



February 27, 2018

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

Dear Mr. Patnode:

Montana Air Quality Permit #5195-00 is deemed final as of February 27, 2018, by the Department of Environmental Quality (Department). 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,

A handwritten signature in black ink that reads "Julie A. Merkel".

Julie A. Merkel
Permitting Services Section Supervisor
Air Quality Bureau
(406) 444-3626

A handwritten signature in black ink that reads "Craig Henrikson".

Craig Henrikson P.E.
Environmental Engineer
Air Quality Bureau
(406) 444-6711

JM:CH
Enclosures

Montana Department of Environmental Quality
Air, Energy & Mining Division

Montana Air Quality Permit #5195-00

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

February 27, 2018



MONTANA AIR QUALITY PERMIT

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

MAQP: #5195-00
Application Complete: 12/20/2017
Preliminary Determination Issued: 1/24/2018
Department's Decision Issued: 2/9/2018
Permit Final: 2/27/2018

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. Permitted Equipment

Century is proposing to operate a concrete batch truck-mix plant and associated equipment with a maximum operating capacity of 200 cubic yards per hour (cy/hr). The facility will use a centralized dust collection system with automatic pulse-jet cleaning with captured particulate matter returned to a silo.

B. Plant Location

The concrete batch plant is proposed to initially be located in the NW ¼ section of Section 4, Township 1 North, Range 18 East in Stillwater County, Montana. The location in latitude and longitude in decimal degrees is 45.86869 and -109.50282, respectively. However, MAQP #5195-00 applies while operating at any location in Montana, except those areas having a Department of Environmental Quality (Department)-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas. A Missoula County air quality permit will be required for locations within Missoula County, Montana. An addendum will be required for locations in or within 10 km of certain PM10 nonattainment areas.

SECTION II: Conditions and Limitations

A. Emission Limitations

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

2. 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).
3. Century shall treat all unpaved portions of the haul roads, access roads, parking lots, or general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.2 (ARM 17.8.749 and ARM 17.8.752).
4. The maximum rated capacity of the concrete plant shall not exceed 200 cy/hr (ARM 17.8.749).
5. Century shall install, operate, and maintain a centralized dust collection system, and filter vent (ARM 17.8.752):
 - a. Century shall install, operate, and maintain the centralized dust collection system to control particulate emissions and
 - b. Century shall install, operate, and maintain a filter vent to control particulate emissions during the batching process.
6. 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 calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).
7. Century shall not operate or have on-site more than one diesel engine/generator which must be a minimum of an EPA Tier III engine. The maximum capacity of the engine that drives the generator shall not exceed 685 horsepower (hp.) (ARM 17.8.749).
8. Century shall not operate or have on-site more than two diesel-fired heaters used for water heating each rated at 3.5 MMBtu/hr (ARM 17.8.749).
9. Century shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines and 40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, for any applicable diesel engine (ARM 17.8.340; 40 CFR 60, Subpart IIII; ARM 17.8.342 and 40 CFR 63, Subpart ZZZZ).

B. Emissions Monitoring

1. Century shall inspect, maintain, and repair the centralized dust collection system, which is used for controlling emissions from the package batch plant, as recommended by the manufacturer or every six months, whichever is

greater in frequency, to ensure the centralized dust collection system and automatic pulse-jet cleaning process is operating at the optimum efficiency. Records of inspections, repairs and maintenance shall be kept for a minimum of 5 years (ARM 17.8.749).

2. Century shall inspect, maintain, and repair the filter vent, which is used to capture cement particulate during the batching process, as recommended by the manufacturer or every six months, whichever is greater in frequency, to ensure the filter vent is operating at the optimum efficiency. Records of inspections, repairs and maintenance shall be kept for a minimum of 5 years (ARM 17.8.749).
3. Century shall maintain on-site records of inspections, repairs, and maintenance. All 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 submitted to the Department upon request, and shall be available at the plant site for inspection by the Department (ARM 17.8.749).

C. Testing Requirements

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

D. Operational Reporting Requirements

1. If this truck-mix concrete batch plant is moved to another location, an Intent to Transfer Form must be sent to the Department. In addition, a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The Intent to Transfer Form and the proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.749 and 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 to calculate 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*, change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation. The notice must be submitted to the Department, in writing, 10 days prior to startup or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(l)(d) (ARM 17.8.745).
4. All records compiled in accordance with this permit must 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 site for inspection by the Department, and must be submitted to the Department upon request. These records may be stored at a location other than the plant site upon approval by the Department (ARM 17.8.749).

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 such as Continuous Emission Monitoring Systems (CEMS) or Continuous Emission Rate Monitoring Systems (CERMS), or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver – The permit and 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 in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties, or other enforcement action as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals – Any person or persons jointly or severally adversely affected by the Department’s decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefor, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department’s decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department’s decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department’s decision on the application is final 16 days after the Department’s decision is made.

- F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by the Department at the location of the source.
- G. Permit Fee – 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).

