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June 28, 2010

Mr. Norman Hanson Sickler Shale & Gravel, Inc. 255 Sickler Creek Road Marion, MT 59925

Dear Mr. Hanson:

Montana Air Quality Permit #4548-00 is deemed final as of June 26, 2010, by the Department of Environmental Quality (Department). This permit is for the Sickler Shale and Gravel, Inc. – portable nonmetallic mineral crushing and screen facility. 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,

For the Department,

Vicke Walsh

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

VW:PS Enclosures

Pul the

Paul Skubinna Environmental Engineer Air Resources Management Bureau (406) 444-6711

Montana Department of Environmental Quality Permitting and Compliance Division

Montana Air Quality Permit #4548-00

Sickler Shale & Gravel, Inc. 255 Sickler Creek Road Marion, MT 59925

June 26, 2010



## MONTANA AIR QUALITY PERMIT

Issued To: Sickler Shale & Gravel, Inc. 255 Sickler Creek Road Marion, MT 59925 MAQP: #4548-00 Application Complete: 04/21/10 Preliminary Determination Issued: 05/20/10 Department's Decision Issued: 06/10/2010 Permit Final: 06/26/10 AFS #: 777-4548

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Sickler Shale & Gravel, Inc. (Sickler) pursuant to Sections 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. Permitted Equipment

Sickler owns and operates a trailer mounted non-metallic mineral crushing and screening facility. The facility consists of a bulk loading hopper complete with grizzly screen, 3X10 triple deck screen, roller crusher, jaw crusher, two primary conveyors, rotovator, and two stacker conveyors. The unit is mechanically driven by a 238 horspower (hp) diesel-fired reciprocating internal combustion compression ignition engine.

B. Plant Location

Sickler owns and operates a portable non-metallic mineral crushing and screening facility, which will initially be located in the Northwest (NW) <sup>1</sup>/<sub>4</sub> of the Southwest (SW) <sup>1</sup>/<sub>4</sub>, Section 33, Township 27 North, Range 24 West, in Flathead County, Montana. However, MAQP 4548-00 applies while operating at any location in Montana, except those areas having a Department of Environmental Quality (Department)-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana*. An addendum will be required for locations in or within 10 km of certain PM<sub>10</sub> nonattainment areas.

SECTION II: Conditions and Limitations

- A. Emission Limitations
  - 1. All visible emissions from any Standards of Performance for New Stationary Source (NSPS)-affected crusher shall not exhibit an opacity in excess of the following averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO):
    - For crushers that commence construction, modification, or reconstruction on or after April 22, 2008: 12% opacity
    - For crushers that commence construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008: 15% opacity
  - 2. All visible emissions from any other NSPS-affected equipment, such as screens or conveyor transfers, shall not exhibit an opacity in excess of the following averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO):

- For equipment that commences construction, modification, or reconstruction on or after April 22, 2008: 7% opacity
- For equipment that commences construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008: 10% opacity
- 3. All visible emissions from any non-NSPS affected equipment constructed after November 23, 1968, shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
- 4. All visible emission from any non-NSPS affected equipment constructed before November 23, 1968, shall not exhibit an opacity of 40% or greater averaged over 6 consecutive minutes (ARM 17.8.304
- 5. Water and 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 17.8.749).
- 6. Sickler 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).
- Sickler 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).
- 8. Crushing production is limited to 2,628,000 tons during any rolling 12-month time period (ARM 17.8.749).
- 9. Screening production is limited to 1,314,000 tons during any rolling 12-month time period (ARM 17.8.749).
- 10. Sickler is authorized to operate one diesel engine; the nameplate horsepower rating of the engine shall not exceed 238 hp (ARM 17.8.749).
- 11. If the permitted equipment is used in conjunction with any other equipment owned or operated by Sickler, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).
- 12. Sickler shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO, *Standards of Performance for Nonmetallic Mineral Processing Plants* (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
- 13. Sickler shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR 60, Subpart IIII, *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 IIII; ARM 17.8.342 and 40 CFR 63, Subpart ZZZZ).

## B. Testing Requirements

- 1. Within 60 days after achieving maximum production, but no later than 180 days after initial start-up, an Environmental Protection Agency (EPA) Method 9 opacity test and/or other methods and procedures as specified in 40 CFR 60.675 must be performed on all NSPS affected equipment to demonstrate compliance with the emission limitations contained in Section II.A.1 and II.A.2 (ARM 17.8.340 and 40 CFR 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 crushing/screening 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. Sickler 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. Sickler 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(l)(d) (ARM 17.8.745).
- 4. Sickler shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. The records compiled in accordance with this permit shall be maintained by Sickler as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).

- 5. Sickler shall document, by month, the crushing production from the facility. By the 25<sup>th</sup> day of each month, Sickler shall calculate the 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.7. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
- 6. Sickler shall document, by month, the screening production from the facility. By the 25<sup>th</sup> day of each month, Sickler 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).

## D. Notification

- 1. Within 30 days of commencement of construction of any NSPS-affected equipment, Sickler 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, Subpart OOO and Subpart IIII).
- 2. Within 15 days of the actual start-up date of any NSPS-affected equipment, Sickler 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, Subpart OOO and Subpart IIII).
- 3. Within 15 days of the actual start-up date of any non-NSPS-affected equipment, Sickler shall submit written notification to the Department of the initial start-up date of the affected equipment (ARM 17.8.749).

