

AIR QUALITY PERMIT

Issued To: Kenyon Noble Ready Mix
P.O. Box 1387
Bozeman, MT 59771

Permit #4064-00
Application Complete: 3/22/07
Preliminary Determination Issued: 4/19/07
Department's Decision Issued: 5/07/07
Permit Final: 05/23/07
AFS #: 777-4064

An air quality permit, with conditions, is hereby granted to Kenyon Noble Ready Mix (Kenyon Noble) 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

Kenyon Noble owns and operates a portable cement/concrete ready-mix plant. Permitted equipment includes an Erie Strayer MPII-T Low Profile Transit Mix Plant with a cement batcher (12 cubic yard (yd³) capacity), a cement silo (200 ton per hour (ton/hr) capacity), an aggregate batcher (200 ton/hr capacity), an aggregate bin (200 ton/hr capacity), a fly-ash silo (45 ton storage capacity), a C & W dust collection system, and associated material handling and processing equipment.

B. Plant Location

Permit #4064-00 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 (PM₁₀) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* An addendum will be required for operating in locations in or within 10 km of certain PM₁₀ nonattainment areas.

The initial operating site is 889 Valley Center Road West, which is approximately 2 miles south of Belgrade, Montana, and approximately 1 mile west of Jackrabbit Lane. The legal description of the site is Section 23, Township 1 South, Range 4 East, in Gallatin County, Montana.

SECTION II: Conditions and Limitations

A. Operational and Emission Limitations

1. Kenyon Noble shall not cause or authorize to be discharged into the atmosphere from the portable concrete batch plant and general plant operations:
 - a. Any vent emissions which exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304 and 17.8.752); and
 - b. Any fugitive emissions from the facility including, but not limited to, emissions from truck loading and unloading operations or any material handling and transfer operations, which exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304, ARM 17.8.308, and ARM 17.8.752).

2. Kenyon Noble shall install, operate, and maintain a fabric filter dust collection system for the control of particulate matter emissions from the Erie Strayer MPIO-T Low Profile Transit Mix concrete batch plant (ARM 17.8.752).
3. Kenyon Noble shall install, operate, and maintain a fabric filter dust collection system for the control of particulate matter emissions from each cement silo (ARM 17.8.752).
4. A warning device must be installed, operated, and maintained on each cement storage silo to avoid overfilling and fabric filter damage (ARM 17.8.749).
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.1.b (ARM 17.8.749).
6. Kenyon Noble 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).
7. Kenyon Noble 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.6 (ARM 17.8.749).
8. Kenyon Noble shall use only pipeline quality natural gas fuel to fire the 4.5 million British thermal unit per hour (MMBtu/hr) heat input capacity boiler used to heat process water (ARM 17.8.752).
9. If the permitted equipment is used in conjunction with any other equipment owned or operated by Kenyon Noble, 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).

B. Testing Requirements

1. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures manual (ARM 17.8.106).
2. The Department may require further testing (ARM 17.8.105).

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

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

3. Kenyon Noble 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. Kenyon Noble 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 Kenyon Noble 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. Kenyon Noble shall inspect the C&W fabric filter dust collection system, cement silo fabric filter dust collection system, and associated vents and collection systems, which are used for controlling emissions from the cement storage silos and the batch plant, on an every 6 month of operation basis, to ensure that each dust collection system is operating in a manner to minimize emissions (ARM 17.8.749).
6. Kenyon Noble shall maintain on-site records of inspections, repairs, and maintenance conducted in accordance with Section II.C.5. All inspection records compiled in accordance with this permit shall be maintained by Kenyon Noble as a permanent business record for at least 5 years following the date of measurement, shall be submitted to the Department upon request, and shall be available at the plant for inspection by the Department (ARM 17.8.749).

D. Notification

Kenyon Noble shall provide the Department with written notification of the actual start-up date of the portable concrete batch plant within 15 days after the actual startup date (ARM 17.8.749).

SECTION III: General Conditions

- A. Inspection – Kenyon Noble shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver – The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if Kenyon Noble fails to appeal as indicated below.

- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Kenyon Noble 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 Kenyon Noble 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 be 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. Kenyon Noble 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
Kenyon Noble Ready Mix, Inc.
Permit #4064-00

I. Introduction/Process Description

A. Permitted Equipment

Kenyon Noble Ready Mix, Inc. (Kenyon Noble) owns and operates a portable cement/concrete ready-mix plant. Permitted equipment includes a Erie Strayer MPII-T Low Profile Transit Mix Plant with a cement batcher (12 cubic yard (yd³) capacity), a cement silo (200 ton per hour (ton/hr) capacity), an aggregate batcher (200 ton/hr capacity), an aggregate bin (200 ton/hr capacity), a fly-ash silo (45 ton storage capacity), a C & W dust collection system, and associated material handling and processing equipment.

