



Montana Department of
ENVIRONMENTAL QUALITY

Brian Schweitzer, Governor

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May 24, 2010

H. Howard Anderson
8920 Birdseye Road
Helena, MT 59602

Dear Mr. Anderson:

Montana Air Quality Permit #3380-02 is deemed final as of May 22, 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 Walsh
Air Permitting Program Supervisor
Air Resources Management Bureau
(406) 444-3490

Julie Merkel
Air Quality Specialist
Air Resources Management Bureau
(406) 444-3626

VW:JM
Enclosures

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #3380-02

H. Howard Anderson
8920 Birdseye Road
Helena, MT 59602

May 22, 2010



MONTANA AIR QUALITY PERMIT

Issued To: H. Howard Anderson
8920 Birdseye Rd
Helena, MT 59602

Montana Air Quality Permit #3380-02
Administrative Amendment (AA)
Application Received: 01/25/10
Department Decision on AA: 05/06/10
Permit Final: 05/22/10
AFS #777-3380

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to H. Howard Anderson, pursuant to Sections 75-2-204 and 211, Montana Code Annotated (MCA), as amended, and the Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

Section I: Permitted Facilities

A. Plant Location

H. Howard Anderson operates a portable crushing/screening facility at various locations throughout Montana. The initial location is in the NE¼ of Section 1, Township 11 North, Range 5 West, in Lewis and Clark County, Montana. However, MAQP #3380-02 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. A complete list of the permitted equipment is contained in Section I.A of the Permit Analysis.

B. Current Permit Action

On January 25, 2010, the Department received a request to transfer ownership and change the name of MAQP#3380-02 from Silver City Sand and Gravel to H. Howard Anderson. In addition, the legal description for the initial site location was incorrect in the original permit and has been corrected to NE¼ of Section 1, Township 11 North, Range 5 West, in Lewis and Clark County.

Section II: Limitations and Conditions

A. Operational Limitations and Conditions

1. H. Howard Anderson shall not cause or authorize to be discharged into the atmosphere, from any non-Standards of Performance for New Stationary Sources (NSPS) affected equipment, any visible emissions that exhibit an opacity of 20% or greater averaged over six consecutive minutes (ARM 17.8.308 and ARM 17.8.752).
2. All visible emissions from any 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
3. All visible emissions from any NSPS-affected equipment, other than a crusher (such as screens and conveyors), shall not exhibit an opacity in excess of the following averaged over six consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO):
 - For equipment that commences construction, modification, or reconstruction on or after April 22, 2008: 7% opacity
 - For equipment that commences construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008: 10% opacity
 4. Water and water spray bars shall be available on site at all times and operated, as necessary, to maintain compliance with the opacity limitations in Sections II.A.1, II.A.2, and II.A.3 (ARM 17.8.752).
 5. H. Howard Anderson shall not cause or authorize to be discharged into the atmosphere from any street, road, or parking lot any visible fugitive emissions that exhibit an opacity of 20% or greater (ARM 17.8.308 and ARM 17.8.752).
 6. H. Howard Anderson shall treat all unpaved portions of the haul roads, access roads, parking lots, or general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.5 (ARM 17.8.749).
 7. Crushing production from the facility shall be limited to 3,066,000 tons during any rolling 12-month time period (ARM 17.8.749).
 8. H. Howard Anderson shall not operate more than two crushers at any given time and the total combined maximum rated design capacity of the crushers shall not exceed 350 tons per hour (TPH) (ARM 17.8.749).
 9. Screen production from the facility shall be limited to 5,694,000 tons during any rolling 12-month time period (ARM 17.8.749).
 10. H. Howard Anderson shall not operate more than four screening units at any given time and the total combined maximum rated design capacity of the screens shall not exceed 650 TPH (ARM 17.8.749).
 11. H. Howard Anderson shall not operate more than four diesel-powered engines/generators at any given time. The total combined maximum rated design capacity of the engines/generators shall not exceed 850 horsepower (hp) (ARM 17.8.749).
 12. Operation of each of the four diesel engines/generators shall not exceed 6000 hours during any rolling 12-month time period (ARM 17.8.749 and ARM 17.8.1204).
 13. If the permitted equipment is used in conjunction with any other equipment owned or operated by H. Howard Anderson, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons of emissions during any rolling 12-month time period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).