# SECTION III: General Conditions

- A. Inspection Sickler 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 Sickler fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving Sickler 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, failure to pay the annual operation fee by Sickler may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Duration of Permit Construction or installation must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (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. Sickler 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.

## Montana Air Quality Permit (MAQP) Analysis Sickler Shale & Gravel, Inc. MAQP #4548-00

## I. Introduction/Process Description

Sickler Shale & Gravel, Inc. (Sickler) owns and operates a trailer mounted portable non-metallic mineral crushing and screening facility.

#### A. Permitted Equipment

The facility consists of a 1950 Universal 880 Junior GravelMaster trailer mounted package plant. The plant consists of the following implements:

- Bulk loading feeder/grizzly screen,
- 3 X 10 triple deck screen,
- 16 X 24 roller crusher,
- 10 X 24 jaw crusher,
- Rotovator,
- Two stacker conveyors,
- Mechanical drive ~1960 Detroit, Model 6-71, 238 horsepower (hp) diesel-fired engine, and
- Associated equipment.
- B. Source Description

During a typical set-up unprocessed aggregate or fragmented stone is loaded into plate feeder/grizzly screen. Grizzly pass-through lands on the main screen conveyor and is whereby it is transferred into the triple deck screen. Reject from the course and medium screens feed the jaw crusher and roller crusher, respectively, while pass-through from the medium screen falls onto the fine screen. Reject from the fine screen drops onto the delivery stacker conveyor and pass-through from the fine screen drops onto the sand conveyor/stacker. The jaw and roller crushers pass-through is collected on a conveyor, which deposits the recycle material on the rotovater, whereby it is transferred onto the primary screen conveyor and reprocessed through the plant.

C. Additional Information (Changes to an existing permit)

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 of Environmental Quality (Department). Upon request, the Department will provide references for location 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. <u>ARM 17.8.101 Definitions</u>. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
  - 2. <u>ARM 17.8.105 Testing Requirements</u>. 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. <u>ARM 17.8.106 Source Testing Protocol</u>. 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).

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

- 4. <u>ARM 17.8.110 Malfunctions</u>. (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. <u>ARM 17.8.111 Circumvention</u>. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.
- 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 17.8.213 Ambient Air Quality Standard for Ozone
  - 5. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
  - 6. ARM 17.8.221 Ambient Air Quality Standard for Visibility
  - 7. ARM 17.8.223 Ambient Air Quality Standard for PM<sub>10</sub>

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

- C. ARM 17.8, Subchapter 3 Emission Standards, including, but not limited to:
  - <u>ARM 17.8.304 Visible Air Contaminants</u>. (1) This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed on or before November 23, 1968, that exhibit an opacity of 40% or greater averaged over 6 consecutive minute. (2) 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. <u>ARM 17.8.308 Particulate Matter, Airborne</u>. (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, Sickler 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. <u>ARM 17.8.309 Particulate Matter, Fuel Burning Equipment</u>. 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. <u>ARM 17.8.310 Particulate Matter, Industrial Process</u>. 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. <u>ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel</u>. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this section.
- 6. <u>ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products</u>. (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.
- <u>ARM 17.8.340 Standard of Performance for New Stationary Sources</u>. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). This facility is not currently an NSPS affected source because it does not meet the definition of any NSPS subpart defined in 40 CFR Part 60.
  - a. <u>40 CFR 60, Subpart A General Provisions</u> apply to all equipment or facilities subject to an NSPS Subpart as listed below:
  - b. <u>40 CFR 60, Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants</u>. In order for a crushing/screening plant to be subject to 40 CFR 60, Subpart OOO 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 or modified after August 31, 1983. Based on the information submitted by Sickler, the crushing/screening equipment to be used with MAQP #4548-07 is not subject to NSPS requirements because of the date of manufacture of the crushing/screening equipment (40 CFR 60, Subpart A General Provisions, and Subpart OOO, Non-Metallic Mineral Processing Plants). However, this Subpart may become applicable if a crusher is added to the facility (under the de minimis friendly permit conditions) that meets the definition of an affected facility and was manufactured after August 31, 1983.
  - c. <u>40 CFR 60, Subpart IIII Standards of Performance for Compression Ignition</u> <u>Internal Combustion Engines</u>. NSPS-affected engines at the Sickler facility include any new or reconstructed stationary compression ignition (CI) internal combustion engines (ICE) that commence construction after July 11, 2005, where

the stationary CI ICE are manufactured after April 1, 2006, and are not fire pump engines, and stationary CI ICE that modify or reconstruct their stationary CI ICE after July 11, 2005, (40 CFR 60, Subpart IIII). The currently proposed engine is not subject to 40 CFR 60, Subpart IIII because it was manufactured before April 1, 2006, and reconstructed before July 11, 2005. However, this Subpart may become applicable if an engine is added to the facility (under the de minimis friendly permit conditions) that meets the definition of an affected facility and was manufactured April 1, 2005.

