Montana Department of
ENVIRONMENTAL QUALITY
Brian Schweitzer, Governor
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August 8, 2011

Ms. Tracy Hodik
Century Companies, Inc.
39 Industrial Way
P.O. Box 579
Lewistown, MT 59457

Dear Ms. Hodik:

Montana Air Quality Permit #2596-01 is deemed final as of August 6, 2011, by the Department of Environmental Quality (Department). This permit is for a portable rotary drum-mix asphalt plant and associated equipment. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

Vickie Walsh
Air Permitting Program Supervisor
Air Resources Management Bureau
(406) 444-9741

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

VW:DCK
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #2596-01

Century Companies, Inc.
39 Industrial Way
P.O. Box 579
Lewistown, MT 59457

August 6, 2011

MONTANA AIR QUALITY PERMIT

Issued To: Century Companies, Inc.
39 Industrial Way
P.O. Box 579
Lewistown, MT 59457

MAQP: #2596-01
Application Complete: 05/13/2011
Preliminary Determination Issued: 06/16/2011
Department's Decision Issued: 07/21/2011
Permit Final: 08/06/2011
AFS #: 777-2596

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Century Companies, Inc. (Century), pursuant to Section 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. Plant Location

Century operates a portable parallel flow rotary drum-mix asphalt plant with attached venturi scrubber and associated equipment. The initial site location has been identified as Section 21, Township 16 North, Range 17 East, in Fergus County, Montana. A list of permitted equipment is included in Section I.A of the Permit Analysis.

MAQP #2596-01 applies while operating in any location in the state of Montana, except within those areas having a Department of Environmental Quality (Department) approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) nonattainment areas other than the current location. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* An addendum will be required for locations in or within 10 km of certain PM_{10} nonattainment areas if Century moves from the current location.

B. Current Permit Action

On May 13, 2011, the Department received correspondence from Century detailing the acquisition of the portable asphalt plant and associated equipment from H.L. Ostermiller Construction, Inc., in turn, requesting that MAQP #2596-00 be updated to reflect this transfer of ownership. As the original permit did not address the regulatory applicability of the associated diesel-fired generators this permit action is a modification to MAQP #2596-00 in order to allow inclusion of conditions related to the diesel engines. This permit action also incorporates current permit language and rule references used by the Department, as well as, updates the emission inventory.

Section II: Limitations and Conditions

A. Emission Limitations

1. Asphalt plant particulate matter (PM) emissions shall be limited to 0.04 grains per dry standard cubic foot (gr/dscf) (ARM 17.8.749, ARM 17.8.752, and 40 Code of Federal Regulations (CFR) 60, Subpart I).

2. Century shall not cause or authorize to be discharged into the atmosphere from the asphalt plant stack, any visible emissions that exhibit opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart I).

3. Century shall not cause or authorize to be discharged into the atmosphere from systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler; systems for mixing hot-mix asphalt; and the loading, transfer, and storage systems associated with emission control systems, any visible emissions that exhibit opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart I).

4. Century 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).

5. Century 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.4 (ARM 17.8.749 and ARM 17.8.752).

6. Century shall install, operate, and maintain a wet scrubber for PM air pollution control. A device to measure the pressure drop (magnehelic gauge, manometer, etc.) must be installed and maintained. Pressure drop must be measured in inches of water. Temperature indicators at the control device inlet and outlet must be installed and maintained (ARM 17.8.749 and ARM 17.8.752).

7. Once a stack test is performed, the asphalt plant production rate shall be limited to the average production rate during the last source test demonstrating compliance (ARM 17.8.749).

8. Asphalt production shall not exceed 1,138,800 tons of asphalt during any rolling 12-month period (ARM 17.8.749).

9. Operation of asphalt plant shall not exceed 6,750 hours (including each diesel-fire generator engine) during any rolling 12-month time period (ARM 17.8.749 and 17.8.1204).

10. Century shall not operate or have on-site more than two diesel-fire generator engines. The combined maximum rated design capacity of the engines shall not exceed 643 hp (ARM 17.8.749).

11. Century shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart I, *Standards of Performance for Hot Mix Asphalt Facilities* (ARM 17.8.340 and 40 CFR 60, Subpart I).

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

13. If the permitted equipment is used in conjunction with any other equipment owned or operated by Century, 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 time period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).

B. Testing Requirements

1. An EPA Methods 1-5, and 9 source test must be performed on the asphalt plant every four years after the initial source test to demonstrate compliance with the conditions specified in Sections II.A.1, II.A.2, and II.A.3 (ARM 17.8.105 and ARM 17.8.749).

2. Pressure drop on the control device and temperatures must be recorded during the test and reported as part of the test results (ARM 17.8.749).

3. Pressure drop on the control device and temperature must be recorded daily and kept on site according to Section II.C.2

4. Since asphalt production will be limited to the average production rate during the test, it is suggested the test be performed at the highest production rate practical (ARM 17.8.749).

5. Century may retest at any time in order to achieve a higher allowable production rate (ARM 17.8.749).

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

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

C. Operational Reporting Requirements

1. If this asphalt 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. This Change of Location notice must be published at least 15 days prior to the move. The Intent to Transfer form and the proof of publication (affidavit) of the Change of Location Form must be submitted to the Department prior to the move. These forms are available from the Department. Once the asphalt plant is moved to another location, the facility shall not operate in the new location for longer than one year (ARM 17.8.749 and ARM 17.8.765).

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

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

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

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

5. Century shall document, by month, the production from the asphalt plant. By the 25th day of each month, Century shall calculate the monthly production of asphalt during 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. Century shall document, by month, the hours of operation of the asphalt plant and each associated generator engine. By the 25th day of each month, Century shall calculate the hours of operation for the asphalt plant for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.9. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

7. Century shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit as required by ARM 17.8.1204(3)(b). The annual certification shall comply with the certification requirements of ARM 17.8.1207, and the annual certification shall be submitted with the annual emissions inventory information (ARM 17.8.749 and ARM 17.8.1204).

Section III: General Conditions

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

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

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Century 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. Air Quality Operation Fees – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by Century may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.

H. Duration of Permit – Construction or installation must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).

I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.

J. Century shall comply with the conditions contained in this permit while operating in any location in Montana, except within those areas that have a Department-approved permitting program or areas considered tribal lands.

Montana Air Quality Permit (MAQP) Analysis
Century Companies, Inc.
MAQP #2596-01

I. Introduction/Process Description

A. Permitted Equipment

Century Companies, Inc. (Century) operates a portable asphalt drum-mix plant which includes, but is not limited to, the following equipment:

- 1988 AEDCO 6628 rotary drum dryer-mix asphalt plant (maximum capacity 130 tons per hour (TPH) of asphalt production). 32 MMBtu/hr propane fired dyer with venturi wet scrubber for particulate control.
- Highway 88 diesel-fired asphalt heater (1.5 MMBtu/hr).
- Hydrated lime storage silo with baghouse particulate control.
- Asphalt storage silo.
- Two diesel engine/generators with a total engine capacity not to exceed 643 horsepower (hp).
- Aggregate handling equipment.
- Associated equipment.

B. Process Description

For a typical operational set-up, aggregate materials are taken from the on-site aggregate stockpiles and dumped via a front end loader into the cold aggregate feed bins. The cold aggregate is then transferred from the cold aggregate feed bins via conveyor to the drum mixer, where the aggregate is dried and heated. Mineral filler and asphalt oil are then introduced into the drum mixer. Mineral filler is delivered from a storage silo to the drum via an enclosed feed auger system. Particulate emissions from the mineral filler storage and feeder system are routed to a baghouse. The raw materials are introduced into the drum mixer and continuously mixed and heated by the drum mixer until desired properties are obtained.