14. H. Howard Anderson shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO, *Standards of Performance for Nonmetallic Mineral Processing Plants* (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
15. H. Howard Anderson 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. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
2. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. If this portable crushing/screening plant is moved to another location, an Intent to Transfer Form must be sent to the Department. In addition, a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The Intent to Transfer Form and the proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.765).
2. H. Howard Anderson shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. All records compiled in accordance with this permit shall be maintained by H. Howard Anderson as a permanent business record for at least 5 years following the date of the measurement, must be submitted to the Department upon request, and must be available at the plant site for inspection by the Department (ARM 17.8.749).
3. H. Howard Anderson shall supply the Department with annual production information for all emission points, as required by the Department in the annual Emission Inventory request. The request will include, but is not limited to, all sources of emissions identified in the most recent emission inventory report and sources identified in Section I.A of the Permit Analysis.

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

4. H. Howard Anderson 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 emission unit*, a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or

would result in an increase in source capacity above its permitted. The notice must be submitted to the Department, in writing, 10 days prior to start-up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).

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

Section III: General Conditions

- A. Inspection - H. Howard Anderson shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver - The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if H. Howard Anderson fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations - Nothing in this permit shall be construed as relieving H. Howard Anderson of the responsibility for complying with any applicable federal or Montana statute, rule or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement - Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401 *et seq.*, MCA.

- E. Appeals – Any person or persons jointly or severally adversely affected by the Department’s decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department’s decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department’s decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department’s decision on the application is final 16 days after the Department’s decision is made.
- F. Permit Inspection - As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. Permit Fees - Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by H. Howard Anderson 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. H. Howard Anderson shall comply with the conditions contained in this permit while operating at any location in Montana, except within those areas having a Department-approved permitting program or areas considered tribal lands.

Montana Air Quality Permit (MAQP) Analysis
H. Howard Anderson
MAQP # 3380-02

I. Introduction/Process Description

A. Permitted Equipment

H. Howard Anderson owns and operates a portable crushing/screening facility consisting of up to two portable crushers (up to 350 tons per hour (TPH) total), up to four screens (up to 650 TPH total), up to four diesel engines/generators (up to 850 horsepower (hp) combined), and associated equipment.

H. Howard Anderson operates a portable aggregate crushing/screening facility that initially located in the NE¼ of Section 1, Township 11 North, Range 5 West, in Lewis and Clark County, Montana. MAQP #3380-02 will apply to the source while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department) approved permitting program, those areas considered tribal lands, or those areas in or within 10 kilometers (km) of 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.* H. Howard Anderson will be required to obtain an addendum to this air quality permit to operate at locations in or within 10 km of certain PM₁₀ nonattainment areas.

B. Source Description

H. Howard Anderson operates a crushing/screening plant and associated equipment to crush and screen sand and gravel materials for use in various construction operations. For a typical operational setup, materials are loaded into the crushing/screening plant by a feeder, transferred by conveyor, and passed through the crusher. Materials are crushed by the crusher and sent to the screen. Materials are screened, separated, and sent to stockpile for sale and use in construction operations.

C. Permit History

On April 19, 2005, the Department issued **MAQP #3380-00** to Silver City Sand and Gravel (Silver City) to operate a crushing/screening facility.

On November 25, 2009, Silver City submitted a complete application to update the facility's MAQP to reflect currently owned equipment at the facility and to allow for future equipment purchases. The Department updated the MAQP to reflect equipment currently on site, and updated permit language to be de minimis friendly to allow for potential equipment changes. **MAQP #3380-01** replaced MAQP #3380-00.

D. Current Permit Action

On January 25, 2010, the Department received a request to transfer ownership and change the name of MAQP#3380-02 from Silver City to H. Howard Anderson. In addition, the legal description for the initial site location was incorrect in the original permit and has been corrected to NE¼ of Section 1, Township 11 North, Range 5 West, in Lewis and Clark County. **MAQP #3380-02** replaces MAQP #3380-01.

E. Additional Information

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

II. Applicable Rules and Regulations

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

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

1. ARM 17.8.101 Definitions. This rule is a list of applicable definitions used in this subchapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

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

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created.

