Montana Department of
ENVIRONMENTAL QUALITY

Steve Bullock, Governor
Tracy Stone-Manning, Director

P. O. Box 200901 Helena, MT 59620-0901 (406) 444-2544 Website: www.deq.mt.gov

PRELIMINARY DETERMINATION
ON PERMIT APPLICATION

Date of Mailing: November 29, 2013

Name of Applicant: Pinky's Aggregate Inc.

Source: Portable Aggregate Crushing and Screening Operation

Proposed Action: The Department of Environmental Quality (Department) proposes to issue a permit, with conditions, to the above-named applicant. The application was assigned Montana Air Quality Permit Application Number MAQP#4982-00.

Proposed Conditions: See attached.

Public Comment: Any member of the public desiring to comment must submit such comments in writing to the Air Resources Management Bureau (Bureau) of the Department at the above address. Comments may address the Department's analysis and determination, or the information submitted in the application. In order to be considered, comments on this Preliminary Determination are due by December 16, 2013. Copies of the application and the Department's analysis may be inspected at the Bureau's office in Helena. For more information, you may contact the Department.

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

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

For the Department,

Julie Merkel
Air Permitting Supervisor
Air Resources Management Bureau
(406) 444-3626

Deanne Fischer, P.E.
Environmental Engineer
Air Resources Management Bureau
(406) 444-3403

JM:DF
Enclosure

MONTANA AIR QUALITY PERMIT

Issued To: Pinky's Aggregates, Inc.
3731 86th St. NE
Rolette, ND 58366

MAQP: #4982-00
Application Complete: 11/19/2013
Preliminary Determination Issued: 11/29/2013
Department's Decision Issued:
Permit Final:
AFS #:777-4982

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

SECTION I: Permitted Facilities

A. Permitted Equipment

Pinky's Aggregate Inc. proposes to operate a portable non-metallic mineral crushing/screening operation. Pinky's Aggregate Inc.'s operation generally includes up to two cone crushers, one screen plant, a diesel engine/generator and associated equipment. However, a complete list of permitted equipment is contained in Section I.A of the permit analysis.

B. Plant Location

Pinky's Aggregate Inc. operates a portable aggregate crushing and screening plant which will initially be located at ***Section 12 of Township 24 North, Range 59 East in Richland County, Montana***. However, MAQP 4982-00 applies while operating at any location in Montana, except those areas having a Department of Environmental Quality (Department)-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana*. An addendum will be required for locations in or within 10 km of certain PM_{10} nonattainment areas.

SECTION II: Conditions and Limitations

A. Emission Limitations

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

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

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

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

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 17.8.752).

5. Pinky's Aggregate Inc. 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. Pinky's Aggregate Inc. 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. Pinky's Aggregate Inc. shall not operate more than two crushers at any given time and the maximum rated design capacity of each crusher shall not exceed 1,000 tons per hour (TPH) (ARM 17.8.749).

8. Pinky's Aggregate Inc. shall not operate more than one 3-deck screen at any given time and the maximum rated design capacity of the 3 deck-screen shall not exceed 850 TPH (ARM 17.8.749).

9. Pinky's Aggregate Inc. shall not operate or have on-site more than one diesel engine driven generator. The maximum capacity of the engine that drives the generator shall not exceed 650 horsepower (hp) (ARM 17.8.749).

10. Operation of the diesel engine driving the generator shall not exceed 3,900 hours each during any rolling 12-month time period (ARM 17.8.749).

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

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

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

B. Testing Requirements

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

2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

3. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. If this crushing/screening plant is moved to another location, an Intent to Transfer form must be sent to the Department and a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.749 and ARM 17.8.765).

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

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

3. Pinky's Aggregate Inc. shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include ***the addition of a new emissions unit***, change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation. The notice must be submitted to the Department, in writing, 10 days prior to startup or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(l)(d) (ARM 17.8.745).

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

5. Pinky's Aggregate Inc. shall document, by month, the hours of operation of the diesel engine/generator. By the 25th day of each month, Pinky's Aggregate Inc. shall total the hours of operation for the diesel engine/generator for the previous month. The monthly information will be used to demonstrate compliance with the rolling 12-month limitation in Section II.A.11. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

D. Notification

Pinky's Aggregate Inc. shall provide the Department with written notification of the actual start-up date of the Pinky's Aggregate Inc. facility postmarked within 15 days after the actual start-up date (ARM 17.8.749)

SECTION III: General Conditions

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

B. Waiver – The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if Pinky's Aggregate Inc. fails to appeal as indicated below.

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

D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement action 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 therefor, 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 the Department 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 Pinky's Aggregate Inc. 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. Pinky's Aggregate Inc. shall comply with the conditions contained in this permit while operating in any location in Montana, except within those areas that have a Department-approved permitting program or areas considered tribal lands.

Montana Air Quality Permit (MAQP) Analysis
Pinky's Aggregate Inc.
MAQP #4982-00

I. Introduction/Process Description

Pinky's Aggregate Inc. owns and operates a portable non-metallic mineral crushing and screening facility.

A. Permitted Equipment

The following list of permitted equipment is based on information provided within the application submitted by Pinky's Aggregate Inc. and is provided for reference. MAQP #4982-00 is written de minimis friendly to provide operational flexibility so that alternate equipment may be utilized as long as maximum capacities are not exceeded and permit conditions are met. See Section II of the MAQP for specific equipment limitations and/or conditions. Equipment permitted under this action consists of the following:

- Two Crushing Units (1,000 TPH each)
- Screen Plant (1,000 TPH)
- Up to six conveyors
- Diesel-fired generator engine (650 horsepower (hp))
- Associated Material Handling Equipment; feeder hopper; stackers, aggregate stockpiles, etc.

