Montana Department of
ENVIRONMENTAL QUALITY
Brian Schweitzer, Governor
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March 27, 2012

Leroy Kountz
Missing Link Gravel, LLC
170 Hwy 246
Glasgow, MT 59230

Dear Mr. Kountz:

Montana Air Quality Permit #3830-01 is deemed final as of March 27, 2012, by the Department of Environmental Quality (Department). This permit is for a non-metallic mineral processing plant and associated equipment. 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

Doug Kuenzli
Environmental Science Specialist
Air Resources Management Bureau
(406) 444-4267

VW:DCK
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #3830-01

Missing Link Gravel, LLC
170 Hwy 246
Glasgow, MT 59230

March 27, 2012

MONTNA AIR QUALITY PERMIT

Issued To: Missing Link Gravel, LLC
170 Hwy 246
Glasgow, MT 59230

MAQP: #3830-01
Administrative Amendment (AA) Request
Received: 02/13/2012
Department's Decision on AA: 03/09/2012
Permit Final: 03/27/2012
AFS Number: 777-3830

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Missing Link Gravel, LLC (Missing Link) pursuant to Sections 75-2-204 and 211 of the Montana Codes 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

Missing Link operates a portable crushing and screening facility initially located in Section 28, Township 29 North, Range 39 East in Valley County, Montana. However, MAQP #3830-01 applies while operating at any location in Montana, except within those areas having a Montana 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. *A Missoula County air quality permit will be required for locations within Missoula County, Montana. Century will be required to obtain an addendum to this air quality permit to operate at locations in or within 10 km of certain PM_{10} nonattainment areas.* A complete list of the permitted equipment is contained in Section I.A of the Permit Analysis.

B. Current Permit Action

On February 6, 2012, the Department received a request from Missing Link seeking authorization to operate an additional aggregate cold screen. The potential emissions from this action were determined to be below the de minimis threshold established under ARM 17.8.745. In response to Missing Links request the current permit action is an administrative amendment for the inclusion of a third aggregate screen. In addition to the aforementioned action, the permit updates the rule references and language used by the Department and updates the emissions inventory.

Section II: Limitations and Conditions

A. Emission Limitations

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

   - For crushers that commence construction, modification, or reconstruction on or after April 22, 2008: 12% opacity

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

2. All visible emissions from any NSPS-affected equipment, other than a crusher (such as screens and conveyors), shall not exhibit an opacity in excess of the following averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO):

   - For equipment that commences construction, modification, or reconstruction on or after April 22, 2008: 7% opacity

   - For equipment that commences construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008: 10% opacity

3. All visible emissions from any non-NSPS affected equipment shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).

4. Water and spray bars shall be available on-site at all times and operated as necessary to maintain compliance with the opacity limitations in Sections II.A.1, II.A.2, and II.A.3 (ARM 17.8.749).

5. Missing Link 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. Missing Link shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section II.A.5 (ARM 17.8.749).

7. Missing Link shall not operate more than three (3) crushers at any given time and the maximum combined rated design capacity of the crushers shall not exceed 705 tons per hour (TPH) (ARM 17.8.749).

8. Missing Link shall not operate more than three (3) screens at any given time and the maximum combined rated design capacity of the screens shall not exceed 1,250 TPH (ARM 17.8.749).

9. Missing Link shall not operate or have on site more than two (2) diesel-fired generator sets at any given time and the maximum rated combined capacity of the diesel generator engines shall not exceed 1,140 horsepower (hp) (ARM 17.8.1204).

10. Operation of the diesel-fired generator engines shall not exceed 4,500 hours during any rolling 12-month time period (ARM 17.8.749 and ARM 17.8.1204)

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

12. Missing Link shall comply with all applicable standards and limitations, and the reporting, record keeping, and notification requirements contained in 40 Code of Federal Regulations (CFR) Part 60, Subpart OOO, for the crushing/screening plant (ARM 17.8.340 and 40 CFR 60, Subpart OOO).

13. Missing Link 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 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, Subpart ZZZZ).

