



February 27, 2015

Donna Welch
Washington Group International, Inc.
91 South Main
Soda Springs, ID 83276

Dear Ms. Welch:

Montana Air Quality Permit #2751-03 is deemed final as of February 27, 2015, by the Department of Environmental Quality (Department). This permit is for a portable crushing/screening plant. 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,

A handwritten signature in black ink that reads "Julie A. Merkel".

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

A handwritten signature in black ink that reads "Ed Warner".

Ed Warner
Lead Engineer – Air Permitting Section
Air Resources Management Bureau
(406) 444-2467

JM:EW
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #2751-03

Washington Group International, Inc.
91 South Main
Soda Springs, Idaho 83276

February 27, 2015



MONTANA AIR QUALITY PERMIT

Issued To: Washington Group International, Inc. MAQP #2751-03
91 South Main Application Complete: 12/05/2014
Soda Springs, ID 83276 Preliminary Determination Issued: 1/8/2015
Department's Decision Issued: 2/11/2015
Permit Final: 2/27/2015
AFS #777-2751

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Washington Group International, Inc. (WGI) 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. Facility Location

WGI's portable crushing/screening facility, identified under MAQP #2751-03, applies while operating at any location within Montana, except within those areas having a Department of Environmental Quality (Department) approved permitting program. The facility was originally located in the Northeast $\frac{1}{4}$ of Section 20, Township 2 North, Range 5 West, in Jefferson County. *A Missoula County air quality permit will be required for all locations within Missoula County.* A list of the permitted equipment is contained in the permit analysis.

B. Current Permit Action

On November 12, 2014, the Department received an application from WGI to modify MAQP #2751-02 to include the addition of a 350 ton per hour (tph) cone crusher and a 1,500 horsepower (hp) diesel fired engine generator to the existing portable crushing/screening operation. In addition, the permit was updated to reflect the current permit language and rule references used by the Department and to update the list of emitting units to more closely reflect operations at the site.

Section II: Limitations and Conditions

A. Emission Limitations

1. All visible emissions from any Standards of Performance for New Stationary Source (NSPS) – affected crusher shall not exhibit an opacity in excess of the following averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO):
 - For crushers that commence construction, modification, or reconstruction on or after April 22, 2008: 12% opacity
 - For crushers that commence construction, modification, or reconstruction after August 31, 1983, but before April 22, 2008: 15% opacity

2. All visible emissions from any other NSPS-affected equipment (such as screens and conveyors) shall not exhibit an opacity in excess of the following averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO):
 - For equipment that commence construction, modification, or reconstruction on or after April 22, 2008: 7% opacity
 - For equipment that commence construction, modification, or reconstruction after August 31, 1983, but before April 22, 2008: 10% opacity
3. All visible emissions from any non-NSPS affected equipment shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
4. Water and spray bars shall be available on-site at all times and operated, as necessary, to maintain compliance with the opacity limitations in Sections II.A.1, II A.2, and II.A.3 (ARM 17.8.749 and ARM 17.8.752).
5. WGI shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308 and ARM 17.8.752).
6. WGI 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 and ARM 17.8.752).
7. WGI shall not operate, or have on site, more than two crushers at any given time, and the total combined maximum rated design capacity of the crushers shall not exceed 900 tons per hour (TPH) (ARM 17.8.749).
8. WGI shall not operate more than three screens at any given time and the total combined maximum rated design capacity of the screens shall not exceed 1,050 TPH (ARM 17.8.749).
9. The baghouse must be operated at all times when the crushers are in use (ARM 17.8.749).
10. The crushing facility shall not operate more than 3,400 hours during any rolling 12-month time period (ARM 17.8.749).
11. WGI shall not operate or have on-site more than two diesel engine generators. The operation of the proposed 1,500 hp diesel engine generator, and the existing 335 hp diesel engine generator shall not exceed 3,400 hours each during any rolling 12-month time period (ARM 17.8.749 and ARM 17.8.1204).
12. If the permitted equipment is used in conjunction with any other equipment owned or operated by WGI, 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 time period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).

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. Additional testing may be required by 40 CFR 60, Subpart OOO (ARM 17.8.340 and 40 CFR 60, Subpart OOO)
2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
3. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. If this crushing/screening plant is moved to another location, an Intent to Transfer Form must be sent to the Department, and a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer will 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. WGI 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 WGI as a permanent business record for at least five 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).
3. WGI shall supply the Department with annual production information for all emission points, as required by the Department, in the annual emission inventory request. The request will include, but not be limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.

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

4. WGI shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include the ***addition of a new emissions unit***, change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation. The

notice must be submitted to the Department, in writing, 10 days prior to startup or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(l)(d) (ARM 17.8.745).

5. WGI 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 WGI 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).
6. WGI shall document, by month, the hours of operation of the crushing facility. By the 25th day of each month, WGI shall total the hours of operation of the facility during the previous 12 months to verify compliance with the 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. WGI shall document, by month, the hours of operation of the 335 hp diesel engine generator and the 1,500 hp diesel engine generators. By the 25th day of each month, WGI shall total the hours of operation of the diesel generators for the previous month. The monthly information will be used to demonstrate 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. WGI shall annually certify that its emissions are less than those that would require the source to obtain an air quality operating permit as required by ARM 17.8.1204(3)(b). The annual certification shall comply with the certification requirements of ARM 17.8.1207. The annual certification shall be submitted along with the annual emissions inventory information (ARM 17.8.749 and ARM 17.8.1204

D. Notification

WGI shall provide the Department with written notification of the following dates within the specified time periods (ARM 17.8.749):

- Beginning actual construction of the crusher and 1,500 hp engine generator within 30 days after actual construction has begun; and
- Actual start-up date of crusher and 1,500 hp engine generator within 15 days after the actual start-up of the generating unit

