ADMINISTRATIVE AMENDMENT
TO MONTANA AIR QUALITY PERMIT

Date of Mailing: October 6, 2016

Name of Applicant: A.M. Welles

Source: Portable Crushing and Screening

Location: Various locations throughout Montana

Proposed Action: The Department of Environmental Quality (Department) proposes to issue an Administrative Amendment, with conditions, to the above-named permittee. The permit will be assigned #2691-06. The permittee may appeal the Department's decision to the Board of Environmental Review (Board). A request for hearing must be filed by October 21, 2016. This permit shall become final on October 22, 2016, unless the Board orders a stay on the permit.

Proposed Conditions: See attached.

Procedures for Appeal: The permittee may request a hearing before the Board. Any appeal must be filed before the final date stated above. The request for hearing shall contain an affidavit setting forth the grounds for the request. Any hearing will be held under the provisions of the Montana Administrative Procedures Act. Submit requests for hearing in triplicate to: Chairman, Board of Environmental Review, P.O. Box 200901, Helena, Montana 59620.

For the Department,

Julie Merkel
Permitting Services Section Supervisor
Air Quality Bureau
(406) 444-3626

Rhonda Payne
Environmental Science Specialist
Air Quality Bureau
(406) 444-5287

JM:RP
Enclosure

MONTANA AIR QUALITY PERMIT

Issued To: A.M. Welles, Inc.
P.O. Box 2808
Norris, MT 59745

MAQP: #2691-06
Administrative Amendment (AA)
Request Received: 09/08/2016
Department Decision on AA: 10/6/2016
Permit Final:
State ID #:017-0007

An air quality permit, with conditions, is hereby granted to A.M. Welles, Inc. (Welles) 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:

Welles owns and operates a portable crushing and screening facility located in the NE ¼ of Section 18, Township 1 South, Range 5 East in Gallatin County, Montana. MAQP #2691-05 applies while operating at any location in Montana, except those areas having a Department of Environmental Quality (Department) approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* An addendum will be required for PM_{10} nonattainment areas.

B. Current Permit Action:

On September 8, 2016, the Department received a request from Welles to update their permit to include an additional crusher and two additional screens. The facility is limited to 800 tons per hour maximum crushing and screening capacity. The addition of the fourth crusher and two additional screens will not cause the facility to exceed the 800 tons per hour limit as the source was initially permitted for extra capacity. Therefore, this update is considered an administrative action because the update only clarifies the equipment list and does not either result in an increase in emissions or affect substantive provisions of the permit.

SECTION II: Conditions and Limitations

A. Emission Limitations

1. All visible emissions from any Standards of Performance for New Stationary Source (NSPS)-affected crusher shall not exhibit an opacity in excess of the following averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO):

- For crushers that commence construction, modification, or reconstruction on or after April 22, 2008: 12% opacity

- For crushers that commence construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008: 15% opacity

2. All visible emissions from any other NSPS-affected equipment (such as screens or conveyors) shall not exhibit an opacity in excess of the following averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR, Subpart OOO):

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

    - For equipment that commence construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008: 10% opacity

3. All visible emissions from any non-NSPS affected equipment shall not exhibit an opacity of 20% or greater averaged over 6-consecutive minutes (ARM 17.8.304).

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

5. Welles 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. Welles 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. Welles shall not have onsite or operate more than four crushers and the maximum combined rated design capacity of the crushers shall not exceed 800 TPH (ARM 17.8.749).

8. Crushing production from the facility is limited to 7,008,000 tons during any rolling 12-month time period (ARM 17.8.749).

9. Welles shall not have onsite or operate more than five screens and the maximum combined rated design capacity of the screens shall not exceed 800 TPH (ARM 17.8.749).

10. Screening production is limited to 7,008,000 tons during any rolling 12-month time period (ARM 17.8.749).

11. Welles shall not operate more than one diesel generator at any given time and the maximum rated design capacity shall be between 450 kW and 1000 kW, and shall not exceed 4900 hours during any rolling 12-month time period (ARM 17.8.1204).

12. If the permitted equipment is used in conjunction with any other equipment owned or operated by Welles, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).

