



Montana Department of
ENVIRONMENTAL QUALITY

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September 18, 2009

Keith Engelbretson
LHC, Inc.
P.O. Box 7338
Kalispell, MT 59904-0338

Dear Mr. Keith Engelbretson:

Montana Air Quality Permit #3050-03 is deemed final as of September 18, 2009, by the Department of Environmental Quality (Department). This permit is for a portable screening operation. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

Vickie Walsh
Air Permitting Program Supervisor
Air Resources Management Bureau
(406) 444-9741

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

VW:SJ
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #3050-03

LHC, Inc
P.O. Box 7338
Kalispell, MT 59904-0338

September 18, 2009



MONTANA AIR QUALITY PERMIT

Issued To: LHC, Inc.
P.O. Box 7338
Kalispell, MT 59904-0338

MAQP: #3050-03
Administrative Amendment (AA) Request
Received: 7/27/2009
Department's Decision on AA: 9/02/2009
Permit Final: 9/18/2009
AFS #: 777-3050

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

SECTION I: Permitted Facilities

A. Plant Location

LHC operates a portable screen at various locations throughout the State of Montana. MAQP #3050-03 applies while operating at any location within the State of Montana, except within those areas having a Department of Environmental Quality (Department)-approved permitting program and those areas considered tribal lands. MAQP #3050-03 and Addendum 4 apply while operating in or within 10 kilometers (km) of the Libby, Thompson Falls, Kalispell, Whitefish, Columbia Falls, and Butte Nonattainment Areas. *A Missoula County air quality permit will be required for locations within Missoula County.*

B. Current Permit Action

On July 27, 2009, the Department received a de minimis request letter from LHC requesting to add a diesel engine/generator up to 110 horsepower (hp). This permitting action is an administrative amendment to include the addition of the engine/generator. The permit was also updated to reflect the current permit language, format, and rule references used by the Department.

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 of 15% or greater averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
2. All visible emissions from any other NSPS-affected equipment, such as screens or conveyor transfers, shall not exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
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 and ARM 17.8.752).
4. Water spray bars and a fogging/mist system shall be available on site at all times and operated as necessary to maintain compliance with the opacity limitations in Sections II.A.1, II.A.2, and II.A.3 (ARM 17.8.752).

5. LHC 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. LHC 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 17.8.752).
7. Screening production is limited to 2,628,000 tons during any rolling 12-month time period (ARM 17.8.749).
8. LHC shall not operate more than one diesel engine/generator at any time and the maximum rated hp of the engine/generator shall not exceed 110 hp (ARM 17.8.749).
9. If the permitted equipment is used in conjunction with any other equipment owned or operated by LHC, 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).
10. LHC shall comply with all applicable standards and limitations, and the 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).
11. LHC 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 Sections II.A.1 and II.A.2 (ARM 17.8.340 and 40 CFR 60, Subpart A 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 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

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

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

3. LHC 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. LHC 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 LHC 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).

SECTION III: Addendum

LHC shall comply with all conditions in Addendum 4 to this permit as appropriate (ARM 17.8.749).

SECTION IV: General Conditions

- A. Inspection – LHC 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 LHC fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving LHC 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. Permit Fee – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by LHC 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. LHC 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.

Permit Analysis
LHC, Inc.
MAQP #3050-03

I. Introduction/Process Description

LHC, Inc (LHC) owns and operates a portable screening operation.

A. Permitted Equipment

LHC owns and operates the following permitted equipment to process sand and gravel materials:

- One (1) Screen with a maximum rating of 300 tons per hour (TPH)
- One (1) Diesel fired engine/generator up to 110 horsepower (hp)
- Associated equipment

B. Source Description

LHC owns and operates a screen rated for a maximum throughput of 300 TPH. The screen sorts sand and gravel to specific sized materials for sale and use in the construction industry. Typically, the permitted screen will operate in conjunction with other permitted sand and gravel processing equipment. LHC will utilize a portable electrical generator powered by diesel engine to supply electricity. The diesel engine/generator will have a maximum design capacity of up to 110 hp. The last location on file for the facility is Section 9, Township 29 North, Range 22 West, in Flathead County.

