Montana Department of
ENVIRONMENTAL QUALITY
Brian Schweitzer, Governor
P. O. Box 200901 Helena, MT 59620-0901 (406) 444-2544 Website: www.deq.mt.gov

June 30, 2009

Mr. Dan McNurlin
CAP Paving, Inc.
P.O. Box 978
East Helena, MT 59635

Dear Mr. McNurlin:

Montana Air Quality Permit #4206-02 is deemed final as of June 30, 2009, by the Department of Environmental Quality (Department). This permit is for a portable drum mix asphalt facility. 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

Skye Hatten, P.E.
Environmental Engineer
Air Resources Management Bureau
(406) 444-5287

VW: SH
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #4206-02

CAP Paving, Inc.
P.O. Box 978
East Helena, MT 59635

June 30, 2009

MONTANA AIR QUALITY PERMIT

Issued To: CAP Paving, Inc.
P.O. Box 978
East Helena, MT 59635

MAQP: #4206-02
Application Complete: 04/06/09
Preliminary Determination Issued: 05/12/09
Department's Decision Issued: 06/12/09
Permit Final: 06/30/09
AFS #: 777-4206

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to CAP Paving Inc. (CAP) pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq*., as amended, for the following:

SECTION I: Permitted Facilities

A. Plant Location

The initial location of the permitted CAP facility is the East Helena "home pit", which is located 0.25 mile south of East Helena, Montana, off Highway 282. The legal description of the site is the NE¼ of Section 35, Township 10 North, and Range 3 West, in Lewis and Clark County. MAQP #4206-02 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 (PM_{10}) 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 PM_{10} nonattainment areas.

B. Current Permit Action

On April 6, 2009, the Department received a request from CAP for a modification to MAQP #4206-01 to replace the currently permitted 350 horsepower diesel engine/generator with a 490 hp diesel engine/generator. In addition to this modification, the permit updates the rule references, permit format, and the emissions inventory.

SECTION II: Conditions and Limitations

A. Emission Limitations

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

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

3. CAP shall not cause or authorize to be discharged into the atmosphere from systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler; systems for mixing hot mix asphalt; and the

loading, transfer, and storage systems associated with emission control systems, any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart I).

4. CAP shall not cause or authorize the use of any street, road or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).

5. CAP shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section II.A.4. (ARM 17.8.749).

6. A fabric-filter baghouse for particulate matter air pollution control, with a device to measure the pressure drop (magnehelic gauge, manometer, etc.), shall be installed, operated, and maintained on the asphalt drum mix dryer. Pressure drop must be measured in inches of water. Temperature indicators at the control device inlet and outlet must be installed and maintained (ARM 17.8.752).

7. Asphalt production shall be limited to 876,000 tons during any rolling 12-month time period (ARM 17.8.749).

8. CAP shall not operate more than one diesel fuel-fired engine/generator at any given time with a maximum rating of 490 hp (ARM 17.8.749).

9. If the permitted equipment is used in conjunction with any other equipment owned or operated by CAP, 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).

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

11. CAP 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 Internal Combustion Engines (ARM 17.8.340 and 40 CFR 60, Subpart IIII).

B. Testing Requirements

Since asphalt production will be limited to the average production rate (as reported in CAP's application) achieved during the initial and subsequent compliance source test(s), the test should be performed at the highest production rate practical.

1. Within 60 days after achieving the maximum production rate, but not later than 180 days after initial start up, an initial Environmental Protection Agency (EPA) Methods 1-5 and 9 source test(s) shall be performed on any New Source Performance Standard (NSPS)-affected equipment at the asphalt plant to demonstrate compliance with the applicable emission limit(s) in Section II.A.1, Section II.A.2, and Section II.A.3, respectively. NSPS-affected equipment at the CAP facility would include any combination of the following: dryers; systems for screening, handling, storing, and

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

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

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

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

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

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

C. Operational Reporting Requirements

1. If this 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. CAP 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. CAP 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. CAP shall maintain on-site records showing daily hours of operation and daily production rates and daily pressure drop and temperature readings for the last 12 months. The records compiled in accordance with this permit shall be maintained by CAP 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. CAP shall document, by month, the asphalt production from the facility. By the 25th day of each month, CAP shall calculate the asphalt production from the facility for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.7. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

D. Notification

1. Within 30 days of commencement of construction of any NSPS-affected equipment, CAP shall notify the Department of the date of commencement of construction of the affected equipment (ARM 17.8.340 and 40 CFR 60, Subpart A and Subpart I).

2. Within 15 days of the actual start-up date of any NSPS-affected equipment, CAP shall submit written notification to the Department of the initial start-up date of the affected equipment (ARM 17.8.340 and 40 CFR 60, Subpart A and Subpart I).

