AIR QUALITY PERMIT

Issued To: Flint Creek Concrete Permit #3857-00

Products, Inc. Application Complete: 6/9/06

P.O. Box 652 Preliminary Determination Issued: 07/17/06

Philipsburg, MT 59858 Department Decision Issued: 08/02/06 Permit Final: 08/18/06

AFS #: 777-3857

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

Section I: Permitted Facilities

A. Permitted Equipment

Flint Creek operates a portable truck mix concrete batch plant. A complete list of the permitted equipment is contained in Section I.A of the permit analysis.

B. Plant Location

Flint Creek operates a portable truck mix concrete batch plant operation, which will originally locate in the SE ¼ of the SW ¼ of Section 11, Township 7 North, Range 14 West, in Granite County, Montana. Permit #3857-00 applies while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department) approved permitting program, those areas considered tribal lands, or those areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana*. An addendum to this air quality permit will be required for locations in or within 10 km of certain PM₁₀ nonattainment areas.

Section II: Conditions and Limitations

A. Emission Limitations

- 1. Flint Creek shall install, operate, and maintain the baghouse and rubber boot load-out spout as specified in their Montana Air Quality Permit Application and all supporting documentation (ARM 17.8.752):
 - a. Flint Creek shall install, operate, and maintain the baghouse on the weigh hopper, cement silo, and cement supplement silo; and
 - b. Flint Creek shall install, operate, and maintain the rubber boot load-out spout on the concrete plant for product loadout.
- 2. Flint Creek shall not cause or authorize to be discharged into the atmosphere from the ready mix plant:
 - a. Any vent emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304 and ARM 17.8.752).

- b. Any fugitive emissions from the source, or from any material transfer operations, including, but not limited to, truck loading or unloading, which exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.308 and ARM 17.8.752).
- 3. All visible emissions from NSPS-affected equipment, such as screens or conveyor transfers, shall not exhibit an opacity of 10% or greater averaged over 6-consecutive minutes (ARM 17.8.340 and 40 CFR, Subpart OOO).
- 4. 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).
- 5. 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.3 and II.A.4 (ARM 17.8.749).
- 6. Flint Creek 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 and ARM 17.8.752).
- 7. Flint Creek shall treat all unpaved portions of the haul roads, access roads, parking lots, and 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.6 (ARM 17.8.752).
- 8. Total plant concrete production shall be limited to 438,000 cubic yards of concrete during any rolling 12-month time period (ARM 17.8.749).
- 9. Flint Creek shall not operate more than one screen at any given time and the maximum rated design capacity of the screen shall not exceed 200 ton per hour (TPH).
- 10. The screening plant shall be limited to a production of 1,752,000 tons during any rolling 12-month time period (ARM 17.8.749).
- 11. Flint Creek shall not operate more than two generators at any given time and the maximum combined rated design capacity of the generators shall not exceed 160 kilowatts (kW) (ARM 17.8.749).
- 12. If the permitted equipment is used in conjunction with any other equipment owned or operated by Flint Creek, at the same site, production shall be limited to correspond with an emissions level that does not exceed 250 tons during any rolling 12-month time period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).

B. Emissions Monitoring Requirements

1. Flint Creek shall inspect the baghouse and its vents, which are used for controlling emissions from the silos and weigh hopper, every 6 months of operation to ensure that each collector is operating at the optimum efficiency. Records of inspections, repairs, and maintenance shall be kept for a minimum of 5 years (ARM 17.8.749).

2. Flint Creek shall maintain on-site records of inspections, repairs, and maintenance. All records compiled in accordance with this permit shall be maintained by Flint Creek 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).

C. Testing Requirements

- 1. Within 60 days after achieving the maximum production rate, but no later than 180 days after initial startup, an Environmental Protection Agency (EPA) Method 9 opacity test and/or other methods and procedures, as specified in 40 CFR Part 60.675, must be performed on any NSPS affected equipment to demonstrate compliance with the emissions limitations contained in Sections II.A.4 and II.A.5 (ARM 17.8.340, 40 CFR Part 60, Subpart A 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 testing (ARM 17.8.105).

