## AIR QUALITY PERMIT

Issued To: Rockwall, Inc. Permit #3355-02

P.O. Box 519 Application Complete: 5/30/07

Airway Heights, WA 99001 Preliminary Determination Issued: 06/21/07

Department's Decision: 7/24/07

Permit Final: 8/9/07 AFS #777-3355

An air quality permit, with conditions, is hereby granted to Rockwall, Inc. (Rockwall), pursuant to Sections 75-2-204 and 211, Montana Code Annotated (MCA), as amended, and the Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

#### Section I: Permitted Facilities

#### A. Plant Location

Rockwall will operate a portable crushing and screening facility at various locations throughout Montana. Permit #3355-02 applies while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department)-approved permitting program or those areas considered tribal lands. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* 

#### B. Current Permit Action

The current permit action will increase the generator size from 1500 kilowatts (kW) to 1750 kW, and will add a crusher (up to 800 tons per hour (TPH)) to the existing equipment. Permit #3355-02 was also updated to reflect the current permit language and rule references used by the Department. A complete list of the permitted equipment is contained in Section I.A of the permit analysis.

Addendum #1 and Permit #3355-02 apply to the Rockwall facility while operating at any location in or within 10 kilometer (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less  $(PM_{10})$  nonattainment areas.

## Section II: Limitations and Conditions

## A. Emission Limitations

- 1. Rockwall shall not cause or authorize to be discharged into the atmosphere from any Standards of Performance for New Stationary Sources (NSPS) affected crusher, any visible emissions that exhibit an opacity of 15% or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart OOO).
- 2. Rockwall shall not cause or authorize to be discharged into the atmosphere from any other NSPS affected equipment, such as screens or conveyor transfers, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart OOO).
- 3. Rockwall shall not cause or authorize to be discharged into the atmosphere, from

- any non-NSPS affected equipment, any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304 and ARM 17.8.752).
- 4. Water and spray bars shall be available and used, 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. Rockwall shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).
- 6. Rockwall 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. Rockwall shall not operate more than two crushers at any given time and the combined maximum rated design capacity of the crushers shall not exceed 1,800 TPH (ARM 17.8.749).
- 8. Total crusher production from the facility shall be limited to 15,768,000 tons during any rolling 12-month time period (ARM 17.8.749).
- 9. Rockwall shall not operate more than one screen at any given time and the maximum rated design capacity of the screen shall not exceed 1,000 TPH (ARM 17.8.749).
- 10. Total screen production from the facility shall be limited to 8,760,000 tons during any rolling 12-month time period (ARM 17.8.749).
- 11. Rockwall shall not operate more than one diesel generator at any given time and the maximum rated capacity shall not exceed 1750 kW and operation shall not exceed 2,720 hours during any rolling 12-month time period (ARM 17.8.749 and ARM 17.8.1204).
- 12. Rockwall shall comply with all applicable standards and limitations, and the reporting record keeping, and notification requirements contained in 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, for any applicable diesel engines (ARM 17.8.340 and 40 CFR 60, Subpart IIII).
- 13. If the permitted equipment is used in conjunction with any other equipment owned or operated by Rockwall, 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).
- 14. Rockwall 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).

# 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 portable crushing and screening facility is moved to another location, an Intent to Transfer Form must be sent to the Department. In addition, a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The Intent to Transfer Form and the proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.765).
- 2. Rockwall shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. All records compiled in accordance with this permit shall be maintained by Rockwall as a permanent business record for at least 5 years following the date of the measurement, must be submitted to the Department upon request, and must be available at the plant site for inspection by the Department (ARM 17.8.749).
- 3. Rockwall shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the most recent emission inventory report and sources identified in Section I.A of the permit analysis.
  - Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in units, as required by the Department. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).
- 4. Rockwall 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 start-up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).
- 5. Rockwall shall document, by month, the total crushing production for the facility. By the 25<sup>th</sup> day of each month, Rockwall shall calculate the crushing

production 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. Rockwall shall document, by month, the total screening production for the facility. By the 25<sup>th</sup> day of each month, Rockwall shall calculate the screening production 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. Rockwall shall document, by month, the total hours of operation for the diesel generator. By the 25<sup>th</sup> day of each month, Rockwall shall calculate the total hours of operation for the diesel generator/engine 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. Rockwall shall annually certify that its actual emissions are less than those that would require the source to obtain an Air Quality Operating Permit as required 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 with the annual emissions inventory information (ARM 17.8.749 and ARM 17.8.1204).

#### Section III: Addendum

Rockwall shall comply with all conditions in Addendum #1 to Permit #3355-02, as applicable (ARM 17.8.749)

#### Section IV: General Conditions

- A. Inspection Rockwall 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 Rockwall fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving Rockwall of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement Violations of limitations, conditions, and requirements contained herein may constitute grounds for permit revocation, penalties, or other enforcement as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review

(Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.

- F. Permit Inspection As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. Construction Commencement Construction must 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).
- H. Permit Fee Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by Rockwall may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- 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. Rockwall shall comply with the conditions contained in this permit while operating at any location in Montana, except within those areas having a Department approved permitting program.

Permit Analysis Rockwall, Inc. Permit #3355-02

# I. Introduction/Process Description

## A. Permitted Equipment

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

- Two crushers (maximum combined capacity up to 1,800 tons per hour (TPH));
- One screen (maximum capacity up to 1,000 TPH);
- Diesel generator (up to 1750 kilowatt (kW)); and
- Other associated equipment.

## B. Source Description

Rockwall proposes to use this crushing and screening facility to crush and sort: sand, gravel, concrete and/or asphalt for use in various construction operations. For a typical operational setup, materials are crushed, conveyed to the screen where materials are separated by size. Once material is screened, it is either conveyed to stockpile or conveyed back to the crusher for further processing. Finally, material is separated by size and sent to stockpile for sale or use at various construction projects.

# C. Permit History

On September 10, 2004, Rockwall submitted a complete permit application to operate a portable diesel generator (up to 365 kilowatt (kW)), a diesel generator (up to 1500 kW), a diesel generator (up to 1500 kW), a 2004 Eagle Horizontal Impactor crusher (up to 1,000 TPH), a 2004 Eagle (6'x20') 3-deck screen (up to 1,000 TPH), and associated equipment. The original location for the crushing and screening facility was Section 6, Township 1 North, Range 27 East in Yellowstone County. The permit was issued under **Permit** #3355-00.

On September 5, 2006, Rockwall submitted an Intent to Transfer request to the Department of Environmental Quality (Department). The transfer location was to an area in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less ( $PM_{10}$ ) nonattainment area, and the Department notified Rockwall that they would need an addendum to Permit #3355-01 with limits applicable to the facility when operating in or near  $PM_{10}$  nonattainment areas. In addition, Rockwall requested to remove two generators from the facility's existing permit, leaving one 1500 kW generator permitted. **Permit #3355-01** replaced Permit #3355-00.

## D. Current Permit Action

On December 22, 2006, Rockwall submitted an application to modify the existing permit, and the permit application was deemed complete on May 30, 2007. The current permit action is to change the generator size from 1500 kW to 1750 kW, and to add a crusher (up to 800 TPH). In addition, Permit #3355-02 was updated to reflect the current permit language and rule references used by the Department. **Permit #3355-02** replaces Permit #3355-01.