13. Welles shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO (ARM 17.8.340 and 40 CFR 60, Subpart OOO).

14. Welles shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines and 40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, for any applicable diesel engine (ARM 17.8.340; 40 CFR 60, Subpart IIII; ARM 17.8.342 and 40 CFR 63, Subpart ZZZZ).

B. Testing Requirements

1. Within 60 days after achieving maximum production, but no later than 180 days after initial start-up, an Environmental Protection Agency (EPA) Method 9 opacity test and/or other methods and procedures as specified in 40 CFR 60.675 must be performed on all NSPS affected equipment to demonstrate compliance with the emission limitations contained in Section II.A.1 and II.A.2 (ARM 17.8.340 and 40 CFR 60, General Provisions and Subpart OOO).

2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures manual (ARM 17.8.106).

3. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. If this crushing/screening plant is moved to another location, an Intent to Transfer form must be sent to the Department. 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 17.8.749 and ARM 17.8.765).

2. Welles shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but not be limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.

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

3. Welles shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include 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 operation or the addition of a new emission unit. The notice must be submitted to the Department, in writing, 10 days prior to startup or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(l)(d) (ARM 17.8.745).

4. Welles 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 Welles 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. Welles shall document, by month, the crushing production from the facility. By the 25th day of each month, Welles shall calculate the crushing production from the facility for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.8. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

6. Welles shall document, by month, the screening production from the facility. By the 25th day of each month, Welles shall calculate the screening production from the facility for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.10. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

7. Welles shall document, by month, the hours of operation of the diesel generator. By the 25th day of each month, Welles shall calculate the hours of operation for the diesel generator for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.11. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

8. Welles 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 – Welles 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 Welles fails to appeal as indicated below.

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Welles 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 therefor, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.

F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.

G. Permit Fee – Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by Welles may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.

H. Construction Commencement – Construction must be begin within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked (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. Welles 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.

Montana Air Quality Permit (MAQP) Analysis
A.M. Welles, Inc.
MAQP# 2691-06

I. Introduction/Process Description

A. Permitted Equipment:

A.M. Welles, Inc. (Welles) owns and operates a portable crushing and screening facility consisting of the following equipment:

- Primary Jaw Crusher (1);
- 3 Deck Screens (5);
- Secondary Cone Crushers (3)
- 1000 kW diesel generator
- Other associated equipment

MAQP #2691-06 applies while operating at any location in Montana, except those areas having a Department of Environmental Quality (Department)-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* An addendum will be required for locations in or within 10 km of certain PM_{10} nonattainment areas.

B. Source Description:

Welles proposes to use this crushing/screening plant and associated equipment to crush sand and gravel for use in various construction operations. For a typical operation setup, materials are crushed by the primary jaw crusher and sent to the screens. The material is then sent to the cone crusher and screened for further reduction. Material is separated by size and stockpiled, or sent back to the crusher via conveyors.

C. Permit History:

On May 22, 1991, **MAQP #2691-00** was issued to TMC, Inc. to operate a portable 1954 Austin Western Crusher (200 TPH) and associated equipment in various locations throughout Montana.

On April 12, 1995, **MAQP #2691-01** was transferred to Welles from T.M.C., Inc. MAQP #2691-01 replaced MAQP #2691-00.

MAQP #2691-02 was deemed final on July 26, 1997. The permit modification was requested by Welles to replace the 1954 Austin Western jaw crusher with a leased 1990 Cedar Rapids jaw crusher (200 TPH).

On March 19, 1998, MAQP #2691-03 was issued to Welles. The permit allowed Welles to replace the 1990 Cedar Rapids jaw crusher with a 1997 Cedar Rapids cone crusher, and to add a 1997 El Jay Screen to the permit. **MAQP #2691-03** replaced MAQP #2691-02.

On February 8, 2002, Welles requested to add a 1999 Cedar Rapids jaw crusher (300 TPH) to MAQP #2691-03. **MAQP #2691-04** replaced MAQP #2691-03.