B. Source Description

Pinky's Aggregate Inc.'s crushing/screening plant is used to crush and sort gravel/sand materials for use in various construction activities. Raw material will be fed into the feed hopper, conveyed through a 3-deck screen, and conveyed into stockpiles. Oversize material will be conveyed back to the crusher and back through the screen prior to being stockpiled.

Pinky's Aggregate Inc.'s crushing/screening plant will initially be located in Section 12 of Township 24 North, Range 59 East in Richland County, Montana.

II. Applicable Rules and Regulations

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

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

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

2. <u>ARM 17.8.105 Testing Requirements</u>. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities 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).

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

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

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

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

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
9. ARM 17.8.222 Ambient Air Quality Standard for Lead
10. ARM 17.8.223 Ambient Air Quality Standard for PM_{10}
11. ARM 17.8.230 Fluoride in Forage

Pinky's Aggregate Inc. must maintain compliance with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 – Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.

2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Pinky's Aggregate Inc. shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.

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

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

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

6. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 Code of Federal Regulations (CFR) Part 60, Standards of Performance for New Stationary Sources (NSPS). Pinky's Aggregate Inc. is considered an NSPS affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts.

   a. 40 CFR 60, Subpart A – General Provisions apply to all equipment or facilities subject to an NSPS Subpart as listed below:

   b. 40 CFR 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants. In order for a crushing plant to be subject to this subpart, the facility must meet the definition of an affected facility and, the affected equipment must have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted by Pinky's Aggregate Inc., the portable crushing equipment to be used under MAQP # 4982-00 is subject to this subpart because they meet the definition of an affected facility with a capacity greater than or equal to 150 TPH.

   c. 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE). Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are manufactured after April 1, 2006, and are not fire pump engines, and owners and operators of stationary CI ICE that modify or reconstruct their stationary CI ICE after July 11, 2005, are subject to this subpart. Based on the information submitted by Pinky's Aggregate Inc., the CI ICE equipment to be used under MAQP #4982-00 is potentially subject to this Subpart depending upon the construction/manufacture date and the upon the location, nature, and duration of operation..

7. 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. Pinky's Aggregate Inc. is potentially a NESHAP-affected facility under 40 CFR Part 63 and is subject to the requirements of the following subparts.

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

b. 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants (HAPs) for Stationary Reciprocating Internal Combustion Engines (RICE). An owner or operator of a stationary reciprocating internal combustion engine (RICE) at a major or area source of HAP emissions is subject to this rule except if the stationary RICE is being tested at a stationary RICE test cell/stand. An area source of HAP emissions is a source that is not a major source. An area source of HAP emissions is a source that is not a major source. Pinky's Aggregate Inc. is considered an area source of HAP emissions and operates RICE equipment, therefore, the engine is potentially subject to this subpart depending upon the location and nature of operation. A RICE is considered stationary if it remains or will remain at the permitted location for more than 12 months, or a shorter period of time for an engine located at a seasonal source. A seasonal source remains at a single location on a permanent basis (at least 2 consecutive years) and operates at least 3 months each year. Based on the information submitted by Pinky's Aggregate Inc., the RICE equipment to be used under MAQP #4982-00 may be subject to this subpart because they are an area source of HAP emissions and the engine may remain at the same home pit location for more than 12 consecutive months.

D. ARM 17.8, Subchapter 5 – Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. Pinky's Aggregate Inc. submitted the appropriate permit application fee for the current permit action.

2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department. the air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

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

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

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit modification to construct, modify, or use any asphalt plant, crusher or screen that has the potential to emit (PTE) greater than 15 tons per year of any pollutant. Pinky's Aggregate Inc. has a PTE greater than 15 tons per year of Particulate matter (PM), Particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}), Carbon Monoxide (CO), and Oxides of Nitrogen (NO_x) 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. Pinky's Aggregate Inc. submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. Pinky's Aggregate Inc. submitted an affidavit of publication of public notice for the November 6, 2013, issue of the *Sidney Herald*, a newspaper of general circulation in the Town of Sidney in Richland County, as proof of compliance with the public notice requirements.

6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.

7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.

8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.

9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Pinky's Aggregate Inc. of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*.

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

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

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

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

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

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

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

2. ARM 17.8.818 Review of Major Stationary Sources and Major 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 the facility's PTE is less than 250 tons per year of any pollutant (excluding fugitive emissions).

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

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:

   a. PTE > 100 tons/year of any pollutant;

   b. PTE > 10 tons/year of any one HAP, PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or

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

2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #4982-00 for Pinky's Aggregate Inc., 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 subject to NSPS 40 CFR 60, Subpart OOO and potentially subject to NSPS 40 CFR 60, Subpart IIII.

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

f. This source is not a Title IV affected source

g. This source is not a solid waste combustion unit.

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

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

III. BACT Determination

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

The BACT analysis for MAQP #4982-00 addresses some available methods of controlling emissions from crushing and screening operation. The Department has reviewed these methods, as well as previous BACT determinations. The following control options have been reviewed by the Department in order to make the following BACT determinations.