Montana Air Quality Permit Analysis
 Century Companies, Inc.
 MAQP #5195-00

I. Introduction/Process Description

Century Companies Inc. (Century) owns and operates a truck-mix concrete batch plant capable of 200 cubic yards per hour (cy/hr), utilizing a diesel-fired engine with associated generator, two diesel-fired water heaters and associated equipment. The particulate matter emissions from the storage silos are controlled with a centralized dust collection system.

A. Permitted Equipment

Century proposes to operate a concrete batch plant which includes:

- Material stacker conveyor
- 3-Compartment Aggregate Bin
- Cement Bin
- Centralized Dust Collection System
- Diesel-fired engine up to 685 horsepower and associated generator
- Two diesel-fired water heaters (each rated for 3.5 MMBtu/hr)
- associated equipment

B. Source Description

The concrete batch plant is used to mix materials for transfer into trucks. Aggregate material is fed into the feed conveyor via front loader. Sand and gravel is mixed with cement from the silo and water in the plant process. The material is loaded into mixer trucks for transport.

The concrete batch plant is proposed to initially be located in the NW ¼ section of Section 4, Township 1 North, Range 18 East in Stillwater County, Montana.

C. Response to Public Comments (none received)

Person/Group Commenting	Permit Reference	Comment	Department Response

II. Applicable Rules and Regulations

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

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

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

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 the following:

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 PM₁₀

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, 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 rule.
4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule 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 rule.
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 rule.
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 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). Century is considered an NSPS affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts.
 - a. 40 CFR 60, Subpart A – General Provisions apply to all equipment or facilities subject to an NSPS Subpart as listed below:
 - b. 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE). Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are manufactured after April 1, 2006, and are not fire pump engines, and owners and operators of stationary CI ICE that modify or reconstruct their stationary CI ICE after July 11, 2005, are subject to this subpart. Based on the information submitted by Century, the CI ICE equipment to be used under MAQP #5195-00 may be subject to this subpart because the proposed engine was manufactured after the applicable date.

8. 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 a NESHAP-affected facility under 40 CFR Part 63 and is subject to the requirements of the following subparts.
 - a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to a NESHAPs Subpart as listed below.
 - b. 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants (HAPs) for Stationary Reciprocating Internal Combustion Engines (RICE). An owner or operator of a stationary reciprocating internal combustion engine (RICE) at a major or area source of HAP emissions is subject to this rule except if the stationary RICE is being tested at a stationary RICE test cell/stand. An area source of HAP emissions is a source that is not a major source. Based on the information submitted by Century, the RICE equipment to be used under MAQP #5195-00 may be subject to this subpart if Century remains in the same location for more than 12 months.

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

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. Century submitted the appropriate permit application fee for the current permit action.
2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit (excluding an open burning permit) issued by the Department. The air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that prorate 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 air contaminant sources that have the potential to emit (PTE) greater than 25 tons per year of any pollutant. Century has a PTE greater than 25 tons per year of particulate matter (PM); 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. Century submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. Century submitted an affidavit of publication of public notice for the 01/11/2018 issue of the *Big Timber Pioneer*, a newspaper of general circulation in the Town of Big Timber in Sweet Grass County, as proof of compliance with the public notice requirements.
6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving 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. 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 this facility is not a listed source and the facility's PTE is below 250 tons per year of any pollutant (excluding fugitive emissions) and, therefore, does not require a New Source Review (NSR) analysis.

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 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 (PM₁₀) in a serious PM₁₀ nonattainment area.
2. ARM 17.8.1204 Air Quality Operating Permit Program. (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 #5195-00 for Century, the following conclusions were made:
 - a. The facility's PTE is less than 100 tons/year for any pollutant.
 - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year for all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility may be subject to NSPS 40 CFR 60 IIII.
 - e. This facility may be subject to NESHAP 40 CFR 63 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.

Based on these facts, the Department determined that Century will be a minor source of emissions as defined under Title V.

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 technically practicable and economically feasible, except that BACT shall be utilized.

A. Particulate Emissions

Century has proposed the use of a centralized dust collection filter system to capture the particulate matter from the loading and storage of product in the silos. The efficiency of capture of particulate matter for the centralized dust collection system is expected to be 99.9%. Because Century has proposed a particulate matter emissions control technology that is considered to be the best performing for these types of applications, no other technologies were contemplated. Century shall use a filter vent to capture cement particulate during the batching process.

The Department determined that this equipment that is required to be operated to ensure compliance with the general opacity rule of 20% opacity, constitutes BACT for this source. The control options selected contain control equipment and control costs comparable to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

B. Fugitive Emissions

Two types of emission controls are readily available and used for dust suppression of fugitive emissions that result from the operation of equipment and associated activities. These two control methods are water and chemical dust suppressant. Both suppressants could be used for dust control for the area surrounding the concrete plant and for emissions from the handling of aggregate materials.

However, in view of the fact that water is more readily available, more cost effective, is equally effective as chemical dust suppressant, while presenting less potential environmental quality degradation, water has been identified as the most appropriate method of pollution control of particulate emissions. In addition, water suppression has been required of recently permitted similar sources. However, Century has the option to use chemical dust suppressant to assist in controlling particulate emissions.

