AIR QUALITY PERMIT

Issued To:	Hollow Contracting, Inc. 404 Greenwood Avenue Butte, Montana 59701	Permit #2744-07 Administrative Amendment (AA) Request Received: 04/19/07 Department Decision on AA: 06/07/07 Permit Final: 06/23/07 AFS #777-2744

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

SECTION I: Permitted Facilities

A. Plant Location

Hollow operates a portable crushing/screening facility that moves to various locations throughout Montana. However, Permit #2744-07 will apply while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department)-approved permitting program, those areas considered tribal lands, or those areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) nonattainment areas (NAAs). *A Missoula County air quality permit will be required for locations within Missoula County, Montana*. Addendum #5 applies to the Hollow facility while operating at any location in or within 10 km of certain PM_{10} NAAs during the summer months (April 1 – September 30) and at sites approved by the Department during the winter months (October 1 – March 31). A complete list of the permitted equipment is contained in Section I.A of the permit analysis.

B. Current Permit Action

On April 19, 2007, Hollow requested an administrative amendment to write Permit #2744-06 in a de minimis friendly manner, allowing Hollow additional flexibility in facility operations while limiting facility emissions. Also, the permit was updated to reflect the current permit language and rule references used by the Department.

SECTION II: Limitations and Conditions

A. Operational Limitations and Conditions

1. Hollow shall not cause or authorize to be discharged into the atmosphere from any Standards of Performance for New Stationary Sources (NSPS)-affected crusher, any visible emissions that exhibit an opacity of 15% or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 Code of Federal Regulations (CFR) Part 60, Subpart OOO).

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

3. Hollow shall not cause or authorize to be discharged into the atmosphere, from any non-NSPS-affected equipment, any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304 and ARM 17.8.752).

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

5. Hollow shall not cause or authorize to be discharged into the atmosphere from any street, road, or parking lot any visible fugitive emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes and must take reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308 and ARM 17.8.752).

6. Hollow shall treat all unpaved portions of the haul roads, access roads, parking lots, or 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. Crushing production from the facility shall be limited to 3,022,200 tons during any rolling 12-month time period (ARM 17.8.749).

8. Hollow shall not operate more than 3 crushers at any given time and the maximum combined rated design capacity of the crushers shall not exceed 345 tons per hour (TPH) (ARM 17.8.749).

9. Screening production from the facility shall be limited to 4,380,000 tons during any rolling 12-month time period (ARM 17.8.749).

10. Hollow shall not operate more than 2 screens at any given time and the maximum combined rated design capacity of the screens shall not exceed 500 TPH (ARM 17.8.749).

11. Hollow shall not operate more than 1 diesel engine/generator at any given time and the maximum rated design capacity of the diesel engine/generator shall not exceed 450 kilowatts (kW) (ARM 17.8.749).

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

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

14. Hollow shall comply with all applicable standards and limitations, and the reporting, record keeping, and notification requirements contained in 40 CFR Part 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, for any applicable diesel engines (ARM 17.8.340, 40 CFR 60, Subpart IIII).

B. Testing Requirements

1. Within 60 days after achieving the maximum production rate, but no later than 180 days after initial startup, an Environmental Protection Agency (EPA) Method 9 opacity test and/or other methods and procedures, as specified in 40 CFR Part 60.675, must be performed on any NSPS affected equipment to demonstrate compliance with the emissions limitations contained in Sections II.A.1 and II.A.2 (ARM 17.8.340, 40 CFR Part 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 portable crushing/screening plant is moved to another location, an Intent to Transfer form must be sent to the Department. In addition, a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The Intent to Transfer form and the proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.765).

2. Hollow shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. All records compiled in accordance with this permit shall be maintained by Hollow as a permanent business record for at least 5 years following the date of the measurement, must be submitted to the Department upon request, and must be available at the plant site for inspection by the Department (ARM 17.8.749).

3. Hollow shall supply the Department with annual production information for all emission points, as required, by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the most recent emission inventory report and sources identified in Section I.A of the permit analysis.

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

4. Hollow shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted to the Department, in writing, 10 days prior to start-up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must

include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).

5. Hollow shall document, by month, the total crushing production for the facility. By the 25th day of each month, Hollow shall total the crushing production during the previous 12 months to verify compliance with the limitation in Section II.A.7. A written report of the compliance verification shall be submitted along with the annual emission inventory (ARM 17.8.749).

6. Hollow shall document, by month, the total screening production for the facility. By the 25th day of each month, Hollow shall total the screening production during the previous 12 months to verify compliance with the limitation in Section II.A.9. A written report of the compliance verification shall be submitted along with the annual emission inventory (ARM 17.8.749).

SECTION III: General Conditions

A. Inspection - Hollow 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 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 Hollow fails to appeal as indicated below.

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

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

E. Appeals - Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding. 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 Fees - Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay of the annual operation fee by Hollow may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.

H. Construction Commencement - Construction must begin within 3 years of permit

issuance and proceed with due diligence until the project is complete or the permit shall be revoked.

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. Hollow shall comply with the conditions contained in this permit while operating at any location in Montana, except within those areas having a Department approved permitting program.

PERMIT ANALYSIS
Hollow Contracting, Inc.
Permit #2744-07

I. Introduction/Process Description

A. Permitted Equipment

Hollow Contracting, Inc. (Hollow) owns and operates a portable crushing/screening facility consisting of 3 crushers (up to 345 ton per hour (TPH)), 2 screens (up to 500 TPH), a diesel generator/engine (up to 450 kilowatts (kW), and associated equipment. Permit #2744-07 will apply while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department)-approved permitting program, those areas considered tribal lands, or those areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) nonattainment areas (NAAs). *A Missoula County air quality permit will be required for locations within Missoula County, Montana*. Addendum #5 applies to the Hollow facility while operating at any location in or within 10 km of certain PM_{10} NAAs during the summer months (April 1 – September 30) and at sites approved by the Department during the winter months (October 1 – March 31).