#### E. Additional Information

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

## II. Applicable Rules and Regulations

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

- A. ARM 17.8, Subchapter 1 General Provisions, including, but not limited to:
  - 1. <u>ARM 17.8.101 Definitions</u>. This rule is a list of applicable definitions used in this subchapter, 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 all necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
  - 3. <u>ARM 17.8.106 Source Testing Protocol</u>. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

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

- 4. <u>ARM 17.8.110 Malfunctions</u>. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
- 5. <u>ARM 17.8.111 Circumvention</u>. (1) No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner 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 Standards for Settled Particulate Matter
  - 5. ARM 17.8.223 Ambient Air Quality Standards for PM<sub>10</sub>

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

- C. ARM 17.8, Subchapter 3 Emission Standards, including, but not limited to:
  - 1. <u>ARM 17.8.304 Visible Air Contaminants</u>. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
  - 2. <u>ARM 17.8.308 Particulate Matter, Airborne</u>. (1) This rule requires an opacity limitation of 20% for all fugitive emission sources and reasonable precautions be taken to control emissions of airborne particulate matter (PM). (2) Under this rule, Rockwall 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. <u>ARM 17.8.310 Particulate Matter, Industrial Processes</u>. This rule requires that no person shall cause or allow to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.
  - 5. <u>ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel</u>. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this section.
  - 6. <u>ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products</u>. (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 Standards of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR 60, Standards of Performance for New Stationary Sources (NSPS). The owner or operator of any stationary source or modification, as defined and applied in 40 CFR Part 60, NSPS, shall comply with the standards and provisions of 40 CFR Part 60, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants, indicated that NSPS requirements apply to crushing facilities with capacities greater than 150 tons/hour and was constructed after August 31, 1983. Based on the information submitted by Rockwall, the crushing and screening equipment to be used under Permit #3355-02 is subject to NSPS requirements.

The owner or operator of a diesel generator that is manufactured after April 1, 2006, or modified, or reconstructed after July 11, 2005, shall comply with the standards and provisions of 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

- D. ARM 17.8, Subchapter 5 Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:
  - 1. <u>ARM 17.8.504 Air Quality Permit Application Fees</u>. This rule requires that Rockwall 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. Rockwall submitted the appropriate permit application fee for the current permit action.
  - 2. <u>ARM 17.8.505 Air Quality Operation Fees</u>. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department. This operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

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

- E. ARM 17.8, Subchapter 7 Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:
  - 1. <u>ARM 17.8.740 Definitions</u>. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
  - 2. ARM 17.8.743 Montana Air Quality Permits-When Required. This rule requires a facility to obtain an air quality permit or permit alteration to construct, alter, or use any crusher or screen that has the Potential to Emit (PTE) greater than 15 tons per year of any pollutant. Rockwall has the PTE to emit greater than 15 tons per year of total PM, PM<sub>10</sub>, oxides of nitrogen (NO<sub>X</sub>), carbon monoxide (CO), volatile organic carbons (VOC), and sulfur oxides (SO<sub>X</sub>); therefore, an air quality permit is required.
  - 3. <u>ARM 17.8.744 Montana Air Quality Permits-General Exclusions</u>. This rule identifies the activities that are not subject to the Montana Air Quality Permit Program.
  - 4. <u>ARM 17.8.745 Montana Air Quality Permit-Exclusion for De Minimis Changes</u>. This rule identifies the de minimis changes at permitted facilities that are not subject to the Montana Air Quality Permit Program.

- 5. ARM 17.8.748 New or Modified Emitting Units-Permit Application Requirements. This rule requires that a permit application be submitted prior to installation, modification, or use of a source. Rockwall 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. Rockwall submitted an affidavit of publication of public notice for the May 2, 2007, issue of the *Billings Gazette*, a newspaper of general circulation in the City of Billings, as proof of compliance with the public notice requirements.
- 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. <u>ARM 17.8.752 Emission Control Requirements</u>. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section IV of this permit analysis.
- 8. <u>ARM 17.8.755 Inspection of Permit</u>. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
- 9. <u>ARM 17.8.756 Compliance with Other Requirements</u>. This rule states that nothing in the permit shall be construed as relieving Rockwall of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*.
- 10. <u>ARM 17.8.759 Review of Permit Applications</u>. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
- 11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than one year after the permit is issued.
- 12. <u>ARM 17.8.763 Revocation of Permit</u>. An air quality permit may be revoked upon written request of Rockwall, or for violations of any requirement of the Clean Air Act of Montana (Act), rules adopted under the Clean Air Act of Montana, FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
- 13. <u>ARM 17.8.764 Administrative Amendment to Permit</u>. An air quality permit may be amended for changes in any applicable rules and standards adopted by the

Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.

- 14. 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 one year, the facility will comply with the FCAA and the Act, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.
- F. ARM 17.8, Subchapter 8 Prevention of Significant Deterioration of Air Quality, including, but not limited to:
  - 1. <u>ARM 17.8.801 Definitions</u>. This rule is a list of applicable definitions used in this subchapter.
  - 2. 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 since it is not a listed source, and the facility's potential to emit is less than 250 tons per year (excluding fugitive emissions) of any air pollutant.

- G. ARM 17.8, Subchapter 12 Operating Permit Program Applicability, including, but not limited to:
  - 1. <u>ARM 17.8.1201 Definitions</u>. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
    - a. PTE > 100 tons/year of any pollutant;
    - b. PTE > 10 tons/year of any one Hazardous Air Pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or a 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 #3355-02 for the Rockwall facility, the following conclusions were made:

- a. The facility's PTE is less than 100 tons/year for any pollutant.
- b. The facility's PTE is less than 10 tons/year of any one HAP and less than 25 tons/year of all HAPs.
- c. This source is not located in a serious PM<sub>10</sub> nonattainment area.
- d. This facility is not subject to any current National Emission Standard of Hazardous Air Pollutants (NESHAP) standards.
- e. This facility is subject to current NSPS standards (40 CFR 60, Subpart A General Provisions, and Subpart OOO, Non-Metallic Mineral Processing Plants OOO and 40 CFR 60, Supart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engine).
- f. This source is not a Title IV affected source or a solid waste combustion
- g. This source is not an EPA designated Title V source.

Based on these facts, the Department determined that Rockwall would be a minor source of emissions as defined under Title V. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, Rockwall will be required to obtain a Title V Operating Permit.

- h. ARM 17.8.1204(3). The Department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable limitations, which limit that source's PTE.
  - i. In applying for an exemption under this section, the owner or operator of the source 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.

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

3. ARM 17.8.1207 Certification of Truth, Accuracy, and Completeness. The compliance certification submittal required 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 any new or altered source. Rockwall shall install on the new or altered source the maximum air pollution control capability that is technologically practicable and economically feasible, except that BACT shall be used.

# A. Area Source Fugitive 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 and screening facility operations. These two control methods are water and chemical dust suppressant. Chemical dust suppressant could be used on the area surrounding the operation and for emissions from the 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. Rockwall may, however, use chemical dust suppressant to assist in controlling particulate emissions from the surrounding plant area.

Rockwall shall not cause or authorize to be discharged into the atmosphere from any affected screens, conveyor transfers, or other NSPS affected equipment, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes. Further, Rockwall shall not cause or authorize to be discharged into the atmosphere from any non-NSPS affected equipment, any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.

Rockwall 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. Rockwall 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. Rockwall may also use chemical dust suppression, in order to maintain compliance with emission limitations in Section II.A of Permit #3355-02.

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 and screening operation.

#### B. Diesel Generator

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

The control options required for the proposed crushing and screening facility are comparable to other recently permitted similar sources, and are capable of achieving the appropriate emission standards.

