



Montana Department of
ENVIRONMENTAL QUALITY

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March 20, 2014

Gerard Hamblin
Waste Management of North Dakota, Inc.
W132 N10487 Grant Drive
Germantown, WI 53022

Dear Mr. Hamblin:

Montana Air Quality Permit #4719-02 is deemed final as of March 20, 2014, by the Department of Environmental Quality (Department). This permit is for a non-metallic mineral processing plant and associated equipment. 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,

Julie Merkel
Air Permitting Program Supervisor
Air Resources Management Bureau
(406) 444-3626

Doug Kuenzli
Environmental Science Specialist
Air Resources Management Bureau
(406) 444-4267

JM:DCK
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #4719-02

Waste Management of North Dakota, Inc.
W132 N10487 Grant Drive
Germantown, WI 53022

March 20, 2014



MONTANA AIR QUALITY PERMIT

Issued To: Waste Management of North Dakota, Inc.
W132 N10487 Grant Drive
Germantown, WI 53022

MAQP: #4719-02
Administrative Amendment (AA) Request
Received: 02/06/2014
Department's Decision on AA: 03/04/2014
Permit Final: 03/20/2014
AFS #: 777-4719

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

SECTION I: Permitted Facilities

A. Plant Location

Waste Management owns and operates a portable non-metallic mineral process plant with an initial location in Sections 30 and 31, Township 24 North, Range 59 East in Richland County, Montana. However, MAQP #4719-02 applies while operating at any location in Montana, except those areas having a Montana 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.* A complete list of permitted equipment is contained in Section I.A of the permit analysis.

B. Current Permit Action

On February 6, 2014, the Department of Environmental Quality (Department) received correspondence from Waste Management requesting a change to the mailing address for the facility. The current permit action incorporates this request.

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 Part 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, other than a crusher (such as screens or conveyors), shall not exhibit opacity in excess of the following averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR, Subpart OOO).
 - For equipment that commences construction, modification, or reconstruction on or after April 22, 2008: 7% opacity

- For equipment that commences construction, modification, or reconstruction after August 31, 1983, but before April 22, 2008: 10% opacity
- 3. All visible emissions from any non-NSPS affected equipment 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. Waste Management 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. Waste Management 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).
- 7. Waste Management shall not operate more than one (1) crusher at any given time and the total combined maximum rated design capacity of the crusher(s) shall not exceed 600 tons per hour (TPH) (ARM 17.8.749).
- 8. Waste Management shall not operate more than two (2) screens at any given time and the combined maximum rated design capacity of the screens shall not exceed 1,200 TPH (ARM 17.8.749).
- 9. Waste Management shall not operate or have on site more than one (1) diesel-fired generator set at any given time and the maximum rated design capacity of the generator engine shall not exceed 1,100 brake-horsepower (bhp) (ARM 17.8.1204).
- 10. Operation of the diesel-fired generator engine shall not exceed 4,650 hours during any rolling 12-month time period (ARM 17.8.749 and ARM 17.8.1204).
- 11. If the permitted equipment is used in conjunction with any other equipment owned or operated by Waste Management, 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).
- 12. Waste Management shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 Code of Federal Regulations (CFR) 60, Subpart OOO, *Standards of Performance for Nonmetallic Mineral Processing Plants* (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
- 13. Waste Management shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR 60, Subpart III, *Standards of Performance for Stationary Compression Ignition Internal 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 III; ARM 17.8.342; and 40 CFR, Subpart ZZZZ).

B. Testing Requirements

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

C. Operational Reporting Requirements

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

2. Waste Management 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. Waste Management 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(1)(d) (ARM 17.8.745).
4. Waste Management 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 Waste Management 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. Waste Management shall document, by month, the hours of operation of the diesel-fired engine generator. By the 25th day of each month, Waste Management shall calculate the hours of operation of the generator engine 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).
6. Waste Management shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit as required in ARM 17.8.1204. The annual certification shall comply with the certification requirements of ARM 17.8.1207. The annual certification shall be submitted with the annual emission inventory information (ARM 17.8.1204 and ARM 17.8.1207).