B. Process Description

Hollow proposes to use this crushing/screening plant and associated equipment to crush and screen sand and gravel materials for use in various construction operations. For a typical operational setup, unprocessed materials are loaded into the crushing/screening plant via a hopper and transferred by conveyor to the crushers. From the crushers, materials are sent to the screen, where they are separated and conveyed to stockpiles**.**

C. Permit History

On March 19, 1993, **Permit #2744-00** was issued to Hollow to operate a 1968 Eagle jaw crusher and associated equipment.

On April 24, 1995, Hollow submitted a request that air quality Permit #2744-00 be transferred to Montana Materials. In addition to transferring ownership of Permit #2744-00 from Hollow to Montana Materials, Montana Materials added a 1952 Telesmith cone crusher, a 1960 Symons cone crusher, two 1965 Telesmith screens, and a 1972 El-Jay screen. **Permit #2744-01** replaced Permit #2744-00.

On May 21, 1998, Hollow Contracting, Inc. requested a modification of Permit #2744-01 to change the name of the company from Montana Materials, L.L.C. to Hollow. In addition, the rule references were updated. On June 18, 1998, the final version of **Permit #2744-02** replaced Permit #2744-01.

On April 8, 1999, Hollow requested a modification to allow for summer operation (April 1, 1999, through September 30, 1999) within the Butte PM_{10} NAA at Section 25 (Tract 1), Township 3 North, Range 8 West, in Silver Bow County, Montana. In addition to the Butte NAA, the permit action allowed the facility to operate in or within 10 kilometers of the following PM_{10} NAA's during the summer months: Libby, Kalispell, Columbia Falls, Whitefish, and Thompson Falls. On April 24, 1999, the final version of **Permit #2744-03** replaced Permit #2744-02 and **Addendum 1** was attached.

On May 31, 2000, Hollow requested a modification to allow for summer operation (April 1, 2000, through September 30, 2000) within the Butte PM_{10} NAA. Hollow initially located at Section 25 (Tract 1), Township 3 North, Range 8 West, Silver Bow County, Montana. In addition to the Butte NAA, this permit action allowed the facility to operate in or within 10 kilometers of the following PM_{10} NAA's during the summer months: Libby, Kalispell, Columbia Falls, Whitefish, and Thompson Falls. On July 16, 2000, the final version of **Permit #2744-04** replaced Permit #2744-03 and **Addendum 2** replaced Addendum 1.

Hollow submitted a request for an alteration to Permit #2744-04 to add a 1986 El-Jay 45" cone crusher, a 1989 Barmac 9600 impact crusher, a Universal roll crusher, and two 1991 Fabtec screen plants. Hollow's request also included the removal of a 1952 Telesmith cone crusher, a 1960 Symons cone crusher, two 1965 Telesmith screens, and a 1972 El-Jay screen.

The permit action allowed for summer operation (April 1 through September 30) within the Butte PM_{10} NAA. Hollow initially located at Section 25 (Tract 1), Township 3 North, Range 8 West in Silver Bow County, Montana. In addition to the Butte PM_{10} NAA, the permit action allowed the facility to operate in or within 10 kilometers of the following PM_{10} NAA's during the summer months: Libby, Kalispell, Columbia Falls, Whitefish, and Thompson Falls. The permit was also updated to reflect current permit language and rule references used by the Department. **Permit #2744-05** replaced Permit #2744-04 and **Addendum 3** replaced Addendum 2.

On November 20, 2002, Hollow submitted a request for a permit modification to correctly identify the equipment Hollow operates. Hollow requested to remove the universal roll crusher and properly identify the screens as rentals, which were improperly identified in the permit alteration to Permit #2744-04 and should be listed as 2 screens of up to 250 TPH. Also, in order to update the Addendum for operations in or within 10 km of certain PM_{10} NAA's and correctly list the equipment, Hollow submitted a request for an Addendum renewal on December 11, 2002.

Addendum 4 to Permit #2744-06 allows for summer operations (April 1 through September 30) in or within 10 km of certain PM_{10} NAA's and winter operations (October 1 through March 31) at Section 25 (Tract 1), Township 3 North, Range 8 West in Silver Bow County. Hollows initial location was indicated as Section 25 (Tract 1), Township 3 North, Range 8 West in Silver Bow County, Montana, in the Butte PM_{10} NAA. In addition to the Butte PM_{10} NAA, the current permit action allows the facility to operate in or within 10 km of the following PM_{10} NAA's during the summer months: Libby, Kalispell, Columbia Falls, Whitefish, and Thompson Falls. **Permit #2744-06** replaced Permit #2744-05 and **Addendum 4** replaced Addendum 3.

D. Current Permit Action

On April 19, 2007, Hollow requested an administrative amendment to write Permit #2744-06 in a de minimis friendly manner, allowing Hollow additional flexibility in facility operations while limiting facility emissions. Also, the permit was updated to reflect the current permit language and rule references used by the Department. **Permit #2744-07** replaces Permit #2744-06 and **Addendum #5** replaces Addendum 4.

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 locations of complete copies of all applicable rules and regulations or copies where appropriate.

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

1. ARM 17.8.101 Definitions. This rule is a list of applicable definitions used in this subchapter, 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).

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

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

5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant 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 that a public nuisance is created.

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

1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
4. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
5. ARM 17.8.223 Ambient Air Quality Standard for PM_{10}

Hollow must comply 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, Hollow 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 rule.

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

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 rule.

