

Brian Schweitzer, Governor

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September 23, 2010

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

Dear Mr. Wood:

Montana Air Quality Permit #4564-00 is deemed final as of September 23, 2010, by the Department of Environmental Quality (Department). This permit is for a portable crushing/screening 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,

Vickie / 1 hash

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

VW:KG Enclosure

Karem Dillespie

Karen Gillespie Environmental Engineer Specialist Air Resources Management Bureau (406) 782-2689 ext.207

Montana Department of Environmental Quality Permitting and Compliance Division

Montana Air Quality Permit #4564-00

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

September 23, 2010



MONTANA AIR QUALITY PERMIT

Issued To: Wood's Crushing & Hauling, Inc. 933 Woodside Road Sandpoint, ID 83864 MAQP: #4564-00 Application Complete: 6/24/2010 Preliminary Determination Issued: 8/3/2010 Department's Decision Issued: 9/7/2010 Permit Final: 9/23/2010 AFS #: 777-4564

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Wood's Crushing & Hauling, Inc. (Wood's) 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

Wood's proposes to operate a portable crushing and screening operation consisting of the following:

- Diesel Engine/Generator (not to exceed 1, 072 horsepower (hp));
- Crusher(s) (combined maximum rated capacity up to 1,700 tons per hour (TPH));
- Screen(s) (combined maximum rated capacity up to 1,400 TPH);
- Miscellaneous conveyors; and
- Associated equipment.

B. Plant Location

Wood's operates a portable crushing and screening operation, which will initially be located at *Section 25, Township 30 North, Range 19 West in Flathead County*, Montana. However, MAQP #4564-00 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 (PM₁₀) 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 PM₁₀ nonattainment areas. Addendum 1, associated with this permitting action, allows for the winter time operation of the equipment in the Columbia Falls PM₁₀ nonattainment area, and summer time operation in certain PM₁₀ 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 and conveyors) 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 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).
- 4. 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 and ARM 17.8.752).
- 5. Wood's shall not cause or authorize the use of any street, road or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).
- 6. Wood's 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).
- Wood's shall not operate more than 4 crusher(s) at any given time and the total combined maximum rated design capacity of the crusher(s) shall not exceed 1,700 TPH (ARM 17.8.749).
- 8. Crushing production is limited to 14,892,000 tons during any rolling 12-month time period (ARM 17.8.749).
- 9. Wood's shall not operate more than 3 screen(s) at any given time and the total combined maximum rated design capacity of the screen(s) shall not exceed 1,400 TPH (ARM 17.8.749).
- 10. Screening production is limited to 12,264,000 tons during any rolling 12-month time period (ARM 17.8.749).
- 11. Wood's shall not operate or have on-site more than one diesel engine/generator. The maximum capacity of the engine that drives the generator shall not exceed 1,072 hp (ARM 17.8.749).
- 12. The 1,072 hp diesel engine/generator exhaust stack shall stand no less than 20 feet above ground level (ARM 17.8.749).
- 13. Operation of the diesel engine driving the generator shall not exceed 4,754 hours during any rolling 12-month time period (ARM 17.8.749 and ARM 17.8.1204).

- 14. If the permitted equipment is used in conjunction with any other equipment owned or operated by Wood's, 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).
- 15. Wood's 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 Plants* (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
- 16. Wood's 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). 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 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. Wood's 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).

- 3. Wood's 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. Wood's 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 Wood's 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. Wood's shall document, by month, the crushing production from the facility. By the 25th day of each month, Wood's shall calculate the crushing production from the facility for the previous month. The monthly information will be used to demonstrate compliance with the rolling 12-month limitation in Section II.A.8. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
- 6. Wood's shall document, by month, the screening production from the facility. By the 25th day of each month, Wood's shall calculate the screening production from the facility for the previous month. The monthly information will be used to demonstrate compliance with the rolling 12-month limitation in Section II.A.10. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
- 7. Wood's shall document, by month, the hours of operation of the diesel engine/generator. By the 25th day of each month, Wood's shall calculate the hours of operation for the diesel engine/generator for the previous month. The monthly information will be used to demonstrate compliance with the rolling 12-month limitation in Section II.A.12. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
- 8. Wood's shall annually certify that its emissions are less than those that would require the facility to obtain an air quality operating permit as required by ARM 17.8.1204(3)(b). The annual certification shall comply with the certification requirements of ARM 17.8.1207. The annual certification shall be submitted along with the annual emissions inventory information (ARM 17.8.749 and ARM 17.8.1204).

D. Notification

Wood's shall provide the Department with written notification of the actual start-up date postmarked within 15 days after the actual start-up date (ARM 17.8.749)

SECTION III: General Conditions

- A. Inspection Wood's 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), 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 Wood's fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving Wood's 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 Wood's 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. Wood's 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 Wood's Crushing & Hauling, Inc. MAQP #4564-00

I. Introduction/Process Description

Wood's Crushing & Hauling, Inc. (Wood's) owns and operates a portable crushing and screening plant.

A. Permitted Equipment

The facility is permitted to operate four crushers with a combined maximum material throughput capacity not to exceed 1,700 tons per hour (TPH), three screens with a combined maximum material throughput capacity not to exceed 1,400 TPH, a diesel engine/generator with a maximum rated capacity not to exceed 1,072 horsepower (hp), miscellaneous conveyors, and associated equipment.

B. Source Description

Wood's proposes to operate this equipment to crush and sort sand and gravel like materials. Wood's would use this crushing/screening plant to crush, screen, and sort sand and gravel like materials for use in various construction operations. For a typical operational setup, unprocessed materials are loaded into the crushing/screening plant via a hopper and transferred by conveyor to a series of crushers and screens where it is sorted and separated. The final product is then transported to a stockpile.

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).

Wood's 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 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
 - 5. ARM 17.8.221 Ambient Air Quality Standard for Visibility
 - 6. <u>ARM 17.8.223 Ambient Air Quality Standard for PM₁₀</u>

Wood's must maintain compliance with the applicable ambient air quality standards.

- C. ARM 17.8, Subchapter 3 Emission Standards, including, but not limited to:
 - 1. <u>ARM 17.8.304 Visible Air Contaminants</u>. 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, Wood's 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.

- <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). Wood's is considered an NSPS affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts.
 - 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</u> <u>Mineral Processing Plants</u>. 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 Wood's, the portable crushing equipment to be used under MAQP #4564-00 is subject to this subpart because it meets the definition of an affected facility and has been constructed or modified after August 31, 1983.
 - c. <u>40 CFR 60, Subpart IIII Standards of Performance for Stationary Compression</u> <u>Ignition Internal Combustion Engines (CI ICE)</u>. 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 Wood's, the diesel engine to be used under MAQP #4564-00 is not subject to this subpart because it 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.
- <u>ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source</u> <u>Categories</u>. This rule incorporates, by reference, 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Categories. Wood's is considered an NESHAP-affected facility under 40 CFR Part 63 and is subject to the requirements of the following subparts.
 - a. <u>40 CFR 63, Subpart A General Provisions</u> apply to all equipment or facilities subject to a NESHAPs Subpart as listed below.
 - b. <u>40 CFR 63, Subpart ZZZZ National Emissions Standards for Hazardous Air</u> <u>Pollutants (HAPs) for Stationary Reciprocating Internal Combustion Engines</u> (<u>RICE</u>). An owner or operator of a stationary 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 Wood's will be subject to this Maximum Available Control Technology (MACT) standard if the engine remains or will remain at the permitted location for more than 12 months, or a shorter period of time for an engine located at a seasonal source. A seasonal source remains at a single location on a permanent basis (at least 2 years) and operates 3 months or more each year. Since the permit is written in a de minimis friendly manner, area source provisions of the MACT requirements may apply to the facility engine.

- 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. Wood's 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.