# IV. Emission Inventory

Source*	Tons/Year (TPY)						
	PM	$PM_{10}$	$NO_x$	VOC	CO	$SO_x$	
Crushing (up to 1,800 TPH)	9.46	4.26					
Screening (up to 1,000 TPH)	9.64	3.24					
Material Transfer (6)	3.68	1.21					
Truck Unloading (1)	1.26	0.13					
Pile Forming (3 piles)	42.05	19.71					
Haul Roads	2.54	3.60					
Diesel Generator (up to 1750 kW)	7.02	7.02	98.94	7.88	21.32	6.54	
Total	75.64	39.17	98.94	7.88	21.32	6.54	

<sup>\*</sup>The maximum rated design capacity of the diesel generator is 1750 kW and operation shall not exceed 2,720 hours during any 12-month time period.

Two Crushers (up to 1,800 TPH)

Maximum Process Rate::1800 ton/hrAdjusted Process Rate:1800 ton/hrHours of operation:24.00 hr/day

PM Emissions:

Emission Factor: 0.0012 lb/ton (AP-42, Section 11.19.2-2, 8/04)

 Hourly Calculations:
 0.0012 lb/ton \* 1800 ton/hr =
 2.16 lb/hr

 Daily Calculations:
 2.16 lb/hr \* 24 hr/day =
 51.84 lb/day

 Annual Calculations:
 2.16 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb =
 9.46 ton/yr

8760 hr/yr

8760 hr/yr

PM-10 Emissions:

Emission Factor: 0.00054 lb/ton (AP-42, Section 11.19.2-2, 8/04)

 Hourly Calculations:
 0.00054 lb/ton \* 1800 ton/hr =
 0.97 lb/hr

 Daily Calculations:
 0.972 lb/hr \* 24 hr/day=
 23.33 lb/day

 Annual Calculations:
 0.972 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb =
 4.26 ton/yr

Screen (up to 1,000 TPH)

 Maximum Process Rate:
 1000 ton/hr

 Adjusted Process Rate:
 1000 ton/hr

 Hours of operation:
 24.00 hr/day
 or

PM Emissions:

Emission Factor: 0.0022 lb/ton (AP-42, Section 11.19.2-2, 8/04)

 Hourly Calculations:
 0.0022 lb/ton \* 1000 ton/hr =
 2.20 lb/hr

 Daily Calculations:
 2.2 lb/hr \* 24 hr/day =
 52.80 lb/day

 Annual Calculations:
 2.2 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb =
 9.64 ton/yr

PM-10 Emissions:

Emission Factor: 0.00074 lb/ton (AP-42, Section 11.19.2-2, 8/04)

 Hourly Calculations:
 0.00074 lb/ton \* 1000 ton/hr =
 0.74 lb/hr

 Daily Calculations:
 0.74 lb/hr \* 24 hr/day=
 17.76 lb/day

 Annual Calculations:
 0.74 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb =
 3.24 ton/yr

**Material Transfers** 

Maximum Process Rate: 1000 ton/hr
Adjusted Process Rate: 1000 ton/hr
Number of Material Transfer 6 number of Transfers

Hours of operation: 8760 hr/yr or 24.00 hr/day

PM Emissions:

Emission Factor: 0.00014 lb/ton (AP-42, Section 11.19.2-2, 8/04)

 Hourly Calculations:
 0.00014 lb/ton \* 1000 ton/hr \* 6 number of Transfers=
 0.84 lb/hr

 Daily Calculations:
 0.84 lb/hr \* 24 hr/day=
 20.16 lb/day

 Annual Calculations:
 0.84 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb =
 3.68 ton/yr

PM-10 Emissions:

Emission Factor: 0.000046 lb/ton (AP-42, Section 11.19.2-2, 8/04)

 Hourly Calculations:
 0.000046 lb/ton \* 1000 ton/hr \* 6 number of Transfers =
 0.28 lb/hr

 Daily Calculations:
 0.276 lb/hr \* 24 hr/day=
 6.62 lb/day

 Annual Calculations:
 0.276 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb =
 1.21 ton/yr

**Truck Unloading** 

Maximum Process Rate Adjusted Process Rate: Number of Material Transfer Hours of operation:

1800 ton/hr 1800 ton/hr 1 Load 8760 hr/vr

24.00 hr/day

(AP-42, Section 11.19.2-2, 8/04)

(AP-42, Section 11.19.2-2, 8/04)

(AP-42, Section 13.2.4, 1/95)

PM Emissions:

Emission Factor: Hourly Calculations:

0.00016 lb/ton 0.00016 lb/ton \* 1800 ton/hr \* 1 Load= 0.288 lb/hr \* 24 hr/day= 0.288 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb =

0.29 lb/hr 6.91 lb/day 1.26 ton/yr

PM-10 Emissions:

Emission Factor: Hourly Calculations:

Daily Calculations:

Annual Calculations:

0.000016 lb/ton 0.000016 lb/ton \* 1800 ton/hr \* 1 Load =

0.03 lb/hr 0.69 lb/day

0.0288 lb/hr \* 24 hr/day= 0.0288 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = Daily Calculations: Annual Calculations:

0.13 ton/yr

Pile Forming

Maximum Process Rate Adjusted Process Rate: Number of Piles Hours of operation:

1000 ton/hr 1000 ton/hr 3 Piles 8760 hr/yr

24.00 hr/day

PM Emissions:

Emission Factor: Hourly Calculations: Daily Calculations:

Annual Calculations:

0.0032 lb/ton

0.0032 lb/ton \* 1000 ton/hr \* 3 Piles= 9.6 lb/hr \* 24 hr/day= 9.6 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb =

9.60 lb/hr 230.40 lb/day 42.05 ton/vr

PM-10 Emissions:

Emission Factor:

0.0015 lb/ton (AP-42, Section 13.2.4, 1/95)

or

Hourly Calculations: 0.0015 lb/ton \* 1000 ton/hr \* 3 Piles = Daily Calculations:

4.50 lb/hr 108.00 lb/day 19.71 ton/yr

4.5 lb/hr \* 24 hr/day= 4.5 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = Annual Calculations:

**Haul Roads** 

Vehicle miles traveled:

5 VMT/day

{Estimated}

Control Efficiency is included in Emission Factor

PM Emissions:

PM Emission Factor (Rated Load Capacity <50 tons):

13.90 Lbs/VMT

(AP-42, Section 13.2.2, 12/03)

E(PM)= (5 VMT/day)(13.90 Lbs/VMT)= 69.50 Lbs/day E(PM)= (5 VMT/day)(13.90 Lbs/VMT)\* 0.0005 tons/lb= 0.01 tons/day 2.54 tons/yr E(PM)= 0.00695 tons/day \* 1day/24 hrs \* 8760hrs/year=

PM10 Emissions:

PM10 Emission Factor (Rated Load Capacity <50 tons):

3.95 Lbs/VMT

(AP-42, Section 13.2.2, 12/03)

E(PM)= (5 VMT/day)(3.95 Lbs/VMT)= 19.75 Lbs/day E(PM)= 19.75 Lbs/day \* 1day/24 hrs \* 8760hrs/year \* 0.0005 tons/lb= 3.60 tons/yr

**Diesel Generator (up to 1750 kW)** 

1,750 KW 1.341 150 KW \* 1.341 = 2,346.75 hp

2720 hr/yr Hours of Operation: 7.45 hr/day

PM Emissions

Emission Factor (AP-42 Table 3.3-1,10/96)

2346.75 hp \* 0.0022 lb/hp-hr = 2346.75 hp \* 0.0022 lb/hp-hr \* 7.45 hr/day = 2346.75 hp \* 0.0022 lb/hp-hr \* 2720 hr/yr \* 0.0005 tons/lb = Hourly Calculations 5.16 lb/hr Daily Calculations 38.46 lb/day Annual Calculations 7.02 ton/yr

