Montana Department of
ENVIRONMENTAL QUALITY
Brian Schweitzer, Governor
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March 6, 2012

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

Dear Ms. Hodik:

Montana Air Quality Permit #3008-04 is deemed final as of March 3, 2012, by the Department of Environmental Quality (Department). This permit is for a portable drum mix asphalt plant. 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

Shawn Juers
Environmental Engineer
Air Resources Management Bureau
(406) 444-2049

VW:SJ
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #3008-04

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

March 3, 2012

MONTANA AIR QUALITY PERMIT

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

MAQP: #3008-04
Administrative Amendment (AA) Request Received: 1/6/2012
Department's Decision on AA: 2/16/2012
Permit Final: 3/02/2012
AFS #: 777-3008

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

The original location of the permitted facility is the SW¼, SE¼ of Section 17, Township 15 North, Range 18 East, in Fergus County, Montana. Century operates the portable drum mix asphalt plant at various locations throughout Montana. Permit #3008-03 applies while operating at any location within Montana, except within those areas having a Department of Environmental Quality (Department) approved permitting program. *A Missoula County air quality permit will be required for locations within Missoula County, Montana*. A list of the permitted equipment can be found in the permit analysis.

B. Current Permit Action

On January 6, 2012, the Department received a request to administratively amend the MAQP to change existing federally enforceable limits. Century's request was made as part of a project undertaken by the Department to address those sources with existing federally enforceable permit limits that were established to keep potential emissions below the 100 ton per year (tpy) major source Title V Operating Permit thresholds. The Department encouraged synthetic minor sources to take new permit limits to further reduce emissions from just below 100 tons per year to just below 80 tons per year. The permit limit change will consequently alter the oversight category for this facility to a level that is only subject to the State Compliance Monitoring Strategy. This permitting action amends the MAQP to further limit hours of operation to maintain potential emissions below 80 tons per year, using the hour of operation limits requested by the applicant. In addition, this permit action updates rule references, permit format, and the emissions inventory.

SECTION II: Conditions and Limitations

A. Emission Limitations

1. Asphalt plant particulate matter emissions shall be limited to 0.04 grains per dry standard cubic feet (gr/dscf) (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart I).

2. Century shall not cause or authorize to be discharged into the atmosphere from any sources or stacks that exhibit 20% opacity 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 an 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 and ARM 17.8.752).

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. A baghouse for air pollution control, with 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 production rate shall be limited to the average production rate during the last source test demonstrating compliance (ARM 17.8.749).

8. Century shall only use natural gas or propane to fire the hot mix dryer (ARM 17.8.749).

9. Asphalt plant production shall not exceed 698,400 tons during any rolling 12-month time period (ARM 17.8.1204).

10. Century shall not operate more than two diesel-powered engine(s)/generator(s) at any given time and the maximum rated capacity shall not exceed 795 hp (ARM 17.8.749).

11. The hours of operation of the asphalt plant and associated equipment (including diesel-powered engines/generators) shall not exceed 4,365 hours during any rolling 12-month time period (ARM 17.8.1204).

12. 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 period. Any calculation used to establish production levels shall be approved by the Department (ARM 17.8.749).

13. Century shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR Part 60, Subpart I, for the asphalt plant (ARM 17.8.340 and 40 CFR 60, Subpart I).

B. Testing Requirements

1. Within 60 days after achieving the maximum production rate, but not later than 180 days after initial start up, an Environmental Protection Agency (EPA) Methods 1-5 source test shall be performed on the asphalt plant to demonstrate compliance with Section II.A.1. and an EPA Method 9 opacity test shall be performed in conjunction with all particulate tests to demonstrate compliance with the conditions specified in Sections II.A.2. and II.A.3. Testing shall continue on an every 4-year basis or according to another testing/monitoring schedule as may be approved by the Department (ARM 17.8.105 and ARM 17.8.749).

2. Pressure drop on the control device and temperature must be recorded daily and kept on site according to Section II.C.4. (ARM 17.8.749).

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

4. Since asphalt production will be limited to the average production rate during the compliance source 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 test at a higher production rate (ARM 17.8.749).

6. All compliance source tests must be conducted in accordance with 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 where 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 upon request (ARM 17.8.765).

2. 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 is not 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. 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***, 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.

This notice must be submitted to the Department, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745 (1)(d) (ARM 17.8.745).

4. 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, must be available at the plant for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).