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 Standards of Performance for New Stationary Sources. This rule incorporates, by reference, 40 Code of Federal Regulations (CFR) 60, Standards of Performance for New Stationary Sources (NSPS). The owner or operator of any stationary source or modification, as defined and applied in 40 Part 60, NSPS, shall comply with the standards and provisions of 40 CFR Part 60.

   Hollow is considered an NSPS-affected facility under 40 CFR 60 and is subject to the requirements of Subpart OOO and Subpart IIII.

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 Hollow 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. Hollow was not required to submit a permit application fee for the current action because it is considered an administrative 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. This operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

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

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

1. 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 facility to obtain an air quality permit or permit alteration to construct, alter, or use any Hollow plant, crusher, or screen that has the Potential to Emit (PTE) greater than 15 tons per year of any pollutant. Hollow has a PTE greater than 15 tons per year of total PM, PM_{10}, oxides of nitrogen (NO_x), and carbon monoxide (CO); 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. Hollow was not required to submit a permit application for the current permit action because it is considered an administrative 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. Hollow was not required to submit a public notice for the current permit action because it is considered an administrative action.

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. Hollow was not required to submit a BACT analysis for the current permit action because it is considered an administrative action.

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 Hollow 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 altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 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 Hollow, 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 Modifications--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

   This facility is not a major stationary source because it is not a listed source and does not have a PTE greater than 250 tons per year (excluding fugitive emissions) of any air pollutant.

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

1. 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.

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

2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #2744-07 for the Hollow facility, the following conclusions were made:

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

b. The facility's PTE is less than 10 tons/year 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 not subject to any current National Emission Standards for Hazardous Air Pollutants (NESHAP) standards.

e. The facility is currently subject to NSPS (40 CFR 60, Subpart A, General Provisions, and Subpart OOO, Non-Metallic Mineral Processing Plants) standards.

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

g. This source is not an Environmental Protection Agency (EPA) designated Title V source.

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

III. BACT Analysis

A BACT determination is required for any new or altered source. Hollow shall install on the new or altered source the maximum air pollution control capability that is technologically practicable and economically feasible, except that BACT shall be used. A BACT analysis was not required for the current permit action because it is considered an administrative action.

IV. Emission Inventory

	Tons/Year					
Source	**PM**	**PM_{10}**	**NO_x**	**VOC**	**CO**	**SO_x**
Up to 3 Crushers (up to 345 TPH)	1.80	0.83				
Up to 2 Screens (up to 500 TPH)	4.82	1.62				
Material Transfer	2.32	0.74				
Pile Forming	17.52	8.23				
Bulk Loading	2.41	0.81				
Diesel Engine/Generator (up to 450 kW)	5.81	5.81	81.94	6.53	17.66	5.42
Haul Roads	12.68	3.60				
Total	47.36	21.64	81.94	6.53	17.66	5.42

Table abbreviations for gaseous pollutants include the abbreviation for Volatile Organic Compounds (VOC).

Up to 3 Crushers (up to 345 TPH)

Maximum Process Rate: 345 ton/hr
Hours of operation: 8760 hr/yr

PM Emissions:

Emission Factor:	0.0012 lb/ton (controlled) (AP-42, Table 11.19.2-2, 8/04)	
Hourly Calculations:	0.0012 lb/ton * 345 ton/hr =	0.41 lb/hr
Daily Calculations:	0.41 lb/hr * 24 hr/day =	9.94 lb/day
Annual Calculations:	0.41 lb/hr * 8760 hr/yr * 0.0005 ton/lb =	1.80 ton/yr

PM_{10} Emissions:

Emission Factor:	0.00054 lb/ton (controlled) (AP-42, Table 11.19.2-2, 8/04)	
Hourly Calculations:	0.00054 lb/ton * 345 ton/hr = 0.19 lb/hr	
Daily Calculations:	0.19 lb/hr * 24 hr/day =	4.47 lb/day
Annual Calculations:	0.19 lb/hr * 8760 hr/yr * 0.0005 ton/lb =	0.83 ton/yr

Up to 2 Screens (up to 500 TPH)

Process Rate: 500 ton/hr
Hours of operation: 8760 hr/yr

PM Emissions:

Emission Factor:	0.0022 lb/ton (controlled) (AP-42, Table 11.19.2-2, 8/04)	
Hourly Calculations:	0.0022 lb/ton * 500 ton/hr =	1.10 lb/hr
Daily Calculations:	1.10 lb/hr * 24 hr/day =	26.4 lb/day
Annual Calculations:	1.10 lb/hr * 8760 hr/yr * 0.0005 ton/lb =	4.82 ton/yr

PM_{10} Emissions:

Emission Factor:	0.00074 lb/ton (controlled) (AP-42, Table 11.19.2-2, 8/04)	
Hourly Calculations:	0.00074 lb/ton * 500 ton/hr =	0.37 lb/hr
Daily Calculations:	0.37 lb/hr * 24 hr/day =	8.88 lb/day
Annual Calculations:	0.37 lb/hr * 8760 hr/yr * 0.0005 ton/lb =	1.62 ton/yr

Diesel Generator (up to 450 kW)

Generator Size = up to 450 kW
1kW = 1.341 hp
652 kW * 1.341 = 603.45 hp

Hours of operation: 8760 hr/yr

PM Emissions

Emission Factor:	0.0022 lb/hp-hr (AP-42, Table 3.3-1, 10/96)	
Hourly Calculations:	603.45 hp * 0.0022 lb/hp-hr =	1.33 lb/hr
Daily Calculations:	603.45 hp * 0.0022 lb/hp-hr * 24 hr/day =	31.86 lb/day
Annual Calculation:	603.45 hp * 0.0022 * 8760 hr/yr * 0.0005 lb/ton =	5.81 ton/yr

PM_{10} Emissions:

Emission Factor:	0.0022 lb/hp-hr (AP-42, Table 3.3-1, 10/96)	
Hourly Calculations:	603.45 hp * 0.0022 lb/hp-hr =	1.33 lb/hr
Daily Calculations:	603.45 hp * 0.0022 lb/hp-hr * 24 hr/day =	31.86 lb/day
Annual Calculation:	603.45 hp * 0.0022 * 8760 hr/yr * 0.0005 lb/ton =	5.81 ton/yr

NOx Emissions:

Emission Factor:	0.031 lb/hp-hr (AP-42, Table 3.3-1, 10/96)	
Hourly Calculations:	603.45 hp * 0.031 lb/hp-hr =	18.71 lb/hr
Daily Calculations:	603.45 hp * 0.031 lb/hp-hr * 24 hr/day =	448.97 lb/day
Annual Calculation:	603.45 hp * 0.031 * 8760 hr/yr * 0.0005 lb/ton =	81.94 ton/yr

VOC Emissions:

Emission Factor:	0.00247 lb/hp-hr (AP-42, Table 3.3-1, 10/96)	
Hourly Calculations:	603.45 hp * 0.00247 lb/hp-hr =	1.49 lb/hr
Daily Calculations:	603.45 hp * 0.00247 lb/hp-hr * 24 hr/day =	35.77 lb/day
Annual Calculation:	603.45 hp * 0.00247 * 8760 hr/yr * 0.0005 lb/ton =	6.53 ton/yr

CO Emissions:

Emission Factor:	0.00668 lb/hp-hr (AP-42, Table 3.3-1, 10/96)	
Hourly Calculations:	603.45 hp * 0.00668 lb/hp-hr =	4.03 lb/hr
Daily Calculations:	603.45 hp * 0.00668 lb/hp-hr * 24 hr/day =	96.75 lb/day
Annual Calculation:	603.45 hp * 0.00668 * 8760 hr/yr * 0.0005 lb/ton =	17.66 ton/yr

SOx Emissions:

Emission Factor:	0.00205 lb/hp-hr (AP-42, Table 3.3-1, 10/96)	
Hourly Calculations:	603.45 hp * 0.00205 lb/hp-hr =	1.24 lb/hr
Daily Calculations:	603.45 hp * 0.00205 lb/hp-hr * 24 hr/day =	29.69 lb/day
Annual Calculation:	603.45 hp * 0.00205 * 8760 hr/yr * 0.0005 lb/ton =	5.42 ton/yr

Material Transfer

Process Rate:	250 ton/hr
Number of Transfers	15 transfers
Hours of operation:	8760 hr/yr

PM Emissions:

Emission Factor:	0.00014 lb/ton (controlled) (AP-42, Table 11.19.2-2, 8/04)	
Hourly Calculations:	0.00014 lb/ton * 250 ton/hr * 15 transfers=	0.53 lb/hr
Daily Calculations:	0.53 lb/hr * 24 hr/day =	12.72 lb/day
Annual Calculations:	0.53 lb/hr * 8760 hr/yr * 0.0005 ton/lb =	2.32 ton/yr

PM_{10} Emissions:

Emission Factor:	0.000046 lb/ton (controlled) (AP-42, Table 11.19.2-2, 8/04)	
Hourly Calculations:	0.000046 lb/ton * 250 tons/hr * 15 transfers =	0.17 lb/hr
Daily Calculations:	0.17 lb/hr * 24 hr/day =	4.08 lb/day
Annual Calculations:	0.17 lb/hr * 8760 hr/yr * 0.0005 ton/lb =	0.74 ton/yr

Pile Forming

Process Rate:	250 ton/hr
Number of Piles	5 piles
Hours of operation:	8760 hr/yr

PM Emissions:

Emission Factor:	0.0032 lb/ton (controlled) (AP-42, Section 13.2.4, 1/95)	
Hourly Calculations:	0.0032 lb/ton * 250 ton/hr * 5 piles=	4.00 lb/hr
Daily Calculations:	4.00 lb/hr * 24 hr/day =	96.00 lb/day
Annual Calculations:	4.00 lb/hr * 8760 hr/yr * 0.0005 ton/lb =	17.52 ton/yr

PM_{10} Emissions:

Emission Factor:	0.0015 lb/ton (AP-42, Section 13.2.4, 1/95)	
Hourly Calculations:	0.0015 lb/ton * 250 ton/hr * 5 piles =	1.88 lb/hr
Daily Calculations:	1.88 lb/hr * 24 hr/day =	45.12 lb/day
Annual Calculations:	1.88 lb/hr * 8760 hr/yr * 0.0005 ton/lb =	8.23 ton/yr

Bulk Loading

Process Rate:	250 ton/hr
Number of Loads	1 load
Hours of operation:	8760 hr/yr

PM Emissions:

Emission Factor:	0.0022 lb/ton (AP-42, Table 11.19.2-2, 8/04)	
Hourly Calculations:	0.0022 lb/ton * 250 ton/hr =	0.55 lb/hr
Daily Calculations:	0.55 lb/hr * 24 hr/day =	13.20 lb/day
Annual Calculations:	0.55 lb/hr * 8760 hr/yr * 0.0005 ton/lb =	2.41 ton/yr

PM_{10} Emissions:

Emission Factor:	0.00074 lb/ton (AP-42, Table 11.19.2-2, 8/04)	
Hourly Calculations:	0.00074 lb/ton * 250 ton/hr =	0.185 lb/hr
Daily Calculations:	0.185 lb/hr * 24 hr/day =	4.44 lb/day
Annual Calculations:	0.185 lb/hr * 8760 hr/yr * 0.0005 ton/lb =	0.81 ton/yr