Section III: General Conditions

- A. Inspection - WGI shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (continuous emissions monitoring system (CEMS) or continuous emissions rate monitoring system (CERMS)) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver - The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if WGI fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations - Nothing in this permit shall be construed as relieving WGI 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 action 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 the Department 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 WGI 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. WGI 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
Washington Group International, Inc.
MAQP #2751-03

Section I. Introduction/Process Description

A. Permitted Equipment

Washington Group International, Inc. (WGI) owns and operates the following equipment at the portable crushing/screening facility:

- Pioneer 35" x 52" Jaw Crusher (550 tons per hour (TPH)),
- Telesmith 52" Cone Crusher (350 TPH)
- five screens (350 TPH each),
- 335 horsepower (hp) diesel engine generator,
- 1,500 hp diesel engine generator,
- 1,000 gallon gasoline fuel tank,
- 12,000 gallon diesel fuel tank,
- 3,000 gallon used oil storage tank, and
- associated equipment.

In addition, a 1993 DCE Dalmatic reverse jet fabric filter controls particulate emissions from this facility.

B. Process Description

WGI proposes to use this crushing/screening plant to crush rock for railroad ballast and construction, repair, and maintenance of roads and highways. The typical operation begins by the loading of raw material into the feeder by a front-end loader or similar piece of equipment. From the feeder, the raw material is sent through a screen and crusher. From the crusher, the material is conveyed to another screen and ultimately conveyed and stockpiled for use. In addition, the oversized material from a second screen may be sent to a previously permitted crusher, screened, conveyed, and stockpiled for use. Particulate emissions from the jaw crusher are controlled with a baghouse.

C. Permit History

On January 21, 1993, **MAQP #2751-00** was issued to Conda Mining to operate a portable 1976 Pioneer 35" x 46" Jaw Crusher (450 TPH), a screen (450 TPH), a diesel generator, and associated equipment.

On August 7, 1995, **MAQP #2751-01** was issued to Conda Mining to utilize a 1993 DCE Dalmatic reverse jet fabric filter to control particulate emissions from the crusher.

On March 15, 2002, the Department of Environmental Quality (Department) received correspondence from WGI requesting to update Air Quality MAQP #2751-01 to reflect the most up to date permit language and emission factors, and to provide clarification on the size of the diesel generator used to power the crushing/screening operation. In addition, WGI requested that the permit be updated to reflect the name change from Conda Mining to WGI. **MAQP #2751-02** replaced MAQP #2751-01.

D. Current Permit Action

On November 12, 2014, the Department received an application from WGI to modify MAQP #2751-02 to include the addition of a 350 tph cone crusher and a 1,500 hp diesel fired engine generator to the existing portable crushing/screening operation. In addition, the permit was updated to more accurately include the emitting sources on site, and to reflect current permit language and rule references used by the Department.

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.

Section II. Applicable Rules and Regulations

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

WGI 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 which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant which would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

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

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
9. ARM 17.8.222 Ambient Air Quality Standard for Lead
10. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀
11. ARM 17.8.230 Fluoride in Forage

WGI 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, WGI shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.

3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section.
4. ARM 17.8.310 Particulate Matter, Industrial Processes. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.
5. ARM 17.8.322 Sulfur Oxide Emissions - Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this section.
6. ARM 17.8.324 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 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). WGI 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 WGI, the portable crushing equipment to be used under MAQP #2751-03 is subject to this subpart because it meets the definition of an affected facility and was constructed or modified after August 31, 1983.
 - c. 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE). Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are manufactured after April 1, 2006, and are not fire pump engines, and owners and operators of stationary CI ICE that modify or reconstruct their stationary CI ICE after July 11, 2005, are subject to this subpart. Based on the information submitted by WGI, the CI ICE equipment to be used under MAQP #2751-03 is not required to comply with the applicable emission limitations and operating limitations of 40 CFR 60, Subpart IIII because it was manufactured before April 1, 2006.

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. WGI is considered a NESHAP-affected facility under 40 CFR Part 63 and is subject to the requirements of the following subparts.
 - a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to a NESHAPs Subpart as listed below:
 - b. 40 CFR 63, Subpart ZZZZ – NESHAPs 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 hazardous air pollutant (HAP) emissions is a source that is not a major source. WGI is considered an area source of HAP emissions and operates RICE equipment, therefore, the engines are potentially subject to this subpart depending upon the location and nature of operation. A RICE is considered stationary if it remains or will remain at the permitted location for more than 12 months, or a shorter period of time for an engine located at a seasonal source. A seasonal source remains at a single location on a permanent basis (at least 2 consecutive years) and operates at least 3 months each year. Based on the information submitted by WGI, the RICE equipment to be used under MAQP #2751-03 may be subject to this subpart because they are an area source of HAP emissions and the engines may remain at the same home pit 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. WGI submitted the appropriate permit application fee 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.

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 General Procedures for Air Quality Preconstruction Permitting. 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. WGI has a PTE greater than 15 tons per year of particulate matter (PM), particulate matter with an aerodynamic diameter of 10 microns or less (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. WGI submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. WGI submitted an affidavit of publication of public notice for the November 12, 2014, issue of the *Whitehall Ledger*, a newspaper of general circulation in the Town of Whitehall in Jefferson County, as proof of compliance with the public notice requirements.
 6. ARM 17.8.749 Conditions for Issuance of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
 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 WGI of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an MAQP may be transferred from one location to another if the Department receives a complete notice of intent to transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.