B. Source Description

For a typical operational set up, raw materials are loaded into an overhead storage bin (200 ton storage capacity) via a material handling conveyor(s). The storage bin is separated into 4 storage compartments – two compartments for concrete graded course aggregate and two compartments for concrete graded fine aggregate. The materials are then weighed and dropped into a single batch scale/holding area (up to 12 cubic yards per batch). The material is then conveyed to a mixer truck where water is added to the process. Cement and/or fly ash from the overhead silos (200 ton and 50 ton capacity) is then delivered via gravity feed (200 ton silo) or auger (50 ton silo) to the mixer truck. Admixtures (chemicals used to control various aspects of the finished concrete product) are then pneumatically pumped to the mixer truck and added to the process simultaneously with water. Particulate emissions resulting from product loading activities are controlled by a vacuum-powered dust collector with associated 4000 pound capacity storage hopper. When hot water is required for concrete processing, water is heated by a 4.5 million British thermal unit per hour (MMBtu/hr) capacity natural gas-fired boiler. All facility operations are powered by electricity from land-line power provided by a power utility.

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

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

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.

3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

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

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

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

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

Kenyon Noble 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 (PM). (2) Under this rule, Kenyon Noble 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 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.

4. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. Commencing July 1, 1971, no person shall burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions.
 5. ARM 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR 60, Standards of Performance for New Stationary Sources (NSPS). This facility is not an NSPS affected source because it does not meet the definition of any NSPS subpart defined in 40 CFR 60.
- 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. Kenyon Noble 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 alteration to construct, alter, or use any asphalt plant, crusher or screen that has the Potential to Emit (PTE) greater than 15 tons per year of any pollutant. Kenyon Noble has a PTE greater than 15 tons per year of PM and particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM₁₀); 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, alteration, or use of a source. Kenyon Noble 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. Kenyon Noble submitted an affidavit of publication of public notice for the March 12, 2007, issue of the *Bozeman Daily Chronicle*, a newspaper of general circulation in the Town of Bozeman in Gallatin 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 Kenyon Noble of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a *de minimis*

change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.

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

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

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
2. ARM 17.8.818 Review of Major Stationary Sources and Major Modification--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

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

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

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. PTE > 100 tons/year of any pollutant
 - b. PTE > 10 tons/year of any one hazardous air pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule, or
 - c. PTE > 70 tons/year of PM₁₀ in a serious PM₁₀ nonattainment area.
2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #4064-00 for Kenyon Noble, the following conclusions were made:
 - a. The facility's PTE is less than 100 tons/year for any pollutant.
 - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.

- d. This facility is not subject to any current NSPS.
- e. This facility is not subject to any current National Emission Standards for Hazardous Air Pollutants (NESHAP) standards.
- f. This source is not a Title IV affected source or a solid waste combustion unit.
- g. This source is not an EPA designated Title V source.

Based on these facts, the Department has determined that Kenyon Noble is a minor source of emissions as defined under Title V; therefore, a Title V Operating Permit is not required for proposed operations.

III. BACT Determination

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

A BACT analysis was submitted by Kenyon Noble in Permit Application #4064-00, addressing some available methods of controlling particulate matter emissions from cement batch plant operations and associated sources of fugitive particulate matter emissions. 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. General Plant and Fugitive Particulate Matter Emissions

All sources of visible fugitive particulate matter emissions from the plant are limited to 20% opacity. Two types of emissions controls are readily available and used for the suppression of fugitive particulate matter emissions at the site, fugitive emissions for the surrounding area of operations, and for emissions from material handling equipment (conveyors, open bins, etc.) at the facility. These two control methods are water and/or chemical dust suppressant. Chemical dust suppressant is an effective method of controlling fugitive particulate matter emissions and could be used on the area surrounding the operation and for emissions resulting from facility operations. Further, because water is also effective at controlling particulate matter emissions, is readily available, is cost effective, and is environmentally friendly, water has also been identified as an appropriate method of particulate matter control. Water suppression and/or chemical dust suppressant have been required of recently permitted similar sources. Kenyon Noble may use chemical dust suppressant and/or water spray to control particulate matter emissions from sources of fugitive dust emissions and the surrounding plant area.

Kenyon Noble must also use reasonable precautions to limit the fugitive emissions of airborne particulate matter from haul roads, access roads, parking areas, and the general area of operation. Kenyon Noble 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 and reasonable precaution limitations. Kenyon Noble may also use chemical dust suppression, in order to maintain compliance with the opacity limitations contained in Permit #4064-00. The Department determined that using water spray bars, water, and/or chemical dust suppressant, as necessary, to maintain compliance with the opacity requirements and reasonable precaution limitations contained in Section II of Permit #4064-00 constitutes BACT for sources of fugitive particulate matter emissions, in this case.