3. Within 15 days of the actual start-up date of any non-NSPS-affected equipment, CAP shall submit written notification to the Department of the initial start-up date of the affected equipment (ARM 17.8.749).

SECTION III: General Conditions

A. Inspection – CAP 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 System (CEMS), Continuous Emission Rate Monitoring System (CERMS)) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.

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

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving CAP of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided for in ARM 17.8.740, *et seq*. (ARM 17.8.756)

D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401, *et seq*., MCA.

E. Appeals – Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.

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

G. Permit Fee – Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by CAP 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. CAP 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.

PERMIT ANALYSIS
CAP Paving Inc.
Montana Air Quality Permit (MAQP) #4206-02

I. Introduction/Process Description

A. Permitted Equipment

CAP Paving Inc. (CAP) owns and operates a portable 1993 parallel flow continuous asphalt drum mixer with a maximum production capacity of 100 tons per hour (TPH); an asphalt silo; cold aggregate handling operations; material transfer operations including elevator, screens, bins, mixers, conveyors including 4 transfer points; a 490 horsepower (hp) diesel generator; a diesel fuel-fired hot oil heater; and associated equipment and operations.

B. Source Description

For a typical operational set-up, two different raw materials are introduced into the drum mixer. First, aggregate materials are taken from the on-site aggregate stockpiles and dumped via a front end loader into the cold aggregate feed bins. The cold aggregate is then transferred from the cold aggregate feed bins via conveyor to the drum mixer. The cold aggregate is dried and mixed with the other raw material in the drum mixer and the drum mixer burner is fired with diesel fuel. Oil is then introduced to the drum mixer through hoses from the diesel-fired portable hot oil heater tank. Once all raw materials have been introduced into the drum mixer they are continuously mixed and heated by the drum mixer burner. The 490 hp capacity diesel-fired generator set powers the operation.

After heating and mixing is completed, the asphalt product is transferred from the drum mixer to the asphalt product silo via a conveyor. The asphalt remains in the asphalt silo until it is loaded into trucks for transport to a given job location.

C. Permit History

On June 17, 2008, **MAQP #4206-00** was issued to Capital Gravel & Asphalt, LLC to operate a portable drum mix asphalt plant and associated equipment.

On December 9, 2008, the Montana Department of Environmental Quality (Department) received a letter from CAP requesting an administrative amendment to MAQP #4206-00 to change the corporate name on the permit from Capital Gravel & Asphalt, LLC to CAP. **MAQP #4206-01** replaced MAQP #4206-00.

D. Current Permit Action

On April 6, 2009, the Department received a request from CAP for a modification to MAQP #4206-01 to replace the currently permitted 350 horsepower diesel engine/generator with a 490 hp diesel engine/generator. In addition to this modification, the permit updates the rule references, permit format, and the emissions inventory. **MAQP #4206-02** replaces MAQP #4206-01.

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 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).

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

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

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

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

1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
4. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
5. ARM 17.8.223 Ambient Air Quality Standard for PM_{10}

CAP 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, CAP 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 Process. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.

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 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 Code of Federal Regulations (CFR) Part 60, Standards of Performance for New Stationary Sources (NSPS).

   This facility is an NSPS-affected facility under 40 CFR Part 60, Subpart I (Standards of Performance for Hot Mix Asphalt Facilities) NSPS-affected equipment at the CAP facility would include any combination of the following: dryers; systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler; systems for mixing hot mix asphalt; and the loading, transfer, and storage systems associated with emission control systems, which were constructed, reconstructed, or modified after June 11, 1973.

   Currently, the standards referenced in 40 CFR 60, Subpart IIII (Standards of Performance for Stationary Compression Internal Combustion Engines) are not applicable because the proposed equipment is an existing engine that does not meet the applicability provisions stipulated under this Subpart. However, permit conditions for this standard are included in the proposed permit to maintain the de minimis friendly nature of the permit.

7. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. This rule incorporates, by reference, 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAP). The proposed facility contains an engine which is an affected source under 40 CFR 63 Subpart ZZZZ; however, because the engine is an existing engine, that is less than 500 hp, at an area source of Hazardous Air Pollutants (HAPs) it qualifies for an exemption within Subpart ZZZZ that excludes it from the maximum achievable control technology standards and reporting requirements in 40 CFR Part 63. If the engine were replaced by a new or reconstructed 490 hp engine (permit conditions limit the size and quantity of engine that may be operated see Section II.A.8. of permit) via a de minimis change, it would qualify for another separate exemption under Subpart ZZZZ that states the operation of the engine must comply with the NSPS requirement at 40 CFR 60, Subpart IIII as described above. Therefore, the requirements at 40 CFR 63, Subpart ZZZZ do not apply to this facility.