PM-10 Emissions:

Emission Factor 0.0022 lb/hp-hr (AP-42 Table 3.3-1,10/96) Hourly Calculations

2346.75 hp \* 0.0022 lb/hp-hr = 2346.75 hp \* 0.0022 lb/hp-hr \* 7.45 hr/day = 2346.75 hp \* 0.0022 lb/hp-hr \* 7.270 hr/yr \* 0.0005 tons/lb = 5.16 lb/hr Daily Calculations 38.46 lb/day Annual Calculations 7.02 ton/yr

NOx Emissions:

Emission Factor (AP-42 Table 3.3-1.10/96) 0.031 lb/hp-hr

2346.75 hp \* 0.031 lb/hp-hr = 2346.75 hp \* 0.031 lb/hp-hr \* 7.45 hr/day = 2346.75 hp \* 0.031 lb/hp-hr \* 2720 hr/yr \* 0.0005 tons/lb = Hourly Calculations 72.75 lb/hr Daily Calculations 541.98 lb/day Annual Calculations 98.94 ton/vr

VOC Emiss	sions:			
	Emission Factor	0.00247 lb/hp-hr	(AP-42 Table 3.3-1,10/96)	
	Hourly Calculations	2346.75 hp * 0.00247 lb/hp-hr =		5.80 lb/hr
	Daily Calculations	2346.75 hp * 0.00247 lb/hp-hr * 7.45 hr/day =		43.18 lb/day
	Annual Calculations	2346.75 hp * 0.00247 lb/hp-hr * 2720 hr/yr * 0.0005 ton	s/lb =	7.88 ton/yr
CO Emissio	ons:			
	Emission Factor	0.00668 lb/hp-hr	(AP-42 Table 3.3-1,10/96)	
	Hourly Calculations	2346.75 hp * 0.00668 lb/hp-hr =		15.68 lb/hr
	Daily Calculations	2346.75 hp * 0.00668 lb/hp-hr * 7.45 hr/day =		116.79 lb/day
	Annual Calculations	2346.75 hp * 0.00668 lb/hp-hr * 2720 hr/yr * 0.0005 ton	s/lb =	21.32 ton/yr
SOx Emiss	sions:			
	Emission Factor	0.00205 lb/hp-hr	(AP-42 Table 3.3-1,10/96)	
	Hourly Calculations	2346.75 hp * 0.00205 lb/hp-hr =		4.81 lb/hr
	Daily Calculations	2346.75 hp * 0.00205 lb/hp-hr * 7.45 hr/day =		35.84 lb/day
	Annual Calculations	2346.75 hp * 0.00205 lb/hp-hr * 2720 hr/yr * 0.0005 ton	s/lb =	6.54 ton/yr

# V. Existing Air Quality

Permit #3355-02 is issued for a portable crushing and screening facility to operate at various locations throughout Montana. This facility would be allowed to operate at this proposed site and any other areas designated as attainment or unclassified for all National Ambient Air Quality Standards (NAAQS); excluding those counties that have a Department approved permitting program, or those areas considered Tribal Lands. A Missoula County air quality permit would be required for locations within Missoula County, Montana.

Addendum #1 and Permit #3355-02 apply to Rockwall's crushing and screening facility while operating at any location in or within 10 km of  $PM_{10}$  nonattainment areas during the summer months (April 1 – September 30) and at sites approved by the Department during the winter months (October 1 – March 31).

# VI. Air Quality Impacts

Based on the information provided and the conditions established in Permit #3355-02, the Department believes that the amount of controlled emissions generated by this facility will not exceed any ambient air quality standard established for any of Montana's attainment or unclassified ambient air quality areas. Additionally, the limitations and conditions established in Addendum #1 would further reduce the facility emissions generated while operating at locations in or within 10 km of  $PM_{10}$  nonattainment areas and would also be protective of corresponding ambient air quality standards. In addition, this source is portable and any air quality impacts will be minimal.

## VII. Taking or Damaging Implication Analysis

As required by 2-10-101 through 105, MCA, the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

#### VIII. Environmental Assessment

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

Addendum #1 Rockwall, Inc. Permit #3355-02

An addendum to air quality Permit #3355-02 is hereby granted to Rockwall, Inc. (Rockwall), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.765, as amended, for the following:

# I. Permitted Equipment

Rockwall, operates a portable crushing and screening facility consisting of two crushers (with a combined capacity up to 1,800 tons per hour (TPH)), one screen (capacity up to 1,000 TPH), a diesel generator (capacity up to 1750 kilowatts (kW)), and associated equipment.

#### II. Seasonal and Site Restrictions

Addendum #1 and Permit #3355-02 apply to the Rockwall facility while operating at any location in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less ( $PM_{10}$ ) nonattainment areas. Additionally, seasonal and site restrictions apply to the facility as follows:

- A. During the winter season (October 1– March 31), the only location in or within 10 km of PM<sub>10</sub> nonattainment area where Rockwall may operate is at site(s) approved, in writing, by the Department of Environmental Quality (Department).
- B. During the summer season (April 1– September 30), Rockwall may operate at any location in or within 10 km of the Libby, Thompson Falls, Kalispell, Whitefish, Columbia Falls, and Butte PM<sub>10</sub> nonattainment areas.
- C. Rockwall shall comply with the limitations and conditions contained in Addendum #1 to Permit #3355-02 while operating in or within 10 km of any of the previously listed PM<sub>10</sub> nonattainment areas. Addendum #1 shall be valid until revoked or modified. The Department reserves the authority to modify Addendum #1 at any time based on local conditions of any future site. These conditions may include, but are not limited to, local terrain, meteorological conditions, proximity to residences or other businesses, etc.

## III. Conditions and Limitations

## A. Operational Limitations and Conditions – Summer Season

- 1. All visible emissions from any crushing and screening plant shall not exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).
- 2. All visible emissions from any equipment, such as transfer points, shall not exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749 and 40 CFR 60, Subpart OOO).
- 3. 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 III.A.1, and III.A.2 (ARM 17.8.749).
- 4. Rockwall shall not cause or authorize to be discharged into the atmosphere from any haul roads, access roads, parking lot or general plant property any visible fugitive emissions that exihibit an opacity of 10% or greater (ARM 17.8.749).

- 5. Rockwall 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 10% opacity limitation in Section III.A.4 (ARM 17.8.749).
- 6. Rockwall shall operate up to two crushers and the combined maximum rated design capacity shall not exceed 1,800 TPH (ARM 17.8.749).
- 7. Crushing production shall not exceed 43,200 tons during any rolling 24-hour time period (ARM 17.48.749).
- 8. Rockwall shall operate one screen and the maximum rated design capacity shall not exceed 1,000 TPH (ARM 17.8.749).
- 9. Screening production shall not exceed 24,000 tons during any 24-hour time period (ARM 17.48.749).
- 10. Rockwall shall operate one diesel generator and the maximum rated design capacity shall not exceed 1750 kW (ARM 17.8.749).
- 11. Operation of the diesel-fired generator shall not exceed 2,720 hours during 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 Rockwall, 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).
- B. Operational Limitations and Conditions Winter Season
  - 1. All visible emissions from any crushing and screening plant shall not exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).
  - 2. All visible emissions from any equipment, such as transfer points, shall not exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749 and 40 CFR, Subpart OOO).
  - 3. 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 III.B.1, and III.B.2 (ARM 17.8.749).
  - 4. Rockwall shall not cause or authorize to be discharged into the atmosphere from any haul roads, access roads, parking lot or general plant property any visible fugitive emissions that exhibit an opacity of 10% or greater (ARM 17.8.749).
  - 5. Rockwall 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 10% opacity limitation in Section III.B.4 (ARM 17.8.749).
  - 6. Rockwall shall operate one crusher with a maximum rated design capacity up to 1,000 TPH (ARM 17.8.749).