B. Concrete Batch Plant Particulate Matter Emissions

All visible emissions from the plant including systems for handling, storing, and weighing aggregate; systems for loading, transferring, and storing cement are limited to 20% opacity. Kenyon Noble proposed to control particulate emissions from the plant using a fabric filter dust collection system for batch plant operations. Because these emission control systems constitute highly effective methods for the control of particulate matter emissions from the proposed operations, the Department determined that operating and maintaining a fabric filter dust collection system on the cement storage and transfer operations and concrete batch plant material loading and load-out operations to achieve compliance with the corresponding emission limitations in Section II.A of the permit constitutes BACT, in this case.

C. Natural Gas-Fired Boiler (4.5 MMBtu/hr)

Natural gas fired boilers are inherently low emitters of air pollution due to characteristics of the natural gas fuel fired to operate the boiler. Potential emissions of all regulated pollutants resulting from operation of the affected boiler are less than 2 tons per year (tpy). Because potential emissions of all regulated pollutants are low, incorporation of available pollutant-specific control technologies would result in high cost-effective (\$/ton removed) values thereby making pollutant-specific add-on controls for NO_x, CO, SO₂, PM/PM₁₀ and VOCs economically infeasible in this case. Therefore, the Department determined that combustion of pipeline quality natural gas only and proper operation and maintenance of the affected boiler with no additional control constitutes BACT for all regulated pollutants, in this case.

In summary, the Department determined that using fabric filter bin vents, a vacuum powered fabric-filter dust collection system, and water spray and/or chemical dust suppressant, as applicable, to maintain compliance with the opacity and reasonable precaution limitations constitutes BACT for concrete batch plant operations, in this case. Further, the Department determined that combustion of pipeline quality natural gas only and proper operation and maintenance of the affected boiler with no additional control constitutes BACT, in this case.

The control options selected contain control equipment and control costs comparable to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

IV. Emission Inventory

| Emitting Unit/Process | PM | PM₁₀ | NO_x | CO | VOC | SO_x |
|--|--------------|------------------------|-----------------------|-------------|-------------|-----------------------|
| Aggregate Delivery to Ground Storage | 4.91 | 2.38 | 0.00 | 0.00 | 0.00 | 0.00 |
| Sand Delivery to Ground Storage | 1.15 | 0.54 | 0.00 | 0.00 | 0.00 | 0.00 |
| Aggregate Transfer to Conveyor | 4.91 | 2.38 | 0.00 | 0.00 | 0.00 | 0.00 |
| Sand Transfer to Conveyor | 1.15 | 0.54 | 0.00 | 0.00 | 0.00 | 0.00 |
| Aggregate Transfer to Elevated Storage | 4.91 | 2.38 | 0.00 | 0.00 | 0.00 | 0.00 |
| Sand Transfer to Elevated Storage | 1.15 | 0.54 | 0.00 | 0.00 | 0.00 | 0.00 |
| Cement Delivery to Storage Silo | 0.15 | 0.08 | 0.00 | 0.00 | 0.00 | 0.00 |
| Cement Supplement Delivery to Storage Silo | 0.23 | 0.15 | 0.00 | 0.00 | 0.00 | 0.00 |
| Weigh Hopper Loading of Sand/Aggregate | 6.06 | 2.91 | 0.00 | 0.00 | 0.00 | 0.00 |
| Truck Loading (Truck Mix) | 12.28 | 3.46 | 0.00 | 0.00 | 0.00 | 0.00 |
| Haul Roads | 12.68 | 3.60 | 0.00 | 0.00 | 0.00 | 0.00 |
| Natural Gas-Fired Boiler (4.5 MMBtu/hr) | 0.15* | 0.15 | 1.97 | 1.66 | 0.11 | 0.01 |
| Total Emissions | 49.72 | 19.09 | 1.97 | 1.66 | 0.11 | 0.01 |

* Assume PM emissions resulting from natural gas combustion are equal to PM₁₀ emissions

Emission Calculations

Aggregate delivery to ground storage

| | |
|-----------------------------|--|
| Process Rate: | 175 yd ³ /hr |
| Hours of operation: | 8760 hr/yr |
| PM Emissions: | |
| Emission Factor: | 0.0064 lb/yd ³ (AP-42, Table 11.12-6, 6/06) |
| Calculations: | 0.0064 lb/yd ³ * 175 yd ³ /hr * 8760 hr/yr * 0.0005 ton/lb = 4.91 ton/yr |
| PM ₁₀ Emissions: | |
| Emission Factor: | 0.0031 lb/yd ³ (AP-42, Table 11.12-6, 6/06) |
| Calculations: | 0.0031 lb/yd ³ * 175 yd ³ /hr * 8760 hr/yr * 0.0005 ton/lb = 2.38 ton/yr |