The Department determined that using water spray, water, and/or chemical dust suppressant to maintain compliance with the opacity requirements and reasonable precaution limitation constitutes BACT for the operation for the additional equipment.

C. Diesel Engine

Due to the limited amount of emissions produced by the proposed EPA Tier 3 diesel-fired engine used in association with MAQP #5195-00 and the lack of cost effective add-on controls, such add-on controls would be cost prohibitive.

Therefore, the Department determined that proper operation and maintenance with no add-on controls would constitute BACT for the diesel-fired engine. The engine as proposed is an EPA Tier 3 engine, which by default has relatively low emission levels.

The engine would be required to comply with the federal engine emission limitations including EPA Tiered emission standards for non-road engines (40 CFR Parts 89 and 1039), NSPS 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 this engine.

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

D. Diesel-fired Water Heaters

For the two diesel-fired heaters used to heat water at the site, add-on controls would be cost prohibitive for the heaters which are likely to have intermittent use based on ambient temperatures. Therefore, no add-on controls are required for the two water heaters and proper operation and maintenance of the heaters constitutes BACT for the two water heaters.

IV. Emission Inventory

Emission Source	TPY						VOC	SO ₂
	PM _{fil}	PM _{10fil}	PM _{2.5fil}	PM _{con}	NO _x	CO		
Aggregate delivery to ground storage (3-05-011-21)	5.64	2.70	0.40					
Sand delivery to ground storage (3-05-011-22)	1.31	0.62	0.09					
Aggregate transfer to conveyor (3-05-011-23)	5.64	2.70	0.40					
Sand transfer to conveyor (3-05-011-24)	1.31	0.62	0.09					
Aggregate transfer to elevated storage (3-05-011-04)	5.64	2.70	0.40					
Sand transfer to elevated storage (3-05-011-05)	1.31	0.62	0.09					
Cement delivery to silo (3-05-011-07)	0.21	0.07	0.01					
Cement supplement delivery to silo (3-05-011-17)	0.28	0.16	0.02					
Weigh hopper loading (3-05-011-08)	6.92	4.04	0.61					
Truck Mix Loading (3-05-011-10)	24.21	6.50	0.97					
Diesel Engine EPA Tier 3 (685 hp)	0.99	0.99	0.99	0.16	19.84	17.20	7.54	6.15
Heaters (Diesel-Fired (2))	0.48	0.48	0.48	3.10	4.77	1.20	0.05	0.03
Unpaved Roads	5.49	1.51	0.30					
Total Emissions Excluding Unpaved Roads	53.95	22.18	4.58	3.26	24.62	18.40	7.59	6.18

** CO = carbon monoxide

(fil) = filterable

HAPs = hazardous air pollutants

hp = horsepower

lb = pound

N/A = not applicable

ND = no data available

NO_x = oxides of nitrogen

PMfil = filterable particulate matter

PM10fil = filterable particulate matter with an aerodynamic diameter of 10 microns or less

PM2.5fil = filterable particulate matter with an aerodynamic diameter of 2.5 microns or less

PMcon = condensable particulate matter

SO₂ = sulfur dioxide

TPH = tons per hour

TPY = tons per year

VOC = volatile organic compounds

yr = year

Footnotes:

- Inventory reflects maximum allowable emissions for all pollutants based on maximum production and year-round operation (8,760 hours). The facility did not take limits on production or hours of operation.

CONCRETE BATCH PLANT EMISSIONS

Based on 1 yd³ = 4024 lbs and the following avg material composition (AP 42, Chapter 11.12, 6/06)
1865 lb/yd³ coarse aggregate per yd³

1428 lb/yd³ sand per yd³
491 lb/yd³ cement per yd³

73 lb/yd³ cement supplement per yd³

167 lb/yd³ water (~20 gal) per yd³

Maximum Process Rate = 200 yd³/hr (max concrete capacity)

Maximum Hours of Operation = 8,760 hrs/yr

Truck Mix Loading (3-05-011-10)

| Aggregate delivery to ground storage (3-05-011-21)

PM Emissions:

Based on AP-42

Emission Factor = 0.0069 lb/ton (uncontrolled, AP 42, Table 11.12-2, 6/06)

Calculation: $(200 \text{ yd}^3/\text{hr}) * (1865 \text{ lb/yd}^3) * (\text{ton}/2000 \text{ lb}) * (8760 \text{ hrs/yr}) * (0.0069 \text{ lb/ton}) * (\text{ton}/2000 \text{ lb}) = 5.64 \text{ ton/yr}$

PM₁₀ Emissions:

Based on AP-42

Emission Factor = 0.0033 lb/ton (uncontrolled, AP 42, Table 11.12-2, 6/06)

Calculation: $(200 \text{ yd}^3/\text{hr}) * (1865 \text{ lb/yd}^3) * (\text{ton}/2000 \text{ lb}) * (8760 \text{ hrs/yr}) * (0.0033 \text{ lb/ton}) * (\text{ton}/2000 \text{ lb}) = 2.70 \text{ ton/yr}$

| Sand delivery to ground storage (3-05-011-22)

