would require the use of only a few employees and little or no additional employment to accommodate the proposed new equipment. 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 would be minor

because the source would be portable and the money generated for taxes would be widespread. Overall, any impacts to the above-cited economic and social resource of the human environment of any given project area would be minor because the proposed crushing/screening operation would typically operate within areas designated for such operations and the proposed new equipment would result in similar impacts to those impacts created by the existing equipment. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

D. Agricultural or Industrial Production

The proposed modified crushing/screening operations would result in only minor impacts to the local industrial production of a given area since the facility would remain small by industrial standards and would result in only minor and controlled air emissions (see Section 7.F of this EA). Also, while the facility could locate within or adjacent to land that is currently used for agricultural animal grazing and/or other agricultural production, most operations would take place within existing and previously disturbed industrial gravel pits thereby resulting in only minor impacts and little or no displacement of agricultural land. Because minimal deposition of air pollutants from the new equipment would occur on the surrounding land, only minor and temporary impacts to the surrounding vegetation and land would occur thereby further limiting any impacts to surrounding agricultural land and practices in any given area of operations.

Overall, any impacts to the above-cited economic and social resource of the human environment of any given project area would be minor because the proposed crushing/screening operation would typically operate within areas designated for such operations and the proposed new equipment would result in similar impacts to those impacts created by the existing equipment. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

E. Human Health

Permit #3802-01 would include limits and conditions applicable to the proposed new equipment to ensure that the crushing/screening facility 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 7.F. of this EA, the air emissions from the proposed modification of the existing facility would be minimized by the use of water spray and other process limits that would be required by Permit #3802-01. Also, the facility would operate on a temporary and intermittent basis and pollutants would be widely dispersed (see Section 7.F of this EA). Therefore, only minor impacts would be expected on human health from the proposed modified crushing/screening operations.

Overall, any impacts to the above-cited economic and social resource of the human environment of any given project area would be minor because the proposed crushing/screening operation would typically operate within areas designated for such operations and the proposed new equipment would result in similar impacts to those impacts created by the existing equipment. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

F. Access to and Quality of Recreational and Wilderness Activities

Noise from the proposed modified facility would be minor because the crushing/screening operation would remain small by industrial standards and would operate in areas typically used for such operations (i.e. existing gravel pit). As a result, the amount of noise generated from the proposed new crushing/screening equipment would be minimal and typical for the area. Also, the facility would operate on a seasonal and intermittent basis. Therefore, any impacts to the quality of recreational and wilderness activities created by the proposed new equipment operating with

the existing crushing and screening plant would be minor and short-lived.

Overall, any impacts to the above-cited economic and social resource of the human environment of any given project area would be minor because the proposed crushing/screening operation would typically operate within areas designated for such operations and the proposed new equipment would result in similar impacts to those impacts created by the existing equipment. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

G. Quantity and Distribution of Employment

H. Distribution of Population

The modified crushing/screening operation would require only a few existing employees for normal operations and operations would be conducted on a seasonal and intermittent basis thereby resulting in little, if any, permanent immigration into or emigration out of a given area of operation. Therefore, the proposed modification of the existing crushing/screening operations would not impact the above-cited economic and social resources of the human environment of any given project area.

I. Demands of Government Services

Minor increases would be seen in traffic on existing roadways in the area while the modified crushing/screening operation is in progress. In addition, government services would be required for acquiring the appropriate permits for the proposed project and to verify compliance with the permits that would be issued. Overall, demands for government services would be minor.

Overall, any impacts to the above-cited economic and social resource of the human environment of any given project area would be minor because the proposed crushing/screening operation would typically operate within areas designated for such operations and the proposed new equipment would result in similar impacts to those impacts created by the existing equipment. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

J. Industrial and Commercial Activity

The modified crushing/screening operation would represent only a minor increase in the industrial activity in any given area of operation because the source would remain a relatively small industrial source that would be portable and temporary in nature. No additional industrial or commercial activity would be expected as a result of the proposed modification of existing crushing/screening operations.

Overall, any impacts to the above-cited economic and social resource of the human environment of any given project area would be minor because the proposed crushing/screening operation would typically operate within areas designated for such operations and the proposed new equipment would result in similar impacts to those impacts created by the existing equipment. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

K. Locally Adopted Environmental Plans and Goals

The modified crushing/screening plant would operate in various locations throughout the state which are designated by EPA as attainment or unclassified for the National Ambient Air Quality Standards; therefore, the Department is unaware of any locally adopted environmental plans or goals that may be affected by the proposed modification of the existing crushing/screening plant.

The state standards included in the air quality permit would be protective of any proposed project area.

L. Cumulative and Secondary Impacts

The modified crushing/screening operations would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area of operation because the source would be a portable and temporary source. No other industrial operations would be expected to result from the permitting and operation of this facility. Minor increases in traffic would have minor effects on local traffic in the immediate area. Because the source would remain relatively small by industrial standards and would conduct operations on a temporary basis, only minor economic impacts to a given local economy would be expected from operating the modified facility. Further, this facility may be operated in conjunction with other equipment owned and operated by Kootenai; however, any cumulative impacts to the social and economic aspects of the human environment would be minor and short-lived. Overall, the modified crushing/screening operation would result in only minor and temporary secondary and cumulative impacts to the social and economic aspects of the human environment of the initially proposed and any future operating site.

Overall, any cumulative or secondary impacts to the above-cited economic and social resource of the human environment of any given project area would be minor because the proposed crushing/screening operation would typically operate within areas designated for such operations and the proposed new equipment would result in similar impacts to those impacts created by the existing equipment. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

Recommendation: An Environmental Impact Statement (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: Montana 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: Montana Department of Environmental Quality (Air Resources Management Bureau and Industrial and Energy Minerals Bureau), Montana State Historic Preservation Office (Montana Historical Society).

EA prepared by: M. Eric Merchant, MPH

Date: April 4, 2007