Sand delivery to ground storage

| | |
|-----------------------------|--|
| Process Rate: | 175 yd ³ /hr |
| Hours of operation: | 8760 hr/yr |
| PM Emissions: | |
| Emission Factor: | 0.0015 lb/yd ³ (AP-42, Table 11.12-6, 6/06) |
| Calculations: | 0.0015 lb/yd ³ * 175 yd ³ /hr * 8760 hr/yr * 0.0005 ton/lb = 1.15 ton/yr |
| PM ₁₀ Emissions: | |
| Emission Factor: | 0.0007 lb/yd ³ (AP-42, Table 11.12-6, 6/06) |
| Calculations: | 0.0007 lb/yd ³ * 175 yd ³ /hr * 8760 hr/yr * 0.0005 ton/lb = 0.54 ton/yr |

Aggregate transfer to conveyor

| | |
|-----------------------------|--|
| Process Rate: | 175 yd ³ /hr |
| Hours of operation: | 8760 hr/yr |
| PM Emissions: | |
| Emission Factor: | 0.0064 lb/yd ³ (AP-42, Table 11.12-6, 6/06) |
| Calculations: | 0.0064 lb/yd ³ * 175 yd ³ /hr * 8760 hr/yr * 0.0005 ton/lb = 4.91 ton/yr |
| PM ₁₀ Emissions: | |
| Emission Factor: | 0.0031 lb/yd ³ (AP-42, Table 11.12-6, 6/06) |
| Calculations: | 0.0031 lb/yd ³ * 175 yd ³ /hr * 8760 hr/yr * 0.0005 ton/lb = 2.38 ton/yr |

Sand transfer to conveyor

| | |
|-----------------------------|--|
| Process Rate: | 175 yd ³ /hr |
| Hours of operation: | 8760 hr/yr |
| PM Emissions: | |
| Emission Factor: | 0.0015 lb/yd ³ (AP-42, Table 11.12-6, 6/06) |
| Calculations: | 0.0015 lb/yd ³ * 175 yd ³ /hr * 8760 hr/yr * 0.0005 ton/lb = 1.15 ton/yr |
| PM ₁₀ Emissions: | |
| Emission Factor: | 0.0007 lb/yd ³ (AP-42, Table 11.12-6, 6/06) |
| Calculations: | 0.0007 lb/yd ³ * 175 yd ³ /hr * 8760 hr/yr * 0.0005 ton/lb = 0.54 ton/yr |

Aggregate transfer to elevated storage

| | |
|-----------------------------|--|
| Process Rate: | 175 yd ³ /hr |
| Hours of operation: | 8760 hr/yr |
| PM Emissions: | |
| Emission Factor: | 0.0064 lb/yd ³ (AP-42, Table 11.12-6, 6/06) |
| Calculations: | 0.0064 lb/yd ³ * 175 yd ³ /hr * 8760 hr/yr * 0.0005 ton/lb = 4.91 ton/yr |
| PM ₁₀ Emissions: | |
| Emission Factor: | 0.0031 lb/yd ³ (AP-42, Table 11.12-6, 6/06) |
| Calculations: | 0.0031 lb/yd ³ * 175 yd ³ /hr * 8760 hr/yr * 0.0005 ton/lb = 2.38 ton/yr |

Sand transfer to elevated storage

Process Rate: 175 yd³/hr
Hours of operation: 8760 hr/yr

PM Emissions:
Emission Factor: 0.0015 lb/yd³ (AP-42, Table 11.12-6, 6/06)
Calculations: 0.0015 lb/yd³ * 175 yd³/hr * 8760 hr/yr * 0.0005 ton/lb = 1.15 ton/yr

PM₁₀ Emissions:
Emission Factor: 0.0007 lb/yd³ (AP-42, Table 11.12-6, 6/06)
Calculations: 0.0007 lb/yd³ * 175 yd³/hr * 8760 hr/yr * 0.0005 ton/lb = 0.54 ton/yr

Cement delivery to silo

Process Rate: 175 yd³/hr
Hours of operation: 8760 hr/yr

PM Emissions:
Emission Factor: 0.0002 lb/yd³ (AP-42, Table 11.12-6, 6/06)
Calculations: 0.0002 lb/yd³ * 175 yd³/hr * 8760 hr/yr * 0.0005 ton/lb = 0.15 ton/yr