On June 25, 2006, Welles requested a modification to MAQP #2691-04 for the addition of a primary jaw crusher (400 TPH), three 3-deck screens (400 TPH, 200 TPH, 200 TPH), and a secondary cone crusher (200 TPH) to the existing facility. In addition, Welles proposed to upgrade the existing generator from 650 kW to 1000 kW. MAQP #2691-04 was also updated to reflect current permit language and rule references used by the Department. **MAQP #2691-05** replaced MAQP #2691-04.

D. Current Permit Action:

On September 8, 2016, the Department received a request from Welles to update their permit to include an additional crusher and two additional screens. The facility is limited to 800 tons per hour maximum crushing and screening capacity. The addition of the fourth crusher and two additional screens will not cause the facility to exceed the 800 tons per hour limit as the source was initially permitted for extra capacity. Therefore, this update is considered an administrative action because the update only clarifies the equipment list and does not either result in an increase in emissions or affect substantive provisions of the permit. **MAQP #2691-06** replaces MAQP #2691-05.

E. Additional Information:

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

II. Applicable Rules and Regulations

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

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

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

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

3. 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).

   Welles 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
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 PM_{10}

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

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

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

2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Welles 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 and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR 60, Standards of Performance for New Stationary Sources (NSPS). Welles is considered an NSPS affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts.

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

    b. 40 CFR 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants. In order for a crushing plant to be subject to this subpart, the facility must meet the definition of an affected facility and, the affected equipment must have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted by Welles, the portable crushing equipment to be used under MAQP #2691-06 is subject as it meets the definition of an affected facility constructed 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 Welles, the CI ICE equipment to be used under MAQP #2691-06 may be subject to this subpart if it remains in one location for longer than twelve consecutive months. Welles may substitute compression ignition internal combustion engine(s), therefore applicability to this subpart may apply to engines in the future and shall be dependent upon the date of construction and/or manufacture of the diesel-fired engine.

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

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

   b. 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants (HAPs) for Stationary Reciprocating Internal Combustion Engines (RICE). An owner or operator of a stationary reciprocating internal combustion engine (RICE) at a major or area source of HAP emissions is subject to this rule except if the stationary RICE is being tested at a stationary RICE test cell/stand. An area source of HAP emissions is a source that is not a major source. Based on the information submitted by Welles, the RICE equipment to be used under MAQP #2691-06 may be subject to this subpart because Welles is considered an area source of HAP emissions and operates RICE equipment. The engine is potentially subject to this subpart depending upon the location, nature, and duration of operation. Since the RICE to be used under MAQP #2691-06 is intended to be portable, Welles may not be required to comply with the applicable requirements of 40 CFR 63, Subpart ZZZZ. However, this subpart would become applicable if Welles constructed and operated a RICE that remains in a location for more than 12 consecutive months.

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

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

2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department; 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 or screen that has the Potential to Emit (PTE) greater than 15 tons per year of any pollutant. Welles has a PTE greater than 15 tons per year of PM, PM_{10}, oxides of nitrogen (NO_x), carbon monoxide (CO), and oxides of sulfur (SO_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 because the permit change is considered an administrative permit change. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. An affidavit of publication of public notice was not required for the current permit action because the permit change is considered an administrative permit change.

6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.

7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.

8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.

9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Welles 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 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 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 since it is not a listed source and the facility's PTE is less than 250 tons per year of any pollutant (excluding fugitive emissions).

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

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

   a. PTE > 100 tons/year of any pollutant,

   b. PTE > 10 tons/year of any one Hazardous Air Pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule, or

   c. PTE > 70 tons/year of PM_{10} in a serious PM_{10} nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #2691-06 for Welles, the following conclusions were made:

   a. The facility's PTE is less than 100 tons/year for any pollutant.

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

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

   d. This facility is subject to a current NSPS (40 CFR 60, Subparts A, OOO, and potentially IIII).

   e. This facility is potentially subject to a current NESHAP (40 CFR 63, Subparts A and ZZZZ).

   f. This source is not a Title IV affected source or a solid waste combustion unit.

   g. This source is not an EPA designated Title V source.

Welles has taken 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.

h. As allowed by 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 potential to emit.

i. In applying for an exemption under this section the owner or operator of the facility shall certify to the Department that the source's potential to emit does not require the source to obtain an air quality operating permit.

ii. Any source that obtains a federally enforceable limit on potential to emit 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.