Haul Roads

Vehicle miles traveled:	5 VMT/day {Estimated}
Assumption:	Rated Load Capacity < 50 tons
Hours of Operation:	8760 hr/yr
	24 hr/day
	365 day/yr

TSP Emissions:

Emission Factor:	13.90 lb/VMT (controlled) (AP-42 Section 13.2.2, 12/03)	
Calculations:	5.0 VMT/day * 13.90 lb/VMT =	69.50 lb/day
	69.50 lb/day * 365 day/yr * 0.0005 ton/lb =	12.68 ton/yr

PM_{10} Emissions:

Emission Factor:	3.95 lb/VMT (controlled) (AP-42 Section 13.2.2, 12/03)	
Calculations:	5.0 VMT/day * 3.95 lb/VMT =	19.75 lb/day
	19.75 lb/day * 365 day/yr * 0.0005 ton/lb =	3.60 ton/yr

V. Existing Air Quality

Permit #2744-07 is issued for the operation of a portable crushing/screening that moves to various locations throughout Montana. This facility would be allowed to operate at areas designated as attainment or unclassified for all National Ambient Air Quality Standards (NAAQS); excluding counties that have a Department-approved permitting program, and those considered Tribal Lands. Permit #2744-07 and Addendum #5 applies to the Hollow facility while operating at any location in or within 10 km of certain PM_{10} NAAs during the summer months (April 1 – September 30) and at sites approved by the Department during the winter months (October 1 – March 31).

VI. Air Quality Impacts

This permit is for a portable crushing/screening plant to be located at various locations around Montana. This permit contains operational conditions and limitations that would protect air quality for this site and the surrounding area. Also, this facility is a portable source that would operate on an intermittent and temporary basis, so any effects to air quality will be minor and short-lived. Further, the amount of controlled particulate emissions generated by this project should not cause concentrations of PM_{10} in the ambient air that exceed the set standard. In addition, the limitations and conditions established in Addendum #5 would further protect NAAs.

VII. Taking or Damaging Implication Analysis

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

VIII. Environmental Assessment

An environmental assessment was not required for the current permit action because it is considered an administrative action.

Analysis Prepared By: Eric Thunstrom
Date: May 8, 2007

Addendum #5
Hollow Contracting, Inc.
Permit #2744-07

An addendum to air quality Permit #2744-07, with conditions, is hereby granted to Hollow Contracting, Inc. (Hollow) pursuant to Sections 75-2-204 and 75-2-211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.765, *et seq*., as amended, for the following:

I. Permitted Equipment

Hollow owns and operates a portable crushing/screening facility consisting of 3 crushers (up to 345 ton per hour (TPH)), 2 screens (up to 500 TPH), a diesel generator/engine (up to 450 kilowatts (kW)), and associated equipment. Hollow operates at various locations throughout Montana, including locations in or within 10 kilometers (km) of the following particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) nonattainment areas (NAAs): Butte, Columbia Falls, Kalispell, Libby, Thompson Falls, and Whitefish.

II. Seasonal and Site Restrictions

Addendum #5 to Permit #2744-07 applies to the Hollow facility while operating at any location in or within 10 km of certain PM_{10} NAAs. Additionally, seasonal and site restrictions apply to the facility as follows.

A. During the winter season (October 1 - March 31) – The only location(s) in or within 10 km of a PM_{10} NAA where Hollow may operate is:

- Section 25 (Tract 1), Township 3 North, Range 8 West, in Silver Bow County, Montana; and
- 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) – Hollow may operate at any location in or within 10 km of certain PM_{10} NAAs, including, but not limited to Butte, Columbia Falls, Kalispell, Libby, Thompson Falls, and Whitefish.

C. Hollow shall comply with the limitations and conditions contained in Addendum #5 to Permit #2744-07. Addendum #5 shall be valid until revoked or modified. The Department reserves the authority to modify Addendum #5 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

A. Operational Limitations and Conditions – **Winter Season (October 1 – March 31)**

1. Water spray bars shall be available on site at all times, and operated as necessary, on the crushers, screens, and all transfer points whenever the crushing/screening plant is operating (ARM 17.8.749).

2. All visible emissions from the crushing/screening plant may not exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8. 749).

3. Hollow shall not cause or authorize to be discharged into the atmosphere from any other 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).

4. Hollow 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).

5. Hollow 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).

6. Total crushing production of all crushers shall not exceed 4,719 tons during any rolling 24-hour time period (ARM 17.8.749).

7. Total screening production of all screens shall not exceed 6,840 tons during any rolling 24-hour time period (ARM 17.8.749).

8. Hollow shall not operate more than 1 diesel engine/generator at any given time and the maximum rated design capacity of the diesel engine/generator shall not exceed 450 kW (ARM 17.8.749).

B. Operational Limitations and Conditions – **Summer Season (April 1 – September 30)**

1. Water spray bars shall be available on site at all times, and used, as necessary on the crushers, screens, and all transfer points whenever the crushing/screening plant is operating (ARM 17.8.749).

2. All visible emissions from the crushing/screening plant may not exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).

3. Hollow shall not cause or authorize to be discharged into the atmosphere from any other equipment, such as transfer points, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).

4. Hollow 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 averaged over 6 consecutive minutes (ARM 17.8.749).

5. Hollow shall treat all unpaved portions of the haul roads, 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).

6. Total crushing production of all crushers shall not exceed 8,280 tons during any rolling 24-hour time period (ARM 17.8.749).

7. Total screening production of all screens shall not exceed 12,000 tons during any rolling 24-hour time period (ARM 17.8.749).

8. Hollow shall not operate more than 1 diesel engine/generator at any given time and the maximum rated design capacity of the diesel engine/generator shall not exceed 450 kW (ARM 17.8.749).