- D. ARM 17.8, Subchapter 5 Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:
  - 1. <u>ARM 17.8.504 Air Quality Permit Application Fees</u>. This rule requires that an applicant 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. Sickler submitted the appropriate permit application fee for the current permit action.
  - 2. <u>ARM 17.8.505 Air Quality Operation Fees</u>. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department; the air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

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. <u>ARM 17.8.740 Definitions</u>. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
  - 2. <u>ARM 17.8.743 Montana Air Quality Permits--When Required</u>. This rule requires a person to obtain an air quality permit or permit modification to construct, modify, or use any asphalt plant, crusher or screen that has the potential to emit (PTE) greater than 15 tons per year of any pollutant. Sickler has a PTE greater than 15 tons per year of oxides of nitrogen (NO<sub>x</sub>) and particulate matter (PM); therefore, an air quality permit is required.
  - 3. <u>ARM 17.8.744 Montana Air Quality Permits--General Exclusions</u>. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
  - 4. <u>ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes</u>. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
  - <u>ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements</u>.
    (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. Sickler 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. Sickler submitted an affidavit of publication of public notice for the April 19, 2010, issue of the *Daily Interlake*, a newspaper of general circulation in the Towns of Marion and Kalispell in Flathead County, as proof of compliance with the public notice requirements.

- 6. <u>ARM 17.8.749 Conditions for Issuance or Denial of Permit</u>. 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. <u>ARM 17.8.752 Emission Control Requirements</u>. 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. <u>ARM 17.8.755 Inspection of Permit</u>. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
- 9. <u>ARM 17.8.756 Compliance with Other Requirements</u>. This rule states that nothing in the permit shall be construed as relieving Sickler 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. <u>ARM 17.8.759 Review of Permit Applications</u>. 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. <u>ARM 17.8.762 Duration of Permit</u>. 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 modified 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. <u>ARM 17.8.763 Revocation of Permit</u>. 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. <u>ARM 17.8.764 Administrative Amendment to Permit</u>. 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. <u>ARM 17.8.765 Transfer of Permit</u>. (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. <u>ARM 17.8.801 Definitions</u>. This rule is a list of applicable definitions used in this subchapter.
  - 2. <u>ARM 17.8.818 Review of Major Stationary Sources and Major Modification--Source</u> <u>Applicability and Exemptions</u>. 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 the facility's PTE is less than 250 tons per year of any pollutant (excluding fugitive emissions).

- G. ARM 17.8, Subchapter 12 Operating Permit Program Applicability, including, but not limited to:
  - 1. <u>ARM 17.8.1201 Definitions</u>. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
    - a. PTE > 100 tons/year of any pollutant;
    - b. PTE > 10 tons/year of any one hazardous air pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
    - c. PTE > 70 tons/year of particulate matter with an aerodynamic diameter of 10 microns or less ( $PM_{10}$ ) in a serious  $PM_{10}$  nonattainment area.
  - <u>ARM 17.8.1204 Air Quality Operating Permit Program Applicability</u>. (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 MAQP #4548-00 for Sickler, the following conclusions were made:
    - a. The facility's 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  $PM_{10}$  nonattainment area.
    - d. This facility is not subject to any current NSPS.
    - e. This facility is not subject to any current NESHAP standards.

- 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.

Based on these facts, the Department has determined that Sickler will be a minor source of emissions as defined under Title V.

## III. BACT Determination

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

Sickler has proposed use of water spray bars for aggregate process equipment and no additional controls for the diesel engine. The Department has reviewed these methods, as well as previous BACT determinations.

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

# Total PTE (tons/year)

<b>Emitting Unit</b> Roller Crusher (150 TPH) Jaw Crusher (150 TPH) Triple Deck Screen (150	<b>PM</b> 0.79 0.79	PM <sub>10</sub> 0.35 0.35	<b>PM<sub>2.5</sub></b> 0.07 0.07	NO <sub>x</sub>	VOC	СО	SOx	
TPH)	1.45	0.49	0.03					
Bulk Loading	0.07	0.07	0.01					
Material Transfer (2)	0.18	0.06	0.02					
Pile Forming (2)	2.12	1.01	0.01					
Haul Roads	8.35	2.13	0.21					
Diesel Generator (238 hp)	2.29	2.29	2.29	32.32	2.62	6.96	2.14	
	16.03	6.75	2.70	32.32	2.62	6.96	2.14	
Roller Crusher (150 TPH)								
Process Rate:		150 to	ns/hr					
Hours of operation:	8	760 hr.	/yr					
PM Emissions (controlled):								
Emission Factor:	0.0	<u>012</u> lbs	s/ton	(AP-4	2 Table	11.19.2	2-2 8/200	4)
Calculations:	0.0012 lbs/t	ion * 150	) tons/hr	· =			0.18	lbs/hr
	0.18 lbs/hr	* 8760 h	r/yr * 0.0	)005 ton	/lb =		0.79	tons/yr
PM <sub>10</sub> Emissions (controlled):								
Emission Factor:	0.00	<u>054</u> lbs	s/ton	(AP-4	2 Table	11.19.2	2-2, 8/200	4)
Calculations:	0.00054 lbs	/ton * 15	50 tons/h	n <b>r</b> =			0.08	lbs/hr
	0.081 lbs/hi	r * 8760	hr/yr * 0	.0005 to	n/lb =		0.35	tons/yr