III. BACT Determination

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

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

IV. Emission Inventory

Source	Tons/Year (TPY)					
	PM	**PM_{10}**	**NO_x**	**VOC**	**CO**	**SO_x**
Crushers (800 TPH throughput)	4.20	1.89	0	0	0	0
Screens (800 TPH throughput)	7.71	2.59	0	0	0	0
Material Transfer	2.21	0.73	0	0	0	0
Pile Forming	16.82	7.88	0	0	0	0
Bulk Loading	0.06	0.03	0	0	0	0
Diesel Generator [a.] (1000 kW)	2.30	1.25	78.75	2.32	18.07	26.58
Haul Roads	6.34	1.80	0	0	0	0
Total	**39.64**	**16.17**	**78.75**	**2.32**	**18.07**	**26.58**

****** CO = carbon monoxide
NO_X = oxides of nitrogen
PM = particulate matter
PM_{10} = particulate matter with an aerodynamic diameter of 10 microns or less
$PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 microns or less
SO_2 = sulfur dioxide
VOC = volatile organic compounds
kW = kilowatt
TPH = tons per hour

a. Inventory reflects enforceable limits on hours of operation for the diesel generator to keep allowable emissions below the Title V threshold and the 80 tpy.

Crusher (800 TPH)

Process Rate: 800 ton/hr
Hours of operation: 8760 hr/yr

PM Emissions:

Emission Factor: 0.0012 lb/ton Controlled (AP-42, Table 11.19.2-2, 8/2004)
Calculations: 0.0012 lb/ton * 800 ton/hr = 0.96 lb/hr
0.96 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 4.2048 ton/yr

Pm-10 Emissions:

Emission Factor: 0.00054 lb/ton Controlled (AP-42, Table 11.19.2-2, 8/04)
Calculations: 0.00054 lb/ton * 800 ton/hr = 0.43 lb/hr
0.432lb/hr * 8760 hr/yr * 0.0005 ton/lb = 1.89216 ton/yr

Screening (800 TPH total throughput)

Process Rate: 800 ton/hr
Hours of operation: 8760 hr/yr

PM Emissions:

Emission Factor: 0.0022 lb/ton Controlled (AP-42, Table 11.19.2-2, 8/04)
Calculations: 0.0022 lb/ton * 800 ton/hr = 1.76 lb/hr
1.76 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 7.7088 ton/yr

PM-10 Emissions:

Emission Factor: 0.00074 lb/ton Controlled (AP-42, Table 11.19.2-2, 8/04)
Calculations: 0.00074 lb/ton * 800 ton/hr = 0.59 lb/hr
0.592 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 2.59296 ton/yr

Material Transfer

Process Rate: 400 ton/hr
Number of Transfers 9 Transfers
Hours of operation: 8760 hr/yr

PM Emissions:

Emission Factor: 0.00014 lb/ton Controlled (AP-42, Table 11.19.2-2, 8/04)
Calculations: 0.00014 lb/ton * 400 ton/hr * 9 Transfers = 0.50 lb/hr
0.504 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 2.20752 ton/yr

PM-10 Emissions:

Emission Factor: 0.000046 lb/ton Controlled (AP-42, Table 11.19.2-2, 8/04)
Calculations: 0.000046 lb/ton * 400 ton/hr * 9 Transfers = 0.17 lb/hr
0.1656 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.725328 ton/yr

Pile Forming

Process Rate: 400 ton/hr
Number of Piles 3 Piles
Hours of operation: 8760 hr/yr

PM Emissions:

Emission Factor: 0.0032 lb/ton Controlled (AP-42, Section 13.2.4, 1/95)
Calculations: 0.0032 lb/ton * 400 ton/hr * 3 Piles = 3.84 lb/hr
3.84 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 16.82 ton/yr

PM-10 Emissions:

Emission Factor: 0.0015 lb/ton Controlled (AP-42, Section 13.2.4, 1/95)
Calculations: 0.0015 lb/ton * 400 tons/hr * 3 Piles = 1.80 lb/hr
1.8 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 7.88 ton/yr

Bulk Loading

Process Rate: 400 ton/hr
Number of Loads 2 Load
Hours of operation: 8760 hr/yr

PM Emissions:

Emission Factor: 1.60E-05 lb/ton AP-42 Section 11.19 (8/04)
Calculations: 0.000016 lb/ton * 400 ton/hr * 2 Load = 0.01 lb/hr
0.0128 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.06 ton/yr

PM-10 Emissions:

Emission Factor: 1.60E-05 lb/ton AP-42 Section 11.19 (8/04)
Control Efficiency: 50% 0
Calculations: 0.000016 lbs/ton * 400 ton/hr * 2 Load = 0.01 lb/hr
0.0128 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.06 ton/yr
0.056064 ton/yr * (1 - 0.5) = 0.03 ton/yr

Diesel Generator(s) (kw)

Generator Size = 1000 kw
1kw = 1.3410hp
1000 kw * 1.341 = 1341.0 hp
7000 Btu= 1 Hp-hr

Hours of Operation: 4900 hr/yr

PM Emissions

Emission Factor 0.0007 lb/hp-hr (AP-42 Table 3.4-1, 10/96)
Calculations 1341 hp * 0.0007 lb/hp-hr * 4900 hr/yr * 0.0005 ton/lb = 2.30ton/yr

PM-10 Emissions

Emission Factor 0.0004 lb/hp-hr (AP-42 Table 3.4-2, 10/96)
Calculations 1341 hp * 0.004 lb/hp-hr * 4900 hr/yr * 0.0005 ton/lb = 1.25ton/yr

NOX Emissions

Emission Factor 0.0240 lb/hp-hr (AP-42 Table 3.4-1, 10/96)
Calculations 1341 hp * 0.024 lb/hp-hr * 4900 hr/yr * 0.0005 ton/lb = 78.85ton/yr

VOC Emissions

Emission Factor 0.00071 lb/hp-hr (AP-42 Table 3.4-1, 10/96)
Calculations 1341 hp * 0.000705 lb/hp-hr * 4900 hr/yr * 0.0005 ton/lb = 2.32ton/yr

CO Emissions

Emission Factor 0.00550 lb/hp-hr (AP-42 Table 3.4-1, 10/96)
Calculations 1341 hp * 0.0055 lb/hp-hr * 4900 hs/yr * 0.0005 ton/lb = 18.07ton/yr

SO_X Emissions

Emission Factor 0.00809 lb/hp-hr (AP-42 Table 3.4-1, 10/96)
Calculations 1341 hp * 0.00809 lb/hp-hr * 4900 hr/yr * 0.0005 ton/lb = 26.58ton/yr

Haul Roads

Vehicle miles traveled: 5 VMT/day {Estimated}
Control Efficiency included in Emission Factor

PM Emissions:
PM Emission Factor (Rated Load Capacity <50 tons): 13.90 Lb/VMT (AP-42, Section 13.2.2, 12/03)

PM= (5 VMT/day)(13.90 Lb/VMT)(0.5)
PM=
34.75 Lb/day
6.34 ton/yr

PM10 Emissions:
PM10 Emission Factor (Rated Load Capacity <50 tons): 3.95 Lb/VMT (AP-42, Section 13.2.2, 12/03)

PM10= (5 VMT/day)(3.95 Lb/VMT)(0.5)
PM10=
9.88 Lb/day
1.80 ton/yr

V. Existing Air Quality

MAQP #2691-06 applies while operating at any location in Montana designated as attainment or unclassified for all National Ambient Air Quality Standards (NAAQS), except those areas having a Department approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of a PM_{10} nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* An addendum will be required for locations in or within 10 km of certain PM_{10} nonattainment areas.

VI. Air Quality Impacts

This permit is for a portable crushing/screening plant to be located at various locations around Montana. MAQP #2691-06 contains operation conditions and limitations that would protect air quality for the site and surrounding area. Because this facility is a portable source that would operate on an intermittent and temporary basis, any effects to air quality will be minor. Further, the Department believes that the amount of controlled emissions generated by this project will not exceed any ambient air quality standard.

VII. Taking or Damaging Implication Analysis

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

YES	NO	
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)].
	X	5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
	X	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

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: R. Payne
Date: 10/3/2016