5. Century shall document, by month, the asphalt production of the facility. By the 25th day of each month, Century shall total the asphalt production of the facility for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.9. 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 diesel-powered engine/generator. By the 25th day of each month, Century shall total the hours of operation of the diesel-powered engine/generator for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.10. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

7. Century shall annually certify that its emissions are less than those that would require the facility 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. The annual certification shall be submitted along with the annual emissions inventory information.

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. Permit Fee – Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, 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. Construction Commencement – Construction must begin within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked (ARM 17.8.762).

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

J. 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 #3008-04

I. Introduction/Process Description

A. Permitted Equipment

Century Companies, Inc (Century) owns and operates a portable asphalt plant (maximum capacity 160-tons per hour (TPH)). Equipment used at the facility includes, but is not limited to the following:

1. (1) 1998 160-TPH Asphalt Drum Mixers, Inc. (ADM) drum mix asphalt plant with baghouse (fired on propane)

2. (1) 7.3-gallon per hour (gal/hr) asphalt heater (fired on diesel)

3. (1) 45 horsepower (hp) diesel-powered engine/generator

4. (1) 750 hp diesel-powered engine/generator

5. Associated equipment (elevator, screens, bins, mixer, conveyors, etc.)

B. Source Description

For a typical operational set-up, stockpiled aggregate is loaded into the 4-bin cold feeder. The aggregate is dispensed from the bins, screened, and dumped onto slow moving feeder conveyors that transfer the aggregate to the drum mix dryer. The aggregate travels through the rotating drum where asphalt oil is added to the dryer. The dryer drum mixes the asphalt oil and the aggregate. The resulting hot-mix asphalt is loaded into a hot mix asphalt storage silo where it is stored until the asphalt is dumped into trucks for transport to the project site.

C. Permit History

Permit #3008-00 became final June 17, 2002. On April 14, 1998, Northern Line Layers, Inc. (Northern) submitted a complete permit application to operate a portable 1998 Asphalt Drum Mixers, Inc. model RB160 drum mix asphalt plant, (maximum production rate of 160 TPH), a 450-kW diesel generator, and associated equipment. The facility operated at various locations throughout the state of Montana. The original location of the equipment was Section 29, Township 29 North, Range 39 East, in Valley County Montana.

Permit #3008-01 replaced Permit #3008-00**:** On May 14, 2003, Century submitted a complete air quality permit application to the Department of Environmental Quality (Department) to change ownership of Permit #3008-01 from Northern Line Layers, Inc. to Century and to change the portable generator from a 450-kW to a 500-kW diesel generator. The new equipment will provide power for the asphalt plant, conveyors, and associated equipment. The permit action changed ownership of Permit #3008-01 to Century, changed the generator, and updated the permit to reflect current permit language and rule references used by the Department.

Permit #3008-02 replaced Permit #3008-01: On September 30, 2008, Century submitted a request include the hp rating of the diesel-powered engine/generators in Permit #3008-01. The permit action added a 45 hp engine/generator to the list of permitted equipment and included the hp rating of the engines/generators.

Upon issuing MAQP #3008-04, it was discovered that the permit history in the permit analysis section of previous permits, and the permit history as recorded in the Department's database, did not correspond. Furthermore, the permit history sections of previous permits did not correspond to previous permit numbers. In order to maintain consistency with the Department's database, **MAQP #3008-03** is skipped, and MAQP #3008-04 is issued.

D. Current Permit Action

On January 6, 2012, the Department received a request to administratively amend the MAQP to change existing federally enforceable limits. Century's request was made as part of a project undertaken by the Department to address those sources with existing federally enforceable permit limits that were established to keep potential emissions below the 100 ton per year major source Title V Operating Permit thresholds. The Department encouraged synthetic minor sources to take new permit limits to further reduce emissions from just below 100 tons per year to just below 80 tons per year. The permit limit change will consequently alter the oversight category for this facility to a level that is only subject to the State Compliance Monitoring Strategy. This permitting action amends the MAQP to further limit hours of operation to maintain potential emissions below 80 ton per year, using the hour of operation limits requested by the applicant. In addition, this permit action updates rule references, permit format, and the emissions inventory. **MAQP #3008-04** replaces MAQP #3008-02.

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 of Environmental Quality (Department). Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations where appropriate.

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

1. 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).

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

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

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

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

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

Century must maintain compliance with the applicable ambient air quality standards.

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

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

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

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

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

6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank truck or trailer is equipped with a vapor loss control device as described in (1) of this rule.

7. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS).

