



Montana Department of
ENVIRONMENTAL QUALITY

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September 20, 2011

Wade Hansen
C&S Construction
P.O. Box 797
Billings, MT 59103

Dear Mr. Hansen,

Montana Air Quality Permit #3163-04 is deemed final as of September 20, 2011, by the Department of Environmental Quality (Department). This permit is for crushers, a screen, generators and associated equipment. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

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

Craig Henrikson, PE
Environmental Engineer
Air Resources Management Bureau
(406)-444-6711

VW:CH
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #3163-04

C&S Construction, Inc.
P.O. Box 797
Billings, MT 59103

September 20, 2011



MONTANA AIR QUALITY PERMIT

Issued To: C&S Construction, Inc. Montana Air Quality Permit #3163-04
P.O. Box 797 Application Complete: July 26, 2011
Billings, MT 59103 Preliminary Decision Issued: August 15, 2011
Department Decision Issued: September 2, 2011
Permit Final: September 20, 2011
AFS #: 777-3163

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to C&S Construction, Inc. (C&S) 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

MAQP #3163-04 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.

B. Current Permit Action

On July 26, 2011, the Department received a request from C&S to modify MAQP #3163-03 by adding additional equipment including a closed circuit cone crusher, multiple conveyors, a screen, and a new larger diesel generator. C&S also has requested to keep some of the current permitted equipment, including an impact crusher and up to an 88 horsepower (hp) diesel generator used for an existing conveyor.

SECTION II: Conditions and Limitations

A. Emission Limitations

1. All visible emissions from any Standards of Performance for New Stationary Sources (NSPS)-affected crusher shall not exhibit an opacity in excess of the following averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
 - For crushers that commence construction, modification, or reconstruction on or after April 22, 2008: 12% opacity
 - For crushers that commence construction, modification, or reconstruction after August 31, 1983, but before April 22, 2008: 15% opacity
2. All visible emissions from any other NSPS-affected equipment, other than a crusher (such as screens or conveyor transfers), shall not exhibit an opacity in excess of the following averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO).

- For equipment that commences construction, modification, or reconstruction on or after April 22, 2008: 7% opacity
 - For equipment that commences construction, modification, or reconstruction after August 31, 1983, but before April 22, 2008: 10% opacity
3. C&S shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart III, *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 III; ARM 17.8.342 and 40 CFR 63, Subpart ZZZZ).
 4. All visible emissions from any non-NSPS affected equipment shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8. 304).
 5. Water and spray bars shall be available on site at all times and operated, as necessary, to maintain compliance with the opacity limitations in Sections II.A.1, II.A.2, and II.A.4 (ARM 17.8.752).
 6. C&S shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).
 7. C&S shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section II.A.6 (ARM 17.8.749 and ARM 17.8.752).
 8. C&S shall not cause or authorize to be discharged into the atmosphere from any street, road, or parking lot any visible fugitive emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes and must take reasonable precautions to control emissions of airborne Particulate Matter (PM) (ARM 17.8.308 and ARM 17.8.752).
 9. C&S shall not operate more than two crushers at any given time and the combined maximum rated design capacity of the crushers shall not exceed 800 tons per hour (TPH) (ARM 17.8.749).
 10. C&S shall not operate more than one independent screen at any given time and the maximum rated design capacity of the screen shall not exceed 200 TPH (ARM 17.8.749). This does not prevent operation of the integral screen located on the cone crusher at the same time as the independent screen.
 11. C&S shall not operate more than two diesel fired engines driving electrical generators (or directly driving crushers, screens, etc.) at any given time and the combined maximum rated design capacity shall not exceed 838 horsepower (hp) (ARM 17.8.749).
 12. Each diesel generator shall be limited to 3,000 hours of operation during any rolling 12-month time period (ARM 17.8.749).

13. If the permitted equipment is used in conjunction with any other equipment owned or operated by C&S, 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).
14. C&S shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO, *Standards of Performance for Nonmetallic Mineral Processing Plants* (ARM 17.8.340 and 40 CFR 60, Subpart OOO).

B. Testing Requirements

1. Within 60 days after achieving maximum production, but no later than 180 days after initial start-up, an Environmental Protection Agency (EPA) Method 9 opacity test and/or other methods and procedures, as specified in 40 CFR 60.675 must be performed on all NSPS affected equipment to demonstrate compliance with the emission limitations contained in Sections II.A.1 and II.A.2 (ARM 17.8.340 and 40 CFR 60, Subpart A and Subpart OOO).
2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
3. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. If this crushing/screening plant is moved to another location, an Intent to Transfer Form must be sent to the Department and 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 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. C&S shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but not be limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.

