Montana Department of
ENVIRONMENTAL QUALITY
Brian Schweitzer, Governor
P. O. Box 200901 Helena, MT 59620-0901 (406) 444-2544 Website: www.deq.mt.gov

PRELIMINARY DETERMINATION
ON PERMIT APPLICATION

Date of Mailing: 12/13/2010

Name of Applicant: H K Contractors, Inc

Source: Portable Crushing and Screening Operation

Proposed Action: The Department of Environmental Quality (Department) proposes to issue a permit, with conditions, to the above-named applicant. The application was assigned Montana Air Quality Permit Application Number 4613-00.

Proposed Conditions: See attached.

Public Comment: Any member of the public desiring to comment must submit such comments in writing to the Air Resources Management Bureau (Bureau) of the Department at the above address. Comments may address the Department's analysis and determination, or the information submitted in the application. In order to be considered, comments on this Preliminary Determination are due by December 28, 2010. Copies of the application and the Department's analysis may be inspected at the Bureau's office in Helena. For more information, you may contact the Department.

Departmental Action: The Department intends to make a decision on the application after expiration of the Public Comment period described above. A copy of the decision may be obtained at the above address. The permit shall become final on the date stated in the Department's Decision on this permit, unless an appeal is filed with the Board of Environmental Review (Board).

Procedures for Appeal: Any person jointly or severally adversely affected by the final action may request a hearing before the Board. Any appeal must be filed by the date stated in the Department's Decision on this permit. The request for a hearing shall contain an affidavit setting forth the grounds for the request. Any hearing will be held under the provisions of the Montana Administrative Procedures Act. Submit requests for a hearing in triplicate to: Chairman, Board of Environmental Review, P.O. Box 200901, Helena, MT 59620.

For the Department,

Vickie Walsh
Air Permitting Program Supervisor
Air Resources Management Bureau
(406) 444-3490

Shawn Juers
Environmental Engineer
Air Resources Management Bureau
(406) 444-2049

VW:SJ
Enclosures

MONTANA AIR QUALITY PERMIT

Issued To: HK Contractors, Inc
PO Box 51450
Idaho Falls, ID 83405

MAQP: # 4613-00
Application Complete: 12/1/2010
Preliminary Determination Issued: 12/13/2010
Department's Decision Issued:
Permit Final:
AFS #:777-4613

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to HK Contractors, Inc (HK Contractors) 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. Permitted Equipment

HK Contractors proposes to own and operate a portable crushing and screening operation. A complete list of the permitted equipment is contained in Section I.A of the permit analysis.

B. Plant Location

HK Contractors proposes to operate a portable crushing and screening operation, which will initially be located in the East ½ of the Southeast ¼ of Section 14, Township 10 North, Range 3 West, in Lewis and Clark County, Montana. However, MAQP #4613-00 applies while operating at any location in Montana, except those areas having a Department of Environmental Quality (Department)-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana*. An addendum will be required for locations in or within 10 km of certain PM_{10} nonattainment areas.

SECTION II: Conditions and Limitations

A. Emission Limitations

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

   - For crushers that commence construction, modification, or reconstruction on or after April 22, 2008: 12% opacity
   - For crushers that commence construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008: 15% opacity

2. All visible emissions from any other NSPS-affected equipment (such as screens and conveyors) shall not exhibit an opacity in excess of the following averaged over six consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO):

   - For equipment that 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. HK Contractors 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. HK Contractors 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. HK Contractors shall not operate more than one crusher at any given time and the maximum rated design capacity of the crusher shall not exceed 350 tons per hour (TPH) (ARM 17.8.749).

8. HK Contractors shall not operate more than two (2) screens at any given time and the total combined maximum rated design capacity of the screens shall not exceed 1,011 TPH (ARM 17.8.749).

9. HK Contractors shall properly operate and maintain the diesel fired generator engines (ARM 17.8.752).

10. HK Contractors shall not operate or have on-site more than three (3) diesel fired generator/hydraulics engines (ARM 17.8.749):

    a. The maximum rated 425-horsepower (hp) diesel engine shall meet EPA Tier II standards (as tabulated in 40 CFR 89.112(a)), or lower, and shall have a minimum stack height, when operating, of 11.75 feet (ft) from ground level.

    b. The maximum rated 113-hp diesel engine shall meet EPA Tier II standards (as tabulated in 40 CFR 89.112(a)), or lower, and shall have a minimum stack height, when operating, of 8ft from ground level.

    c. The maximum rated 111.3-hp diesel engine shall meet EPA Tier II standards (as tabulated in 40 CFR 89.112(a)), or lower, and shall have a minimum stack height, when operating, of 8ft from ground level.

11. If the permitted equipment is used in conjunction with any other equipment owned or operated by HK Contractors, 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).

12. HK Contractors shall comply with all applicable standards and limitations, monitoring, reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO, *Standards of Performance for Nonmetallic Mineral Processing Plants* (ARM 17.8.340 and 40 CFR 60, Subpart OOO).

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

B. Testing Requirements

1. Within 60 days after achieving maximum production, but no later than 180 days after initial start-up, an Environmental Protection Agency (EPA) Method 9 opacity test and/or other methods and procedures as specified in 40 CFR 60.675 must be performed on all NSPS-affected equipment to demonstrate compliance with the emission limitations contained in Section II.A.1 and II.A.2 (ARM 17.8.340 and 40 CFR 60, Subpart A and Subpart OOO). 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 is to be made, at least 15 days prior to the move. The proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.749 and ARM 17.8.765).

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

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

3. HK Contractors 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).

4. HK Contractors 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 HK Contractors as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).

5. HK Contractors shall document, by month, the crushing production from the facility. By the 25th day of each month, HK Contractors shall calculate the crushing production from the facility for the previous month. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

6. HK Contractors shall document, by month, the screening production from the facility. By the 25th day of each month, HK Contractors shall calculate the screening production from the facility for the previous month. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

7. HK Contractors shall document, by month, the hours of operation of the diesel engine/generator. By the 25th day of each month, HK Contractors shall calculate the hours of operation for the diesel engine/generator for the previous month. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

D. Notification

HK Contractors shall provide the Department with written notification of the actual start-up date of the crushing and screening operation postmarked within 15 days after the actual start-up date (ARM 17.8.749).