PM <sub>2.5</sub> Emissions (controlled):	<u>0.0001</u>	lbs/ton	(AP-42 Table 11.19.2-2,	8/2004	<sup>4)</sup>
Emission Factor:	0.0001 lbs/ton *	150 tons/hr =	-	<b>0.02</b>	Ibs/hr
Calculations:	0.015 lbs/hr * 87	60 hr/yr * 0.0	005 ton/lb =	<b>0.07</b>	tons/yr
Jaw Crusher (150 TPH) Process Rate: Hours of operation:	150 8760	tons/hr hr/yr			
PM Emissions (controlled):	<u>0.0012</u>	lbs/ton	(AP-42 Table 11.19.2-2	8/2004	<sup>4)</sup>
Emission Factor:	0.0012 lbs/ton *	150 tons/hr =	-	<b>0.18</b>	Ibs/hr
Calculations:	0.18 lbs/hr * 876	0 hr/yr * 0.00	05 ton/lb =	<b>0.79</b>	tons/yr
PM <sub>10</sub> Emissions (controlled):	<u>0.00054</u>	lbs/ton	(AP-42 Table 11.19.2-2,	8/2004	<sup>4)</sup>
Emission Factor:	0.00054 lbs/ton	* 150 tons/hr	=	<b>0.08</b>	Ibs/hr
Calculations:	0.081 lbs/hr * 87	⁄60 hr/yr * 0.0	005 ton/lb =	<b>0.35</b>	tons/yr
PM <sub>2.5</sub> Emissions (controlled):	<u>0.0001</u>	lbs/ton	(AP-42 Table 11.19.2-2,	8/2004	<sup>4)</sup>
Emission Factor:	0.0001 lbs/ton *	150 tons/hr =	-	<b>0.02</b>	Ibs/hr
Calculations:	0.015 lbs/hr * 87	′60 hr/yr * 0.0	005 ton/lb =	<b>0.07</b>	tons/yr
Triple Deck Screen (150 TPH) Process Rate: Hours of operation:	150 8760	tons/hr hr/yr			
PM Emissions (controlled):	<u>0.0022</u>	lbs/ton	(AP-42 Table 11.19.2-2,	8/2004	<sup>4)</sup>
Emission Factor:	0.0022 lbs/ton *	150 tons/hr =	-	<b>0.33</b>	Ibs/hr
Calculations:	0.33 lbs/hr * 876	60 hr/yr * 0.00	05 ton/lb =	1.45	tons/yr
PM <sub>10</sub> Emissions (controlled):	<u>0.00074</u>	lbs/ton	(AP-42 Table 11.19.2-2,	8/2004	<sup>4)</sup>
Emission Factor:	0.00074 lbs/ton	* 150 tons/hr	=	<b>0.11</b>	Ibs/hr
Calculations:	0.111 lbs/hr * 87	'60 hr/yr * 0.0	005 ton/lb =	<b>0.49</b>	tons/yr
PM <sub>2.5</sub> Emissions (controlled):	<u>0.00005</u>	lbs/ton	(AP-42 Table 11.19.2-2,	8/2004	<sup>4)</sup>
Emission Factor:	0.00005 lbs/ton	* 150 tons/hr	=	0.01	Ibs/hr
Calculations:	0.0075 lbs/hr * 8	760 hr/yr * 0.	0005 ton/lb =	0.03	tons/yr
Bulk Loading Process Rate: Number of Loads Hours of operation:	150 1 8760	tons/load load/hr hr/yr			
PM Emissions (controlled):	<u>1.00E-04</u>	lbs/ton	(AP-42 Table 11.19.2-2,	8/2004	<sup>4)</sup>
Emission Factor:	0.0001 lbs/ton *	150 tons/load	d * 1 load/hr =	<b>0.02</b>	Ibs/hr
Calculations:	0.015 lbs/hr * 87	60 hr/yr * 0.0	0005 tons/lb =	<b>0.07</b>	tons/yr

PM <sub>10</sub> Emissions (controlled): Emission Factor: Calculations:	<u>1.00E-04</u> lbs/ton (AP-42 Table 11.19.2-2 0.0001 lbs/ton * 150 tons/load * 1 load/hr = 0.015 lbs/hr * 8760 hr/yr * 0.0005 tons/lb =	, 8/2004 <b>0.02</b> <b>0.07</b>	<sup>4)</sup> Ibs/hr tons/yr
PM <sub>2.5</sub> Emissions (controlled): Emission Factor: Calculations:	<u>1.30E-05</u> lbs/ton (AP-42 Table 11.19.2-2 0.000013 lbs/ton * 150 tons/load * 1 load/hr = 0.00195 lbs/hr * 8760 hr/yr * 0.0005 ton/lb =	, 8/200 0.00 0.01	<sup>4)</sup> Ibs/hr tons/yr
Material Transfer (2) Process Rate: Number of Transfers Hours of operation:	150 tons/hr 2 Transfers 8760 hr/yr		
PM Emissions (controlled): Emission Factor: Calculations:	0.00014 lbs/ton (AP-42 Table 11.19.2-2 0.00014 lbs/ton * 150 tons/hr * 2 Transfers = 0.042 lbs/hr * 8760 hr/yr * 0.0005 ton/lb =	, 8/2004 0.04 0.18	<sup>4)</sup> Ibs/hr tons/yr
PM <sub>10</sub> Emissions (controlled): Emission Factor: Calculations:	<u>4.60E-05</u> lbs/ton (AP-42 Table 11.19.2-2 0.000046 lbs/ton * 150 tons/hr * 2 Transfers = 0.0138 lbs/hr * 8760 hr/yr * 0.0005 ton/lb =	, 8/2004 0.01 0.06	<sup>4)</sup> Ibs/hr tons/yr
PM <sub>2.5</sub> Emissions (controlled): Emission Factor: Calculations:	<u>1.30E-05</u> lbs/ton (AP-42 Table 11.19.2-2 0.000013 lbs/ton * 150 tons/hr * 2 Transfers = 0.0039 lbs/hr * 8760 hr/yr * 0.0005 ton/lb =	, 8/2004 0.00 0.02	4) Ibs/hr tons/yr
<b>Pile Forming (2)</b> Process Rate: Number of Piles Hours of operation:	75 tons/hr 2 Piles 8760 hr/yr		
PM Emissions (controlled): Emission Factor: Calculations:	<u>3.22E-03</u> lbs/ton (AP-42 Section 13.2.4.3 0.00322 lbs/ton * 75 tons/hr * 2 Piles = 0.483 lbs/hr * 8760 hr/yr * 0.0005 tons/lb =	3, 11/20 <b>0.48</b> <b>2.12</b>	006) Ibs/hr tons/yr
PM <sub>10</sub> Emissions (controlled): Emission Factor: Calculations:	<u>1.53E-03</u> lbs/ton (AP-42 Section 13.2.4.3 0.00153 lbs/ton * 75 tons/hr * 2 Piles = 0.2295 lbs/hr * 8760 hr/yr * 0.0005 tons/lb =	3, 11/20 <b>0.23</b> <b>1.01</b>	006) Ibs/hr tons/yr
PM <sub>2.5</sub> Emissions (controlled): Emission Factor: Calculations:	<u>2.00E-05</u> lbs/ton (AP-42 Table 11.19.2-2 0.00002 lbs/ton * 150 tons/hr = 0.0015 lbs/hr * 8760 hr/yr * 0.0005 ton/lb =	, 8/200 <sup>,</sup> <b>0.002</b> <b>0.007</b>	<sup>4)</sup> Ibs/hr tons/yr