- 7. Crushing production shall not exceed 7,450 tons during any rolling 24-hour time period (ARM 17.48.749).
- 8. Rockwall shall operate one screen with a maximum rated design capacity up to 1,000 TPH (ARM 17.8.749).
- 9. Screening production shall not exceed 7,450 tons during any rolling 24-hour time period (ARM 17.48.749).
- 10. Rockwall shall operate one diesel generator and the maximum rated design capacity shall not exceed 1750 kW (ARM 17.8.749).
- 11. The hours of operation of the diesel-fired generator shall not exceed 7.45 hours during any rolling 24-hour time period (ARM 17.8.749).
- 12. If the permitted equipment is used in conjunction with any other equipment owned or operated by Rockwall, 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).

# C. Operational Reporting Requirements

- 1. Rockwall shall provide the Department with written notification of job completion within 10 days of job completion (ARM 17.8.749).
- 2. Rockwall shall provide the Department with written notice of relocation of the permitted equipment within 15 days of physical transfer of equipment (ARM 17.8.765).
- 3. Production information for the sites covered by this addendum must be submitted to the Department with the annual emissions inventory request or within 30 days of completion of the project. The information must include the following (ARM 17.8.749):
  - a. Tons of gravel crushed by each crusher at each site;
  - b. Tons of material screened by each screen at each site;
  - c. Tons of bulk material loaded at each site;
  - d. Daily hours of operation at each site;
  - e. Gallons of diesel used by the generator at each site;
  - f. Fugitive dust information consisting of all plant vehicles, including the following for each vehicle type:
    - i. Number of vehicles;
    - ii. Vehicle type;
    - iii. Vehicle weight, loaded;
    - iv. Vehicle weight, unloaded;
    - v. Number of tires on vehicle;

- vi. Average trip length;
- vii. Number of trips per day per vehicle;
- viii. Average vehicle speed;
- ix. Area of activity; and
- x. Vehicle fuel usage (gasoline and diesel) annual total.
- g. Fugitive dust control for haul roads and general plant area:
  - i. Hours of operation of water trucks; and
  - ii. Application schedule for chemical dust suppressant, if applicable.
- 4. Rockwall shall document, by day, the total crushing production during the winter season. Rockwall shall sum the combined total crushing production during the previous 24 hours to verify compliance with the limitation in Section III.B.7. A written report of compliance verification and the emissions inventory shall be submitted to the Department annually. The report for the previous calendar year shall be submitted along with the annual emission inventory (ARM 17.8.749).
- 5. Rockwall shall document, by day, the total screening production during the winter season. Rockwall shall sum the combined total screening production during the previous 24 hours to verify compliance with the limitation in Section III.B.9. A written report of compliance verification and the emissions inventory shall be submitted to the Department annually. The report for the previous calendar year shall be submitted along with the annual emission inventory (ARM 17.8.749).
- 6. Rockwall shall document, by day, the hours of operation of the diesel generator during the winter months. Rockwall shall total the hours of operation of the diesel generator during the previous 24 hours to verify compliance with the limitation in Section III.B.11. A written report of compliance and the emissions inventory shall be submitted to the Department annually. The report for the previous calendar year shall be submitted along with the annual emissions inventory (ARM 17.8.749).

# Addendum #1 Analysis Rockwall, Inc. Permit #3355-02

# I. Permitted Equipment

Rockwall, Inc. (Rockwall) operates a portable crushing and screening facility consisting of two crushers (combined capacity up to 1800 tons per hour (TPH)), one screen (up to 1000 TPH), a diesel generator (up to 1750 kilowatts (kW)), and associated equipment. Addendum #1 and Permit #3355-02 apply to Rockwall while operating at any location in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>) nonattainment areas.

# II. Source Description

Rockwall proposes to use this crushing and screening facility to crush and sort: sand, gravel, concrete and asphalt for use in various construction operations. For a typical operational setup, materials are crushed, conveyed to the screen where materials are separated by size. Once material is screened it is either conveyed to stockpile or conveyed back to the crusher for further processing. Finally, material is separated by size and sent to stockpile for sale or use at various construction sites.

# III. Applicable Rules and Regulations

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

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

- A. <u>ARM 17.8.749 Conditions for Issuance of Permit</u>. This rule requires that the source demonstrate compliance with applicable rules and standards before a permit can be issued. Also, a permit may be issued with conditions as are necessary to assure compliance with all applicable rules and standards. Rockwall demonstrated compliance with all applicable rules and standards as required for permit issuance.
- B. <u>ARM 17.8.764 Modification of Permit</u>. An air quality permit may be modified 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 which do not result in an increase in emissions because of the changed conditions. A source may not increase its emissions beyond those found in its permit unless the source applies for and receives another permit.
- C. <u>ARM 17.8.765 Transfer of Permit</u>. An air quality permit may be transferred from one location to another if:
  - 1. Written notice of Intent to Transfer location and proof of public notice are sent to the Department at least 15 days prior to the move;
  - 2. The source will operate in the new location for a period of less than 1 year; and
  - 3. The source will not have any significant impact on any nonattainment area or any

#### Class I area.

Rockwall must submit proof of compliance with the transfer and public notice requirements, when transferring to the location(s) covered by this addendum, and will only be allowed to stay in the new location for a period of less than one year. Also, the conditions and limitations of Addendum #1 to Permit #3355-02 will prevent Rockwall from having a significant impact on  $PM_{10}$  nonattainment areas.

## IV. Emission Inventory

Summer Season	Lbs/Day					
Source	PM	$PM_{10}$	$NO_x$	VOC	CO	$SO_x$
Two crushers (up to 1,800 TPH)	51.84	23.33				
One screen (up to 1,000 TPH)	52.80	17.76				
Material Transfers (6)	20.16	6.62				
Pile Forming (3 piles)	230.40	108.00				
Bulk Loading (1)	6.91	0.69				
Diesel Generator (up to 1750 kW)*	123.91	123.91	1745.98	139.12	376.23	115.46
Haul Roads	69.50	19.75				
Total	555.52	300.96	1745.98	139.12	376.23	115.46

For summer season, see Emission Inventory in Permit Analysis. \*The maximum rated design capacity of the diesel generator is 1750 kW and operation shall not exceed 2,720 hours per year.

Winter Season	Lbs/Day					
Source	PM	$PM_{10}$	$NO_x$	VOC	CO	$SO_x$
One crusher (up to 1000 TPH)*	8.94	4.02				
One screen (up to 1000 TPH)	16.39	5.51				
Material Transfer (5)	1.19	0.12				
Pile Forming (2 piles)	5.22	1.71				
Bulk Loading (1)	47.68	22.35				
Diesel Generator (up to 1750 kW)*	38.46	38.46	541.98	43.18	116.79	35.84
Haul Roads	21.57	6.13				
Total	139.45	78.31	541.98	43.18	116.79	35.84

<sup>\*</sup>During the winter season, Rockwall may only operate one crusher (up to 1000 TPH). In addition, the maximum rated design capacity of the diesel generator must not exceed 1750 kW and operation shall not exceed 7.45 hours during any 24-hour time period.