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. CAP submitted the appropriate permit application fee for the current permit action.

2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department; the air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

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

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

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

2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit 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. CAP has a PTE greater than 15 tons per year of particulate matter (PM), particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}), oxides of nitrogen (NO_x), carbon monoxide (CO), sulfur dioxide (SO_2) and volatile organic compounds (VOC); 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. CAP 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. CAP submitted an affidavit of publication of public notice for the March 21, 2009 issue of the *Independent Record*, a newspaper of general circulation in the City of Helena in Lewis and Clark 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 Best Available Control Technology (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 CAP of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*.

10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.

11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.

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

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

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

an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.

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

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

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

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

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

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

a. PTE > 100 tons/year of any pollutant;

b. PTE > 10 tons/year of any one 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 PM_{10} in a serious PM_{10} nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #4206-02 for CAP, 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 PM_{10} nonattainment area.

d. This facility is subject to a current NSPS at 40 CFR 60, Subpart I and may become subject to Subpart IIII via a de minimis change.

e. This facility may be subject to area source provisions of current NESHAP 40 CFR 63, Subpart ZZZZ; however, based on proposed equipment, permit conditions and possible de minimis changes, no requirements apply for the proposed engine under this NESHAP.

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 CAP will be a minor source of emissions as defined under Title V. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, CAP will be required to obtain a Title V Operating Permit.

III. BACT Determination

A BACT determination is required for each new or modified source. CAP 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.

Diesel Generators

Because of the limited amount of emissions produced by the diesel generators/engines and the lack of readily available/cost effective add-on controls, add-on controls would be cost prohibitive. Therefore, the Department determined that proper operation and maintenance, with no additional controls would constitute BACT for the diesel engine-powered generator. In addition, any new diesel engine would be required to comply with the new federal engine emission limitations - including either EPA Tier 2 emission standards for nonroad engines (40 CFR Part 1039) or New Source Performance Standard emission limitations for stationary engines (40 CFR 60, Subpart IIII).

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

IV. Emission Inventory

	tons/year					
Emission Source	**PM**	**PM10**	**NO_x**	**CO**	**VOC**	**SO_2**
100 TPH Drum Mix Asphalt Plant Dryer	21.98	10.99	24.09	56.94	14.02	25.40
Diesel-Fired Asphalt Oil Heater	--	--	--	0.005	--	--
Cold Aggregate Storage Piles	0.72	0.34	--	--	--	--
Cold Aggregate Elevators, Screens, Bins, & Mixers	0.00	0.00	--	--	--	--
Cold Aggregate Handling/Conveyors	5.26	1.93	--	--	--	--
Lime Silo	1.50	1.50	--	--	--	--
Asphalt Product Silo Filling	0.26	--	--	0.52	--	--
Drum Mix Plant Load-Out	0.23	--	--	0.59	--	--
490 hp Diesel Engine Generator	4.72	4.72	66.53	14.34	5.40	4.40
Haul Roads / Vehicle Traffic	11.37	3.13	--	--	--	--
Total Emissions	**46.03**	**22.61**	**90.62**	**72.39**	**19.41**	**29.80**

DRUM MIX ASPHALT PLANT DRYER

Operating Parameters:

Operating Hours:	8760 hr/yr (Permit Limit)
Plant Elevation:	4000 ft. (Application information)
Actual Pressure:	25.9 in. Hg (Application Information)
Standard Pressure:	29.92 in. Hg
Flowrate:	30,000 acfm (Company Information)
Std. Temp:	25 °C = 77 °F = 537 °R

Stack Temp. 177 °C = 350 °F = 810°R (Application Information)
Fractional Moisture Content: 0.15
Correction Equation: V1 = V2 (P2/P1) (T1/T2) (1-MC)

Corrected Flowrate: 30000 acfm * (25.9 in. Hg / 29.92 in. Hg) * (537 R / 810 R)*(1-0.15) = 14634 dscfm

Process Rate: 100 ton/hr (Application Information)

PM Emissions:
Emission Factor: 0.04 gr/dscf (permit limit)
Calculation: (0.04 gr/dscf) * (14,634 dscfm) * (1 lb / 7000 gr) * (60 min/hr) = 5.02 lb/hr
Calculation: (5.02 lb/hr) * (8760 hrs/yr) * (0.0005 ton/lb) = 21.98 ton/yr

PM10 Emissions:
Emission Factor: 0.02 gr/dscf (permit limit, assume 50% of TSP is PM10)
Calculation: (0.02 gr/dscf) * (14,634 dscfm) * (1 lb / 7000 gr) * (60 min/hr) = 2.51 lb/hr
Calculation: (2.51 lb/hr) * (8760 hrs/yr) * (0.0005 ton/lb) = 10.99 ton/yr