SECTION III: General Conditions

A. Inspection – HK Contractors shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (Continuous Emissions Monitoring System (CEMS), Continuous Emissions Rate Monitoring System (CERMS)) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.

B. Waiver – The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if HK Contractors fails to appeal as indicated below.

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving HK Contractors of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided for in ARM 17.8.740, *et seq*. (ARM 17.8.756)

D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401, *et seq*., MCA.

E. Appeals – Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of

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

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

G. Air Quality Operation Fees – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by HK Contractors 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. HK Contractors 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
HK Contractors, Inc
MAQP #4613-00

I. Introduction/Process Description

HK Contractors, Inc (HK Contractors) proposes to own and operate a portable crushing and screening facility.

A. Permitted Equipment

The crushing and screening operation is permitted for the following equipment:

- Three (3) diesel generator/hydraulics engines with maximum ratings not to exceed:
  - 425 horsepower (hp)
  - 111.3 hp
  - 113 hp
- One (1) Impact Crusher with a maximum capacity of 350 tons per hour (TPH)
- Two (2) screens with maximum ratings not to exceed:
  - 661 TPH
  - 350 TPH
- Eleven (11) conveyors
- Associated equipment

At the time of application, the above equipment was incorporated in package plants grouped as follows:

- One Terex/Pegson Trakpactor Model 1412 rated for 350 TPH with the following components:
  - One (1) Cat C-12 DITA Generator Engine with a maximum rating of 425 hp
  - One (1) Vibrating Grizzly Screen Feed Hopper
  - One (1) 350 TPH Impact Crusher
  - One (1) Product Conveyor
  - One (1) Dirt Conveyor
- One Terex Chiefton 1700 Power Screen Deck rated for 661 TPH with the following components:
  - One (1) Cat C-4.4 Diesel Engine powering hydraulics with a maximum rating of 111.3 hp
  - One (1) Side Conveyor
  - One (1) Tail Conveyor
  - One (1) Auxiliary Conveyor
  - One (1) Feed Conveyor
  - One (1) Main Conveyor
  - One (1) Screen
- Additional unpackaged equipment including:
  - One (1) Stacker
  - Three (3) Conveyors
  - One (1) 113 hp John Deere generator engine to power the additional unpackaged equipment

B. Source Description

HK Contractors intends to use the above equipment to crush and sort recycled asphalt and concrete. The equipment may also be used to crush and sort various sand and gravel type materials for various uses.

II. Applicable Rules and Regulations

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

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

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

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

3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq*., Montana Code Annotated (MCA).

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

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.

5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

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

1. ARM 17.8.204 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 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
7. ARM 17.8.221 Ambient Air Quality Standard for Visibility
8. ARM 17.8.223 Ambient Air Quality Standard for PM_{10}

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

3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section.

4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.

5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this section.

6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank truck or trailer is equipped with a vapor loss control device as described in (1) of this rule.

7. ARM 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS).

   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 HK Contractors, this subpart is applicable.

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. Therefore, HK Contractors is subject to this subpart.

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. HK Contractors 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 - National Emissions Standards for Hazardous Air Pollutants (HAPs) for Stationary Reciprocating Internal Combustion Engines (RICE). An owner or operator of a stationary reciprocating internal combustion engine (RICE) at a major or area source of HAP emissions is subject to this rule except if the stationary RICE is being tested at a stationary RICE test cell/stand. Therefore, HK Contractors is subject to these standards.

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. HK Contractors 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 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit modification to construct, modify, or use any asphalt plant, crusher or screen that has the potential to emit (PTE) greater

than 15 tons per year of any pollutant. HK Contractors has a PTE greater than 15 tons per year of particulate matter, oxides of nitrogen, and carbon monoxide; 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. HK Contractors 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. HK Contractors submitted an affidavit of publication of public notice for the November 21, 2010 issue of the *Independent Record*, a newspaper of general circulation in the Town of Helena in Lewis and Clark County, 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. 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 HK Contractors of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*.

10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.

11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.

12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).

13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.

14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an MAQP may be transferred from one location to another if the Department receives a complete notice of intent to transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.

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

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.

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

This facility is not a major stationary source because it is not a listed source and the facility's PTE is less than 250 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 particulate matter with an aerodynamic diameter of 10 microns or less (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 MAQP #4613-00 for HK Contractors, the following conclusions were made:

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

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

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

   d. This facility is/is not subject to any current NSPS (40 CFR 60, Subpart OOO and IIII).

   e. This facility is/is not subject to any 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.

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

III. BACT Determination

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

Diesel Generator Engine:

Any new diesel engine 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 of the engines constitutes BACT for these engines.

Fugitive Emissions

HK Contractors must take reasonable precautions to limit the fugitive emissions of airborne particulate matter on haul roads, access roads, parking lots, and the general plant area. Reasonable precautions include treating all unpaved portions of the haul roads, access roads,

parking lots, or the general plan area with water and/or chemical dust suppressant, as necessary. Using water and/or chemical dust suppressant to comply with the reasonable precautions limitation will be considered BACT.

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.

Crushing and Screening Emissions:

HK Contractors is required to use water spray bars and water and/or chemical dust suppressant, as necessary, to control particulate emissions. Furthermore, HK Contractors is required to comply with 40 CFR 60, Subpart OOO containing opacity limitations. The Department determined that using water spray bars, as proposed by the applicant, to maintain compliance with opacity requirements constitutes BACT for these sources.