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

3. C&S 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 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. C&S shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. The records compiled in accordance with this permit shall be maintained by C&S as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).
5. C&S shall annually certify that its emissions are less than those would require the facility to obtain an air quality operating permit as required by ARM 17.8.1204(3)(b). The annual certification shall be submitted along with the annual emissions inventory information (ARM 17.8.749 and ARM 17.8.1204).
6. C&S shall document, by month, the hours of operation of the diesel engine/generators. By the 25th of each month, C&S shall calculate the hours of operation each diesel engine/generator for the previous month. The monthly information will be used to demonstrate compliance with the rolling 12-month limitation in Section II.A.12. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

SECTION III: General Conditions

- A. Inspection – C&S 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 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 all the terms, conditions, and matters stated herein shall be deemed accepted if C&S fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations - Nothing in this permit shall be construed as relieving C&S 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, failure to pay of the annual operation fee by C&S may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Duration of Permit - Construction or installation must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).
- I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.
- J. C&S 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
C&S Construction, Inc.
MAQP #3163-04

I. Introduction/Process Description

A. Permitted Equipment

C&S Construction, Inc., Crushing Division (C&S) operates a portable Kolberg/Pioneer 4233 impact crusher (with a maximum capacity up to 200 tons per hour (TPH)), a Cedar Rapids MVP 280 Closed Circuit Cone (crusher) with integral scalping screen, a 4' by 10' independent screen (maximum capacity 200 TPH), an 88 horsepower (hp) diesel generator, a 750 hp diesel generator and a number of conveyors. One conveyor is a Superior 36" by 50' stackable conveyor and the other is a Fisher 36" by 125' Radial Stacker.

B. Source Description

C&S proposes to use this crushing/screening plant and associated equipment to crush and sort sand and gravel materials for use in various construction operations. For a typical operational setup, materials are loaded into the primary impact crusher using a wheeled loader, and then fed the secondary crusher. Material is separated by screening and finally sent to stockpiles for sale and use in construction operations.

C. Home Pit Location

C&S has indicated it will maintain location 45.83 degrees North and 108.47 degrees West as its "home pit" and when not at other locations will return back to this location where it may reside for longer than 12 months. This location is the approximate center-point of the parcel owned by C&S Construction located at the NW¹/₄ of the SE¹/₄ of Section 15, Township 1 North, Range 26 East, Yellowstone County, Montana.

D. Permit History

On September 8, 2001, C&S was issued **MAQP #3163-00** to operate a portable 1966 Pioneer jaw crusher (maximum capacity 200 TPH), a 1966 Pioneer roll crusher (maximum capacity 200 TPH), a 2000 Nordberg screen (maximum capacity 200 TPH), a 125 kW diesel generator, a 280 kW diesel generator, and associated equipment.

On July 19, 2004, C&S submitted a complete permit application to replace a Caterpillar diesel generator (280 kW) and a duplex crusher consisting of a 1966 Pioneer jaw crusher (maximum capacity 200 TPH) and a 1966 Pioneer rolls crusher (maximum capacity 200 TPH) with a 2000 TESAB impactor crusher (maximum capacity up to 200 TPH), a diesel engine (up to 300 HP), and an additional crusher and screen (maximum capacity up to 200 TPH each). **MAQP #3163-01** replaced MAQP #3163-00.

On March 21, 2006, the Department of Environmental Quality (Department) received a request from Rocky Mountain Recycling & Crushing, Inc., Crushing Division (RMRC) to update the equipment list for MAQP #3163-01. Then on May 8, 2006, the Department received a request from RMRC to change the name on MAQP #3163-01 from C&S to RMRC. **MAQP #3163-02** replaced MAQP #3163-01.

On December 15, 2009, the Department received a request from C&S Construction, Inc., Crushing Division (C&S) to change the name on MAQP #3163-02 from Rocky Mountain Recycling & Crushing, Inc. (RMRC) to C&S. The current permit action transfers ownership of MAQP #3163-02 from RMRC to C&S and updates the MAQP to reflect the current permit language used by the Department. **MAQP #3163-03** replaced MAQP #3163-02.

E. Current Permit Action

On July 26, 2011, the Department received a request from C&S to modify MAQP #3163-03 by adding additional equipment including a closed circuit cone crusher, conveyors, screen, and a new larger diesel generator. C&S also has requested to keep some of the current permitted equipment, including an impact crusher and up to an 88 horsepower (hp) diesel generator used for an existing conveyor. The analysis assumed the following equipment:

Cedar Rapids MVP 280 Cone Crusher with recycle and integral scalping screen
(Maximum Capacity = 600 tons/hr)
Superior Stackable Conveyor (Conveyor and Stacker total = 800 tons/hr)
Fisher Radial Stacker (Conveyor and Stacker total = 800 tons/hr)
Kolman Athey Screen (Maximum Capacity = 200 tons/hr)
Caterpillar Engine/Diesel Generator up to 750 hp
Diesel Engine/Generator up to 88 hp
Pioneer Impact Crusher (Maximum Capacity = 200 tons/hr)

F. Additional Information

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

II. Applicable Rules and Regulations

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

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

1. ARM 17.8.101 Definitions. This rule 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).

C&S 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 Quality Monitoring
2. ARM 17.8.210 Ambient Air Quality Standard for Sulfur Dioxide
3. ARM 17.8.211 Ambient Air Quality Standard for Nitrogen Dioxide
4. ARM 17.8.212 Ambient Air Quality Standard 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 17.8.223 Ambient Air Quality Standard for PM₁₀