C. Operational Reporting Requirements

1. Hollow shall provide the Department with written notification of job completion within 10 working days of job completion (ARM 17.8.749).

2. Hollow shall provide the Department with written notice of relocation of the permitted equipment within 15 working days before physical transfer of equipment (ARM 17.8.765).

3. Production information for the sites covered by this addendum must be submitted to the Department with the annual emissions inventory request or within 30 days of completion of the project. The information must include (ARM 17.8.749):

   a. Tons of material crushed by each crusher at each site;

   b. Tons of material screened by each screen at each site;

   c. Tons of bulk material loaded at each site;

   d. Daily hours of operation at each site;

   e. Gallons of diesel fuel used for the generators/engines at each site;

   f. Fugitive dust information consisting of all plant vehicles, including the following:

      i. Number of vehicles;
      ii. Vehicle type;
      iii. Vehicle weight, loaded;
      iv. Vehicle weight, unloaded;
      v. Number of tires on vehicle;
      vi. Average trip length;
      vii. Number of trips per day per vehicle;
      viii. Average vehicle speed;
      ix. Area of activity;
      x. Vehicle fuel usage (gasoline and diesel) annual total.

   g. Fugitive dust control for haul roads and general plant area:

      i. Hours of operation of water trucks;
      ii. Application schedule for chemical dust suppressant, if applicable.

4. Hollow shall document, by day, the combined total crushing production during the winter season. Hollow shall sum the combined total crushing production during the previous 24 hours to verify compliance with the limitations in Section III.A.6. A written report of compliance and the emissions inventory shall be submitted to the Department annually. The report for the previous calendar year shall be submitted along with the annual emissions inventory (ARM 17.8.749).

5. Hollow shall document, by day, the combined total crushing production during the summer season. Hollow shall sum the combined total crushing production during the previous 24 hours to verify compliance with the limitations in Section III.B.6. A written report of compliance and the emissions inventory shall be submitted to the Department annually. The report for the previous calendar year shall be submitted along with the annual emissions inventory (ARM 17.8.749).

6. Hollow shall document, by day, the total screening production during the winter season. Hollow shall sum the total screening production during the previous 24 hours to verify compliance with the limitations in Section III.A.7. A written report of compliance and the emissions inventory shall be submitted to the Department annually. The report for the previous calendar year shall be submitted along with the annual emissions inventory (ARM 17.8.749).

7. Hollow shall document, by day, the total screening production during the summer season. Hollow shall sum the total screening production during the previous 24 hours to verify compliance with the limitations in Section III.B.7. A written report of compliance and the emissions inventory shall be submitted to the Department annually. The report for the previous calendar year shall be submitted along with the annual emissions inventory (ARM 17.8.749).

Addendum #5 Analysis
Hollow Contracting, Inc.
Permit #2744-07

I. Permitted Equipment

Hollow Contracting, Inc. (Hollow) owns and operates a portable crushing/screening facility consisting of 3 crushers (up to 345 ton per hour (TPH)), 2 screens (up to 500 TPH), a diesel generator/engine (up to 450 kilowatts (kW), and associated equipment at various locations throughout Montana, except within those areas having a Department of Environmental Quality (Department)-approved permitting program. *A Missoula County air quality permit will be required for locations within Missoula County*.

II. Source Description

Hollow uses the crushing/screening plant and associated equipment to crush and screen sand and gravel materials for use in various construction operations. For a typical operational setup, unprocessed materials are loaded into the crushing/screening plant via a hopper and transferred by conveyor to the crushers. From the crushers, materials are sent to a screen, where they are separated and conveyed to stockpiles.

III. Applicable Rules and Regulations

The following rules 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. Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

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

A. <u>ARM 17.8.749 Conditions for Issuance of Permit</u>. This rule requires that the source demonstrate compliance with applicable rules and standards before a permit can be issued. Also, a permit may be issued with such conditions as are necessary to assure compliance with all applicable rules and standards. Hollow demonstrated compliance with all applicable rules and standards as required for permit issuance.

B. <u>ARM 17.8.764 Modification of Permit</u>. An air quality permit may be modified for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase in emissions because of the changed conditions. A source may not increase its emissions beyond those found in its permit unless the source applies for and receives another permit.

C. <u>ARM 17.8.765 Transfer of Permit</u>. An air quality permit may be transferred from one location to another if:

1. Written notice of intent to transfer location and public notice is sent to the Department.

2. The source will operate in the new location for a period of less than 1 year.

3. The source will not have any significant impact on any nonattainment area or any Class I area.

Hollow must submit proof of compliance with the transfer and public notice requirements when they transfer to the location(s) covered by this addendum, and will only be allowed to stay in the new location for a period of less than 1 year. Also, implementing the conditions and controls of this addendum will keep Hollow from having a significant impact on any area in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less PM_{10} nonattainment areas (NAAs).

IV. Emission Inventory (summer season)

	Lbs/Day					
Source	**PM**	**PM_{10}**	**NO_x**	**VOC**	**CO**	**SO_x**
Up to 3 Crushers (up to 345 TPH)	9.94	4.47				
Up to 2 Screens (up to 500 TPH)	26.40	8.88				
Material Transfer	12.72	4.08				
Pile Forming	96.00	45.12				
Bulk Loading	13.20	4.44				
Diesel Engine/Generator (up to 450 kW)	31.86	31.86	448.97	35.77	96.75	29.69
Haul Roads	69.50	19.75				
Total	259.62	118.60	448.97	35.77	96.75	29.69

Emission Inventory (winter season)

	Lbs/Day					
Source	**PM**	**PM_{10}**	**NO_x**	**VOC**	**CO**	**SO_x**
Up to 3 Crushers (up to 345 TPH)	5.66	2.54				
Up to 2 Screens (up to 500 TPH)	15.04	5.06				
Material Transfer	7.25	2.32				
Pile Forming	54.72	25.71				
Bulk Loading	7.52	2.53				
Diesel Engine/Generator (up to 450 kW)	31.86	31.86	448.97	35.77	96.75	29.69
Haul Roads	39.61	11.25				
Total	161.68	81.30	448.97	35.77	96.75	29.69

- Table abbreviations for gaseous pollutants include the abbreviation for Volatile Organic Compounds (VOC).