CO Emissions:
Emission Factor: 0.13 lb/ton (waste oil-fired dryer, AP 42, Table 11.1-7, 3/04)
Calculation: (100 ton/hr) * (8760 hrs/yr) * (0.13 lb/ton) * (ton/2000 lb) = 56.94 ton/yr

NOx Emissions:
Emission Factor: 0.055 lb/ton (waste oil-fired dryer, AP 42, Table 11.1-7, 3/04)
Calculation: (100 ton/hr) * (8760 hrs/yr) * (0.055 lb/ton) * (ton/2000 lb) = 24.09 ton/yr

SO2 Emissions:
Emission Factor: 0.058 lb/ton (waste oil-fired dryer, AP 42, Table 11.1-7, 3/04)
Calculation: (100 ton/hr) * (8760 hrs/yr) * (0.058 lb/ton) * (ton/2000 lb) = 25.40 ton/yr

TOC Emissions:
Emission Factor: 0.044 lb/ton (waste oil-fired dryer, AP 42, Table 11.1-8, 3/04)
Calculation: (100 ton/hr) * (8760 hrs/yr) * (0.044 lb/ton) * (ton/2000 lb) = 19.27 ton/yr

CH4 Emissions:
Emission Factor: 0.012 lb/ton (waste oil-fired dryer, AP 42, Table 11.1-8, 3/04)
Calculation: (100 ton/hr) * (8760 hrs/yr) * (0.012 lb/ton) * (ton/2000 lb) = 5.26 ton/yr

VOC Emissions:
Emission Factor: 0.032 lb/ton (waste oil-fired dryer, AP 42, Table 11.1-8, 3/04)
Calculation: (100 ton/hr) * (8760 hrs/yr) * (0.032 lb/ton) * (ton/2000 lb) = 14.02 ton/yr

Total HAPs Emissions:
Emission Factor: 0.01 lb/ton (waste oil-fired dryer with fabric filter, AP 42, Table 11.1-10, 3/04)
Calculation: (100 ton/hr) * (8760 hrs/yr) * (0.01 lb/ton) * (ton/2000 lb) = 4.38 ton/yr

HOT OIL HEATER

Operating Parameters:

Diesel Fuel Consumption: 0.92 gal/hr (Application Information)
Operating Hours: 8760 hr/yr (Annual Capacity)
Calculation: 0.92 gal/hr * 8760 hr/yr = 8059.2 gal/yr

CO Emissions
Emission Factor: 0.0012 lb/gal (AP-42, Section 11.1, Table 11.1-13, Diesel Fuel, 3/04)
Calculations: 8059.2 gal/yr * 0.0012 lb/gal * 0.0005 ton/lb = 0.005 ton/yr

COLD AGGREGATE PILES

Operating Parameters:

Process Rate: 100 tons/hr (Application Information)
Number of Piles: 1 pile
Hours of operation: 8760 hr/yr (Annual Capacity)

PM Emissions:
Predictive equation for emission factor provided per AP 42, Sec. 13.2.4.3, 11/06.
Emission Factor: k (0.0032) * (U/5)^1.3 * (M / 2)^-1.4 = 0.00331 lb/ton
Calculation: 100 ton/hr * 8760 hrs/yr * 0.00331 lb/ton * ton/2000 lb * 1 piles * 1 - 50/100 = 0.72 ton/yr

PM10 Emissions:
Predictive equation for emission factor provided per AP 42, Sec. 13.2.4.3, 11/06.
Emission Factor: k (0.0032) * (U/5)^1.3 * (M / 2)^-1.4 = 0.00156 lb/ton
Calculation: 100 ton/hr * 8760 hrs/yr * 0.00156 lb/ton * ton/2000 lb * 1 piles * 1 - 50/100 = 0.34 ton/yr

COLD AGGREGATE HANDLING/CONVEYORS

Operating Parameters:

Process Rate: 100 tons/hr (Application Information)
Number of Transfers: 4 Transfers (Application Information)
Hours of operation: 8760 hr/yr (Annual Capacity)

PM Emissions:
Emission Factor: 0.003 lb/ton (AP 42, Table 11.19.2-2, 8/04)
Calculation: (100 ton/hr) * (8760 hrs/yr) * (0.003 lb/ton) * (ton/2000 lb) * (4 transfers) = 5.26 ton/yr

PM10 Emissions
Emission Factor: 0.0011 lb/ton (AP 42, Table 11.19.2-2, 8/04)
Calculation: (100 ton/hr) * (8760 hrs/yr) * (0.0011 lb/ton) * (ton/2000 lb) * (4 transfers) = 1.93 ton/yr

LIME SILO

Operating Parameters:

Flow Capacity: 1,000 cfm (Conservative Estimate)
Hours of operation: 8760 hr/yr (Annual Capacity)