PM₁₀ Emissions:
Emission Factor: 0.0001 lb/yd³ (AP-42, Table 11.12-6, 6/06)
Calculations: 0.0001 lb/yd³ * 175 yd³/hr * 8760 hr/yr * 0.0005 ton/lb = 0.08 ton/yr

Cement supplement delivery to silo

Process Rate: 175 yd³/hr
Hours of operation: 8760 hr/yr

PM Emissions:
Emission Factor: 0.0003 lb/yd³ (AP-42, Table 11.12-6, 6/06)
Calculations: 0.0003 lb/yd³ * 175 yd³/hr * 8760 hr/yr * 0.0005 ton/lb = 0.23 ton/yr

PM₁₀ Emissions:
Emission Factor: 0.0002 lb/yd³ (AP-42, Table 11.12-6, 6/06)
Calculations: 0.0002 lb/yd³ * 175 yd³/hr * 8760 hr/yr * 0.0005 ton/lb = 0.15 ton/yr

Weigh hopper loading of sand and aggregate

Process Rate: 175 yd³/hr
Hours of operation: 8760 hr/yr

PM Emissions:
Emission Factor: 0.0079 lb/yd³ (AP-42, Table 11.12-6, 6/06)
Calculations: 0.0079 lb/yd³ * 175 yd³/hr * 8760 hr/yr * 0.0005 ton/lb = 6.06 ton/yr

PM₁₀ Emissions:
Emission Factor: 0.0038 lb/yd³ (AP-42, Table 11.12-6, 6/06)
Calculations: 0.0038 lb/yd³ * 175 yd³/hr * 8760 hr/yr * 0.0005 ton/lb = 2.91 ton/yr

Truck Loading (Truck Mix)

Process Rate: 175 yd³/hr
Hours of operation: 8760 hr/yr

PM Emissions:
Emission Factor: 0.282(0.0568) = 0.016 lb/yd³ (AP-42, Table 11.12-6, 6/06)
Calculations: 0.016 lb/yd³ * 175 yd³/hr * 8760 hr/yr * 0.0005 ton/lb = 12.28 ton/yr

PM₁₀ Emissions:
Emission Factor: 0.282(0.0160) = 0.005 lb/yd³ (AP-42, Table 11.12-6, 6/06)
Calculations: 0.005 lb/yd³ * 175 yd³/hr * 8760 hr/yr * 0.0005 ton/lb = 3.46 ton/yr

Haul Roads

Vehicle miles traveled: 5 VMT/day {Estimated}
Assumption: Rated Load Capacity < 50 tons
Haul Road Use: 365 day/yr

PM Emissions:

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

PM₁₀ Emissions:

Emission Factor: 3.95 lb/VMT (controlled) (AP-42 Section 13.2.2, 12/03)
Calculations: 5 VMT/day * 3.95 lb/VMT = 19.75 lb/day
19.75 lb/day * 365 day/yr * 0.0005 ton/lb = 3.60 ton/yr

Natural Gas-Fired Boiler (4.5 MMBtu/hr)

Heat Input Capacity: 4.5 MMBtu/hr (Company Information)
Hours of Operation: 8760 hr/yr (Annual Capacity)
Fuel Heating Value: 0.001 MMscf/MMBtu (AP-42, Fifth Edition, Appendix A)

PM Emissions

Assume all PM emissions resulting from the combustion of natural gas are equal to PM₁₀

PM₁₀ Emissions

Emission Factor: 7.6 lb/MMscf (AP-42, Section 1.4, Table 1.4-2, 7/98)
Calculations: 7.6 lb/MMscf * 0.001 MMscf/MMBtu * 4.5 MMBtu/hr = 0.03 lb/hr
0.03 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.15 ton/yr

NO_x Emissions

Emission Factor: 100.0 lb/MMscf (AP-42, Section 1.4, Table 1.4-2, 7/98)
Calculations: 100.0 lb/MMscf * 0.001 MMscf/MMBtu * 4.5 MMBtu/hr = 0.45 lb/hr
0.45 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 1.97 ton/yr

CO Emissions

Emission Factor: 84.0 lb/MMscf (AP-42, Section 1.4, Table 1.4-2, 7/98)
Calculations: 84.0 lb/MMscf * 0.001 MMscf/MMBtu * 4.5 MMBtu/hr = 0.38 lb/hr
0.38 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 1.66 ton/yr

VOC Emissions

Emission Factor: 5.5 lb/MMscf (AP-42, Section 1.4, Table 1.4-2, 7/98)
Calculations: 5.5 lb/MMscf * 0.001 MMscf/MMBtu * 4.5 MMBtu/hr = 0.02 lb/hr
0.02 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.11 ton/yr