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. Wood's has a PTE greater than 15 tons per year of particulate matter (PM), PM with an aerodynamic diameter of 10 microns or less (PM₁₀), oxides of nitrogen (NO_x), and carbon monoxide (CO); 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.
 - 5. <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. Wood's 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. Wood's submitted an affidavit of publication of public notice for the June 15, 2010, issue of the *Daily Inter Lake*, a newspaper of general circulation in the Town of 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 Wood's 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 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. <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 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 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 #4564-00 for Wood's, 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 subject to a current NSPS (40 CFR 60, Subpart OOO).
 - e. This facility is not subject to any current NESHAP standards.
 - f. This source is not a Title IV affected source.
 - g. This source is not a solid waste combustion unit.
 - h. This source is not an EPA designated Title V source.

Wood's requested federally-enforceable permit limitations to remain a minor source of emissions with respect to Title V. Based on these limitations, the Department determined that this facility is not subject to the Title V Operating Permit Program. However, in the event that the EPA makes minor sources that are subject to NSPS obtain a Title V Operating Permit, this source will be subject to the Title V Operating Permit Program.

- i. ARM 17.8.1204(3). The Department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable limitations which limit that source's PTE.
 - i. In applying for an exemption under this section the owner or operator of the facility shall certify to the Department that the source's PTE does not require the source to obtain an air quality operating permit.
 - ii. Any source that obtains a federally enforceable limit on PTE shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.
- 3. <u>ARM 17.8.1207 Certification of Truth, Accuracy, and Completeness</u>. The compliance certification submittal by ARM 17.8.1204(3) shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this subchapter shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

III. BACT Determination

A BACT determination is required for each new or modified source. Wood's 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.

Crushing/Screening PM/PM₁₀ Emissions

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

Wood's shall not cause or authorize to be discharged into the atmosphere from any crusher, screen, or associated equipment, not subject to NSPS, any visible emissions that exhibit opacity of 20% or greater averaged over 6 consecutive minutes. Further, Wood's shall not cause or authorize to be discharged into the atmosphere from any NSPS-affected crusher any visible emissions that exhibit opacity of 12% or greater averaged over 6 consecutive minutes for crushers that commenced construction, modification, or reconstruction on or after April 22, 2008, and 15% for crushers that commence construction, modification, or reconstruction after August 31, 1983, but before April 22, 2008. Wood's shall not cause or authorize to be discharged into the atmosphere from any other associated NSPS-affected equipment, such as screens and material conveyors, any visible emissions that exhibit opacity of 7% or greater averaged over 6 construction after April 22, 2008, and 10% for equipment that commences construction, modification, or reconstruction, modification, or reconstruction after April 22, 2008, and 10% for equipment that commences construction, modification, or reconstruction, modification, or reconstruction, modification, or reconstruction after April 22, 2008, and 10% for equipment that commences construction, modification, or reconstruction after August 31, 1983, but before April 22, 2008, and 10% for equipment that commences construction, modification, or reconstruction after August 31, 1983, but before April 22, 2008.

Wood's is required to have water spray bars and water available on site (at all times) and to apply the water, as necessary, to maintain compliance with the opacity and reasonable precautions limitations. Wood's may also use chemical dust suppressant to maintain compliance with emissions limitations in Section II.A. of MAQP #4564-00. The Department determined that using water spray bars, water, and/or chemical dust suppressant to maintain compliance with the opacity requirements and reasonable precaution limitations constitutes BACT for the operation for the additional equipment.

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.

Diesel Engines

Due to the limited amount of emissions produced by the diesel engine and the lack of readily available cost effective add-on controls, add-on controls would be cost prohibitive. Therefore, the Department determined that proper operation and maintenance with no add-on controls would constitute BACT for the diesel engine.

In addition, any new diesel engine would be required to comply with the federal engine emission limitations including, for example, 40 CFR 60, Subpart IIII and/or 40 CFR 63, Subpart ZZZZ.

IV. Emission Inventory

			Тог	ns per Yea	r	-	
Emission Source	PM	PM ₁₀	PM _{2.5}	NO _x	СО	VOC	SO_2
Material Crushing (up to 1,700 TPH)	8.94	4.02	0.74				
Material Screening (up to 1,400 TPH)	13.49	4.54	0.31				
Truck Unloading	0.46	0.15	0.04				
Material Transfer	5.52	1.81	0.59				
Pile Forming	21.22	10.05	1.51				
Diesel Engine (up to 1,072 hp) ¹	5.61	5.61	5.61	78.99	17.02	6.39	5.22
Haul Roads	11.37	3.13	0.31				
Total Emissions	66.61	29.31	9.11	78.99	17.02	6.39	5.22

Notes:

1 - Annual hours of operation for the diesel generator engine is limited to 4,754 hours per year to keep total NO_x emissions below the Title V threshold as well as 80 tpy.

- PM_{2.5} Particulate matter with an aerodynamic diameter of 2.5 microns or less
- VOC Volatile Organic Compounds
- SO₂ Sulfur Dioxide
- VMT Vehicle Miles Traveled
- hr Hour
- yr Year
- b lb Pound
- mph Miles per Hour

Material Crushing (up to 1,700 TPH)

Process Rate:	1,700 tons/hr
Hours of Operation:	8,760 hr/yr

PM Emissions:	
Emission Factor: Calculations:	0.0012 lbs/ton (AP-42, Table 11.19.2-2, 8/04) 0.0012 lbs/ton * 1,700 tons/hr = 2.04 lbs/hr 2.04 lbs/hr * 8,760 hr/yr * 0.0005 tons/lb = 8.94 tons/yr
PM ₁₀ Emissions:	
Emission Factor: Calculations:	0.00054 lbs/ton (AP-42, Table 11.19.2-2, 8/04) 0.00054 lbs/ton * 1,700 tons/hr = 0.92 lbs/hr 0.92 lbs/hr * 8,760 hr/yr * 0.0005 tons/lb = 4.02 tons/yr
<u>PM_{2.5} Emissions:</u> Emission Factor: Calculations:	0.0001 lbs/ton (AP-42, Table 11.19.2-2, 8/04) 0.0001 lbs/ton * 1,700 tons/hr = 0.17 lbs/hr 0.17 lbs/hr * 8,760 hr/yr * 0.0005 tons/lb = 0.74 tons/yr
Material Screening (up to 1	1.400 TPH)
Process Rate: Hours of Operation:	1,400 tons/hr 8,760 hr/yr
PM Emissions:	
Emission Factor: Calculations:	0.0022 lbs/ton (AP-42, Table 11.19.2-2, 8/04) 0.0022 lbs/ton * 1,400 tons/hr = 3.08 lbs/hr 3.08 lbs/hr * 8,760 hr/yr * 0.0005 tons/lb = 13.49 tons/yr
DM Emission	
<u>PM₁₀ Emissions:</u> Emission Factor: Calculations:	0.00074 lbs/ton (AP-42, Table 11.19.2-2, 8/04) 0.00074 lbs/ton * 1,400 tons/hr = 1.04 lbs/hr 1.04 lbs/hr * 8,760 hr/yr * 0.0005 tons/lb = 4.54 tons/yr
PM2.5 Emissions:	
Emission Factor: Calculations:	0.00005 lbs/ton (AP-42, Table 11.19.2-2, 8/04) 0.00005 lbs/ton * 1,400 tons/hr = 0.07 lbs/hr 0.07 lbs/hr * 8,760 hr/yr * 0.0005 tons/lb = 0.31 tons/yr
Truck Unloading	
Process Rate:	750 tons/hr
Number of Loads: Hours of Operation:	1 Load 8,760 hr/yr
TSP Emissions:	
Emission Factor: Calculations:	0.00014 lbs/ton (AP-42, Section 11.19.2-2, 8/04) 0.00014 lbs/ton * 750 tons/hr * 1 Load = 0.11 lbs/hr 0.11 lbs/hr * 8,760 hr/yr * 0.0005 tons/lb = 0.46 tons/yr
PM ₁₀ Emissions:	
Emission Factor: Calculations:	0.000046 lbs/ton (AP-42, Section 11.19.2-2, 8/04) 0.000046 lbs/ton * 750 tons/hr * 1 Load = 0.0345 lbs/hr 0.0345 lbs/hr * 8,760 hr/yr * 0.0005 tons/lb = 0.15 tons/yr
PM2.5 Emissions:	
Emission Factor: Calculations:	0.000013 lbs/ton (AP-42, Section 11.19.2-2, 8/04) 0.000013 lbs/ton * 750 tons/hr * 1 Load = 0.0098 lbs/hr 0.0098 lbs/hr * 8,760 hr/yr * 0.0005 tons/lb = 0.04 tons/yr
Material Transfer	
Process Rate:	750 tons/hr
Number of Transfers: Hours of Operation:	12 Transfers 8,760 hr/yr
PM Emissions:	
Emission Factor: Calculations:	0.00014 lbs/ton (AP-42, Table 11.19.2-2, 7/94) 0.00014 lbs/ton * 750 tons/hr * 12 Transfers = 1.26 lbs/hr 1.26 lbs/hr * 8,760 hr/yr * 0.0005 tons/lb = 5.52 tons/yr