SECTION III: General Conditions

- A. Inspection – Waste Management 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 Waste Management fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Waste Management 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 Waste Management 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. Waste Management 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
Waste Management of North Dakota, Inc.
MAQP #4719-02

I. Introduction/Process Description

Waste Management of North Dakota, Inc. (Waste Management) owns and operates a non-metallic mineral processing plant with a maximum rated design capacity of 600 tons per hour (TPH) crushing production and 1,200 TPH screening production. The facility typically employs a diesel-fired generator set to provide electricity to power the equipment.

A. Permitted Equipment

The following list of permitted equipment is based on information provided within the initial application and is provided for reference. MAQP #4719-02 is written de minimis friendly, whereby operational flexibility is provided so that alternate equipment may be utilized as long as maximum capacities are not exceeded. See Section II of the MAQP for specific equipment limitations and/or conditions. Equipment permitted under this action consists of the following:

- 1978 Spokane Model 82 Vertical Shaft Impact Crusher [600 TPH]
- 1998 Cedar Rapids 6' x 20' Screen Plant [600 TPH]
- 1989 Cedar Rapids 6' x 16' 3-Deck Screen Plant [600 TPH]
- 1989 Caterpillar 3508 1,100 brake-horsepower (bhp) diesel-fired generator; and
- Associated material handling equipment; dozer trap, conveyors, stackers, etc.

B. Source Description

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

The initial location proposed for this facility, identified as the Linde Pit, shall serve as the plants designated home pit. The Linde Pit is located within Sections 30 and 31, Township 24 North, Range 59 East, in Richland County, Montana.

C. Permit History

On June 5, 2012, Summit Energy Services, LLC was issued an initial air quality permit for the operation of a non-metallic mineral processing plant. The permit was assigned **MAQP #4719-00**.

On June 20, 2013, the Department of Environmental Quality (Department) received notification from Summit Energy Services, LLC and Waste Management indicating a transfer of assets and assignment of ownership of the facility MAQP to Waste Management. The permit action reflected this ownership transfer and updated any permit language and rule references used by the Department. **MAQP #4719-01** replaced MAQP 4719-00.

D. Current Permit Action

On February 6, 2014, the Department received correspondence from Waste Management requesting a change to the mailing address for the facility. The current permit action incorporates this request. **MAQP #4719-02** replaces MAQP 4719-01.

E. Additional Information

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

II. Applicable Rules and Regulations

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

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

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

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

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction 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 (SO₂)
2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide (NO₂)
3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide (CO)
4. ARM 17.8.211 Ambient Air Quality Standards for Ozone (O₃)
5. ARM 17.8.220 Ambient Air Quality Standards for Settled Particulate Matter (PM)
6. ARM 17.8.221 Ambient Air Quality Standard for Visibility
7. ARM 17.8.223 Ambient Air Quality Standard for Particulate Matter with an Aerodynamic Diameter of 10 Microns or Less (PM₁₀)

Waste Management must maintain compliance with the applicable ambient air quality standards.

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

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions are taken to control emissions of airborne particulate matter. (2) Under this rule, Waste Management shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section.
4. ARM 17.8.310 Particulate Matter, Industrial 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.
5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this section.
6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank truck or trailer is equipped with a vapor loss control device as described in (1) of this rule.
7. ARM 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 Code of Federal Regulations (CFR) Part 60, Standards of Performance for New Stationary Sources (NSPS). Based on the information submitted by Waste Management the portable crushing/screening operation and associated equipment are subject to NSPS (40 CFR 60), as follows:

- 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/screening plant to be subject to NSPS requirements, two specific criteria must be met. First, the crushing/screening plant must meet the definition of an affected facility and, second, the equipment in question must have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted by Waste Management, the portable crushing equipment to be used under MAQP #4719-02 is subject to this subpart as it meets the definition of an affected facility modified after August 31, 1983.
- c. 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE). Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are manufactured after April 1, 2006, and are not fire pump engines, and owners and operators of stationary CI ICE that modify or reconstruct their stationary CI ICE after July 11, 2005, are subject to this subpart.

Based on the information submitted by Waste Management, the diesel-fired engine associated with this permit is not subject to this Subpart as the manufactured date was prior the effective date. However, due to the operational flexibility afforded de minimis friendly permits future engines may be subject to this subpart depending upon the location and nature of operation.

8. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. This rule incorporates, by reference, 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Categories. Based on the information submitted by Waste Management the associated diesel engines are applicable to NESHAP (40 CFR 63), as follows:

- a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to a NESHAPs Subpart as listed below.
- b. 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants (NESHAPs) for Stationary Reciprocating Internal Combustion Engines (RICE). An owner or operator of a stationary RICE at a major or area source of Hazardous Air Pollutant (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. As Waste Management is considered an area source of HAP emissions and operates RICE equipment the engine(s) are potentially subject to this subpart depending upon the location and nature of operation.

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

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. A permit application was not required for the current permit action.

2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department; the air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

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

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

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit modification to construct, modify, or use any asphalt plant, crusher, screen, or other portable source that has the potential to emit (PTE) greater than 15 tons per year (tpy) of any pollutant. Waste Management has a PTE greater than 15 tpy of PM, PM₁₀, and oxides of nitrogen (NO_x), therefore, an air quality permit is required.
3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements.
(1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. A permit application was not required 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. An affidavit of publication of public notice was not requirement for the current permit 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 BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.

8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
 9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Waste Management of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
 10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
 11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
 12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
 13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
 14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an MAQP may be transferred from one location to another if the Department receives a complete notice of intent to transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.
- F. ARM 17.8, Subchapter 8 - Prevention of Significant Deterioration of Air Quality, including, but not limited to:
1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.

2. ARM 17.8.818 Review of Major Stationary Sources and Major Modification--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source because it is not a listed source and the facility's PTE is less than 250 tpy of any pollutant (excluding fugitive emissions).

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

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. PTE > 100 tpy of any pollutant;
 - b. PTE > 10 tpy of any single HAP, PTE > 25 tpy of any combination of HAPs, or lesser quantity as the Department may establish by rule; or
 - c. PTE > 70 tpy 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 review and issuance of MAQP #4719-02 for Waste Management, the following conclusions were made:
 - a. Waste Management has requested that federally-enforceable permit operating limits be established to maintain the facility's PTE to less than the 100 tpy threshold.
 - b. The facility's PTE is less than 10 tpy for any single HAP and less than 25 tpy of combined HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is subject to a current NSPS (40 CFR 60, Subpart OOO and Subpart IIII (potentially)).
 - e. This facility is potentially subject to a current NESHAP standard (40 CFR 63, Subpart ZZZZ).
 - 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.

Waste Management has 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.

Deck Screen (3) 1,200 tons/hour (Maximum) 10,512,000 tons/year (Maximum)
 Allowable Hours of Operation: 8760 hours/year [Material Processing]
 4650 hours/year [Diesel-Fire Engine Generator Set]

Power Source: (1) Diesel-Fire Generator up to 1,100 hp [1989 Caterpillar 3508 Genset]

Material Processing:

Aggregate Crushers [SCC 3-05-020-01]

Process Rate: 600 tons/hour
 Operating Hours: 8760 hours/year

Particulate Emissions (controlled):

PM Emissions:

Emission Factor	0.0012 lbs/ton processed	[AP-42 Table 11.19.2-2, 8/04]	
Calculations	$(0.0012 \text{ lbs/ton}) * (600 \text{ tons/hr}) =$		0.72 lbs/hr
	$(0.72 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) =$		3.15 TPY

PM₁₀ Emissions:

Emission Factor	0.00054 lbs/ton processed	[AP-42 Table 11.19.2-2, 8/04]	
Calculations	$(0.00054 \text{ lbs/ton}) * (600 \text{ tons/hr}) =$		0.32 lbs/hr
	$(0.324 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) =$		1.42 TPY

PM_{2.5} Emissions:

Emission Factor	0.0001 lbs/ton processed	[AP-42 Table 11.19.2-2, 8/04]	
Calculations	$(0.0001 \text{ lbs/ton}) * (600 \text{ tons/hr}) =$		0.06 lbs/hr
	$(0.06 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) =$		0.26 TPY

Aggregate Cold Deck Screens [SCC 3-05-020-02]

Process Rate: 1,200 tons/hour
 Operating Hours: 8760 hours/year

Particulate Emissions (controlled):

PM Emissions:

Emission Factor	0.0022 lbs/ton processed	[AP-42 Table 11.19.2-2, 8/04]	
Calculations	$(0.0022 \text{ lbs/ton}) * (1200 \text{ tons/hr}) =$		2.64 lbs/hr
	$(2.64 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) =$		11.56 TPY

PM₁₀ Emissions:

Emission Factor	0.00074 lbs/ton processed	[AP-42 Table 11.19.2-2, 8/04]	
Calculations	$(0.00074 \text{ lbs/ton}) * (1200 \text{ tons/hr}) =$		0.89 lbs/hr
	$(0.888 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) =$		3.89 TPY

PM_{2.5} Emissions:

Emission Factor	0.00005 lbs/ton processed	[AP-42 Table 11.19.2-2, 8/04]	
Calculations	$(0.00005 \text{ lbs/ton}) * (1200 \text{ tons/hr}) =$		0.06 lbs/hr
	$(0.06 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) =$		0.26 TPY

Material Handling:

Fragmented Stone Load-In ► Ground Storage [SCC 3-05-020-31]

Process Rate: 600 tons/hour [Crusher Capacity]
 Operating Hours: 8760 hours/year

Particulate Emissions (uncontrolled):

PM Emissions:

Emission Factor 0.000031 lbs/ton [PM = PM₁₀/0.51 ► AP-42 Appendix B.2 - Table B.2.2, Category 3, 1/95]
 Calculations (0.000031 lbs/ton) * (600 tons/hr) = 0.02 lbs/hr
 (0.0186 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) = 0.08 TPY

PM₁₀ Emissions:

Emission Factor 0.000016 lbs/ton processed [AP-42 Table 11.19.2-2, 8/04]
 Calculations (0.000016 lbs/ton) * (600 tons/hr) = 0.01 lbs/hr
 (0.0096 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) = 0.04 TPY

PM_{2.5} Emissions:

Emission Factor 0.000005 lbs/ton [PM = PM₁₀*0.15 ► AP-42 Appendix B.2 - Table B.2.2, Category 3, 1/95]
 Calculations (0.000005 lbs/ton) * (600 tons/hr) = 0.00 lbs/hr
 (0.00279 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) = 0.01 TPY

Conveyor Transfer Points [SCC 3-05-020-06]

Process Rate: 1200 tons/hour [Maximum Facility Capacity]
 Operating Hours: 8760 hours/year
 Total Transfers: 21 Transfers [Based on Process Flow Diagram]

Particulate Emissions (controlled):

PM Emissions:

Emission Factor 0.00014 lbs/ton processed [AP-42 Table 11.19.2-2, 8/04]
 Calculations (0.00014 lbs/ton) * (1200 tons/hr) * (21 Transfers) = 3.53 lbs/hr
 (3.528 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) = 15.45 TPY

PM₁₀ Emissions:

Emission Factor 0.000046 lbs/ton processed [AP-42 Table 11.19.2-2, 8/04]
 Calculations (0.000046 lbs/ton) * (1200 tons/hr) * (21 Transfers) = 1.16 lbs/hr
 (1.159 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) = 5.08 TPY

PM_{2.5} Emissions:

Emission Factor 0.000013 lbs/ton processed [AP-42 Table 11.19.2-2, 8/04]
 Calculations (0.000013 lbs/ton) * (1200 tons/hr) * (21 Transfers) = 0.33 lbs/hr
 (0.328 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) = 1.43 TPY

Storage Pile Load-In & Load-Out [SCC 30502505 / 30502502]

Process Rate: 1200 tons/hour [Maximum Facility Capacity]
 Operating Hours: 8760 hours/year
 Pile Transfers: 2 [Initial Pile Formation → Pile Load-Out to Trucks]

Particulate Emissions (uncontrolled):

Emission Factor $EF = k (0.0032) * [(U/5)^{1.3} / (M / 2)^{1.4}]$ [AP-42 13.2.4, 11/06]

where: EF, Emission Factor = lbs Emitted / ton Processed

k, Dimensionless Particle Size Multiplier PM = 0.74 [AP-42 13.2.4, 11/06]

k, Dimensionless Particle Size Multiplier PM₁₀ = 0.35 [AP-42 13.2.4, 11/06]

k, Dimensionless Particle Size Multiplier PM_{2.5} = 0.053 [AP-42 13.2.4, 11/06]

U, Mean Wind Speed (mph) = 9.3 [ASOS/AWOS AVE-MT 10 yr Ave.]

