Montana Department of
ENVIRONMENTAL QUALITY
Brian Schweitzer, Governor
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March 9, 2012

Mr. Brian Wood
Wood's Crushing & Hauling, Inc.
933 Woodside Road
Sandpoint, ID 83864

Dear Mr. Wood:

Montana Air Quality Permit #3024-03 is deemed final as of March 9, 2012, by the Department of Environmental Quality (Department). This permit is for a portable crushing/screening operation. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

Vickie Walsh
Air Permitting Program Supervisor
Air Resources Management Bureau
(406) 444-9741

Deanne Fischer, P.E.
Environmental Engineer
Air Resources Management Bureau
(406) 444-3043

VW:DF
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #3024-03

Woods Crushing and Hauling, Inc.
933 Woodside Road
Sandpoint, ID 83864

March 9, 2012

MONTANA AIR QUALITY PERMIT

Issued To: Woods Crushing and Hauling, Inc.
933 Woodside Road
Sandpoint, Idaho 83864

MAQP #3024-03
Administrative Amendment (AA) Request Received: 01/27/2012
Department's Decision on AA: 02/22/2012
MAQP Final: 03/09/2012
AFS #777-3024

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Woods Crushing and Hauling, Inc. (Woods) 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. Plant Location

Woods operates a portable crushing/screening operation at various locations throughout Montana. However, MAQP#3024-03 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_{10}) 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_{10} nonattainment areas.

MAQP #3024-03 and Addendum 2 apply to the Woods facility while operating at any location in or within 10 km of certain PM_{10} nonattainment areas during the summer months (April 1 – September 30).

B. Current Permit Action:

On January 27, 2012, the Department received a request to administratively amend MAQP #3024-02 to change existing federally enforceable limits. Woods' request was made as part of a project undertaken by the Department to address those sources with existing federally enforceable permit limits that were established to keep potential emissions below the 100 ton per year major source Title V Operating Permit thresholds. The Department offered existing "synthetic minor" sources the opportunity to take new permit limits to further reduce emissions from just below 100 tons per year (TPY) to below 80 TPY. The permit limit change will consequently alter the oversight category for this facility to a level that is only subject to the State Compliance Monitoring Strategy. This permitting action amends MAQP #3024-02 to further limit hours of operation to a level that results in potential emissions below 80 TPY.

In addition, this permit action adds a 2006 Nordberg cone crusher (300 tons per hour (TPH)) and a 2 deck screen. The additional equipment will not result in the increase of any pollutant emissions by 5 tons or greater per year. Therefore, the crusher and screen are being added as a de minimis change in accordance with Administrative Rules of Montana (ARM) 17.8.745. This permit action also updates the rule references, permit format, and the emissions inventory.

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, ARM 17.8.752, 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 and conveyors) shall not exhibit an opacity in excess of the following averaged over six consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart OOO):

    - For equipment that commence construction, modification, or reconstruction on or after April 22, 2008: 7% opacity

    - For equipment that commence 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 shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304 and ARM 17.8.752).

4. Woods shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308 and ARM 17.8.752).

5. Woods shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.4 (ARM 17.8.752 and ARM 17.8.749).

6. Water and spray bars shall be available on-site at all times and operated, as necessary, to maintain compliance with the opacity limitations in Section II.A.1, II.A.2, and II.A.3 (ARM 17.8.752 and ARM 17.8.749).

7. Total plant production shall be limited to 2,190,000 tons during any rolling 12-month time period (ARM 17.8.749).

8. Woods shall not operate or have on-site more than one diesel engine/generator. The maximum capacity of the engine that drives the 725 kW generator shall not exceed 1,071 brake horsepower (bhp) (ARM 17.8.749).

9. Operation of the 1,071 bhp diesel engine driving the 725 kW generator shall not exceed 4,800 hours during any rolling 12-month time period (ARM 17.8.749 and ARM 17.8.1204).

10. If the permitted equipment is used in conjunction with any other equipment owned or operated by Woods, 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)).

11. Woods shall comply with all applicable standards and limitations, monitoring, reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO, *Standards of Performance for Nonmetallic Mineral Processing* (ARM 17.8.340 and 40 CFR 60, Subpart OOO).

12. Woods 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 Part 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). Additional testing may be required by 40 CFR 60, Subpart OOO (ARM 17.8.340 and 40 CFR 60, Subpart OOO).

2. All compliance source tests shall be conducted in accordance with 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. Woods 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 Woods as a permanent business record for at least 5 years following the date of the measurement, shall be submitted to the Department upon request, and shall be available at the plant site for inspection by the Department (ARM 17.8.749).

3. Woods 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, and/or to verify compliance with permit limitations (ARM 17.8.505).

4. Woods 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).

5. Woods shall document, by month, the total plant production. By the 25th day of each month, Woods shall total the production during the previous 12 months to verify compliance with the limitation in Section II.A.7. A written report of the compliance verification shall be submitted annually to the Department no later than March 15 and may be submitted along with the annual emission inventory (ARM 17.8.749).

6. Woods shall document, by month, the hours of operation of the 1,071 bhp diesel generator. By the 25th day of each month, Woods shall total the hours of operation of the diesel generator during the previous 12 months to verify compliance with the limitation in Section II.A.9. A written report of the compliance verification shall be submitted by March 15 and may be submitted with the annual emission inventory (ARM 17.8.749).