B. Testing Requirements

1. Within 60 days after achieving maximum production, but no later than 180 days after initial start-up, an Environmental Protection Agency (EPA) Method 9 opacity test and/or other methods and procedures as specified in 40 CFR 60.675 must be performed on all NSPS affected equipment to demonstrate compliance with the emission limitations contained in Section II.A.1 and II.A.2 (ARM 17.8.340 and 40 CFR 60, General Provisions and Subpart OOO).

2. All compliance source tests shall be conducted in accordance with 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 the crushing/screening facility is moved to another location, a notice of 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 17.8.749 and ARM 17.8.765).

2. Missing Link shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745 that would include ***the additional of a new emissions unit***, 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).

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

4. Missing Link 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 (ARM 17.8.505).

5. Missing Link shall document, by month, the hours of operation of the diesel generator engines. By the 25th day of each month, Missing Link shall calculate the hours of operation from the diesel generator engines for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.10. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

6. Missing Link shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit as required in ARM 17.8.1204. The annual certification shall comply with the certification requirements of ARM 17.8.1207. The annual certification shall be submitted with the annual emission inventory information (ARM 17.8.1204 and ARM 17.8.1207).

Section III: General Conditions

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

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

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

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

E. Appeals - Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.

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

G. Air Quality Operation Fees - Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by Missing Link 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. Missing Link shall comply with the conditions contained in this permit while operating at any location in Montana, except within those areas that have a Department approved permitting program or areas considered tribal lands.

Montana Air Quality Permit (MAQP) Analysis
Missing Link Gravel, LLC
MAQP #3830-01

I. Introduction/Process Description

Missing Link Gravel, LLC (Missing Link) owns and operates a portable crushing and screening facility with a maximum rated design capacity of 705 tons per hour (TPH) of crushing production and 1,250 TPH of screening production. The facility typically employs diesel-fired generator sets to provide electrical service to equipment.

A. Permitted Equipment

Equipment permitted under this action consists of the following:

- Three (3) crushers with a combined throughput capacity of 705 TPH
- Three (3) screen plants with a combined throughput capacity of 1,250 TPH
- Two (2) diesel-fired generator sets with a combined rated capacity up to 1,140 horsepower (hp)
- Associated material handling equipment (conveyors/stackers, bin feeders, etc.)

B. Source Description

For a typical operational setup, materials are loaded into a hopper that feeds a conveyor to a portable crushing unit. Material is crushed by the crusher and conveyed to the screen. Properly sized material is conveyed to a stockpile for use and oversized material is conveyed back through the crushing/screening operation and then to a stockpile for use.

The designated home-pit was identified as Section 28, Township 29 North, Range 38 East in Valley County.

C. Permit History

On July 22, 2206, Missing Link was issued **MAQP #3890-00** to operate a portable crushing/screening facility consisting of three portable crushers (705 tons per hour (TPH) combined capacity), three screens (800 TPH combined capacity), two diesel generators (850 kW combined capacity), and associated equipment.

D. Current Permit Action

On February 6, 2012, the Department of Environmental Quality (Department) received a request from Missing Link seeking authorization to operate an additional aggregate cold screen. The potential emissions from this action were determined to be below the de minimis threshold established in Administrative Rules of Montana (ARM) 17.8.745. In response to Missing Links request the current permit action is an administrative amendment for the inclusion of a third aggregate screen. In addition to the aforementioned action, the permit updates the rule references and language used by the Department and updates the emissions inventory. **MAQP #3830-01** will replace MAQP #3830-00.

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 quotations of some applicable rules and regulations, which apply to the facility. The complete rules are stated in the 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 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*., MCA.