IV. Emission Inventory**

HK Contractors, Inc Potential To Emit in Tons Per Year MAQP #4613-00							
Source	PM	PM_{10}	$PM_{2.5}$	NO_X	CO	VOC	SO_X
425 HP Diesel Generator Engine	0.62	0.62	0.62	19.70	10.67	4.68	3.82
113 HP Diesel Generator Engine	0.24	0.24	0.24	5.35	4.04	1.24	1.01
111.3 HP Diesel Generator Engine	0.16	0.16	0.16	5.27	3.98	1.23	1.00
Feed Hopper Vibrating Screen	3.37	1.13	0.08	N/A	N/A	N/A	N/A
350 TPY Impact Crusher	4.60	1.84	0.11	N/A	N/A	N/A	N/A
Conveyor Transfer Points	4.46	1.46	0.41	N/A	N/A	N/A	N/A
3 Deck Screen Box	5.73	1.93	0.13	N/A	N/A	N/A	N/A
Raw Material Unloading	0.02	0.02	neg	N/A	N/A	N/A	N/A
Piles	32.63	15.44	2.34	N/A	N/A	N/A	N/A
Fugitive Haul Road Emissions	5.49	1.51	0.15	N/A	N/A	N/A	N/A
TOTAL:	57.33	24.35	4.23	30.32	18.69	7.15	5.83

** Inventory reflects maximum allowable emissions for all pollutants based on maximum production and year-round operation (8,760 hours).

CO = carbon monoxide
CO_2 = carbon dioxide
HAPs = hazardous air pollutants
hp = horsepower
lb = pound
N/A = not applicable
ND = no data available
neg = negligible
NO_X = oxides of nitrogen
PM = particulate matter
PM_{10} = particulate matter with an aerodynamic diameter of 10 microns or less
$PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 microns or less
SO_X = oxides of sulfur
TPH = tons per hour
TPY = tons per year
VOC = volatile organic compounds
yr = year

Emissions Calculations:

425 HP Diesel Generator Engine

Maximum Capacity: 425 HP Application Material
Hours of Operation: 8760 hours/yr

PM/PM_{10}/$PM_{2.5}$ Emissions

Emissions Factor: 0.15 g/bhp-hr Tier II Emissions

Calculations:			
0.15g/bhp-hr*425HP*0.002205 lb/g =	0.14	lb/hr
0.14056875lb/hr*8760hours/yr=	1231.38	lb/yr
1231.38225lb/yr*0.0005 ton/lb =	**0.62**	**ton/yr**

NO_X Emissions

			Tier II		
Emissions Factor:	4.8	g/bhp-hr	Emissions		
Calculations:	4.8g/bhp-hr*425HP*0.002205 lb/g =			4.50	lb/hr
	4.4982lb/hr*8760hours/yr=			39404.23	lb/yr
	39404.232lb/yr*0.0005 ton/lb =			**19.70**	**ton/yr**

CO Emissions

			Tier II		
Emissions Factor:	2.6	g/bhp-hr	Emisisons		
Calculations:	2.6g/bhp-hr*425HP*0.002205 lb/g =			2.44	lb/hr
	2.436525lb/hr*8760hours/yr=			21343.96	lb/yr
	21343.959lb/yr*0.0005 ton/lb =			**10.67**	**ton/yr**

SO_X Emissions

Emissions Factor:	0.00205	lb/hp-hr	(AP-42 Table 3.3-1, 10/96)		
Calculations:	0.00205lb/hp-hr*425HP*8760hours/yr=			7632.15	lb/yr
	7632.15lb/yr*0.0005 ton/lb =			**3.82**	**ton/yr**

VOC Emissions:

Emissions Factor:	0.002514	lb/hp-hr	(AP-42 Table 3.3-1, 10/96)		
Calculations:	0.0025141lb/hp-hr*425HP*8760hours/yr=			9359.994	lb/yr
	9359.9943lb/yr*0.0005 ton/lb =			**4.68**	**ton/yr**

CO_2 Emissions:

Emissions Factor:	1.15	lb/hp-hr	(AP-42 Table 3.3-1, 10/96)		
Calculations:	1.15lb/hp-hr*425HP*8760hours/yr=			4281450	lb/yr
	4281450lb/yr*0.0005 ton/lb =			**2140.73**	**ton/yr**

113 HP Diesel Generator Engine

Maximum Capacity:	113	HP	Application Material
Hours of Operation:	8760	hours/yr	

$PM/PM_{10}/PM_{2.5}$ Emissions

Emissions Factor:	0.22	g/bhp-hr	Tier II Emissions (de minimis friendly)		
Calculations:	0.22g/bhp-hr*113HP*0.002205 lb/g =			0.05	lb/hr
	0.0548163lb/hr*8760hours/yr=			480.19	lb/yr
	480.190788lb/yr*0.0005 ton/lb =			**0.24**	**ton/yr**

NO_X Emissions

Emissions Factor:	4.9	g/bhp-hr	Tier II Emissions	
Calculations:	4.9g/bhp-hr*113HP*0.002205 lb/g =		1.22	lb/yr
	1.2209085lb/yr*8760hours/yr=		10695.16	lb/yr
	10695.15846lb/yr*0.0005 ton/lb =		**5.35**	**ton/yr**

CO Emissions

Emissions Factor:	3.7	g/bhp-hr	Tier II Emissions	
Calculations:	3.7g/bhp-hr*113HP*0.002205 lb/g =		0.92	lb/yr
	0.9219105lb/yr*8760hours/yr=		8075.94	lb/yr
	8075.93598lb/yr*0.0005 ton/lb =		**4.04**	**ton/yr**

SO_X Emissions

Emissions Factor:	0.00205	lb/hp-hr	(AP-42 Table 3.3-1, 10/96)	
Calculations:	0.00205lb/hp-hr*113HP*8760hours/yr=		2029.254	lb/yr
	2029.254lb/yr*0.0005 ton/lb =		**1.01**	**ton/yr**

VOC Emissions:

Emissions Factor:	0.002514	lb/hp-hr	(AP-42 Table 3.3-1, 10/96)	
Calculations:	0.0025141lb/hp-hr*113HP*8760hours/yr=		2488.657	lb/yr
	2488.657308lb/yr*0.0005 ton/lb =		**1.24**	**ton/yr**