<u>PM₁₀ En</u>	nissions:		
<u> </u>	Emission Factor: Calculations:		(AP-42, Table 11.19.2-2, 7/94) 50 tons/hr * 12 Transfers = 0.414 lbs/hr 0 hr/yr * 0.0005 tons/lb = 1.81 tons/yr
<u>PM_{2.5} Er</u>	nissions: Emission Factor: Calculations:		(AP-42, Table 11.19.2-2, 7/94) 50 tons/hr * 12 Transfers = 0.135 lbs/hr 0 hr/yr * 0.0005 tons/lb = 0.59 tons/yr
Pile For	ming		
Process 1		750 tons/hr	
Number Hours of	Operation:	2 Piles 8,760 hr/yr	
PM Emi	ssions:		
	Emission Factor:	0.00323 lbs/ton	(Equation 1 from AP-42, Sec. 13.2.4.3, 11/06)
	Where:	k = 0.74 U = 8.15 mph	(Value for PM < 30 microns) (Average from values provided)
	Calculations:		(Average from values provided) 750 tons/hr * 2 Piles = 4.85 lbs/hr hr/yr * 0.0005 tons/lb = 21.22 tons/yr
<u>PM₁₀ En</u>	<u>nssions:</u> Emission Factor:	0.00153 lbs/ton	(Equation 1 from AP-42, Sec. 13.2.4.3, 11/06)
	Where:	k = 0.35	(Value for PM < 10 microns)
		U = 8.15 mph	(Average from values provided)
	Calculations:	M = 2.52 % 0.00153 lbs/top * 7	(Average from values provided) 750 tons/hr * 2 Piles = 2.30 lbs/hr
	Calculations.		hr/yr * 0.0005 tons/lb = 10.05 tons/yr
<u>PM_{2.5} Er</u>			
	Emission Factor:	0.00023 lbs/ton	(Equation 1 from AP-42, Sec. 13.2.4.3, 11/06)
	Where:	k = 0.053 U = 8.15 mph	(Value for PM < 10 microns) (Average from values provided)
		M = 2.52 %	(Average from values provided)
	Calculations:		750 tons/hr * 2 Piles = 0.345 lbs/hr 0 hr/yr * 0.0005 tons/lb = 1.51 tons/yr
Diesel E	ngine (up to 1,072	hp)	
Generato	or Size:	1,072 hp	
Hours of	Operation:	4,754 hr/yr	
PM Emi	ssions:		
	Emission Factor:		(AP-42 Table 3.3-1, 10/96)
	Calculations:		1,072 hp = 2.36 lbs/hr hr/yr * 0.0005 tons/lb = 5.61 tons/yr
		2.30 105/11 1,731	
<u>PM₁₀ En</u>	nissions: Emission Factor:	$0.0022 \text{lb}_{2}/\text{b}_{2}$	$(AD 42 T_{abl} 2.2.1 10/06)$
	Calculations:	0.0022 lbs/hp-hr 0.0022 lbs/hp-hr *	(AP-42 Table 3.3-1, 10/96) 1,072 hp = 2.36 lbs/hr
			hr/yr * 0.0005 tons/lb = 5.61 tons/yr
<u>PM_{2.5} Er</u>	nissions:		
	Emission Factor:	0.0022 lbs/hp-hr	(AP-42 Table 3.3-1, 10/96)
	Calculations:		1,072 hp = 2.36 lbs/hr
		2.50 108/111 * 4,754	hr/yr * 0.0005 tons/lb = 5.61 tons/yr
<u>NO_x Em</u>			
	Emission Factor: Calculations:	0.031 lbs/hp-hr 0.031 lbs/hp-hr * 1	(AP-42 Table 3.3-1, 10/96) ,072 hp = 33.23 lbs/hr
	Calculations.		4 hr/yr * 0.0005 tons/lb = 78.99 tons/yr
CO Emi	sions		
<u>CO EIIII</u>	Emission Factor:	0.00668 lbs/hp-hr	(AP-42 Table 3.3-1, 10/96)
	Calculations:	0.00668 lbs/hp-hr	* 1,072 hp = 7.16 lbs/hr
		7.16 lbs/hr * 4,754	hr/yr * 0.0005 tons/lb = 17.02 tons/yr

<u>VOC En</u>	<u>nissions:</u> Emission Factor: Calculations:	0.00251 lbs/hp-hr 3	(AP-42 Table 3.3-1, 10/96) * 1,072 hp = 2.69 lbs/hr hr/yr * 0.0005 tons/lb = 6.39 tons/yr			
<u>SO₂ Emi</u>	<u>ssions:</u> Emission Factor: Calculations:	0.00205 lbs/hp-hr (AP-42 Table 3.3-1, 10/96) 0.00205 lbs/hp-hr * 1,072 hp = 2.20 lbs/hr 2.20 lbs/hr * 4,754 hr/yr * 0.0005 tons/lb = 5.22 tons/yr				
Haul Ro Vehicle	ads Miles Traveled:	5 VMT/day {Estim	nated }			
<u>PM Emi</u>	ssions: Emission Factor: Where: Calculations:		(Equation 1a from AP-42, Sec. 13.2.2, 11/06) (Value for PM30/TSP, AP-42, Table 13.2.2-2, 11/06) (AP-42, Table 13.2.2-1, 11/06) (Value for PM30/TSP, AP-42, Table 13.2.2-2, 11/06) (Value for PM30/TSP, AP-42, Table 13.2.2-2, 11/06) VMT/day = 62.3 lbs/day days/yr * 0.0005 tons/lb = 11.37 tons/yr			
<u>PM₁₀ En</u>	<u>iissions:</u> Emission Factor: Where: Calculations:		(Equation 1a from AP-42, Sec. 13.2.2, 11/06) (Value for PM10, AP-42, Table 13.2.2-2, 11/06) (AP-42, Table 13.2.2-1, 11/06) (Value for PM10, AP-42, Table 13.2.2-2, 11/06) (Value for PM10, AP-42, Table 13.2.2-2, 11/06) VMT/day = 17.15 lbs/day 5 days/yr * 0.0005 tons/lb = 3.13 tons/yr			
<u>PM_{2.5} Er</u>	nissions: Emission Factor: Where: Calculations:		(Equation 1a from AP-42, Sec. 13.2.2, 11/06) (Value for PM10, AP-42, Table 13.2.2-2, 11/06) (AP-42, Table 13.2.2-1, 11/06) (Value for PM10, AP-42, Table 13.2.2-2, 11/06) (Value for PM10, AP-42, Table 13.2.2-2, 11/06) VMT/day = 1.7 lbs/day ays/yr * 0.0005 tons/lb = 0.31 tons/yr			

V. Existing Air Quality

The Department is issuing MAQP #4564-00 for a portable crushing and screening facility. MAQP #4564-00 will apply to the plant while operating at any location within Montana, excluding those counties that have a Department approved permitting program. Addendum 1 will apply while the facility is operating in or within 10 km of any PM₁₀ nonattainment area within Montana. *A Missoula County air quality permit will be required for locations within Missoula County, Montana*. In the view of the Department, operating the plant in accordance with the conditions and limitations contained in the permit will not generate emissions that exceed any ambient standard in areas classified as attainment or unclassified for the ambient air quality standards. Addendum 1 contains more stringent requirements concerning operation that are designed to protect the air quality or nonattainment areas. In addition, this source is portable and any air quality impacts will be minimal and temporary.