7. Woods shall annually certify that its emissions are less than those that would require the source 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. Addendum

Woods shall comply with all conditions in Addendum 2 to MAQP#3024-03, as appropriate (ARM 17.8.749).

SECTION III: General Conditions

A. Inspection - Woods 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 (continuous emissions monitoring system (CEMS) or continuous emissions rate monitoring system 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 Woods fails to appeal as indicated below.

C. Compliance with Statutes and Regulations - Nothing in this permit shall be construed as relieving Woods 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. Air Quality Operation Fees – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by Woods 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. Woods 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
Woods Crushing and Hauling, Inc.
MAQP #3024-03

I. Introduction/Process Description

Woods Crushing and Hauling, Inc. (Woods) owns and operates a crushing/screening plant to crush and sort sand and gravel materials for use in various construction operations.

A. Permitted Equipment

Woods operates a 1998 Nordberg (34"x44") jaw crusher (maximum capacity 500 tons per hour (TPH)), 1998 Cedar Rapids 45" cone crusher (maximum capacity 300 TPH), 1999 Cedar Rapids cone crusher (maximum capacity 300 TPH), 1960 Pioneer (24"x42") rolls crusher (maximum capacity 100 TPH),), 2006 Nordberg HP200 Cone Crusher with a 2 deck screen, 1998 Cedar Rapids 3-deck screen (maximum capacity 300 TPH), 1999 Cedar Rapids 3-deck screen (maximum capacity 300 TPH), a 1,071 brake horsepower (bhp) diesel engine/generator (725 kilowatt (kW)) , and associated equipment. The facility is a portable source and moves to various locations throughout Montana.

B. Source Description

For a typical operational setup, materials are loaded into a hopper that feeds the jaw crusher. From the jaw crusher, oversized material is conveyed to a 3-deck screen and the undersized material is sent to the final product conveyor for stockpile. Mid-sized material, 3/8"-1 1/2", is sent to the rolls crusher. The larger materials are sent on to a cone crusher and crushed. The material is sent on to another 3-deck screen. Any oversized material is sent on to another cone crusher and recycled back to the screening unit. The undersized material is sent to the final product conveyor and on to stockpile.

C. Permit History

On November 14, 1998, **MAQP# 3024-00** was issued to Woods for the operation of a portable 1960 Kue Ken jaw crusher (maximum capacity 240 TPH), a portable 1978 EL-Jay cone crusher (maximum capacity 170 TPH), a 1979 Cedar Rapids rolls crusher (maximum capacity 196 TPH), a 1979 EL-Jay (5'x16') screen (maximum capacity 280 TPH), a 1980 EL-Jay (5'x16') screen (maximum capacity 280 TPH), a Detroit Diesel Generator (600 kW), and associated equipment. The permit allowed operation at various locations throughout the state of Montana.

On March 22, 2002, Woods submitted a complete permit application to replace a portable 1960 Kue Ken jaw crusher, a portable 1978 EL-Jay cone crusher, a 1979 Cedar Rapids rolls crusher, a 1979 EL-Jay screen, a 1980 EL-Jay screen, and a Detroit Diesel Generator (600 kW) with a 1998 Nordberg jaw crusher, 1998 Cedar Rapids cone crusher, 1999 Cedar Rapids cone crusher, 1960 Pioneer rolls crusher, 1998 Cedar Rapids 3-deck screen, 1999 Cedar Rapids 3-deck screen, a 725 kW diesel generator, and associated equipment. **MAQP# 3024-01** replaced MAQP#3024-00.

On May 24, 2002, Woods submitted a request for an Addendum for **MAQP# 3024-02**, to allow Woods to operate in or within 10 kilometers (km) of the Kalispell, Libby, Whitefish, Columbia Falls, Butte, and Thompson Falls particulate matter with an aerodynamic diameter of 10 microns or less **(**PM_{10}) nonattainment areas (NAA) during the summer months (April 1 through September 30). MAQP#3024-02 replaced MAQP# 3024-01 and

Addendum 1 was established. Additionally, the total plant production in condition II.A.7 was changed to correctly reflect the plant production used in generating the emissions inventory.

D. Current Permit Action

On January 27, 2012, the Department received a request to administratively amend MAQP #3024-02 to change existing federally enforceable limits. Woods' request was made as part of a project undertaken by the Department to address those sources with existing federally enforceable permit limits that were established to keep potential emissions below the 100 ton per year major source Title V Operating Permit thresholds. The Department offered these existing "synthetic minor" sources the opportunity to take new permit limits to further reduce emissions from just below 100 tons per year (TPY) to below 80 TPY. The permit limit change will consequently alter the oversight category for this facility to a level that is only subject to the State Compliance Monitoring Strategy. To reduce emissions to below 80 TPY, this permit action reduces the hours of operation of the diesel engine/generator from 8,525 hours/year to 4,800 hours/year and corrects the rated capacity of the engine driving the 725 kilowatt (kW) generator from an estimated 972.2 brake horsepower (bhp) to the nameplate rating of 1,071 bhp.

This permit action also adds a 2006 Nordberg cone crusher (300 tons per hour (TPH)) and a 2 deck screen The additional equipment will not result in the increase of any pollutant emissions by 5 tons or greater per year. Therefore, the crusher and screen are being added as a de minimis change in accordance with Administrative Rules of Montana (ARM) 17.8.745. In addition, this permit action revises the emissions calculations to more accurately correlate with total plant production limit of 2,190,000 tons/year.