C. Permit History

On May 5, 1999, LHC was issued **Montana Air Quality Permit (MAQP) #3050-00** and **Addendum 1** for the operation of a 300 TPH screen. The screen was to be used in conjunction with various sand and gravel operations performed by LHC. LHC requested the permit be general enough in nature to allow renting of any make or model screen as long as the capacity never exceeded 300 TPH.

On February 26, 2000, LHC requested that MAQP #3050-00 be modified to allow the permitted facility to operate in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas (NAAs) during the summer months (April 1, 2001, through September 30, 2001). On April 6, 2001, the Department of Environmental Quality (Department) issued MAQP #3050-01 to reflect the change. **MAQP #3050-01** replaced MAQP #3050-00 and **Addendum 2** replaced Addendum 1.

On December 3, 2001, LHC requested that Addendum 1 to MAQP #3050-01 be updated to allow the permitted facility to operate in or within 10 km of the Kalispell, Libby, Whitefish, Columbia Falls, Butte, and Thompson Falls PM₁₀ NAAs during the summer months (April 1 through September 30) and the Kalispell and Thompson Falls Nonattainment Areas during the winter months (October 1 through March 31). Wintertime operations were limited to Sections 25 and 26, Township 29 North, Range 22 West, in Flathead County and Section 13, Township 21 North, Range 29 West, in Sanders County, Montana. **MAQP #3050-02** replaced MAQP#3050-01 and **Addendum 3** replaced Addendum 2.

D. Current Permit Action

On July 27, 2009, the Department received a de minimis request letter from LHC requesting to add a diesel engine/generator up to 110 hp. This permitting action is an administrative amendment to include the addition of the engine/generator. The permit was also updated to reflect the current permit language, format, and rule references used by the Department. **MAQP #3050-03** replaces MAQP 3050-02 and **Addendum 4** replaces Addendum 3.

E. Additional Information

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

II. Applicable Rules and Regulations

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

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

1. 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).

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

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that

would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

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

1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
4. ARM 17.8.213 Ambient Air Quality Standard for Ozone
5. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
6. ARM 17.8.221 Ambient Air Quality Standard for Visibility
7. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀

LHC 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, LHC 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). LHC is considered an NSPS affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts:

- a. 40 CFR 60, Subpart A – General Provisions apply to all equipment or facilities subject to an NSPS Subpart as listed below:
 - b. 40 CFR 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants. In order for a processing 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. The Department has on file that a 1999 screen is currently being used under this permit. Because the screen was manufactured after August 31, 1983 and has a rated capacity greater than 150 TPH, if the screen is operated with a crusher manufactured after this date, this screen would be subject to these standards.
 - c. 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE), indicates that NSPS requirements apply to owners or operators of stationary CI ICE that commence construction, modification, or reconstruction after July 11, 2005, where the stationary CI ICE is manufactured after April 1, 2006, and is not a fire pump engine. Through a de minimis change, this permit authorizes the use of a diesel-powered engine up to 110 hp. Any engine/generator meeting the applicability requirements of this rule will be subject to the NSPS.
8. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. This rule requires that a source, as defined and applied in 40 CFR Part 63, comply with the requirements of 40 CFR Part 63.
- a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to a National Emission Standard for Hazardous Air Pollutants (NESHAPs) Subpart as listed below:
 - b. 40 CFR 63, Subpart ZZZZ – NESHAPs for Stationary Reciprocating Internal Combustion Engines (RICE). Diesel RICE engines are an affected source if they are new or reconstructed on or after June 12, 2006. Any diesel RICE engine operated by LHC that is new or reconstructed on or after June 12, 2006, will be subject to this standard. Any engine/generator meeting the applicability requirements of this rule will be subject to these standards. Since the permit is written in a de minimis-friendly manner, area source provisions of the MACT requirements may apply to future engine/generators.
- D. ARM 17.8, Subchapter 5 – Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:
- 1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. A permit fee is not required for the current permit action because the permit action is considered an administrative permit change.
 - 2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department; the air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

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

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

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit modification to construct, modify, or use any asphalt plant, crusher or screen that has the potential to emit (PTE) greater than 15 tons per year of any pollutant. LHC has a PTE greater than 15 tons per year of particulate matter; therefore, an air quality permit is required.
3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. A permit application was not required for the current permit action because the permit change is considered an administrative permit change. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. An affidavit of publication of public notice was not required for the current permit action because the permit change is considered an administrative permit change.
6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.