## Crusher (up to 1000 TPH)

Maximum Process Rate:: 1000 ton/hr
Adjusted Process Rate: 1000 ton/hr

Hours of operation: 7.45 hr/day or 2720 hr/yr

PM Emissions:

Emission Factor: 0.0012 lb/ton (AP-42, Section 11.19.2-2, 8/04)

Hourly Calculations: 0.0012 lb/ton \* 1000 ton/hr = 1.20 lb/hr Daily Calculations: 1.2 lb/hr \* 7.45 hr/day = 8.94 lb/day Annual Calculations: 1.2 lb/hr \* 2720 hr/yr \* 0.0005 ton/lb = 1.63 ton/yr

PM-10 Emissions:

Emission Factor: 0.00054 lb/ton (AP-42, Section 11.19.2-2, 8/04)

 Hourly Calculations:
 0.00054 lb/ton \* 1000 ton/hr =
 0.54 lb/hr

 Daily Calculations:
 0.54 lb/hr \* 7.45 hr/day=
 4.02 lb/day

 Annual Calculations:
 0.54 lb/hr \* 2720 hr/yr \* 0.0005 ton/lb =
 0.73 ton/yr

## Screen (up to 1000 TPH)

Maximum Process Rate: 1000 ton/hr
Adjusted Process Rate: 1000 ton/hr

Hours of operation: 7.45 hr/day or 2720 hr/yr

PM Emissions:

Emission Factor: 0.0022 lb/ton (AP-42, Section 11.19.2-2, 8/04)

 Hourly Calculations:
 0.0022 lb/ton \* 1000 ton/hr =
 2.20 lb/hr

 Daily Calculations:
 2.2 lb/hr \* 7.45 hr/day =
 16.39 lb/day

 Annual Calculations:
 2.2 lb/hr \* 2720 hr/yr \* 0.0005 ton/lb =
 2.99 ton/yr

PM-10 Emissions:

Emission Factor: 0.00074 lb/ton (AP-42, Section 11.19.2-2, 8/04)

 Hourly Calculations:
 0.00074 lb/ton \* 1000 ton/hr =
 0.74 lb/hr

 Daily Calculations:
 0.74 lb/hr \* 7.45 hr/day=
 5.51 lb/day

 Annual Calculations:
 0.74 lb/hr \* 2720 hr/yr \* 0.0005 ton/lb =
 1.01 ton/yr

**Material Transfers** 

Maximum Process Rate: 1000 ton/hr Adjusted Process Rate: 1000 ton/hr

Number of Material Transfer 5 number of Transfers

Hours of operation: 2720 hr/yr or 7.45 hr/day

PM Emissions:

Emission Factor: 0.00014 lb/ton (AP-42, Section 11.19.2-2, 8/04)

 Hourly Calculations:
 0.00014 lb/ton \* 1000 ton/hr \* 5 number of Transfers=
 0.70 lb/hr

 Daily Calculations:
 0.7 lb/hr \* 7.45 hr/day=
 5.22 lb/day

 Annual Calculations:
 0.7 lb/hr \* 2720 hr/yr \* 0.0005 ton/lb =
 0.95 ton/yr

PM-10 Emissions:

Emission Factor: 0.000046 lb/ton (AP-42, Section 11.19.2-2, 8/04)

 Hourly Calculations:
 0.000046 lb/ton \* 1000 ton/hr \* 5 number of Transfers =
 0.23 lb/hr

 Daily Calculations:
 0.23 lb/hr \* 7.45 hr/day=
 1.71 lb/day

 Annual Calculations:
 0.23 lb/hr \* 2720 hr/yr \* 0.0005 ton/lb =
 0.31 ton/yr

Pile Forming

Maximum Process Rate: 1000 ton/hr
Adjusted Process Rate: 1000 ton/hr
Number of Piles 2 Piles

Hours of operation: 2720 hr/yr or 7.45 hr/day

PM Emissions:

Emission Factor: 0.0032 lb/ton (AP-42, Section 13.2.4, 1/95)

 Hourly Calculations:
 0.0032 lb/ton \* 1000 ton/hr \* 2 Piles=
 6.40 lb/hr

 Daily Calculations:
 6.4 lb/hr \* 7.45 hr/day=
 47.68 lb/day

 Annual Calculations:
 6.4 lb/hr \* 2720 hr/yr \* 0.0005 ton/lb =
 8.70 ton/yr

PM-10 Emissions:

Emission Factor: 0.0015 lb/ton (AP-42, Section 13.2.4, 1/95)

 Hourly Calculations:
 0.0015 lb/ton \* 1000 ton/hr \* 2 Piles =
 3.00 lb/hr

 Daily Calculations:
 3 lb/hr \* 7.45 hr/day=
 22.35 lb/day

 Annual Calculations:
 3 lb/hr \* 2720 hr/yr \* 0.0005 ton/lb =
 4.08 ton/yr

**Bulk Loading** 

 Maximum Process Rate:
 1000 ton/hr

 Adjusted Process Rate:
 1000 ton/hr

 Number of Material Transfer
 1 Load

Hours of operation: 2720 hr/yr or 7.45 hr/day

PM Emissions:

Emission Factor: 0.00016 lb/ton (AP-42, Section 11.19.2-2, 8/04)

 Hourly Calculations:
 0.00016 lb/ton \* 1000 ton/hr \* 1 Load=
 0.16 lb/hr

 Daily Calculations:
 0.16 lb/hr \* 7.45 hr/day=
 1.19 lb/day

 Annual Calculations:
 0.16 lb/hr \* 2720 hr/yr \* 0.0005 ton/lb =
 0.22 ton/yr

PM-10 Emissions:

Emission Factor: 0.000016 lb/ton (AP-42, Section 11.19.2-2, 8/04)