This permitting action amends MAQP #3024-02 to further limit hours of operation of the engine/generator to maintain potential emissions below 80 TPY, corrects the rated capacity of the diesel engine driving the generator, adds the 2006 Nordberg crusher and 2 deck screen, and updates the rule references, permit format, emissions factors and the emissions inventory. **MAQP #3024-03** replaces MAQP#3024-02 and **Addendum 2** replaces Addendum 1.

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 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 where appropriate.

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

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment, including instruments and sensing devices, and shall conduct tests, emission or ambient, for such periods of time as may be necessary, using methods approved by the Department.

3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

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

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.

5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction 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 as to create a public nuisance.

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

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
9. ARM 17.8.222 Ambient Air Quality Standard for Lead
10. ARM 17.8.223 Ambient Air Quality Standard for PM_{10}
11. ARM 17.8.230 Fluoride in Forage

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

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

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.

2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Woods shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.

3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section.

4. ARM 17.8.310 Particulate Matter, Industrial Processes. This rule requires that no person shall cause, or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.

5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this section.

6. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). Woods is considered an NSPS affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts.

   a. 40 CFR 60, Subpart A – General Provisions apply to all equipment or facilities subject to an NSPS Subpart as listed below:

   b. 40 CFR 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants. In order for a crushing plant to be subject to this subpart, the facility must meet the definition of an affected facility and, the affected equipment must have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted by Woods, some of the portable crushing equipment to be used under MAQP #3024-03 are subject to this subpart because it meets the definition of an affected facility and has been constructed or modified after August 31, 1983.

   c. 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE). Owners and operators of stationary CI 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 owners and operators of stationary CI ICE that modify or reconstruct their stationary CI ICE after July 11, 2005, are subject to this subpart. Based on the information submitted by Woods, the CI ICE equipment to be used under MAQP #3024-03 is not subject to this subpart because the engine was manufactured before April 1, 2006. As this permit is written in a de minimis friendly manner, future engines may be subject to this subpart.

7. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. This rule incorporates, by reference, 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Categories. This facility is considered a NESHAP-affected facility under 40 CFR Part 63 and is subject to the requirements of the following subparts.

a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to a NESHAPs Subpart as listed below.

b. 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants (HAPs) for Stationary Reciprocating Internal Combustion Engines (RICE). An owner or operator of a stationary reciprocating internal combustion engine (RICE) at a major or area source of HAP emissions is subject to this rule except if the stationary RICE is being tested at a stationary RICE test cell/stand. An area source of HAP emissions is a source that is not a major source. Any diesel RICE engine operated by Woods will be subject to this Maximum Available Control Technology (MACT) standard if the engine(s) remains or will remain at the permitted location for more than 12 months, or a shorter period of time for an engine located at a seasonal source. A seasonal source remains at a single location on a permanent basis (at least 2 years) and operates 3 months or more each year. Since the permit is written in a de minimis friendly manner, area source provisions of the MACT requirements may apply to the facility engines.

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 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. A permit fee is not required for the current permit action because the permit action is considered an administrative permit change.

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.

   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 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. Woods has a PTE greater than 15 tons per year of PM_{10}, oxides of nitrogen (NOx), and carbon monoxide (CO), 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. A permit application was not required for the current permit action because the permit change is considered an administrative permit change. (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. An affidavit of publication of public notice was not required for the current permit action because the permit change is considered an administrative permit change.

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 Woods 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 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. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).

13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.

14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an MAQP 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 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. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:

   a. PTE > 100 TPY of any pollutant;

   b. PTE > 10 TPY of any one hazardous air pollutant (HAP), PTE > 25 TPY of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or

   c. PTE > 70 TPY of PM_{10} in a serious PM_{10} 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 MAQP#3024-03 for Woods, the following conclusions were made:

a. The facility's PTE is less than 100 TPY for any pollutant.

b. The facility's PTE is less than 10 TPY for any one HAP and less than 25 TPY of all HAPs.

c. This source is not located in a serious PM_{10} nonattainment area.

d. This facility is not subject to any current NESHAP standards.

e. This facility is subject to a current NSPS standard (40 CFR 60, Subparts A and OOO).

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.

Woods requested federally-enforceable permit limitations to keep their potential emissions below the major source Title V permit threshold. Based on these limitations, the Department determined that this facility is not a major source for 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 which limit that source's PTE.

i. In applying for an exemption under this section, the owner or operator of the facility shall certify to the Department that the source's 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 PTE shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.

3. ARM 17.8.1207 Certification of Truth, Accuracy, and Completeness. The compliance certification submittal required by ARM 17.8.1204(3) shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this subchapter shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

III. BACT Analysis

A BACT determination is required for each new or modified source. Woods shall install on the new or modified source the maximum air pollution control capability which is technologically practicable and economically feasible, except that BACT shall be utilized. A BACT determination was not required for the current permit action because the permit change is considered an administrative permit change.