VI. Air Quality Impacts

The application submitted by Wood's for MAQP #4564-00 states that the facility will operate a 1,072 hp diesel engine/generator at the facility. In order to maintain compliance with the one-hour nitrogen dioxide (NO₂) national ambient air quality standard (NAAQS), Wood's will need a

minimum height above ground level of 20 feet for the 1,072 hp diesel engine/generator. This minimum stack height will provide adequate dispersion of the NO₂ emissions to maintain compliance with the one-hour NO₂ NAAQS. This condition is based on ambient air modeling of the diesel engine/generator emissions while located at the initial site location for less than one year.

Based on the relatively small amount of emissions resulting from the Wood's operation and the limits and conditions that would be included in MAQP #4564-00 and Addendum 1, the Department believes that the allowable/permitted emissions from this source will not cause or contribute to an exceedance of any ambient air quality standard while operating in any area classified as attainment or unclassified for the ambient air quality standards.

VII. 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.

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	
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)
	X	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)].
		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?
	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)
	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?
	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.

IX. Environmental Assessment

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

Addendum 1 Wood's Crushing & Hauling, Inc. Montana Air Quality Permit (MAQP) #4564-00

An addendum to MAQP #4564-00 is hereby granted to Wood's Crushing & Hauling, Inc. (Wood's) 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:

Wood's owns and operates a portable non-metallic mineral processing facility consisting of four crushers (a maximum combined capacity of 1,700 tons per hour (TPH)), three screens (a maximum combined capacity of 1,400 TPH), a 1,072 horsepower (hp) engine driving a generator, and associated material handling and processing equipment.

II. Seasonal and Site Restrictions – Winter and Summer Seasons

Addendum 1 applies to the Wood's facility while operating at any location in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) nonattainment areas. Additionally, seasonal and site restrictions apply to the facility as follows:

- A. During the winter season (October 1-March 31) The only location in or within 10 km of a PM_{10} nonattainment area where Wood's may operate is:
 - 1. NE ¼ of Section 25, Township 30 North, Range 19 West, Flathead County, MT; and
 - 2. Any other site that may be approved, in writing, by the Department of Environmental Quality (Department).
- B. During the summer season (April 1-September 30) Wood's may operate at any location in or within 10 km of the Butte, Columbia Falls, Kalispell, Libby, Thompson Falls, and Whitefish PM₁₀ nonattainment areas.
- C. Wood's shall comply with the limitations and conditions contained in Addendum 1 to MAQP #4564-00 while operating in or within 10 km of any of the previously identified PM₁₀ nonattainment areas. Addendum 1 shall be valid until revoked or modified. The Department reserves the authority to modify Addendum 1 at any time based on local conditions of any future site. These conditions may include, but are not limited to, local terrain, meteorological conditions, proximity to residences or other businesses, etc.
- III. Limitations and Conditions
 - A. Operational Limitations and Conditions Summer Season Conditions (April 1 September 30)
 - 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).
 - Wood's 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. Wood's 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. Wood's 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. Wood's shall not operate, or have on-site, more than four crushers at any one time. Total crusher production shall not exceed 40,800 tons per day (ARM 17.8.749).
- 6. Wood's shall not operate, or have on-site, more than three screens at any one time. Total screen production shall not exceed 33,600 tons per day (ARM 17.8.749).
- 7. Wood's shall not operate or have on-site more than one diesel engine/generator. The maximum combined capacity of the engine that drives the generator shall not exceed 1,072 hp (ARM 17.8.749).
- B. Operation Limitations and Conditions Winter Season Conditions (October 1 March 31)
 - 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).
 - Wood's 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. Wood's 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. Wood's 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. Wood's shall not operate, or have onsite, more than four crushers at any one time. Total crusher production shall not exceed 17,000 tons per day (ARM 17.8.749).
 - 6. Wood's shall not operate, or have onsite, more than three screens at any one time. Total screen production shall not exceed 14,000 tons per day (ARM 17.8.749).
 - 7. Wood's shall not operate or have on-site more than one diesel engine/generator. The maximum combined capacity of the engine that drives the generator shall not exceed 1,072 hp (ARM 17.8.749).
 - 8. Operation of the diesel engine driving the generator shall not exceed 10 hours per day (ARM 17.8.749).

- C. 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). Wood's shall document, by day, the total crushing production. Wood's shall sum the total crushing production for the previous day to demonstrate compliance with the limitations in Sections III.A.5 and III.B.5.
 - b. Daily tons of material screened by each screen at each site (including amount of recirculated/rerun material). Wood's shall document, by day, the total screening production. Wood's shall sum the total screening production for the previous day to demonstrate compliance with the limitations in Sections III.A.6 and III.B.6.
 - c. Daily tons of bulk material loaded at each site (production).
 - d. Daily hours of operation at each site.
 - e. Daily hours of operation and the hp for each engine at each site.
 - f. Fugitive dust information consisting of the daily total miles driven on unpaved roads within the operating site for all plant vehicles.

Addendum 1 Analysis Wood's Crushing & Hauling, Inc. Montana Air Quality Permit (MAQP) #4564-00

I. Permitted Equipment

Wood's Crushing & Hauling, Inc. (Wood's) owns and operates a portable non-metallic mineral processing facility consisting of four crushers (a maximum combined capacity of 1,700 tons per hour (TPH)), three screens (a maximum combined capacity of 1,400 TPH), a 1,072 horsepower (hp) engine driving a generator, and associated material handling and processing equipment.

II. Source Description

Wood's proposes to operate this equipment to crush and sort sand and gravel like materials. Wood's would use this crushing/screening plant to crush, screen, and sort sand and gravel like materials for use in various construction operations. For a typical operational setup, unprocessed materials are loaded into the crushing/screening plant via a hopper and transferred by conveyor to a series of crushers and screens where it is sorted and separated. The final product is then transported to a 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. <u>ARM 17.8.749 Conditions for Issuance 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.
- B. <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. A source may not increase its emissions beyond those found in its permit unless the source applies for and receives another permit.
- C. <u>ARM 17.8.765 Transfer of Permit</u>. 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

Summer Season-Emission Inventory

				lbs/day			
Emission Source	PM	PM ₁₀	PM _{2.5}	NO _x	СО	VOC	SO_2
Material Crushing (up to 1,700 TPH)	48.96	22.03	4.08				
Material Screening (up to 1,400 TPH)	73.92	24.86	1.68				
Truck Unloading	2.52	0.83	0.23				
Material Transfer	30.24	9.94	3.24				
Pile Forming	116.28	55.08	8.28				
Diesel Engine (up to 1,072 hp)	56.60	56.60	56.60	797.57	171.86	64.58	52.74
Haul Roads	62.20	17.12	1.70				
Total Emissions	390.72	186.46	75.81	797.57	171.86	64.58	52.74

Winter Season-Emission Inventory

				lbs/day			
Emission Source	PM	PM_{10}	PM _{2.5}	NO _x	СО	VOC	SO_2
Material Crushing (up to 1,700 TPH)	20.40	9.18	1.70				
Material Screening (up to 1,400 TPH)	30.80	10.36	0.70				
Truck Unloading	1.05	0.35	0.10				
Material Transfer	12.60	4.14	1.35				
Pile Forming	48.45	22.95	3.45				
Diesel Engine (up to 1,072 hp)	23.58	23.58	23.58	332.32	71.61	26.91	21.98
Haul Roads	25.92	7.13	0.71				
Total Emissions	162.80	77.69	31.59	332.32	71.61	26.91	21.98

Note: Hours of operation are limited to ten hours per day to maintain a PM_{10} emission rate of less than 82 pounds per day (lb/day) as well as a modeled 24-hour PM_{10} impact of less than 5 micrograms per cubic meter ($\mu g/m^3$).