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

   b. 40 CFR 60, Subpart I – Standards of Performance for Hotmix Asphalt Facilities. This facility is an NSPS affected facility under 40 CFR Part 60, Subpart I (Standards of Performance for Hot Mix Asphalt Facilities), because the facility was constructed after June 11, 1973; therefore, the facility is subject to the requirements of 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.

8. ARM 17.8.341 Emission Standards for Hazardous Air Pollutants. This source shall comply with the standards and provisions of 40 CFR Part 61, as appropriate.

9. 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.

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

   b. 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants (HAPs) for Stationary Reciprocating Internal Combustion Engines (RICE). At the time of permit issuance, this subpart is applicable to an owner or operator of a stationary RICE at a major or area source of HAP emissions. Therefore, this subpart applies.

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. A permit fee is not required for the current permit action because the permit action is considered an administrative permit change.

2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department.

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

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

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

2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit modification to construct, modify, or use any asphalt plant, crusher or screen that has the potential to emit (PTE) greater than 15 tons per year of any pollutant. Century has a PTE greater than 15 tons per year of all conventional pollutants; therefore, an air quality permit is required.

3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.

4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.

5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. A permit application was not required for the current permit action because the permit change is considered an administrative permit change. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. An affidavit of publication of public notice was not required for the current permit action because the permit change is considered an administrative permit change.

6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of

this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.

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

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

9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving 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 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.

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

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

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

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

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

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

This facility is not a major stationary source because it is not a listed source and the facility's PTE is less than 250 tons per year of any pollutant.

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 particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) in a serious PM_{10} nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #3008-03 for Century, the following conclusions were made:

   a. The facility's PTE is not less than 100 tons/year for any pollutant.

   b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.

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

   d. This facility is subject to current NSPS.

   e. This facility is subject to current NESHAP standards.

   f. This source is not a Title IV affected source

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

   h. 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.

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

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

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

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

III. BACT Determination

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

A BACT determination was not required for the current permit action because the permit change is considered an administrative permit change.

IV. Emission Inventory**

MAQP #3008-04								
Source	**Ton/Year**							
	PM	**PM_{10}**	**$PM_{2.5}$**	**NO_X**	**VOC**	**CO**	**SO_X**	**HAPs**
1998 160 TPH Drum Mix Asphalt Plant Dryer	32.79	14.58	12.24	13.62	11.17	45.40	1.19	2.68
Hot Oil Heater	0.05	0.05	0.05	0.32	0.01	0.02	0.11	0.00
Drum Mix Plant Load-Out	0.18	0.18	0.18		1.45	0.41		0.10
Asphalt Product Silo Filling	0.20	0.20	0.20		4.26	0.41		0.49
Cold Aggregate Screening	1.26	0.77	ND					
Cold Aggregate Handling / Conveyors	0.29	0.10	0.03					
Cold Aggregate Storage Piles	10.98	5.19	0.79					
Diesel Generator(s) (up to 795 hp)	3.82	3.82	3.82	53.79	4.36	11.59	3.56	6.35
Haul Roads / Vehicle Traffic	5.49	1.51	0.15					
TOTAL:	**55.06**	**26.41**	**17.46**	**67.73**	**21.25**	**57.83**	**4.86**	**9.61**

Footnotes:

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

** acfm = actual cubic feet per minute
dscfm = dry standard cubic feet per minute
CO = carbon monoxide
ft = feet
in Hg = inches of mercury
HAPs = hazardous air pollutants
hp = horsepower
hr = hour
lb = pound
N/A = not applicable
ND = no data available
NOX = oxides of nitrogen
PM = particulate matter
PM10 = particulate matter with an aerodynamic diameter of 10 microns or less
PM2.5 = particulate matter with an aerodynamic diameter of 2.5 microns or less
SOX = oxides of sulfur
TPH = tons per hour
TPY = tons per year
VMT = vehicle miles traveled
VOC = volatile organic compounds
yr = year

Operating Hours	4365	hr/year	MAQP #3008-03				
Average Plant Elevation	3000	ft	Prior Department Information				
Actual Pressure	26.8	in Hg	Prior Department Information				
Standard Pressure	29.92	in Hg					
Flowrate	54,930	acfm	Prior Company Information				
Std. Temp:	25	°C					
Assumed Stack Temp	149	°C	Prior Determination				
Dry flowrate:	34765	dscfm	prior calculation (V1=V2(P2/P1)(T1/T2))				
Process Production Rate:	160	TPH					