Up to 3 Crushers (up to 345 TPH)

Maximum Process Rate: 345 ton/hr
Hours of operation: 8760 hr/yr

PM Emissions:

Emission Factor: 0.0012 lb/ton (controlled) (AP-42, Table 11.19.2-2, 8/04)
Hourly Calculations: 0.0012 lb/ton * 345 ton/hr = 0.41 lb/hr
Daily Calculations: 0.41 lb/hr * 24 hr/day = 9.94 lb/day
Annual Calculations: 0.41 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 1.80 ton/yr

PM_{10} Emissions:

Emission Factor: 0.00054 lb/ton (controlled) (AP-42, Table 11.19.2-2, 8/04)
Hourly Calculations: 0.00054 lb/ton * 345 ton/hr = 0.19 lb/hr
Daily Calculations: 0.19 lb/hr * 24 hr/day = 4.47 lb/day
Annual Calculations: 0.19 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.83 ton/yr

Up to 2 Screens (up to 500 TPH)

Process Rate: 500 ton/hr
Hours of operation: 8760 hr/yr

PM Emissions:

Emission Factor:	0.0022 lb/ton (controlled) (AP-42, Table 11.19.2-2, 8/04)	
Hourly Calculations:	0.0022 lb/ton * 500 ton/hr =	1.10 lb/hr
Daily Calculations:	1.10 lb/hr * 24 hr/day =	26.40 lb/day
Annual Calculations:	1.10 lb/hr * 8760 hr/yr * 0.0005 ton/lb =	4.82 ton/yr

PM_{10} Emissions:

Emission Factor:	0.00074 lb/ton (controlled) (AP-42, Table 11.19.2-2, 8/04)	
Hourly Calculations:	0.00074 lb/ton * 500 ton/hr =	0.37 lb/hr
Daily Calculations:	0.37 lb/hr * 24 hr/day =	8.88 lb/day
Annual Calculations:	0.37 lb/hr * 8760 hr/yr * 0.0005 ton/lb =	1.62 ton/yr

Diesel Generator (up to 450 kW)

Generator Size =	up to 450 kW
1kW =	1.341 hp
652 kW * 1.341 =	603.45 hp
Hours of operation:	8760 hr/yr

PM Emissions

Emission Factor:	0.0022 lb/hp-hr (AP-42, Table 3.3-1, 10/96)	
Hourly Calculations:	603.45 hp * 0.0022 lb/hp-hr =	1.33 lb/hr
Daily Calculations:	603.45 hp * 0.0022 lb/hp-hr * 24 hr/day =	31.86 lb/day
Annual Calculation:	603.45 hp * 0.0022 * 8760 hr/yr * 0.0005 lb/ton =	5.81 ton/yr

PM_{10} Emissions:

Emission Factor:	0.0022 lb/hp-hr (AP-42, Table 3.3-1, 10/96)	
Hourly Calculations:	603.45 hp * 0.0022 lb/hp-hr =	1.33 lb/hr
Daily Calculations:	603.45 hp * 0.0022 lb/hp-hr * 24 hr/day =	31.86 lb/day
Annual Calculation:	603.45 hp * 0.0022 * 8760 hr/yr * 0.0005 lb/ton =	5.81 ton/yr

NOx Emissions:

Emission Factor:	0.031 lb/hp-hr (AP-42, Table 3.3-1, 10/96)	
Hourly Calculations:	603.45 hp * 0.031 lb/hp-hr =	18.71 lb/hr
Daily Calculations:	603.45 hp * 0.031 lb/hp-hr * 24 hr/day =	448.97 lb/day
Annual Calculation:	603.45 hp * 0.031 * 8760 hr/yr * 0.0005 lb/ton =	81.94 ton/yr

VOC Emissions:

Emission Factor:	0.00247 lb/hp-hr (AP-42, Table 3.3-1, 10/96)	
Hourly Calculations:	603.45 hp * 0.00247 lb/hp-hr =	1.49 lb/hr
Daily Calculations:	603.45 hp * 0.00247 lb/hp-hr * 24 hr/day =	35.77 lb/day
Annual Calculation:	603.45 hp * 0.00247 * 8760 hr/yr * 0.0005 lb/ton =	6.53 ton/yr

CO Emissions:

Emission Factor:	0.00668 lb/hp-hr (AP-42, Table 3.3-1, 10/96)	
Hourly Calculations:	603.45 hp * 0.00668 lb/hp-hr =	4.03 lb/hr
Daily Calculations:	603.45 hp * 0.00668 lb/hp-hr * 24 hr/day =	96.75 lb/day
Annual Calculation:	603.45 hp * 0.00668 * 8760 hr/yr * 0.0005 lb/ton =	17.66 ton/yr

SOx Emissions:

Emission Factor:	0.00205 lb/hp-hr (AP-42, Table 3.3-1, 10/96)	
Hourly Calculations:	603.45 hp * 0.00205 lb/hp-hr =	1.24 lb/hr
Daily Calculations:	603.45 hp * 0.00205 lb/hp-hr * 24 hr/day =	29.69 lb/day
Annual Calculation:	603.45 hp * 0.00205 * 8760 hr/yr * 0.0005 lb/ton =	5.42 ton/yr