- F. ARM 17.8, Subchapter 8, Prevention of Significant Deterioration of Air Quality, including, but not limited to:
1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
 2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

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

- G. ARM 17.8, Subchapter 12, Operating Permit Program Applicability, including, but not limited to:
1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. PTE > 100 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 PM₁₀ in a serious PM₁₀ non-attainment area.
 2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #2751-03 for WGI, the following conclusions were made:
 - a. The facility's PTE is less than 100 tons/year for any pollutant.
 - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is subject to a current NSPS (40 CFR 60, Subpart OOO).
 - e. This facility is potentially subject to a current NESHAP standards (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

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

- i. ARM 17.8.1204(3). The Department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable limitations which limit that source's PTE
 - i. In applying for an exemption under this section the owner or operator of the facility shall certify to the Department that the source's PTE does not require the source to obtain an air quality operating permit.
 - ii. Any source that obtains a federally enforceable limit on PTE shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.
3. ARM 17.8.1207 Certification of Truth, Accuracy, and Completeness. The compliance certification submittal required by ARM 17.8.1204(3)(a) 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.

Section III. BACT Determination

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

The BACT analysis for MAQP #2751-03 addresses some available methods of controlling PM and NO_x, emissions from the diesel engine generators. The Department has reviewed these methods, as well as previous BACT determinations. The following control options have been reviewed by the Department in order to make the following BACT determinations:

A. Crushing/Screening Particulate Emissions

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

WGI must also take reasonable precautions to limit the fugitive emissions of airborne particulate matter from haul roads, access roads, parking areas, and the general area of operation. WGI is required to have water spray bars and water available on site (at all times) and to apply the water, as necessary, to maintain compliance with the opacity and reasonable precaution limitations. WGI may also use chemical dust suppression, in order to maintain compliance with emission limitations in Section II.A of MAQP #2751-03. The Department determined that using water spray bars, water, and chemical dust suppressant to maintain compliance with the opacity requirements and reasonable precaution limitations constitutes BACT for the crushing/screening operation.

B. Diesel Engines

Due to the limited amount of emissions produced by the diesel engines and the lack of readily available cost effective add-on controls, add-on controls would be cost prohibitive. Generally, any new diesel engines would likely be required to comply with the federal engine emission limitations including, for example, EPA Tier emission standards for non-road engines (40 CFR Part 1039), New Source Performance Standard emission limitations for stationary compression ignition engines (40 CFR 60, Subpart IIII), or National Emissions Standards for Hazardous Air Pollutant Sources for Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ).

Therefore, the Department has determined that compliance with applicable federal standards and proper operation and maintenance constitutes BACT for these engines.

The control options selected contain control equipment and control costs comparable to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

Section IV. Emission Inventory

Emission Source	tons/year						
	PM	PM10	PM2.5	NOx	CO	VOC	SO2
1500 bhp Engine Generator	1.79	1.79	1.79	61.20	14.03	1.80	20.63
335 bhp Generator Engine	1.25	1.25	1.25	17.65	3.80	1.43	1.17
1976 Pioneer Jaw crusher (550 TPH) (controlled)	0.06	0.03	0.00				
2013 Telsmith Cone Crusher (350 TPH) (controlled)	0.04	0.02	0.00				
Screens (350 TPH) (3)	3.93	1.73	0.05				
Haul Roads	4.41	1.22	0.12				
Conveyor Transfer Points (12) (350 TPH)	1.00	0.33	0.09				
Pile Forming	4.03	1.91	0.29				
Bulk Loading	0.06	0.06	0.06				
1,000 gallon gasoline fuel tank	-	-	-				
12,000 gallon diesel fuel tank	-	-	-				
3, 000 gallon used oil storage tank	-	-	-				
Total Emissions	16.56	8.32	3.66	78.85	17.83	3.23	21.80
Assuming	3,400 hr/yr operation						

1500 bhp Engine Generator

Operational Capacity of Engine = 1,500.00 hp
generator = 1,360.00 kw
Hours of Operation = 3,400 hours/yr

PM Emissions: Emission Factor (AP-42, Table 3.4-1, 10/96) = 7.00E-04 lbs/hp-hr
Calculation: (1,500 hp) * (3,400 hours/yr) * (0.0007 lbs/hp-hr) * (ton/2000 lb) = **1.79** ton/yr
Calculation: (1,500 hp) * (3,400 hours/yr) * (0.0007 lbs/hp-hr) = **3,570.00** lbs/yr

PM10 Emissions: Emission Factor (AP-42, Table 3.4-1, 10/96) = 7.00E-04 lbs/hp-hr
Calculation: (1,500 hp) * (3,400 hours/yr) * (0.0007 lbs/hp-hr) * (ton/2000 lb) = **1.79** ton/yr
Calculation: (1,500 hp) * (3,400 hours/yr) * (0.0007 lbs/hp-hr) = **3,570.00** lbs/yr

PM2.5 Emissions: Emission Factor (AP-42, Table 3.4-1, 10/96) = 7.00E-04 lbs/hp-hr
Calculation: (1,500 hp) * (3,400 hours/yr) * (0.0007 lbs/hp-hr) * (ton/2000 lb) = **1.79** ton/yr
Calculation: (1,500 hp) * (3,400 hours/yr) * (0.0007 lbs/hp-hr) = **3,570.00** lbs/yr

NOx Emissions: Emission Factor (AP-42, Table 3.4-1, 10/96) = 2.40E-02 lbs/hp-hr
Calculation: (1,500 hp) * (3,400 hours/yr) * (0.0240 lbs/hp-hr) * (ton/2000 lb) = **61.20** ton/yr
Calculation: (1,500 hp) * (3,400 hours/yr) * (0.0240 lbs/hp-hr) = **122,400.00** lbs/yr