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

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

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide (SO_2)
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide (NO_2)
4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide (CO)
5. ARM 17.8.213 Ambient Air Quality Standard for Ozone (O_3)
6. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate (PM)
7. ARM 17.8.223 Ambient Air Quality Standard for Particulate Matter with an Aerodynamic Diameter of Ten Microns or Less (PM_{10})

Missing Link 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 to an outdoor atmosphere from any source installed after Nov. 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 are taken to control emissions of airborne particulate matter. (2) Under this rule, Missing Link 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 Process. This section requires that no person shall cause, allow, or permit 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 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) Part 60, Standards of Performance for New Stationary Sources (NSPS). Missing Link is considered an NSPS affected facility under this standard 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, indicates that NSPS requirements apply to portable crushing/screening facilities with capacities greater than 150 tons per hour and that were constructed after August 31, 1983. Based on the information submitted by Missing Link, the portable crushing equipment to be used under this air quality permit is subject to this subpart as it meets the definition of an affected facility and has been constructed or modified after August 31, 1983.

c. 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE). Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are manufactured after April 1, 2006, and are not fire pump engines, or are manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006, and owners and operators of stationary CI ICE that modify or reconstruct their stationary CI ICE after July 11, 2005, are subject to this part. As this permit is written in a de minimis friendly manner, operational flexibility is afforded to this facility to substitute engines. Therefore applicability to this subpart is dependent upon the equipment utilized and the location and nature of operation of the equipment.

8. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. This rule incorporates, by reference, 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Categories. Based on the information submitted by Missing Link the associated diesel engines are applicable to NESHAP (40 CFR 63), as follows:

a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to an NESHAPs Subpart as listed below:

b. 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). As an area source, the diesel RICE operated by Missing Link are potentially subject to this rule. Although diesel RICE engines are an affected source, per 40 CFR 63.5490(b)(3), they do not have any requirements unless they are new or reconstructed after June 12, 2006. As Missing Link is considered an area source of HAP emissions and operates RICE equipment the engine(s) are potentially subject to this subpart.

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 Missing Link 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. This operation fee is based on the actual or estimated 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, as 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 which 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 alteration to construct, alter, or use any asphalt plant, crusher, or screen that has the Potential to Emit (PTE) greater than 15 tons per year (tpy) of any pollutant. Missing Link has the PTY more than 15 tpy of particulate matter, PM, PM_{10}, and oxides of nitrogen (NO_x), therefore, a 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 Missing Link 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 one 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 Missing Link, 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 the 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. 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 sub-chapter.

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 Federal Clean Air Act 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 the PTE more than 250 tons per year 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 tpy of any pollutant;

b. PTE > 10 tpy of any single hazardous air pollutant (HAP), PTE > 25 tpy of combined HAPs, or a lesser quantity as the Department may establish by rule; or

c. Sources with the PTE > 70 tpy of PM_{10} in a serious PM_{10} non-attainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. 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 #3830-01 for Missing Link, the following conclusions were made:

a. Missing Link has requested federally-enforceable permit operating limits be established to maintain the facility's PTE below 100 tpy and 80 tpy for all criteria pollutants.

b. The facility's PTE is less than 10 tpy of any single HAP and less than 25 tpy of combined HAPs.

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

d. This facility is subject to current NSPS standard 40 CFR 60, Subpart OOO and potentially subject to NSPS standard 40 CF$R 60, Subpart IIII.

e. This facility is potentially subject to a current NESHAP standards (40 CFR 63, Subpart ZZZZ).

f. This source is not a Title IV affected source.

g. This source is not solid waste combustion unit.

h. This source is not an EPA designated Title V source.

Missing Link requested federally-enforceable permit limitations to remain a minor source of emissions with respect to Title V. Based on these limitations, the Department determined that this facility is not subject to the Title V

Operating Permit Program. However, in the event that the EPA makes minor sources that are subject to NSPS obtain a Title V Operating Permit, this source will be subject to the Title V Operating Permit Program.

i. ARM 17.8.1204(3). The Department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable limitations which limit that source's PTE.

i. In applying for an exemption under this section the owner or operator of the facility shall certify to the Department that the source's PTE does not require the source to obtain an air quality operating permit.

ii. Any source that obtains a federally enforceable limit on PTE shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.

3. ARM 17.8.1207 Certification of Truth, Accuracy, and Completeness. The compliance certification submittal required by ARM 17.8.1204(3) shall contain a certification of truth, accuracy, and completeness by a responsible official. This certification and any other certification required under this subchapter shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

III. BACT Determination

A BACT determination is required for any new or altered source. Missing Link 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 determination was not required for the current permit action because the permit change is considered an administrative permit change.