Drum Mix Plant Load-Out							
Process Rate:	160	ton/hr					
PM/PM10/PM2.5 Emissions Fact	0.000181+0.00141(-V)e^((0.0251)(T+460)-20.43)				(AP-42 Table 11.1-14, 3/2004)		
(AP-42 Table 11.1-14, 3/2004)							
	V = asphalt volatility =		-0.5	(AP-42 Table 11.1-14 note a)			
	T = mix temp in °F =		325	(AP-42 Table 11.1-14 note a)			
	Emissions Factor =		0.000521937	lb/ton produced			
Calculations:	0.000521937031819792lb/ton produced*160TPH=					0.08351	lb/hr
	0.0835099250911667lb/hr*4365hr/year*0.0005 ton/lb =					**0.18**	**ton/yr**
	Note b of Table 11.1-14 indicates total PM is predominately PM2.5						
VOC Emissions							
Emissions Factor =	0.0172(-V)e^((0.0251)(T+460)-20.43))						
	Emissions Factor =		0.004158948	lb/ton produced			
Calculations:	0.00415894818957476lb/ton produced*160TPH=					0.665432	lb/hr
	0.665431710331962lb/hr*4365hr/year*0.0005 ton/lb =					**1.45**	**ton/yr**
HAPs Emissions							
Total PAH HAPs =	5.93%	of VOCs	(AP-42 Table 11.1-15, 3/2004)				
Total Other HAPs =	1.18%	of VOCs	(AP-42 Table 11.1-15, 3/2004)				
TOTAL:	7.11%	of VOCs				**0.10**	**ton/yr**
CO Emissions							
Emissions Factor =	=0.00488(-V)e^((0.0251)(T+460)-20.43)						
	Emissions Factor =		0.001179981	lb/ton produced			
Calculations:	0.00117998064913517lb/ton produced*160TPH=					0.188797	lb/hr
	0.188796903861627lb/hr*4365hr/year*0.0005 ton/lb =					**0.41**	**ton/yr**

Asphalt Product Silo Filling								
PM/PM10/PM2.5 Emissions Fact	=0.000332+0.00105(-V)e^((0.0251)(T+460)-20.43)							
(AP-42 Table 11.1-14, 3/2004)								
	Emissions Factor =		0.000585889	lb/ton produced				
Calculations:	0.000585889279014739lb/ton produced*160TPH=						0.093742	lb/hr
	0.0937422846423582lb/hr*4365hr/year*0.0005 ton/lb =						**0.20**	**ton/yr**
VOC Emissions Factor =	=0.0504*(-V)*e^((0.0251)(T+460)-20.43)							
	Emissions Factor =		0.012186685	lb/ton produced				
Calculations:	0.012186685 3927075lb/ton produced*160TPH=						1.94987	lb/hr
	1.94986966283319lb/hr*4365hr/year*0.0005 ton/lb =						**4.26**	**ton/yr**
HAPs Emissions								
Total PAH HAPs =	11.40%	of VOCs	(AP-42 Table 11.1-15, 3/2004)				**0.49**	**ton/yr**
Total Other HAPs =	ND							
CO Emissions Factor =	=0.00488(-V)e^((0.0251)(T+460)-20.43)							
	Emissions Factor =		0.001179981	lb/ton produced				
Calculations:	0.00117998064913517lb/ton produced*160TPH=						0.188797	lb/hr
	0.188796903861627lb/hr*4365hr/year*0.0005 ton/lb =						**0.41**	**ton/yr**

Cold Aggregate Storage Piles

For calculation purposes, 1 pile, at max capacity of the plant, is assumed

Process Rate:	160	TPH
Hours of Operation	4365	hr/year (MAQP Section II.C.11)

$$E = k(0.0032)\frac{\left(\frac{U}{5}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}} \text{ (pound [lb]/ton)}$$

where:

E = emission factor
k = particle size multiplier (dimensionless)
U = mean wind speed, meters per second (m/s) (miles per hour [mph])
M = material moisture content (%)

	PM	PM10	PM2.5	
k =	0.74	0.35	0.053	
U =	9.1	MPH - average of statewide wind speeds from NOAA		
M =	0.55	average of controlled moisture contents - AP-42 Table 11.19.2-2 note b		
		(some moisture control is assumed to meet general opacity requirements)		
		(less moisture needed to meet 20% opacity than OOO opacity requirements)		

PM EMIssions

Emissions Factor =	0.031435	lb/ton handled
Calculations:	0.0314346573743194	lb/ton handled*160TPH= 5.0295452 lb/hr
	5.0295451798911	lb/hr*4365hr/year*0.0005= **10.98 ton/yr**