CO Emissions: Emission Factor (AP-42, Table 3.4-1, 10/96) = 5.50E-03 lbs/hp-hr
Calculation: (1,500 hp) * (3,400 hours/yr) * (0.00550 lbs/hp-hr) * (ton/2000 lb) = **14.03** ton/yr
Calculation: (1,500 hp) * (3,400 hours/yr) * (0.00550 lbs/hp-hr) = **28,050.00** lbs/yr

VOC Emissions: Emission Factor (AP-42, Sec. 3.3, Table 3.3-1, TOC, Exhaust + Crankcase, 10/96) = 7.05E-04 lbs/hp-hr
Calculation: (1,500 hp) * (3,400 hours/yr) * (0.00071 lbs/hp-hr) * (ton/2000 lb) = **1.80** ton/yr
Calculation: (1,500 hp) * (3,400 hours/yr) * (0.00071 lbs/hp-hr) = **3,595.50** lbs/yr

SOx Emissions: Emission Factor (AP-42, Sec. 3.3, Table 3.3-1, 10/96) =	8.09E-03	lbs/hp-hr
Calculation: (1,500 hp) * (3,400 hours/yr) * (0.00809 lbs/hp-hr) * (ton/2000 lb) =	1.80	ton/yr
Calculation: (1,500 hp) * (3,400 hours/yr) * (0.00809 lbs/hp-hr) =	3,595.50	lbs/yr

335 bhp Generator Engine

Operational Capacity of Engine = 335 hp	335	hp/250 kW
Hours of Operation = 3,400 hours/yr	3,400	hours/yr

PM Emissions: (AP-42, Sec. 3.3, Table 3.3-1, 10/96) =	2.20E-03	lbs/hp-hr
Calculation: (2,505.80 lbs/yr) * (ton/2000 lb) =	1.25	ton/yr
Calculation: (335 hp) * (3,400 hours/yr) * (0.0022 lbs/hp-hr) =	2,505.80	lbs/yr

PM-10 Emissions: (AP-42, Sec. 3.3, Table 3.3-1, 10/96) =	2.20E-03	lbs/hp-hr
Calculation: (2,505.80 lbs/yr) * (ton/2000 lb) =	1.25	ton/yr
Calculation: (335 hp) * (3,400 hours/yr) * (0.0022 lbs/hp-hr) =	2,505.80	lbs/yr

PM-2.5 Emissions: (AP-42, Sec. 3.3, Table 3.3-1, 10/96) =	2.20E-03	lbs/hp-hr
Calculation: (2,505.80 lbs/yr) * (ton/2000 lb) =	1.25	ton/yr
Calculation: (335 hp) * (3,400 hours/yr) * (0.0022 lbs/hp-hr) =	2,505.80	lbs/yr

NOx Emissions: (AP-42, Sec. 3.3, Table 3.3-1, 10/96) =	3.10E-02	lbs/hp-hr
Calculation: (35,309.00 lbs/yr) * (ton/2000 lb) =	17.65	ton/yr
Calculation: (335 hp) * (3,400 hours/yr) * (0.03 lbs/hp-hr) =	35,309.00	lbs/yr

CO Emissions: (AP-42, Sec. 3.3, Table 3.3-1, 10/96) =	6.68E-03	lbs/hp-hr
Calculation: (7,608.52 lbs/yr) * (ton/2000 lb) =	3.80	ton/yr
Calculation: (335 hp) * (3,400 hours/yr) * (0.0067 lbs/hp-hr) =	7,608.52	lbs/yr

VOC Emissions: (AP-42, Sec. 3.3, Table 3.3-1, 10/96) =	2.51E-03	lbs/hp-hr
Calculation: (2,863.56 lbs/yr) * (ton/2000 lb) =	1.43	ton/yr
Calculation: (335 hp) * (3,400 hours/yr) * (0.0025 lbs/hp-hr) =	2,863.56	lbs/yr

SOx Emissions: (AP-42, Sec. 3.3, Table 3.3-1, 10/96) =	2.05E-03	lbs/hp-hr
Calculation: (2,334.95 lbs/yr) * (ton/2000 lb) =	1.17	ton/yr
Calculation: (335 hp) * (3,400 hours/yr) * (0.0021 lbs/hp-hr) =	2,334.95	lbs/yr

1976 Pioneer Jaw crusher (550 TPH) (controlled)

Hours of Operation	3,400	hrs/yr
Process Rate	550	ton/hr

PM Emissions: Emission Factor (AP 42, Table 11.19.2-2, 8/04, controlled)	0.0012	lb/ton
Calculation: (550 ton/hr) * (3400 hrs/yr) * (0.0012 lb/ton) * (ton/2000 lb) = 1.12 ton/yr	1.12	ton/yr
Baghouse control @ 95%	0.06	ton/yr

PM₁₀ Emissions: Emission Factor (AP 42, Table 11.19.2-2, 8/04, controlled)	0.00054	lb/ton
Calculation: (550 ton/hr) * (3400 hrs/yr) * (0.00054 lb/ton) * (ton/2000 lb) = 0.50 ton/yr	0.50	ton/yr
Baghouse control @ 95%	0.03	ton/yr

PM_{2.5} Emissions: Emission Factor (AP 42, Table 11.19.2-2, 8/04, controlled)	0.0001	lb/ton
Calculation: (550 ton/hr) * (3400 hrs/yr) * (0.00054 lb/ton) * (ton/2000 lb) =	0.50	ton/yr
Baghouse control @ 95%	0.03	ton/yr

2013 TelSmith Cone Crusher 350 TPH (controlled)

Hours of Operation	3,400	hrs/yr
Process Rate	350	ton/hr

PM Emissions: Emission Factor (AP 42, Table 11.19.2-2, 8/04, controlled)	0.0012	lb/ton
Calculation: (350 ton/hr) * (3400 hrs/yr) * (0.0012 lb/ton) * (ton/2000 lb) =		
0.71 ton/yr	0.71	ton/yr
Baghouse control @ 95%	0.04	ton/yr