- PM Particulate Matter
- PM₁₀ 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
- NO_x Oxides of Nitrogen
- CO Carbon Monoxide
- VOC Volatile Organic Compounds
- SO₂ Sulfur Dioxide
- VMT Vehicle Miles Traveled
- hr Hour
- yr Year
- lb Pound
- mph Miles per Hour

Model Calculations for Generator Engine Stack

8
0.66 feet (MAQP #4564-00 Application)
14 feet (MAQP #4564-00 Application)
1,131 °F (MAQP #4564-00 Application)
6,187.14 ACFM (MAQP #4564-00 Application)
67.73 °F (Default)
See Calculation Below

F P	ns Rate: Engine/Generator Size: Hours of Operation: PM ₁₀ Emissions Factor: Calculations:	1,072 hp 10 hr/day 0.0022 lb/hp-hr 0.0022 lbs/hp-hr * 1,072 hp * 10 hr/day = 23.58 lbs/day 23.58 lb/day * 1 day/24 hr = 0.9827 lb/hr
Ν	g Outputs: /aximum 1-hr Modeled Impac /aximum 24-hr Modeled Impa	
		Emission Inventory Calculations
	l Crushing (up to 1,700 TPH	
Process I Hours of	Rate: Operation (Summer):	1,700 tons/hr 24 hr/day
	Operation (Winter):	10 hr/day
	-	
PM Emi	ssions: Emission Factor:	0.0012 lbs/ton (AP-42, Table 11.19.2-2, 8/04)
	Calculations (Summer):	$0.0012 \text{ lbs/ton} = (141 - 42, 14010 + 1117) \cdot 22, 0.047)$ 0.0012 lbs/ton * 1,700 tons/hr * 24 hr/day = 48.96 lbs/day
	Calculations (Winter):	0.0012 lbs/ton * 1,700 tons/hr * 10 hr/day = 20.40 lbs/day
DM E.		
<u>PM₁₀ En</u>	Emission Factor:	0.00054 lbs/ton (AP-42, Table 11.19.2-2, 8/04)
	Calculations (Summer):	0.00054 lbs/ton * 1,700 tons/hr * 24 hr/day = 22.03 lbs/day
	Calculations (Winter):	0.00054 lbs/ton * 1,700 tons/hr * 10 hr/day = 9.18 lbs/day
DM Er	nissions:	
<u>1 1v1_{2.5} 1.51</u>	Emission Factor:	0.0001 lbs/ton (AP-42, Table 11.19.2-2, 8/04)
	Calculations (Summer):	0.0001 lbs/ton * 1,700 tons/hr * 24 hr/day = 4.08 lbs/day
	Calculations (Winter):	0.0001 lbs/ton * 1,700 tons/hr * 10 hr/day = 1.70 lbs/day
Materia	l Screening (up to 1,400 TPF	Ð
Process		1,400 tons/hr
	Operation (Summer):	24 hr/day
Hours of	Operation (Winter):	10 hr/day
PM Emi	ssions:	
	Emission Factor:	0.0022 lbs/ton (AP-42, Table 11.19.2-2, 8/04)
	Calculations (Summer):	0.0022 lbs/ton * 1,400 tons/hr * 24 hr/day = 73.92 lbs/day
	Calculations (Winter):	0.0022 lbs/ton * 1,400 tons/hr * 10 hr/day = 30.8 lbs/day
<u>PM₁₀ En</u>	nissions:	
	Emission Factor:	0.00074 lbs/ton (AP-42, Table 11.19.2-2, 8/04)
	Calculations (Summer):	0.00074 lbs/ton * 1,400 tons/hr * 24 hr/day = 24.86 lbs/day
	Calculations (Winter):	0.00074 lbs/ton * 1,400 tons/hr * 10 hr/day = 10.36 lbs/day
$PM_{2.5}$ Er	nissions:	
	Emission Factor:	0.00005 lbs/ton (AP-42, Table 11.19.2-2, 8/04)
	Calculations (Summer):	0.00005 lbs/ton * 1,400 tons/hr * 24 hr/day = 1.68 lbs/day
	Calculations (Winter):	0.00005 lbs/ton * 1,400 tons/hr * 10 hr/day = 0.70 lbs/day
Truck U	Inloading	
Process		750 tons/hr
	of Loads:	1 Load
	Operation (Summer): Operation (Winter):	24 hr/day 10 hr/day
110015 01	operation (miller).	10 11/04/
TSP Em		
	Emission Factor:	$\begin{array}{llllllllllllllllllllllllllllllllllll$
	Calculations (Summer): Calculations (Winter):	0.00014 lbs/ton * 750 tons/hr * 24 hr/day * 1 Load = 2.52 lbs/day 0.00014 lbs/ton * 750 tons/hr * 10 hr/day * 1 Load = 1.05 lbs/day
	((inter).	

<u>PM₁₀ Emissions:</u> Emission Factor: Calculations (Summer): Calculations (Winter):	0.000046 lbs/ton (AP-42, Section 11.19.2-2, 8/04) 0.000046 lbs/ton * 750 tons/hr * 24 hr/day * 1 Load = 0.83 lbs/day 0.000046 lbs/ton * 750 tons/hr * 10 hr/day * 1 Load = 0.35 lbs/day
<u>PM_{2.5} Emissions:</u> Emission Factor: Calculations (Summer): Calculations (Winter):	0.000013 lbs/ton (AP-42, Section 11.19.2-2, 8/04) 0.000013 lbs/ton * 750 tons/hr * 24 hr/day * 1 Load = 0.23 lbs/day 0.000013 lbs/ton * 750 tons/hr * 10 hr/day * 1 Load = 0.10 lbs/day
Material Transfer Process Rate: Number of Transfers: Hours of Operation (Summer): Hours of Operation (Winter):	750 tons/hr 12 Transfers 24 hr/day 10 hr/day
<u>PM Emissions:</u> Emission Factor: Calculations (Summer): Calculations (Winter):	0.00014 lbs/ton (AP-42, Table 11.19.2-2, 7/94) 0.00014 lbs/ton * 750 tons/hr * 24 hr/day * 12 Transfers = 30.24 lbs/day 0.00014 lbs/ton * 750 tons/hr * 10 hr/day * 12 Transfers = 12.60 lbs/day
<u>PM₁₀ Emissions:</u> Emission Factor: Calculations (Summer): Calculations (Winter):	4.6E-5 lbs/ton (AP-42, Table 11.19.2-2, 7/94) 4.6E-5 lbs/ton * 750 tons/hr * 24 hr/day * 12 Transfers = 9.94 lbs/day 4.6E-5 lbs/ton * 750 tons/hr * 10 hr/day * 12 Transfers = 4.14 lbs/day
<u>PM_{2.5} Emissions:</u> Emission Factor: Calculations (Summer): Calculations (Winter):	1.5E-5 lbs/ton (AP-42, Table 11.19.2-2, 7/94) 1.5E-5 lbs/ton * 750 tons/hr * 24 hr/day * 12 Transfers = 3.24 lbs/day 1.5E-5 lbs/ton * 750 tons/hr * 10 hr/day * 12 Transfers = 1.35 lbs/day
Pile Forming Process Rate: Number of Piles: Hours of Operation (Summer): Hours of Operation (Winter):	750 tons/hr 2 Piles 24 hr/day 10 hr/day
<u>PM Emissions:</u> Emission Factor: Where: Calculations (Summer):	0.00323 lbs/ton(Equation 1 from AP-42, Sec. 13.2.4.3, 11/06) $k = 0.74$ (Value for PM < 30 microns)
Calculations (Winter):	0.00323 lbs/ton * 750 tons/hr * 10 hr/day * 2 Piles = 48.45 lbs/day
Emission Factor: Where:	
Calculations (Summer): Calculations (Winter):	0.00153 lbs/ton * 750 tons/hr * 24 hr/day * 2 Piles = 55.08 lbs/day 0.00153 lbs/ton * 750 tons/hr * 10 hr/day * 2 Piles = 22.95 lbs/day
<u>PM_{2.5} Emissions:</u> Emission Factor: Where:	0.00023 lbs/ton k = 0.053(Equation 1 from AP-42, Sec. 13.2.4.3, 11/06) (Value for PM < 10 microns)U = 8.15 mph M = 2.52 %(Average from values provided) (Average from values provided)
Calculations (Summer): Calculations (Winter):	0.00023 lbs/ton * 750 tons/hr * 24 hr/day * 2 Piles = 8.28 lbs/day 0.00023 lbs/ton * 750 tons/hr * 10 hr/day * 2 Piles = 3.45 lbs/day
Diesel Engine (up to 1,072 hp) Generator Size: Hours of Operation (Summer): Hours of Operation (Winter):	1,072 hp 24 hr/day 10 hr/day