After heating and mixing is completed, the asphalt product is transferred from the drum mixer to the asphalt product silo via a conveyor. The asphalt remains in the asphalt silo until it is loaded into trucks for transport. The operation is powered by the primary diesel-fired generator, with a secondary diesel-fired generator available.

C. Permit History

On August 21, 1989, H.L. Ostermiller Construction, Inc. (Ostermiller) was issued **MAQP #2596-00** for the operation of a 1988 AEDCO 6628 portable drum mix asphalt plant (maximum capacity 130 TPH) and associated equipment. The plant was initially located in Section 12, Township 1 North, Range 26 E, in Yellowstone County, Montana.

D. Current Permit Action

On May 13, 2011, the Department received correspondence from Century detailing the acquisition of the portable asphalt plant and associated equipment from Ostermiller, in turn, requesting that MAQP #2596-00 be updated to reflect this transfer of ownership. As the original permit was issued prior to the promulgation of the Title V Operating Permit Program and did not address the regulatory applicability of the associated diesel-fired generators, this permit action is a modification to MAQP #2596-00 in order to allow

inclusion of conditions related to the diesel engines. In addition, the current permit action incorporates current permit language and rule references used by the Department, as well as, updates the emission inventory. **MAQP #2596-01** replaces MAQP #2596-00.

E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT)/Reasonably Available Control Technology (RACT) determinations, air quality impacts, and environmental assessments, is included in the analysis associated with each change to the permit.

II. Applicable Rules and Regulations

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

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

1. ARM 17.8.101 Definitions. This rule is a list of applicable definitions used in this sub-chapter, unless indicated otherwise in a specific sub-chapter.

2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.

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

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

4. ARM 17.8.110 Malfunctions. 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. No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant which would otherwise violate an air pollution control regulation. No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created.

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

1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide (CO)
4. ARM 17.8.213 Ambient Air Quality Standard for Ozone
5. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter (PM)
6. ARM 17.8.221 Ambient Air Quality Standard for Visibility
7. ARM 17.8.223 Ambient Air Quality Standard for Particulate Matter with an Aerodynamic Diameter of Ten Microns or Less (PM_{10})

Century must comply with the applicable ambient air quality standards.

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

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

2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne Particulate Matter. (2) Under this section, Century 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 section requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section.

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

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

6. ARM 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 Code of Federal Regulations (CFR) 60, Standards of Performance for New Stationary Sources (NSPS). The owner or operator of any stationary source or modification, as defined and applied in 40 CFR Part 60, shall comply with the standards and provisions of 40 CFR Part 60.

   Based on the information submitted by Century, the portable asphalt plant and associated equipment are subject to NSPS (40 CFR Part 60), as follows:

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

b. 40 CFR 60, Subpart I – Standards of Performance for Hot Mix Asphalt Facilities. Owners and operators of hot mix asphalt facilities that commence construction or modification after June 11, 1973, are subject to the requirements of this subpart. Based on the information submitted by Century, the portable asphalt plant and associated equipment are currently subject to provisions of this subpart as the plant meets the definition of an affected facility under 40 CFR Part 60, Subpart I.

c. 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE). Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are manufactured after April 1, 2006, and are not fire pump engines, and owners and operators of stationary CI ICE that modify or reconstruct their stationary CI ICE after July 11, 2005, are subject to this subpart.

Based on information provided by Century, Tier 3 engines will be used in conjunction with MAQP #2596-01. While these particular engines are potentially subject to this subpart, the permittee has requested that this permit be written in a de minimis friendly manner which allows substitution of the diesel-fired generator engines as long as the combined maximum rated design capacity does not exceed 643 hp. Therefore, potential applicability to 40 CFR 60, Subpart IIII will depend upon the diesel-fired generator engines selected.

7. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. This rule incorporates, by reference, 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Categories. Century is considered an NESHAP-affected facility under 40 CFR Part 63 and is subject to the requirements of the following subparts.

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

b. 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants (HAPs) for Stationary Reciprocating Internal Combustion Engines (RICE). An owner or operator of a stationary reciprocating internal combustion engine (RICE) at a major or area source of HAP emissions is subject to this rule except if the stationary RICE is being tested at a stationary RICE test cell/stand. Based on the information submitted by Century, the RICE equipment to be used under MAQP #2596-01 is potentially subject to this subpart as the engines powering the generators are reciprocating internal combustion engines operating at an area source of HAP emissions.

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. Century shall 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. Century requested an administrative amendment of MAQP #2596-00 to reflect a recent transfer in ownership of the asphalt plant. However, in alteration of MAQP #2596-00, the Department, will

use this opportunity to incorporate up to date permit conditions. A modification of the permit is required to incorporate these necessary conditions. However, the Department has waived the application fees for this 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. This air quality operation fee is based on the actual or estimated amount of air pollutants emitted during the previous calendar year.

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

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

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

2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit alteration to construct, alter or use any asphalt plant, crusher, or screen that has the Potential to Emit (PTE) greater than 15 tons per year of any pollutant. Century has a PTE greater than 15 tons per year of PM, PM_{10}, nitrogen oxides (NO_x), CO, volatile organic compounds (VOC), and Sulfur Dioxide (SO_2); 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. Century submitted the appropriate documentation 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. Century requested an administrative amendment of MAQP #2596-00 to reflect a recent transfer in ownership of the asphalt plant. However, in alteration of MAQP #2596-00, the Department, will use this opportunity to incorporate up to date permit conditions related to diesel engines powering generators. A modification of the permit is required to incorporate these necessary conditions. However, the Department has waived the public notice requirement for this permit action.

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

7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. 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 Century 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 17.8.760 Additional Review of Permit Applications. 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. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than one year after the permit is issued.

13. 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).

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

2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the Federal Clean Air Act (FCAA) that it would emit, except as this sub-chapter would otherwise allow.

   This facility is not a major stationary source because it is not listed and does not have the potential to emit 250 tons per year or more (excluding fugitive emissions) of any air pollutant.

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

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

   a. PTE > 100 tons/year of any pollutant

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

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

2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #2596-01 for Century, the following conclusions were made:

   a. Century requested that federally-enforceable permit operating limits be established to maintain the facility's PTE to less than the 100 tons/years threshold for any 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 PM_{10} nonattainment area.

d. This facility is potentially subject to a current NSPS (40 CFR 60, Subpart I and Subpart IIII).

e. This facility is potentially subject to the area source provisions of a current NESHAP standard (40 CFR 63, Subpart ZZZZ).

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.

Century requested federally-enforceable permit limitations to remain a minor source of emissions with respect to Title V. Based on these limitations, the Department determined that this facility is not subject to the Title V Operating Permit Program. However, in the event that the EPA makes minor sources that are subject to NSPS obtain a Title V Operating Permit, this source will be subject to the Title V Operating Permit Program.