IV. Emission Inventory

Source	Tons/Year						
	PM	**PM_{10}**	**$PM_{2.5}$**	**NOx**	**VOC**	**CO**	**SO_2**
Crushers (5) – Total process rate = 250 TPH	5.65	5.65	5.65				
Screen (3) - Total Screening rate = 250 TPH	1.31	0.59	0.11				
Material Transfer- 250 TPH	2.41	0.81	0.05				
Pile Forming – 250 TPH	11.37	3.13	0.31				
Bulk Loading – 250 TPH	2.45	0.81	0.23				
Diesel Engine/Generator (1071 bhp/725 kW)	7.42	3.51	0.53	79.68	17.17	6.46	5.27
Haul Roads	11.37	3.13	0.31				
Total	**30.73**	**14.61**	**7.00**	**79.68**	**17.17**	**6.46**	**5.27**

Footnotes:

a. Inventory reflects enforceable limits on the diesel engine/generator hours of operation (4,800 hrs/yr) to keep allowable emissions below the Title V threshold AND 80 TPY.

b. Emissions based on the total plant production limit of 2.190,000 tpy @ 8760 hr/yr (MAQP#3024-02) = 250 TPH

** CO = carbon monoxide
HAPs = hazardous air pollutants
bhp = brake horsepower
lb = pound
N/A = not applicable
ND = no data available
NO_X = oxides of nitrogen
PM = particulate matter
PM_{10} = particulate matter with an aerodynamic diameter of 10 microns or less
$PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 microns or less
SO_X = oxides of sulfur
TPH = tons per hour
TPY = tons per year
VOC = volatile organic compounds
yr = year

Crushers (5) – Total process rate = 250 TPH

Process Rate	250	ton/hr
PM Emissions:		
Emission Factor (AP 42, Table 11.19.2-2, 8/04, controlled)	0.0012	lb/ton
Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.0012 lb/ton) * (ton/2000 lb)	**1.31**	ton/yr
Daily Calculation: (250 ton/hr) * (0.0012 lb/ton) * (24 hr/day)	**7.20**	lb/day
PM_{10} Emissions:		
Emission Factor (AP 42, Table 11.19.2-2, 8/04, controlled)	0.00054	lb/ton
Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.00054 lb/ton) * (ton/2000 lb) =	**0.59**	ton/yr
Daily Calculation: (250 ton/hr) * (0.00054 lb/ton) * (24 hr/day) =	**3.24**	lb/day
$PM_{2.5}$ Emissions:		
Emission Factor (AP 42, Table 11.19.2-2, 8/04, controlled)	0.0001	lb/ton
Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.0001 lb/ton) * (ton/2000 lb) =	**0.11**	ton/yr
Daily Calculation: (250 ton/hr) * (0.0001 lb/ton) * (24 hr/day) =	**0.60**	lb/day

Screens (3) – Total process rate = 250 TPH

Hours of Operation	8,760	hrs/yr
Process Rate	250	ton/hr
Total PM Emissions:		
Emission Factor (AP 42, Table 11.19.2-2, 8/04)	0.0022	lb/ton
Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.0022 lb/ton) * (ton/2000 lb) =	**2.41**	ton/yr
Daily Calculation: (250 ton/hr) * (0.0022 lb/ton) * 24 hrs/day =	**13.20**	lb/day

Total PM_{10} Emissions:

Emission Factor (AP 42, Table 11.19.2-2, 8/04)	0.00074	lb/ton
Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.00074 lb/ton) * (ton/2000 lb) =	**0.81**	ton/yr
Daily Calculation: (250 ton/hr) * (0.00074 lb/ton) * 24 hrs/day =	**4.44**	lb/day

Total $PM_{2.5}$ Emissions:

Emission Factor (AP 42, Table 11.19.2-2, 8/04)	0.00005	lb/ton
Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.00005 lb/ton) * (ton/2000 lb) =	**0.05**	ton/yr
Daily Calculation: (250 ton/hr) * (0.00005 lb/ton) * 24 hrs/day =	**0.30**	lb/day

Conveyor Transfer Point (controlled) - (SCC 3-05-020-06)

Process Rate	250	ton/hr
Hours of Operation	8,760	hrs/yr
Number of Transfers	16	transfer

Total PM Emissions:

Emission Factor (AP 42, Table 11.19.2-2, 8/04)	0.00014	lb/ton
Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.00014 lb/ton) * (ton/2000 lb) * (16 transfer) =	**2.45**	ton/yr
Daily Calculation: (250 ton/hr) * (0.00014 lb/ton) * (16 transfer)* 24 hr/day =	**13.44**	lb/day

Total PM_{10} Emissions:

Emission Factor (AP 42, Table 11.19.2-2, 8/04)	4.60E-05	lb/ton
Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.000046 lb/ton) * (ton/2000 lb) * (16 transfer) =	**0.81**	ton/yr
Daily Calculation: (250 ton/hr) * (0.000046 lb/ton) * (16 transfer)* 24 hr/day =	**4.42**	lb/day

Total $PM_{2.5}$ Emissions:

Emission Factor(AP 42, Table 11.19.2-2, 8/04)	1.30E-05	lb/ton
Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.000013 lb/ton) * (ton/2000 lb) * (16 transfer) =	**0.23**	ton/yr
Daily Calculation: (250 ton/hr) * (0.000013 lb/ton) * (16 transfer)* 24 hr/day =	**1.25**	lb/day

Pile Forming

Process Rate	250	ton/hr
Hours of Operation	8,760	hrs/yr
Hours of Operation	24	hrs/day
Number of Piles	4	piles

PM Emissions:

Emission Factor (AP 42, Sec. 13.2.4.3, 11/06) = k (0.0032) * (U/5)^1.3 * (M / 2)^-1.4 =	0.00169	lb/ton
Where: k = particle size multiplier (Value for PM < 30 microns)	0.74	
U = mean wind speed (Average from values provided)	8.15	mph
M = material moisture content (from previous permit version)	4.00	%
Control Efficiency	0	%
Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.00169 lb/ton) * (ton/2000 lb) * (4 piles) =	7.42	ton/yr
Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.00169) * (ton/2000 lb) * (4 piles) * (1-0/100)=	**7.42**	ton/yr
Daily Calculation: (250 ton/hr) * (0.00169 lb/ton) * (4 piles) * 24 hr/day =	**40.64**	lb/day

PM_{10} Emissions:

Emission Factor (AP 42, Sec. 13.2.4.3, 11/06) = k (0.0032) * (U/5)^1.3 * (M / 2)^-1.4 =	0.00080	lb/ton
Where: k = particle size multiplier (Value for PM < 30 microns)	0.35	
U = mean wind speed (Average from values provided)	8.15	mph
M = material moisture content (from previous permit version)	4.00	%

Control Efficiency	0	%
Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.00080 lb/ton) * (ton/2000 lb) * (4 piles) =	3.51	ton/yr
Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.00080) * (ton/2000 lb) * (4 piles) * (1-0/100)=	**3.51**	ton/yr
Daily Calculation: (250 ton/hr) * (0.00080 lb/ton) * (4 piles) * 24 hr/day =	**19.22**	lb/day

$PM_{2.5}$ Emissions:

Emission Factor (AP 42, Sec. 13.2.4.3, 11/06) = k (0.0032) * (U/5)^1.3 * (M / 2)^-1.4 =	0.00012	lb/ton
Where: k = particle size multiplier (Value for PM < 30 microns)	0.053	
U = mean wind speed (Average from values provided)	8.15	mph
M = material moisture content (from previous permit version)	4.00	%
Control Efficiency	0	%
Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.00012 lb/ton) * (ton/2000 lb) * (4 piles) =	0.53	ton/yr
Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.00012) * (ton/2000 lb) * (4 piles) * (1-0/100)=	**0.53**	ton/yr
Daily Calculation: (250 ton/hr) * (0.00012 lb/ton) * (4 piles) * 24 hr/day =	**2.91**	lb/day

Bulk Loading

Process Rate	250	ton/hr
Hours of Operation	8,760	hrs/yr
Hours of Operation	24	hrs/day
Number of Loads	1	load

Assumed PM = PM10 = PM2.5 Emissions:

Emission Factor (AP 42, Sec. 11.19.2-2, 8/2004)	1.00E-04	lb/ton
Control Efficiency	0	%
Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.00010 lb/ton) * (ton/2000 lb) * (1 load) =	0.11	ton/yr
Calculation: (250 ton/hr) * (8760 hrs/yr) * (0.00010 lb/ton) * (ton/2000 lb) * (1 load) * (1 - 0/100) = ton/yr	**0.11**	ton/yr
Daily Calculation: (250 ton/hr) * (0.00010 lb/ton) * (1 load) * 24 hr/day=	**0.60**	lb/day

1,071 bhp Engine/Generator

Operational Capacity of Engine (nameplate) =	1,071	hp
Generator =	725	kW
Hours of Operation =	4,800	hours/yr
Hours of Operation =	24.00	hrs/day

PM = PM10 = PM2.5 Emissions:

Emission Factor (AP-42, Sec. 3.3, Table 3.3-1, 10/96) =	2.20E-03	lbs/hp-hr
Calculation: (1,071 hp) * (4,800 hours/yr) * (0.0022 lbs/hp-hr) * (ton/2000 lb) =	5.65	ton/yr
Calculation: (1,071 hp) * (4,800 hours/yr) * (0.0022 lbs/hp-hr) =	11,309.76	lbs/yr
Calculation: (1,071 hp) * (24 hrs/day) * (0.0022 lbs/hp-hr) =	56.55	lbs/day

NOx Emissions:

Emission Factor (AP-42, Sec. 3.3, Table 3.3-1, 10/96) =	3.10E-02	lbs/hp-hr
Calculation: (1,071 hp) * (4,800 hours/yr) * (0.0310 lbs/hp-hr) * (ton/2000 lb) =	79.68	ton/yr
Calculation: (1,071 hp) * (4,800 hours/yr) * (0.0310 lbs/hp-hr) =	159,364.80	lbs/yr
Calculation: (1,071 hp) * (24 hrs/day) * (0.0310 lbs/hp-hr) =	796.82	lbs/day

CO Emissions:

Emission Factor (AP-42, Sec. 3.3, Table 3.3-1, 10/96) =	6.68E-03	lbs/hp-hr
Calculation: (1,071 hp) * (4,800 hours/yr) * (0.00668 lbs/hp-hr) * (ton/2000 lb) =	17.17	ton/yr
Calculation: (1,071 hp) * (4,800 hours/yr) * (0.00668 lbs/hp-hr) =	34,340.54	lbs/yr
Calculation: (1,071 hp) * (24 hrs/day) * (0.00668 lbs/hp-hr) =	171.70	lbs/day

VOC Emissions:

Emission Factor (AP-42, Sec. 3.3, Table 3.3-1, TOC, Exhaust + Crankcase, 10/96) =	2.51E-03	lbs/hp-hr
Calculation: (1,071 hp) * (4,800 hours/yr) * (0.00251 lbs/hp-hr) * (ton/2000 lb) =	6.46	ton/yr
Calculation: (1,071 hp) * (4,800 hours/yr) * (0.00251 lbs/hp-hr) =	12,924.49	lbs/yr
Calculation: (1,071 hp) * (24 hrs/day) * (0.00251 lbs/hp-hr) =	64.62	lbs/day

SOx Emissions:

Emission Factor (AP-42, Sec. 3.3, Table 3.3-1, 10/96)=	2.05E-03	lbs/hp-hr
Calculation: (1,071 hp) * (4,800 hours/yr) * (0.00205 lbs/hp-hr) * (ton/2000 lb) =	5.27	ton/yr
Calculation: (1,071 hp) * (4,800 hours/yr) * (0.00205 lbs/hp-hr) =	10,538.64	lbs/yr
Calculation: (1,071 hp) * (24 hrs/day) * (0.00205 lbs/hp-hr) =	52.69	lbs/day

Haul Roads

Vehicle Miles Traveled	5	VMT/day
VMT per Hour	0.21	VMT/hr
Hours of Operation	8,760	hrs/yr
Hours of Operation	365	days/yr

PM Emissions:

Emission Factor = k * (s / 12)^a * (W / 3)^b = 12.46 lb/VMT (AP 42, Ch. 13.2.2, 11/06)	12.46	lb/VMT
Where: k = constant (Value for PM30/TSP)	4.9	lbs/VMT
s = surface silt content (Mean value, sand/gravel process, mat'l storage area)	7.1	%
W = mean vehicle weight (1994 average loaded/unloaded or a 40 ton truck)	54	tons
a = constant (Value for PM30/TSP)	0.7	
b = constant (Value for PM30/TSP)	0.45	
Control Efficiency	0	%
Calculation: (8760 hrs/yr) * (0.21 VMT/hr) * (12.46 lb/VMT) * (ton/2000 lb) =	11.37	tons/yr
Calculation: (8760 hrs/yr) * (0.21 VMT/hr) * (12.46 lb/VMT) * (ton/2000 lb) * (1-0/100) =	**11.37**	tons/yr
Daily Calculation: (5.00 VMT/day) * (12.46 lb/VMT) =	**62.30**	lbs/day

PM_{10} Emissions:

Emission Factor = k * (s / 12)^a * (W / 3)^b = 12.46 lb/VMT (AP 42, Ch. 13.2.2, 11/06)	3.43	lb/VMT
Where: k = constant (Value for PM30/TSP)	1.5	lbs/VMT
s = surface silt content (Mean value, sand/gravel process, mat'l storage area)	7.1	%
W = mean vehicle weight (1994 average loaded/unloaded or a 40 ton truck)	54	tons
a = constant (Value for PM30/TSP)	0.9	
b = constant (Value for PM30/TSP)	0.45	
Control Efficiency	0	%
Calculation: (8760 hrs/yr) * (0.21 VMT/hr) * (3.43 lb/VMT) * (ton/2000 lb) =	3.13	tons/yr
Calculation: (8760 hrs/yr) * (0.21 VMT/hr) * (3.43 lb/VMT) * (ton/2000 lb) * (1-0/100) =	**3.13**	tons/yr
Daily Calculation: (5.00 VMT/day) * (3.43 lb/VMT) =	**17.17**	lbs/day

$PM_{2.5}$ Emissions:

Emission Factor = k * (s / 12)^a * (W / 3)^b = 12.46 lb/VMT (AP 42, Ch. 13.2.2, 11/06)	0.34	lb/VMT
Where: k = constant (Value for PM30/TSP)	0.15	lbs/VMT
s = surface silt content (Mean value, sand/gravel process, mat'l storage area)	7.1	%
W = mean vehicle weight (1994 average loaded/unloaded or a 40 ton truck)	54	tons
a = constant (Value for PM30/TSP)	0.9	
b = constant (Value for PM30/TSP)	0.45	

Control Efficiency	0	%
Calculation: (8760 hrs/yr) * (0.21 VMT/hr) * (0.34 lb/VMT) * (ton/2000 lb) =	0.31	tons/yr
Calculation: (8760 hrs/yr) * (0.21 VMT/hr) * (0.34 lb/VMT) * (ton/2000 lb) * (1-0/100) =	**0.31**	tons/yr
Daily Calculation: (5.00 VMT/day) * (0.34 lb/VMT) =	**1.72**	lbs/day

V. Existing Air Quality

MAQP #3024-03 and Addendum 2 are issued for the operation of a portable crushing and screening plant to be located in various locations throughout Montana and while operating at any location in or within 10 km of certain PM_{10} nonattainment areas during the summer months (April 1 – September 30). The more stringent operating conditions contained in the addendum will minimize any potential impact on the nonattainment areas and will protect the national ambient air quality standards. Also, this facility is a portable source that would be expected to operate on an intermittent and temporary basis and any effects on air quality would be expected to be minor and short-lived.

VI. Air Quality Impacts

The Department determined that there will be minor impacts from this permitting action because this permitting action is considered an administrative action. Therefore, the Department believes this action will not cause or contribute to a violation of any ambient air quality standard.

VII. Ambient Air Quality Impact Analysis

Based on the information provided and the conditions established in MAQP #3024-03, the Department determined that the impact from this permitting action will be minor.

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

	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

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

IX. Environmental Assessment

This permitting action is considered an administrative action; therefore, an environmental assessment is not required.

