

AIR QUALITY PERMIT

Issued To: Knerr, Inc.
dba Thompson Falls Sand and Gravel
P.O. Box 2269
Thompson Falls, MT 59873

Permit #2985-06
Administrative Amendment (AA)
Request Received: 08/17/06
Department Decision on AA: 09/13/06
Permit Final: 09/29/06
AFS #777-2985

An air quality permit, with conditions, is hereby granted to Knerr, Inc. dba Thompson Falls Sand and Gravel (Thompson), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and the Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

Section I: Permitted Facilities

A. Plant Location

Thompson operates a portable drum mix asphalt plant with an attached wet scrubber at various locations throughout Montana. Permit #2985-06 applies while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department)-approved permitting program, those areas considered tribal lands, or those 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.* Addendum #6 applies to the Thompson facility while operating at locations in or within 10 km of certain PM₁₀ nonattainment areas during the summer months (April 1 through September 30) and winter months (October 1 through March 31). A complete list of the permitted equipment is contained in Section I.A of the permit analysis.

B. Current Permit Action

On August 17, 2006, the Department received a request from Thompson for an administrative amendment to Permit #2985-05 to allow for wintertime operations (October 1 through March 31) at certain locations in or within 10 km of the Butte, Columbia Falls, Libby, Kalispell, Thompson Falls, and Whitefish PM₁₀ nonattainment areas.

Section II: Limitations and Conditions

A. Emission Limitations

1. Asphalt plant particulate matter emissions shall be limited to 0.04 gr/dscf (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart I).
2. Thompson shall not cause or authorize to be discharged into the atmosphere from the asphalt plant, stack emissions that exhibit 20% opacity or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart I).
3. Thompson 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. Thompson shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308 and ARM 17.8.752).
5. Thompson shall treat all unpaved portions of the haul roads, access roads, and 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 17.8.752).
6. A wet scrubber for air pollution control, with a device to measure the pressure drop (magnehelic gauge, manometer, etc.), must be installed and maintained. Pressure drop must be measured in inches of water. Temperature indicators at the control device inlet and outlet must be installed and maintained (ARM 17.8.749).
7. Once a stack test is performed, the asphalt production rate shall be limited to the average production rate during the last source test demonstrating compliance (ARM 17.8.749).
8. Thompson shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR Part 60, Subpart I, for the asphalt plant (ARM 17.8.340 and 40 CFR 60).
9. Total particulate emissions from this asphalt plant, in conjunction with the total particulate emissions from any additional equipment at any individual site, shall be less than 250 tons per year during any rolling 12-month time period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).

B. Emission Testing

1. Within 60 days after achieving the maximum production rate, but not later than 180 days after initial start up, an Environmental Protection Agency (EPA) Methods 1-5 and 9 source test shall be performed on the asphalt plant to demonstrate compliance with Section II.A.1, Section II.A.2, and Section II.A.3, respectively. Testing shall continue on an every 4-year basis or according to another testing/monitoring schedule as may be approved by the Department (ARM 17.8.105 and ARM 17.8.749).
2. The pressure drop and temperature on the air pollution control device must be recorded daily and kept on site according to Section II.C.2 (ARM 17.8.749).
3. Pressure drop and temperature on the air pollution control device must be recorded during the test and reported as part of the test results (ARM 17.8.749).
4. Although asphalt production will be limited to the average production rate during the compliance source test, it is suggested the test be performed at the highest production rate practical (ARM 17.8.749).

5. Thompson may retest at any time in order to test at a higher production rate (ARM 17.8.749).
6. All compliance source tests must be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
7. The Department may require further testing (ARM 17.8.105).

C. Reporting Requirements

1. If this asphalt plant is moved to another location, an Intent to Transfer Form must be sent to the Department. In addition, a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area where the transfer is to be made, at least 15 days prior to the move. The Intent to Transfer Form and the proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department upon request (ARM 17.8.765).
2. Thompson shall maintain on-site records showing daily hours of operation, daily production rates, and daily pressure drop and temperature readings for the last 12 months. The records compiled in accordance with this permit shall be maintained by Thompson as a permanent business record for at least 5 years following the date of the measurement, must be submitted to the Department upon request, and must be available for inspection by the Department (ARM 17.8.749).
3. Thompson shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in Section I.A of 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).
4. Thompson shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745, that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. This notice must be submitted to the Department, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745 (1)(d) (ARM 17.8.745).