SO_x Emissions

Emission Factor: 0.6 lb/MMscf (AP-42, Section 1.4, Table 1.4-2, 7/98)
Calculations: 0.6 lb/MMscf * 0.001 MMscf/MMBtu * 4.5 MMBtu/hr = 0.003 lb/hr
0.003 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.01 ton/yr

V. Air Quality Impacts

Permit #4064-00 applies to Kenyon Noble while operating at any location within Montana excluding those areas that have a Department-approved permitting program, areas considered tribal lands, or areas in or within 10 km of certain PM₁₀ nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* In the view of the

Department, the amount of controlled emissions generated by this facility will not exceed any set ambient standards while operating in any area classified as attainment or unclassified for the ambient air quality standards. An addendum to Permit #4064-00 will be required for operating in locations in or within 10 km of certain PM₁₀ nonattainment areas in Montana.

VI. 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.

VII. Environmental Assessment

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

Permit Analysis Prepared By: M. Eric Merchant, MPH

Date: April 5, 2007

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

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Kenyon Noble Ready Mix
P.O. Box 1387
Bozeman, MT 59771

Air Quality Permit number: 4064-00

Preliminary Determination Issued: April 19, 2007

Department Decision Issued: May 7, 2007

Permit Final: May 23, 2007

1. *Legal Description of Site:* Permit #4064-00 would apply 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 km of certain PM₁₀ nonattainment areas. A Missoula County air quality permit would be required for locations within Missoula County, Montana. The initial operating site would be 889 Valley Center Road West, which is approximately 2 miles south of Belgrade, Montana, and approximately 1 mile west of Jackrabbit Lane. The legal description of the site is Section 23, Township 1 South, Range 4 East, in Gallatin County, Montana.
2. *Description of Project:* A proposed concrete batch plant operation. Kenyon Noble owns and operates a portable cement/concrete ready-mix plant. Permitted equipment would include an Erie Strayer MPII-T Low Profile Transit Mix Plant with a cement batcher (12 cubic yard (yd³) capacity), a cement silo (200 ton per hour (ton/hr) capacity), an aggregate batcher (200 ton/hr capacity), an aggregate bin (200 ton/hr capacity), a fly-ash silo (45 ton storage capacity), a C & W dust collection system, and associated material handling and processing equipment.
3. *Objectives of Project:* The project would provide business and revenue for the company and concrete product for various construction and related projects in Montana.
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 Kenyon Noble 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 Permit #4064-00.
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

Terrestrials would use the same area as the concrete batch operations. The concrete batch operations would be considered a minor source of emissions, by industrial standards, with intermittent and seasonal operations. Therefore, only minor effects on terrestrial life and habitats would be expected as a result of equipment operations or from pollutant deposition.

Impacts on aquatic life and habitats could result from storm water runoff and pollutant deposition, but such impacts would be minor as the facility would be a minor source of emissions (with seasonal and intermittent operations) and only minor amounts of water would be used for pollution control. Since only a minor amount of air emissions would be generated, only minor deposition would occur. Therefore, only minor and temporary impacts to aquatic life and habitat would be expected from the proposed concrete batch operation.

Overall, any impacts to the above-cited physical and biological resource of the human environment of the project area would be minor because the proposed concrete batch operation would initially and typically operate within areas designated for such operations. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

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 a minor disturbance to these areas, since only relatively small amounts of water would be needed. At most, only minor surface and groundwater quality impacts would be expected as a result of using water for dust suppression because only small amounts of water would be required to control air pollutant emissions and deposition of air pollutant emissions would be minor (as described in Section 7.F of this EA).

Overall, any impacts to the above-cited physical and biological resource of the human environment of the project area would be minor because the proposed concrete batch operation would initially and typically operate within areas designated for such operations. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

C. Geology and Soil Quality, Stability, and Moisture

The concrete batch operations would have only minor impacts on soils in any proposed site location (due to the construction and use of the concrete batch facility) because the facility is relatively small in size, would use only relatively small amounts of water for pollution control, and would only have seasonal and intermittent operations. Therefore, any impacts to geology and soil quality, stability, and moisture at any proposed operational site would be minor.

Overall, any impacts to the above-cited physical and biological resource of the human environment of the project area would be minor because the proposed concrete batch operation would initially and typically operate within areas designated for such operations. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

D. Vegetation Cover, Quantity, and Quality

Because the facility would be a minor source of emissions, by industrial standards, and would initially and typically operate in areas previously designated and used for such operations, impacts from the emissions from the concrete batch facility would be minor and typical. As described in Section 7.F of this EA, the amount of air emissions from this facility would be minor. As a result, the corresponding deposition of the air pollutants on the surrounding vegetation would also be minor. Also, because the water usage is minimal, as described in Section 8.B, and the associated soil disturbance is minimal, as described in Section 8.C, corresponding vegetative impacts would be minor.