CO_2 Emissions:

Emissions Factor:	1.15	lb/hp-hr	(AP-42 Table 3.3-1, 10/96)	
Calculations:	1.15lb/hp-hr*113HP*8760hours/yr=		1138362	lb/yr
	1138362lb/yr*0.0005 ton/lb =		**569.18**	**ton/yr**

111.3 HP Diesel Generator Engine

Maximum Capacity:	111.3	HP
Hours of Operation:	8760	hours/yr

$PM/PM_{10}/PM_{2.5}$ Emissions

Emissions Factor:	0.15	g/bhp-hr	Tier II Emissions	
Calculations:	0.15g/bhp-hr*111.3HP*0.002205 lb/g =		0.04	lb/hr
	0.036812475lb/hr*8760hours/yr=		322.48	lb/yr
	322.477281lb/yr*0.0005 ton/lb =		**0.16**	**ton/yr**

NO_X Emissions

Emissions Factor:	4.9	g/bhp-hr	Tier II Emissions	
Calculations:	4.9g/bhp-hr*111.3HP*0.002205 lb/g =		1.20	lb/hr
	1.20254085lb/hr*8760hours/yr=		10534.26	lb/yr

10534.257846lb/yr*0.0005 ton/lb = **5.27 ton/yr**

CO Emissions

Emissions Factor: 3.7 g/bhp-hr Tier II Emissions (de minimis friendly)
Calculations: 3.7g/bhp-hr*111.3HP*0.002205 lb/g = 0.91 lb/hr
0.90804105lb/hr*8760hours/yr= 7954.44 lb/yr
7954.439598lb/yr*0.0005 ton/lb = **3.98 ton/yr**

SO_X Emissions

Emissions Factor: 0.00205 lb/hp-hr (AP-42 Table 3.3-1, 10/96)
Calculations: 0.00205lb/hp-hr*111.3HP*8760hours/yr= 1998.725 lb/yr
1998.7254lb/yr*0.0005 ton/lb = **1.00 ton/yr**

VOC Emissions:

Emissions Factor: 0.002514 lb/hp-hr (AP-42 Table 3.3-1, 10/96)
Calculations: 0.0025141lb/hp-hr*111.3HP*8760hours/yr= 2451.217 lb/yr
2451.2173308lb/yr*0.0005 ton/lb = **1.23 ton/yr**

CO_2 Emissions:

Emissions Factor: 1.15 lb/hp-hr (AP-42 Table 3.3-1, 10/96)
Calculations: 1.15lb/hp-hr*111.3HP*8760hours/yr= 1121236 lb/yr
1121236.2lb/yr*0.0005 ton/lb = **560.62 ton/yr**

TOTAL CO_2: **3270.52 ton/yr**

350 TPH Impact Crusher

Maximum Capacity: 350 TPH
Hours of Operation: 8760 hours/yr

PM Emissions:

Emissions Factor: 0.003 lb/Ton Processed (AP-42 Table 11.19.2-2, 08/2004)
Calculaltions: 0.003lb/Ton Processed*350TPH*8760hours/yr= 9198 lb/yr
9198lb/yr*0.0005 ton/lb = **4.60 ton/yr**

PM_{10} Emissions:

Emissions Factor: 0.0012 lb/Ton Processed (AP-42 Table 11.19.2-2, 08/2004)
Calculaltions: 0.0012lb/Ton Processed*350TPH*8760hours/yr= 3679.2 lb/yr
3679.2lb/yr*0.0005 ton/lb = **1.84 ton/yr**

$PM_{2.5}$ Emissions:

Emissions Factor:	0.00007	lb/Ton Processed	(AP-42 Table 11.19.2-2, 08/2004)	
Calculations:	0.00007lb/Ton Processed*350TPH*8760hours/yr=		214.62	lb/yr
	214.62lb/yr*0.0005 ton/lb =		**0.11**	**ton/yr**

350 TPH Vibrating Feed Screen

Maximum Capacity:	350	TPH
Hours of Operation:	8760	hours/yr

PM Emissions:

Emissions Factor:	0.0022	lb/Ton Processed	(AP-42 Table 11.19.2-2, 08/2004)	
Calculaltions:	0.0022lb/Ton Processed*350TPH*8760hours/yr=		6745.2	lb/yr
	6745.2lb/yr*0.0005 ton/lb =		**3.37**	**ton/yr**

PM_{10} Emissions:

Emissions Factor:	0.00074	lb/Ton Processed	(AP-42 Table 11.19.2-2, 08/2004)	
Calculaltions:	0.00074lb/Ton Processed*350TPH*8760hours/yr=		2268.84	lb/yr
	2268.84lb/yr*0.0005 ton/lb =		**1.13**	**ton/yr**

$PM_{2.5}$ Emissions:

Emissions Factor:	0.00005	lb/Ton Processed	(AP-42 Table 11.19.2-2, 08/2004)	
Calculations:	0.00005lb/Ton Processed*350TPH*8760hours/yr=		153.3	lb/yr
	153.3lb/yr*0.0005 ton/lb =		**0.08**	**ton/yr**

661 TPH Screen

Maximum Throughput:	661	TPH
Hours of Operation:	8760	hr/yr

PM Emissions:

Emissions Factor:	0.0022	lb/ton screened	(AP-42 Table 11.19.2-2, 08/2004)	
Calculations:	0.0022lb/ton screened*661TPH*8760hr/yr=		12738.79	lb/yr
	12738.792lb/yr*0.0005 ton/lb =		**5.73**	**ton/yr**

PM_{10} Emissions:

Emissions Factor:	0.00074	lb/ton screened	(AP-42 Table 11.19.2-2, 08/2004)	
Calculations:	0.00074lb/ton screened*661TPH*8760hr/yr=		4284.866	lb/yr
	4284.8664lb/yr*0.0005 ton/lb =		**1.93**	**ton/yr**