A. Crushing & Screening Particulate Emissions

Two types of emission controls are readily available and used for dust suppression of fugitive emissions that result from the operation of crushing/screening equipment and associated activities. These two control methods are water and chemical dust suppressant. Chemical dust suppressant could be used on the area surrounding the crushing/screening operation, and for emissions from the crushing/screening operation itself. However, in view of the fact that water is more readily available, more cost effective, is equally effective as chemical dust suppressant, while presenting less potential environmental quality degradation, water has been identified as the most appropriate method of pollution control of particulate emissions. In addition, water suppression has been required of recently permitted similar sources. Certain circumstances may necessitate the use of chemical dust suppressant to assist in controlling particulate emissions from the surrounding plant area.

Pinky's Aggregates Inc. is required to have water spray bars and water available on site (at all times) and to apply the water, as necessary, to maintain compliance with the opacity restrictions and reasonable precautions limitations. Pinky's Aggregates Inc. may also use chemical dust suppressant to maintain compliance with emissions limitations in Section II.A

of MAQP #4982-00. The Department determined that using water spray bars, water, and/or chemical dust suppressant to maintain compliance with the opacity requirements and reasonable precaution limitations constitutes BACT for the operation for the additional equipment.

C. Diesel-Fired Engine

Due to the limited amount of emissions produced by the diesel-fired engine used in association with MAQP #4982-00 and the lack of cost effective add-on controls, add-on controls would be cost prohibitive. Therefore, the Department determined that proper operation and maintenance with no add-on controls would constitute BACT for the diesel-fired engine.

Generally, any new diesel-fired engine would likely be required to comply with the federal engine emission limitations including, for example, *EPA Tier emission standards for non-road engines* (40 CFR Part 89 or 1039), *New Source Performance Standard emission limitations for stationary compression ignition engines* (40 CFR 60, Subpart IIII), or *National Emissions Standards for Hazardous Air Pollutant Sources for Reciprocating Internal Combustion Engines* (40 CFR 63, Subpart ZZZZ).

Therefore, the Department has determined that compliance with applicable federal standards and proper operation and maintenance of the engines constitutes BACT for these engines.

The control options selected for the proposed crushing/screening facility and for the diesel engines driving the crushing, screening and conveying equipment include control methods and control costs comparable to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

IV. Emission Inventory

	tons/year[a]						
Emission Source	**PM**	**PM10**	**PM2.5**	**NOx**	**VOC**	**CO**	**SO2**
650bhp Volvo Genset (manuf. 1999)	6.26	6.26	6.26	88.26	7.16	19.02	5.84
Cedar Rapids C54 Cone Crusher	5.26	2.37	0.44				
Crusher	5.26	2.37	0.44				
Fabtec Scereen Plant w/Feeder	9.64	3.24	0.22				
Superior Conveyor Transfer Points (12) (controlled) - (SCC 3-05-020-06)	7.36	2.42	0.68				
Bulk Loading	0.04	0.04	0.07				
Pile Forming	7.16	3.39	0.51				
Haul Roads	5.68	1.57	0.16				
TOTAL	**46.65**	**21.64**	**8.78**	**88.26**	**7.16**	**19.02**	**5.84**
Assuming	**8,760**	**hr/yr operation**					

Footnotes:
a.Inventory reflects maximum allowable emissions for all pollutants based on maximum production and year-round operation (8,760 hours). However, as shown in the inventory below, the facility took limits hours of operation.

	tons/year						
Emission Source	**PM**	**PM10**	**PM2.5**	**NOx**	**CO**	**VOC**	**SO2**
650bhp Volvo Genset (manuf. 1999)	2.79	2.79	2.79	39.29	8.47	3.19	2.60
Cedar Rapids C54 Cone Crusher	2.34	1.05	0.20				
Crusher	2.34	1.05	0.20				
Fabtec Scereen Plant w/Feeder	4.29	1.44	0.10				
Superior Conveyor Transfer Points (12) (controlled) - (SCC 3-05-020-06)	3.28	1.08	0.30				
Bulk Loading	0.02	0.02	0.03				
Pile Forming	3.19	1.51	0.23				
Haul Roads	2.53	0.70	0.07				
TOTALTotal E	**20.77**	**9.64**	**3.91**	**39.29**	**8.47**	**3.19**	**2.60**
Assuming	**3,900**	**hr/yr operation**					

Footnotes:
a. Inventory reflects enforceable limits on hours of operation (3,900 hr/yr) to keep allowable emissions below the attainment area modeling threshold of 40 tpy for NOx

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

650bhp Volvo Genset (manuf. 1999)

Operational Capacity of Engine = 650 hp
Generator = 500 kW
Hours of Operation = 3,900 hours/yr

PM Emissions:

(AP-42, Sec. 3.3, Table 3.3-1, 10/96) Emission Factor =	2.20E-03	lbs/hp-hr
Calculation: (650 hp) * (3,900 hours/yr) * (0.0022 lbs/hp-hr) =	5,577.00	lbs/yr
Calculation: (5,577.00 lbs/yr) * (ton/2000 lb) =	**2.79**	ton/yr

PM10 Emissions:

(AP-42, Sec. 3.3, Table 3.3-1, 10/96) Emission Factor =	2.20E-03	lbs/hp-hr
Calculation: (650 hp) * (3,900 hours/yr) * (0.0022 lbs/hp-hr) =	5,577.00	lbs/yr
Calculation: (5,577.00 lbs/yr) * (ton/2000 lb) =	**2.79**	ton/yr

PM2.5 Emissions:

(AP-42, Sec. 3.3, Table 3.3-1, 10/96) Emission Factor =	2.20E-03	lbs/hp-hr
Calculation: (650 hp) * (3,900 hours/yr) * (0.0022 lbs/hp-hr) =	5,577.00	lbs/yr
Calculation: (5,577.00 lbs/yr) * (ton/2000 lb) =	**2.79**	ton/yr

NOx Emissions:

(AP-42, Sec. 3.3, Table 3.3-1, 10/96) Emission Factor =	3.10E-02	lbs/hp-hr
Calculation: (650 hp) * (3,900 hours/yr) * (0.0310 lbs/hp-hr) =	78,585.00	lbs/yr
Calculation: (78,585.00 lbs/yr) * (ton/2000 lb) =	**39.29**	ton/yr

CO Emissions:

(AP-42, Sec. 3.3, Table 3.3-1, 10/96) Emission Factor =	6.68E-03	lbs/hp-hr
Calculation: (650 hp) * (3,900 hours/yr) * (0.0067 lbs/hp-hr) =	16,933.80	lbs/yr
Calculation: (16,933.80 lbs/yr) * (ton/2000 lb) =	**8.47**	ton/yr

VOC Emissions:

(AP-42, Sec. 3.3, Table 3.3-1, TOC, Exhaust + Crankcase, 10/96)

Emission Factor =	2.51E-03	lbs/hp-hr
Calculation: (650 hp) * (3,900 hours/yr) * (0.0025 lbs/hp-hr) =	6,373.24	lbs/yr
Calculation: (6,373.24 lbs/yr) * (ton/2000 lb) =	**3.19**	ton/yr

SOx Emissions:

(AP-42, Sec. 3.3, Table 3.3-1, 10/96) Emission Factor =	2.05E-03	lbs/hp-hr
Calculation: (650 hp) * (3,900 hours/yr) * (0.0021 lbs/hp-hr) =	5,196.75	lbs/yr
Calculation: (5,196.75 lbs/yr) * (ton/2000 lb) =	**2.60**	ton/yr

Cedar Rapids C54 Cone Crusher

Process Rate = 1,000 TPH

PM Emissions: 0.0012 lb/ton (AP 42, Table 11.19.2-2, 8/04, controlled)

Emission Factor

Calculation: (1000 ton/hr) * (3900 hrs/yr) * (0.0012 lb/ton) * (ton/2000 lb) = 2.34 ton/yr

PM_{10} Emissions:

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

Calculation: (1,000 ton/hr) * (3900 hrs/yr) * (0.00054 lb/ton) * (ton/2000 lb) = 1.05 ton/yr

$PM_{2.5}$ Emissions:

Emission Factor: 0.0001 lb/ton (AP 42, Table 11.19.2-2, 8/04, controlled)

Calculation: (1,000 ton/hr) * (3900 hrs/yr) * (0.0001 lb/ton) * (ton/2000 lb) = 0.20 ton/yr

Crusher

Process Rate = 1,000 TPH

PM Emissions: 0.0012 lb/ton (AP 42, Table 11.19.2-2, 8/04, controlled)

Emission Factor = (AP 42, Table 11.19.2-2, 8/04, controlled)

Calculation: (1000 ton/hr) * (3900 hrs/yr) * (0.0012 lb/ton) * (ton/2000 lb) = 2.34 ton/yr

PM_{10} Emissions:

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

Calculation: (1,000 ton/hr) * (3900 hrs/yr) * (0.00054 lb/ton) * (ton/2000 lb) = 1.05 ton/yr

$PM_{2.5}$ Emissions:

Emission Factor: 0.0001 lb/ton (AP 42, Table 11.19.2-2, 8/04, controlled)

Calculation: (1,000 ton/hr) * (3900 hrs/yr) * (0.0001 lb/ton) * (ton/2000 lb) = 0.20 ton/yr

Fabtec Screen Plant w/Feeder

Process Rate= 1,000 TPH

Total PM Emissions:

Emission Factor (AP 42, Table 11.19.2-2, 8/04)

Calculation: (1,000 ton/hr) * (3900 hrs/yr) * (0.0022 lb/ton) * (ton/2000 lb) = 4.29 ton/yr

Total PM_{10} Emissions:

Emission Factor (AP 42, Table 11.19.2-2, 8/04)

Calculation: (1,000 ton/hr) * (3900 hrs/yr) * (0.00074 lb/ton) * (ton/2000 lb) = 1.44 ton/yr

Total $PM_{2.5}$ Emissions:
Emission Factor (AP 42, Table 11.19.2-2, 8/04)
Calculation: (1,000 ton/hr) * (3900 hrs/yr) * (0.00005 lb/ton) * (ton/2000 lb) = 0.10 ton/yr

Superior Conveyor Transfer Points (12) (controlled) - (SCC 3-05-020-06)

Process Rate = 1,000 TPH
Hours of Operation = 3,900 hr/yr
Number of Transfers = 12 Transfers

Total PM Emissions:
Emission Factor (AP 42, Table 11.19.2-2, 8/04)
Calculation: (1,000 ton/hr) * (3900 hrs/yr) * (0.00014 lb/ton) * (ton/2000 lb) * (12 transfer) = 3.28 ton/yr

Total PM_{10} Emissions:
Emission Factor (AP 42, Table 11.19.2-2, 8/04)
Calculation: (1,000 ton/hr) * (3900 hrs/yr) * (0.000046 lb/ton) * (ton/2000 lb) * (12 transfer) = 1.08 ton/yr