PM₁₀ Emissions: Emission Factor (AP 42, Table 11.19.2-2, 8/04, controlled)	0.00054	lb/ton
Calculation: (350 ton/hr) * (3400 hrs/yr) * (0.00054 lb/ton) * (ton/2000 lb) =		
0.32 ton/yr	0.32	ton/yr
Baghouse control @ 95%	0.02	ton/yr

PM_{2.5} Emissions: Emission Factor (AP 42, Table 11.19.2-2, 8/04, controlled)	0.0001	lb/ton
Calculation: (350 ton/hr) * (3400 hrs/yr) * (0.0001 lb/ton) * (ton/2000 lb) =		
0.06 ton/yr	0.06	ton/yr
Baghouse control @ 95%	0.00	ton/yr

Screens (350 TPH) (3)

Hours of Operation	3,400	hrs/yr
Number of Screens	3	screens
Process Rate	350	ton/hr

Total PM Emissions: Emission Factor (AP 42, Table 11.19.2-2, 8/04)	0.0022	lb/ton
Calculation: (350 ton/hr) * (3400 hrs/yr) * (3 screens)*(0.0022 lb/ton) * (ton/2000 lb) =	3.47	ton/yr

Total PM₁₀ Emissions: Emission Factor (AP 42, Table 11.19.2-2, 8/04)	0.00074	lb/ton
Calculation: (350 ton/hr) * (3400 hrs/yr) * (3 screens)*(0.00074 lb/ton) * (ton/2000 lb) =	1.35	ton/yr

Total PM_{2.5} Emissions: Emission Factor (AP 42, Table 11.19.2-2, 8/04)	0.00005	lb/ton
Calculation: (350 ton/hr) * (3400 hrs/yr) * (3 screens)*(0.00005 lb/ton) * (ton/2000 lb) =	0.04	ton/yr

Conveyor Transfer Points (12)

Process Rate	350	ton/hr
Hours of Operation	3,400	hrs/yr
Number of Transfers	12	transfer

Total PM Emissions: Emission Factor (AP 42, Table 11.19.2-2, 8/04)	0.00014	lb/ton
Calculation: (350 ton/hr) * (3400 hrs/yr) * (0.00014 lb/ton) * (ton/2000 lb) * (12 transfer) =	1.00	ton/yr

Total PM₁₀ Emissions: Emission Factor (AP 42, Table 11.19.2-2, 8/04) 4.60E-05 lb/ton
 Calculation: (350 ton/hr) * (3400 hrs/yr) * (0.000046 lb/ton) * (ton/2000 lb) * (12 transfer) = **0.33** ton/yr

Total PM_{2.5} Emissions: Emission Factor (AP 42, Table 11.19.2-2, 8/04) 1.30E-05 lb/ton
 Calculation: (350 ton/hr) * (3400 hrs/yr) * (0.000013 lb/ton) * (ton/2000 lb) * (12 transfer) = **0.09** ton/yr

Pile Forming

Process Rate 350 ton/hr
 Hours of Operation 3,400 hrs/yr
 Number of Piles 4 piles

PM Emissions: (AP 42, Sec. 13.2.4.3, 11/06)

Emission Factor = $k (0.0032) * (U/5)^{1.3} * (M / 2)^{-1.4} =$ 0.00169 lb/ton
 Where: k = particle size multiplier 0.74
 U = mean wind speed 8.15 mph
 M = material moisture content 4.00 %
 Control Efficiency 0 %
 Calculation: (350 ton/hr) * (3400 hrs/yr) * (0.00169 lb/ton) * (ton/2000 lb) * (4 piles) = 3.56 ton/yr

PM₁₀ Emissions: (AP 42, Sec. 13.2.4.3, 11/06)

Emission Factor = $k (0.0032) * (U/5)^{1.3} * (M / 2)^{-1.4} =$ 0.00080 lb/ton
 Where: k = particle size multiplier 0.35
 U = mean wind speed 8.15 mph
 M = material moisture content 4.00 %
 Control Efficiency 0 %
 Calculation: (350 ton/hr) * (3400 hrs/yr) * (0.00080) * (ton/2000 lb) * (4 piles) * (1-0/100)= **1.68** ton/yr

PM_{2.5} Emissions: (AP 42, Sec. 13.2.4.3, 11/06)

Emission Factor = $k (0.0032) * (U/5)^{1.3} * (M / 2)^{-1.4} =$ 0.00012 lb/ton
 Where: k = particle size multiplier 0.053
 U = mean wind speed 8.15 mph
 M = material moisture content 4.00 %
 Control Efficiency 0 %
 Calculation: (350 ton/hr) * (3400 hrs/yr) * (0.00012 lb/ton) * (ton/2000 lb) * (4 piles) = 0.25 ton/yr

Bulk Loading

Process Rate 350 ton/hr
 Hours of Operation 3,400 hrs/yr
 Number of Loads 1 load

PM Emissions: Emission Factor (AP 42, Sec. 11.19.2-2, 8/2004) 1.00E-04 lb/ton
 Control Efficiency 0 %
 Calculation: (350 ton/hr) * (3400 hrs/yr) * (0.00010 lb/ton) * (ton/2000 lb) * (1 load) = 0.05 ton/yr

PM₁₀ Emissions: Emission Factor (AP 42, Sec. 11.19.2-2, 8/2004) 1.00E-04 lb/ton
 Control Efficiency 0 %
 Calculation: (350 ton/hr) * (3400 hrs/yr) * (0.00010 lb/ton) * (ton/2000 lb) * (1 load) = 0.05 ton/yr

PM_{2.5} Emissions: Emission Factor (AP 42, Sec. 11.19.2-2, 8/2004) 1.00E-04 lb/ton
Control Efficiency 0 %
Calculation: (350 ton/hr) * (3400 hrs/yr) * (0.00010 lb/ton) * (ton/2000 lb) * (1 load) = 0.05 ton/yr

Section V. Existing Air Quality

This permit is for a portable facility to be initially located in the Northeast ¼ of Section 20, Township 2 North, Range 5 West, in Jefferson County, Montana. Richland County, and those areas for which this facility is permitted to operate, have been designated unclassified/attainment with all ambient air quality standards, and where there are no major air pollution sources in the surrounding area.