Analysis prepared by: Deanne Fischer
Date: February 8, 2012

Addendum 2
Woods Crushing and Hauling, Inc.
Montana Air Quality Permit MAQP#3024-03

An addendum to MAQP#3024-03 is hereby granted to Woods Crushing and Hauling, Inc. (Woods), pursuant to Section 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.765, as amended, for the following:

I. Permitted Equipment

Woods owns and operates a crushing/screening plant consisting of a 1998 Nordberg (34"x44") jaw crusher (maximum capacity 500 tons per hour (TPH)), 1998 Cedar Rapids 45" cone crusher (maximum capacity 300 TPH), 1999 Cedar Rapids cone crusher (maximum capacity 300 TPH), 1960 Pioneer (24"x42") rolls crusher (maximum capacity 100 TPH), 2006 Nordberg HP200 Cone Crusher with a 2 deck screen, a 1998 Cedar Rapids 3-deck screen (maximum capacity 300 TPH), 1999 Cedar Rapids 3-deck screen (maximum capacity 300 TPH), a 725 kilowatt (kW) (1,071 brake horsepower (bhp)) diesel generator, and associated equipment.

II. Seasonal and Site Restrictions

Addendum 2 applies to the Woods facility while operating at any location in or within 10 km of certain PM_{10} NAAs. Additionally, seasonal and site restrictions apply to the facility as follows:

A. During the winter season (October 1-March 31) - Woods may not operate at any location in or within 10 km of any PM_{10} NAA.

B. During the summer season (April 1-September 30) – Woods may operate at any location in or within 10 km of certain PM_{10} NAAs, including, but not limited to Libby, Thompson Falls, Kalispell, Whitefish, Columbia Falls, and Butte.

C. Woods shall comply with the limitations and conditions contained in Addendum 2 to MAQP #3024-03 while operating in or within 10 km of any of the previously identified PM_{10} NAAs. Addendum 2 shall be valid until revoked or modified. The Department of Environmental Quality Air Resources Management Bureau (Department) reserves the authority to modify Addendum 2 at any time based on local conditions of any future site. These conditions may include, but are not limited to, local terrain, meteorological conditions, proximity to residences or other businesses, etc.

III. Limitations and Conditions

A. Operational Limitations – Summer only

1. Water spray bars must be available and operated as necessary on the crushers, screens, and all transfer points whenever the crushing/screening plant is in operation (ARM 17.8.749).

2. Woods shall not cause or authorize to be discharged into the atmosphere from any equipment, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749). For NSPS-affected equipment constructed after April 22, 2008 for which an opacity limitation of 7% applies (such as screens and conveyors), that 7% limit shall apply to the affected equipment (ARM 17.8.340 and 40 CFR 60, Subpart OOO).

3. Woods shall not cause or authorize to be discharged into the atmosphere from haul roads, access roads, parking lots, or the general plant property any visible fugitive emissions that exhibit an opacity of 10% or greater (ARM 17.8.749).

4. Woods shall treat all unpaved portions of the access roads, parking lots, and general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the 10% opacity limitation (ARM 17.8.749).

5. Woods shall not operate or have on-site more than 5 crushers at any one time, with a maximum combined rated design capacity of up to 250 TPH (ARM 17.8.749).

6. Total crusher production shall not exceed 24,000 tons during any rolling 24-hour time period (ARM 17.8.749).

7. Woods shall not operate or have on-site more than 3 screens at any one time, with a maximum combined rated design capacity of up to 250 TPH.

8. Total screen production shall not exceed 12,000 tons per any rolling 24-hour time period (ARM 17.8.749).

9. Woods shall not operate, or have on-site more than 1 diesel engine/generator at any one time and the maximum rated design capacity shall not exceed 1,071 bhp (ARM 17.8.749).

B. Operational Reporting Requirements

1. If this crushing/screening plant is moved to another nonattainment location, an Intent to Transfer form must be sent to the Department and a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.749 and ARM 17.8.765).

2. Production information for the sites covered by this addendum must be maintained for five years and submitted to the Department upon request. The information must include (ARM 17.8.749):

   a. Daily tons of material crushed by each crusher at each site (including amount of recirculated/rerun material). Woods shall document, by day, the total crushing production. Woods shall sum the total crushing production for the previous day to demonstrate compliance with the limitations in Sections III.A.6.

   b. Daily tons of material screened by each screen at each site (including amount of recirculated/rerun material). Woods shall document, by day, the total screening production. Woods shall sum the total screening production for the previous day to demonstrate compliance with the limitations in Sections III.A.8.

   c. Woods shall not operate or have on-site more than 1 diesel engine/generator. The maximum capacity of the engine that drives the generator shall not exceed 1,071 bhp (ARM 17.8.749).

   d. Daily tons of bulk material loaded at each site (production).

e. Daily hours of operation at each site.

f. Daily hours of operation and the hp for each engine at each site.

g. Fugitive dust information consisting of the daily total miles driven on unpaved roads within the operating site for all plant vehicles.