Total $PM_{2.5}$ Emissions:
Emission Factor (AP 42, Table 11.19.2-2, 8/04)
Calculation: (1,000 ton/hr) * (3900 hrs/yr) * (0.000013 lb/ton) * (ton/2000 lb) * (12 transfer) = 0.30 ton/yr

Pile Forming

Process Rate = 1,000 TPH
Hours of Operation= 3,900 hr/yr
Number of Piles = 1 pile

PM Emissions:

Emission Factor = k (0.0032) * (U/5)^1.3 * (M / 2)^-1.4 = 0.00327 lb/ton
Where: k = particle size multiplier
U = mean wind speed
M = material moisture content
Control Efficiency
Calculation: (1,000 ton/hr) * (3900 hrs/yr) * (0.00327 lb/ton) * (ton/2000 lb) * (1 pile) = 6.38 ton/yr
Calculation: (1,000 ton/hr) * (3900 hrs/yr) * (0.00327) * (ton/2000 lb) * (1 pile) * (1-0/100)= 3.19 ton/yr

PM_{10} Emissions:

Emission Factor = k (0.0032) * (U/5)^1.3 * (M / 2)^-1.4 = 0.00155 lb/ton
Where: k = particle size multiplier
U = mean wind speed
M = material moisture content
Control Efficiency
Calculation: (1,000 ton/hr) * (3900 hrs/yr) * (0.00155 lb/ton) * (ton/2000 lb) * (1 pile) = 3.02 ton/yr
Calculation: (1,000 ton/hr) * (3900 hrs/yr) * (0.00155) * (ton/2000 lb) * (1 pile) * (1-0/100)= 1.51 ton/yr

$PM_{2.5}$ Emissions:

Emission Factor = k (0.0032) * (U/5)^1.3 * (M / 2)^-1.4 = 0.00023 lb/ton
Where: k = particle size multiplier
U = mean wind speed
M = material moisture content
Control Efficiency
Calculation: (1,000 ton/hr) * (3900 hrs/yr) * (0.00023 lb/ton) * (ton/2000 lb) * (1 pile) = 0.46 ton/yr
Calculation: (1,000 ton/hr) * (3900 hrs/yr) * (0.00023) * (ton/2000 lb) * (1 pile) * (1-0/100)= 0.23 ton/yr

Bulk Loading

Process Rate = 1,000 TPH
Hours of Operation = 8,760 hr/yr
Number of Loads = 1 load

PM Emissions: Assuming PM= PM10 = PM2.5
Emission Factor
Control Efficiency
Calculation: (1,000 ton/hr) * (3900 hrs/yr) * (0.00002 lb/ton) * (ton/2000 lb) * (1 load) = 0.03 ton/yr
Calculation: (1,000 ton/hr) * (3900 hrs/yr) * (0.00002 lb/ton) * (ton/2000 lb) * (1 load) * (1 - 50/100) = 0.02 ton/yr

PM_{10} Emissions:
Emission Factor
Control Efficiency
Calculation: (1,000 ton/hr) * (3900 hrs/yr) * (0.00002 lb/ton) * (ton/2000 lb) * (1 load) = 0.03 ton/yr
Calculation: (1,000 ton/hr) * (3900 hrs/yr) * (0.00002 lb/ton) * (ton/2000 lb) * (1 load) * (1 - 50/100) = 0.02 ton/yr

$PM_{2.5}$ Emissions:
Emission Factor = k (0.0032) * (U/5)^1.3 * (M / 2)^-1.4 = 0.00002 lb/ton
Control Efficiency
Calculation: (1,000 ton/hr) * (3900 hrs/yr) * (0.00002 lb/ton) * (ton/2000 lb) * (1 load) = 0.03 ton/yr
Calculation: (1,000 ton/hr) * (3900 hrs/yr) * (0.00002 lb/ton) * (ton/2000 lb) * (1 load) * (1 - 0/100) = 0.03 ton/yr

Haul Roads

Vehicle Miles Traveled (Estimated) = 5 VMT/day (estimated)
VMT per Hour = 0.21 VMT/hr
Hours of Operation = 3,900 hr/day

PM Emissions:
Emission Factor = k * (s / 12)^a * (W / 3)^b = 12.46 lb/VMT (AP 42, Ch. 13.2.2, 11/06)
Where: k = constant (Value for PM10, AP 42, Table 13.2.2-2, 11/06)
s = surface silt content (sand/gravel processing, material storage area, Table 13.2.2-1)
W = mean vehicle weight (1994 average loaded/unloaded or a 40 ton truck)
a = constant (Value for PM30/TSP, Table 13.2.2-2)
b = constant (Value for PM30/TSP, Table 13.2.2-2)
Control Efficiency
Calculation: (3900 hrs/yr) * (0.21 VMT/hr) * (12.46 lb/VMT) * (ton/2000 lb) = 5.06 tons/yr
Calculation: (3900 hrs/yr) * (0.21 VMT/hr) * (12.46 lb/VMT) * (ton/2000 lb) * (1-50/100) = 2.53 tons/yr

PM_{10} Emissions:

Emission Factor = k * (s / 12)^a * (W / 3)^b = 3.43 lb/VMT (AP 42, Ch. 13.2.2, 11/06)

Where: k = constant (Value for PM10, AP 42, Table 13.2.2-2, 11/06)
s = surface silt content (sand/gravel processing, material storage area, Table 13.2.2-1)
W = mean vehicle weight (1994 average loaded/unloaded or a 40 ton truck)
a = constant (Value for PM30/TSP, Table 13.2.2-2)
b = constant (Value for PM30/TSP, Table 13.2.2-2)