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

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

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

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

III. Best Available Control Technology

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

A. Asphalt Drum Mixer

The Department reviewed relevant control options, as well as previous BACT determinations for similar sources. The following control options were reviewed by the Department in order to make the following BACT determinations:

- Fabric Filter Baghouse
- Electrostatic Precipitator
- Cyclone
- Wet Scrubber

All of the listed technologies were deemed technically feasible for this application. Technical feasible control options, in order the highest control efficiency to the lowest control efficiency base on PM control are as follows:

1. Fabric Filter Baghouse (99 – 99.9% efficient) (EPA Fact Sheet EPA-452/F-03-025, 07/15/03)
2. Electrostatic Precipitator (99 – 99.9% efficient) (EPA Fact Sheet EPA-452/F-03-025, 07/15/03)
3. Cyclone (up to 99% efficient) (EPA Fact Sheet EPA-452/F-03-005, 07/15/03)
4. Wet Scrubber (up to 99% efficient) (EPA Fact Sheet EPA-452/F-03-0010, 07/15/03)

Century has proposed to use a venture wet scrubber for the control of PM from the exhaust of the asphalt drum mixer. As Century proposes to use a control technology that is equivalent to the highest control efficiency, no further economic analysis is needed. The control option selected has control technology and a control cost comparable to other recently permitted similar sources and is capable of achieving the appropriate emissions standards. Operating and maintaining a venture wet scrubber will constitute BACT for the asphalt drum mixer. Asphalt drum mixer emissions are limited to 0.04 grains per dry standard cubic foot (gr/dscf) for particulate and 20 percent opacity in accordance with 40 CFR 60, Subpart I.

B. Mineral Filler Silo

Century's portable asphalt plant will utilize mineral filler as an additive to the asphalt mixture. The mineral filler will be stored in an on-site silo and will be added to the asphalt drum mixer as necessary. The PM emissions generated from silo filling will be routed to a dedicated baghouse. As with the asphalt drum mixer BACT analysis, Century has proposed to utilize a control technology that is equivalent to the highest control efficiency. The baghouse is considered to be the BACT for controlling the PM emissions associated with the mineral filler silo. In accordance with 40 CFR 60, Subpart I, systems for loading, transferring, and storing mineral filler are considered part of an affected facility and emissions are limited to 0.04 gr/dscf for PM and 20 percent opacity.

C. Diesel Generators

Due to the limited amount of emissions produced by the diesel engine(s) and the lack of cost effective add-on controls, this control approach would be cost prohibitive. Therefore, the Department has determined that proper operation and maintenance with no add-on controls would constitute BACT for the diesel engine.

In addition, any new diesel engine would likely be required to comply with federal engine emission limitations including; EPA Tier emission standards for non-road engines (40 CFR Part 1039), New Source Performance Standard emission limitations for stationary compression ignition engines (40 CFR 60, Subpart IIII), or National Emissions Standards for Hazardous Air Pollutant Sources for Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ). Therefore, the Department has determined that compliance with applicable federal standards and proper operation and maintenance of the engines constitutes BACT for these engines.

D. Fugitive Emissions

Century must take reasonable precautions to limit the fugitive emissions of airborne particulate matter on haul roads, access roads, parking lots, and throughout the general plant area. Reasonable precautions include treating 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. Using water and/or chemical dust suppressant to comply with the reasonable precautions limitation will be considered BACT.

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

IV. Emission Inventory

	Emissions Tons/Year [PTE]						
Emission Source	PM	PM_{10}	$PM_{2.5}$	CO	NOx	SO_2	VOC
Rotary Drum Mix Asphalt Plant w/ Venturi Scrubber *(a)*	14.48	3.54	2.48	57.04	11.41	1.49	14.04
Hwy 88 Asphalt Heater	0.07	0.04	0.05	0.04	0.74	10.13	0.02
Aggregate Handling & Storage Piles	4.37	2.07	0.31	--	--	--	--
Aggregate Screening &Conveying	2.05	0.69	0.45	--	--	--	--
Lime Silo transfer & Conveying	0.04	0.04	0.04	--	--	--	--
Asphalt Storage & Handling	0.26	0.26	0.26	0.52	--	--	5.35
Asphalt Load-Out	0.23	0.23	0.23	0.59	--	--	1.82
MTU 375kWT2 Diesel Engine Generator 563 hp *(a)*	4.18	4.18	0.74	12.69	58.90	3.90	4.78
MTU DS40D6S Diesel Engine Generator 80 hp *(a)*	0.59	0.59	0.11	1.80	8.37	0.55	0.68
Unpaved Roadways	10.98	3.03	0.30	--	--	--	--
TOTAL EMISSIONS ►	37.25	14.66	4.96	72.69	79.42	16.07	26.69

a. Emission Inventory reflects enforceable limits on hours of operation and production output to keep allowable emissions below the Title V threshold AND 80 tpy.

CO, carbon monoxide
NO_X, oxides of nitrogen
PM, particulate matter
PM_{10}, particulate matter with an aerodynamic diameter of 10 microns or less
$PM_{2.5}$, particulate matter with an aerodynamic diameter of 2.5 microns or less
SO_2, oxides of sulfur
TPY, tons per year
VOC, volatile organic compounds

1988 AEDCO Rotary Drum Mix Asphalt Plant with Venturi Scrubber [SCC 3-05-002-55]

Production Rate: 130 Tons/Hour (Maximum) 1138800 tons/year (Maximum)
877500 tons/year (Restricted Maximum)

Operating Schedule: 6750 Hours/Year (Restricted Maximum)

Dryer fuel Configuration: Propane [32 MMBtu/hr]

Power Plant: 563 hp Diesel Generator (Asphalt Plant)
80 hp Diesel Generator (Supplemental Power)
Note: Asphalt Plant May Operate On Utility/commercial Power

Stack Test Data: [August 7, 2007]

Air Flow[Volume] 10,204.20 dscfm

Stack Test Results 0.0161 gr/dscf

Test Throughput Demonstrated N/A tons/hour

Particulate Emissions: Stack Parameters

PM Emissions (controlled):

Emission Rate	0.04	gr/dscf	[Permit Limit]	
Calculations	(0.04 gr/dscf) * (10204.2 dscfm) * (60 min/hr) * (0.000143 lb/gr) =		3.50	lbs/hr
	(3.50 lbs/hr) * (6750 hrs/yr) * (0.0005 tons/lb) =		11.81	TPY

PM_{10} Emissions (controlled):

Emission Rate	0.012	gr/dscf	[30% PM_{10} to PM, AP-42 Table 11.1-4, 3/04]	
Calculations	(0.012 gr/dscf) * (10204.2 dscfm) * (60 min/hr) * (0.000143 lb/gr) =		1.05	lbs/hr
	(1.05 lbs/hr) * (6750 hrs/yr) * (0.0005 tons/lb) =		3.54	TPY

$PM_{2.5}$ Emissions (controlled):

Emission Rate	0.0084	gr/dscf	[21% PM_{10} to PM, AP-42 Table 11.1-4, 3/04]	
Calculations	(0.0084 gr/dscf) * (10204.2 dscfm) * (60 min/hr) * (0.000143 lb/gr) =		0.73	lbs/hr
	(0.73 lbs/hr) * (6750 hrs/yr) * (0.0005 tons/lb) =		2.48	TPY

Particulate Emissions: Emission Factor Determination

PM Emissions (controlled):

Emission Rate	0.033	lbs/ton Processed	[AP-42 Table 11.1-3, 3/04]	
Calculations	(0.033 lbs/ton) * (130 tons/hour) =		4.29	lbs/hr
	(4.29 lbs/hr) * (6750 hours/year) * (0.0005 tons/lbs) =		14.48	TPY

PM_{10} Emissions (controlled):

Emission Rate	0.023	lbs/ton Processed	[AP-42 Table 11.1-3, 3/04]	
Calculations	(0.023 lbs/ton) * (130 tons/hour) =		2.99	lbs/hr
	(2.99 lbs/hr) * (6750 hours/year) * (0.0005 tons/lbs) =		10.09	TPY