PM Emissions:

Based on AP-42

Emission Factor = 0.0021 lb/ton (uncontrolled, AP 42, Table 11.12-2, 6/06)

Calculation: $(200 \text{ yd}^3/\text{hr}) * (1428 \text{ lb/yd}^3) * (\text{ton}/2000 \text{ lb}) * (8760 \text{ hrs/yr}) * (0.0021 \text{ lb/ton}) * (\text{ton}/2000 \text{ lb}) = 1.31 \text{ ton/yr}$

PM₁₀ Emissions:

Based on AP-42

Emission Factor = 0.00099 lb/ton (uncontrolled, AP 42, Table 11.12-2, 6/06)

Calculation: $(200 \text{ yd}^3/\text{hr}) * (1428 \text{ lb/yd}^3) * (\text{ton}/2000 \text{ lb}) * (8760 \text{ hrs/yr}) * (0.00099 \text{ lb/ton}) * (\text{ton}/2000 \text{ lb}) = 0.62 \text{ ton/yr}$

| Aggregate transfer to conveyor (3-05-011-23)

PM Emissions:

Based on AP-42

Emission Factor = 0.0069 lb/ton (uncontrolled, AP 42, Table 11.12-2, 6/06)

Calculation: $(200 \text{ yd}^3/\text{hr}) * (1865 \text{ lb/yd}^3) * (\text{ton}/2000 \text{ lb}) * (8760 \text{ hrs/yr}) * (0.0069 \text{ lb/ton}) * (\text{ton}/2000 \text{ lb}) = 5.64 \text{ ton/yr}$

PM₁₀ Emissions:

Based on AP-42

Emission Factor = 0.0033 lb/ton (uncontrolled, AP 42, Table 11.12-2, 6/06)

Calculation: $(200 \text{ yd}^3/\text{hr}) * (1865 \text{ lb}/\text{yd}^3) * (\text{ton}/2000 \text{ lb}) * (8760 \text{ hrs}/\text{yr}) * (0.0033 \text{ lb}/\text{ton}) * (\text{ton}/2000 \text{ lb}) = 2.70 \text{ ton}/\text{yr}$

| Sand transfer to conveyor (3-05-011-24)

PM Emissions:

Based on AP-42

Emission Factor = 0.0021 lb/ton (uncontrolled, AP 42, Table 11.12-2, 6/06)

Calculation: $(200 \text{ yd}^3/\text{hr}) * (1428 \text{ lb}/\text{yd}^3) * (\text{ton}/2000 \text{ lb}) * (8760 \text{ hrs}/\text{yr}) * (0.0021 \text{ lb}/\text{ton}) * (\text{ton}/2000 \text{ lb}) = 1.31 \text{ ton}/\text{yr}$

PM₁₀ Emissions:

Based on AP-42

Emission Factor = 0.00099 lb/ton (uncontrolled, AP 42, Table 11.12-2, 6/06)

Calculation: $(200 \text{ yd}^3/\text{hr}) * (1428 \text{ lb}/\text{yd}^3) * (\text{ton}/2000 \text{ lb}) * (8760 \text{ hrs}/\text{yr}) * (0.00099 \text{ lb}/\text{ton}) * (\text{ton}/2000 \text{ lb}) = 0.62 \text{ ton}/\text{yr}$

| Aggregate transfer to elevated storage (3-05-011-04)

PM Emissions:

Based on AP-42

Emission Factor = 0.0069 lb/ton (uncontrolled, AP 42, Table 11.12-2, 6/06)

Calculation: $(200 \text{ yd}^3/\text{hr}) * (1865 \text{ lb}/\text{yd}^3) * (\text{ton}/2000 \text{ lb}) * (8760 \text{ hrs}/\text{yr}) * (0.0069 \text{ lb}/\text{ton}) * (\text{ton}/2000 \text{ lb}) = 5.64 \text{ ton}/\text{yr}$

PM₁₀ Emissions:

Based on AP-42

Emission Factor = 0.0033 lb/ton (uncontrolled, AP 42, Table 11.12-2, 6/06)

Calculation: $(200 \text{ yd}^3/\text{hr}) * (1865 \text{ lb}/\text{yd}^3) * (\text{ton}/2000 \text{ lb}) * (8760 \text{ hrs}/\text{yr}) * (0.0033 \text{ lb}/\text{ton}) * (\text{ton}/2000 \text{ lb}) = 2.70 \text{ ton}/\text{yr}$

| Sand transfer to elevated storage (3-05-011-05)

PM Emissions:

Based on AP-42

Emission Factor = 0.0021 lb/ton (uncontrolled, AP 42, Table 11.12-2, 6/06)

Calculation: $(200 \text{ yd}^3/\text{hr}) * (1428 \text{ lb}/\text{yd}^3) * (\text{ton}/2000 \text{ lb}) * (8760 \text{ hrs}/\text{yr}) * (0.0021 \text{ lb}/\text{ton}) * (\text{ton}/2000 \text{ lb}) = 1.31 \text{ ton}/\text{yr}$