- B. ARM 17.8, Subchapter 2 - Ambient Air Quality, including, but not limited to:
1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
 2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
 3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
 4. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
 5. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀
- H. Howard Anderson must comply with the applicable ambient air quality standards.
- C. ARM 17.8, Subchapter 3 - Emission Standards, including, but not limited to:
1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
 2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions are taken to control emissions of airborne particulate matter. (2) Under this rule, H. Howard Anderson shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
 3. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.
 4. ARM 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, Title 40 Code of Federal Regulations (40 CFR) Part 60, Standards of Performance for New Stationary Sources (NSPS). This facility is not currently an NSPS-affected source. The following subparts could potentially become applicable to the facility during the life of the permit:
 - a. 40 CFR 60, Subpart A – General Provisions apply to all equipment or facilities subject to an NSPS Subpart as listed below:
 - b. 40 CFR 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants. In order for a crushing facility 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 H. Howard Anderson, the crushing/screening equipment used with MAQP #3380-02 would not be subject to NSPS requirements because the crusher and attached screen were constructed prior to the NSPS trigger date. However, should H. Howard Anderson utilize affected equipment that is manufactured after August 31, 2010, this Subpart would apply.
 - c. 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE). This rule indicates that NSPS requirements apply to owners or operators of stationary CI ICE that commences construction after July 11, 2005, where the stationary CI ICE is manufactured after April 1, 2006, and is not a fire pump

engine. This Subpart would also apply to owners and operators of stationary CI ICE that has modified or reconstruct their stationary CI ICE after July 11, 2005. In order to keep the permit de minimis-friendly, this permit authorizes the use of a diesel engine with a maximum design capacity of 850 hp or less.

The permit application states that the facility will be powered primarily by a diesel engine that was manufactured prior to the trigger date; therefore, this CI ICE would not be subject to this Subpart. However if a different engine is used at a later date, this Subpart may become applicable.

5. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. The source, as defined and applied in 40 CFR Part 63, shall comply with the requirements of 40 CFR Part 63. This facility is not currently an affected source as defined in 40 CFR Part 63. The following subparts could potentially become applicable to the facility during the life of the permit:
 - a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to a National Emission Standard for Hazardous Air Pollutants (NESHAP) Subpart as listed below:
 - b. 40 CFR 63, Subpart ZZZZ – NESHAPs for Stationary Reciprocating Internal Combustion Engines (RICE). As an area source, the diesel RICE will be subject to this rule. However, although diesel RICE engines are an affected source, per 40 CFR 63.6590(b)(3) they do not have any requirements unless they are new or reconstructed after June 12, 2006. Therefore, any diesel RICE engine operated by H. Howard Anderson that is new or reconstructed after June 12, 2006, may be subject to the area source provisions of this Subpart.

D. ARM 17.8, Subchapter 5 - Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that H. Howard Anderson 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. H. Howard Anderson was not required to submit a permit application fee for the current permit action because it is considered an administrative action.
2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an Open Burning Permit, issued by the Department. This operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that pro-rate the required fee amount.

- E. ARM 17.8, Subchapter 7 - Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:
1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a facility to obtain an air quality permit or permit alteration to construct, alter, or use any asphalt plant, crusher, or screen that has the Potential to Emit (PTE) greater than 15 tons per year of any pollutant. H. Howard Anderson has a PTE greater than 15 tons per year of total PM, PM₁₀, and nitrogen oxides (NO_x); therefore, an air quality permit is required.
 3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit Program.
 4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
 5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. H. Howard Anderson was not required to submit a permit application for the current permit action because it is considered an administrative 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. H. Howard Anderson was not required to publish a public notice for the current permit action because it is considered an administrative action.
 6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
 7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that Best Available Control Technology (BACT) shall be utilized. The required BACT analysis is included in Section IV of this permit analysis.
 8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
 9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving H. Howard Anderson of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*

10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of H. Howard Anderson, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an air quality permit may be transferred from one location to another if the Department receives a complete notice of Intent to Transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.

F. ARM 17.8, Subchapter 8 - Prevention of Significant Deterioration of Air Quality, including, but not limited to:

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications-- Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source because it is not a listed source and does not have a PTE greater than 250 tons per year (excluding fugitive emissions) of any air pollutant.