PM Emissions:
Emission Factor: 0.04 gr/dscf (Permit limit per NSPS)
Calculation: 1000 cfm * 8760 hrs/yr * 0.04 gr/dscf * lb/7000 gr * ton/2000 lb * 60 min/hr = 1.50 ton/yr

PM10 Emissions:
Emission Factor: 0.04 gr/dscf (Permit limit per NSPS)
Calculation: 1000 cfm * 8760 hrs/yr * 0.04 gr/dscf * lb/7000 gr * ton/2000 lb * 60 min/hr = 1.50 ton/yr

ASPHALT PRODUCT SILO FILLING

Operating Parameters:

Process Rate: 100 ton/hr (Application Information)
Hours of Operation: 8760 hr/yr (Annual Capacity)

PM Emissions
Emission Factor: 0.00059 lb/ton (AP-42, Section 11.1, Table 11.1-14, 3/04)
Calculations: 0.00059 lb/ton * 100 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 0.26 ton/yr

PM_{10} Emissions
Emission Factor: 0.00025lb/ton (AP-42, Section 11.1, Table 11.1-14, 3/04,)
Calculations: 0.00025 lb/ton * 100 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 0.11 ton/yr

CO Emissions
Emission Factor: 0.00118 lb/ton (AP-42, Section 11.1, Table 11.1-14, 3/04,)
Calculations: 0.00118 lb/ton * 100 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 0.52 ton/yr

VOC Emissions (VOC = TOC)
Emission Factor: 0.01219 lb/ton (AP-42, Section 11.1, Table 11.1-14, 3/04)
Calculations: 0.01219 lb/ton * 100 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 5.34 ton/yr

PRODUCT LOAD OUT

Operating Parameters:

Process Rate: 100 ton/hr (Application Information)
Hours of Operation: 8760 hr/yr (Annual Capacity)

PM Emissions
Emission Factor: 0.00052 lb/ton (AP-42, Section 11.1, Table 11.1-14, 3/04)
Calculations: 0.00052 lb/ton * 100 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 0.23 ton/yr

PM_{10} Emissions
Emission Factor: 0.00034lb/ton (AP-42, Section 11.1, Table 11.1-14, 3/04)
Calculations: 0.00034 lb/ton * 100 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 0.15 ton/yr

CO Emissions
Emission Factor: 0.00135 lb/ton (AP-42, Section 11.1, Table 11.1-14, 3/04)
Calculations: 0.00135 lb/ton * 100 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 0.59 ton/yr

VOC Emissions (VOC = TOC)
Emission Factor: 0.00416 lb/ton (AP-42, Section 11.1, Table 11.1-14, 3/04)
Calculations: 0.00416 lb/ton * 100 ton/hr * 8760 hr/yr * 0.0005 ton/lb = 1.82 ton/yr

DIESEL ENGINE/GENERATOR

Operating Parameters:

Engine size = 490 hp
1kw = 1.3410 hp
490.0 hp / 1.341 hp/kw ≈ 365 kw
Hours of Operation: 8760 hrs/yr

PM10 Emissions:
Emission Factor: 0.0022 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)
Calculation: (8,760 hours) * (490 hp) * (0.0022 lbs/hp-hr) * (ton/2000 lb) = 4.72 ton/yr

PM Emissions:
Calculation: Assume PM = PM10 4.72 ton/yr

NOx Emissions:
Emission Factor: 0.031 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)
Calculation: (8,760 hours) * (490 hp) * (0.031 lbs/hp-hr) * (ton/2000 lb) = 66.53 ton/yr

CO Emissions:
Emission Factor: 0.00668 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)
Calculation: (8,760 hours) * (490 hp) * (0.00668 lbs/hp-hr) * (ton/2000 lb) = 14.34 ton/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 hours) * (490 hp) * (0.0025141 lbs/hp-hr) * (ton/2000 lb) = 5.40 ton/yr

SO2 Emissions:
Emission Factor: 0.00205 lbs/hp-hr (AP-42, Sec. 3.3, Table 3.3-1, 10/96)
Calculation: (8,760 hours) * (490 hp) * (0.00205 lbs/hp-hr) * (ton/2000 lb) = 4.40 ton/yr

HAUL ROADS/VEHICLE TRAFFIC

Operating Parameters:

Vehicle miles traveled: 5 VMT/day (Application Information
Days Per Year: 365 days/year

PM Emissions
Emission Factor: 12.46 lb/VMT (AP-42, Section 13.2.2, Controlled Emissions, 11/06)
Calculation: 8760 hrs/yr * (0.21 VMT/hr) * (12.46 lb/VMT) * (ton/2000 lb) * (1-0/100) =11.37 tons/yr