C&S 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, C&S 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 Standards of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). C&S 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 of facilities subject to an NSPS Subpart as listed below.
 - b. 40 CFR 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants. In order for a crushing plant to be subject to this subpart, the facility must meet the definition of an affected facility and, the affected equipment must have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted by C&S, the portable crushing equipment to be used under MAQP #3163-04 is subject to this requirement because it meets the definition of an affected facility and has been constructed or modified after August 31, 1983.
 - c. 40 CFR 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. Owners and operators of stationary compression ignition internal combustion engines (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, are subject to this subpart. In order to keep the permit de minimis-friendly, this permit authorizes the use of two diesel fired engines to drive electrical generators and the combined maximum rated design capacity shall not exceed 833 hp. Based on the information submitted to the Department, one or more of the diesel engines to be used under MAQP #3163-04 may be subject to this subpart. Engines that are added in the future may also be subject to this subpart.

8. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. The source, as defined and applied in 40 CFR Part 63, shall comply with the requirements of 40 CFR Part 63, as listed below:
 - a. 40 CFR 63, Subpart A – General Provisions apply to all equipment of facilities subject to a NESHAP Subpart as listed below:
 - b. 40 CFR 63, Subpart ZZZZ – NESHAPs for Stationary Reciprocating Internal Combustion Engines (RICE). Pursuant to 40 CFR 63.6590(a), an affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand. Pursuant to 40 CFR 63.6590(a)(2)(iii), a stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006. Based on the information submitted to the Department, the diesel engines to be used under MAQP #3163-04 are subject to this subpart. However, pursuant to 40 CFR 63.6590(b)(3), RICE do not have any requirements under this subpart unless they are new or reconstructed after June 12, 2006. Engines added in the future may also be subject to this subpart.

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. C&S submitted the appropriate application fee 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. C&S submitted an affidavit of publication of public notice for the July 22, 2011, issue of the *Billings Gazette*, a newspaper of general circulation in the City of Billings, Yellowstone County, as proof of compliance with the public notice requirements.
2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department; the air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

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

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

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

2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit 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. C&S has a PTE greater than 15 tons per year of total particulate matter (PM), particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀), and oxides of nitrogen (NO_x); therefore, an MAQP 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. C&S 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. C&S submitted an affidavit of publication notice for the 22nd of July, 2011 in the Billings Gazette, a newspaper of general circulation in the City of Billings in Yellowstone County, MT 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 C&S 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 MAQP 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 MAQP 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 MAQP 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 MAQP 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 (excluding fugitive emissions).

- G. ARM 17.8, Subchapter 12 - Operating Permit Program Applicability, including, but not limited to:
1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. PTE > 100 tons/year of any pollutant;
 - b. PTE > 10 tons/year of any one hazardous air pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
 - c. PTE > 70 tons/year of PM₁₀ in a serious PM₁₀ nonattainment area.
 2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #3163-04 for C&S, the following conclusions were made:
 - a. The facility's PTE is less than 100 tons/year for any pollutant.
 - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is subject to area source provisions of a current National Emissions Standard for Hazardous Air Pollutants (NESHAP) (40 CFR 63, ZZZZ).
 - e. This facility is subject to current NSPS standards (40 CFR 60, Subpart OOO and potentially Subpart IIII).
 - f. This source is not a Title IV affected source or a solid waste combustion unit.
 - g. This source is not an EPA designated Title V source.

Based on these facts, the Department has determined that C&S will be a minor source of emissions as defined under the Title V. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, C&S will be required to obtain a Title V Operating Permit.

III. BACT Determination

A BACT determination is required for each new or modified source. C&S 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. All visible emissions from the facility are limited to opacity as referenced in Sections II.A.1, II.A.2, and II.A.4 (ARM 17.8.752). In addition, all visible emissions from any other associated equipment are limited to 20% opacity. Also, C&S must take reasonable precautions to limit the fugitive emissions of airborne particulate matter on haul roads, access roads, parking areas, and general plant property. C&S shall use water spray bars and/or chemical dust suppressant, as necessary to maintain compliance with the opacity and reasonable precaution limitations.