G. ARM 17.8, Subchapter 12 - Operating Permit Program Applicability, including, but not limited to:

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:

- a. PTE > 100 tons/year of any pollutant.
- b. PTE > 10 tons/year of any one Hazardous Air Pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule.
- c. PTE > 70 tons/year of PM₁₀ in a serious PM₁₀ nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #3380-02 for the H. Howard Anderson facility, 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 PM₁₀ nonattainment area.
- d. This facility is not subject to any current NESHAP standards, but may become subject to area source provisions of 40 CFR 63, Subpart ZZZZ depending on the use of engines authorized under this MAQP.
- e. This facility is not subject to any current NSPS, but may become subject to 40 CFR 60, Subparts OOO and IIII depending on the use of other crushing equipment and engines authorized under this MAQP.
- f. This source is not a Title IV affected source nor a solid waste combustion unit.
- g. This source is not an EPA designated Title V source.

H. Howard Anderson requested federally-enforceable permit limitations to remain a minor source of emissions with respect to Title V. Based on those limitations, the Department has determined that H. Howard Anderson will be a minor source of emissions as defined under Title V. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit and the facility contains affected sources at that time, H. Howard Anderson will be required to obtain a Title V Operating Permit.

h. ARM 17.8.1204(3). The Department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable limitations which limit that source's PTE.

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

The Department determined that the annual reporting requirements contained in the permit are sufficient to satisfy this requirement.

III. Emission Inventory

Source	PM	PM ₁₀	NO _x	VOC	CO	SO _x
Up to 2 Crushers (up to 350 TPH)	1.84	0.83				
Up to 4 Screens (up to 650 TPH)	41.00	8.43				
Material Transfer (18 Transfers)	7.17	2.36				
Pile Forming (5 Piles)	23.46	11.10				
Bulk Loading (3 Loads)	8.28	3.94				
Haul Roads (5 Miles per Day)	2.74	1.23				
Engines/Generators (up to 850 hp)	5.61	5.61	79.05	5.74	17.09	5.23
Total	90.01	33.50	79.05	5.74	17.09	5.23

Up to two Crushers (Up to 350 TPH)

PM Emissions

Emission Factor: 0.0012 lb/ton (AP-42, Table 11.19.2-2, 8/04)
 Hourly Calculations: 350 TPH * (0.0012 lb/ton) = 0.42 lb/hr
 Annual Calculations: 0.42 lb/hr * (8760 hr/yr) * (0.0005 lb/ton) = 1.84 TPY

PM₁₀ Emissions

Emission Factor: 0.00054 lb/ton (AP-42, Table 11.19.2-2, 8/04)
 Hourly Calculations: 350 TPH * (0.00054 lb/ton) = 0.19 lb/hr
 Annual Calculations: 0.19 lb/hr * (8760 hr/yr) * (0.0005 lb/ton) = 0.83 TPY

Up to three Screens (Up to 650 TPH)

PM Emissions

Emission Factor: 0.0036 lb/ton (AP-42, Table 11.19.2-2, 8/04)
 Hourly Calculations: 650 TPH * (0.0025 lb/ton) * (4 screens) = 9.36 lb/hr
 Annual Calculations: 9.36 lb/hr * (8760 hr/yr) * (0.0005 lb/ton) = 41.00 TPY

PM₁₀ Emissions

Emission Factor: 0.00074 lb/ton (AP-42, Table 11.19.2-2, 8/04)
 Hourly Calculations: 650 TPH * (0.00074 lb/ton) * (4 screens) = 1.92 lb/hr
 Annual Calculations: 1.92 lb/hr * (8760 hr/yr) * (0.0005 lb/ton) = 8.43 TPY

Material Transfer (650 TPH)

PM Emissions

Emission Factor: 0.00014 lb/ton (AP-42, Table 11.19.2-2, 8/04)
Number of Transfers: 18
Hourly Calculations: $650 \text{ TPH} * (0.00014 \text{ lb/ton}) * (18) = 1.64 \text{ lb/hr}$
Annual Calculations: $1.35 \text{ lb/hr} * (8760 \text{ hr/yr}) * (0.0005 \text{ lb/ton}) = 7.17 \text{ TPY}$

PM₁₀ Emissions

Emission Factor: 0.000046 lb/ton (AP-42, Table 11.19.2-2, 8/04)
Number of Transfers: 18
Hourly Calculations: $650 \text{ TPH} * (0.000046 \text{ lb/ton}) * (18) = 0.54 \text{ lb/hr}$
Annual Calculations: $0.50 \text{ lb/hr} * (8760 \text{ hr/yr}) * (0.0005 \text{ lb/ton}) = 2.36 \text{ TPY}$

Pile Forming (650 TPH)

PM Emissions

Predictive equation for emission factor provided per AP 42, Sec. 13.2.4.3, 11/06.