Haul Ro Vehicle Control	<b>bads</b> miles travelled (estimate Efficiency is included in l	): Emission Factor	<u>5</u>	VMT/day		
PM Emi Emissio tons):	ssions (controlled): (AP- n Factor (Rated Load Ca	-42 Chapter 13.2.2, 11, apacity <50	/2006) <u>9.15</u>	Lbs/VMT		
Calcu	ulations:	5 VMT/day * 9.15 Lb 45.75 lb/day * 365 da	s/VMT = ays/yr * 0	.0005 tons/lb	45.75	lb/day
		=			8.35	tons/yr
PM <sub>10</sub> En Emissio	nissions (controlled): (A n Factor (Rated Load Ca	P-42 Chapter 13.2.2, 1 apacity <50	1/2006)			
Calcu	ulations:	5 VMT/day * 2.33 Lb	<u>2.33</u> s/VMT =	LDS/VIVII	11.65	lb/day
		=	ays/yr u	0.0005 10115/10	2.13	tons/yr
PM <sub>2.5</sub> Er	missions (controlled):	apacity <50				
tons):		$5 \sqrt{MT/day} \approx 0.23 \text{ b}$	<u>0.23</u>	Lbs/VMT	1 15	lb/day
Calco		1.15 lb/day * 365 day	s/vivi = ys/yr * 0.0	0005 tons/lb =	0.21	tons/yr
Diesel (	Generator (238 hp)					
	Rating = Operating Hours=	238 8760	hp hr/yr			
NO <sub>x</sub>				(AF	242 Table 3.3-1	
	Emission Factor = Calculations:	0.031 0.031 lb/hp-	lb/hp-hr hr * 238	hp = <b>7.</b> 3	10/96) 10/96	
	7.378	lb/hr * 8760 hr/yr * 0.0	005 tons	/lb = 32.3	32 tons/yr	
СО				(AP 42	, Table 3.3-1,	
	Emission Factor= Calculations:	6.68E-03 0.00668 lb/hp-	lb/hp-hr hr * 238	hp = <b>1.</b>	10/96) 5 <b>9 lb/hr</b>	
	1.58984	lb/hr * 8760 hr/yr * 0.0	005 tons	/lb = 6.9	96 tons/yr	
SOx				(AF	242 Table 3 3-1	
	Emission Factor= Calculations:	2.05E-03 0.00205.lb/bp-	lb/hp-hr hr * 238	hp = 0.4	10/96) 19 lb/hr	
	0.4879	lb/hr * 8760 hr/yr * 0.0	005 tons	/lb = <b>2.</b> 1	l4 tons/yr	
PM				(AF	9 42, Table 3.3-1.	
	Emission Factor= Calculations:	2.20E-03 0.0022 lb/hp-	lb/hp-hr hr * 238	hp = <b>0.</b> {	10/96) 52 lb/hr	
	0.5236	lb/hr * 8760 hr/yr * 0.0	005 tons	/lb = 2.2	29 tons/yr	

 $PM_{10}$ 

	Emission Facto Calculations:	or= 0.5236 lb/hr *	2.20E-03 0.0022 lb/hp * 8760 hr/yr * 0.	lb/hp-hr b-hr * 238 hp = 0005 tons/lb =	(AP 42 0.52 2.29	, Table 3.3-1, 10/96) Ib/hr tons/yr
PM <sub>2.5</sub>	Emission Facto Calculations:	or= 0.5236 lb/hr *	2.20E-03 0.0022 lb/hp 8760 hr/yr * 0.	lb/hp-hr o-hr * 238 hp = 0005 tons/lb =	(AP 42 0.52 2.29	, Table 3.3-1, 10/96) Ib/hr tons/yr
VOC	Emission Facto Calculations =	י <b>r=</b> ).59738 lb/hr *	2.51E-03 0.00251 lb/hp 8760 hr/yr * 0.	lb/hp-hr p-hr * 238 hp = 0005 tons/lb =	(AP 42 <b>0.60</b> <b>2.62</b>	, Table 3.3-1, 10/96) Ib/hr tons/yr

# V. Air Quality Impacts

MAQP #4548-00 is issued for the operation of a portable crushing and screening plant to be initially located in the NW ¼ of the Southwest SW ¼, Section 33, Township 27 North, Range 24 West, in Flathead County, Montana. MAQP #4548-00 will also cover the plant while operating at any location within Montana, excluding those counties that have a Department approved permitting program, those areas considered tribal lands, or those areas in or within 10 kilometers (km) of certain PM<sub>10</sub> nonattainment areas. An Addendum to MAQP #4548-00, including more stringent requirements to protect the non-attainment area, will be required for operating at locations in or within 10 km of certain PM<sub>10</sub> nonattainment areas. *A Missoula County air quality permit would be required for locations within Missoula County, Montana*.