Overall, any impacts to the above-cited physical and biological resource of the human environment of the project area would be minor because the proposed concrete batch operation would initially and typically operate within areas designated for such operations. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

E. Aesthetics

The concrete batch operation would be visible and would create noise while in operation. However, Permit #4064-00 would include conditions to control emissions, including visible emissions, from the plant. Also, because the concrete batch operation is portable and would operate on an intermittent and seasonal basis, any visual and noise impacts would be minor and short-lived.

Overall, any impacts to the above-cited physical and biological resource of the human environment of the project area would be minor because the proposed concrete batch operation would initially and typically operate within areas designated for such operations. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

F. Air Quality

The air quality impacts from the concrete batch operations would be minor because Permit #4064-00 would include conditions limiting the opacity from the plant, as well as requiring water spray bars and other means to control air pollution. Further, Permit #4064-00 would limit total emissions from the concrete batch operation and any additional equipment owned and operated by Kenyon Noble to 250 tons/year or less at any given operating site, excluding fugitive emissions.

Further, the concrete batch plant would be used on a temporary and intermittent basis and would initially and typically operate within an area designated for such operations, thereby further reducing potential air quality impacts from the facility. Additionally, the small and intermittent amounts of deposition generated from the concrete batch 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 result in only minor impacts to the surrounding environment. Overall, any air quality impacts resulting from the proposed concrete batch operation would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The proposed concrete batch operations would result in the emission of air pollutants, which could result in minor impacts to any existing unique endangered, fragile, or limited environmental resource in any given area of operation. However, given the temporary and portable nature of the operation, any impact would be minor and short lived. In addition, the operations would initially and typically take place within a previously disturbed industrial location further reducing the potential for impact to any existing unique, endangered, fragile or limited environmental resource in the proposed area of operation.

Overall, any impacts to the above-cited physical and biological resource of the human environment of the project area would be minor because the proposed concrete batch operation would initially and typically operate within areas designated for such operations. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts 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 operation would result in only minor demands on the environmental resources of water, air, and energy for normal operations. Small quantities of water would be used for dust suppression and would control particulate emissions generated through equipment operations and vehicle traffic at the site. Energy requirements would be accommodated through the use of electricity obtained via land-line power. In addition, the concrete batch plant would operate on an intermittent and seasonal basis thereby minimizing energy demands. Further, impacts to air resources would be minor because the source would be small by industrial standards, would operate on an intermittent and seasonal basis, and would generate relatively minor amounts of regulated pollutants through normal operations.

Overall, any impacts to the above-cited physical and biological resource of the human environment of the project area would be minor because the proposed concrete batch operation would initially and typically operate within areas designated for such operations. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

I. Historical and Archaeological Sites

Typically, the concrete batch plant would operate within a previously disturbed open-cut pit used for such purposes. According to past correspondence from the Montana Historical Society, State Historic Preservation Office (SHPO), there would be a low likelihood of disturbance to any known archaeological or historical site given any previous industrial disturbance in any given area of operation. Therefore, it is unlikely that the proposed concrete batch plant would impact any historical or archaeological sites in a given area of operation.

J. Cumulative and Secondary Impacts

The concrete batch operation would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment of a given proposed area of operation because the facility would generate emissions of regulated air pollutants and noise would be generated from equipment operations. Emissions and noise would cause minor disturbance to a given area because the equipment is relatively small by industrial standards and the facility would initially and typically operate in areas designated and used for such operations. Additionally, this facility, in combination with the other emissions from equipment operations at the operational site, would not be permitted to exceed 250 tons per year of non-fugitive emissions.

Overall, any cumulative or secondary impacts to the physical and biological aspects of the human environment of the project area would be minor because the proposed concrete batch operation would initially and typically operate within areas designated for such operations. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would 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
- B. Cultural Uniqueness and Diversity

The concrete batch operation would cause no disruption to the above-cited economic and social resources of the human environment in any given area of operation because the source would be a minor industrial source of emissions, would initially and typically operate in an existing industrial site used for such purposes, and would operate on a temporary and intermittent basis. The predominant use of the surrounding area would not change as a result of the proposed project.

- C. Local and State Tax Base and Tax Revenue

The concrete batch operations would have little, if any, impact on the local and state tax base and tax revenue because the facility would be a minor industrial source and would conduct only seasonal and intermittent operations. The facility would require the use of only a few 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 would be minor because the source would be portable and the money generated for taxes would be widespread.