PM10 Emissions

Emissions Factor =	0.014868	lb/ton handled
Calculations:	0.0148677433527186	lb/ton handled*160TPH= 2.3788389 lb/hr
	2.37883893643498	lb/hr*4365hr/year*0.0005= **5.19 ton/yr**

PM2.5 Emissions

Emissions Factor =	0.002251	lb/ton handled
Calculations:	0.00225140113626882	lb/ton handled*160TPH= 0.3602242 lb/hr
	0.360224181803012	lb/hr*4365hr/year*0.0005= **0.79 ton/yr**

Cold Aggregate Transfer Points							
Process Rate		160	tons/hr				
Number of Transfers		6	transfers	(previously determined)			
Hours of Operation:		4365	hr/yr				
PM Emissions							
Emissions Factor:		0.00014	lb/ton processed		(AP-42 Table 11.19.2-2, 8/2004)		
Calculations:		0.00014lb/ton processed*160tons/hr=				0.0224	lb/hr
		0.0224lb/hr*4365hr/yr*0.0005ton/lb =				0.049	ton/yr
		0.048888ton/yr*6transfers=				**0.293**	**ton/yr**
PM10 Emissions							
Emissions Factor:		0.000046	lb/ton processed		(AP-42 Table 11.19.2-2, 8/2004)		
Calculations:		0.000046lb/ton processed*160tons/hr=				0.00736	lb/hr
		0.00736lb/hr*4365hr/yr*0.0005ton/lb =				0.016	ton/yr
		0.0160632ton/yr*6transfers=				**0.096**	**ton/yr**
PM2.5 Emissions							
Emissiosn Factor:		0.000013	lb/ton processed		(AP-42 Table 11.19.2-2, 8/2004)		
Calculations:		0.000013lb/ton processed*160tons/hr=				0.00208	lb/hr
		0.00208lb/hr*4365hr/yr*0.0005ton/lb =				0.005	ton/yr
		0.0045396ton/yr*6transfers=				**0.027**	**ton/yr**

Diesel Generator(s)						
Maximum Rated hp =	795	hp	(MAQP Section II.C.10)			
Hours of Operation =	4365	hr/year	(MAQP Section II.C.11)			
PM/PM10/PM2.5 Emissions						
Emissions Factor:	0.0022	lb/hp-hr	(AP-42 Table 3.3-1, 10/1996)			
Calculations:	0.0022lb/hp-hr*795hp=				1.75	lb/hr
	1.749lb/hr*4365hr/year*0.0005ton/lb =				**3.82**	**ton/yr**
NOX Emissions						
Emissions Factor:	0.031	lb/hp-hr	(AP-42 Table 3.3-1, 10/1996)			
Calculations:	0.031lb/hp-hr*795hp=				24.65	lb/hr
	24.645lb/hr*4365hr/year*0.0005ton/lb =				**53.79**	**ton/yr**
VOC Emissions						
Emissions Factor:	0.002514	lb/hp-hr	(AP-42 Table 3.3-1, 10/1996)			
Calculations:	0.0025141lb/hp-hr*795hp=				2.00	lb/hr
	1.9987095lb/hr*4365hr/year*0.0005ton/lb				**4.36**	**ton/yr**
CO Emissions						
Emissions Factor:	0.00668	lb/hp-hr	(AP-42 Table 3.3-1, 10/1996)			
Calculations:	0.00668lb/hp-hr*795hp=				5.31	lb/hr
	5.3106lb/hr*4365hr/year*0.0005ton/lb =				**11.59**	**ton/yr**
SOX Emissions						
Emissions Factor:	0.00205	lb/hp-hr	(AP-42 Table 3.3-1, 10/1996)			
Calculations:	0.00205lb/hp-hr*795hp=				1.63	lb/hr
	1.62975lb/hr*4365hr/year*0.0005ton/lb =				**3.56**	**ton/yr**
HAPs						
Emissions Factor:	0.003659	lb/hp-hr	(AP-42 Table 3.3-1, 10/1996)			
Calculations:	0.0036588lb/hp-hr*795hp=				2.91	lb/hr
	2.908746lb/hr*4365hr/year*0.0005ton/lb				**6.35**	**ton/yr**