M, Material Moisture Content (%) = 2.53 [AP-42 13.2.4.3, 11/06]

PM Emissions:

Emission Factor	$EF = 0.74 * (0.0032) * [(9.33/5)^{1.3} / (2.525/ 2)^{1.4}] =$	0.0038 lbs/ton
Calculations	$(0.0038 \text{ lbs/ton}) * (1200 \text{ tons/hr}) * (2 \text{ pile transfers}) =$	9.23 lbs/hr
	$(9.23 \text{ lbs/hr}) * (8760 \text{ hours/yr}) * (0.0005 \text{ tons/lb}) =$	40.41 TPY

PM₁₀ Emissions:

Emission Factor	$EF = 0.35 * (0.0032) * [(9.33/5)^{1.3} / (2.525/ 2)^{1.4}] =$	0.0018 lbs/ton
Calculations	$(0.0018 \text{ lbs/ton}) * (1200 \text{ tons/hr}) * (2 \text{ piles}) =$	4.36 lbs/hr
	$(4.36 \text{ lbs/hr}) * (8760 \text{ hours/yr}) * (0.0005 \text{ tons/lb}) =$	19.11 TPY

PM_{2.5} Emissions:

Emission Factor	$EF = 0.053 * (0.0032) * [(9.33/5)^{1.3} / (2.525/ 2)^{1.4}] =$	0.00028 lbs/ton
Calculations	$(0.0003 \text{ lbs/ton}) * (1200 \text{ tons/hr}) * (2 \text{ piles}) =$	0.66 lbs/hr
	$(0.66 \text{ lbs/hr}) * (8760 \text{ hours/yr}) * (0.0005 \text{ tons/lb}) =$	2.89 TPY

Diesel-Fired Generator Engines [SCC 2-02-001-02]

Engine Rating: 1100 hp
 Fuel Input: 7.70 MMBtu/hr
 56.2 gallons/hour [Estimated]
 Operating Hours: 4650 hours/year

Particulate Emissions (uncontrolled):

PM Emissions:

Emission Factor	0.0022 lb/hp-hr	[AP-42 3.3-1, 10/96]	
Calculations	$(0.0022 \text{ lb/hp-hr}) * (1100 \text{ hp}) =$		2.42 lbs/hr
	$(2.42 \text{ lbs/hr}) * (4650 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) =$		5.63 TPY

PM₁₀ Emissions:

Emission Factor	0.0022 lb/hp-hr	[AP-42 3.3-1, 10/96]	
Calculations	$(0.0022 \text{ lb/hp-hr}) * (1100 \text{ hp}) =$		2.42 lbs/hr
	$(2.42 \text{ lbs/hr}) * (4650 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) =$		5.63 TPY

PM_{2.5} Emissions (filterable):

Emission Factor	0.0479 lb/MMBtu	[AP-42 3.4-2, 10/96]	
Calculations	$(0.0479 \text{ lb/MMBtu}) * (7.70 \text{ MMBtu/hr}) =$		0.37 lbs/hr
	$(0.37 \text{ lbs/hr}) * (4650 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) =$		0.86 TPY

PM_{2.5} Emissions (condensable):

Emission Factor	0.0077 lb/MMBtu	[AP-42 3.4-2, 10/96]	
Calculations	$(0.0077 \text{ lb/MMBtu}) * (7.70 \text{ MMBtu/hr}) =$		0.06 lbs/hr
	$(0.06 \text{ lbs/hr}) * (4650 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) =$		0.14 TPY

CO Emissions (uncontrolled):

Emission Factor	0.00668 lb/hp-hr	[AP-42 3.3-1, 10/96]	
Calculations	$(0.00668 \text{ lb/hp-hr}) * (1100 \text{ hp}) =$		7.35 lbs/hr
	$(7.35 \text{ lbs/hr}) * (4650 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) =$		17.08 TPY

NOx Emissions (uncontrolled):

Emission Factor	0.031 lb/hp-hr	[AP-42 3.3-1, 10/96]	
Calculations	$(0.031 \text{ lb/hp-hr}) * (1100 \text{ hp}) =$		34.10 lbs/hr
	$(34.10 \text{ lbs/hr}) * (4650 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) =$		79.28 TPY

SO₂ Emissions (uncontrolled):

Emission Factor	0.00205 lb/hp-hr	[AP-42 3.3-1, 10/96]	
Calculations	(0.0021 lb/hp-hr) * (1100 hp) =		2.26 lbs/hr
	(2.26 lbs/hr) * (4650 hrs/yr) * (0.0005 tons/lb) =		5.24 TPY