Section VI Air Quality Impacts

This permit contains conditions and limitations that would protect air quality for the site and surrounding area. Furthermore, this facility is a portable source that would operate on an intermittent and temporary basis, so any effects to air quality will be minor and of limited duration.

Section VII. Ambient Air Impact Analysis

Based on the information provided and the conditions established in MAQP #2751-03, the Department determined that the impact from this permitting action will be minor.

Section 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)

Section IX. Environmental Assessment

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

DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Air Resources Management Bureau
P.O. Box 200901, Helena, MT 59620
(406) 444-3490

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued To: **Washington Group International, Inc.**

Montana Air Quality Permit number (MAQP): **2751-03**

Preliminary Determination Issued: **January 8, 2015**

Department Decision Issued: **February 11, 2015**

Permit Final: **February 27, 2015**

1. Legal Description of Site: Northeast ¼ of Section 20, Township 2 North, Range 5 West, in Jefferson County, Montana.
2. Description of Project: The Washington Group International, Inc. (WGI) facility is an existing portable mineral crushing and screening plant. Under the current permit action, WGI would add a 350 ton per hour cone crusher and a 1,500 horsepower diesel fired engine generator to the existing portable crushing/screening operation.
3. Objectives of Project: WGI submitted the current permit modification to allow for the installation of a 350 ton per hour cone crusher and a 1,500 horsepower diesel fired engine generator. These proposed modifications would be used in conjunction with other previously permitted equipment at the facility. The objective of this project would be to produce revenue for WBI through the sale and use of crushed material. The issuance of the permit would allow WBI to operate the permitted equipment at various locations throughout Montana, including the initial site location.
4. Alternatives Considered: In addition to the proposed action, the Department of Environmental Quality (Department) also considered the “no-action” alternative. The “no-action” alternative would deny issuance of the air quality preconstruction permit to the proposed facility. However, the Department does not consider the “no-action” alternative to be appropriate because WGI has demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the “no-action” alternative was eliminated from further consideration.
5. A Listing of Mitigation, Stipulations, and Other Controls: A list of enforceable conditions, including a Best Available Control Technology (BACT) analysis, would be included in MAQP #2751-03

6. Regulatory Effects on Private Property: The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.
7. The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The “no-action” alternative was discussed previously.

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Terrestrial and Aquatic Life and Habitats			X			Yes
B	Water Quality, Quantity, and Distribution			X			Yes
C	Geology and Soil Quality, Stability and Moisture			X			Yes
D	Vegetation Cover, Quantity, and Quality			X			Yes
E	Aesthetics			X			Yes
F	Air Quality			X			Yes
G	Unique Endangered, Fragile, or Limited Environmental Resources			X			Yes
H	Demands on Environmental Resource of Water, Air and Energy			X			Yes
I	Historical and Archaeological Sites				X		Yes
J	Cumulative and Secondary Impacts			X			Yes

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

A. Terrestrial and Aquatic Life and Habitats

This permitting action would be expected to have a minor effect on terrestrial and aquatic life and habitats because facility emissions would be well dispersed in the area of the operations (see Section 7.F of this EA) and would have intermittent and seasonal operations. Any impacts to aquatic life would be minimized through conditions within the open cut mine permit. Therefore, only minor and temporary effects to terrestrial and aquatic life and habitat would be expected from the proposed project.

B. Water Quality, Quantity and Distribution

The quarry is located in an unnamed watershed that is an ephemeral tributary to Pipestone Creek. Water would be required for dust suppression on the mineral processing equipment and surrounding facility area, including haul roads. This water use would be expected to

only cause minor, if any, impacts to water resources because the facility is small and only a small volume of water would be required to be used. There would not be any potential impacts to wetlands or changes in the drainage patterns at the proposed site. In addition, the facility would emit air pollutants, and corresponding deposition of pollutants would occur, as described in Section 7.F. of this EA. The site will be in an open-cut mine area where water runoff would be more readily controlled. However, the Department determined that, due to dispersion characteristics of pollutants and conditions that would be placed in MAQP #2751-03, any impacts from deposition of pollutants on water quality, quantity, and distribution from the proposed project would be minor.

C. Geology and Soil Quality, Stability and Moisture

The quarry site and surrounding area is located on the east margin of the Boulder Batholith. The application described that the surface of the ridge to be mined is predominately a mixture of rock outcrops consisting of dense, hard, fractured bedrock and bedrock covered with four to twelve inches (average six inches) of stony soil between the rocks. Recovery of useable topsoil from the rocky ridge will be meticulous and will produce minimal yield. Thick deposits of useable topsoil are available in the drainage bottom land, which will provide the majority of salvaged soil to be used in reclaiming the entire quarry site. Only minor impacts from deposition of air pollutants on soils would likely result (as described in Section 7.F of this EA) and only minor amounts of water would be used for pollution control, and only as necessary, in controlling particulate emissions. Thus, only minimal water runoff would likely occur. Since only minor amounts of pollution would be expected and corresponding emissions would be widely dispersed before settling upon surrounding soils and vegetation (as described in Section 7.D of this EA), impacts would be minor. Therefore, any effects upon geology and soil quality, stability, and moisture from air pollutant emissions from this permitting action would likely be minor and short-lived.