Emission Factor = $k (0.0032) * (U/5)^{1.3} * (M / 2)^{-1.4} = 0.00330 \text{ lb/ton}$

Where: k = particle size multiplier = 0.74 (Value for PM < 30 microns per AP 42, Sec. 13.2.4.3, 11/06)
U = mean wind speed = 8.2 mph (Average from values provided in AP 42, Sec. 13.2.4.3, 11/06)
M = material moisture content = 2.5% (Average from values provided in AP 42, Sec. 13.2.4.3, 11/06)

Control Efficiency = 50% (Water or chemical spray)

Calculation: $(650 \text{ ton/hr}) * (8760 \text{ hrs/yr}) * (0.00330 \text{ lb/ton}) * (\text{ton}/2000 \text{ lb}) * (5 \text{ piles}) = 46.92 \text{ ton/yr}$

Calculation: $(650 \text{ ton/hr}) * (8760 \text{ hrs/yr}) * (0.00330 \text{ lb/ton}) * (\text{ton}/2000 \text{ lb}) * (5 \text{ piles}) * (1 - 50/100) = 23.46 \text{ ton/yr}$

PM₁₀ Emissions

Predictive equation for emission factor provided per AP 42, Sec. 13.2.4.3, 11/06.

Emission Factor = $k (0.0032) * (U/5)^{1.3} * (M / 2)^{-1.4} = 0.00156 \text{ lb/ton}$

Where: k = particle size multiplier = 0.35 (Value for PM < 10 microns per AP 42, Sec. 13.2.4.3, 11/06)
U = mean wind speed = 8.2 mph (Average from values provided in AP 42, Sec. 13.2.4.3, 11/06)
M = material moisture content = 2.5% (Average from values provided in AP 42, Sec. 13.2.4.3, 11/06)

Control Efficiency = 50% (Water or chemical spray)

Calculation: $(650 \text{ ton/hr}) * (8760 \text{ hrs/yr}) * (0.00156 \text{ lb/ton}) * (\text{ton}/2000 \text{ lb}) * (5 \text{ piles}) = 22.19 \text{ ton/yr}$

Calculation: $(650 \text{ ton/hr}) * (8760 \text{ hrs/yr}) * (0.00156 \text{ lb/ton}) * (\text{ton}/2000 \text{ lb}) * (5 \text{ piles}) * (1 - 50/100) = 11.10 \text{ ton/yr}$

Bulk Loading (150 TPH)

PM Emissions

Emission Factor: 0.0084 lb/ton (AP-42, Table 8.23-4, 8/82)
Number of Loads: 3
Control Efficiency 50% Water Spray
Hourly Calculations: $150 \text{ TPH} * (0.0084 \text{ lb/ton}) * (0.50) * (3) = 1.89 \text{ lb/hr}$
Annual Calculations: $1.89 \text{ lb/hr} * (8760 \text{ hr/yr}) * (0.0005 \text{ lb/ton}) = 8.28 \text{ TPY}$

PM₁₀ Emissions

Emission Factor: 0.004 lb/ton (AP-42, Table 8.23-4, 8/82)
Number of Loads: 6
Control Efficiency 50% Water Spray
Hourly Calculations: $150 \text{ TPH} * (0.004 \text{ lb/ton}) * (0.50) * (3) = 0.90 \text{ lb/hr}$
Annual Calculations: $0.90 \text{ lb/hr} * (8760 \text{ hr/yr}) * (0.0005 \text{ lb/ton}) = 3.94 \text{ TPY}$

Haul Roads (5 VMT/Day)

Vehicle Miles travelled per day (estimate) = 5VMT/day
VMT/hr = (5 VMT/day) * (1 day/24 hours) = .21 VMT/hr