PM_{10} Emissions
Emission Factor: 3.43 lb/VMT (AP-42, Section 13.2.2, Controlled Emissions, 11/06)
Calculation: 8760 hrs/yr * (0.21 VMT/hr) * (3.43 lb/VMT) * (ton/2000 lb) * (1-0/100) = 3.13 tons/yr

V. Existing Air Quality

MAQP #4206-02 is issued for the operation of a portable drum mix asphalt batch plant to be originally located 0.25 mile south of East Helena, Montana, off Highway 282. The legal description of the site is the NE¼ of Section 35, Township 10 North, and Range 3 West, in Lewis and Clark County. This facility would be allowed to operate at this proposed site and any other areas designated as attainment or unclassified for all National Ambient Air Quality Standards (NAAQS); excluding counties that have a Department approved permitting program, areas considered Tribal Lands, or areas in or within 10 kilometers (km) of certain PM_{10} nonattainment areas. The permit contains operational conditions and limitations that would protect air quality for this site and the surrounding area. Also, this facility is a portable source that would operate on an intermittent and temporary basis, so any effects to air quality will be minor and short-lived.

VI. Air Quality Impacts

MAQP #4206-02 is issued for the operation of a portable drum mix asphalt plant to be initially located in the NE¼ of Section 35, Township 10 North, and Range 3 West, in Lewis and Clark County, Montana. MAQP #4206-02 will also cover the plant 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 km of certain PM_{10} nonattainment areas. An Addendum to MAQP #4206-02, including more stringent requirements to protect the non-attainment area, will be required for operating at locations in or within 10 km of certain PM_{10} nonattainment areas. *A Missoula County air quality permit would be required for locations within Missoula County, Montana*.

VII. Ambient Air Impact Analysis

The initial proposed location of the asphalt plant is within the historic East Helena lead nonattainment area and approximately ½ mile west of the East Helena SO_2 nonattainment area. However, this facility is not expected to have lead emissions and minimal SO_2 emissions from the single 490 hp diesel engine/generator. Therefore, the Department has determined that the impact from this permitting action will be minor. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

VIII. Taking or Damaging Implication Analysis

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

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

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

IX. Environmental Assessment

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

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

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued To: CAP Paving Inc.

Air Quality Permit number: 4206-02

Preliminary Determination Issued: 05/12/09
Department Decision Issued: 06/12/09
Permit Final: 06/30/09

1. *Legal Description of Site:* The asphalt plant would initially operate at NE¼ of Section 35, Township 10 North, and Range 3 West, in Lewis and Clark County, Montana. However, Permit #4206-02 would also apply while operating at any location in Montana, except within those areas having a Department approved permitting program or those areas in or within 10 km of certain PM_{10} nonattainment areas. *A Missoula County air quality permit would be required for locations within Missoula County, Montana.*

2. *Description of Project*: On April 6, 2009, Capitol Gravel and Asphalt, LLC (CAP) submitted a complete permit application requesting a modification to Montana Air Quality Permit (MAQP) #4206-01 to replace the currently permitted 350 horsepower diesel engine/generator with a 490 hp diesel engine/generator.

3. *Objectives of Project*: The objective of the proposed project is to permit the appropriate size of engine necessary for equipment operation.

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 CAP has demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.

5. *A Listing of Mitigation, Stipulations, and Other Controls*: A list of enforceable conditions, including a BACT analysis, would be included in MAQP #4206-02.

6. *Regulatory Effects on Private Property*: The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.

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

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

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

A. Terrestrial and Aquatic Life and Habitats:

Emissions from the diesel-powered generator/engine would have only minor impacts upon the terrestrial and aquatic life and habitats in areas where the generators/engines may operate. Although air pollutant deposition would occur in the areas where the generators/engines operate, the size and temporary nature of the operation, dispersion characteristics of pollutants, and conditions placed in MAQP #4206-02 would result in minor impacts. In addition, the generator/engine would be relatively small and located at previously disturbed sites. Therefore, the operation of the generators/engine would present only minor impacts to the terrestrial and aquatic life and habitats in areas of potential operation.

B. Water Quality, Quantity and Distribution:

There would only be minor impacts on the water quality, quantity, and distribution because of the relatively small size and nature of the project. While deposition of pollutants would occur, the Department determined that any impacts from deposition of pollutants would be minor. As described in 7.F. of the EA, due to the conditions placed in MAQP #4206-02 and the size and nature of the project, the maximum impacts from the air emissions as a result of the project would be minor. Therefore, the diesel-powered generator/engine would have only minor impacts to water quality, quantity, and distribution in the proposed area of operation**.**

C. Geology and Soil Quality, Stability and Moisture:

As a result of the operation of the portable diesel-powered generator/engine, 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 from portable generator operations. As explained in Section 7.F. of this EA, the generator/engine size, operational requirements, temporary nature of the operation, and conditions placed in MAQP #4206-02 would minimize the impacts from deposition. In addition, the

generator/engine would be relatively small in size and located at previously disturbed sites, which would also reduce the potential impact to the local geology and soil quality, stability, and moisture.