D. Operational Reporting Requirements

- 1. If this concrete batch plant is moved to another location, an Intent to Transfer Form must be sent to the Department. In addition, a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The Intent to Transfer Form and the proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.765).
- 2. Flint Creek 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 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 the units required by the Department. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).
- 3. Flint Creek shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted to the Department, in writing, 10 days prior to 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. Flint Creek shall maintain on-site records showing daily hours of operation and daily production rates, and temperature and pressure drop readings, for the last 12 months. All records compiled in accordance with this permit must be maintained by Flint Creek as a permanent business record for at least 5 years following the date of the measurement, must be submitted to the Department upon request, and must be available at the plant site for inspection by the Department (ARM 17.8.749).
- 5. Flint Creek shall document, by month, the total concrete plant production. By the 25th day of each month, Flint Creek shall calculate the concrete plant production from the facility for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.8. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
- 6. Flint Creek shall document, by month, the total screen production. By the 25th day of each month, Flint Creek shall calculate the screening plant production from the facility 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).

Section III: General Conditions

- A. Inspection Flint Creek 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 (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 Flint Creek fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving Flint Creek of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided for in ARM 17.8.740, *et seq.* (ARM 17.8.756)
- D. Enforcement Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by

- the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.
- F. Permit Inspection As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. Permit Fee Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by Flint Creek may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Construction Commencement Construction must begin within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked (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. Flint Creek 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.

Permit Analysis Flint Creek Concrete Products, Inc. Permit #3857-00

I. Introduction

A. Permitted Equipment

Flint Creek Concrete Products, Inc. (Flint Creek) operates a portable truck mix concrete batch plant, which includes a concrete batch plant (maximum capacity of 50 cubic yards per hour), a screen (maximum capacity of 200 ton per hour (TPH)), two diesel generators (combined size up to 160 kilowatts (kW)), and associated equipment. Particulate emissions from the cement silo are controlled by a fabric filter dust collector. Particulate emissions from the weigh hopper, cement, and cement supplement silo are controlled by a rubber boot load-out spout.

B. Process Description

Flint Creek proposes to use this concrete batch plant to produce wet mix concrete for use in various construction operations. For a typical operational setup, aggregate materials are loaded into an aggregate storage bin and appropriately metered and fed to a conveyor. The cementitious material is pneumatically loaded into a silo (using fabric filters to control particulate emissions) and appropriately metered via a screw auger onto a conveyor and loaded into a truck mixer (through the rubber boot load-out spout to control particulate emissions). Water is also loaded into the truck mixer. Materials are then mixed and are ready to be transported as cement to the construction site.

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, or copies 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 is a list of applicable definitions used in this subchapter, 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. <u>ARM 17.8.106 Source Testing Protocol</u>. 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 Montana Clean Air Act, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

Flint Creek 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. <u>ARM 17.8.110 Malfunctions</u>. (2) The Department must be notified promptly by telephone whenever a malfunction occurs, which 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 in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation.
 (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.
- B. ARM 17.8, Subchapter 2 Ambient Air Quality, including, but not limited to:
 - 1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
 - 2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
 - 3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
 - 4. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
 - 5. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀

Flint Creek must comply with the applicable ambient air quality standards.

- C. ARM 17.8, Subchapter 3 Emission Standards, including, but not limited to:
 - 1. <u>ARM 17.8.304 Visible Air Contaminants</u>. 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. <u>ARM 17.8.308 Particulate Matter, Airborne</u>. (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, Flint Creek 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. <u>ARM 17.8.310 Particulate Matter, Industrial Process</u>. 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. <u>ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel</u>. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this section.

- 6. <u>ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products</u>. (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 CFR 60, Standards of Performance for New Stationary Sources (NSPS). The owner or operator of any stationary source or modification, as defined and applied in 40 CFR Part 60, shall comply with the standards and provisions of 40 CFR Part 60. This facility consists of a truck mix concrete batch plant and associated equipment. NSPS (40 CFR Part 60, General Provisions and Subpart F, Portland Cement Plants) does not apply to the truck mix plant because the truck mix plant does not meet the definition of an affected facility. However, the facility also consists of a screening plant and associated equipment. NSPS (40 CFR Part 60, General Provisions and Subpart OOO, Nonmetallic Mineral Processing Plants) does apply to the screen plant because the screen plant does meet the definition of an affected facility.
- D. ARM 17.8, Subchapter 5 Air Quality Permit Application, Operation and Open Burning Fees, including, but not limited to:
 - 1. <u>ARM 17.8.504 Air Quality Permit Application Fees</u>. This rule requires that Flint Creek 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. Flint Creek submitted the appropriate permit application fee as required for the current permit action.
 - 2. <u>ARM 17.8.505 Air Quality Operation Fees</u>. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department. This operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, 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 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. <u>ARM 17.8.740 Definitions</u>. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. <u>ARM 17.8.743 Montana Air Quality Permits--When Required</u>. This rule requires a person to obtain an air quality permit or permit alteration to construct, alter or use any concrete batch plant, crusher or screen that has the Potential to Emit (PTE) greater than 25 tons per year of any pollutant. Flint Creek has a PTE