IV. Emission Inventory

	Emissions Tons/Year [PTE] *(a)(b)*							
Emission Source	PM	PM_{10}	$PM_{2.5}$	PM_{cond}	CO	NOx	SO_2	VOC
Aggregate Crushers	3.71	1.67	0.31	--	--	--	--	--
Aggregate Deck Screens	12.05	4.05	0.27	--	--	--	--	--
Material Handling	55.22	24.24	4.24	--	--	--	--	--
Diesel Generator sets	5.64	5.64	1.00	0.14	17.13	79.52	5.26	6.45
Unpaved Roadways (Haul Roads)	5.49	1.51	0.15	--	--	--	--	--
TOTAL EMISSIONS ►	82.11	37.12	5.97	0.14	17.13	79.52	5.26	6.45

(a) *Emission Inventory reflects enforceable limits on hours of operation of the diesel-fired generator engine to keep allowable NO_x emissions below the Title V threshold [100 tpy] and the State CMS SM Source threshold [80 tpy].*

(b) *PM emissions presented in the table represent the sum of the filterable and condensable particulate matter (CPM) fractions. All CPM is considered to be $PM_{2.5}$.*

CMS, Compliance Monitoring Strategy
CO, carbon monoxide
hp, horsepower
MMBtu, million British Thermal Units
NO_X, oxides of nitrogen
PTE, Potential To Emit
PM, particulate matter

PM_{COND}, condensable particulate matter
PM_{10}, particulate matter with an aerodynamic diameter of 10 microns or less
$PM_{2.5}$, particulate matter with an aerodynamic diameter of 2.5 microns or less [Sum of condensable and filterable]
SM, synthetic minor (with respect to Title V criteria pollutants)
SO_2, sulfur dioxide
TPH, tons per hour
TPY, tons per year
VOC, volatile organic compounds

Portable Crushing and Screen Plant

Production Rate:

Crushers (3)	705	tons/hour (Maximum)	6,175,800	tons/year (Maximum)
Deck Screen (3)	1,250	tons/hour (Maximum)	10,950,000	tons/year (Maximum)

Allowable Hours of Operation: 8760 hours/year [Material Processing]
4500 hours/year [Diesel-Fire Engine Generator Sets]

Power Source: (2) Diesel-Fire Engines up to 1,140 hp

Material Processing:

Aggregate Crushers [SCC 3-05-020-01]

Process Rate: 705 tons/hour
Operating Hours: 8760 hours/year

Particulate Emissions (controlled):

PM Emissions:

Emission Factor	0.0012 lbs/ton processed	[AP-42 Table 11.19.2-2, 8/04]	
Calculations	(0.0012 lbs/ton) * (705 tons/hr) =		0.85 lbs/hr
	(0.846 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =		3.71 TPY

PM_{10} Emissions:

Emission Factor	0.00054 lbs/ton processed	[AP-42 Table 11.19.2-2, 8/04]	
Calculations	(0.00054 lbs/ton) * (705 tons/hr) =		0.38 lbs/hr
	(0.3807 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =		1.67 TPY

$PM_{2.5}$ Emissions:

Emission Factor	0.0001 lbs/ton processed	[AP-42 Table 11.19.2-2, 8/04]	
Calculations	(0.0001 lbs/ton) * (705 tons/hr) =		0.07 lbs/hr
	(0.0705 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =		0.31 TPY

Aggregate Cold Deck Screens [SCC 3-05-020-02]

Process Rate: 1,250 tons/hour
Operating Hours: 8760 hours/year

Particulate Emissions (controlled):

PM Emissions:

Emission Factor	0.0022 lbs/ton processed	[AP-42 Table 11.19.2-2, 8/04]	
Calculations	(0.0022 lbs/ton) * (1250 tons/hr) =		2.75 lbs/hr
	(2.75 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =		12.05 TPY

PM_{10} Emissions:

Emission Factor	0.00074 lbs/ton processed	[AP-42 Table 11.19.2-2, 8/04]

Calculations	(0.00074 lbs/ton) * (1250 tons/hr) =	0.93 lbs/hr
	(0.925 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =	4.05 TPY

$PM_{2.5}$ Emissions:

Emission Factor	0.00005 lbs/ton processed [AP-42 Table 11.19.2-2, 8/04]	
Calculations	(0.00005 lbs/ton) * (1250 tons/hr) =	0.06 lbs/hr
	(0.0625 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =	0.27 TPY

Material Handling:

Fragmented Stone Load-In ► Ground Storage [SCC 3-05-020-31]

Process Rate: 705 tons/hour [Crusher Capacity]
Operating Hours: 8760 hours/year

Particulate Emissions (uncontrolled):

PM Emissions:

Emission Factor	0.000031 lbs/ton [PM = PM_{10}/0.51 ► AP-42 Appendix B.2 - Table B.2.2, Category 3, 1/95]	
Calculations	(0.000031 lbs/ton) * (705 tons/hr) =	0.02 lbs/hr
	(0.021855 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =	0.10 TPY

PM_{10} Emissions:

Emission Factor	0.000016 lbs/ton processed [AP-42 Table 11.19.2-2, 8/04]	
Calculations	(0.000016 lbs/ton) * (705 tons/hr) =	0.01 lbs/hr
	(0.01128 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =	0.05 TPY

$PM_{2.5}$ Emissions:

Emission Factor	0.000005 lbs/ton [PM = PM_{10}*0.15 ► AP-42 Appendix B.2 - Table B.2.2, Category 3, 1/95]	
Calculations	(0.000005 lbs/ton) * (705 tons/hr) =	0.00 lbs/hr
	(0.00327825 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =	0.01 TPY

Conveyor Transfer Points [SCC 3-05-020-06]

Process Rate: 1250 tons/hour [Maximum Facility Capacity]
Operating Hours: 8760 hours/year
Total Transfers: 17 Transfers [Based on Process Flow Diagram]

Particulate Emissions (controlled):

PM Emissions:

Emission Factor	0.00014 lbs/ton processed [AP-42 Table 11.19.2-2, 8/04]	
Calculations	(0.00014 lbs/ton) * (1250 tons/hr) * (17 Transfers) =	2.98 lbs/hr
	(2.975 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =	13.03 TPY

PM_{10} Emissions:

Emission Factor	0.000046 lbs/ton processed [AP-42 Table 11.19.2-2, 8/04]	
Calculations	(0.000046 lbs/ton) * (1250 tons/hr) * (17 Transfers) =	0.98 lbs/hr
	(0.978 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =	4.28 TPY

$PM_{2.5}$ Emissions:

Emission Factor	0.000013 lbs/ton processed [AP-42 Table 11.19.2-2, 8/04]	
Calculations	(0.000013 lbs/ton) * (1250 tons/hr) * (17 Transfers) =	0.28 lbs/hr
	(0.276 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =	1.21 TPY

Storage Pile Load-In & Load-Out [SCC 30502505 / 30502502]

Process Rate: 1250 tons/hour [Maximum Facility Capacity]
Operating Hours: 8760 hours/year
Pile Transfers: 2 [Initial Pile Formation → Pile Load-Out to Trucks]

Particulate Emissions (uncontrolled):

Emission Factor EF = k (0.0032) * [(U/5)^1.3 / (M / 2)^1.4] [AP-42 13.2.4, 11/06]

where: EF, Emission Factor = lbs Emitted / ton Processed
k, Dimensionless Particle Size Multiplier PM = 0.74 [AP-42 13.2.4, 11/06]
k, Dimensionless Particle Size Multiplier PM_{10} = 0.35 [AP-42 13.2.4, 11/06]
k, Dimensionless Particle Size Multiplier $PM_{2.5}$ = 0.053 [AP-42 13.2.4, 11/06]
U, Mean Wind Speed (mph) = 9.3 [ASOS/AWOS AVE-MT 10 yr Ave.]
M, Material Moisture Content (%) = 2.53 [AP-42 13.2.4.3, 11/06]

PM Emissions:

Emission Factor EF = 0.74 * (0.0032) * [(9.33/5)^1.3 / (2.525/ 2)^1.4] = 0.0038 lbs/ton
Calculations (0.0038 lbs/ton) * (1250 tons/hr) * (2 pile transfers) = 9.61 lbs/hr
(9.61 lbs/hr) * (8760 hours/yr) * (0.0005 tons/lb) = 42.10 TPY