VI. Ambient Air Impact Analysis

The Department determined 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.

VII. Taking or Damaging Implication Analysis As required by 2-10-105, MCA, the Department conducted the following private property taking and damaging assessment.

YES	NO	
Х		1. Does the action pertain to land or water management or environmental regulation affecting
		private real property or water rights?
	Х	2. Does the action result in either a permanent or indefinite physical occupation of private
		property?
	Х	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others,
		disposal of property)
	Х	4. Does the action deprive the owner of all economically viable uses of the property?
	Х	5. Does the action require a property owner to dedicate a portion of property or to grant an
		easement? [If no, go to (6)].
NA		5a. Is there a reasonable, specific connection between the government requirement and
		legitimate state interests?
NA		5b. Is the government requirement roughly proportional to the impact of the proposed use of the
		property?
	Х	6. Does the action have a severe impact on the value of the property? (consider economic
		impact, investment-backed expectations, character of government action)
	Х	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?
	Х	7a. Is the impact of government action direct, peculiar, and significant?
	Х	7b. Has government action resulted in the property becoming practically inaccessible,
		waterlogged or flooded?
	Х	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?
	Х	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.

VIII. Environmental Assessment

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

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

## FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Sickler Shale & Gravel, Inc.

Montana Air Quality Permit number: 4548-00

Preliminary Determination Issued: May 20, 2010 Department Decision Issued: June 10, 2010 Permit Final: June 26, 2010

- 1. *Legal Description of Site*: NW <sup>1</sup>/<sub>4</sub> of the SW <sup>1</sup>/<sub>4</sub>, Section 33, Township 27 North, Range 24 West, in Flathead County, Montana.
- 2. Description of Project: Sickler owns and operates a trailer mounted portable non-metallic mineral crushing and screening facility. For typical set-up and operation unprocessed aggregate or fragmented stone is loaded into plate feeder/grizzly screen. Grizzly pass-through lands on the main screen conveyor and is whereby it is transferred into the triple deck screen. Reject from the course and medium screens feed the jaw crusher and roller crusher, respectively, while pass-through from the medium screen falls onto the fine screen. Reject from the fine screen drops onto the delivery stacker conveyor and pass-through from the fine screen drops onto the sand conveyor/stacker. The jaw and roller crushers pass-through is collected on a conveyor, which deposits the recycle material on the rotovater, whereby it is transferred onto the primary screen conveyor and reprocessed through the plant.
- 3. *Objectives of Project*: At its initial location, the project objective is to produce aggregate sub-base and construction materials in support of road construction and maintenance efforts and other construction activities.
- 4. *Alternatives Considered*: In addition to the proposed action, the Department also considered the "noaction" 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 "noaction" alternative to be appropriate because Sickler has 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 BACT analysis, would be included in MAQP #4548-00.
- 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 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
Α	Terrestrial and Aquatic Life and Habitats			X			Yes
В	Water Quality, Quantity, and Distribution			Х			Yes
С	Geology and Soil Quality, Stability and Moisture				Х		Yes
D	Vegetation Cover, Quantity, and Quality						Yes
Е	Aesthetics			X			Yes
F	Air Quality			Х			Yes
G	Unique Endangered, Fragile, or Limited Environmental Resources			Х			Yes
Н	Demands on Environmental Resource of Water, Air and Energy			Х			Yes
Ι	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:

The crushing and screening plant would initially be located in an existing disturbed area/gravel pit. Similarly, as the facility moves from location to location it would be expected to locate within existing gravel pits or industrial sites due to the nature of business conducted by the operation. Therefore, impacts to bordering terrestrial and aquatic life and their habitats is expected to be minor due to noise produced by the operation and the potential for limited amounts of airborne particulate deposition caused by the facility.

B. Water Quality, Quantity and Distribution:

Water would be used for dust suppression on the surrounding roadways and areas of operation and for particulate emission control during operations. Water use would be relatively minor, therefore impacts on water quantity are expected to be minor. No impacts to ground water quality from pollutant infiltration are expected because PM suppression would be on an asneeded basis, saturated conditions would not be maintained within material or along haul roads. The facility has not proposed to discharge industrial waste water to state surface water, furthermore storm water run-off from the facility would be subject to control and permitting under the Montana Pollutant Discharge Elimination System as applicable. Therefore, potential impacts to state water quality, quantity and distribution would be minor.

C. Geology and Soil Quality, Stability and Moisture

The crushing and screening operation would initially be located within an existing gravel pit and would likely locate in similar disturbed areas as it moves from location to location. In general no additional disturbance would be anticipated by the proposed action; therefore, no impacts, in addition to those permitted for construction and mining of the gravel pit(s) within which it would operate, are expected. D. Vegetation Cover, Quantity, and Quality

Since no additional land disturbance beyond that for the gravel pit(s) in which this operation would locate is included in this proposed action, potential impacts to vegetative cover, quantity and quality would be minor due to the potential for minor amounts particulate deposition and minor amounts of other air pollutions emitted from this facility.