Based on the relatively low amount of particulate, PM₁₀, NO_x, CO, VOC and SO_x emitted it is economically infeasible to require pollution controls on the diesel generator. The control options selected have controls and control costs similar to other recently permitted similar sources and are capable of achieving the appropriate emission standards

IV. Emission Inventory

Emission Source	Emissions Tons/Year [PTE]						
	PM	PM ₁₀	PM _{2.5}	CO	NO _x	SO _x	VOC
Impact Crusher	1.05	0.47	0.09				
Cone Crusher	3.15	1.42	0.26				
Truck Unloading (Assume all material is unloaded that can be processed in crushers)	0.00	0.06					
Screen (Assume all material is unloaded that can be processed in crushers)	1.93	0.65	0.04				
Transfer Points (Assume 3 Transfer Points that are Controlled Covering alternate product streams)	1.47	0.48	0.14				
Pile Formation (Assume sum of all crushers)	11.33	5.36	0.81				
Truck Loading (Assume all material is eventually loaded)	0.49	0.16					
Diesel Generators (Total 838 hp)	2.77	2.77	2.77	8.40	38.97	2.58	3.16
Unpaved Roadways (Haul Roads)	5.39	1.49	0.15				
TOTAL EMISSIONS >	27.58	12.85	4.26	8.40	38.97	2.58	3.16

C and S Construction Emission Inventory Calculation Details

Impact Crusher No. 1

Crusher Capacity

Process Rate: 200 ton/hr
 Operating Hours: 8760 hours/year

PM Emissions:

Emission Factor: 0.0012 lbs/ton [AP-42 Table 11.19.2-2 8/04]

Calculations: (0.0012 lbs/ton) * (200.00 ton/hour) = 0.24 lbs/hr
 (0.24 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) = 1.05 TPY

PM₁₀

Emissions:

Emission Factor 0.00054 lbs/ton [AP-42 Table 11.19.2-2 8/04]

Factor

Calculations (0.00054 lbs/ton) * (200.00 ton/hour) = 0.11 lbs/hr
(0.11 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) = 0.47 TPY

PM_{2.5}

Emissions:

Emission Factor 0.0001 lbs/ton [AP-42 Table 11.19.2-2 8/04]

Factor

Calculations (0.0001 lbs/ton) * (200.00 ton/hour) = 0.02 lbs/hr
(0.02 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) = 0.09 TPY

*Rollercone MVP 280 Closed Circuit Cone (Modeled as "tertiary controlled")
Cone
Crusher*

Process Rate: 600.0 ton/hr

Operating Hours 8760 hours/year

PM

Emissions:

Emission Factor 0.0012 lbs/ton [AP-42 Table 11.19.2-2 8/04]

Factor

Calculations (0.0012 lbs/ton) * (600.00 ton/hour) = 0.72 lbs/hr
(0.72 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) = 3.15 TPY

PM₁₀

Emissions:

Emission Factor 0.00054 lbs/ton [AP-42 Table 11.19.2-2 8/04]

Factor

Calculations (0.00054 lbs/ton) * (600.00 ton/hour) = 0.32 lbs/hr
(0.32 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) = 1.42 TPY

PM_{2.5}

Emissions:

Emission Factor 0.0001 lbs/ton [AP-42 Table 11.19.2-2 8/04]

Factor

Calculations (0.0001 lbs/ton) * (600.00 ton/hour) = 0.06 lbs/hr
(0.06 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) = 0.26 TPY

Truck Unloading (Assume all material is unloaded that can be processed in crushers)

Process Rate: 800.0 ton/hr (Assumes each crusher operates independently)

Operating Hours 8760 hours/year

PM₁₀

Emissions:

Emission Factor 0.000016 lbs/ton [AP-42 Table 11.19.2-2 8/04]

Factor

Calculations $(0.000016 \text{ lbs/ton}) * (800.00 \text{ ton/hour}) =$ 0.01 lbs/hr
 $(0.01 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) =$ 0.06 TPY

Screen (Assume all material is unloaded that can be processed in crushers)

Process 200 ton/hr
 Rate:
 Operating 8760 hours/year
 Hours

PM (Screening controlled)
 Emissions:

Emission 0.00220 lbs/ton [AP-42 Table 11.19.2-2 8/04]
 Factor

Calculations $(0.0022 \text{ lbs/ton}) * (200.00 \text{ ton/hour}) =$ 0.44 lbs/hr
 $(0.44 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) =$ 1.93 TPY

PM₁₀
 Emissions:

Emission 0.00074 lbs/ton [AP-42 Table 11.19.2-2 8/04]
 Factor

Calculations $(0.00074 \text{ lbs/ton}) * (200.00 \text{ ton/hour}) =$ 0.15 lbs/hr
 $(0.15 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) =$ 0.65 TPY

PM_{2.5}
 Emissions:

Emission 0.00005 lbs/ton [AP-42 Table 11.19.2-2 8/04]
 Factor

Calculations $(0.00005 \text{ lbs/ton}) * (200.00 \text{ ton/hour}) =$ 0.01 lbs/hr
 $(0.01 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) =$ 0.04 TPY

Transfer Points (Assume 3 Transfer Point that are Controlled Covering alternate product streams)

Process 2400 ton/hr (Assumes each crusher operates independently and three handling steps)
 Rate:
 Operating 8760 hours/year
 Hours

PM (Conveyor Transfer Points)
 Emissions:

Emission 0.00014 lbs/ton [AP-42 Table 11.19.2-2 8/04]
 Factor

Calculations $(0.00014 \text{ lbs/ton}) * (2,400.00 \text{ ton/hour}) =$ 0.34 lbs/hr
 $(0.34 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) =$ 1.47 TPY

PM₁₀
 Emissions:

Emission 0.000046 lbs/ton
 Factor [AP-42 Table 11.19.2-2 8/04]

Calculations $(0.000046 \text{ lbs/ton}) * (2,400.00 \text{ ton/hour}) =$ 0.11 lbs/hr
 $(0.11 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) =$ 0.48 TPY

PM2.5
Emissions:

Emission Factor	0.000013 lbs/ton	[AP-42 Table 11.19.2-2 8/04]		
Calculations	(0.000013 lbs/ton) * (2,400.00 ton/hour) =		0.03 lbs/hr	
	(0.03 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =		0.14 TPY	

Pile Formation (Assume equipment thru- put is crusher total capacity)

Process Rate:	800 ton/hr	Equation 1 from AP-42 Sec 13.2.4.3 11/06		
Operating Hours	8760 hrs/year	U = wind speed miles per hour	8.15	(established in 3163-03)
PM Emissions:		k = particle size multiplier	0.74	AP-42 Sec 13.2.4-3 11/06
		M = Moisture content %	2.52	(established in 3163-03)
Emission Factor	0.00323375 lbs/ton	E=k*(0.0032)*(U/5)^1.3/(M/2)^1.4		
Calculations	(0.00323 lbs/ton) * (800.00 ton/hour) =		2.59 lbs/hr	
	(2.59 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =		11.33 TPY	
PM ₁₀ Emissions:		Equation 1 from AP-42 Sec 13.2.4.3 11/06		
		U = wind speed miles per hour	8.15	8.15 (previous permit)
		k = particle size multiplier	0.35	0.35 AP-42 Sec 13.2.4-3 11/06
		M = Moisture content %	2.52	2.52 (previous permit)
Emission Factor	0.00152948 lbs/ton	E=k*(0.0032)*(U/5)^1.3/(M/2)^1.4		
Calculations	(0.00153 lbs/ton) * (800.00 ton/hour) =		1.22 lbs/hr	
	(1.22 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =		5.36 TPY	
PM2.5 Emissions:		Equation 1 from AP-42 Sec 13.2.4.3 11/06		
		U = wind speed miles per hour	8.15	8.15 (previous permit)
		k = particle size multiplier	0.053	0.35 AP-42 Sec 13.2.4-3 11/06
		M = Moisture content %	2.52	2.52 (previous permit)
Emission Factor	0.00023161 lbs/ton	E=k*(0.0032)*(U/5)^1.3/(M/2)^1.4		
Calculations	(0.00023 lbs/ton) * (800.00 ton/hour) =		0.19 lbs/hr	
	(0.19 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =		0.81 TPY	

Truck Loading (Assume all material is eventually loaded)

Modeled as Truck Loading Conveyor

Process **800** ton/hr
Rate:
Operating **8760** hours/year
Hours

PM
Emissions:

Emission **0.00014** lbs/ton [AP-42 Table 11.19.2-2 8/04]
Factor
Calculations $(0.00014 \text{ lbs/ton}) * (800.00 \text{ ton/hour}) =$ **0.11** lbs/hr
 $(0.11 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) =$ **0.49** TPY

PM₁₀
Emissions:

Emission **0.000046** lbs/ton [AP-42 Table 11.19.2-2 8/04]
Factor
Calculations $(0.000046 \text{ lbs/ton}) * (800.00 \text{ ton/hour}) =$ **0.04** lbs/hr
 $(0.04 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) =$ **0.16** TPY

Diesel Generators (Total 838 hp)

Engine **838** hp
Rating:
Operating **3000** hrs/yr
Hours:

Particulate Emissions:

PM
Emissions:

Emission **0.0022** lb/hp-hr [AP-42 3.3-1, 10/96]
Factor
Calculations $(0.0022 \text{ lb/hp-hr}) * (838 \text{ hp}) =$ **1.84** lbs/hr
 $(1.84 \text{ lbs/hr}) * (3000 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) =$ **2.77** TPY

PM₁₀
Emissions:

Emission **0.0022** lb/hp-hr [AP-42 3.3-1, 6/06]
Factor
Calculations $(0.0022 \text{ lb/hp-hr}) * (838 \text{ hp}) =$ **1.84** lbs/hr
 $(1.84 \text{ lbs/hr}) * (3000 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) =$ **2.77** TPY

PM_{2.5}

Emissions:

Emission Factor	0.0022 lb/hp-hr	[AP-42 3.3-1, 10/96]	
Calculations	(0.0022 lb/hp-hr) * (838 hp) =		1.84 lbs/hr
	(1.84 lbs/hr) * (3000 hrs/yr) * (0.0005 tons/lb) =		2.77 TPY

CO

Emissions:

Emission Factor	0.00668 lb/hp-hr	[AP-42 3.3-1, 6/06]	
Calculations	(0.00668 lb/hp-hr) * (838 hp) =		5.60 lbs/hr
	(5.60 lbs/hr) * (3000 hrs/yr) * (0.0005 tons/lb) =		8.40 TPY

NO_x

Emissions:

Emission Factor	0.031 lb/hp-hr	[AP-42 3.3-1, 6/06]	
Calculations	(0.031 lb/hp-hr) * (838 hp) =		25.98 lbs/hr
	(25.98 lbs/hr) * (3000 hrs/yr) * (0.0005 tons/lb) =		38.97 TPY

SO_x

Emissions:

Emission Factor	0.00205 lb/hp-hr	[AP-42 3.3-1, 6/06]	
Calculations	(0.0021 lb/hp-hr) * (838 hp) =		1.72 lbs/hr
	(1.72 lbs/hr) * (3000 hrs/yr) * (0.0005 tons/lb) =		2.58 TPY

VOC

Emissions:

Emission Factor	0.00251 lb/hp-hr	[AP-42 3.3-1, 6/06]	
Calculations	(0.0025 lb/hp-hr) * (838 hp) =		2.10 lbs/hr
	(2.10 lbs/hr) * (3000 hrs/yr) * (0.0005 tons/lb) =		3.16 TPY

Unpaved Roadways (Haul Roads)

Emission Factor	EF = $k(s/12)^a * (W/3)^b$	[AP-42 13.2.2.2, 11/06]
	EF, Emission Factor = lbs Emitted Per Vehicle Mile Traveled (VMT)	
	k, Empirical Constant PM =	4.9 [AP-42 Table 13.2.2-2, 11/06]
	k, Empirical Constant PM ₁₀ =	1.5 [AP-42 Table 13.2.2-2, 11/06]
	k, Empirical Constant PM _{2.5} =	0.15 [AP-42 Table 13.2.2-2, 11/06]
	s, Surface Material Silt Content (%) =	7.1 [AP-42 Table 13.2.2-1, 11/06]
	W, Mean Vehicle Weight (tons) =	48 [Estimated]
	a, Empirical Constant PM =	0.7 [AP-42 Table 13.2.2-2, 11/06]
	a, Empirical Constant PM ₁₀ and PM _{2.5} =	0.9 [AP-42 Table 13.2.2-2, 11/06]
	b, Empirical Constant PM, PM ₁₀ and PM _{2.5} =	0.45 [AP-42 Table 13.2.2-2, 11/06]

PM Emissions (uncontrolled): PM30

Emission Factor	$EF = 4.9 * (7.1/12)^{0.7} * (48/3)^{0.45} =$	11.82	lbs/VMT
Calculations	$(11.82 \text{ lbs/VMT}) * (5 \text{ miles/day}) =$	59.08	lbs/day
	$(59.08 \text{ lbs/day}) * (365 \text{ days/yr}) * (0.0005 \text{ tons/lb}) =$	10.78	TPY
	50% Control Efficiency	5.39	TPY

PM₁₀ Emissions (uncontrolled):

Emission Factor	$EF = 1.5 * (7.1/12)^{0.9} * (48/3)^{0.45} =$	3.26	lbs/VMT
Calculations	$(3.26 \text{ lbs/VMT}) * (5 \text{ miles/day}) =$	16.28	lbs/day
	$(16.28 \text{ lbs/day}) * (365 \text{ days/yr}) * (0.0005 \text{ tons/lb}) =$	2.97	TPY
	50% Control Efficiency	1.486	TPY

PM_{2.5} Emissions (uncontrolled):

Emission Factor	$EF = 0.15 * (7.1/12)^{0.9} * (48/3)^{0.45} =$	0.33	lbs/VMT
Calculations	$(0.33 \text{ lbs/VMT}) * (5 \text{ miles/day}) =$	1.63	lbs/day
	$(1.63 \text{ lbs/day}) * (365 \text{ days/yr}) * (0.0005 \text{ tons/lb}) =$	0.30	TPY
	50% Control Efficiency	0.15	TPY

V. Existing Air Quality

MAQP #3163-04 is issued for the operation of a portable crushing/screening plant to be located in various locations throughout Montana that are designated as attainment/unclassified for the National Ambient Air Quality Standards (NAAQS). This facility is a portable source that would be expected to operate on an intermittent and temporary basis and any effects on air quality in a given area would be expected to be minor and short-lived.

VI. Ambient Air Quality Impact Analysis

MAQP #3163-04 will cover the operation while operating at any location within Montana, excluding those counties that have a Department approved permitting program, those areas considered tribal lands, or those areas in or within 10 kilometers of certain PM₁₀ nonattainment areas. The amount of controlled emissions generated by this facility will not exceed any set ambient standard. In addition, this source is portable and any air quality impacts would be expected to be minor and short-lived.