Overall, any impacts to the above-cited economic and social resource of the human environment of any given project area would be minor because the proposed concrete batch operation would initially and typically operate within areas designated for such operations. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

- D. Agricultural or Industrial Production

The concrete batch operations would result in only minor impacts to local industrial production since the facility would be a minor source of industrial production and air emissions. Also, the facility could locate in an area adjacent to land that could be used for animal grazing and agricultural production. However, because minimal deposition of air pollutants would occur on the surrounding land, only minor and temporary impacts to the surrounding vegetation and land would occur thereby minimizing any minor impacts to surrounding agricultural land and practices in a given proposed area of operation. In addition, the facility operations would be temporary in nature and would be permitted with operational conditions and limitations that would minimize impacts to local agricultural areas.

Overall, any impacts to the above-cited economic and social resource of the human environment of the project area would be minor because the proposed concrete batch operation would initially and typically operate within areas designated for such operations. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

- E. Human Health

Permit #4064-00 would include limits and conditions to ensure that the concrete batch facility 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 7.F. of this EA, the air emissions from the proposed facility would be minimized by the use of water spray and other process limits that would be required by Permit #4064-00. Also, the facility would operate on a temporary and intermittent basis and pollutants would be widely dispersed (see Section 7.F of this EA). Therefore, only minor impacts would be expected on human health from the proposed concrete batch operations.

Overall, any impacts to the above-cited economic and social resource of the human environment of the project area would be minor because the proposed concrete batch operation would initially and typically operate within areas designated for such operations. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

F. Access to and Quality of Recreational and Wilderness Activities

Noise from the facility would be minor because the concrete batch operation would be small by industrial standards and would initially and typically operate in areas used for such operations. As a result, the amount of noise generated from the concrete batch operation would be minimal for the area. Also, the facility would operate on a seasonal and intermittent basis. Therefore, any impacts to the quality of recreational and wilderness activities created by the proposed project would be expected to be minor and short-lived.

Overall, any impacts to the above-cited economic and social resource of the human environment of the project area would be minor because the proposed concrete batch operation would initially and typically operate within areas designated for such operations. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

G. Quantity and Distribution of Employment

H. Distribution of Population

The proposed concrete batch operation would require only a few employees to operate and would be conducted on a seasonal and intermittent basis thereby resulting in little, if any, permanent immigration into or emigration out of a given area. Therefore, the proposed project would not impact the above-cited economic and social resources of the human environment at the initially proposed or any other given operating site.

I. Demands of Government Services

Minor increases would be seen in traffic on existing roadways in the area while the concrete batch operation is in progress. In addition, 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. Overall, demands for government services would be minor.

J. Industrial and Commercial Activity

The concrete batch operation would represent only a minor increase in the industrial activity in the proposed initial or any future area of operation because the source would be a relatively small industrial source that would be portable and temporary in nature. Very little, if any, additional industrial or commercial activity would be expected as a result of the proposed operation.

Overall, any impacts to the above-cited economic and social resource of the human environment of the project area would be minor because the proposed concrete batch operation would initially and typically operate within areas designated for such operations. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans or goals in the initial area of operation or any future operating site since Permit #4064-00 would allow for operations at various unknown locations throughout the state. However, if the plant moved to an area classified as non-attainment for PM₁₀ the operation would be required to apply for and receive an addendum to Permit #4064-00 prior to operation at the site. The state standards would be protective of any proposed area of operation

Overall, any impacts to the above-cited economic and social resource of the human environment of the project area would be minor because the proposed concrete batch operation would initially and typically operate within areas designated for such operations. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

L. Cumulative and Secondary Impacts

The concrete batch operations would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area of operation because the source would be a portable and temporary source. Few, if any, other industrial operations would be expected to result from the permitting and operation of this facility. Minor increases in traffic would have minor effects on local traffic in the immediate area. Because the source is relatively small and temporary, only minor economic impacts to the local economy would be expected from operating the facility. Further, this facility may be operated in conjunction with other equipment owned and operated by Kenyon Noble; however, any cumulative impacts to the social and economic aspects of the human environment would be minor and short-lived. Overall, the proposed concrete batch operation would result in only minor and temporary secondary and cumulative impacts to the social and economic aspects of the human environment of the initially proposed and any future operating site.

Overall, any cumulative or secondary impacts to the economic and social aspects of the human environment of the project area would be minor because the proposed concrete batch operation would initially and typically operate within areas designated for such operations. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be minor.

Recommendation: An Environmental Impact Statement (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: Montana 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: Montana Department of Environmental Quality (Air Resources Management Bureau and Industrial and Energy Minerals Bureau), Montana State Historic Preservation Office (Montana Historical Society).

EA prepared by: M. Eric Merchant, MPH

Date: April 5, 2007