- greater than 25 tons per year of total particulate matter and particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}); therefore, an air quality permit is required.
- 3. <u>ARM 17.8.744 Montana Air Quality Permits--General Exclusions</u>. This rule identifies the activities that do not require a permit and are not subject to the Montana Air Quality Permit Program.
- 4. <u>ARM 17.8.745 Montana Air Quality Permits—Exclusion for De Minimis</u>

 <u>Changes</u>. 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, alteration or use of a source. Flint Creek 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. Flint
 Creek submitted an affidavit of publication of public notice for the June 8, 2006,
 issue of the *Philipsburg Mail*, a newspaper of general circulation in the Town of
 Philipsburg, in Granite 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. <u>ARM 17.8.752 Emission Control Requirements</u>. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that Best Available Control Technology (BACT) shall be utilized. The required BACT analysis is included in Section IV of this permit analysis.
- 8. <u>ARM 17.8.755 Inspection of Permit</u>. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
- 9. <u>ARM 17.8.756 Compliance with Other Requirements</u>. This rule states that nothing in the permit shall be construed as relieving Flint Creek 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. <u>ARM 17.8.759 Review of Permit Applications</u>. 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. <u>ARM 17.8.760 Additional Review of Permit Applications</u>. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those applications that require an environmental impact

statement.

- 12. <u>ARM 17.8.762 Duration of Permit</u>. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
- 13. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of Flint Creek, 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).
- 14. 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 contained in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
- 15. ARM 17.8.765 Transfer of Permit. (1) This rule states that an air quality permit may be transferred from one location to another if the Department receives a complete notice of Intent to Transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.
- F. ARM 17.8, Subchapter 8 Prevention of Significant Deterioration of Air Quality, including, but not limited to:
 - 1. <u>ARM 17.8.801 Definitions</u>. This rule is a list of applicable definitions used in this subchapter.
 - 2. ARM 17.8.818 Review of Major Stationary Sources and Major Modification—Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

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

- G. ARM 17.8, Subchapter 12 Operating Permit Program Applicability, including, but not limited to:
 - 1. <u>ARM 17.8.1201 Definitions</u>. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. PTE > 100 tons/year of any pollutant,
 - b. PTE > 10 tons/year of any one Hazardous Air Pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or a lesser quantity as the Department may establish by rule, or
 - c. PTE > 70 tons/year of PM₁₀ in a serious PM₁₀ nonattainment area.
 - 2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #3857-00 for Flint Creek, the following conclusions were made:
 - a. The facility's PTE is less than 100 tons/year for any air pollutant.
 - b. The facility's PTE is less than 10 tons/year of any one HAP and less than 25 tons/year of all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is subject to current NSPS.
 - e. This facility is not subject to any current NESHAP standards.
 - f. This source is not a Title IV affected source nor a solid waste combustion unit.
 - g. This source is not an EPA designated Title V source.

This Flint Creek facility is not a major stationary source since it is not a listed source and the facility's PTE is less than 100 tons per year of any pollutant (excluding fugitive emissions).

III. BACT Determination

A BACT determination is required for any new or altered source. Flint Creek 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. Area Source Fugitives Emissions

Two types of emissions controls are readily available and used for dust suppression of fugitive emissions at the site, and fugitive emissions for the surrounding area of operation. These two control methods are water and chemical dust suppressant. Chemical dust suppressant could be used for dust suppression on the area surrounding the operation. However, because water is more readily available, is more cost effective, is equally effective as chemical dust suppressant, and is more environmentally friendly, water has been identified

as the most appropriate method of pollution control of particulate emissions for the general plant area. In addition, water suppression has been required of recently permitted similar sources. Flint Creek may, however, use chemical dust suppressant to assist in controlling particulate emissions from the surrounding plant area.