4

PM Emis	ssions: Emission Factor:	0.0022 lbs/hp-hr	(AP-42 Table 3.3-1, 10/96)
	Calculations (Summer): Calculations (Winter):	0.0022 lbs/hp-hr *	1,072 hp * 24 hr/day = 56.60 lbs/day 1,072 hp * 10 hr/day = 23.58 lbs/day
<u>PM₁₀ Em</u>	iissions:		
_	Emission Factor:	0.0022 lbs/hp-hr	(AP-42 Table 3.3-1, 10/96)
	Calculations (Summer):		1,072 hp * 24 hr/day = 56.60 lbs/day
	Calculations (Winter):	0.0022 108/11p-11	1,072 hp * 10 hr/day = 23.58 lbs/day
<u>PM_{2.5} En</u>	nissions:		
	Emission Factor:	0.0022 lbs/hp-hr	(AP-42 Table 3.3-1, 10/96)
	Calculations (Summer):		1,072 hp * 24 hr/day = 56.60 lbs/day 1,072 hp * 10 hr/day = 23.58 lbs/day
	Calculations (Winter):	0.0022 108/11p-111	$1,072 \text{ mp}^{-1}$ 10 m/day = 25.56 lbs/day
<u>NO_x Emi</u>	ssions:		
	Emission Factor:	0.031 lbs/hp-hr	(AP-42 Table 3.3-1, 10/96)
	Calculations (Summer):		,072 hp * 24 hr/day = 797.57 lbs/day
	Calculations (Winter):	0.051 lbs/lip-lif * 1	,072 hp * 10 hr/day = 332.32 lbs/day
CO Emis	sions:		
	Emission Factor:		(AP-42 Table 3.3-1, 10/96)
	Calculations (Summer):		* 1,072 hp * 24 hr/day = 171.86 lbs/day
	Calculations (Winter):	0.00008 lbs/np-nr	* 1,072 hp * 10 hr/day = 71.61 lbs/day
VOC Em	issions:		
	Emission Factor:		(AP-42 Table 3.3-1, 10/96)
	Calculations (Summer):		* 1,072 hp * 24 hr/day = 64.58 lbs/day
	Calculations (Winter):	0.00251 lbs/np-nr	* 1,072 hp * 10 hr/day = 26.91 lbs/day
SO ₂ Emi	ssions:		
_	Emission Factor:		(AP-42 Table 3.3-1, 10/96)
	Calculations (Summer):		* 1,072 hp * 24 hr/day = 52.74 lbs/day
	Calculations (Winter):	0.00205 lbs/hp-hr	* 1,072 hp * 10 hr/day = 21.98 lbs/day
Haul Ro	ads		
	Miles Traveled:	0.208 VMT/hr {Es	timated}
	Operation (Summer):	24 hr/day	
Hours of	Operation (Winter):	10 hr/day	
PM Emis	ssions:		
	Emission Factor:	12.46 lbs/VMT	(Equation 1a from AP-42, Sec. 13.2.2, 11/06)
	Where:		(Value for PM30/TSP, AP-42, Table 13.2.2-2, 11/06)
		s = 7.1% W = 54 tons	(AP-42, Table 13.2.2-1, 11/06)
		a = 0.7	(Value for PM30/TSP, AP-42, Table 13.2.2-2, 11/06)
		b = 0.45	(Value for PM30/TSP, AP-42, Table 13.2.2-2, 11/06)
	Calculations (Summer):		0.208 VMT/hr * 24 hr/day = 62.20 lbs/day
	Calculations (Winter):	12.46 lbs/VMT * 0	0.208 VMT/hr * 10 hr/day = 25.92 lbs/day
<u>PM₁₀ Em</u>	issions:		
<u>1 1 1 10 2010</u>	Emission Factor:	3.43 lbs/VMT	(Equation 1a from AP-42, Sec. 13.2.2, 11/06)
	Where:	k = 1.5 lbs/VMT	(Value for PM10, AP-42, Table 13.2.2-2, 11/06)
		s = 7.1%	(AP-42, Table 13.2.2-1, 11/06)
		W = 54 tons a = 0.9	(Value for PM10, AP-42, Table 13.2.2-2, 11/06)
		b = 0.45	(Value for PM10, AP-42, Table 13.2.2-2, 11/06) (Value for PM10, AP-42, Table 13.2.2-2, 11/06)
	Calculations (Summer):		208 VMT/hr * 24 hr/day = 17.12 lbs/day
	Calculations (Winter):	3.43 lbs/VMT * 0.1	208 VMT/hr * 10 hr/day = 7.13 lbs/day
<u>PM_{2.5} En</u>	nissions:		
<u></u>	Emission Factor:	0.34 lbs/VMT	(Equation 1a from AP-42, Sec. 13.2.2, 11/06)
	Where:	k = 0.15 lbs/VMT	(Value for PM10, AP-42, Table 13.2.2-2, 11/06)
		s = 7.1%	(AP-42, Table 13.2.2-1, 11/06)
		W = 54 tons a = 0.9	(Value for PM10, AP-42, Table 13.2.2-2, 11/06)
1561.00			· ····································

	b = 0.45	(Value for PM10, AP-42, Table 13.2.2-2, 11/06)
Calculations (Summer):	0.34 lbs/VMT *	* 0.208 VMT/hr * 24 hr/day = 1.70 lbs/day
Calculations (Winter):	0.34 lbs/VMT *	* 0.208 VMT/hr * 10 hr/day = 0.71 lbs/day

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 #4564-00 and Addendum 1 are for a portable crushing/screening plant that will locate at sites in or within 10 kilometers (km) of certain PM_{10} nonattainment areas. 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

MAQP #4564-00 and Addendum 1 will cover the operations 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 1 will cover the operations of this portable crushing/screening plant, while operating in or within 10 km of the Columbia Falls PM_{10} nonattainment area (specific site during the winter months (October 1 through March 31)). Additionally, the facility will also be allowed to operate in or within 10 km of PM_{10} nonattainment areas during the summer months (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?