PM₁₀ Emissions:

Based on AP-42

Emission Factor = 0.00099 lb/ton (uncontrolled, AP 42, Table 11.12-2, 6/06)

Calculation: $(200 \text{ yd}^3/\text{hr}) * (1428 \text{ lb}/\text{yd}^3) * (\text{ton}/2000 \text{ lb}) * (8760 \text{ hrs}/\text{yr}) * (0.00099 \text{ lb}/\text{ton}) * (\text{ton}/2000 \text{ lb}) = 0.62 \text{ ton}/\text{yr}$

| Cement delivery to silo (3-05-011-07)

PM Emissions:

Based on AP-42

Emission Factor = 0.00099 lb/ton (controlled, AP 42, Table 11.12-2, 6/06)

Calculation: $(200 \text{ yd}^3/\text{hr}) * (491 \text{ lb}/\text{yd}^3) * (\text{ton}/2000 \text{ lb}) * (8760 \text{ hrs}/\text{yr}) * (0.00099 \text{ lb}/\text{ton}) * (\text{ton}/2000 \text{ lb}) = 0.21 \text{ ton}/\text{yr}$

PM₁₀ Emissions:

Based on AP-42

Emission Factor = 0.00034 lb/ton (controlled, AP 42, Table 11.12-2, 6/06)

Calculation: $(200 \text{ yd}^3/\text{hr}) * (491 \text{ lb}/\text{yd}^3) * (\text{ton}/2000 \text{ lb}) * (8760 \text{ hrs}/\text{yr}) * (0.00034 \text{ lb}/\text{ton}) * (\text{ton}/2000 \text{ lb}) = 0.07 \text{ ton}/\text{yr}$

Cement supplement delivery to silo (3-05-011-17)

PM Emissions:

Based on AP-42

Emission Factor = 0.0089 lb/ton (controlled, AP 42, Table 11.12-2, 6/06)

Calculation: $(200 \text{ yd}^3/\text{hr}) * (73 \text{ lb}/\text{yd}^3) * (\text{ton}/2000 \text{ lb}) * (8760 \text{ hrs}/\text{yr}) * (0.0089 \text{ lb}/\text{ton}) * (\text{ton}/2000 \text{ lb}) = 0.28 \text{ ton}/\text{yr}$

PM₁₀ Emissions:

Based on AP-42

Emission Factor = 0.0049 lb/ton (controlled, AP 42, Table 11.12-2, 6/06)

Calculation: $(200 \text{ yd}^3/\text{hr}) * (73 \text{ lb}/\text{yd}^3) * (\text{ton}/2000 \text{ lb}) * (8760 \text{ hrs}/\text{yr}) * (0.0049 \text{ lb}/\text{ton}) * (\text{ton}/2000 \text{ lb}) = 0.16 \text{ ton}/\text{yr}$

Weigh hopper loading (3-05-011-08)

PM Emissions:

Based on AP-42

Emission Factor = 0.0048 lb/ton (aggregate & sand, uncontrolled, AP 42, Table 11.12-2, 6/06)

Calculation: $(200 \text{ yd}^3/\text{hr}) * (3293 \text{ lb}/\text{yd}^3) * (\text{ton}/2000 \text{ lb}) * (8760 \text{ hrs}/\text{yr}) * (0.0048 \text{ lb}/\text{ton}) * (\text{ton}/2000 \text{ lb}) = 6.92 \text{ ton}/\text{yr}$

PM₁₀ Emissions:

Based on AP-42

Emission Factor = 0.0028 lb/ton (aggregate & sand, uncontrolled, AP 42, Table 11.12-2, 6/06)

Calculation: $(200 \text{ yd}^3/\text{hr}) * (3293 \text{ lb}/\text{yd}^3) * (\text{ton}/2000 \text{ lb}) * (8760 \text{ hrs}/\text{yr}) * (0.0028 \text{ lb}/\text{ton}) * (\text{ton}/2000 \text{ lb}) = 4.04 \text{ ton}/\text{yr}$

Truck Mix Loading (3-05-011-10)

PM Emissions:

Based on AP-42

Emission Factor = 0.098 lb/ton (cement & supplement, controlled, AP 42, Table 11.12-2, 6/06)

Calculation: $(200 \text{ yd}^3/\text{hr}) * (564 \text{ lb}/\text{yd}^3) * (\text{ton}/2000 \text{ lb}) * (8760 \text{ hrs}/\text{yr}) * (0.098 \text{ lb}/\text{ton}) * (\text{ton}/2000 \text{ lb}) = 24.21 \text{ ton}/\text{yr}$

PM₁₀ Emissions:

Based on AP-42

Emission Factor = 0.0263 lb/ton (cement & supplement, controlled, AP 42, Table 11.12-2, 6/06)