All visible emissions from any NSPS affected equipment, used in conjunction with this facility, and manufactured after August 31, 1983, are limited to an opacity of 10%. This includes the 1999 Fab Tec Screen Plant. Flint Creek must also take reasonable precautions to limit the fugitive emissions of airborne particulate matter from haul roads, access roads, parking areas, and the general area of operation. Flint Creek is required to have water available on site (at all times) and to apply the water, as necessary, to maintain compliance with the opacity and reasonable precaution limitations. Flint Creek may also use chemical dust suppression, in order to maintain compliance with emissions limitations in Section I.A of Permit #3857-00. The Department determined that using water spray bars and water to maintain compliance with the opacity requirements and reasonable precaution limitations constitutes BACT for the operation of the 1999 Screen Plant.

B. Cement Plant

All visible emissions from any cement and cement supplement silo (or vent), truck loading or unloading operations, or any material transferring operations shall be limited to less than 20% opacity. Flint Creek shall use a fabric filter dust collector for the cement silo and a rubber boot load-out spout on the cement batcher. The Department determined that using a fabric filter dust collector and a load-out spout to maintain compliance with the opacity limitations constitutes BACT for these sources.

IV. Emission Inventory

	Tons/Year					
Source	PM	PM-10	NOX	VOC	CO	SOX
Aggregate Delivery to Ground Storage	0.705	0.34	0.00	0.00	0.00	0.00
Sand Delivery to Ground Storage	0.164	0.05	0.00	0.00	0.00	0.00
Aggregate Transfer to Conveyor	0.705	0.34	0.00	0.00	0.00	0.00
Sand Transfer to Conveyor	0.164	0.05	0.00	0.00	0.00	0.00
Aggregate Transfer to Elevated Storage	0.705	0.34	0.00	0.00	0.00	0.00
Sand Transfer to Elevated Storage	0.164	0.05	0.00	0.00	0.00	0.00
Cement Unloading to Elevated Storage Silo	0.039	0.025	0.00	0.00	0.00	0.00
Cement Supplement Unloading to Elevated Storage Silo	0.025	0.009	0.00	0.00	0.00	0.00
Weigh Hopper Loading of Sand/Aggragate	0.92	0.43	0.00	0.00	0.00	0.00
Central Mix Loading of Cement/Supplement/Sand/Aggregate	46.49	16.48	0.00	0.00	0.00	0.00
Screen (up to 200 tph)	13.80	6.57	0.00	0.00	0.00	0.00
Haul Roads	2.74	1.23	0.00	0.00	0.00	0.00
Diesel Generator (up to 100 kw)	1.29	1.29	18.21	1.45	3.92	1.20
Diesel Generator (up to 60 kw)	0.78	0.78	10.92	0.87	2.35	0.72
Total	67.92	27.22	29.13	2.32	6.28	1.93

• A complete emission inventory for Permit #3857-00 is on file with the Department.

V. Existing Air Quality

Permit #3857-00 is issued for the operation of a portable truck mix concrete batch plant to be originally located in the SE ¼ of the SW ¼ of Section 11, Township 7 North, Range 14 West, in Granite County, Montana. This facility would be allowed to operate at this proposed site and any other areas 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.

VI. Ambient Air Quality Impacts

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

VII. Taking or Damaging Implication Analysis

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

VIII. Environmental Assessment

An environmental assessment, 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, Montana 59620 (406) 444-3490

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued For: Flint Creek Concrete Products, Inc.

P.O. Box 652

Phillipsburg, MT 59858

Air Quality Permit Number: #3857-00

Preliminary Determination Issued: 07/17/06

Department Decision Issued: 08/02/06 Permit Final: 08/18/06

1. Legal Description of Site: This permit is for the operation of a portable concrete batch plant to be initially located at the SE ¼ of the SW ¼ of Section 11, Township 7 North, Range 14 West, in Granite County, Montana. Permit #3857-00 would apply while operating at any location in Montana, except within those areas having a Department approved permitting program, those areas considered tribal lands, or those areas in or within 10 kilometers of certain PM₁₀ nonattainment areas. A Missoula County air quality permit would be required for locations within Missoula County, Montana. An addendum to this air quality permit would be required for locations in or within 10 km of certain PM₁₀ nonattainment areas.