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
Permitting and Compliance Division
Air Resources Management Bureau
1520 East Sixth Avenue
P.O. Box 200901
Helena, Montana 59620-0901
(406) 444-3490

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued For: C&S Construction
P.O. Box 797
Billings, MT 59103

Permit Number: #3163-04

Preliminary Determination on Permit Issued: August 15, 2011

Department Decision Issued: September 2, 2011

Permit Final: September 20, 2011

1. *Legal Description of Site:* The location of the portable crushing/screening plant will be at the NW¼ of the SE¼ of Section 15, Township 1 North, Range 26 East, Yellowstone County, Montana. In addition, Permit #3163-04 would apply while operating at any location in the state of Montana, except within those areas having a Department approved permitting program. *A Missoula County air quality permit would be required for locations within Missoula County, Montana.*
2. *Description of Project:* The permit application is for the modification of MAQP #3163-03 for a portable crushing and screening plant. The modified plant operation would include two crushers, two generators, an independent screen, an integral screen associated with the cone crusher, two diesel generators, and a number of conveyors and auxiliary equipment. The process description is discussed in the permit analysis Section I.B of Permit #3163-04.
3. *Objectives of Project:* The permit would allow C&S to crush and screen for the purpose of producing stockpiles of products at the site.
4. *Alternatives Considered:* In addition to the proposed action, the Department also considered the "no-action" alternative. The "no-action" alternative would deny issuance of the air quality preconstruction permit to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because C&S demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.
5. *A Listing of Mitigation, Stipulations, and Other Controls:* A listing of the enforceable permit conditions and a permit analysis, including a BACT analysis, would be contained in MAQP #3163-04.
6. *Regulatory Effects on Private Property Rights:* The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.

7. The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The “no action alternative” was discussed previously.

		Major	Moderate	Minor	None	Unknown	Comments Included
A.	Terrestrial and Aquatic Life and Habitats			x			yes
B.	Water Quality, Quantity, and Distribution				x		yes
C.	Geology and Soil Quality, Stability, and Moisture			x			yes
D.	Vegetation Cover, Quantity, and Quality				x		yes
E.	Aesthetics			x			yes
F.	Air Quality			x			yes
G.	Unique Endangered, Fragile, or Limited Environmental Resource				x		yes
H.	Demands on Environmental Resource of Water, Air, and Energy			x			yes
I.	Historical and Archaeological Sites				x		yes
J.	Cumulative and Secondary Impacts			x			yes

Summary of Comments on Potential Physical and Biological Effects: The following comments have been prepared by the Department.

A. Terrestrial and Aquatic Life and Habitats

Terrestrials, if any present, would use the same areas that the crushing/screening operations currently occupy although since the site is currently an industrial operation no impact is likely. Additionally, no impact is expected on aquatic life as aerial pictures do not indicate any surface water is present on site or nearby. Therefore, minor if any impacts are expected for terrestrial and/or aquatic habitats.

B. Water Quality, Quantity, and Distribution

The modified permit represents a decrease in potential to emit (PTE) over MAQP #3163-03 and there would be minor impacts on water quality quantity, and distribution because of the temporary nature, size, operational requirements, and conditions placed in MAQP #31630-04 for the facility. Further, as described in Section 7.F of this EA, the Department determined that any impacts from deposition of pollutants would be minor. In addition, any accidental spills or leaks from equipment would be required to be handled according to the appropriate environmental regulations in an effort to minimize any potential adverse impact on the immediate and surrounding area. Water would be used for dust suppression, but would only cause a minor disturbance to the area.

C. Geology and Soil Quality, Stability, and Moisture

As a result of the portable crushing/screening plant operation, there would be minor impacts to the geology and soil quality, stability, and moisture near the equipment’s operational area because of the increased vehicle traffic and deposition of pollutants the facility. As explained in Section 7.F of this EA, the facility’s size, operational requirements, and conditions placed in MAQP #3163-04 would minimize the impacts from deposition. Operations similar to those currently occurring under MAQP #3163-03 would continue to occur with limited potential impact to the local geology and soil quality, stability, and moisture.

D. Vegetation Cover, Quantity, and Quality

Because the proposed operations are similar to those already at the site, no negative impacts on vegetative cover, quantity, and quality from the deposition of pollutants are expected.

E. Aesthetics

The crushing/screening operations would be visible to some of the closest neighbors and would likely have similar noise as the current operations. However, MAQP #3163-04 would include conditions to control emissions, including visible emissions, from the plant. The facility would remain at its' present location to support projects in the surrounding communities. Therefore, any aesthetic and noise impacts would be minor.

F. Air Quality

The air quality emission impacts from the crushing/screening plant operations would be minor because MAQP #3163-04 would include conditions limiting the visible emissions (opacity) from the plant and reducing the hours of operation to limit emissions of air pollution. In addition, the facility would be required to utilize water spray bars and other means to control air pollution. The operations would be limited by MAQP #3163-04 to total particulate emissions of 250 tons/year or less from non-fugitive sources at the plant, in addition to any additional equipment at the site. Because of the size and temporary nature of the operation and conditions placed in MAQP #3163-04, impacts from the deposition of pollutants would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The proposed project would have no impact on any unique endangered, fragile, or limited environmental resources. The Department, in an effort to identify any species of special concern associated with the proposed site location, contacted the Montana Natural Heritage Program (MNHP). Search results have concluded there are ten species of concern in the area. The species of concern identified in the search include the following vertebrate animals:

1. Bald Eagle (sensitive)
2. Greater Sage Grouse (sensitive)
3. Yellowstone Cutthroat Trout (sensitive)
4. Spotted Bat (sensitive)
5. Greater Short-horned Lizard (sensitive)
6. Western Hog-nosed Snake (sensitive)
7. Milksnake (sensitive)
8. Great Blue Heron
9. Pinyon Jay
10. Common Sagebrush Lizard

Given the site is currently in use for crushing and screening, minimal additional, if any impacts are expected to the species of concern noted by the MNHP.