D. Vegetation Cover, Quantity, and Quality

The permit area would be located in an existing quarry adjacent to primarily rangeland. According to Montana Natural Heritage Program, there are no plant species of concern at the project site. According to the application, the plant community type is grassland and the permit area and adjacent areas are used as non-irrigated rangeland and habitat for coyote, pronghorn, and mule deer. The present vegetation consists of bluebunch wheatgrass, blue grama, rubber rabbitbrush, broom snakeweed, needleand-thread grass, and fringed sagewort. During operations, the facility would be a minor source of emissions and the pollutants widely dispersed (as described in Section 7.F of this EA); therefore, deposition on vegetation from the proposed project would expect to be minor. Also, due to limited water usage (as described in Section 7.B of this EA) and minimal associated soil disturbance from the application of water and water runoff (as described in Section 7.C of this EA), corresponding vegetative impacts would likely be minor.

E. Aesthetics

The facility would be visible and would create noise while operating the proposed equipment at the site. Further, MAQP #2751-03 would include conditions to control emissions, including visible emissions, from the plant. The diesel-fired equipment would

be moderately sized by industrial standards and would be used to power permitted equipment operated by WGI. The long term mine plan and final reclamation plan for the quarry incorporates a pit boundary along the south side of the quarry that would create a “ridge” to provide a buffer zone between Interstate Highway 90 and the pit operations to mitigate noise impacts over the remaining life of the mine. Noise levels at the quarry site have had minimal to no impact, considering existing noise levels along Interstate 90 are more continuous and higher in intensity. Interstate 90 is located between the quarry site and Pipestone Creek, a small residential area with a few local residents. There are no residents within a ¾ mile radius of the quarry site. Blasting, which is typically performed once or twice a month, is audible from the Pipestone area. Blasts are relatively small, and not a significant impact to local residents. The facility would operate on an intermittent and seasonal basis, and would be a small industrial source. Upon completion of the project, the affected area will be reclaimed as rangeland. Therefore, any visual or audible aesthetic impacts would be short-lived and are expected to be minor.

F. Air Quality

The air quality impacts from the equipment would be minor because the facility is relatively small and would be used on a temporary and intermittent basis. Additionally, the small and intermittent amounts of deposition generated from the crushing/screening operation would be minimal because the pollutants emitted would be well controlled, widely dispersed (from such factors as wind speed and wind direction) and would have minimal deposition on the surrounding area. MAQP #2751-03 would include conditions limiting the opacity from the plant, as well as requiring water spray bars and other means to control emissions from haul roads, access roads, parking lots, or the general work area. In addition, MAQP #2751-03 would limit total emissions from the crushing and screening operation and any additional equipment operated at the same site to 250 tons/year or less, excluding fugitive emissions. Further, the crushing and screening facility requested federally-enforceable permit limitations to remain a minor source of emissions with respect to Title V.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department, in an effort to assess any potential impacts to any unique endangered, fragile, or limited environmental resources in the initial proposed area of operation (Northeast ¼ of Section 20, Township 2 North, Range 5 West, in Jefferson County) contacted the Natural Resource Information System – Montana Natural Heritage Program (MNHP) for a review of species of special concern. The search area, in this case, is defined by the section, township, and range of the proposed site, with an additional one (1) mile buffer. Search results concluded there are such environmental resources found within the defined area. *Oreoscoptes montanus* (Sage Thrasher), *Myotis licifugus* (Little Brown Myotis), *Lasiurus cinereus* (Hoary Bat), and Bat Roosts are species or environmental resources of concern in the area. The impact from operation of the crushing/screening facility in this area would be minor since the facility is relatively small in size and will have only seasonal and intermittent operations in the area. Therefore, the Department determined that any effects upon these species would likely be minor and short-lived.

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

Due to the relatively small size of the project, only small demands on environmental resources would likely be required for proper operation. Only small quantities of water are required for dust suppression of particulate emissions being generated at the site. In addition, impacts to air resources would be expected to be minor because the source would be considered a minor industrial source of emissions, with intermittent and seasonal operations, and because air pollutants generated by the facility would be widely dispersed as described in Section 7.F of this EA. Energy requirements would also be small, as the diesel engines would use small amounts of fuel. Overall, any impacts to water, air, and energy resources would likely be minor.

I. Historical and Archaeological Sites

The Department contacted the Montana Historical Society - State Historical Preservation Office (SHPO) in an effort to identify any historical and/or archaeological sites that may be present in the location of the facility. According to correspondence from the Montana State Historic Preservation Office, there have been a few previously recorded sites within the designated search locale and a few previously conducted cultural resource inventories done in the area. However SHPO indicated that as long as there would be no expansion of the existing pit associated with this project, there would be a low likelihood of cultural properties impacted. Therefore, it is unlikely that the crushing/screening operation would have an effect on any known historic or archaeological sites.

J. Cumulative and Secondary Impacts

The operation of the crushing and screening equipment would likely cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because the facility would be limited in the amount of emissions allowed to be released to the atmosphere. Emissions and noise generated from the equipment would likely result in only minor impacts to the area, as the facility would be seasonal and temporary. The proposed project would be short-term in nature, and likely have minor cumulative effects upon resources within the area. These resources include water, terrestrial and aquatic life, soils, and vegetation. Overall, cumulative and secondary impacts to the physical and biological aspects of the human environment would likely be minor.