- 2. Description of Project: Flint Creek submitted a permit application for the construction and operation of a portable truck mix concrete batch plant, which would include an electrical powered truck mix concrete batch plant (maximum capacity of 50 cubic yards per hour), a screen plant, two diesel generators (total maximum combined capacity of 160-kW, and associated equipment. Particulate emissions from the cement silo, cement supplement silo, and weigh hopper would be controlled by a baghouse. Particulate emissions from loading the cement batcher would be controlled by a rubber boot load-out spout.
- 3. Objectives of the Project: Flint Creek, in an effort to increase business and revenue for the company through the construction and use of their facility, submitted a complete application for a concrete batch plant. The concrete batch plant would be used to supply wet mix concrete and would allow Flint Creek to operate the portable equipment at various locations throughout Montana, including the proposed initial site location.
- 4. Additional Project Site Information: In many cases, the truck mix concrete batch plant operation may move to a general site location, or open cut pit, which has been previously permitted through the Industrial and Energy Minerals Bureau (IEMB). If this were the case, a more extensive EA for the site would have been conducted and would be found in the Mined Land Reclamation Permit for that specific site.

- 5. 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 Flint Creek demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.
- 6. A Listing of Mitigation, Stipulations, and Other Controls: A list of enforceable conditions, including a BACT analysis, would be contained in Permit #3857-00.
- 7. 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 would be reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and would not unduly restrict private property rights.
- 8. 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	Unknow n	Comments Included
A.	Terrestrial and Aquatic Life and Habitats			X			yes
В.	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 Resource			X			yes
Н.	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

Terrestrials would use the same area as the concrete batch plant operations. The concrete batch plant operations would be considered a minor source of emissions (by industrial standards) with intermittent and seasonal operations. Therefore, any effects to terrestrial and aquatic life would be minor and short-lived. Only minor effects on terrestrial life and aquatic life would be expected as a result of equipment operations or from pollutant deposition.

B. Water Quality, Quantity, and Distribution

Water would be used for dust suppression on the surrounding roadways and areas of operation and for pollution control for equipment operations. However, water use would only cause minor impacts upon water quality, quantity, and distribution at the site because the equipment would only have seasonal and intermittent operations.

Surface water resources would be protected by the pollution prevention measures identified in the storm water discharge permit to protect both aquatic and water resources. Water would be made readily available through the water lease agreement and would be used, as necessary, to comply with emissions limitations and conditions established in Section I.A of this Permit. Thus, any impacts from the proposed project would be minor and short-lived.

C. Geology and Soil Quality, Stability, and Moisture

The soils at the facility sites would be impacted by the concrete batch plant operations due to the construction and use of the concrete batch plant. Minimal disturbance to soil would occur as a result of construction and use of the facility because the facility would be operating on an intermittent and temporary basis, and pollutant deposition upon the surrounding soils would be minimal. Further, considering the facility's portable and temporary nature, the area's industrial usage and good pollutant dispersion would exist within the area, the fact that the facility would typically operate within an existing permitted open cut pit, any effects (upon geology and soil quality, stability, and moisture) from operating this facility would be minor and short-lived.

D. Vegetation Cover, Quantity, and Quality

As described in Section 8.F of this EA, the impacts from the air emissions of this facility would be minor. As a result, the corresponding deposition of the air pollutants on the surrounding vegetation would also be minor. Also, equipment construction and operations would result in only minor soil and water disturbance (as described in Sections 8.B and 8.C) because the facility would be portable and temporary in nature and corresponding permits would be acquired before operation commences. Therefore, because the facility would locate in an area where good pollutant dispersion would occur, would locate in an area where little vegetation would be effected, and would be a minor source of emissions and temporary in nature, impacts from the emissions of the concrete batch plant on vegetation would be minor.

E. Aesthetics

The concrete batch plant operations would be visible and would create additional noise in the area of operation. Permit #3857-00 would include conditions to control emissions, including visible emissions, from the plant. The concrete batch plant operations would have a minor amount of emissions, would be portable, would have seasonal and intermittent operations, and would locate near an existing highway. Noise would be noticeable, but minor, due to the location of the site in relation to existing activity and surrounding land use. Therefore, impacts upon aesthetics would be minor and short-lived.