$PM_{2.5}$ Emissions:

Emissions Factor:	0.00005	lb/ton screened	(AP-42 Table 11.19.2-2, 08/2004)	
Calculations:	0.00005lb/ton screened*661TPH*8760hr/yr=		289.518	lb/yr
	289.518lb/yr*0.0005 ton/lb =		**0.13**	**ton/yr**

Conveyor Transfers

Maximum Capacity:	661	TPH
Hours of Operation:	8760	hours/yr
Number of Transfers:	11	

PM Emissions:

Emissions Factor:	0.0001	lb/Ton Processed	(AP-42 Table 11.19.2-2, 08/2004)	
Calculaltions:	0.00014lb/Ton Processed*661TPH*8760hours/yr*11=		8917.154	lb/yr
	8917.1544lb/yr*0.0005 ton/lb =		**4.46**	**ton/yr**

PM_{10} Emissions:

Emissions Factor:	5E-05	lb/Ton Processed	(AP-42 Table 11.19.2-2, 08/2004)	
Calculaltions:	0.000046lb/Ton Processed*661TPH*8760hours/yr*11=		2929.922	lb/yr
	2929.92216lb/yr*0.0005 ton/lb =		**1.46**	**ton/yr**

$PM_{2.5}$ Emissions:

Emissions Factor:	1E-05	lb/Ton Processed	(AP-42 Table 11.19.2-2, 08/2004)	
Calculations:	0.000013lb/Ton Processed*661TPH*8760hours/yr*11=		828.0215	lb/yr
	828.02148lb/yr*0.0005 ton/lb =		**0.41**	**ton/yr**

Raw Material Unloading
(Uncrushed)

Rate:	350	TPH
Operating Hours:	8760	hr/yr

PM Emissions:

No Data.

PM_{10} Emissions

Emissions Factor:	0.000016 lb/Ton Unloaded		
Calculations:	0.000016lb/Ton Unloaded*350TPH*8760hr/yr=	49.056	lb/yr
	49.056lb/yr*0.0005 ton/lb =	**0.02**	**ton/yr**

$PM_{2.5}$ Emissions

NEGLIGIBLE

Piles

These calculations account for:
1. Loading of aggregate onto storage piles (batch or continuous drop operations).
2. Equipment traffic in storage area.
3. Wind erosion of pile surfaces and ground areas around piles.
4. Loadout of aggregate for shipment or for return to the process stream (batch or continuous drop operations).

For caluclation purposes, 2 piles, at the max capacity of the Terex Model 1412
And the Terex 1700 Power Screen were assumed, with moisture carryover.

$$E = k(0.0032) \frac{\left(\frac{U}{5}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}} \text{ (pound [lb]/ton)}$$

where:

E = emission factor
k = particle size multiplier (dimensionless)
U = mean wind speed, meters per second (m/s) (miles per hour [mph])
M = material moisture content (%)

	PM	PM_{10}	$PM_{2.5}$	
k =	0.74	0.35	0.053	
U =	9.1			
M =	1.55	avg moisture content, AP-42 Table 11.19.2-1 Note b		

PM Emissions:

Rate:	350	TPH		
Emissions Factor:	0.00737	lb/ton		
Calculations:	350TPH*0.007369739192962 7lb/ton *8760hr/yr=		22595.62	lb/yr
	22595.6203656236lb/yr*0.0005 ton/lb =		**11.30**	**ton/yr**

Rate:	661	TPH		
Emissions Factor:	0.00737	lb/ton		
Calculations:	661TPH*0.007369739192962 7lb/ton *8760hr/yr=		42673.44	lb/yr
	42673.4430333635lb/yr*0.0005ton/lb =		**21.34**	**ton/yr**

PM_{10} Emissions:

Rate:	350	TPH		
Emissions Factor:	0.003486	lb/ton		
Calculations:	0.0034856874561310 1lb/ton *350TPH*8760hr/yr=		10687.12	lb/yr
	10687.1177404977lb/yr*0.0005ton/lb =		**5.34**	**ton/yr**

Rate:	661	TPH		
Emissions Factor:	0.003486	lb/ton		
Calculations:	0.0034856874561310 1lb/ton *661TPH*8760hr/yr=		20183.39	lb/yr
	20183.3852184827lb/yr*0.0005ton/lb =		**10.09**	**ton/yr**

$PM_{2.5}$ Emissions:

Rate:	350	TPH		
Emissions Factor:	0.000528	lb/ton		
Calculations:	0.0005278326719284 1lb/ton*350TPH*8760hr/yr=		1618.335	lb/yr
	1618.3349721325lb/yr*0.0005 ton/lb =		**0.809167**	**ton/yr**

Rate:	661	TPH		
Emissions Factor:	0.000528	lb/ton		
Calculations:	0.0005278326719284 1lb/ton*661TPH*8760hr/yr=		3056.341	lb/yr
	3056.34119022739lb/yr*0.0005 ton/lb =		**1.528171**	**ton/yr**

V. Existing Air Quality

The initial location of this portable operation is to be located in an area designated as attainment/unclassifiable for all criteria pollutants.

VI. Ambient Air Impact Analysis

The Department modeled the engines to determine impacts to the 1-hour nitrogen dioxide (NO_2) National Ambient Air Quality Standards (NAAQS). The Department assumed that 75% of the NO_X emissions are NO_2. A background NO_2 concentration of 40 micrograms per cubic meter (ug/m^3) was assumed.

The Department determined, based on the NO_X emissions limit and stack heights required, that the impact from this permitting action would be expected to be minor. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

VII. Taking or Damaging Implication Analysis

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

YES	NO	
XX		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	XX	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	XX	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	XX	4. Does the action deprive the owner of all economically viable uses of the property?
	XX	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?
	XX	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	XX	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?
	XX	7a. Is the impact of government action direct, peculiar, and significant?
	XX	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	XX	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?
	XX	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

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

VIII. Environmental Assessment

An environmental assessment, 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

DRAFT ENVIRONMENTAL ASSESSMENT (EA)

Issued To: HK Contractors, Inc.