9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving LHC of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
 10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
 11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
 12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
 13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
 14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an air quality permit may be transferred from one location to another if the Department receives a complete notice of intent to transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.
- F. ARM 17.8, Subchapter 8 - Prevention of Significant Deterioration of Air Quality, including, but not limited to:
1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
 2. ARM 17.8.818 Review of Major Stationary Sources and Major Modification--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

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

- G. ARM 17.8, Subchapter 12 – Operating Permit Program Applicability, including, but not limited to:
1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. PTE > 100 tons/year of any pollutant;
 - b. PTE > 10 tons/year of any one hazardous air pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
 - c. PTE > 70 tons/year of PM₁₀ in a serious PM₁₀ 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 #3050-03 for LHC, the following conclusions were made:
 - a. The facility's PTE is less than 100 tons/year for any pollutant.
 - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is potentially subject to current NSPS (40 CFR 60, Subpart OOO).
 - e. This facility is potentially subject to area source provisions of a current NESHAP standard (depending on engine/generator installed).
 - f. This source is not a Title IV affected source or a solid waste combustion unit.
 - g. This source is not an EPA designated Title V source.

Based on these facts, the Department determined that this facility is not subject to the Title V Operating Permit Program. However, in the event that the EPA makes minor sources that are subject to NSPS obtain a Title V Operating Permit, this source may be subject to the Title V Operating Permit Program.

III. BACT Determination

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

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

IV. Emission Inventory**

LHC, Inc
Emissions Inventory - Controlled

Source	Tons/Year					
	PM	PM-10	NOx	VOC	CO	SOx
300 TPH Screen	2.89	0.97				
Diesel Generator (up to 110 hp)	1.06	1.06	14.94	1.21	3.23	1.01
Transfer Operations	0.00	0.00				
Pile Forming	8.41	3.94				
Bulk Loading	16.82	7.88				
Haul Roads	5.49	2.05				
Total	34.67	15.90	14.94	1.21	3.23	1.01

** PM = Particulate Matter
 PM-10 or PM10 = Particulate Matter with an aerodynamic diameter of 10 microns or less
 NO_x = oxides of nitrogen
 VOC = volatile organic carbon
 CO = carbon monoxide
 SO_x = oxides of sulfur

CALCULATIONS:

Screen

Process Rate: 300.0000 tons/hr
 Hours of operation: 8760.0000 hr/yr or 24 hr/day

PM Emissions (controlled):
 Emission Factor: 0.0022 lbs/ton (AP-42 Table 11.19.2-2 8/2004)
 Calculations: 0.0022 lbs/ton * 300 tons/hr = 0.660 lbs/hr
 0.66 lbs/hr * 8760 hr/yr * 0.0005 ton/lb = **2.891** tons/yr

PM-10 Emissions (controlled):
 Emission Factor: 0.00074 lbs/ton (AP-42 Table 11.19.2-2, 8/2004)
 Calculations: 0.00074 lbs/ton * 300 tons/hr = 0.222 lbs/hr
 0.222 lbs/hr * 8760 hr/yr * 0.0005 ton/lb = **0.972** tons/yr

Pile Forming (1 Pile) -

Process Rate: 300.0000 tons/hr
Hours of operation: 8760.0000 hr/yr or 24 hr/day

PM Emissions:

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

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 (%)

k = 0.74 for PM
k = 0.35 for PM10
M = 1.72 %
U = 9.10 MPH

average moisture content observed in mineral processing: AP-42 table 11.19.2-1 note b
statewide average : <http://met-www.cit.cornell.edu/ccd/wndspd98.html>

PM E = 0.0064 lbs/ton
PM10 E = 0.0030 lbs/ton

PM Emissions:

Emission Factor: 0.0064 lbs/ton (AP 42 13.2.4, 11/06)
Calculations: 0.0064 lbs/ton * 300 tons/hr = 1.920 lbs/hr
1.92 lbs/hr * 8760 hr/yr * 0.0005 tons/lb = 8.410 tons/yr

PM-10 Emissions:

Emission Factor: 0.0030 lbs/ton (AP 42 13.2.4, 11/06)
Calculations: 0.003 lbs/ton * 300 tons/hr = 0.900 lbs/hr
0.9 lbs/hr * 8760 hr/yr * 0.0005 tons/lb = 3.942 tons/yr

Bulk Loading (2)

Process Rate 300.0000 tons/hr
Hours of operation: 8760.0000 hr/yr

PM Emissions:

Emission Factor: 0.0064 lbs/ton (AP 42 13.2.4, 11/06)
Calculations: 0.0064 lbs/ton * 300 tons/hr * 2 = 3.840 lbs/hr
3.84 * 8760 hr/yr * 0.0005 tons/lb = 16.819 TPY

PM10 Emissions:

Emission Factor: 0.0030 lbs/ton (AP 42 13.2.4, 11/06)
Calculations: 0.003 lbs/ton * 300 tons/hr * 2 = 1.800 lbs/hr
1.8 lbs/hr * 8760 hr/yr * 0.0005 tons/lb = 7.884 tons/yr

Generators

Rated hp: 110.0000 hp
8760.0000 hrs or

PM Emissions - hP

Emissions Factor: 0.0022 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations: 0.0022 lb/hP-hr *110 hP = 0.242 lb/hr
0.242 lbs/hr *8760 hrs * 0.0005 tons/lb = 1.060 tons/yr

PM-10 Emissions

assume all PM emissions are PM10 emissions (AP-42 Table 3.3-1, 10/1996)
0.242 lb/hr
1.060 tons/yr

NO_x

Emissions Factor: 0.0310 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations: 0.031 lb/hP-hr *110 hP = 3.410 lb/hr
3.41 lbs/hr *8760 hrs * 0.0005 tons/lb = 14.936 tons/yr

CO

Emissions Factor: 0.0067 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations: 0.0067 lb/hP-hr *110 hP = 0.737 lb/hr
0.737 lbs/hr *8760 hrs * 0.0005 tons/lb = 3.228 tons/yr

SO_x

Emissions Factor: 0.0021 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations: 0.0021 lb/hP-hr *110 hP = 0.231 lb/hr
0.231 lbs/hr *8760 hrs * 0.0005 tons/lb = 1.012 tons/yr

VOC

Emissions Factor: 0.0025 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations: 0.0025 lb/hp-hr *110 hp = 0.275 lb/hr
0.275 lb/hr *8760 hrs * 0.0005 tons/lb = 1.205 tons/yr

Total HAPs

Emissions Factor: 0.0037 lb/MMBTU (AP-42 Table 3.3-2, 10/1996)
Conversion Factor: 7000.0000 BTU/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations: 7000 BTU/hp-hr *110 hp *0.0037 lb/MMBTU * 10⁻⁶ MMBTU/BTU = 0.003 lb/hr
0.003 lb/hr *8760 hr * 0.0005 tons/lb = 0.013 ton/yr

Haul Roads

AP-42 13.2 (11/2006)

$$E = k (s/12)^a (W/3)^b$$

where k, a, b, c and d are empirical constants (Reference 6) given below and

E = size-specific emission factor (lb/VMT)

s = surface material silt content (%)

W = mean vehicle weight (tons)

s = 7.1 %

W = 50 tons

Vehicle Miles Traveled: 5 VMT/day {Estimated}

PM Emissions:

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

a = 0.7

b = 0.45

k = 4.9

E = $\frac{12.035995}{50}$ lb/VMT

Control Factor = 50.00%

PM= 30.09 Lbs/day
5.49 ton/yr

PM10 Emissions:

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

a = 0.9

b = 0.45

k = 1.5

E = $\frac{4.5030949}{50}$ lb/VMT

PM= 11.26 Lbs/day
2.05 ton/yr

V. Existing Air Quality

MAQP #3050-03 allows the operation of the screening equipment at various locations throughout Montana. The areas covered by MAQP #3050-03 are designated as attainment/unclassified for the ambient air quality standards. Addendum 4 to MAQP #3050-03 allows LHC to operate in certain PM₁₀ nonattainment areas during both the summer and winter months.