F. Air Quality

The air quality impacts from the concrete batch plant operations would be minor because Permit #3857-00 would include conditions limiting the opacity from the plant, as well as requiring a baghouse and other means to control air pollution. Additionally, the facility is considered a minor source of air pollution by industrial standards. While deposition of

pollutants would occur as a result of operating the facility, the Department determined that any air quality impacts from deposition of pollutants would be minor due to dispersion characteristics of pollutants, the atmosphere, (wind speed, wind direction, ambient temperature, etc.) and conditions that would be placed in Permit #3857-00. The Department determined that controlled emissions from the source will not cause or contribute to a violation of any ambient air quality standard Therefore, any impacts to air quality from the propose facility would be minor

The operations would be limited, by Permit #3857-00, to total emissions of 250 tons/year or less of any regulated pollutant from non-fugitive sources at the plant, including any additional equipment owned and operated at the site. Furthermore, the facility emissions would be subject to BACT. Also, the operation would have temporary and intermittent use, thereby further reducing potential air quality impacts from the facility. Therefore, air quality impacts would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department, in an effort to assess any potential impacts to unique endangered, fragile, or limited environmental resources in the initial proposed area of operation, contacted the Montana Natural Heritage Program (MNHP). MNHP search results showed there were species of concern in the defined search area. The species of concern include *Salvelinus confluentus* (Bull Trout), *Lynx Canadensis* (Lynx), and *Oncorhynchus clarkia lewisi* (Westslope Cuthroat Trout). The area, in this case, is defined as the township and range of the proposed site, with an additional one-mile buffer. Based on the small size and temporary nature of equipment operations, the fact that the proposed operational site is a previously used open cut pit, and the minimal disturbance to the environment (water, air, and soils) from the proposed project, the Department determined no impacts to unique endangered, fragile, or limited environmental resources would be minor.

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

Due to the relatively small size of the facility, the concrete batch plant operations would only require small quantities of water, air, and energy for proper operation. Small quantities of water would be used for dust suppression and would control fugitive emissions being generated at the site. Energy requirements would also be small because the facility is small by industrial standards with seasonal and intermittent operations. In addition, impacts to air resources would be minor because the source is small by industrial standards, with intermittent and seasonal operations, and because air pollutants generated by the facility would be widely dispersed. Furthermore, facility emissions would be controlled. Therefore, any impacts to water, air, and energy resources would be minor.

I. Historical and Archaeological Sites

The Department previously conducted a site visit and also 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 area of construction/operation. Through those efforts, the Department concluded that there are no previously recorded historical or archaeological resources of concern within the proposed area of operations. The area was previously used for pastureland and has since been disturbed for aggregate mining. Therefore, no impacts upon historical or archaeological sites would be expected as a result of operating the proposed concrete batch plant.

J. Cumulative and Secondary Impacts

The concrete batch plant operations would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because the facility would have seasonal and intermittent use and because the facility is considered a minor source of air pollutants by industrial standards. The facility would generate emissions of PM, PM_{10} , NO_x , VOC, CO, and SO_x . Noise would also be generated from the site. Emissions and noise would cause minimal disturbance at the initial site location. Additionally, this facility, in combination with the other emissions from the site would not be permitted to exceed 250 tons per year of non-fugitive emissions. Overall, any cumulative and secondary impacts would be minor.

9. 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	Unknow n	Comments Included
A.	Social Structures and Mores				X		yes
В.	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
Н.	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 Department has prepared the following comments.

A. Social Structures and Mores

The concrete batch plant operation would cause no disruption to the social structures and mores in the area because the source is a minor source of emissions and temporary in nature. Additionally, the facility would be a minor source of air pollution and would be required to operate under the conditions in Permit #3857-00. Thus, no native or traditional communities would be affected by the proposed project operations and no impacts upon social structures or mores would result. The predominant use of the surrounding area would not change as a result of this project, which has previously been used for gravel production.

B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of the area would not be impacted by the proposed concrete batch plant operations because the site would be separated from the residential areas. Additionally, the facility would be considered a portable/temporary source with seasonal and intermittent operations resulting in short-term and minor impacts. Also, the predominant use of the site and surrounding area would not change as a result of this project.

C. Local and State Tax Base and Tax Revenue

The concrete batch plant operations would have little, if any, impact on the local and state tax base and tax revenue because the facility would be a temporary source and small by industrial standards. The facility operations would not require the use of any new employees. Thus, only minor impacts to the local and state tax base and revenue could be expected from the employees and facility production. Furthermore, the impacts to local tax base and revenue is expected to be minor because the source would be portable and any money generated for taxes would be widespread.