Montana Air Quality Permit number: 4613-00

Preliminary Determination Issued: 12/13/2010
Department Decision Issued:
Permit Final:

1. *Legal Description of Site*: East ½ of the Southeast ¼ of Section 14, Township 10 North, Range 3 West, in Lewis and Clark County, Montana

2. *Description of Project*: The project will use portable crushing and screening equipment, and associated equipment, to crush and sort asphalt and concrete materials for purposes of reusing the materials. The equipment may also be used to crush and sort sand and gravel type material for various uses.

3. *Objectives of Project*: The objective of the crushing and screening operation is to produce business and revenue by selling aggregate to support various projects. The issuance of MAQP #4613-00 would allow HK Contractors 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 HK Contractors 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 MAQP #4613-00.

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			XX			Yes
B	Water Quality, Quantity, and Distribution			XX			Yes
C	Geology and Soil Quality, Stability and Moisture			XX			Yes
D	Vegetation Cover, Quantity, and Quality			XX			Yes
E	Aesthetics			XX			Yes
F	Air Quality			XX			Yes
G	Unique Endangered, Fragile, or Limited Environmental Resources			XX			Yes
H	Demands on Environmental Resource of Water, Air and Energy			XX			Yes
I	Historical and Archaeological Sites			XX			Yes
J	Cumulative and Secondary Impacts			XX			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

Terrestrials would use the same area as the crushing and screening operation. The proposed crushing/screening operations would be considered a minor source of emissions by industrial standards. Limitations and conditions would be placed in MAQP #4613-00 to minimize these emissions. Furthermore, this project would typically operate in an area designated and used for such activities. In consideration of operations in accordance with the limitations and conditions of MAQP #4613-00, only minor impacts on terrestrial life and habitats would be expected.

B. Water Quality, Quantity and Distribution

Water would be used as required for dust suppression on haul roads, the general plant area, on piles, and as a part of equipment operation. Chemical dust suppression may also be used as necessary to reduce particulate matter emissions. Impacts to water quality, quantity, and distribution would be expected to be minor.

C. Geology and Soil Quality, Stability and Moisture

The proposed crushing/screening operation would typically operate within areas designated for such operations. As discussed above in Section 7.B of this section, water would be expected to be used for dust suppression. Resulting impacts to geology, stability, and moisture would be expected to be minor. Use of water would be necessary to greatly reduce potential particulate matter emissions.

D. Vegetation Cover, Quantity, and Quality

Because the facility would be a minor source of emissions by industrial standards and would typically operate in areas previously designated and used for aggregate crushing and screening, impacts from the emissions from the crushing/screening facility would be expected to be minor.

The amount of allowable air emissions from this facility would be minor. Conditions and limitations require control of particulate matter from equipment operations and control of fugitive emissions from haul roads. As a result, the corresponding deposition of the air pollutants on the surrounding vegetation would also be expected to be minor. With consideration of operations in accordance with MAQP #4613-00, effects to vegetation cover, quantity, and quality, would be expected to be minor.

E. Aesthetics

The crushing/screening operation would be visible and would create additional noise while in operation. However, operations would normally take place in areas previously designated and used for such activities. Therefore, minor effects to aesthetics would be expected as a result of issuing MAQP #4613-00.

F. Air Quality

MAQP #4613-00 would limit the emissions allowable from the facility. The air quality impacts from the crushing and screening operation would be expected to be minor because the facility would be relatively small and would be required to operate using appropriated air pollution controls. MAQP #4613-00 would include conditions limiting the opacity from the plant, as well as requiring water spray as necessary to control particulate matter from haul roads. As discussed in the permit analysis associated with MAQP #4613-00, air quality modeling was conducted for NO_X emissions to demonstrate compliance with the 1-hr NO_2 standards. With consideration of operations in accordance with the requirements of MAQP #4613-00, air quality impacts would be expected to be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department contacted the Montana Natural Heritage Program (MNHP) to identify species of special concern that may be found in the area where the proposed portable plant would initially locate. Search results concluded that there are 8 species of concern in the area. Species of concern include the Bald Eagle, the Long-billed Curlew, the Lewis's Woodpecker, the Brewer's Sparrow, the Bobolink, the Grey Wolf, the Wedge-leaved Saltbush, and the Small Yellow Lady's Slipper.

The Bald Eagle has a listed state conservation status of S3, signifying a state-level rank of vulnerable. The global conservation status is G5, signifying a global-level rank of secure. Secure is defined by NatureServe.org as common; widespread and abundant. The bald eagle is found primarily in forested areas along rivers and lakes, especially during breeding season. However, nesting site selection is dependent upon food availability and disturbance from human activity. The MNHP identified bald eagle nests potentially located within 2.5 miles of the plant operations. To aid in determining potential impacts to the local Bald Eagle population, the Department consulted the U.S. Department of Interior, Bureau of Reclamation Montana Bald Eagle Management Plan (MBEMP). With the identified nests being greater than 0.5 mile away from the facility, the site would fall into an MBEMP "Zone III" classification, representing the home range for bald eagles. Zone III is classified as the area from 0.5 mile to 2.5 miles in radius from the nest site (Zone II from 0.25 to 0.5 miles, Zone I from 0 to 0.25 miles). Zone III represents most of the home range used by eagles during nesting season, usually including all suitable foraging habitat within 2.5 miles of all nest sites in the breeding area that have been active within 5 years. The objectives in Zone III areas include maintaining suitability of foraging habitat, minimizing disturbance within key areas, minimizing hazards, and maintaining the integrity of the breeding area.

As described in Section 7.D of this environmental assessment, impacts to Vegetation Cover, Quantity, and Quality from pollutant deposition would be expected to be minor. Conditions and limitations in MAQP #4613-00 would limit the allowable emissions of particulate matter. Control of fugitive dust emissions would also be required. Furthermore, because the plant would be permitted to initially operate in an area in which open cut operations have previously occurred, the project would not be expected to significantly increase disturbance within the area. As described in Section 7.F, the Department determined that impacts to air quality would be minor. With these considerations, the Department has determined that impacts to Bald Eagles would be expected to be minor.