Addendum 2 Analysis
Woods Crushing and Hauling, Inc.
Montana Air Quality Permit (MAQP) #3024-03

I. Permitted Equipment

Woods Crushing and Hauling, Inc. (Woods) owns and operates a crushing/screening plant consisting of a 1998 Nordberg (34"x44") jaw crusher (maximum capacity 500 tons per hour (TPH)), 1998 Cedar Rapids 45" cone crusher (maximum capacity 300 TPH), 1999 Cedar Rapids cone crusher (maximum capacity 300 TPH), 1960 Pioneer (24"x42") rolls crusher (maximum capacity 100 TPH), 2006 Nordberg HP200 Cone Crusher with a 2 deck screen, a 1998 Cedar Rapids 3-deck screen (maximum capacity 300 TPH), 1999 Cedar Rapids 3-deck screen (maximum capacity 300 TPH), a 725 kilowatt (kW) (1,071 brake horsepower (bhp)) diesel engine/generator, and associated equipment. The facility moves to various locations throughout Montana.

II. Source Description

Woods uses this crushing/screening plant to crush, screen, and sort sand and gravel materials for use in various construction operations. For a typical operational setup, materials are loaded into a hopper that feeds the jaw crusher. From the jaw crusher, oversized material is conveyed to a 3-deck screen and the undersized material is sent to the final product conveyor for stockpile. Mid-sized material, 3/8"-1 1/2", is sent to the rolls crusher. The larger materials are sent on to a cone crusher and crushed. The material is sent on to another 3-deck screen. Any oversized material is sent on to another cone crusher and recycled back to the screening unit. The undersized material is sent to the final product conveyor and on to stockpile.

III. Applicable Rules and Regulations

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

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

A. ARM 17.8.749 Conditions for Issuance of Permit. This rule requires that the 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.

B. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. A source may not increase its emissions beyond those found in its permit unless the source applies for and receives another permit.

C. ARM 17.8.765 Transfer of Permit. An air quality permit may be transferred from one location to another if:

1. Written notice of intent to transfer location and proof of public notice are sent to the Department;

2. The source will operate in the new location for a period of less than 1 year; and

3. The source will not have any significant impact on any nonattainment area or any Class I area.

IV. Emission Inventory (Addendum 2 to MAQP#3024-03)

Source	lbs/day						
	PM	**PM_{10}**	**$PM_{2.5}$**	**NOx**	**VOC**	**CO**	**SO_2**
Crushers (5) – Total process rate = 250 TPH	7.20	3.24	0.60				
Screen (3) - Total Screening rate = 250 TPH	13.20	4.44	0.30				
Material Transfer- 250 TPH	13.44	4.42	1.25				
Pile Forming – 250 TPH	40.64	19.22	2.91				
Bulk Loading – 250 TPH	0.60	0.60	0.60				
Diesel Engine/Generator (1071 bhp/725 kW)	56.55	56.55	56.55	796.82	171.70	64.62	52.69
Haul Roads	62.30	17.17	1.72				
Total	**193.93**	**105.64**	**63.92**	**796.82**	**171.70**	**64.62**	**52.69**

Footnotes: PM_{10} emissions are less than 547 pounds per day
A complete emission inventory for Permit Addendum 2 is included in the MAQP#3024-03 permit analysis
The process rate used in the emissions inventory (250 TPH) was established in MAQP 3024-02 based on the total plant permit production limit 2,190,000 tons/year

** CO = carbon monoxide
HAPs = hazardous air pollutants
bhp = brake horsepower
lb = pound
N/A = not applicable
ND = no data available
NO_X = oxides of nitrogen
PM = particulate matter
PM_{10} = particulate matter with an aerodynamic diameter of 10 microns or less
$PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 microns or less
SO_X = oxides of sulfur
TPH = tons per hour
TPY = tons per year
VOC = volatile organic compounds
yr = year

V. Existing Air Quality

On July 1, 1987, the Environmental Protection Agency (EPA) promulgated new National Ambient Air Quality Standards (NAAQS) for PM_{10}. Due to exceedances of the national standards for PM_{10}, the cities of Kalispell (and the nearby Evergreen area), Columbia Falls, Butte, Whitefish, Libby, Missoula, and Thompson Falls were designated by EPA as nonattainment for PM_{10}. As a result of this designation, the EPA required the Department and the City-County Health Departments to submit PM_{10} State Implementation Plans (SIP). The SIPs consisted of emission control plans that controlled fugitive dust emissions from roads, parking lots, construction, and demolition, since technical studies identified these sources to be the major contributors to PM_{10} emissions.

MAQP #3024-03 and Addendum 2 are for a portable crushing/screening plant that will locate at sites in or within 10 km of certain PM_{10} nonattainment areas during the summer months (April 1 through September 30). The operating conditions contained in the addendum will minimize any potential impact on the nonattainment areas and will protect the national ambient air quality standards. Also, this facility is a portable source that would be expected to operate on an intermittent and temporary basis and any effects on air quality would be expected to be minor and short-lived.

VI. Air Quality Impacts

MAQP #3024-03 and Addendum 2 will cover the operation of this portable crushing/screening plant while operating at any location within Montana, excluding those counties that have a Department approved permitting program and those areas that are tribal lands.

Addendum 2 will cover the operations of this portable crushing/screening plant, while operating in or within 10 km of PM_{10} nonattainment areas during the summer months only (April 1 through September 30).

VII. Taking or Damaging Implication Analysis

As required by 2-10-101 through 105, MCA, the Department conducted the following private property taking and damaging assessment:

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

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

VIII. Environmental Assessment

The current permit action is considered an administrative action; therefore an environmental assessment is not required for the proposed project.

Addendum Analysis prepared by: Deanne Fischer
Date: February 8, 2012