$PM_{2.5}$ Emissions (controlled):

Emission Rate	0.0194	lbs/ton Processed	[AP-42 Table 11.1-3, 3/04]	
Calculations	(0.0194 lbs/ton) * (130 tons/hour) =		2.52	lbs/hr
	(2.52 lbs/hr) * (6750 hours/year) * (0.0005 tons/lbs) =		8.51	TPY

CO Emissions:

Emission Factor	0.13	lbs/ton processed	[AP-42 Table 11.1-7, 3/04; EF based on N.G.]	
Calculations	(0.13 lbs/ton) * (130 tons/hr) =		16.90	lbs/hr
	(16.90 lbs/hr) * (6750 hrs/yr) * (0.0005 tons/lb) =		57.04	TPY

NO_X Emissions:

Emission Factor	0.026	lbs/ton processed	[AP-42 Table 11.1-7, 3/04; EF based on N.G.]	
Calculations	(0.026 lbs/ton) * (130 tons/hr) =		3.38	lbs/hr
	(3.38 lbs/hr) * (6750 hrs/yr) * (0.0005 tons/lb) =		11.41	TPY

SO_2 Emissions:

Emission Factor	0.0034	lbs/ton processed	[AP-42 Table 11.1-7, 3/04; EF based on N.G.]	
Calculations	(0.0034 lbs/ton) * (130 tons/hr) =		0.44	lbs/hr
	(0.44 lbs/hr) * (6750 hrs/yr) * (0.0005 tons/lb) =		1.49	TPY

VOC Emissions:

Emission Factor	0.032	lbs/ton processed	[AP-42 Table 11.1-8, 3/04; EF based on N.G.]

Calculations	(0.032 lbs/ton) * (130 tons/hr) =	4.16	lbs/hr
	(4.16 lbs/hr) * (6750 hrs/yr) * (0.0005 tons/lb) =	14.04	TPY

HW 88 Asphalt Heater [SCC 3-05-002-06]

Fuel Type: Diesel Fuel
Burner Firing Rate: 1.50 MMBtu/hr
10.9 Gal/Hour [Estimated]
Operating Hours: 6750 hrs/year

Particulate Emissions:

PM Emissions:

Emission Factor	2.0 lbs/10^3 gallons [AP-42 Table 1.3-6, 5/10]		
Calculations	(2.0 lbs/1000 gal) * (10.9 gal/hr) * (0.001 gal / 1000 gallons) =	0.02	lbs/hr
	(0.022 lbs/hr) * (6750 hrs/yr) * (0.0005 tons/lb) =	0.07	TPY

PM_{10} Emissions:

Emission Factor	1.0 lbs/10^3 gallons [AP-42 Table 1.3-6, 5/10]		
Calculations	(1.0 lbs/1000 gal) * (10.9 gal/hr) * (0.001 gal / 1000 gallons) =	0.01	lbs/hr
	(0.011 lbs/hr) * (6750 hrs/yr) * (0.0005 tons/lb) =	0.04	TPY

$PM_{2.5}$ Emissions:

Emission Factor	1.3 lbs/10^3 gallons [AP-42 Table 1.3-2, 5/10]		
Calculations	(1.3 lbs/1000 gal) * (10.9 gal/hr) * (0.001 gal / 1000 gallons) =	0.01	lbs/hr
	(0.014 lbs/hr) * (6750 hrs/yr) * (0.0005 tons/lb) =	0.05	TPY

CO Emissions:

Emission Factor	0.0012 lbs/gal [AP-42 Table 11.1-13, 3/04]		
Calculations	(0.0012 lbs/MMBtu) * (1.50 Btu/hr) =	0.01	lbs/hr
	(0.013 lbs/hr) * (6750 hrs/yr) * (0.0005 tons/lb) =	0.04	TPY

NO_X Emissions:

Emission Factor	20 lbs/10^3 gallons [AP-42 Table 1.3-1, 5/10]		
Calculations	(20.0 lbs/1000 gal) * (10.9 gal/hr) * (0.001 gal / 1000 gallons) =	0.22	lbs/hr
	(0.22 lbs/hr) * (6750 hrs/yr) * (0.0005 tons/lb) =	0.74	TPY

SO_2 Emissions:

Emission Factor	142 *(S) lbs/10^3 gallons* [AP-42 Table 1.3-1, 5/10]		
Calculations	(142.0 lbs/1000 gal) * (1.93% S) * (10.9 gal/hr) * (0.001 gal / 1000 gallons) =	3.00	lbs/hr
	(3.00 lbs/hr) * (6750 hrs/yr) * (0.0005 tons/lb) =	10.13	TPY

* *Based on maximum allowable sulfur content under ARM 17.8.322 @ 1.93% [wgt]*

VOC Emissions:

Emission Factor	0.556 lbs/MMBtu [AP-42 Table 1.4-2, 7/98]		
Calculations	(0.556 lbs/1000 gal) * (10.9 gal/hr) * (0.001 gal / 1000 gallons) =	0.01	lbs/hr
	(0.006 lbs/hr) * (6750 hrs/yr) * (0.0005 tons/lb) =	0.021	TPY

Aggregate Handling & Storage Piles

Process Rate: 130 tons/hour
Number of Piles: 2 pile Transfers [Pile formation Load-in & Pile Load-out to bins]

Operating Hours: 6750 hour/year

Particulate Emissions:

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

where: EF, Emission Factor = lbs Emitted / ton Processed

k, Dimensionless Particle Size Multiplier PM =	0.74	[AP-42 13.2.4, 11/06]
k, Dimensionless Particle Size Multiplier PM_{10} =	0.35	[AP-42 13.2.4, 11/06]
k, Dimensionless Particle Size Multiplier $PM_{2.5}$ =	0.053	[AP-42 13.2.4, 11/06]
U, Mean Wind Speed (mph) =	9.3	[ASOS/AWOS AVE-MT 10 yr Ave.]
M, Material Moisture Content (%) =	2.1	[AP-42 13.2.4-1, 11/06]

PM Emissions:

Emission Factor	EF = 0.74 * (0.0032) * (7.0/5)^1.3 / (2.1 / 2)^1.4 =	0.0050	lbs/ton	
Calculations	(0.0050 lbs/ton) * (130 tons/hr) * (2 pile) =		1.29	lbs/hr
	(1.29 lbs/hr) * (6750 hrs/year) * (0.0005 lbs/ton) =		4.37	TPY

PM_{10} Emissions:

Emission Factor	EF = 0.35 * (0.0032) * (7.0/5)^1.3 / (2.1 / 2)^1.4 =	0.0024	lbs/ton	
Calculations	(0.0024 lbs/ton) * (130 tons/hr) * (2 pile) =		0.61	lbs/hr
	(0.61 lbs/hr) * (6750 hrs/year) * (0.0005 lbs/ton) =		2.07	TPY

$PM_{2.5}$ Emissions:

Emission Factor	EF = 0.053 * (0.0032) * (7.0/5)^1.3 / (2.1 / 2)^1.4 =	0.0004	lbs/ton	
Calculations	(0.0004 lbs/ton) * (130 tons/hr) * (2 pile) =		0.09	lbs/hr
	(0.09 lbs/hr) * (6750 hrs/year) * (0.0005 lbs/ton) =		0.31	TPY

Aggregate Screening & Conveying [SCC 3-05-020-02 & 3-05-020-06]

Process Rate:	130	tons/hour
Number of Transfers:	2	Transfers
Operating Hours:	6750	hours/year