PM_{10} Emissions:

Emission Factor EF = 0.35 * (0.0032) * [(9.33/5)^1.3 / (2.525/ 2)^1.4] = 0.0018 lbs/ton
Calculations (0.0018 lbs/ton) * (1250 tons/hr) * (2 piles) = 4.55 lbs/hr
(4.55 lbs/hr) * (8760 hours/yr) * (0.0005 tons/lb) = 19.91 TPY

$PM_{2.5}$ Emissions:

Emission Factor EF = 0.053 * (0.0032) * [(9.33/5)^1.3 / (2.525/ 2)^1.4] = 0.00028 lbs/ton
Calculations (0.0003 lbs/ton) * (1250 tons/hr) * (2 piles) = 0.69 lbs/hr
(0.69 lbs/hr) * (8760 hours/yr) * (0.0005 tons/lb) = 3.02 TPY

Diesel-Fire Generator Engines: [SCC 2-02-001-02]

Engine Rating: 1140 hp
Fuel Input: 7.98 MMBtu/hr
58.2 gallons/hour [Estimated]
Operating Hours: 4500 hours/year

Particulate Emissions (uncontrolled):

PM Emissions:

Emission Factor 0.0022 lb/hp-hr [AP-42 3.3-1, 10/96]
Calculations (0.0022 lb/hp-hr) * (1140 hp) = 2.51 lbs/hr
(2.51 lbs/hr) * (4500 hrs/yr) * (0.0005 tons/lb) = 5.64 TPY

PM_{10} Emissions:

Emission Factor 0.0022 lb/hp-hr [AP-42 3.3-1, 10/96]
Calculations (0.0022 lb/hp-hr) * (1140 hp) = 2.51 lbs/hr
(2.51 lbs/hr) * (4500 hrs/yr) * (0.0005 tons/lb) = 5.64 TPY

$PM_{2.5}$ Emissions (filterable):

Emission Factor 0.0479 lb/MMBtu [AP-42 3.4-2, 10/96]
Calculations (0.0479 lb/MMBtu) * (7.98 MMBtu/hr) = 0.38 lbs/hr
(0.38 lbs/hr) * (4500 hrs/yr) * (0.0005 tons/lb) = 0.86 TPY

$PM_{2.5}$ Emissions (condensable):

Emission Factor	0.0077 lb/MMBtu [AP-42 3.4-2, 10/96]	
Calculations	(0.0077 lb/MMBtu) * (7.98 MMBtu/hr) =	0.06 lbs/hr
	(0.06 lbs/hr) * (4500 hrs/yr) * (0.0005 tons/lb) =	0.14 TPY

CO Emissions (uncontrolled):

Emission Factor	0.00668 lb/hp-hr [AP-42 3.3-1, 10/96]	
Calculations	(0.00668 lb/hp-hr) * (1140 hp) =	7.62 lbs/hr
	(7.62 lbs/hr) * (4500 hrs/yr) * (0.0005 tons/lb) =	17.13 TPY

NOx Emissions (uncontrolled):

Emission Factor	0.031 lb/hp-hr [AP-42 3.3-1, 10/96]	
Calculations	(0.031 lb/hp-hr) * (1140 hp) =	35.34 lbs/hr
	(35.34 lbs/hr) * (4500 hrs/yr) * (0.0005 tons/lb) =	79.52 TPY

SO_2 Emissions (uncontrolled):

Emission Factor	0.00205 lb/hp-hr [AP-42 3.3-1, 10/96]	
Calculations	(0.0021 lb/hp-hr) * (1140 hp) =	2.34 lbs/hr
	(2.34 lbs/hr) * (4500 hrs/yr) * (0.0005 tons/lb) =	5.26 TPY

VOC Emissions (uncontrolled):

Emission Factor	0.002514 lb/hp-hr [AP-42 3.3-1, 10/96]	
Calculations	(0.0025 lb/hp-hr) * (1140 hp) =	2.87 lbs/hr
	(2.87 lbs/hr) * (4500 hrs/yr) * (0.0005 tons/lb) =	6.45 TPY