Control Efficiency

Calculation: (3900 hrs/yr) * (0.21 VMT/hr) * (3.43 lb/VMT) * (ton/2000 lb) = 1.40 tons/yr

Calculation: (3900 hrs/yr) * (0.21 VMT/hr) * (3.43 lb/VMT) * (ton/2000 lb) * (1-50/100) = 0.70 tons/yr

$PM_{2.5}$ Emissions: (AP 42, Ch. 13.2.2, 11/06)

Emission Factor = k * (s / 12)^a * (W / 3)^b = 0.34 lb/VMT (AP 42, Ch. 13.2.2, 11/06)

Where: k = constant (Value for PM10, AP 42, Table 13.2.2-2, 11/06)
s = surface silt content (sand/gravel processing, material storage area, Table 13.2.2-1)
W = mean vehicle weight (1994 average loaded/unloaded or a 40 ton truck)
a = constant (Value for PM30/TSP, Table 13.2.2-2)
b = constant (Value for PM30/TSP, Table 13.2.2-2)

Control Efficiency

Calculation: (3900 hrs/yr) * (0.21 VMT/hr) * (0.34 lb/VMT) * (ton/2000 lb) = 0.14 tons/yr

Calculation: (3900 hrs/yr) * (0.21 VMT/hr) * (0.34 lb/VMT) * (ton/2000 lb) * (1-50/100) = 0.07 tons/yr

V. Existing Air Quality

This permit is for a portable facility to be located in Section 12 of Township 24 North, Range 59 East in Richland County, and in those areas for which this facility is permitted to operate, have been designated unclassified/attainment with all ambient air quality standards, and where there are no major air pollution sources in the surrounding area. MAQP 4982-00 applies while operating at any location in Montana, except those areas having a Department -approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana*. An addendum will be required for locations in or within 10 km of certain PM_{10} nonattainment areas.

VI. Air Quality Impacts

This permit contains conditions and limitations that would protect air quality for the site and surrounding area. Furthermore, 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 of limited duration.

VII. Ambient Air Impact Analysis

Based on the information provided and the conditions established in MAQP #4982-00, the Department determined that the impact from this permitting action will be minor. Furthermore the Department believes it will not cause or contribute to a violation of any ambient air quality standard.

VIII. Taking or Damaging Implication Analysis

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

YES	NO	
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)
	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

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

DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Air Resources Management Bureau
P.O. Box 200901, Helena, MT 59620
(406) 444-3490

DRAFT ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Pinky's Aggregates, Inc.
3731 86th St. NE
Rolette, ND 58366

Montana Air Quality Permit number (MAQP): 4982-00
Preliminary Determination Issued: November 29, 2013
Department Decision Issued:
Permit Final:

1. *Legal Description of Site*: Pinky's Aggregates, Inc. submitted an application to operate a portable crushing/screening plant to initially be located in Section 12 of Township 24 North, Range 59 East in Richland County, Montana. MAQP #4982-00 would apply while operating at any location in Montana, except those areas having a Department of Environmental Quality (Department)-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) nonattainment areas. *A Missoula County air* quality permit would be required for locations within Missoula County, Montana. An addendum would be required for locations in or within 10 km of certain PM_{10} nonattainment areas.

2. *Description of Project*: The Department received an application from Pinky's Aggregate Inc. for the operation of a portable non-metallic mineral crushing/screening operation. Pinky's Aggregate Inc.'s operation would generally include up to two cone crushers, one screen plant, a diesel engine/generator and associated equipment.

3. *Objectives of Project*: The objective of this project would be to produce revenue for Pinky's Aggregates, Inc. through the sale and use of gravel. The issuance of the permit would allow Pinky's Aggregates, Inc. to operate the permitted equipment at various locations throughout Montana, including the initial site location.

4. *Alternatives Considered*: In addition to the proposed action, the Department also considered the "no-action" alternative. The "no-action" alternative would deny issuance of the air quality preconstruction permit to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because Pinky's Aggregate Inc. has demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.

5. *A Listing of Mitigation, Stipulations, and Other Controls*: A list of enforceable conditions, including a BACT analysis, would be included in MAQP #4982-00.

6. *Regulatory Effects on Private Property*: The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.

7. *The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The "no-action" alternative was discussed previously.*

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Terrestrial and Aquatic Life and Habitats			X			Yes
B	Water Quality, Quantity, and Distribution			X			Yes
C	Geology and Soil Quality, Stability and Moisture			X			Yes
D	Vegetation Cover, Quantity, and Quality			X			Yes
E	Aesthetics			X			Yes
F	Air Quality			X			Yes
G	Unique Endangered, Fragile, or Limited Environmental Resources			X			Yes
H	Demands on Environmental Resource of Water, Air and Energy			X			Yes
I	Historical and Archaeological Sites				X		Yes
J	Cumulative and Secondary Impacts			X			Yes

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

A. Terrestrial and Aquatic Life and Habitats

This permitting action would be expected to have minor effects on terrestrial and aquatic life and habitats. The crushing and screening plant would disturb approximately 28 acres of agricultural land. There is a possibility that terrestrials would use the same area as the project. Species of concern in the area include the whooping crane which is a migratory bird, listed as endangered according to the Bureau of Land Management, U.S. Fish and Wildlife Service, and U.S. Forest Service. The air emissions from the crushing and screening plant would likely have only minor effects on terrestrial and aquatic life because facility emissions would be well dispersed in the area of the operations (see Section 7.F of this EA) and would have intermittent and seasonal operations. Therefore, only minor and temporary effects to terrestrial and aquatic life and habitat would be expected from the proposed project.