Calculation: $(200 \text{ yd}^3/\text{hr}) * (564 \text{ lb}/\text{yd}^3) * (\text{ton}/2000 \text{ lb}) * (8760 \text{ hrs}/\text{yr}) * (0.0263 \text{ lb}/\text{ton}) * (\text{ton}/2000 \text{ lb}) = 6.50 \text{ ton}/\text{yr}$

Diesel Engine EPA Tier 3			
Note: Emissions are based on the power output of the engine (685 hp).			
Operational Capacity of Engine = 685 hp	685	hp	
Hours of Operation = 8,760.00 hours	8,760.00	hours	
PM Emissions:			
PM Emissions = 0.99 ton/yr (Assume PM = PM10)	0.99	ton/yr	(Assume PM = PM10)
PM-10 Emissions:			
Emission Factor = 0.000330695121144646 lbs/hp-hr (EPA Tier 3 emission standards)	3.31E-04	lbs/hp-hr	standards)
Calculation: $(8,760 \text{ hours}) * (685 \text{ hp}) * (0.000331 \text{ lbs}/\text{hp-hr}) * (\text{ton}/2000 \text{ lb}) = 0.99 \text{ ton}/\text{yr}$	0.99	ton/yr	
PM_{con}			0.0077
Emission Factor = 0.0000539 lbs/hp-hr (AP42 Table 3.3-1 10/96)	0.00005	lbs/hp-hr	(AP42 Table 3.3-1 10/96)
Calculation: $(8,760 \text{ hours}) * (685 \text{ hp}) * (0.0000539 \text{ lbs}/\text{hp-hr}) * (\text{ton}/2000 \text{ lb}) = 0.16 \text{ ton}/\text{yr}$	0.16	ton/yr	
NOx Emissions:			
Emission Factor = 0.00661390242289292 lbs/hp-hr (EPA Tier 3 emission standards, NOx+VOC)			
Calculation: $(8,760 \text{ hours}) * (685 \text{ hp}) * (0.006614 \text{ lbs}/\text{hp-hr}) * (\text{ton}/2000 \text{ lb}) = 19.84 \text{ ton}/\text{yr}$	6.61E-03	lbs/hp-hr	(EPA Tier 3 emission standards, NOx+VOC)
	39687.38	lbs/yr	
CO Emissions:			
Emission Factor = 0.0057320487665072 lbs/hp-hr (EPA Tier 3 emission standards)			
Calculation: $(8,760 \text{ hours}) * (685 \text{ hp}) * (0.005732 \text{ lbs}/\text{hp-hr}) * (\text{ton}/2000 \text{ lb}) = 17.20 \text{ ton}/\text{yr}$	5.73E-03	lbs/hp-hr	standards)
	34395.73	lbs/yr	
VOC Emissions:			
Emission Factor = 0.0025141 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, TOC, Exhaust & Crankcase, 10/96)			
Calculation: $(8,760 \text{ hours}) * (685 \text{ bhp}) * (0.0025141 \text{ lbs}/\text{hp-hr}) * (\text{ton}/2000 \text{ lb}) = 7.54 \text{ ton}/\text{yr}$	2.51E-03	lbs/hp-hr	(AP-42, Sec. 3.3, Table 3.3-1, TOC, Exhaust & Crankcase, 10/96)
	15086.11	lbs/yr	
SOx Emissions:			
Emission Factor = 0.00205 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)			
Calculation: $(8,760 \text{ hours}) * (685 \text{ hp}) * (0.00205 \text{ lbs}/\text{hp-hr}) * (\text{ton}/2000 \text{ lb}) = 6.151 \text{ ton}/\text{yr}$	2.05E-03	lbs/hp-hr	(AP-42, Sec. 3.3, Table 3.3-1, 10/96)
	12301.23	lbs/yr	

Heater [SCC 1-02-005-02]

Fuel Type: #2 Diesel

Burner Firing Rate: 3.5 mmBtu/hr (Maximum Design) (2 Total) 7.0 mmBtu/hr

Fuel Rate (Diesel) 380.6 54.5 gallons/hr
lb/hr

PM (Filterable PM)

Emission Factor 2 lb/1000 gallons [AP-42 Table 1.3-1, 5/10; EF based on Distillate oils]

Calculations $(2 \text{ lbs/1000 gal}) * (54.5 \text{ gals/hr}) = 0.109 \text{ lbs/hr}$
 $(.109 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) = 0.47742 \text{ TPY}$

Condensable PM

Emission Factor 1.3 lb/1000 gallons [AP-42 Table 1.3-1, 5/10; EF based on Distillate oils]

Calculations $(1.3 \text{ lbs/1000 gal}) * (54.5 \text{ gals/hr}) = 0.07085 \text{ lbs/hr}$
 $(.07085 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) = 3.10323 \text{ TPY}$

CO Emissions (uncontrolled)

Emission Factor 5 lb/1000 gallons [AP-42 Table 1.3-1, 5/10; EF based on Distillate oils]

Calculations $(5 \text{ lbs/1000 gal}) * (54.5 \text{ gals/hr}) = 0.2725 \text{ lbs/hr}$
 $(0.275 \text{ lbs/hr}) * 8760 \text{ hrs/yr} * (0.0005 \text{ tons/lb}) = 1.2045 \text{ TPY}$