VI. Air Quality Impacts

MAQP #3050-03 and Addendum 4 is issued for the operation of a portable screening plant. In the view of the Department, the amount of controlled emissions generated by this facility will not exceed any set ambient standard. In addition, this source is portable and any air quality impacts would be expected to be minimal and temporary. The Department determined that the impact from this permitting action will be minor. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

VII. Ambient Air Impact Analysis

The Department determined, based on the maximum potential to emit, and permitting procedures designed to protect ambient air quality standards, that the impact from this permitting action will be minor. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

VIII. Taking or Damaging Implication Analysis

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

YES	NO	
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.

IX. Environmental Assessment

This permitting action is an administrative action; therefore, an environmental assessment is not required.

Analysis Prepared By: Shawn Juers
Date: 8/4/2009

Addendum 4
Montana Air Quality Permit (MAQP) #3050-03

An addendum to MAQP #3050-03 is hereby granted to LHC, Inc (LHC) pursuant to Section 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:

LHC owns and operates a portable non-metallic mineral processing facility consisting of a screen (maximum capacity 300 tons per hour (TPH)), and a diesel fired engine/generator (up to a 110 horsepower (hp)).

II. Seasonal and Site Restrictions – **Winter and Summer Seasons**

Addendum 4 applies to the LHC 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 (PM₁₀) nonattainment areas. Additionally, seasonal and site restrictions apply to the facility as follows:

- A. During the winter season (October 1-March 31) - The only locations in or within 10 km of a PM₁₀ nonattainment area where LHC may operate are:
 - 1. Sections 25 and 26, Township 29 North, Range 22 West, in Flathead County
 - 2. Section 13, Township 21 North, Range 29 West, in Sanders County
 - 3. Any other site that may be approved, in writing, by the Department of Environmental Quality (Department).
- B. During the summer season (April 1-September 30) – LHC may operate at any location in or within 10 km of the Butte, Columbia Falls, Kalispell, Libby, Thompson Falls, and Whitefish PM₁₀ nonattainment areas.
- C. LHC shall comply with the limitations and conditions contained in Addendum 4 to MAQP #3050-03 while operating in or within 10 km of any of the previously identified PM₁₀ nonattainment areas. Addendum 4 shall be valid until revoked or modified. The Department reserves the authority to modify Addendum 4 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. Limitations and Conditions – **Summer Season**

- A. Water spray bars and/or a mist/fogging system must be available and operated, as necessary, on the screens and all transfer points whenever the screening plant is in operation (ARM 17.8.749).
- B. LHC shall not cause or authorize to be discharged into the atmosphere from any equipment, such as screens or transfer points, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).
- C. LHC shall not cause or authorize to be discharged into the atmosphere from haul roads, access roads, parking lots, or the general plant property any visible fugitive emissions that exhibit an opacity of 10% or greater (ARM 17.8.749).

- D. LHC shall treat all unpaved portions of the access roads, parking lots, and general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the 10% opacity limitation (ARM 17.8.749).
- E. LHC shall not operate more than one screen at any one time. Total screen production shall not exceed 7,200 tons per day (ARM 17.8.749).
- F. LHC shall not operate more than one diesel engine/generator at any one time. The diesel engine/generator shall have a maximum rating of 110 hp (ARM 17.8.749).

IV. Limitations and Conditions – **Winter Season**

A. Operational Limitations and Conditions

- 1. Water spray bars and/or a mist/fogging system must be available and operated, as necessary, on the screens and all transfer points whenever the screening plant is in operation (ARM 17.8.749).
- 2. LHC shall not cause or authorize to be discharged into the atmosphere from any equipment, such as screens or transfer points, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).
- 3. LHC shall not cause or authorize to be discharged into the atmosphere from haul roads, access roads, parking lots, or the general plant property any visible fugitive emissions that exhibit an opacity of 10% or greater (ARM 17.8.749).
- 4. LHC shall treat all unpaved portions of the access roads, parking lots, and general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the 10% opacity limitation (ARM 17.8.749).
- 5. LHC shall not operate more than one screen at any one time. Total screen production shall not exceed 6,600 tons per day (ARM 17.8.749).
- 6. LHC shall not operate more than one diesel engine/generator at any one time. The diesel engine/generator shall have a maximum rating of 110 hp and shall not exceed 22 hours per day operation (ARM 17.8.749).