B. Water Quality, Quantity and Distribution

Water would be required for dust suppression on the mineral processing equipment and surrounding facility area, including haul roads. This water use would be expected to only cause minor, if any, impacts to water resources because the facility would be considered small and only a small volume of water would be required to be used. The facility would emit air pollutants and corresponding deposition of pollutants would occur, as described in Section 7.F. of this EA. However, the Department determined that, due to dispersion characteristics of pollutants, and conditions that would be placed in MAQP #4982-00, any impacts from deposition of pollutants on water quality, quantity, and distribution are expected to be minor.

C. Geology and Soil Quality, Stability and Moisture

The proposed site is existing agricultural land which is in the process of being zoned industrial. Only minor impacts from deposition of air pollutants on soils would likely result (as described in Section 7.F of this EA) and only minor amounts of water would be used for pollution control, and only as necessary, in controlling particulate emissions. Thus, only minimal water runoff

would likely occur. According to the application, the topsoil would be removed, and once the gravel is removed and processed, the pit would be reclaimed and the topsoil replaced. Since only minor amounts of pollution would be expected and corresponding emissions would be widely dispersed before settling upon surrounding soils and vegetation (as described in Section 7.D of this EA), impacts would be minor. Therefore, any effects upon geology and soil quality, stability, and moisture from air pollutant emissions from equipment operations would likely be minor and short-lived.

D. Vegetation Cover, Quantity, and Quality

Deposition of pollutants may affect vegetation cover, quantity, and quality in the surrounding area. During operations, the facility would likely be a relatively minor source of emissions and the pollutants widely dispersed (as described in Section 7.F of this EA); therefore, deposition on vegetation from the proposed project would expect to be minor. MAQP #4982-00 would contain limitations and conditions to control the allowable amount of those emissions; therefore, deposition on vegetation from the proposed project would expect to be minor. Also, due to limited water usage (as described in Section 7.B of this EA) and minimal associated soil disturbance from the application of water and water runoff (as described in Section 7.C of this EA), corresponding vegetative impacts would likely be minor.

E. Aesthetics

The crushing/screening facility would be visible and would create noise (in certain areas close to the plant, approximately 115 decibels (dba) according to the application) while operating at the proposed site. However, activity would occur within open agricultural property which would be located outside the city limits of Sidney and Fairfield Montana, approximately two miles from the closest residence. Further, the property would be zoned for industrial use. In addition, MAQP #4982-00 would include conditions to control emissions, including visible emissions, from the plant. The facility would operate on an intermittent and seasonal basis, and would be a small industrial source. Therefore, any visual aesthetic impacts would be short-lived and are expected to be minor.

F. Air Quality

The air quality impacts from the equipment would be minor because the facility is relatively small and would be used on a temporary and intermittent basis. Additionally, the small and intermittent amounts of deposition generated from the crushing/screening operation would be minimal because the pollutants emitted would be well controlled, widely dispersed (from such factors as wind speed and wind direction) and would have minimal deposition on the surrounding area. MAQP #4982-00 would include conditions limiting the opacity from the plant, as well as requiring water spray bars and other means to control air pollution. Therefore, the Department determined that compliance with all of the permit conditions would ensure that effects to the local air quality would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department contacted the Montana Natural Heritage Program (MNHP) in an effort to identify and species of concern that may be found in the area where the proposed crushing/screening facility will occur. MNHP conducted a search of the defined area which is defined by the township and range of the proposed site, with an additional one-mile buffer. Search results concluded there is one animal species of concern in the area: the whooping crane. Specific effects of operating the proposed project in this area would be minor since the project is small, temporary, and operates on an intermittent basis. Therefore, the Department determined that any impacts to unique, endangered, fragile, or limited environmental resources would be minor.

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

Due to the relatively small size of the project, only small demands on environmental resources would likely be required for proper operation. Only small quantities of water are required for dust suppression of particulate emissions being generated at the site. In addition, impacts to air resources would be expected to be minor because the source would be considered a minor industrial source of emissions, with intermittent and seasonal operations, and because air pollutants generated by the facility would be widely dispersed as described in Section 7.F of this EA. Energy requirements would also be small, as the diesel engines would use small amounts of fuel. Overall, any impacts to water, air, and energy resources would likely be minor.

I. Historical and Archaeological Sites

The Department contacted the Montana Historical Society - State Historical Preservation Office (SHPO) in an effort to identify any historical and/or archaeological sites that may be present in the proposed initial location of the facility. Search results concluded that there are no previously recorded historical or archaeological resources of concern within the area surrounding proposed for initial operations. According to correspondence from SHPO, there would be a low likelihood that cultural properties will be impacted. Therefore, no impacts upon historical or archaeological sites would be expected as a result of operating the proposed crushing/screening plant.

J. Cumulative and Secondary Impacts

The operation of the crushing facility would likely cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because the facility would be limited in the amount of emissions allowed to be released to the atmosphere. Emissions and noise generated from the equipment would likely result in only minor impacts to the area of operations because the operation of the crushing facility would be seasonal and temporary. The proposed project would be short-term in nature, and likely have minor cumulative effects upon resources within the area. These resources include water, terrestrial and aquatic life, soils, and vegetation. Overall, cumulative and secondary impacts to the physical and biological aspects of the human environment would likely be minor.