NO_x Emissions (uncontrolled)

Emission Factor 20 lb/1000 gallons [AP-42 Table 1.3-1, 5/10; EF based on Distillate oils]

Calculations $(20 \text{ lbs/1000 gal}) * (54.5 \text{ gals/hr}) = 1.09 \text{ lbs/hr}$
 $(0.109 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) = 4.7742 \text{ TPY}$

SO₂ Emissions (uncontrolled)

Emission Factor 142 lb/1000 gallons [AP-42 Table 1.3-1, 5/10; EF based on Distillate oils]

Calculations $(142 \text{ lbs/1000 gal}) * (0.05\% \text{ S}) * (54.5 \text{ gals/hr}) = 0.0071 \text{ lbs/hr}$
 $(0.0071 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) = 0.031098 \text{ TPY}$

VOC Emissions (uncontrolled)

Emission Factor 0.2 lb/1000 gallons [AP-42 Table 1.3-3, 5/10; EF based on Distillate oils]

Calculations $(0.2 \text{ lbs/1000 gal}) * (54.5 \text{ gals/hr}) = 0.0109 \text{ lbs/hr}$
 $(0.0109 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) = 0.047742 \text{ TPY}$

V. Existing Air Quality

This permit is for a facility in Stillwater County, Montana. Stillwater county has been designated unclassified/attainment with all ambient air quality standards.

VI. Ambient Air Impact Analysis

Based on the information provided and the conditions established in MAQP #5195-00, 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.

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	
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.

VIII. Environmental Assessment

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

DEPARTMENT OF ENVIRONMENTAL QUALITY
Air, Energy & Mining Division
Air Quality Bureau
P.O. Box 200901, Helena, Montana 59620
(406) 444-3490

ENVIRONMENTAL ASSESSMENT (EA)

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

Montana Air Quality Permit number (MAQP): 5195-00

EA Draft: 1/24/2018
EA Final: 2/9/2018
Permit Final: 2/27/2018

1. *Legal Description of Site:* The concrete batch plant would be located in the NW ¼ of section 4, Township 1 North, Range 18 East in Stillwater County, Montana. It is approximately 20 miles northwest of Columbus, MT. The facility would be located on private land currently used for ranching and agriculture.
2. *Description of Project:* Century proposed operate a concrete batch plant that produces and sells concrete for construction and transportation projects.
3. *Objectives of Project:* The project objective is to generate profit for the company by producing concrete to the local area near the site.
4. *Alternatives Considered:* In addition to the proposed action, the Department also considered the “no-action” alternative. The no action alternative would mean that the permit would not be issued to allow Century to operate the proposed concrete batch plant northwest of Columbus. If the project is not developed, the project that it would support would need to concrete from a different source and perhaps, further away. Therefore, the “no-action” alternative was eliminated from further consideration. Other alternatives considered were discussed in the BACT analysis, Section III in the permit.
5. *A Listing of Mitigation, Stipulations, and Other Controls:* A list of enforceable conditions, including a BACT analysis, would be included in MAQP #5195-00.

The proposed project is not within Sage Grouse Habitat and was not required to be reviewed by the Montana Sage Grouse Oversight Team (MSGOT).

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.

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*

Terrestrial and aquatic life and habitats may be affected by this project. The proposed project does not appear to have an existing pit nor is the site currently identified as being a future permitted pit. Since the initial project may be in support of the construction of wind turbine bases, the site location is likely temporary in nature but any disturbances would be new to the area.

B. *Water Quality, Quantity and Distribution*

Water or chemical dust suppressant would be used for dust suppression on the surrounding roadways and areas of operation and within the operation.

C. *Geology and Soil Quality, Stability and Moisture*

The Department is not aware of any fragile, erosive, susceptible to compaction, or unstable geology or soil near the project site. There are no special reclamation considerations known.

D. *Vegetation Cover, Quantity, and Quality*

At this new site, new disturbance of up to two acres are estimated. Current landcover for the area is lowland/Prairie Grassland often with a mix of wheatgrass, needlegrass and fescue.

E. *Aesthetics*

The proposed project is located on a new site but located on private land so impact on aesthetics would be limited to local traffic only.

F. *Air Quality*

MAQP 5195-00 would contain conditions limiting the allowable emissions from the facility. The amount of allowable emissions generated from the plant below those levels which the Department would require more rigorous air quality impact analysis be conducted. The facility would be in an unclassified/attainment area for all regulated pollutants.