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

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Social Structures and Mores				X		Yes
B	Cultural Uniqueness and Diversity				X		Yes
C	Local and State Tax Base and Tax Revenue			X			Yes
D	Agricultural or Industrial Production			X			Yes

E	Human Health			X			Yes
F	Access to and Quality of Recreational and Wilderness Activities				X		Yes
G	Quantity and Distribution of Employment			X			Yes
H	Distribution of Population				X		Yes
I	Demands for Government Services			X			Yes
J	Industrial and Commercial Activity				X		Yes
K	Locally Adopted Environmental Plans and Goals			X			Yes
L	Cumulative and Secondary Impacts			X			Yes

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

A. Social Structures and Mores

The proposed project would cause minor, if any, impacts or disruptions to native or traditional lifestyles or communities (social structures or mores) in the area because the proposed project would take place in a relatively remote location, and because the source is a minor source of emissions (by industrial standards) and would only have intermittent operations. Further, the facility would be required to operate according to the conditions that would be placed in MAQP #2751-03. Therefore, the existing social structures and mores would not be affected as a result of this permitting action.

B. Cultural Uniqueness and Diversity

The operation of crushing and screening equipment would have no impact on the cultural uniqueness and diversity because the equipment operations would be intermittent and temporary and located at an existing gravel pit, in remote area surrounded by rangeland with neighboring gravel pits, and trucking transport yard. Additionally, the facility would be considered a portable/temporary source with seasonal and intermittent operations. The predominant use of the surrounding area would not change as a result of this project. Therefore, there would not be any expected impacts to the cultural uniqueness and diversity of the project location.

C. Local and State Tax Base and Tax Revenue

The proposed modifications to the crushing/screening operation would have little, if any, impact on the local and state tax base and tax revenue because the facility would be a temporary source and small by industrial standards. The facility would continue to employ 11 personnel. Thus, only minor impacts to the local and state tax base and revenue could be expected from the employees and facility production. Furthermore, the impacts to local tax base and revenue would be expected to be minor because the source would be portable and the money generated for taxes would be widespread. Therefore, the Department determined that there would be minor effects to local and state tax base and tax revenue.

D. Agricultural or Industrial Production

The operation of the mineral processing facility would only have a minor impact on local industrial production since the facility would be relatively small by industrial standards and located at an existing gravel pit. Because minimal deposition of air pollutants would occur on the surrounding land (as described in Section 7.F of this EA), only minor and temporary effects on the surrounding vegetation (i.e. agricultural production) would occur. In addition, the facility operations would be small and temporary in nature and would be permitted with operational conditions and limitations that would minimize impacts upon surrounding vegetation, as described in Section 7.D of this EA.

E. Human Health

MAQP #2751-03 would incorporate conditions to ensure that the crushing facility would operate in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. As described in Section 7.F. of this EA, the air emissions from this facility would be minimized by the use of water spray and other conditions that would be established in MAQP #2751-03. Therefore, only minor impacts would be expected upon human health from the proposed crushing/screening facility.

F. Access to and Quality of Recreational and Wilderness Activities

Based on information received from WGI, there is an off highway vehicle (OHV) trailhead near the entrance road to the quarry, with the trails located in the surrounding area, but not within the permitted quarry boundaries. It is anticipated that these recreational areas would not be affected by the proposed project. Therefore, no impacts to the access to and quality of recreational and wilderness activities would be expected

G. Quantity and Distribution of Employment

The application states that the operation of the facility would not require a change in staff, and would continue to operate with 11 employees. Employment would occur only seasonally and intermittently. No individuals would be expected to permanently relocate to this area of operation as a result of proposed operations. Therefore, minor effects upon the quantity and distribution of employment in this area would be expected.

H. Distribution of Population

The proposed modifications to the existing portable crushing and screening operation would be considered small by industrial standards and would not require any changes in the number of employees to operate. Also, no individuals would be expected to permanently relocate to a given area of operation as a result of operating the crushing facility, which would have only intermittent and seasonal operations. Therefore, the crushing facility would not disrupt the normal population distribution in the initial area of operation or any future operating site.

I. Demands for Government Services

No increases would be seen in traffic on existing roadways in the area to accommodate the proposed modifications to the crushing/screening operation. In addition, government services may be required for acquiring the appropriate permits and ensuring compliance with the permits that are issued; however, the government services required would be minor.

J. Industrial and Commercial Activity

The modifications to the crushing/screening operations would not increase the industrial activity in the given area because of the small size of the operations, the portable and temporary nature of the facility. In addition the crushing/screening operation would be located at an existing quarry within close proximity of an existing State of Montana road maintenance yard (0.6 mile from the site). No additional industrial or commercial activity would be expected as a result of the proposed operation.

K. Locally Adopted Environmental Plans and Goals

WGI would be allowed, by MAQP #2751-03, to operate in areas designated by the United States Environmental Protection Agency as attainment or unclassified for ambient air quality. The Department is not aware of any locally adopted environmental plans and goal within this area. Because the proposed equipment would be a portable source and would likely have intermittent and seasonal operations with only minor emissions, any impacts to any locally adopted environmental plans from the project would be expected to be minor and temporary.

L. Cumulative and Secondary Impacts

The crushing and screening operation would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate areas of operation because the source would be a portable and temporary source. No increases in traffic in the immediate area would be expected. Because the source would be relatively small, temporary source, only minor economic impacts to the local economy could be expected from the operation of the plant. The Department believes that this plant could be expected to operate in compliance with all applicable rules and regulations as would be outlined in MAQP #2751-03.

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

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is for the construction and operation of mineral crushing and screening operation. MAQP #2751-03 includes conditions and limitations to ensure the facility will operate in compliance with all applicable rules and regulations. In addition, there are no significant impacts associated with this proposal.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

Individuals or groups contributing to this EA: Department of Environmental Quality – Air
Resources Management Bureau, Montana Historical Society – State Historic Preservation
Office, Natural Resource Information System – Montana Natural Heritage Program

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