 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?
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

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

Addendum Analysis Prepared by: Karen Gillespie Date: July 30, 2010

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: Wood's Crushing & Hauling, Inc.

Montana Air Quality Permit number: 4564-00

Preliminary Determination Issued: 8/3/2010 Department Decision Issued: 9/7/2010 Permit Final: 9/23/10

- Legal Description of Site: Wood's proposes to operate a crushing and screening facility initially located in Section 25, Township 30 North, Range 19 West in Flathead County, Montana. MAQP #4564-00 would apply while operating at any location in Montana, except those areas having a Department-approved permitting program and areas considered tribal lands. MAQP #4564-00 and Addendum 1 would allow the portable crushing/screening plant to operate in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas (Libby, Kalispell, Columbia Falls, Whitefish, Thompson Falls, and Butte) during the summer season (April 1 through September 30) and within the locations listed in Section II.A or Addendum 1 during the winter season (October 1 through March 31).
- 2. Description of Project: Wood's proposes to operate a portable crushing and screening plant at various locations throughout Montana. The plant would consist of four crushers (a maximum combined capacity of 1,700 TPH), three screens (a maximum combined capacity of 1,400 TPH), a 1,072 hp engine driving a generator, and associated material handling and processing equipment. The proposed action is to issue MAQP #4564-00 allowing the construction and operation of the plant in Flathead County, Montana and other locations across the state.
- 3. *Objectives of Project*: The objective of the operation of the crushing and screening facility is to produce business and revenue by selling aggregate to support various projects. The issuance of MAQP #4564-00 would allow Wood's to operate the permitted equipment at various locations throughout Montana, including the home pit location.
- 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 Wood's 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 #4564-00.
- 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
А	Terrestrial and Aquatic Life and Habitats			Х			Yes
В	Water Quality, Quantity, and Distribution			Х			Yes
C	Geology and Soil Quality, Stability and Moisture			X			Yes
D	Vegetation Cover, Quantity, and Quality			Х			Yes
Е	Aesthetics			Х			Yes
F	Air Quality			Х			Yes
G	Unique Endangered, Fragile, or Limited Environmental Resources			X			Yes
Н	Demands on Environmental Resource of Water, Air and Energy			X			Yes
Ι	Historical and Archaeological Sites				Х		Yes
J	Cumulative and Secondary Impacts			X			Yes

SUMMARY OF COMMENTS ON POTENTIAL PHYSICAL AND BIOLOGICAL EFFECTS: The following comments have been prepared by the Department.

A. Terrestrial and Aquatic Life and Habitats

Terrestrials would use the same area as the crushing and screening operation. The proposed crushing/screening operations would be considered a minor source of emissions, by industrial standards, with intermittent and seasonal operations. Limitations and conditions would be placed in MAQP #4564-00 to minimize these emissions. Therefore, only minor effects on terrestrial life and habitats would be expected as a result of equipment operations or from pollutant deposition.

Impacts on aquatic life and habitats could result from storm water runoff and pollutant deposition, but such impacts would be minor as the facility would be a minor source of emissions (with seasonal and intermittent operations). Since only a minor amount of air emissions would be generated, only minor deposition would occur. Furthermore, this project would typically operate in an area designated for such activities. Therefore, only minor and temporary impacts to aquatic life and habitat would be expected from the proposed crushing/screening operation.

B. Water Quality, Quantity and Distribution

Water would be used for dust suppression on the surrounding roadways and areas of operation and for pollution control for equipment operations. However, water use would only cause a minor disturbance to these areas, since only relatively small amounts of water would be needed. At most, only minor surface and groundwater quality impacts would be expected as a result of using water for dust suppression because only small amounts of water would be required to control air pollutant emissions and deposition of air pollutant emissions would be minor (as described in Section 7.F of this EA). Overall, any impacts to the water quality, quantity, and distribution of the project area would be minor because the proposed crushing/screening operation would typically operate within areas designated for such operations. Therefore, the overall characteristics of the area would not change as a result of the proposed project and any associated impacts would be minor.

C. Geology and Soil Quality, Stability and Moisture

The crushing/screening operations would have only minor impacts on soils in any proposed site location (due to the construction and use of the crushing/screening facility) because the facility is relatively small in size, would use only relatively small amounts of water for pollution control, and would only have seasonal and intermittent operations. Therefore, any impacts to geology and soil quality, stability, and moisture at any proposed operational site would be minor.

Overall, any impacts to the geology and soil quality, stability, and moisture of the project area would be minor because the proposed crushing/screening operation would typically operate within areas designated for such operations. Therefore, the overall characteristics of the area would not change as a result of the proposed project and any associated impacts would be minor.

D. Vegetation Cover, Quantity, and Quality

Because the facility would be a minor source of emissions by industrial standards and would typically operate in areas previously designated and used for aggregate crushing and screening, impacts from the emissions from the crushing/screening facility would be minor. As described in Section 7.F of this EA, the amount of air emissions from this facility would be minor. As a result, the corresponding deposition of the air pollutants on the surrounding vegetation would also be minor. Also, because the water usage is minimal as described in Section 7.B of this EA, and the associated soil disturbance is minimal as described in Section 7.C of this EA, corresponding vegetative impacts would be minor.

Overall, any impacts to the vegetation cover, quantity, and quality of the project area would be minor because the proposed crushing/screening operation would typically operate within areas designated for such operations. Therefore, the overall characteristics of the area would not change as a result of the proposed project and any associated impacts would be minor.

E. Aesthetics

The crushing/screening operation would be visible and would create additional noise while in operation. However, MAQP #4564-00 and Addendum 1 would include conditions to control emissions, including visible emissions, from the plant. Also, because the crushing/screening operation is portable, would operate on an intermittent and seasonal basis, and would typically locate within a previously permitted open-cut pit, any visual and noise impacts would be minor and short-lived.

Overall, any impacts to the aesthetics of the project area would be minor because the proposed crushing/screening operation would typically operate within areas designated for such operations. Therefore, the overall characteristics of the area would not change as a result of the proposed project and any associated impacts would be minor.

F. Air Quality

The air quality impacts from the crushing/screening operations would be minor because MAQP #4564-00 and Addendum 1 would include conditions limiting the opacity from the plant, as well as requiring water spray bars and other means to control air pollution. Further, MAQP

#4564-00 would limit total emissions from the crushing/screening operation and any additional equipment owned and operated by Wood's to 250 TPY or less at any given operating site, excluding fugitive emissions, and Addendum 1 would be more stringent than the MAQP to address specific NAAQS of PM_{10} nonattainment areas.

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

G. Unique Endangered, Fragile, or Limited Environmental Resources

Emissions from the proposed project may impact unique, endangered, fragile, or limited environmental resources located in a given proposed project area. However, allowable emissions and resulting impacts from the project would be minor due to the low concentration of those pollutants emitted.

MAQP #4564-00 and Addendum 1 would cover the proposed crushing/screening operation while located at various locations throughout thee state. Most operations would be expected to take place within existing and previously disturbed industrial gravel pits thereby resulting in only minor impacts to the industrial area. Further, given the temporary and portable nature of the operations, any impacts would be expected to be minor and short-lived. In addition, operational conditions and limitations in MAQP #4564-00 and Addendum 1 would be protective of these resources by limiting overall impacts to the surrounding environment.

The Department has previously contacted the Montana Natural Heritage Program (MNHP) to identify species of special concern that may be found in the area where the proposed plant would initially locate. Search results concluded that there were 6 species of concern in the area. The area, in this case, was defined by the section, township, and range of the proposed site, with an additional 1-mile buffer. The species of special concern were the bull trout, grizzly bear, fisher, wolverine, canada lynx, and english sundew.