Unpaved Roadways (Haul Roads)

Miles Travelled: 5 Miles/Day [Estimate]
Vehicle Weight: 50 Tons [Mean Vehicle Weight Empty/Full]
Control Method: Water Application
Control Efficiency (C_e): 50%

Particulate Emissions (controlled):

Emission Factor $EF = k(s/12)^{a} * (W/3)^{b}$ [AP-42 13.2.2.2, 11/06]

where: EF, Emission Factor = lbs Emitted Per Vehicle Mile Traveled (VMT)

k,	Empirical Constant PM =	4.9 [AP-42 Table 13.2.2-2, 11/06]
k,	Empirical Constant PM_{10} =	1.5 [AP-42 Table 13.2.2-2, 11/06]
k,	Empirical Constant $PM_{2.5}$ =	0.15 [AP-42 Table 13.2.2-2, 11/06]
s,	Surface Material Silt Content (%) =	7.1 [AP-42 Table 13.2.2-1, 11/06]
W,	Mean Vehicle Weight (tons) =	50 [Applicant Provided Data]
a,	Empirical Constant PM =	0.7 [AP-42 Table 13.2.2-2, 11/06]
a,	Empirical Constant PM_{10} / $PM_{2.5}$ =	0.9 [AP-42 Table 13.2.2-2, 11/06]
b,	Empirical Constant PM - $PM_{2.5}$ =	0.45 [AP-42 Table 13.2.2-2, 11/06]

PM Emissions:

Emission Factor	EF = 4.9 * (7.1/12)^0.7 * (50/3)^0.45 = 12.04 lbs/VMT	
Calculations	(12.04 lbs/VMT) * (5 miles/day) * (1 - 0.5 Ce) =	30.09 lbs/day
	(30.09 lbs/day) * (365 days/yr) * (0.0005 tons/lb) =	5.49 TPY

PM_{10} Emissions:

Emission Factor Calculations	EF = 1.5 * (7.1/12)^0.9 * (50/3)^0.45 =	3.32	lbs/VMT	
	(3.32 lbs/VMT) * (5 miles/day) * (1 - 0.5 Ce) =			8.29 lbs/day
	(8.29 lbs/day) * (365 days/yr) * (0.0005 tons/lb) =			1.51 TPY

$PM_{2.5}$ Emissions:

Emission Factor Calculations	EF = 0.15 * (7.1/12)^0.9 * (50/3)^0.45 =	0.33	lbs/VMT	
	(0.33 lbs/VMT) * (5 miles/day) * (1 - 0.5 Ce) =			0.83 lbs/day
	(0.83 lbs/day) * (365 days/yr) * (0.0005 tons/lb) =			0.15 TPY

V. Existing Air Quality and Impacts

MAQP #3830-01 will cover the operations of this portable crushing/screening plant while operating at the initial site location within Section 28, Township 29 North, Range 38 East in Valley County. The initial site location has been designated as unclassified/attainment with federal ambient air quality standards.

VI. Air Quality Impacts

Permit #3830-01 is issued for the operation of a portable crushing/screening facility to operate at various locations throughout Montana. This facility would be allowed to operate at any area designated as attainment or unclassified for all National Ambient Air Quality Standards (NAAQS); excluding those counties that have a Department-approved permitting program, those areas considered tribal lands, or those areas in or within 10 km of certain PM_{10} nonattainment areas. A Missoula County air quality permit would be required for locations within Missoula County, Montana. The Department believes this action will not cause or contribute to a violation of any ambient air quality standards because this permitting action is considered an administrative action

VII. Ambient Air Impact Analysis

Based on information provided and the conditions established in MAQP #3830-01, the Department determined that there will be no impact from this permitting action.

VIII. Taking or Damaging Implication Analysis

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

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)

YES	NO	
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

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

IX. Environmental Assessment

The permitting action will not result in an increase of emissions from the facility and is considered an administrative action; therefore, an environmental assessment is not required.

Analysis Prepared by: D. Kuenzli
Date: February 28, 2012