#### E. Aesthetics

At its initial location the proposed facility may be visible or heard from US Highway 2, Sickler Creek Road (County) and/or nearby residences. However, the gravel pit that would be its initial location is bordered on all four sides by mature timber, reclamation soil stock-piles are located between the plant and the nearest neighbor and the operation would be conducted at a suppressed elevation level in the bottom of the gravel pit. Therefore, visual and noise aesthetic impacts from the facility would be shielded from common points of observation are expected to be minor. Additionally, MAQP #4548-00 contains provisions requiring control of visible emissions from the plant further decreasing the potential for visual impacts form the facility.

In general as the facility moves from one location to another it would locate at existing industrial facilities or gravel pits where the plant would be difficult to discern from other construction equipment and implements associated with these types of facilities. Therefore, potential visual noise impacts from this facility to aesthetics would be minor.

## F. Air Quality

The air quality impacts from the crushing and screening plant operations would be minor because MAQP #4548-00 would include conditions limiting the opacity from the plant, as well as requiring, water spray as necessary, and other reasonable precautions to control air pollution. Further, MAQP #4548-00 would limit total of each individual pollutant emitted from the crushing and screening plant operation and associated equipment owned and operated by Sickler to 250 tons per year or less at any given operating site, excluding fugitive emissions.

Air pollutant deposition caused by the crushing and screening plant operation would be minimal because the amount of pollutants emitted are relatively small, would be controlled, and are expected to be dispersed (from such factors as wind speed and wind direction). Therefore impacts from this facility would result in only minor impacts to the surrounding environment. Similarly air pollutant deposition and impacts due to emissions from the crushing and screening plant would likely be temporary because these types of facility generally do not remain in one location more than 12 months. Overall, any air quality impacts resulting from the proposed crushing and screening plant operation would be minor.

## G. Unique Endangered, Fragile, or Limited Environmental Resources

The initial location of this facility is within the established range of the Gray Wolf (*Canis lupis*), Fisher (*Martes pennanti*), Wolverine, (*Gulo gulo*) and Canada Lynx (*Lynx Canadensis*). The following table indicates the rank and Agency status of each of these species.

	Rank		Agency Status				
Species of			US Fish and Wildlife Service	US Forest Service	US Bureau of Land		
Concern	State	Global			Management		
Gray Wolf	<b>S</b> 3	G4	DM	Sensitive	Sensitive		
Fisher	<b>S</b> 3	G5		Sensitive	Sensitive		
Wolverine	<b>S</b> 3	G5		Sensitive	Sensitive		
Canada Lynx	<b>S</b> 3	G5	LT	Threatened	Special Status		
S3/G3 = Potentially at risk because of limited and/or declining numbers, range, and habitat, even through it may be abundant in							
S4/G4 =	some areas. S4/G4 = Uncommon but not rare (although it may be rare in parts of its range), and usually widespread. Apparently not vulnerable in most of its range, but possibly cause for long-term concern						
G5/S5 =	Cora	ommon, wides	pread, and abundant (although it may be	rare in parts of its range). No	ot vulnerable in most of its		
DM (USFWS) =	Re de	ecovered, delis listed, and is b	ted, and being monitored – A specie prevented monitored.	iously listed by USFWS that	t is now recovered, has been		
LT (USFWS) =	Li si:	sted threatened	d – Likely to become an endangered spec on of its range.	ies within the foreseeable fut	ture throughout all or a		
Sensitive (USFS) =	SI	becies which R idenced by a s	egional Forester has determined there is ignificant current or predicted downward	a concern for population viab trend in populations or habi	bility within the state, as tat.		
Sensitive (USBLM)	$= S_{I}$	becies that norr nservation stat	nally occur on Bureau administered land us of the species through management ar	s for which BLM has the cap ad have been given "Sensitiv	ability to significantly affect the e" status by another Agency.		
Threatened (USFS)	= Li	sted as threate	ned (LT) by USFWS.				
Special Status (USBLM)= Species has been given special status by USFWS.							

Information provided by the Montana Natural Heritage Program, Natural Resources Information System indicated known occurrences of all four of these sensitive species near the proposed location of this project have been documented within the last decade. Minor secondary impacts to habitat and/or organisms foraging or hunting within habitat adjacent the gravel pit would be expected as noise or dust may disrupt use of these areas or cause avoidance. However, direct impacts to species of concern are expected to be minor as the current land use at the proposed project location is disturbed and an existing gravel pit that does not provide suitable hunting or foraging habitat for the individual organisms.

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

Due to the relatively small size of the facility and relatively low potential to emit regulated air pollutants, the crushing and screening plant 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 equipment operations and vehicle traffic at the site. Energy requirements would be accommodated in part through the use of compression ignition engine that supply direct drive power to the mechanical systems. Impacts to air resources would be minor because the source would be small by industrial standards, 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 project areas would be minor because the proposed crushing and screening plant operation would initially and typically operate within areas designated for such operations. 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

At this time no previously recorded sites are within the initial project area and the likelihood cultural properties would be impacted by this project is low. Therefore, a recommendation for a cultural resource inventory would be unwarranted at this time.

In general, as the facility moves from one location to another, it would locate in previously disturbed areas such as existing industrial facilities or gravel pits. Therefore, potential impacts to historical and archeological sites would be minor. However, should cultural materials be inadvertently discovered at initial of future location of this facility the State Historic Preservation Offices should be contacted and the site investigated.