D. Vegetation Cover, Quantity, and Quality:

Previous MEPA analysis for the permitted gravel pit identified Wedge-Leaved Saltbush, Lesser Rushy Milvetch and Small Yellow Lady's Slipper as potentially impacted species of concern. The analysis for permitting of the gravel pit concluded potential impacts to these plants were insignificant. Research for this MEPA analysis did not identify additional species of concern. Since no additional land disturbance is included in this proposed action and only minor amounts of air pollutions are anticipated, potential impacts to these species habitats, quantity and quality, would be minor.

E. Aesthetics:

The diesel-powered generator/engine would potentially be visible from Highways 282 and 12. However, the profile of the equipment associated with the asphalt plant will be partially obstructed because its profile will be recessed within the permitted gravel pit. Additionally, MAQP #4206-02 would include provisions to control emissions, including visible emissions, from the generator/engine. The generator/engine would be relatively small and temporary and would be used to power the portable asphalt facility at previously disturbed sites. Therefore, any aesthetic impact to a given area would be minor and temporary.

The diesel-powered generator/engine would create noise pollution during operation. However, the generator/engine would be recessed from the surrounding topography within the gravel pit which would naturally mitigate horizontal noise propagation to receptors. Therefore, potential impacts to aesthetics due to noise are expected to be minor.

F. Air Quality:

The air quality emission impacts from the diesel-powered generator/engine would be minor because MAQP #4206-02 would include conditions limiting the visible emissions from the equipment. In addition, the facility's potential emissions are less than 100 tons per year for any pollutant, resulting in the facility not requiring a Title V Operating Permit. Because of the size and temporary nature of the operation and conditions placed in MAQP #4206-02, impacts from the deposition of pollutants would be minor.

Small amounts of deposition generated from the generator/engine operation would be minimal because the pollutants emitted would be well controlled, widely dispersed (from such factors as wind speed and wind direction), and would result in only minor impacts to the surrounding environment. Similarly air pollutant deposition and impacts due to emissions from the generator/engine would be temporary because the facility is not permitted to remain in one location more than 12 months. Overall, any air quality impacts resulting from the proposed project operation would be minor.

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

The Department, in an effort to assess any potential impacts to any unique endangered, fragile, or limited environmental resources in the initial proposed area of operation (NE¼ of Section 35, Township 10 North, and Range 3 West, in Lewis and Clark County, Montana), contacted the Natural Resource Information System – Montana Natural Heritage Program. The search area, in this case, is defined by the section, township, and range of the proposed site, with an additional 1-mile buffer. Search results concluded there are four species of concern within the

area. The known species of concern include two vertebrate animals: the Plains Spadefoot (Sensitive) and the Gray Wolf (Endangered), as well as two vascular plants: the Wedge-leaved Saltbush and the Small Yellow Lady's-slipper (Sensitive). The Gray Wolf is in the process of being delisted by the US Fish and Wildlife Service. No sightings of this species have been identified at or within one mile of the subject property. Noise from the operation my have limited impacts on animals within their potential extended range; however, no element occurrences have been document at the subject property or within one mile of the subject property. Additionally, since no additional land disturbance beyond that already permitted for the gravel pit is included in this proposed action, no potential impacts to these limited or sensitive plant species are expected.

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

The operation of the generator/engine would require only small demands on water, air, and energy as a result of the relatively small size and temporary nature of the facility. While small amounts of water would be used for dust control on the surrounding roadways and job site, no water would be needed to operate the generator/engine. Energy requirements would be accommodated through the use of electricity obtained from the diesel-fired engine/generator. Overall, the equipment is relatively small and would have operational restrictions placed in MAQP #4206-02. Because the facility operations would be seasonal and temporary, demands and impacts to the environmental resource of air and energy would be minor.

I. Historical and Archaeological Sites:

The Department contacted the Montana Historical Society - State Historical Preservation Office (SHPO) in an effort to identify any historical and/or archaeological sites that may be present in the proposed initial location of the facility. Search results concluded that there are no previously recorded historical or archaeological sites within the area proposed for initial operations. According to the SHPO, there would be a low likelihood of adverse impacts to any known archaeological or historic site. Therefore, no impacts upon historical or archaeological sites would be expected as a result of the generator/engine replacement.