Material Transfer

Process Rate:	250 ton/hr
Number of Transfers	15 transfers
Hours of operation:	8760 hr/yr

PM Emissions:

Emission Factor:	0.00014 lb/ton (controlled) (AP-42, Table 11.19.2-2, 8/04)	
Hourly Calculations:	0.00014 lb/ton * 250 ton/hr * 15 transfers=	0.53 lb/hr
Daily Calculations:	0.53 lb/hr * 24 hr/day =	12.72 lb/day
Annual Calculations:	0.53 lb/hr * 8760 hr/yr * 0.0005 ton/lb =	2.32 ton/yr

PM_{10} Emissions:

Emission Factor:	0.000046 lb/ton (controlled) (AP-42, Table 11.19.2-2, 8/04)	
Hourly Calculations:	0.000046 lb/ton * 250 ton/hr * 15 transfers =	0.17 lb/hr
Daily Calculations:	0.17 lb/hr * 24 hr/day =	4.08 lb/day
Annual Calculations:	0.17 lb/hr * 8760 hr/yr * 0.0005 ton/lb =	0.74 ton/yr

Pile Forming

Process Rate:	250 ton/hr
Number of Piles	5 piles
Hours of operation:	8760 hr/yr

PM Emissions:

Emission Factor:	0.0032 lb/ton (controlled) (AP-42, Section 13.2.4, 1/95)	
Hourly Calculations:	0.0032 lb/ton * 250 ton/hr * 5 piles=	4.00 lb/hr
Daily Calculations:	4.00 lb/hr * 24 hr/day =	96.00 lb/day
Annual Calculations:	4.00 lb/hr * 8760 hr/yr * 0.0005 ton/lb =	17.52 ton/yr

PM_{10} Emissions:

Emission Factor:	0.0015 lb/ton (AP-42, Section 13.2.4, 1/95)	
Hourly Calculations:	0.0015 lb/ton * 250 ton/hr * 5 piles =	1.88 lb/hr
Daily Calculations:	1.88 lb/hr * 24 hr/day =	45.12 lb/day
Annual Calculations:	1.88 lb/hr * 8760 hr/yr * 0.0005 ton/lb =	8.23 ton/yr

Bulk Loading

Process Rate:	250 ton/hr
Number of Loads	1 load
Hours of operation:	8760 hr/yr

PM Emissions:

Emission Factor:	0.0022 lb/ton (AP-42, Table 11.19.2-2, 8/04)	
Hourly Calculations:	0.0022 lb/ton * 250 ton/hr =	0.55 lb/hr
Daily Calculations:	0.55 lb/hr * 24 hr/day =	13.20 lb/day
Annual Calculations:	0.55 lb/hr * 8760 hr/yr * 0.0005 ton/lb =	2.41 ton/yr

PM_{10} Emissions:

Emission Factor:	0.00074 lb/ton (AP-42, Table 11.19.2-2, 8/04)	
Hourly Calculations:	0.00074 lb/ton * 250 ton/hr =	0.185 lb/hr
Daily Calculations:	0.185 lb/hr * 24 hr/day =	4.44 lb/day
Annual Calculations:	0.185 lb/hr * 8760 hr/yr * 0.0005 ton/lb =	0.81 ton/yr

Haul Roads

Vehicle miles traveled:	5 VMT/day {Estimated}
Assumption:	Rated Load Capacity < 50 tons
Hours of Operation:	8760 hr/yr
	24 hr/day
	365 day/yr

TSP Emissions:

Emission Factor:	13.90 lb/VMT (controlled) (AP-42 Section 13.2.2, 12/03)	
Calculations:	5.0 VMT/day * 13.90 lb/VMT =	69.50 lb/day
	69.50 lb/day * 365 day/yr * 0.0005 ton/lb =	12.68 ton/yr

PM_{10} Emissions:

Emission Factor:	3.95 lb/VMT (controlled) (AP-42 Section 13.2.2, 12/03)	
Calculations:	5.0 VMT/day * 3.95 lb/VMT =	19.75 lb/day
	19.75 lb/day * 365 day/yr * 0.0005 ton/lb =	3.60 ton/yr

V. Existing Air Quality

On July 1, 1987, the Environmental Protection Agency (EPA) promulgated new National Ambient Air Quality Standards (NAAQS) for PM_{10}. Due to exceedances of the national standards for PM_{10}, 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

PM_{10}. As a result of this designation, EPA required the Department and the City-County Health Departments to submit PM_{10} 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 determined these sources to be the major contributors to PM_{10} emissions.

Addendum #5 to Montana Air Quality Permit (MAQP) #2744-07 is for a portable crushing/screening plant to locate at sites in or within 10 km of certain PM_{10} NAAs during the winter season (October 1 through March 31). Winter season (October 1 through March 31) operations may include only the locations listed in Section II.A of Addendum #5. Addendum #5 of MAQP #2744-07 would also allow for summertime operations (April 1 through September 30) at any location in or within 10 km of the Butte, Columbia Falls, Libby, Kalispell, Thompson Falls, and Whitefish PM_{10} NAAs.

VI. Air Quality Impacts

Hollow is allowed to operate a portable crushing/screening plant to be located at various locations throughout Montana. MAQP #2744-07 and Addendum #5 will cover the Hollow crushing/screening plant while operating at any location within Montana, excluding those counties that have a Department-approved permitting program and those areas considered tribal lands. In the view of the Department, the amount of controlled particulate emissions generated by this project will not cause concentrations of PM_{10} in the ambient air that exceed the ambient air quality standards. In addition, this source is portable and any air quality impacts will be minimal.

VII. Taking or Damaging Analysis

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

VIII. Environmental Assessment

An environmental assessment was not required for the current permit action because it is considered an administrative action.

Analysis Prepared By: Eric Thunstrom
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