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

The operation of the crushing/screening facility would only require small quantities of water, air, and energy for proper operation, due to the relatively small size of the facility. Small amounts of water would be used for dust control within the C&S site. As described in Section 7.F of this EA, pollutant emissions generated from the facility would have minimal impacts on air quality in the immediate and surrounding area. Energy would be generated from the portable generator, so no

other sources of power would be necessary to operate the facility. The generator would consume energy in the form of diesel fuel, a non-renewable resource. Overall, the equipment is relatively small and would have operational restrictions placed in MAQP #3163-04. Because the facility operations would be seasonal and temporary, demands and impacts to the environmental resource of water, air and energy would be minor.

I. Historical and Archaeological Sites

The crusher/screener operations would be located in the existing C&S parcel. According to the Montana State Historic Preservation Office, there is low likelihood of adverse disturbance to any known archaeological or historic site, given previous industrial disturbance within the area. Therefore, the operation would not have an effect on any known historic or archaeological site.

J. Cumulative and Secondary Impacts

The crusher/screener operations would cause minor cumulative and secondary impacts to the physical and biological environment in the immediate area because the plant would generate small emissions of particulate matter and PM₁₀. The Department expects this facility to operate in compliance with all applicable rules and regulations as would be outlined in MAQP #3163-04.

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

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

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

A. Social Structures and Mores

The operation of the crusher/screener facility would not alter or disrupt any local lifestyles or communities (social structures or mores) in the area of operation because the facility currently exists and the proposed modifications are minor. Therefore, the existing social structures and mores would not be affected as a result of this permitting action.

B. Cultural Uniqueness and Diversity

The crusher/screener plant operations would have no impact on the cultural uniqueness and diversity of the area because the source is existing, and operating at the site allowed under MAQP #3163-03.

C. Local and State Tax Base and Tax Revenue

The crusher/screener operations would have minor effects on the local and state tax base and tax revenue because the facility would be a seasonal source; therefore, it would not likely provide significant permanent employment. C&S expects to employ 4 employees on a seasonal or temporary basis.

D. Agricultural or Industrial Production

The crusher/screener plant operations proposed project would be located in the existing C&S site. Further, the crusher/screener operations are essentially within an existing industrial setting and, thus, would have only a minor impact on local industrial production.

E. Human Health

MAQP #3163-04 would incorporate conditions to ensure that the crusher/screener operations would be operated in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. Since these conditions would be incorporated, only minor impacts would be expected from this crusher/screener facility.

F. Access to and Quality of Recreational and Wilderness Activities

The crusher/screener operations would not affect any access to recreational and wilderness activities because of the lack of wilderness areas in the proximity. However, minor effects on the quality of recreational activities in the vicinity could occur due to minor noise and minor particulates from the facility.

G. Quantity and Distribution of Employment

The crusher/screener operations would have a minor effect on the quantity and distribution of employment in the area because C&S would employ a minimal number of employees. These employees would be employed by C&S on a seasonal or temporary basis and are likely already residents from nearby communities.

H. Distribution of Population

The crusher/screener plant operations would not disrupt the normal population distribution in the area because the proposed modification is relatively consistent with the current operations under MAQP #3163-04.

I. Demands of Government Services

Minor increases would be seen on traffic on existing roadways in the area while the crusher/screening operations are in progress. In addition, government services would be required for acquiring the appropriate permits from government agencies. Demands for government services would be minor.

J. Industrial and Commercial Activity

The crusher/screener batch plant operations would represent only a minor increase in the industrial activity in the given area because small size of the operations and the portable and seasonal nature of the facility. No other known additional industrial or commercial activity is expected as a result of the proposed operation.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans or goals that would be affected by the proposed project. The state and national ambient air quality standards would protect the proposed site and the environment surrounding the site.

L. Cumulative and Secondary Impacts

The crusher/screener plant operations would cause minor cumulative and secondary impacts to the social and economic environment in the immediate area because the facility is a considered a portable, temporary source. Small increases in traffic would have minor effects on local traffic in the immediate area although the current permit modification PTE is less than that of the previous MAQP #3163-04. Because the source is a relatively small, temporary source, only minor economic impacts to the local economy could be expected from the operation of the facility. The Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as would be outlined in MAQP #3163-04.

Recommendation: An EIS is not required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: All potential effects resulting from construction and operation of the proposed facility are minor, therefore, an EIS is not required. In addition, the source would be applying the Best Available Control Technology and the analysis indicates compliance with all applicable air quality rules and regulations.

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

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

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