J. Cumulative and Secondary Impacts:

The diesel-powered generator/engine would cause minor cumulative and secondary impacts on the physical and biological environment because the generator would result in emissions of PM, PM_{10}, NO_x, VOCs, CO, and SO_x. However, the Department believes the cumulative impacts to air quality would not violate applicable air quality standards. Similarly, potential impacts to terrestrial and aquatic life and habitat; water quality, quantity and distribution; vegetative quality; aesthetics; and, demands of environmental resources would be minor. Additional noise impacts from the generator/engine would also be minor. As a result of the temporary or seasonal nature of the facility and conditions and limitations contained within MAQP #4206-02, impacts would be minimized.

The diesel-powered generator/engine would typically operate within a previously disturbed open-cut pit and in conjunction with other portable operations. Therefore, there is a low likelihood that operation of the plant in any location would cause significant additional cumulative and secondary impacts given the likelihood of previous industrial disturbance at the given area of operation.

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

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

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

A. Social Structures and Mores:

The operation of the diesel-powered generator/engine would not alter or disrupt any local lifestyles or communities (social structures or mores) in the area of operation because the generator/engine would be relatively small, would operate intermittently, and would be used with the existing permitted equipment at a previously disturbed site. Therefore, the existing social structures and mores would not be affected as a result of this permit action.

B. Cultural Uniqueness and Diversity:
The operation of the diesel-powered generator/engine would cause no disruption to the above-cited economic and social resources or cultural uniqueness and diversity of the human environment in any given area of operation because the source would be a minor industrial source of emissions, would initially and typically operate in an existing industrial site used for such purposes, and would operate on a temporary basis. The predominant use of any surrounding area would not change as a result of the proposed action.

C. Local and State Tax Base and Tax Revenue:

The operation of the diesel-powered generator/engine would have little, if any, impact on the local and state tax base and tax revenue because the facility would be a minor industrial source and would conduct only seasonal and intermittent operations. No full time or permanent employees would be added as a result of issuing MAQP #4206-02. Therefore, the overall local and state tax base and tax revenue of any given area would not change as a result of the proposed project and any associated impacts would be minor.

D. Agricultural or Industrial Production:

The generator/engine would be used at previously disturbed industrial areas and no additional land disturbance is proposed by this action; therefore, the Department would not expect that the permitted operation would impact or displace agricultural production. Furthermore, only minor impacts on any local industrial production would be expected because the operation of the facility (and generator/engine) would be temporary and would be relatively small in size.

E. Human Health:

MAQP #4206-02 would incorporate conditions to ensure that the generator/engine 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. As described in Section 7.F. of this EA, the air emissions from the generator/engine would be minimized through opacity limitations established in MAQP #4206-02. Therefore, any associated impacts to human health would be minor.

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

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

G. Quantity and Distribution of Employment:

As a result of the relatively small size and temporary nature of the generator/engine, the quantity and distribution of employment in the area would not be impacted. No full time, permanent employees would be employed as a result of issuing MAQP #4206-02 for the addition of the portable diesel generator/engine.

H. Distribution of Population:

Given the relatively small size and portable nature of the generator/engine being added and the surrounding land usage, the normal population distribution in the area would not be affected.

I. Demands for Government Services:
Although minor increases would be observed in the local traffic on existing roads in the area where the facility operates, the operation of the diesel-powered generator/engine to the existing operations would not result in a need for new, altered, or additional government services**.**

J. Industrial and Commercial Activity:

The operation of the generator/engine would represent only a minor increase in the industrial activity in any given area because of the small size and the portable and temporary nature of the facility; therefore, only minor additional industrial or commercial activity would result from the generator operations.

K. Locally Adopted Environmental Plans and Goals:

The Department is not aware of any locally adopted environmental plans and goals that would be affected by issuing this permit. The applicable state and federal standards would be protective of the environment surrounding the site.

If the plant moved to an area classified as non-attainment for PM_{10}, the operation would be required to apply for and receive an addendum to MAQP #4206-02 prior to operation at the site. The addendum would include more restrictive requirements to protect the non-attainment area from further degradation. The state standards would be protective of any proposed area of operation.

L. Cumulative and Secondary Impacts:

The generator/engine would cause only minor cumulative and secondary impacts to the social and economic aspects of the human environment because of the potential air emissions from the generator and increase in local traffic in the immediate area. No social or economic impacts are anticipated as a result of the project as the project entails replacement of an existing engine/generator only. New businesses would not be drawn to any areas and permanent jobs would not be created or lost as result of the proposed project. Because no new employees would be hired, there would be no economic impacts from new employees. Thus, the operation of the generator/engine would result in only minor cumulative and secondary impacts would result to the social and economic environment.

Recommendation: No EIS is required. MAQP #4206-02 includes conditions and limitations to ensure the facility will operate in compliance with all applicable air quality rules and regulations. In addition, all impacts associated with the proposed action are expected to be insignificant or minor.

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

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

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