The Long-billed Curlew, Numenius americanus, is a large North American shorebird of the family Scolopacidae. The species is native to central and western North America. This species has a listed state conservation status of S3, indicating the species is potentially at risk because of limited and/or declining numbers, range, and/or habitat, even though it may be abundant in some areas. The global conservation status is G5, signifying a global-level rank of secure.

In the winter, the species migrates southwards, as well as towards the coastline. Adults have a very long bill curved downwards, a long neck and a small head. The neck and underparts are a light cinnamon, while the crown is streaked with brown.

A small hollow is lined with various weeds and grasses to serve as the nest. Four eggs are always laid as this is a characteristic of shorebirds. The Long-billed Curlew is a precocial bird (young are relatively mature and mobile from the moment of birth or hatching) and the chicks leave the nest soon after hatching. Both parents look after the young.

As described in Section 7.D of this environmental assessment, impacts to Vegetation Cover, Quantity, and Quality from pollutant deposition would be expected to be minor. Because the plant would be permitted for operations in an area in which prior open cut operations have occurred, the project would not be expected to significantly increase disturbance within the area. As described in Section 7.F, the Department determined that impacts to air quality would be minor. With these considerations, the Department has determined that any impacts to the Long-billed Curlew would be expected to be minor.

The Lewis's Woodpecker is a medium sized woodpecker, approximately 10 to 11 inches in length. The head, back, wings and tail are greenish-black. They have a silver-pale collar and upper breast. The face is dark red and the belly and lower breast is pinkish or salmon-red. Juvenile birds are distinct from adults, having an overall dark appearance with more brownish-black on the back. They usually lack the silver color of the neck, the pinkish belly color, as well as the red on the face.

Lewis's Woodpeckers are not well adapted to excavate cavities in hard wood. They tend to nest in a natural cavity. Important habitat features include an open tree canopy, a brushy understory with ground cover, dead trees for nest cavities, dead or downed woody debris, perch sites, and abundant insects. Lewis's Woodpeckers use open ponderosa pine forests. In late summer, wandering flocks move from valleys into mountains or from breeding habitat to orchards. An important habitat feature in many wintering areas is the availability of storage sites for grains or mast, such as tree bark.

No specific information on food habits for Lewis's Woodpecker is available for Montana. Information from studies in other areas of the species' range indicate that Lewis's Woodpeckers feed on adult emergent insects. Unlike other woodpeckers, the Lewis's Woodpecker does not bore for insects but will flycatch and glean insects from tree branches or trunks; they also drop from a perch to capture insects on the ground.

As discussed in Section 7.A. of this environmental assessment, impacts to terrestrial life and habitats would be expected to be minor. Furthermore, because the crushing and screening plant would be permitted for operations in an area in which open cut operations have previously occurred, the project would not be expected to significantly increase disturbance within the area. The Department has determined that minor impacts, if any, to the Lewis's Woodpecker would be expected as a result of issuing MAQP #4613-00.

The Brewer's Sparrow, Spizella breweri, is a small, slim species of American sparrow in the family Emberizidae. These birds migrate to the southwestern United States south to central Mexico. These birds forage primarily in shrubs or in low vegetation, but also on the ground. They mainly eat insects in summer with seeds becoming a more important part of the diet at other times of the year. They usually forage in flocks outside of the breeding season, sometimes with other sparrows. The female typically lays 3 to 4 eggs (up to 5) in a cup nest in low shrubs. In central Montana, food volume was 71 to 81% animal and 8 to 17% plant (grass seeds) with 59 to 69% of the food being grasshoppers and beetles. 74% of nests were found between 6 to 8 inches above the ground in big sagebrush plants. Statewide, the species nests from mid-June to mid-July.

As described in Section 7.D of this environmental assessment, impacts to Vegetation Cover, Quantity, and Quality from pollutant deposition would be expected to be minor. Conditions and limitations in MAQP #4613-00 would limit the allowable emissions of particulate matter. Control of fugitive dust emissions would also be required. As discussed in Section 7.A of this environmental assessment, impacts to terrestrial life and habitats would be expected to be minor. Furthermore, because the plant would be permitted to initially operate in an area in which open cut operations have previously occurred, the project would not be expected to significantly increase disturbance within the area. Therefore, the Department would expect any impacts to the Brewer's Sparrow to be minor.

The Gray Wolf has a listed state conservation status of S3, indicating the species is potentially at risk because of limited and/or declining numbers, range, and/or habitat, even though it may be abundant in some areas. The global conservation status is G4, signifying a global-level rank of apparently secure. Apparently secure is defined by NatureServe.org as uncommon but not rare; some cause for long-term concern due to declines or other factors. In the mid-to-late 1980s, in an effort to restore wolf populations, the gray wolf was reintroduced into three recovery areas – Northwestern Montana, Central Idaho, and the Greater Yellowstone.

The wolf exhibits no particular habitat preference except wolves usually occupy areas with few roads or human disturbance. Since the gray wolf is regional, it is unlikely that the installation and operation of the crushing and screening equipment would have any impact on these animals, as this initial site already contains previous industrial activity.

The Bobolink is a kind of blackbird, and the only member of genus Dolichonyx. This species has a listed state conservation status of S3, signifying a state-level rank of vulnerable. The global conservation status is G5, signifying a global-level rank of "secure."

The Bobolink breeding habitats are open grassy fields, especially hay fields, across North America. Females lay 5 to 6 eggs in a cup-shaped nest, which is always situated on the ground and is usually well-hidden in dense vegetation. These birds migrate to Argentina, Bolivia and Paraguay and often migrate in flocks, feeding on cultivated grains and rice.