VOC Emissions (uncontrolled):

Emission Factor	0.002514 lb/hp-hr	[AP-42 3.3-1, 10/96]	
Calculations	(0.0025 lb/hp-hr) * (1100 hp) =		2.77 lbs/hr
	(2.77 lbs/hr) * (4650 hrs/yr) * (0.0005 tons/lb) =		6.43 TPY

Unpaved Roadways (Haul Roads)

Miles Travelled: 5 Miles/Day [Estimate]
 Vehicle Weight: 50 Tons [Mean Vehicle Weight Empty/Full]
 Control Method: Water Application
 Control Efficiency (C_e): 50%

Particulate Emissions (controlled):

Emission Factor	EF = k(s/12) ^a * (W/3) ^b	[AP-42 13.2.2.2, 11/06]	
	where: EF, Emission Factor = lbs Emitted Per Vehicle Mile Traveled (VMT)		
	k, Empirical Constant PM =	4.9 [AP-42 Table 13.2.2-2, 11/06]	
	k, Empirical Constant PM ₁₀ =	1.5 [AP-42 Table 13.2.2-2, 11/06]	
	k, Empirical Constant PM _{2.5} =	0.15 [AP-42 Table 13.2.2-2, 11/06]	
	s, Surface Material Silt Content (%) =	7.1 [AP-42 Table 13.2.2-1, 11/06]	
	W, Mean Vehicle Weight (tons) =	50 [Applicant Provided Data]	
	a, Empirical Constant PM =	0.7 [AP-42 Table 13.2.2-2, 11/06]	
	a, Empirical Constant PM ₁₀ /PM _{2.5} =	0.9 [AP-42 Table 13.2.2-2, 11/06]	
	b, Empirical Constant PM - PM _{2.5} =	0.45 [AP-42 Table 13.2.2-2, 11/06]	

PM Emissions:

Emission Factor	EF = 4.9 * (7.1/12) ^{0.7} * (50/3) ^{0.45} =	12.04 lbs/VMT	
Calculations	(12.04 lbs/VMT) * (5 miles/day) * (1 - 0.5 C _e) =		30.09 lbs/day
	(30.09 lbs/day) * (365 days/yr) * (0.0005 tons/lb) =		5.49 TPY

PM₁₀ Emissions:

Emission Factor	EF = 1.5 * (7.1/12) ^{0.9} * (50/3) ^{0.45} =	3.32 lbs/VMT	
Calculations	(3.32 lbs/VMT) * (5 miles/day) * (1 - 0.5 C _e) =		8.29 lbs/day
	(8.29 lbs/day) * (365 days/yr) * (0.0005 tons/lb) =		1.51 TPY

PM_{2.5} Emissions:

Emission Factor	EF = 0.15 * (7.1/12) ^{0.9} * (50/3) ^{0.45} =	0.33 lbs/VMT	
Calculations	(0.33 lbs/VMT) * (5 miles/day) * (1 - 0.5 C _e) =		0.83 lbs/day
	(0.83 lbs/day) * (365 days/yr) * (0.0005 tons/lb) =		0.15 TPY

V. Existing Air Quality

The initial location of this portable source is to be located in Sections 30 and 31, Township 24 North, Range 59 East in Richland County, Montana. The initial location and those areas for which this facility is permitted to operate under MAQP #4719-02 has been designated unclassified/attainment with all ambient air quality standards and there are no major air pollution sources in the surrounding area.

VI. Air Quality Impacts

MAQP #4719-02 will cover the plant while operating at any location within Montana, excluding 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 PM₁₀ nonattainment areas.

Emissions generated from the operation of this source are to be well control and limited, furthermore, the portable unit would be expected to be operated on an intermittent and seasonal basis and any air quality impacts would be minimal and temporary. Therefore, the Department determined that the impact from this permitting action will be minor and is not expected to cause or contribute to a violation of any ambient air quality standard.

VII. Ambient Air Impact Analysis

The current permit action is an administrative amendment and results in no increase in emissions, therefore the Department determined that there will be no additional impacts from this permitting action. The Department believes the current conditions and limits will not cause or contribute to a violation on 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	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

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

IX. Environmental Assessment

This permitting action will not result in an increase of emissions from the facility and is considered an administrative action; therefore, an environmental assessment is not required.

Analysis prepared by: D. Kuenzli
Date: February 25, 2014