J. Cumulative and Secondary Impacts

The proposed facility would be expected to move from place to place operating as a stand-alone operation or in support of other similar types of operations both in its initially proposed location and in locations throughout the state. The crushing and screening plant operation would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment of a given area of operation because the facility would emit regulated air pollutants, have some visible profile and noise would be generated from 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 initially and typically operate in areas designated and used for such industrial 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.

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
Α	Social Structures and Mores				X		Yes
В	Cultural Uniqueness and Diversity				Х		Yes
С	Local and State Tax Base and Tax Revenue			X			Yes
D	Agricultural or Industrial Production			Х			Yes
Е	Human Health			X			Yes
F	Access to and Quality of Recreational and Wilderness Activities			Х			Yes
G	Quantity and Distribution of Employment			X			Yes
Н	Distribution of Population			X			Yes
Ι	Demands for Government Services			Х			Yes
J	Industrial and Commercial Activity			Х			Yes
Κ	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
- B. Cultural Uniqueness and Diversity

The crushing and screening plant operation would cause no disruption to social structure or cultural uniqueness and diversity of the human environment in any given area of operation because the source would be a minor industrial source of emissions, would initially and typically operate in an existing industrial site used for such purposes, and would operate on a temporary basis. The predominant use of the surrounding area would not change as a result of the proposed project.

C. Local and State Tax Base and Tax Revenue

The crushing and screening plant operations would have little, if any, impact on the local and state tax base and tax revenue because the facility would be a minor industrial source and would conduct only seasonal and intermittent operations. The facility would require the use of approximately 8 employees. Thus, only minor impacts to the local and state tax base and revenue could be expected from the employees and facility production. Furthermore, the impacts to local tax base and revenue 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 and screening plant operation would initially and typically operate within areas designated for such operations. Therefore, the overall local and state tax base and tax revenue of any given area would not change as a result of the proposed project and any associated impacts would be minor.

D. Agricultural or Industrial Production

The initial location of this facility would located on a property logged 15 years ago, thus available agricultural resources have been removed from the property. As no additional land disturbance is proposed by this action no additional impacts to agricultural production would be expected. Minor impacts to industrial production would be expected as the facility described in the proposed action produces a construction material. However, the proposed operation remains relatively small by industrial standards. Overall, potential impacts to agricultural and industrial production are expected to be minor.

E. Human Health

MAQP #4548-00 includes limits and conditions to ensure that the crushing and screening plant 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.

F. Access to and Quality of Recreational and Wilderness Activities

Noise from the facility would be minor because the crushing and screening plant operation would be small by industrial standards and would initially and typically operate in areas used for such operations and frequently located on private land where public recreation and wilderness opportunities frequently are not available. As a result, the amount of noise generated from the crushing and screening plant operation would be minimal for the area. Therefore, any impacts to the quality of recreational and wilderness activities created by the proposed project would be expected to be minor and short-lived. Similarly, the crushing and screening plant operate within areas designated for such operations and frequently on private land; therefore, impacts to access to recreational and wilderness areas are expected to be minor or insignificant. Overall potential impacts to access to access to and quality of recreational and wilderness activities are expected to be minor.

- G. Quantity and Distribution of Employment
- H. Distribution of Population

The proposed crushing and screening plant operation would require approximately 2 employees to operate thereby resulting in little, if any, permanent immigration into or emigration out of a given area. Therefore, the proposed project would not impact the above-cited economic and social resources of the human environment at the initially proposed or any other given operating site.

I. Demands for Government Services

Minor increases would be seen in traffic on existing roadways in the area while the crushing and screening plant 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, any demands for government services would be minor.

J. Industrial and Commercial Activity

The crushing and screening plant operation would represent only a minor increase in the industrial activity in the proposed initial or any future area of operation because the source would be a relatively small industrial source that would be portable and temporary in nature. No significant additional industrial or commercial activity would be expected as a result of the proposed operation crushing and screening operation.

Overall, any impacts to industrial and commercial activity of the human environment from the project area would be minor because the proposed crushing and screening plant operation would initially and typically operate within areas designated for such operations. 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 Department is not aware of any locally adopted environmental plans or goals in the proposed initial area of operation or any future operating site because MAQP #4548-00 would allow for operations at various locations throughout the state (and unknown at this time). However, if the plant moved to an area classified as non-attainment for PM<sub>10</sub>, the operation would be required to apply for and receive an addendum to MAQP #4548-00 prior to operation at the site. The addendum would include more restrictive requirements to protect the non-attainment area from further degradation. The state standards would be protective of any proposed area of operation.

L. Cumulative and Secondary Impacts

The crushing and screening plant operations as proposed at its initial location would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area of operation.

The source would be a portable and temporary source. Few, if any, 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 is relatively small and temporary, only minor economic impacts to the local economy would be expected from operating the facility.

Overall, the proposed crushing and screening plant 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.

Recommendation: No Environmental Impact Statement (EIS) is required.

- The current permitting action is for the construction and operation of non-metallic mineral crushing and screening operation. MAQP #4548-00 includes conditions and limitations to ensure the facility will operate in compliance with all applicable rules and regulations. In addition, there are no significant impacts associated with this proposal.
- Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program
- Individuals or groups contributing to this EA: Department of Environmental Quality Air Resources Management Bureau, Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

EA prepared by: P. Skubinna Date: April 30, 2010