 Hourly Calculations:
 0.000016 lb/ton \* 1000 ton/hr \* 1 Load =
 0.02 lb/hr

 Daily Calculations:
 0.016 lb/hr \* 7.45 hr/day =
 0.12 lb/day

 Annual Calculations:
 0.016 lb/hr \* 2720 hr/yr \* 0.0005 ton/lb =
 0.02 ton/yr

**Diesel Generator** 

1 750 KW 0.55 Generator Size = 1KW = 1.341 150 KW \* 1.341 = 2,346.75 hp Hours of Operation: 2720 hr/yr or 7.45 hr/day PM Emissions: Emission Factor 0.0022 lb/hp-hr (AP-42 Table 3.3-1,10/96) Hourly Calculations 2346.75 hp \* 0.0022 lb/hp-hr = 5.16 lb/hr 2346.75 hp \* 0.0022 lb/hp-hr \* 7.45 hr/day = Daily Calculations 38.46 lb/day **Annual Calculations** 2346.75 hp \* 0.0022 lb/hp-hr \* 2720 hr/yr \* 0.0005 tons/lb = 7.02 ton/yr PM-10 Emissions: **Emission Factor** 0.0022 lb/hp-hr (AP-42 Table 3.3-1,10/96) 5.16 lb/hr **Hourly Calculations** 2346.75 hp \* 0.0022 lb/hp-hr =Daily Calculations 2346.75 hp \* 0.0022 lb/hp-hr \* 7.45 hr/day = 38.46 lb/day 2346.75 hp \* 0.0022 lb/hp-hr \* 2720 hr/yr \* 0.0005 tons/lb = Annual Calculations 7.02 ton/yr NOx Emissions: **Emission Factor** 0.031 lb/hp-hr (AP-42 Table 3.3-1,10/96) Hourly Calculations 2346.75 hp \* 0.031 lb/hp-hr =72.75 lb/hr Daily Calculations 2346.75 hp \* 0.031 lb/hp-hr \* 7.45 hr/day =541 98 lb/day 2346.75 hp \* 0.031 lb/hp-hr \* 2720 hr/yr \* 0.0005 tons/lb = Annual Calculations 98.94 ton/yr VOC Emissions: (AP-42 Table 3.3-1,10/96) **Emission Factor** 0.00247 lb/hp-hr 2346.75 hp \* 0.00247 lb/hp-hr = Hourly Calculations 5.80 lb/hr 2346.75 hp \* 0.00247 lb/hp-hr \* 7.45 hr/day =Daily Calculations 43.18 lb/day Annual Calculations 2346.75 hp \* 0.00247 lb/hp-hr \* 2720 hr/yr \* 0.0005 tons/lb = 7.88 ton/yr CO Emissions: **Emission Factor** 0.00668 lb/hp-hr (AP-42 Table 3.3-1,10/96) Hourly Calculations 2346.75 hp \* 0.00668 lb/hp-hr =15.68 lb/hr Daily Calculations 2346.75 hp \* 0.00668 lb/hp-hr \* 7.45 hr/day = 116.79 lb/day 2346.75 hp \* 0.00668 lb/hp-hr \* 2720 hr/yr \* 0.0005 tons/lb = Annual Calculations 21.32 ton/yr SOx Emissions: **Emission Factor** 0.00205 lb/hp-hr (AP-42 Table 3.3-1,10/96) Hourly Calculations 2346.75 hp \* 0.00205 lb/hp-hr = 4.81 lb/hr 2346.75 hp \* 0.00205 lb/hp-hr \* 7.45 hr/day = 35.84 lb/day Daily Calculations Annual Calculations 2346.75 hp \* 0.00205 lb/hp-hr \* 2720 hr/yr \* 0.0005 tons/lb = 6.54 ton/yr **Haul Roads** Vehicle miles traveled: 5 VMT/day {Estimated} Control Efficiency is included in Emission Factor PM Emission Factor (Rated Load Capacity <50 tons): 13.90 Lbs/VMT (AP-42, Section 13.2.2, 12/03) E(PM)= (5 VMT/day)(13.90 Lbs/VMT)\* 7.45 hr/day/24 hr 21.57 Lbs/day E(PM)= (5 VMT/day)(13.90 Lbs/VMT)\* 0.0005 tons/lb= 0.01 tons/day E(PM)= 0.00695 tons/day \* 1day/7.45 hrs \* 2720hrs/yea 2.54 tons/yr PM10 Emissions: PM10 Emission Factor (Rated Load Capacity <50 tons): 3.95 Lbs/VMT (AP-42, Section 13.2.2, 12/03)

## V. Existing Air Quality

E(PM)= 6.13 Lbs/day \* 0.0005 tons/lb =

E(PM10)= (5 VMT/day)(3.95 Lbs/VMT) \* 7.45 hr/day/24 hrs/day

E(PM)= 2.6510067114094 tons/day \* 1day/7.45 hrs \* 2720hrs/yea

Permit #3355-02 is issued for a portable crushing and screening facility to operate at various locations throughout Montana. This facility would be allowed to operate at this proposed site and any other areas designated as attainment or unclassified for all National Ambient Air Quality Standards (NAAQS); excluding those counties that have a Department approved permitting program, or those areas considered Tribal Lands. A Missoula County air quality permit would be required for locations within Missoula County, Montana.

6.13 Lbs/day

0.15 tons/yr

2.7 tons/day

Addendum #1 and Permit #3355-02 apply to Rockwall's crushing and screening facility while operating at any location in or within 10 km of  $PM_{10}$  nonattainment areas during the summer months (April 1 – September 30) and at sites approved by the Department during the winter months (October 1 – March 31).

# VI. Air Quality Impacts

This permit is for a portable crushing and screening facility to be located at various locations around Montana. Permit #3355-02 and Addendum #1 contain operating 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 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 2-10-101 through 105, Montana Code Annotated (MCA), the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

#### VIII. 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: Rockwall, Inc.

P.O. Box 519

Airway Heights, WA 99001

Air Quality Permit number: 3355-02

Preliminary Determination Issued: 06/21/07

Department Decision Issued: 7/24/07

Permit Final: 8/9/07

1. Legal Description of Site: Rockwall would operate a portable crushing and screening operation located in Section 15, Township 1 South, Range 25 East in Yellowstone County, Montana. Permit #3355-02 would apply while operating at any location in Montana except those areas having a Department-approved permitting program, or areas considered tribal lands.

Addendum #1 and Permit #3355-02 would apply to the Rockwall crushing and screening facility while operating at any location in or within 10 km of certain  $PM_{10}$  nonattainment areas during the summer months (April 1 – September 30) and at sites approved by the Department during the winter months (October 1 – March 31).

- 2. Description of Project: Rockwall would operate a portable crushing and screening facility at various locations throughout Montana. This permit would allow Rockwall to add a secondary crusher (up to 800 TPH), and to modify the existing generator size from 1500 kW to 1750 kW in addition to the existing permitted equipment. A complete list of the permitted equipment is contained in Section I.A. of the Permit Analysis.
- 3. *Objectives of Project:* The objective of this project would be to produce additional business and revenue for Rockwall through the sale and use of aggregate. The issuance of the permit would allow Rockwall to operate the permitted equipment at various locations throughout Montana.
- 4. Alternatives Considered: In addition to the proposed action, the 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 Rockwall has demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.
- 5. *A Listing of Mitigation, Stipulations, and Other Controls:* A list of enforceable conditions, including a BACT analysis, would be included in Permit #3355-02.
- 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
В	Water Quality, Quantity, and Distribution			X			Yes
С	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
Н	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

Impacts on terrestrials and aquatic life could result from storm water runoff and pollutant deposition, but such impacts would be minor because the crushing and screening facility would be considered a minor source of emissions and would have intermittent and seasonal operations. Furthermore, the air emissions would have only minor effects on terrestrial and aquatic life because facility emissions would have good pollutant dispersion in the area of operations (see section 7.F). 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

Water would be required for dust suppression on the surrounding roadways, at areas of operation, and pollution control for equipment operations. Pollutant deposition and water use could cause minor impacts to water resources in these areas. However, the benefits of using water to control emissions far outweigh the potential minor impacts to water resources. Overall, the facility is small, with seasonal and intermittent operations, and only a small volume of water would be used. Therefore, the impacts to water quality, quantity and distribution would be minor.

#### C. Geology and Soil Quality, Stability and Moisture

The proposed project would be located at an existing gravel pit and would have minor impacts on geology, soil quality, stability, and moisture of soils. Minor impacts from deposition of air pollutants on soils would result and minor amounts of water would be used for pollution control of particulate emissions. Since, a small amount of pollution would be generated and corresponding emissions would be widely dispersed before settling upon vegetation and surrounding soils (as described in Section 7.D of this EA), impacts would be minor. Overall the facility is small, with seasonal and intermittent operations, and only a small volume of water would be used. Any effects upon geology and soil quality, stability, and moisture from air pollutant emissions from equipment and operation would be minor and short-term.

## D. Vegetation Cover, Quantity, and Quality

The crushing and screening facility would be considered a minor source of emissions by industrial standards and would typically operate in remote areas previously designated and used for this type of operation. According to the Montana Natural Heritage Program (MNHP) there are not any sensitive plants near or within the project area. Therefore, the Department believes water use at the facility, soil disturbance from water application, and the associated runoff would be minimal; and impacts to vegetation from the project would be minor.

#### E. Aesthetics

Permit #3355-02 would include conditions to control emissions including visible emissions from the operation. The crushing and screening facility would be portable, would operate on an intermittent and seasonal basis, and would be considered a small industrial source. Typically, the crushing and screening facility would be located near other gravel pit operations and any visual and noise impacts would be minor and short-lived.