PM Emissions (controlled):

Emission Factor	0.0023 lbs/ton transferred [AP-42 Table 11.19.2-2, 8/04]			
Calculations	(0.00234 lbs/ton) * (130 tons/hr) * (2 Transfers) =		0.61	lbs/hr
	(0.61 lbs/hr) * (6750 hrs/year) * (0.0005 lbs/ton) =		2.05	TPY

PM_{10} Emissions (controlled):

Emission Factor	0.0008 lbs/ton transferred [AP-42 Table 11.19.2-2, 8/04]			
Calculations	(0.0008 lbs/ton) * (130 tons/hr) * (2 Transfers) =		0.20	lbs/hr
	(0.20 lbs/hr) * (6750 hrs/year) * (0.0005 lbs/ton) =		0.69	TPY

$PM_{2.5}$ Emissions (controlled):

Emission Factor	0.0005 lbs/ton transferred [AP-42 Table 11.19.2-2, 8/04]			
Calculations	(0.0005 lbs/ton) * (130 tons/hr) * (2 Transfers) =		0.13	lbs/hr
	(0.13 lbs/hr) * (6750 hrs/year) * (0.0005 lbs/ton) =		0.45	TPY

Lime Silo Product transfer & Conveying [SCC 3-05-016-24]

Process Rate:	130	tons/hour
Operating Hours:	6750	hours/year

Particulate Emissions:

PM Emissions (controlled):

Emission Factor	0.000088	lbs/ton material transferred	[AP-42 Table 11.17-4, 2/98]	
Calculations	(0.000088 lbs/ton) * (130 tons/hr) =		0.011	lbs/hr
	(0.01 lbs/hr) * (6750 hrs/year) * (0.0005 lbs/ton) =		0.04	TPY

PM_{10} Emissions (controlled):

Emission Factor	0.000088	lbs/ton material transferred	[AP-42 Table 11.17-4, 2/98]	
Calculations	(0.000088 lbs/ton) * (130 tons/hr) =		0.011	lbs/hr
	(0.01 lbs/hr) * (6750 hrs/year) * (0.0005 lbs/ton) =		0.04	TPY

$PM_{2.5}$ Emissions (controlled):

Emission Factor	0.000088	lbs/ton material transferred	[AP-42 Table 11.17-4, 2/98]	
Calculations	(0.000088 lbs/ton) * (130 tons/hr) =		0.01	lbs/hr
	(0.01 lbs/hr) * (6750 hrs/year) * (0.0005 lbs/ton) =		0.04	TPY

Asphalt Storage & Silo Filling [SCC 3-05-002-13]

Process Rate:	130	tons/hour
Operating Schedule:	6750	tons/year

Particulate Emissions:

Emission Factor: $EF = 0.000332+0.00105(-V)e^{((0.0251)(T+460)-20.43)}$ [AP-42 Table 11.1-14, 3/04]

where: EF, Emission Factor = lbs emitted / ton HMA produced
V, Asphalt Volatility = -0.05 [Default value AP-42 Table 11.1-14, 3/04]
T, HMA temperature = 325ºF [Default value AP-42 Table 11.1-14, 3/04]

PM Emissions:

Emission Factor	EF = 0.000332 + 0.00105 * (0.05) *e((0.0251) * (325 + 460) - 20.43) =	0.00059	lbs/ton HMA
Calculations	(0.00059 lbs/ton) * (130 tons/hr) =	0.08	lbs/hr
	(0.08 lbs/hr) * (6750 tons/year) * (0.0005 lbs/ton) =	0.26	TPY

PM_{10} Emissions:

Emission Factor	EF = 0.000332 + 0.00105 * (0.05) *e((0.0251) * (325 + 460) - 20.43) =	0.00059	lbs/ton HMA
Calculations	(0.00059 lbs/ton) * (130 tons/hr) =	0.08	lbs/hr
	(0.08 lbs/hr) * (6750 tons/year) * (0.0005 lbs/ton) =	0.26	TPY

$PM_{2.5}$ Emissions:

Emission Factor	EF = 0.000332 + 0.00105 * (0.05) *e((0.0251) * (325 + 460) - 20.43) =	0.00059	lbs/ton HMA
Calculations	(0.00059 lbs/ton) * (130 tons/hr) =	0.08	lbs/hr
	(0.08 lbs/hr) * (6750 tons/year) * (0.0005 lbs/ton) =	0.26	TPY

CO Emissions:

Emission Factor: $EF = 0.00488(-V)e^{((0.0251)(T+460)-20.43)}$ [AP-42 Table 11.1-14, 3/04]

where: EF, Emission Factor = lbs Emitted / ton Processed
V, Asphalt Volatility = -0.05 [Default value AP-42 Table 11.1-14, 3/04]
T, HMA temperature = 325ºF [Default value AP-42 Table 11.1-14, 3/04]

CO Emissions:

Emission Factor	EF = 0.00488 * (0.05)*e((0.0251) * (325 + 460) - 20.43) =	0.0012	lbs/ton HMA

Calculations	(0.0012 lbs/ton) * (130 tons/hr) =	0.15	lbs/hr
	(0.15 lbs/hr) * (6750 tons/year) * (0.0005 lbs/ton) =	0.52	TPY

VOC Emissions:

Emission Factor EF = $0.0504(-V)e^{((0.0251)(T+460)-20.43)}$ [AP-42 Table 11.1-14, 3/04]

where: EF, Emission Factor = lbs Emitted / ton Processed
V, Asphalt Volatility = -0.05 [Default value AP-42 Table 11.1-14, 3/04]
T, HMA temperature = 325ºF [Default value AP-42 Table 11.1-14, 3/04]

VOC Emissions:

Emission Factor	EF = 0.0504 * (0.05) * e ((0.0251) * (325 + 460) - 20.43) =	0.0122	lbs/ton HMA
Calculations	(0.0122 lbs/ton) * (130 tons/hr) =	1.58	lbs/hr
	(1.58 lbs/hr) * (6750 tons/year) * (0.0005 lbs/ton) =	5.35	TPY

Asphalt Plant Load-Out [SCC 3-05-002-14]

Process Rate: 130 tons/hour
Operating Schedule: 6750 hours/year

Particulate Emissions:

Emission Factor EF = $0.000181+0.00141(-V)e^{((0.0251)(T+460)-20.43)}$ [AP-42 Table 11.1-14, 3/04]

where: EF, Emission Factor = lbs emitted / ton HMA produced
V, Asphalt Volatility = -0.05 [Default value AP-42 Table 11.1-14, 3/04]
T, HMA temperature = 325ºF [Default value AP-42 Table 11.1-14, 3/04]

PM Emissions:

Emission Factor	EF = 0.000181 + 0.00141 * (0.05) *e((0.0251) * (325 + 460) - 20.43) =	0.00052	lbs/ton HMA
Calculations	(0.00052 lbs/ton) * (130 tons/hr) =	0.07	lbs/hr
	(0.07 lbs/hr) * (6750 tons/year) * (0.0005 lbs/ton) =	0.23	TPY

PM_{10} Emissions:

Emission Factor	EF = 0.000181 + 0.00141 * (0.05) * *e* ((0.0251) * (325 + 460) - 20.43) =	0.00052	lbs/ton HMA
Calculations	(0.00052 lbs/ton) * (130 tons/hr) =	0.07	lbs/hr
	(0.07 lbs/hr) * (6750 tons/year) * (0.0005 lbs/ton) =	0.23	TPY