D. Agricultural or Industrial Production

The concrete batch plant operations would have only a minor impact on local industrial production since the facility is small by industrial standards and would operate in the area on a temporary and intermittent basis. Because of the portable nature of the equipment, only minor and temporary impacts upon surrounding agricultural land are expected to occur. As described in Section 8.D, impacts to vegetation would be minimal. Also, pollution control would be utilized on equipment operations and corresponding operational limits would be established to protect the environment. Therefore, any impacts to agricultural or industrial production would be minor and short-lived.

E. Human Health

Permit #3857-00 would incorporate conditions to ensure that the concrete batch plant would be operated 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 8.F., the air emissions from this facility would be minimized by the use of a fabric filter dust collector, a rubber boot load-out spout, and production and opacity limits established in Permit #3857-00. Based on the facility operations, the permit conditions applicable to the facility, and the seasonal nature of the facility, the human health impacts from the facility would be minor.

F. Access to and Quality of Recreational and Wilderness Activities

Operations at the initially proposed site would not affect access to recreational and wilderness activities in the area because the site is private property that currently has little wilderness or recreational value. Thus, no changes to recreational and wilderness activities, or access to those activities, would be expected from the operation of the concrete batch plant. In addition, the facility would be a temporary source and would have minor amounts of emissions, as described in Section 8.F of this EA. Any changes in the quality of recreational and wilderness activities from noise, created by operating the equipment at the site, would be minor and intermittent.

G. Quantity and Distribution of Employment

The concrete batch plant would have only minor effects on the quantity and distribution of employment in the area because only a few Flint Creek employees would be used for such operations, the facility would be a relatively small and portable source, and the facility would have seasonal and intermittent operations. No individuals would be expected to permanently relocate to this area of operation as a result of operating the concrete batch facility. Therefore, at most, only minor effects upon the quantity and distribution of employment in this area would be expected.

H. Distribution of Population

The concrete batch operation would be a minor industrial source of emissions and the facility would only require the addition of a few new employees to operate the facility. Since the proposed project is a portable source, with seasonal and intermittent operations, it would not be expected to create any new permanent employment in the area. Thus, no individuals are expected to permanently relocate to the area as a result of operating the concrete batch plant. Therefore, the concrete batch plant operations would not impact the normal population distribution in the initial area of operation or any future operating site.

I. Demands of Government Services

Minor increases would be seen in traffic on existing roadways in the area while the concrete batch plant is operating. In addition, government services would be required for acquiring the appropriate permits from government agencies for the proposed project and to verify compliance with the permits that would be issued. Demands for government services would be minor.

J. Industrial and Commercial Activity

The concrete batch plant would represent only a minor increase in the industrial activity in the proposed operational site because the source would be a relatively small source and portable in nature. The associated concrete batching operations are expected to be intermittent and temporary with limited production. Therefore, any impacts upon the industrial and commercial activity in the area is expected to be minor and short-lived.

K. Locally Adopted Environmental Plans and Goals

Flint Creek would generally be allowed, by permit, to operate in areas designated by EPA as attainment or unclassified. Permit #3857-00 would contain limits for protecting air quality and to keep facility emissions in compliance with applicable ambient air quality standards. Locally adopted environmental plans and goals do not exist for this area. Because the facility would be a small and portable source and would have intermittent and seasonal operations, any impacts from the facility would be minor and short-lived.

L. Cumulative and Secondary Impacts

The concrete batch plant would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area because the source is a portable, temporary source. Minor increases in traffic would have minor effects on local traffic in the immediate area, thus having a minor effect on the social environment. Because the source is relatively small (by industrial standards) and temporary, only minor economic impacts to the local economy could be expected from the operation of the facility. Thus, minor and temporary cumulative effects would result to the local economy.

Recommendation: An EIS is not required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: All potential effects resulting from construction and operation of the proposed facility are minor; therefore, an EIS is not required.

Other groups or agencies contacted or which may have overlapping jurisdiction: Department of Environmental Quality - Permitting and Compliance Division (Industrial and Energy Minerals Bureau); Montana Natural Heritage Program; and the State Historic Preservation Office (Montana Historical Society).

Individuals or groups contributing to this EA: Department of Environmental Quality (Air Resources Management Bureau and Industrial and Energy Minerals Bureau), Montana Natural Heritage Program, and State Historic Preservation Office (Montana Historical Society).

EA prepared by: Trista Glazier

Date: June 30, 2005