Given the fact that most of the species of concern (i.e., the bull trout, grizzly bear, fisher, wolverine, and canada lynx) would not likely be located within the operational area of the project and the nature of similar permitted crushing and screening operations, any effects on the local populations are expected to be minimal. Lastly, the english sundew, a vascular plant, covers a small area about one mile from the proposed plant area. As allowable emissions are limited, and deposition is expected to be minimal, if any, effects to the english sundew would be expected to be minimal.

In addition, initial and typical operations would take place within a previously disturbed industrial site, further limiting the potential for impact to any unique endangered, fragile, or limited environmental resource. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

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

Due to the relatively small size of the facility, the crushing/screening operation would result in only minor demands on the environmental resources of water, air, and energy for normal operations. Small quantities of water would be used for dust suppression and would control

particulate emissions generated through equipment operations and vehicle traffic at the site. Energy requirements would be accommodated through the operation of the permitted dieselfired electric generator and would be minor due to the relatively small amount of diesel fuel required to operate the generator. In addition, the crushing/screening plant would operate on an intermittent and seasonal basis thereby minimizing energy demands. Further, impacts to air resources would be minor because the source would be small by industrial standards, would operate on an intermittent and seasonal basis, and would generate relatively minor amounts of regulated pollutants through normal operations.

Overall, any impacts to the demands on the environmental resources of water, air, and energy of the project area would be minor because the proposed crushing/screening operation would 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

Typically, the crushing/screening plant would operate within a previously disturbed open-cut pit used for such purposes. The Department contacted the Montana Historical Society – State Historical Preservation Office (SHPO) in an effort to identify any historical and archaeological sites that may be present in the proposed area of operation. Search results concluded that there are no previously recorded historical or archaeological resources of concern within the area proposed for initial operation. According to correspondence from the SHPO, there would be a low likelihood of adverse disturbance to any known archaeological or historic site given previous industrial disturbance to the area. Therefore, no impacts upon historical or archaeological sites would be expected as a result of operating the crushing and screening plant. However, if cultural materials are discovered during this project, or any future project location, the Montana Historical Society should be contacted.

J. Cumulative and Secondary Impacts

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

Overall, any cumulative or secondary impacts to the physical and biological aspects of the human environment of the project area would be minor because the proposed crushing/screening operation would typically operate within areas designated for such operations. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

8. The following table summarizes the potential economic and social effects of the proposed project on the human environment. The "no-action" alternative was discussed previously.

		Major	Moderate	Minor	None	Unknown	Comments Included
А	Social Structures and Mores				Х		Yes
В	Cultural Uniqueness and Diversity				Х		Yes
С	Local and State Tax Base and Tax Revenue			Х			Yes
D	Agricultural or Industrial Production			Х			Yes
Е	Human Health			Х			Yes
F	Access to and Quality of Recreational and Wilderness Activities			Х			Yes
G	Quantity and Distribution of Employment			Х			Yes
Н	Distribution of Population			Х			Yes
Ι	Demands for Government Services			Х			Yes
J	Industrial and Commercial Activity			Х			Yes
Κ	Locally Adopted Environmental Plans and Goals			Х			Yes
L	Cumulative and Secondary Impacts			Х			Yes

SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS: The following comments have been prepared by the Department.

A. Social Structures and Mores

The crushing/screening operation would cause no disruption to the social structures and mores in the area because the source would be a minor industrial source of emissions, would typically operate in an existing industrial gravel pit used for such purposes, and would operate on a temporary and intermittent basis. Further, the facility would be required to operate according to the limits and conditions that would be included in MAQP #4564-00 and Addendum 1, which would limit the effects to social structures and mores.

B. Cultural Uniqueness and Diversity

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

C. Local and State Tax Base and Tax Revenue

The crushing/screening operation 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 proposed project would not be expected to require any more than a few employees. Furthermore, the impacts to local tax base and revenue would be minor because the source would continue to be portable and the money generated for taxes would be widespread.

D. Agricultural or Industrial Production

The crushing/screening operations would result in only minor impacts to local industrial production since the facility would be a minor source of aggregate production and air emissions. Because minimal deposition of air pollutants would occur on the surrounding land, only minor effects on the vegetation or agricultural production would occur. In addition, the facility operations would be small and temporary in nature. Pollutant deposition from the project would be minimal because the emissions would be well controlled, widely dispersed (from factors such as wind speed and wind direction), and would have minimal deposition on the surrounding area. In addition, the facility operations would be temporary in nature and would be permitted with operational conditions and limitations that would minimize impacts to local agricultural areas.

E. Human Health

MAQP #4564-00 and Addendum 1 would include limits and conditions to ensure that the crushing/screening facility would be operated in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. As described in Section 7.F of this EA, the air emissions from the proposed facility would be minimized by the use of water spray and other process limits that would be required by MAQP #4564-00 and Addendum 1. Also, the facility would operate on a temporary and intermittent basis and pollutants would be widely dispersed (see Section 7.F of this EA). Therefore, only minor impacts would be expected on human health from the proposed crushing/screening operations.

F. Access to and Quality of Recreational and Wilderness Activities

Access to recreational opportunities would not be limited by this facility. The equipment would be initially and typically located within preexisting industrial sites. All recreational opportunities, in available in the area, would still be accessible. Noise from the facility would be minor because the crushing/screening operation would be small by industrial standards and would operate in areas typically used for such operations (i.e., existing gravel pit). As a result, the amount of noise generated from the crushing/screening operation would be minimal for the area. Also, the facility would operate on a seasonal and intermittent basis. Therefore, any impacts to the quality of recreational and wilderness activities created by the proposed project would be expected to be minor and short-lived.

G. Quantity and Distribution of Employment

This facility would be a small, portable operation. Therefore, this project would not be expected to have any more than a minor effect to the quantity and distribution of employment in any given area of operation.

H. Distribution of Population

The portable crushing/screening operation would be small and temporary in nature with few employees. Therefore, the facility would be expected to have little, if any, impact on the normal population distribution in the area of operation or any future operating site.

I. Demands for Government Services

There would be a very small increase in traffic on existing roadways and highways in the area from the proposed project. 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. However, demands for government services would be minor.

J. Industrial and Commercial Activity

The proposed project would represent only a minor increase in the industrial activity in the proposed are of operation because the facility would continue to be a small industrial source and be portable and temporary in nature. Very little additional industrial or commercial activity would be expected as a result of the proposed operation. Therefore, any impacts to the industrial and commercial activity would be minor.

K. Locally Adopted Environmental Plans and Goals

MAQP #4564-00 and Addendum 1 would allow Wood's to operate in areas designated by the Environmental Protection Agency (EPA) as attainment or unclassified for the National and Montana Ambient Air Quality Standards (NAAQS/MAAQS). MAQP #4564-00 and Addendum 1 would include limits and conditions that would protect air quality and keep facility emissions in compliance with any applicable ambient air quality standards. In addition to the air quality protection provided by MAQP #4564-00 and Addendum 1, the facility would be a portable source and would have intermittent and season operations, thus, any impacts from the facility would be minor and short-lived.

L. Cumulative and Secondary Impacts

The crushing/screening operations would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area of operation because the source would be a portable and temporary source. No other industrial operations would be expected to result from the permitting and operation of this facility. Minor increases in traffic would have minor effects on local traffic in the immediate area. Because the source is an existing permitted crushing/screening operation and would remain relatively small and temporary, only minor economic impacts to the local economy would be expected from the proposed project.

Further, this facility may be operated in conjunction with other equipment owned and operated by Wood's; however, any cumulative impacts to the social and economic aspects of the human environment would be minor and short-lived. In conclusion, the source is relatively small, the facility emissions would be minimal, and the project would have only minor cumulative and secondary impacts.

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

- If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is for the construction and operation of a portable crushing/screening facility. MAQP #4564-00 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: Karen Gillespie Date: July 30, 2010