$PM_{2.5}$ Emissions:

Emission Factor	EF = 0.000181 + 0.00141 * (0.05) * *e* ((0.0251) * (325 + 460) - 20.43) =	0.00052	lbs/ton HMA
Calculations	(0.00052 lbs/ton) * (130 tons/hr) =	0.07	lbs/hr
	(0.07 lbs/hr) * (6750 tons/year) * (0.0005 lbs/ton) =	0.23	TPY

CO Emissions:

Emission Factor EF = $0.00558(-V)e^{((0.0251)(T+460)-20.43)}$ [AP-42 Table 11.1-14, 3/04]

where: EF, Emission Factor = lbs Emitted / ton Processed
V, Asphalt Volatility = -0.05 [Default value AP-42 Table 11.1-14, 3/04]
T, HMA temperature = 325ºF [Default value AP-42 Table 11.1-14, 3/04]

CO Emissions:

Emission Factor	EF = 0.00558 * (0.05) * *e* ((0.0251) * (325 + 460) - 20.43) =	0.00135	lbs/ton HMA
Calculations	(0.00135 lbs/ton) * (130 tons/hr) =	0.18	lbs/hr
	(0.18 lbs/hr) * (6750 tons/year) * (0.0005 lbs/ton) =	0.59	TPY

VOC Emissions:

Emission Factor	EF = 0.0172(-V)$e^{((0.0251)(T+460)-20.43)}$ [AP-42 Table 11.1-14, 3/04]		
	where: EF, Emission Factor = lbs Emitted / ton Processed		
	V, Asphalt Volatility = -0.05 [Default value AP-42 Table 11.1-14, 3/04]		
	T, HMA temperature = 325ºF [Default value AP-42 Table 11.1-14, 3/04]		

VOC Emissions:

Emission Factor	EF = 0.0172 * (0.05) * e ((0.0251) * (325 + 460) - 20.43) =	0.00416	lbs/ton HMA produced
Calculations	(0.00416 lbs/ton) * (130 tons/hr) =	0.54	lbs/hr
	(0.54 lbs/hr) * (6750 tons/year) * (0.0005 lbs/ton) =	1.82	TPY

Diesel Engines:

Primary Diesel Engine Generator MTU 375kWT2 Diesel Engine Generator [Detroit Diesel 563 hp]

Engine Rating: 563 hp
Fuel Input: 3.94 MMBtu/hr
28.8 gallons/hour [Estimated]
Hours of Operation: 6750 hours/year

Particulate Emissions:

PM Emissions:

Emission Factor	0.0022	lb/hp-hr	[AP-42 3.3-1, 10/96]	
Calculations	(0.0022 lb/hp-hr) * (563 hp) =		1.24	lbs/hr
	(1.24 lbs/hr) * (6750 hrs/yr) * (0.0005 tons/lb) =		4.18	TPY

PM_{10} Emissions:

Emission Factor	0.0022	lb/hp-hr	[AP-42 3.3-1, 10/96]	
Calculations	(0.0022 lb/hp-hr) * (563 hp) =		1.24	lbs/hr
	(1.24 lbs/hr) * (6750 hrs/yr) * (0.0005 tons/lb) =		4.18	TPY

$PM_{2.5}$ Emissions (filterable):

Emission Factor	0.0479	lb/MMBtu	[AP-42 3.4-2, 10/96]	
Calculations	(0.0479 lb/MMBtu) * (0.00 MMBtu/hr) =		0.19	lbs/hr
	(0.19 lbs/hr) * (6750 hrs/yr) * (0.0005 tons/lb) =		0.64	TPY

$PM_{2.5}$ Emissions (condensable):

Emission Factor	0.0077	lb/MMBtu	[AP-42 3.4-2, 10/96]	
Calculations	(0.0077 lb/MMBtu) * (3.941 MMBtu/hr) =		0.03	lbs/hr
	(0.03 lbs/hr) * (6750 hrs/yr) * (0.0005 tons/lb) =		0.10	TPY

CO Emissions:

Emission Factor	0.00668	lb/hp-hr	[AP-42 3.3-1, 10/96]	
Calculations	(0.00668 lb/hp-hr) * (563 hp) =		3.76	lbs/hr
	(3.76 lbs/hr) * (6750 hrs/yr) * (0.0005 tons/lb) =		12.69	TPY

NOx Emissions:

Emission Factor	0.031	lb/hp-hr	[AP-42 3.3-1, 10/96]	
Calculations	(0.031 lb/hp-hr) * (563 hp) =		17.45	lbs/hr
	(17.45 lbs/hr) * (6750 hrs/yr) * (0.0005 tons/lb) =		58.90	TPY

SO_2 Emissions:

Emission Factor	0.00205 lb/hp-hr	[AP-42 3.3-1, 10/96]		
Calculations	(0.0021 lb/hp-hr) * (563 hp) =		1.15	lbs/hr
	(1.15 lbs/hr) * (6750 hrs/yr) * (0.0005 tons/lb) =		3.90	TPY

VOC Emissions:

Emission Factor	0.002514 lb/hp-hr	[AP-42 3.3-1, 10/96]	1.42	lbs/hr
Calculations	(0.0025 lb/hp-hr) * (563 hp) =		4.78	TPY
	(1.42 lbs/hr) * (6750 hrs/yr) * (0.0005 tons/lb) =			

Secondary Diesel Engine Generator: MTU DS40D6S Diesel Engine Generator [John Deere 80 hp]

Engine Rating: 80 hp
Fuel Input: 0.56 MMBtu/hr
4.1 gallons/hour [Estimated]
Hours of Operation: 6750 hours/year

Particulate Emissions:

PM Emissions:

Emission Factor	0.0022 lb/hp-hr	[AP-42 3.3-1, 10/96]		
Calculations	(0.0022 lb/hp-hr) * (80 hp) =		0.18	lbs/hr
	(0.18 lbs/hr) * (6750 hrs/yr) * (0.0005 tons/lb) =		0.59	TPY

PM_{10} Emissions:

Emission Factor	0.0022 lb/hp-hr	[AP-42 3.3-1, 10/96]		
Calculations	(0.0022 lb/hp-hr) * (80 hp) =		0.18	lbs/hr
	(0.18 lbs/hr) * (6750 hrs/yr) * (0.0005 tons/lb) =		0.59	TPY

$PM_{2.5}$ Emissions (filterable):

Emission Factor	0.0479 lb/MMBtu	[AP-42 3.4-2, 10/96]		
Calculations	(0.0479 lb/MMBtu) * (0.00 MMBtu/hr) =		0.03	lbs/hr
	(0.03 lbs/hr) * (6750 hrs/yr) * (0.0005 tons/lb) =		0.09	TPY

$PM_{2.5}$ Emissions (condensable):

Emission Factor	0.0077 lb/MMBtu	[AP-42 3.4-2, 10/96]		
Calculations	(0.0077 lb/MMBtu) * (0.56 MMBtu/hr) =		0.00	lbs/hr
	(0.00 lbs/hr) * (6750 hrs/yr) * (0.0005 tons/lb) =		0.01	TPY

CO Emissions:

Emission Factor	0.00668 lb/hp-hr	[AP-42 3.3-1, 10/96]		
Calculations	(0.00668 lb/hp-hr) * (80 hp) =		0.53	lbs/hr
	(0.53 lbs/hr) * (6750 hrs/yr) * (0.0005 tons/lb) =		1.80	TPY

NOx Emissions:

Emission Factor	0.031 lb/hp-hr	[AP-42 3.3-1, 10/96]		
Calculations	(0.031 lb/hp-hr) * (80 hp) =		2.48	lbs/hr
	(2.48 lbs/hr) * (6750 hrs/yr) * (0.0005 tons/lb) =		8.37	TPY

SO_2 Emissions:

Emission Factor	0.00205	lb/hp-hr	[AP-42 3.3-1, 10/96]	0.16	lbs/hr
Calculations	(0.0021 lb/hp-hr) * (80 hp) =			0.55	TPY
	(0.16 lbs/hr) * (6750 hrs/yr) * (0.0005 tons/lb) =				

VOC Emissions:

Emission Factor	0.002514	lb/hp-hr	[AP-42 3.3-1, 10/96]		
Calculations	(0.0025 lb/hp-hr) * (80 hp) =			0.20	lbs/hr
	(0.20 lbs/hr) * (6750 hrs/yr) * (0.0005 tons/lb) =			0.68	TPY

Unpaved Roadways (Haul Roads)

Miles Travelled: 5 Miles/Day [Estimate]
Vehicle Weight: < 50 Tons

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

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

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

PM Emissions:

Emission Factor	EF = * (/12)^ * (/3)^ =		12.04 lbs/VMT		
Calculations	(12.04 lbs/VMT) * (5 miles/day) =			60.18	lbs/day
	(60.18 lbs/day) * (365 days/yr) * (0.0005 tons/lb) =			10.98	TPY

PM_{10} Emissions:

Emission Factor	EF = * (/12)^ * (/3)^ =		3.32 lbs/VMT		
Calculations	(3.32 lbs/VMT) * (5 miles/day) =			16.59	lbs/day
	(16.59 lbs/day) * (365 days/yr) * (0.0005 tons/lb) =			3.03	TPY

PM_{10} Emissions:

Emission Factor	EF = * (/12)^ * (/3)^ =		0.33 lbs/VMT		
Calculations	(0.33 lbs/VMT) * (5 miles/day) =			1.66	lbs/day
	(1.66 lbs/day) * (365 days/yr) * (0.0005 tons/lb) =			0.30	TPY

V. Existing Air Quality

This permit is for a portable asphalt plant to originally be located in Section 21, Township 16 North, Range 17 East, in Fergus County, Montana. Fergus County and those areas for which this facility is permitted to operate has been designated unclassified/attainment with all ambient air quality standards and there are no major air pollution sources in the surrounding area.

VI. Air Quality Impacts

MAQP #2596-01 covers operation of this portable drum mix asphalt plant while operating in

areas within Montana that are classified as being in attainment with federal ambient air quality standards and areas not yet classified, excluding counties that have a Department-approved permitting program and areas that are tribal lands. This permit contains conditions and limitations that would protect air quality for the site and surrounding area, and that would limit the facility's emissions below the major source threshold. Based on the information provided, the amount of controlled emissions generated by this facility will not exceed any ambient air quality standard.

VII. Ambient Air Impact Analysis

The Department determined that the impact from this permitting action will be minor. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

VIII. Taking or Damaging Implication Analysis

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

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

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

IX. Environmental Assessment

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

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

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Century Companies, Inc.

Montana Air Quality Permit (MAQP): #2596-01
Preliminary Determination Issued: June 16, 2011
Department Decision Issued: July 21, 2011
Permit Final: August 6, 2011

1. *Legal Description of Site:* Section 21, Township 16 North, Range 17 East, in Fergus County. However, MAQP #2596-01 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 PM_{10} nonattainment areas. A Missoula County air quality permit would be required for locations within Missoula County, Montana. An addendum would be required for locations in or within 10 km of certain PM_{10} nonattainment areas. Montana.

2. *Description of Project:* Century Companies, Inc. (Century) owns and operates a portable hot mix asphalt plant with a capacity of 130 tons per hour, as described within MAQP #2596-01 and associated permit analysis.

3. *Objectives of Project:* The object of the project would be to produce business and revenue for the company through the sale and application of hot mix asphalt. The issuance of MAQP #2596-01 would allow Century to operate the permitted equipment at various locations throughout Montana (as described above), including the proposed initial site location.

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

5. *A Listing of Mitigation, Stipulations, and Other Controls:* A list of enforceable conditions, including a BACT analysis, would be included in MAQP #2596-01.

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

Impacts on terrestrials and aquatic life could result from storm water runoff and pollutant deposition, but such impacts would be minor because the asphalt plant would be considered a minor source of emissions and would have intermittent and seasonal operations. Furthermore, the air emissions would have only minor effects on terrestrial and aquatic life because facility emissions would have good pollutant dispersion in the area of operations (see Section 7.F). Therefore, only minor and temporary effects to terrestrial and aquatic life and habitat would be expected from the proposed project.

B. Water Quality, Quantity and Distribution

Water would be required for dust suppression on the surrounding roadways and general facility area. This water use would expect to only cause minor, if any, impacts to water resources because the facility will require a small volume of water. In addition, the facility would emit air pollutants, and corresponding deposition of pollutants would occur, as described in Section 7.F. of this EA. However, the Department determined that, due to dispersion characteristics of pollutants and conditions that would be placed in MAQP #2596-01, any impacts from deposition of pollutants on water quality would be expected to be minor. Pollutant deposition and water use would cause minor impacts to water resources because the facility is relatively small with seasonal and intermittent operations. The benefits of using water to control emissions outweigh the potential minor impacts to the surroundings.

C. Geology and Soil Quality, Stability and Moisture

Only minor impacts from deposition of air pollutants on soils would be expected (as described in Section 7.F of this EA) and only minor amounts of water would be used for pollution control, and would be used, only as necessary, in controlling particulate emissions. Thus, only minimal water runoff would occur. Since only minor amounts of pollution would be generated

and corresponding emissions would be widely dispersed before settling upon surrounding soils and vegetation (as described in Section 7.D of this EA), impacts would be expected to be minor. Therefore, any effects upon geology and soil quality, stability, and moisture from air pollutant emissions from equipment operations would be expected to be minor and short-lived.

D. Vegetation Cover, Quantity, and Quality

Only minor impacts would be expected to occur on vegetative cover, quality, and quantity because the facility would operate in an area where vegetation has been previously disturbed. During operations, the facility would be a relatively minor source of emissions and the pollutants would be greatly dispersed (as described in Section 7.F of this EA); therefore, deposition on vegetation from the proposed project would be minor. Since water usage would be minimal (as described in Section 7.B of this EA) and the associated soil disturbance from the application of water and water runoff would be minimal (as described in Section 7.C of this EA), corresponding vegetative impacts would be expected to be minor.

E. Aesthetics

The asphalt production facility would generate visible emission, create noise and effect visual aesthetics in the area of operation. However, Permit MAQP #2596-01 includes conditions to control emissions, including visible emissions, from the plant and the facility would be portable, would operate on an intermittent and seasonal basis, and would be a small industrial source. Furthermore, any disturbance to the aesthetic value of the area would be minor because of its location within an existing pre-disturbed industrial site. Therefore, any aesthetic impacts would be short-lived and minor.

F. Air Quality

Air quality impacts from the proposed project would be minor since the facility would be relatively small and operate on an intermittent and temporary basis. Additionally, MAQP #2596-01 would include conditions and controls limiting the facility's opacity and emissions of particulate matter.