V. Operational Reporting Requirements

- A. If this screening plant is moved to another nonattainment 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).
- B. Production information for the sites covered by this addendum must be maintained for 5 years and submitted to the Department upon request. The information must include (ARM 17.8.749):
 - 1. Tons of material screened by each screen at each site (including amount of recirculated/rerun material),

2. Tons of bulk material loaded at each site (production),
 3. Daily hours of operation at each site,
 4. Gallons of diesel used by the generator at each site,
 5. Hours of operation and sizes for the generator at each site, and
 6. Fugitive dust information consisting of the total miles driven on unpaved roads for all plant vehicles.
- C. LHC shall document, by day, the total screening production. LHC shall sum the total screening production for the previous day to verify compliance with the limitations in Sections III.A.5 and IV.A.5. 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 and may be submitted along with the annual emissions inventory (ARM 17.8.749).

Addendum 4 Analysis
LHC, Inc
Montana Air Quality Permit (MAQP) #3050-03

I. Permitted Equipment

LHC, Inc (LHC) owns and operates a portable non-metallic mineral processing facility consisting of a screening plant (maximum capacity 300 tons per hour (TPH)), up to a 110 horsepower (hp) diesel engine/generator, and associated material handling and processing equipment.

II. Source Description

LHC uses this screening plant to sort sand and gravel materials for use in various construction operations.

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. ARM 17.8.749 Conditions for Issuance of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
- B. 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. A source may not increase its emissions beyond those found in its permit unless the source applies for and receives another permit.
- C. ARM 17.8.765 Transfer of Permit. 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;
 - 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.

V. Emission Inventory

LHC Inc.

Source	lbs/day					
	PM	PM-10	NOx	VOC	CO	SOx
300 TPH Screen	14.5	4.9				
Deisel Generator up to 110 hp	5.3	5.3	75.0	6.05	16.21	5.1
Transfer Operations	0.0	0.0				
Pile Forming	42.2	19.8				
Bulk Loading	84.5	39.6				
Haul Roads	30.1	11.3				
Total	176.6	80.9	75.0	6.1	16.2	5.1

V. Existing Air Quality

On July 1, 1987, the Environmental Protection Agency (EPA) promulgated new National Ambient Air Quality Standards (NAAQS) for particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀). Due to exceedances of the national standards for PM₁₀, the cities of Kalispell (and the nearby Evergreen area), Columbia Falls, Butte, Whitefish, Libby, Missoula, and Thompson Falls were designated by EPA as nonattainment for PM₁₀. As a result of this designation, the EPA required the Department and the City-County Health Departments to submit PM₁₀ State Implementation Plans (SIP). The SIPs consisted of emission control plans that controlled fugitive dust emissions from roads, parking lots, construction, and demolition, since technical studies identified these sources to be the major contributors to PM₁₀ emissions.

MAQP #3050-03 and Addendum 4 are for a portable screening plant that will locate at sites in or within 10 kilometers (km) of certain PM₁₀ nonattainment areas. Based on the maximum potential to emit of the permitted equipment, and permitting procedures designed to protect the ambient air quality standards, this permitting action is not expected to cause or contribute to the degradation of the ambient air quality in the areas permitted. The procedures used for non-attainment area permitting are designed to protect the national ambient air quality standards. Also, this facility is a portable source that would be expected to operate on an intermittent and temporary basis and any effects on air quality would therefore be expected to be minor and short-lived.

VI. Air Quality Impacts

MAQP #3050-03 and Addendum 4 will cover the operations of this portable screening plant while operating at any location within Montana, excluding those counties that have a Department approved permitting program and those areas that are tribal lands. Addendum 4 will cover the operations of this portable screening plant while operating in or within 10 km of the PM₁₀ nonattainment areas specified in this addendum. Based on the maximum calculated potential to emit, and permitting procedures designed to protect the ambient air quality standards, this permitting action is not expected to cause or contribute to the degradation of the ambient air quality standards.

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

As the current permit action is an administrative amendment, an environmental assessment is not required for the proposed project.

Permit Analysis Prepared by: Shawn Juers

Date: 8/4/2009