G. *Unique Endangered, Fragile, or Limited Environmental Resources*

The Department conducted an Environmental Summary on the Montana Natural Heritage Program (MNHP) webpage in an effort to identify species of concern that may be found in the area where the initial proposed facility would occur. Search results have concluded there are twenty-four animal species of concern in the area. Area, in this case, would be defined by the township and range of the propose site, with an additional one mile buffer surrounding the interior section. The known species of concern are the Yellowstone Cutthroat Trout, Northern Redbelly Dace,

Bald Eagle, Pinyon Jay, Golden Eagle, Veery, Great Blue Heron, Hoary Bat, Brewer's Sparrow, Plains Spadefoot, Long-billed Curlew, Little Brown Myotis, Greater Short-horned Lizard, Black-tailed Prairie Dog, Green-tailed Towhee, Sage Thrasher, Clark's Nutcracker Cassin's Finch, Black-billed Cuckoo, Bobolink, Sprague's Pipit, *Isocapnia integra*, *Triodanis leptocarpa*, and the Plains Hog-nosed Snake. Effects of operating the proposed project in this area would be mitigated since the proposed disturbed site is only 2 acres and the project is temporary, and operates on an intermittent basis. Therefore, the Department determined that any effects upon these species would likely be minor and short-lived.

The location is not part of established Montana Sage Grouse Habitat under the Sage Grouse Executive Order and therefore no consultation was required.

H. *Sage Grouse Executive Order*

The location is not part of established Montana Sage Grouse Habitat under the Sage Grouse Executive Order and therefore no consultation was required.

I. *Demands on Environmental Resource of Water, Air and Energy*

Water or chemical dust suppressant is required for dust suppression of particulate emission being generated at the site. There would be deliveries of cement, sand and aggregate from the surrounding area to mix and make the concrete. Air resources would be protected through the MAQP operating conditions. A diesel-fired engine would be used for batch plant power and two diesel-fired water heaters would also be used.

J. *Historical and Archaeological Sites*

The Department contacted the Montana History Society State Historical Preservation Office (SHPO) in an effort to identify any historical and/or archaeological sites that may be present in the proposed area of construction and operation. There are two sites of historical or archaeological significance present. No structures would be expected to be removed or altered as a result of the issuance of MAQP #5195-00; no impacts to known historically significant sites would be expected with the small footprint planned. It should be noted that the State Historical Preservation Office maintains the position that any structure over fifty years of age is considered historic and is potentially eligible for listing on the National Register of Historic Places. If any structures are to be altered and are over fifty years old, they would recommend that they be recorded and a determination of their eligibility be made. As long as there would be no disturbance or alteration to structures over fifty years of age, SHPO states there is a low likelihood cultural properties would be impacted.

K. *Cumulative and Secondary Impacts*

The operation of the proposed project would not likely contribute to cumulative and secondary impacts as the location is very temporary in nature.

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 proposed project would not be expected to cause any disruption to the social structures and mores in the area because the source would be a minor industrial source in the general vicinity of Columbus, MT. The permitting action would not affect the social structures and mores.

B. *Cultural Uniqueness and Diversity*

The impact to cultural uniqueness and diversity of these areas would be minor from the proposed equipment because the site would be temporary in an area that is on private land. There is no effect on the cultural uniqueness and diversity.

C. *Local and State Tax Base and Tax Revenue*

The proposed project would have little, if any impact on the local and state tax base and tax revenue due to its temporary nature. The facility would be a minor industrial source of emissions and would have seasonal intermittent operations. Thus, only minor impacts to the local and state tax base and revenue would be expected from the employees and facility production. The impacts to local tax base and revenue would be expected to be minor as the source would be portable and the money generated for taxes would be widespread.

D. *Agricultural or Industrial Production*

The proposed project does not appear to have an existing pit nor is the site currently identified as being a future permitted pit. There would be no effect on agriculture or industrial production as the site disturbance is only approximately 2 acres.

E. *Human Health*

MAQP 5195-00 incorporates conditions to ensure compliance with all applicable air quality rules and standards. The rules and standards are designed to protect human health. There are no known impacts to human health due to this permitting action.

F. *Access to and Quality of Recreational and Wilderness Activities*

Based on the information received from Century, no recreational activities or wilderness areas are near the proposed project site. No access to the public is available on the land where the proposed project would be located. No impacts to the access to and quality of the recreational and wilderness activities would be expected.

G. *Quantity and Distribution of Employment*

The proposed operation may employ up to eight full time employees.

H. *Distribution of Population*

No individuals would be expected to permanently relocate to this area as a result of this permit action. The proposed project would not impact the normal population distribution in the initial area of operation or any future operating site.

I. *Demands for Government Services*

Minor increases would be seen in traffic on existing roadways in the area while the concrete batch plant operates. In addition, government services would be required for acquiring the appropriate permits from government agencies. Demands for government services would increase.

J. *Industrial and Commercial Activity*

The operation of the concrete batch plant would increase the industrial and commercial activity the same for the area as this is a new site for a portable batch concrete plant.

K. *Locally Adopted Environmental Plans and Goals*

There are no known local Environmental plans and goals but if they exist, Century would need to comply with those.

L. *Cumulative and Secondary Impacts*

The operations of the proposed project would impact the economy of the surrounding area by providing construction materials to the nearby area. Socially this project would not have cumulative or secondary impacts to the nearby communities.

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

The current permitting action is for the construction and operation of concrete batch plant. MAQP #5195-00 includes conditions and limitations to ensure the facility would 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 Quality Bureau, Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

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