PM Emissions

Emission Factor: 12.46 lb/VMT
Control Efficiency 50% Water Spray
Annual Calculations: (.21 VMT/hr) * (8760 hr/day) * (12.46 lb/VMT) * (.0005 lb/ton) * (0.50) = 5.73 ton/yr

PM₁₀ Emissions

Emission Factor: 3.43 lb/VMT
Control Efficiency 50% Water Spray
Annual Calculations: (.21 VMT/hr) * (8760 hr/day) * (3.43 lb/VMT) * (.0005 lb/ton) * (0.50) = 1.58 ton/yr

Up to four Diesel Generators/Engines (Up to 850 hp)

PM Emissions

Emission Factor: 0.0022 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Hourly Calculations: 850 hp * (0.0022 lb/hp-hr) = 1.87 lb/hr
Annual Calculations: 1.87 lb/hr * (6000 hr/yr) * (0.0005 lb/ton) = 5.61 TPY

PM₁₀ Emissions

Emission Factor: 0.0022 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Hourly Calculations: 850 hp * (0.0022 lb/hp-hr) = 1.87 lb/hr
Annual Calculations: 1.87 lb/hr * (6000 hr/yr) * (0.0005 lb/ton) = 5.61 TPY

NO_x Emissions

Emission Factor: 0.031 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Hourly Calculations: 850 hp * (0.031 lb/hp-hr) = 26.35 lb/hr
Annual Calculations: 26.35 lb/hr * (6000 hr/yr) * (0.0005 lb/ton) = 79.05 TPY

VOC Emissions

Emission Factor: 0.00225 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Hourly Calculations: 850 hp * (0.00225 lb/hp-hr) = 1.91 lb/hr
Annual Calculations: 1.91 lb/hr * (6000 hr/yr) * (0.0005 lb/ton) = 5.74 TPY

CO Emissions

Emission Factor: 0.0067 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Hourly Calculations: 850 hp * (0.0067 lb/hp-hr) = 5.70 lb/hr
Annual Calculations: 5.70 lb/hr * (6000 hr/yr) * (0.0005 lb/ton) = 17.09 TPY

SO_x Emissions

Emission Factor: 0.00205 lb/hp-hr (AP-42, Table 3.3-1, 10/96)
Hourly Calculations: 850 hp * (0.00205 lb/hp-hr) = 1.74 lb/hr
Annual Calculations: 1.74 lb/hr * (6000 hr/yr) * (0.0005 lb/ton) = 5.23 TPY

IV. BACT Analysis

A BACT determination is required for any new or modified source. H. Howard Anderson shall install on the new or modified source the maximum air pollution control capability that is technologically practicable and economically feasible, except that BACT shall be used.

A BACT analysis was not required for the current permit action because the current permit action is considered an administrative permit action.

V. Existing Air Quality

MAQP #3380-02 is issued for the operation of a portable aggregate crushing/screening facility which resides in its initial location in the NE¼ of Section 1 Township 11 North, Range 5 West, in Lewis and Clark County, Montana. This facility would be allowed to operate at any area designated as attainment or unclassified for all National Ambient Air Quality Standards (NAAQS); excluding those counties that have a Department-approved permitting program, those areas considered Tribal Lands, or those areas in or within 10 km of certain PM₁₀ nonattainment areas. *A Missoula County air quality permit would be required for locations within Missoula County, Montana.* H. Howard Anderson will be required to obtain an addendum to this air quality permit to operate at locations in or within 10 km of certain PM₁₀ nonattainment areas.

VI. Air Quality Impacts

This permit is for a portable crushing/screening plant to be located at various locations around Montana. This permit contains operational conditions and limitations that would protect air quality for this site and the surrounding area. Also, this facility is a portable source that would operate on an intermittent and temporary basis, so any effects to air quality will be minor and short-lived. Further, the amount of controlled particulate emissions generated by this project should not cause concentrations of PM₁₀ in the ambient air that exceed the set standard. In addition, this source is portable and any air quality impacts will be minimal.

VII. Taking or Damaging Implication Analysis

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

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

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

VIII. Environmental Assessment

An Environmental Assessment was not required for the current permit action because it is considered an administrative action.

Analysis Prepared by: Julie Merkel

Date: April 2, 2010