Cold Aggregate Screening

Process Rate:	160	TPH		
Hours of Operation:	4365	hr/year	(MAQP Section II.C.11)	
PM Emissions				
Emissions Factor:	0.0036	lb/ton processed	(AP-42 Table 11.19.2-2, 08/2004)	
Calculations:	0.0036lb/ton processed*160TPH=		0.576	lb/hr
	0.576lb/hr*4365hr/year*0.0005ton/lb =		**1.26**	**ton/yr**
PM10 Emissions				
Emissions Factor:	0.0022	lb/ton processed	(AP-42 Table 11.19.2-2, 08/2004)	
Calculations:	0.0022lb/ton processed*0.0036TPH=		0.352	lb/hr
	0.352lb/hr*4365hr/year*0.0005ton/lb =		**0.77**	**ton/yr**
PM2.5 Emissions				
Emissions Factor:	0	lb/ton processed	(ND - expected to be very small)	
Calculations:	0lb/ton processed*0.0022TPH=		0	lb/hr
	0lb/hr*4365hr/year*0.0005ton/lb =		**0.00**	**ton/yr**

Haul Roads and Front Loader Traffic

(AP-42 13.2.2, 11/2006)

$$E = k\,(s/12)^a (W/3)^b$$

Constant	Industrial Roads (Equation 1a)		
	PM-2.5	PM-10	PM-30*
k (lb/VMT)	0.15	1.5	4.9
a	0.9	0.9	0.7
b	0.45	0.45	0.45
c	-	-	-
d	-	-	-
Quality Rating	B	B	B

k, a, b = empirical constants

s = suface material silt content (%)

W = mean Vehicle Weight (tons)

Vehicle Miles Traveled = 5 miles/day (estimated)

PM Emissions								
Emissions Factor Development:								
	k =	4.9						
	a =	0.7						
	b =	0.45						
	s =	7.1	(AP-42 Table 13.2.2-1, 11/2006)					
	W =	50	tons					
	E =	12.04	lb/VMT					
Calculations:								
	12.036lb/VMT*5miles/day (estimated)=					60.18	lb/day	
	60.17997369366lb/day*365 day/yr =					21965.69	lb/yr	
	21965.6903981859lb/yr*0.0005ton/lb =					10.98	ton/yr	
	50 % control efficiency (AP-42 Figure 13.2.2-2 and MAQP Condition II.A.5)							
			(Department Guidance)					
	10.9828451990929ton/yr*0.50 =					**5.49**	**ton/yr**	

PM10 Emissions							
Emissions Factor Development:							
	k =	1.5					
	a =	0.9					
	b =	0.45					
	s =	7.1	(AP-42 Table 13.2.2-1, 11/2006)				
	W =	50	tons				
	E =	3.32	lb/VMT				
Calculations:							
	3.317lb/VMT*5miles/day (estimated)=				16.59	lb/day	
	16.5867994294458lb/day*365 day/yr =				6054.18	lb/yr	
	6054.1817917477lb/yr*0.0005ton/lb =				3.03	ton/yr	
	50 % control efficiency (AP-42 Figure 13.2.2-2 and MAQP Condition II.A.5)						
			(Department Guidance)				
	3.02709089587385ton/yr*0.50 =				**1.51**	**ton/yr**	
PM2.5 Emissions							
Emissions Factor Development:							
	k =	0.15					
	a =	0.9					
	b =	0.45					
	s =	7.1	(AP-42 Table 13.2.2-1, 11/2006)				
	W =	50	tons				
	E =	0.33	lb/VMT				
Calculations:							
	0.332lb/VMT*5miles/day (estimated)=				1.66	lb/day	
	1.65867994294458lb/day*365 day/yr =				605.42	lb/yr	
	605.41817917477lb/yr*0.0005ton/lb =				0.30	ton/yr	
	50 % control efficiency (AP-42 Figure 13.2.2-2 and MAQP Condition II.A.5)						
			(Department Guidance)				
	0.302709089587385ton/yr*0.50 =				**0.15**	**ton/yr**	

V. Existing Air Quality

This permit is for a portable facility permitted to operate in areas designated as unclassified/attainment with all ambient air quality standards.

VI. Air Quality Impacts and Ambient Air Impact Analysis

The Department determined that there will be no impacts from this permitting action because this permitting action is considered an administrative action, and is reducing the allowable emissions. Therefore, the Department believes this action will not cause or contribute to a violation of any ambient air quality standard.

VII. 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**	
XX		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	XX	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	XX	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	XX	4. Does the action deprive the owner of all economically viable uses of the property?
	XX	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?
	XX	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	XX	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?
	XX	7a. Is the impact of government action direct, peculiar, and significant?
	XX	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	XX	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?
	XX	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

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

Analysis Prepared By: Shawn Juers
Date: 2/2/2012