Further, the Department determined that this facility would be a minor source of emissions as defined under the Title V Operating Permit Program due to the application of federally enforceable permit conditions to limit the source's potential to emit below the major source threshold level of 100 TPY for any regulated pollutant. Pollutant deposition from the facility would be expected to be minimal because the pollutants emitted would be well controlled and widely dispersed (from factors such as wind velocity and wind direction). Therefore, air quality impacts from operating the asphalt facility would be expected to be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

In an effort to assess any potential impacts to any unique endangered, fragile, or limited environmental resources in the initial proposed area of operation, the Department contacted the Natural Resource Information System – Montana Natural Heritage Program. Search results concluded there are three species of concern within the area. The search area, in this case, is defined by the section, township, and range of the proposed site, with an additional 1-mile buffer. The known species of concern include three vertebrate animals: the Great Blue Heron (At Risk), the Northern Redbelly Dace (At Risk), and the Sauger (Sensitive). Based on the impacts presented by similar permitted asphalt operations and the remote potential that any of the animal species of concern would be located within the operational area of the project, any effects on the local populations would be expected to be minimal.

Initial and typical operations will likely take place within a previously disturbed industrial site, further limiting the potential for impact to any unique endangered, fragile, or limited environmental resource. Therefore, the overall industrial nature of the area would not change as a result of the proposed project and any associated impacts would be expected to be minor

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

Due to the relatively small size of the project, any demand on environmental resources would expect to be minor. Small quantities of water would be required for dust suppression of particulate emissions generated at the site. Demands on air resources would be minor as the emissions from the source will be well controlled, intermittent, and seasonal. Energy demands would also be small and provided on-site through the operation of diesel-fired generators. In conclusion, overall impacts to water, air, and energy resources would be expected to be minor.

I. Historical and Archaeological Sites

The Department contacted the Montana Historical Society - State Historical Preservation Office (SHPO) in an effort to identify any historical and/or archaeological sites that may be present in the proposed initial location of the facility. Search results concluded that there were no previously recorded historical or archaeological resources of concern within the search area surrounding the proposed site for initial operation of the processing plant.

According to correspondence from the Montana State Historic Preservation Office, there would be a low likelihood of any disturbance to cultural properties. Therefore, no impacts upon historical or archaeological sites would be expected as a result of operating the proposed hot-mix asphalt production plant.

J. Cumulative and Secondary Impacts

Operation of the portable asphalt plant would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because it would be located at an existing industrial location and would be limited in the amount of air emissions generated. Emissions and noise generated from the equipment would, at most, result in only minor impacts to the area of operation because it would be seasonal and temporary in nature. Additionally, this facility, in combination with other emissions from equipment operations would not be permitted to exceed 250 tons per year of non-fugitive emissions of an individual pollutant. Overall cumulative and secondary impacts to the physical and biological aspects of the human environment would expect to be minor.

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

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

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

A. Social Structures and Mores

The operation of the asphalt facility would cause no disruption to the social structures and mores in the area because the source would be a minor industrial source of emissions and would only have temporary and intermittent operations. Further, the proposed initial location is within an existing industrial site with no existing social structures or mores and the facility would be required to operate according to the conditions that would be placed in MAQP #2596-01, which would limit the effects to social structures and mores.

B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of this area would not be impacted by the operation of the portable asphalt plant because the facility would be a portable source, with seasonal and intermittent operations. The predominant use of this area would not change as a result of the proposed operation. Therefore, the cultural uniqueness and diversity of the area would not be impacted.

C. Local and State Tax Base and Tax Revenue

Only minor impacts to the local and state tax base and revenue could be expected from the employees and facility production. According to Century the facility will employ additional personnel during the operating season. However, as the facility is portable and temporary, it is unlikely that people would move to the area as a result of this project. Impacts to local tax base and revenue would be minor and short-term since the source would be portable and the money generated for taxes would be widely distributed.

D. Agricultural or Industrial Production

The proposed project would have a minor impact on local industrial production since the facility would increase gravel production and air emissions only slightly. Minimal deposition of air pollutants are expected to occur on the surrounding land (as described above in Section 7.F), whereby effects on the surrounding vegetation or agricultural production are expected to be minor. In addition, the facility operations would be small and temporary in nature and would be permitted with operational conditions and limitations that would minimize impacts upon surrounding vegetation, as described in Section 7.D above. Pollutant deposition from the project would be minimal because the emissions would be well controlled, widely dispersed (from factors such as wind speed and wind direction), and would have minimal deposition on the surrounding area.

E. Human Health

MAQP #2596-01 would incorporate conditions to ensure that the 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, air emissions from this project would be minimized by the use of pollution control devices for the drum dryer and mineral filler storage, water application for fugitive emissions, as well as, other process limits that would be required by MAQP #2596-01. Additionally, the facility will be operating on an intermittent and seasonal basis. Therefore, only minor impacts would be expected on human health from the proposed project.

F. Access to and Quality of Recreational and Wilderness Activities

Access to recreational opportunities would not be limited or modified by this facility. The equipment would be located within a pre-existing industrial site that has been established for similar use. All recreational opportunities, if available in the area, would still be accessible. Noise from the facility would be minimal to surroundings because of the facility size, expected hours of operation, and rural location. The applicant has stated that the facility would operate on a seasonal and intermittent basis. The source will operate on private land and the Department has determined that the project would be a minor industrial source of emissions. Therefore, any changes in the quality of recreational and wilderness activities created by operating the equipment at this site are expected to be minor.

G. Quantity and Distribution of Employment

The portable operation will be used in association with a nearby road project so the operations at this location will be temporary. No individuals would be expected to permanently relocate to this area as a result of operating the asphalt facility. Therefore, no effects upon the quantity and distribution of employment in this area would be expected.

H. Distribution of Population

The proposed project would be considered a portable industrial facility and would require few employees to operate. No individuals would be expected to permanently relocate to this area. Therefore, the operation would not impact the normal population distribution in the initial area of operation or any future operating site.

I. Demands for Government Services

While the facility is operating a minor increase in traffic may be noted on existing roadways in the area. In addition, government services will be required for acquiring the appropriate permits for the proposed project and to verify compliance with the permits that would be issued. However, demands for government services would expect to be minor.

J. Industrial and Commercial Activity

The operation of the asphalt production facility would represent only a minor increase in the industrial activity in the proposed area of operation because the source would be a relatively small industrial source that is portable and temporary in nature. No additional industrial or commercial activity would be expected as a result of the proposed operation.

K. Locally Adopted Environmental Plans and Goals

Century would be allowed through issuance of MAQP #2596-01, to operate in areas designated by EPA as attainment or unclassified for ambient air quality. An Addendum would be required to operate in or within 10 km of a PM_{10} nonattainment area. MAQP #2596-01 would contain operational restrictions for protecting air quality and to keep the facility's emissions in compliance with any applicable ambient air quality standards, as well as, any locally adopted environmental plan or goal. Because the proposed facility would be a portable source and would have intermittent and seasonal operations, any impacts from the project would be minor and short-lived.

L. Cumulative and Secondary Impacts

The operation of the asphalt production facility would present only minor cumulative and secondary impacts to the social and economic aspects to the human environment within the immediate area of operation, as the source would be a portable and temporary. A slight increase 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 Century, but any cumulative impacts upon the social and economic aspects of the human environment would be minor and short-lived. Thus, only minor and temporary cumulative effects would be expected on the local economy.

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

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is for the construction and operation of a portable hot mix asphalt plant. MAQP #2596-01 includes conditions and limitations to ensure the facility will operate in compliance with all applicable rules and regulations. In addition, there are no significant impacts associated with this proposal.

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

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

EA prepared by: D. Kuenzli
Date: June 3, 2011