As described in Section 7.D of this environmental assessment, impacts to Vegetation Cover, Quantity, and Quality from pollutant deposition would be expected to be minor. Because the plant would be permitted for operations in an area in which operations have previously been permitted, the project would not be expected to significantly increase disturbance within the

area. As described in Section 7.F, the Department determined that impacts to air quality would be minor. With these considerations, the Department has determined that any impacts to the Bobolink would be expected to be minor.

The Wedge-leaved Saltbush and the Small Yellow Lady's Slipper are vascular plants. Vascular plants are those plants that have lignified tissues for conducting water, minerals, and photosynthetic products through the plant. As allowable emissions are limited and control of fugitive dust emissions is required, deposition is expected to be minimal, and minor effects to the Saltbush or Yellow Lady's Slipper would be expected. As described in Section 7.D of this environmental assessment, impacts to Vegetation Cover, Quantity, and Quality from pollutant deposition would be expected to be minor.

In consideration that the proposed initial location is to be located at an existing and operating open cut pit, with the considerations above, the Department has determined that overall, the proposed operations in accordance with the limitations and conditions of MAQP #4613-00 would present minor impacts to unique endangered, fragile, or limited environmental resources. The overall impact would be expected to be minor.

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

The project would require resources of water, air, and energy for proper operation. Water would be used for dust suppression and would control particulate emissions being generated at the site. Energy requirements would be required, and consist mostly of on-site diesel fired generators. Impacts to water, air, and energy resources of this facility in any given area would be expected to be minor.

I. Historical and Archaeological Sites

The initial location in which this crushing and screening operation proposes to operate is within an existing open cut pit. Therefore, minor, if any, impacts to any historical or archaeological sites would be expected as a result of issuing MAQP #4613-00.

J. Cumulative and Secondary Impacts

The proposed project would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment. The potential impacts to the individual physical and biological considerations above are expected to be minor. Collectively, any cumulative or secondary impacts to the physical and biological aspects of the human environment would be expected to be minor.

Crushing and screening operations typically operate within a previously disturbed open-cut pit used for such purposes. Therefore, there is a low likelihood that assembly and operation of the plant in any of these locations would cause significant additional impacts. Given the expected temporary and portable nature of actual operations, any impacts would be expected to be short-lived, although this assessment is completed with an understanding that no permit condition limits the length of stay at an initial location. Operational conditions and limitations in the permit would be protective of resources by limiting overall impacts to the surrounding environment.

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			XX			Yes
B	Cultural Uniqueness and Diversity			XX			Yes
C	Local and State Tax Base and Tax Revenue			XX			Yes
D	Agricultural or Industrial Production			XX			Yes
E	Human Health			XX			Yes
F	Access to and Quality of Recreational and Wilderness Activities			XX			Yes
G	Quantity and Distribution of Employment			XX			Yes
H	Distribution of Population			XX			Yes
I	Demands for Government Services			XX			Yes
J	Industrial and Commercial Activity			XX			Yes
K	Locally Adopted Environmental Plans and Goals			XX			Yes
L	Cumulative and Secondary Impacts			XX			Yes

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

A. Social Structures and Mores
B. Cultural Uniqueness and Diversity

The initial location of this portable crushing and screening operation is to be within a previously used open cut area. Therefore, in consideration of previous land use and industrial activity, the Department would expect minor effects to social structures and mores, or cultural uniqueness or diversity.

C. Local and State Tax Base and Tax Revenue

The crushing and screening operation would be expected to have little impact on the local and state tax base and tax revenue because the facility would be a minor industrial source and would be expected to have actual operations which are seasonal and intermittent. The proposed project would not be expected to require any more than a few employees. Furthermore, the impacts to local tax base and revenue would be minor because the source would continue to be portable with transfer of locations probable.

D. Agricultural or Industrial Production

The crushing and screening operation would result in only minor impacts to local industrial production since the facility would be a minor source of air emissions. Deposition of air pollutants would occur on the surrounding land, however, conditions and limitations of MAQP #4613-00 would require control of potential emissions, resulting in relatively minor amounts of particulate matter deposition. Minor effects on vegetation or agricultural production would be expected.

As the initial location is of this portable crushing and screening operation is to be within a previously used open cut area, effects to industrial production in the area would be expected to be minor.

E. Human Health

The conditions and limitations of MAQP #4613-00 would be derived from rules intended to protect human health. In consideration of operations in compliance with the conditions and limitations which would be placed in MAQP #4613-00, the Department would expect minor impacts to human health.

F. Access to and Quality of Recreational and Wilderness Activities

The initial location of this portable crushing and screening operation is to be within a previously used open cut area. As discussed in Section 7. E, minor effects to aesthetics would be expected. The Department would expect minor effects to the access to and quality of recreational and wilderness activities.

G. Quantity and Distribution of Employment

A potential minor increase in the quantity or stability of employment would be expected as a result of issuance of MAQP #4613-00. Minor affects to the quantity and distribution of employment would be expected.

H. Distribution of Population

MAQP #4613-00 would be for a portable crushing and screening operation. A relatively small number of employees would be expected and transfer of location of operations would likely occur. The Department would expect changes in the distribution of population to be minor.

I. Demands for Government Services

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. The demands for government services would be expected to be minor.

J. Industrial and Commercial Activity

Trucks would potentially haul raw and product material to and from the site. The process equipment operated would be portable in nature and transfer of locations would likely occur. The initial location of this portable crushing and screening operation is to be within a previously used open cut area. Overall, the effects to industrial and commercial activity would be expected to be minor.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans and goals in which MAQP #4613-00 would affect. The limitations and conditions of MAQP #4613-00 would be derived from rules intended to protect human health.

L. Cumulative and Secondary Impacts

Potential economic and social effects of any individual considerations above would be expected to be minor. The Department has determined that collectively, the potential cumulative and secondary impacts would be expected to be minor.

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 a portable crushing and screening operation. MAQP #4613-00 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, Natural Resource Information System – Montana Natural Heritage Program

EA prepared by: Shawn Juers
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