# F. Air Quality

Air quality impacts from the proposed project would be minor because the facility would operate on an intermittent basis. Permit #3355-02 would include conditions limiting the facility's opacity, as well as a condition requiring water spray bars and other means to control air pollution. The permit would be limited to total emissions from the facility and any additional equipment operated at the site to 250 tons per year or less, excluding fugitive emissions.

Further, the Department determined that the crushing and screening facility would be a minor source of emissions as defined under the Title V Operating Permit Program because the source's PTE would be below the major source threshold level of 100 tons per year for any regulated pollutant. Additional pollutant deposition from the project would be minimal because the pollutants emitted would be well controlled, widely dispersed (from factors such as wind speed and wind direction), and would have minimal deposition on the surrounding area. Therefore, air quality impacts from the project in this area would be minor.

## 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 area of operation contacted the Montana Natural Heritage Program (MNHP). Search results concluded there are two sensitive species within one mile of the facility, including: the Spotted Bat and the Townsend's Big-eared Bat. However, given the fact that all species of concern are located outside of the project area, and the seasonal and portable nature of the crushing and screening facility, any effects would be minimal.

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

The proposed crushing and screening facility would require the use of water, air, and energy for the project. Only a minimal volume of water would be required for dust suppression of emissions for the crushing and screening facility. Because the source would be considered a minor industrial source of emissions, with intermittent and seasonal operations, impacts to air resources would be minor. Energy requirements would be relatively small, as the facility would be powered by an industrial diesel engine. Therefore, impacts to water, air, and energy resources would 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 archaeological sites that may be present in the proposed area of construction and operation. Search results concluded that there are no previously recorded sites; however, this does not mean that they do not exist. If cultural materials are inadvertently discovered during the project, Rockwall should contact SHPO. The Department has determined that no impacts upon historical or archaeological sites would be expected as a result of operating the proposed crushing and screening facility.

## J. Cumulative and Secondary Impacts

The crushing and screening facility would cause minor cumulative or secondary impacts to the physical and biological aspects of the human environment because the equipment would generate relatively small amounts of emissions of PM,  $PM_{10}$ ,  $NO_x$ , CO, VOC, and  $SO_x$ . Emissions and noise generated from the equipment would, at most, result in only minor impacts to the area of operations because the plant would be relatively small, seasonal, and temporary. The proposed project would be short-term in nature, and have minor cumulative effects upon resources within the area. Overall, cumulative and secondary impacts to the physical and biological aspects of the human environment would be minor.

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

	***************************************	atternative was discussed previously.					
		Major	Moderate	Minor	None	Unknown	Comments Included
Α	Social Structures and Mores				X		Yes
В	Cultural Uniqueness and Diversity				X		Yes
С	Local and State Tax Base and Tax Revenue			X			Yes
D	Agricultural or Industrial Production			X			Yes
Е	Human Health			X			Yes
F	Access to and Quality of Recreational and Wilderness Activities			X			Yes
G	Quantity and Distribution of Employment			X			Yes
Н	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 not cause any additional disruption to the social structures and mores in the area because it is an existing gravel pit. Rockwall would be considered a minor industrial source of emissions, and would only have temporary and intermittent operations. Further, the plant would be required to operate according to the conditions placed on Permit #3355-02 and Addendum #1 that

would limit the effects to social structures and mores.

## B. Cultural Uniqueness and Diversity

The facility is located on private land and predominant use of the area would remain the same. The cultural uniqueness and diversity of this area would not change as a result of this proposed project because they plan to operate in an existing gravel pit. The facility would be a portable source, with seasonal and intermittent operations; and therefore, the cultural uniqueness and diversity of the area would not be affected.

#### C. Local and State Tax Base and Tax Revenue

The proposed project would result in minor, if any, impacts to the local and state tax base, and tax revenue because the proposed project would require few additional employees. In addition, only minor amounts of construction would be required to complete the project, and the facility would be a minor industrial source of emissions with seasonal and intermittent operations. There will be a slight increase in employment as a result of this project, but the Department does not anticipate an increase in people moving to the area. Therefore, effect to the local and State tax base and tax revenue will be minor.

## D. Agricultural or Industrial Production

The proposed project would have a minor impact on local industrial production since the facility would increase aggregate production and air emissions slightly. The facility would be located on land that is currently being mined, by others. Because minimal deposition of air pollutants would occur on the surrounding land, only minor and temporary effects on the surrounding vegetation or 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. Therefore, impacts to agricultural and industrial production from the crushing and screening facility would be minor.

#### E. Human Health

Conditions would be incorporated into Permit #3355-02 and Addendum #1 to ensure that the crushing and screening 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. Air emissions from this project would be minimized by the use of water spray. Further, the facility would operate on an intermittent and seasonal basis and only minor impacts would be expected on human health from the proposed facility.

### F. Access to and Quality of Recreational and Wilderness Activities

Access to recreational opportunities would not be limited by this facility. Any recreational opportunities, if available in the area, would still be accessible. Noise from the facility would be minimal to surroundings because of the facility size, hours of operation, and location. The facility would operate on a seasonal and intermittent basis and would be considered a minor industrial source of emissions. Therefore, any changes in the quality of recreational and wilderness activities created by operating the equipment at this site would be minor.

## G. Quantity and Distribution of Employment

The portable crushing and screening facility would be relatively small. As proposed, Rockwall would employ approximately 10 additional people which would have minor impact to area employment. In addition, the crushing and screening operation is considered portable, and would have seasonal and intermittent operations. Therefore, the project would have minor effects upon the

quantity and distribution of employment in this area.

# H. Distribution of Population

The crushing and screening facility would be small, with few additional employees. The Department believes that few individuals, if any, would relocate to the area of operation as a result of the project. Therefore, the facility would have minor impacts to the normal population distribution in the area of operation, or any future operating site.

#### I. Demands for Government Services

There would be a minimal increase in traffic in the area from the proposed project because Rockwall would hire few additional employees for the site. Government services would be required for acquiring the appropriate permits for the proposed project and to verify compliance with the permits that would be issued. Therefore, demands for government services would be minor due to the relatively small size and seasonal nature of the crushing and screening facility.

## J. Industrial and Commercial Activity

The proposed project would represent only a minor increase in the industrial activity in the proposed area of operation because the facility would continue to be a small industrial source, portable and temporary in nature. Therefore, any impacts to the industrial and commercial activity would be minor.

# K. Locally Adopted Environmental Plans and Goals

Rockwall would be allowed by Permit #3355-02 to operate in areas designated by EPA as attainment or unclassified for ambient air quality. Addendum #1 outlines limitations and conditions for operation of the crushing and screening facility in or within 10 km of a PM<sub>10</sub> nonattainment area. Permit #3355-02 would contain opacity limits for protecting air quality and to keep facility emissions in compliance with applicable ambient air quality standards. Because the facility is small and portable, any impacts from the project would be minor and short-lived.

## L. Cumulative and Secondary Impacts

Overall, the proposed project would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area of operation because the source would continue to be portable, intermittent and temporary in nature. Any increase in traffic would have minor effects on local traffic in the immediate area.

This facility may be operated in conjunction with other equipment owned and operated by Rockwall, but any cumulative impacts or secondary impacts would be minor and short-term. In conclusion, the source is relatively small, the facility emissions will be minimal, and the project would have only minor cumulative and secondary impacts.

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

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is to operate a portable crushing and screening facility. Permit #3355-02 and Addendum #1 include conditions and limitations to ensure the facility will operate in compliance with all applicable rules and regulations. In addition, there are no significant impacts associated with this proposal.

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

Natural Heritage Program

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

EA prepared by: Jenny O'Mara Date: June 4, 2007