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

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Social Structures and Mores				X		Yes
B	Cultural Uniqueness and Diversity				X		Yes
C	Local and State Tax Base and Tax Revenue			X			Yes
D	Agricultural or Industrial Production			X			Yes
E	Human Health			X			Yes
F	Access to and Quality of Recreational and Wilderness Activities				X		Yes
G	Quantity and Distribution of Employment				X		Yes
H	Distribution of Population				X		Yes
I	Demands for Government Services			X			Yes
J	Industrial and Commercial Activity			X			Yes
K	Locally Adopted Environmental Plans and Goals			X			Yes
L	Cumulative and Secondary Impacts			X			Yes

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

A. Social Structures and Mores

The operation of the non-metallic mineral processing facility would not be expected to cause any disruption to the social structures and mores in the area because the source would be a minor industrial source that would only have temporary and intermittent operations. Further, the facility would be required to operate according to the conditions that would be placed in MAQP #4982-00, which would limit the effects to social structures and mores. The Department has determined that no impact to the social structure and mores would be expected.

B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of this area would not likely be impacted by the operation of the proposed crushing facility because the facility is a portable source, with seasonal and intermittent operations. Therefore, there would not be any impacts expected to the cultural uniqueness and diversity of the proposed project site.

C. Local and State Tax Base and Tax Revenue

The operation of the facility would likely have little, if any, impact on the local and state tax base and tax revenue because the facility would be a minor industrial source of emissions and would have seasonal and intermittent operations. The facility would require approximately three employees. Thus, only minor impacts to the local and state tax base and revenue would be expected from the employees and facility production. Furthermore, the impacts to local tax base and revenue would expect to be minor because the source would be portable and the money generated for taxes would be widespread.

D. Agricultural or Industrial Production

The initial location of the crushing facility would be an agricultural field. Because minimal deposition of air pollutants would occur on the surrounding land (as described in Section 7.F of this EA), only minor and temporary effects on the surrounding vegetation (i.e. agricultural production) would occur. The operation of the crushing facility would have only a minor impact on local industrial production since the facility would be a minor source of air emissions. In addition, the facility operations would be small and temporary in nature and would be permitted with operational conditions and limitations that would minimize impacts upon surrounding vegetation, as described in Section 7.D of this EA.

E. Human Health

MAQP #4982-00 would incorporate conditions to ensure that the facility would operate in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. As described in Section 7.F of this EA, the air emissions from this facility would be minimized by the use of water spray and other operational limits that would be required by MAQP #4982-00. Also, the facility would be operating on a temporary basis and pollutants would disperse from the ventilation of emissions at this site (see Section 7.F of this EA). Therefore, only minor impacts would be expected on human health from the proposed project.

F. Access to and Quality of Recreational and Wilderness Activities

The initial location of the crushing facility would be an agricultural field. There were no recreational activities or wilderness areas reported to be near the proposed project site. Therefore, no impacts to the access to and quality of recreational and wilderness activities would be expected.

G. Quantity and Distribution of Employment

The portable crushing/screening operation would only require a few employees to operate and would have seasonal and intermittent operations. The crushing/screening operation would be considered a portable source and would not be expected to have long-term affects upon the quantity and distribution of employment in any given area of operation. The application stated three employees would be employed as a result of the proposed project. Therefore, no effects upon the quantity and distribution of employment in this area would be expected.

H. Distribution of Population

The portable crushing and screening operation is a portable industrial facility that would only require a limited number of employees. No individuals would be expected to permanently relocate to this area as a result of this expansion. Therefore, the mineral processing facility would not likely impact the normal population distribution in the initial area of operation or any further operating site.

I. Demands for Government Services

No increase in traffic on existing roadways in the area while the facility is expected from this expansion. Government services would be required for acquiring the appropriate permits for the proposed project and to verify compliance with the permits that would be issued. However, demands for government services would be expected to be minor.

J. Industrial and Commercial Activity

The operation of the new equipment would represent only a minor increase in the industrial activity in the proposed area of operation because the source would be a relatively small industrial source that would be portable and temporary in nature. Furthermore, the industrial activity associated with this plant will occur within an existing gravel pit. Therefore, only limited additional industrial or commercial activity would be expected as a result of the proposed operation.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans or goals that would be affected by the proposed project. MAQP #4982-00 contains operational restrictions for protecting air quality and to keep facility emissions in compliance with any applicable ambient air quality standards, as a locally adopted environmental plan or goal for operating at this proposed site. Because the proposed crushing/screening facility would be a portable source and would likely have intermittent and seasonal operations, any impacts from the project would be expected to be minor and short-lived.

L. Cumulative and Secondary Impacts

The crushing and screening operation would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate areas of operation because the source would be a portable and temporary source. Small increases in traffic would have minor effects on local traffic in the immediate area. Because the source would be relatively small, temporary source, only minor economic impacts to the local economy could be expected from the operation of the plant. The Department believes that this plant could be expected to operate in compliance with all applicable rules and regulations as would be outlined in MAQP #4982-00.

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

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is for the construction and operation of a portable non-metallic mineral processing facility; MAQP #4982-00 includes conditions and limitations to ensure the facility will operate in compliance with all applicable rules and regulations. In addition, there are no significant impacts associated with this proposal.

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

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

EA prepared by: Deanne Fischer
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