Section III: General Conditions

- A. Inspection - Thompson 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 (CEMS, 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 Thompson fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations - Nothing in this permit shall be construed as relieving Thompson of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement - Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties, or other enforcement, 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 Thompson may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Construction Commencement - Construction must begin within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked (ARM 17.8.762).
- I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.
- J. Thompson shall comply with the conditions contained in this permit while operating in any location in Montana, except within those areas having a Department-approved permitting program.

Permit Analysis
Knerr, Inc. dba Thompson Falls Sand and Gravel
Permit #2985-06

I. Introduction/Process Description

A. Permitted Equipment

Knerr, Inc. dba Thompson Falls Sand and Gravel (Thompson) operates a portable 1974 Aedco Drum Mix Asphalt Plant (maximum capacity 100 Tons Per Hour (TPH)) with a 1999 Aedco Madsen wet scrubber and associated equipment.

B. Process Description

A typical operation for the hot mix asphalt plant begins by loading gravel into a cold feed bin. The gravel is then conveyed to the hot asphalt plant. The gravel is mixed with hot oil in the asphalt plant to create asphalt. Hot asphalt then exits the plant and is transported to the current project site.

C. Permit History

On July 10, 1997, Paradise Rock, Inc. submitted a complete permit application to operate a portable 1974 Aedco Drum Mix Asphalt Plant (maximum production rate of 60 TPH) Serial #1261, a 60 Kilowatt (kW) Detroit Diesel generator, a 20 kW Delco AC generator, and associated equipment. The facility originally operated at the NW¼ of the NE¼ of Section 14, Township 21 North, Range 29 West of Sanders County, Montana. Permit **#2985-00** was issued as final on September 3, 1997.

On August 18, 1999, LHC, Inc. (LHC) submitted a complete permit application to alter Permit #2985-00. The alteration involved a transfer of ownership from Paradise Rock, Inc., to LHC; the addition of a Venturi wet scrubber; the addition of a 40-ton storage silo; an increased production rate for the Aedco asphalt plant from 60 ton/hr to 100 ton/hr; and removal of two generators from the existing equipment (60kW and 20kW) covered under Permit #2985-00. The resulting permitted equipment included a portable 1974 Aedco drum mix asphalt plant (100 TPH), with a Venturi wet scrubber, a 40-ton storage silo, and associated equipment.

LHC was originally permitted at their Kalispell home pit located approximately 5 kilometers north of Kalispell and 1 km west of Highway 93 in Section 25 and Section 26, Township 29 North, Range 22 West, in Flathead County, Montana. LHC also proposed operation within Section 13, Township 21 North, Range 29 West, in Sanders County. The Kalispell home pit is located within the Kalispell particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) non-attainment area (NAA) and the Sanders County pit is located within the Thompson Falls PM₁₀ NAA. Because LHC proposed operation at the above sites at various times throughout the year, including during the winter months of October 1, 1999, through March 31, 2000, the operation of the plant required site-specific conditions established using SCREEN3 modeling. Permit **#2985-01** replaced Permit #2985-00 and **Addendum 1** was established.

On October 29, 1999, LHC was issued a modification that increased plant production by applying the correct emission factors in remodeling the source with SCREEN3. During the analysis of the previous permit action, to allow for winter operation at the previously cited locations in or within 10 km of the Kalispell and Thompson Falls PM₁₀ non-attainment areas, the Department of Environmental Quality (Department) used incorrect

emission factors to establish production limits through SCREEN3 modeling. Use of the improper emission factors resulted in decreased allowable production. The allowable production limit found in Addendum 1 to Permit #2985-01 was 378 tons per any rolling 24-hour time period. Using the correct PM₁₀ emission factor increased the allowable production to 462 tons per any rolling 24-hour time period. Therefore, the permit action modified condition A.6 of Addendum 1 to Permit #2985-01, to reflect the increased allowable production. Permit **#2985-02** replaced Permit #2985-01 and **Addendum 2** replaced Addendum 1.

On February 26, 2001, LHC requested that Permit #2985-02 and Addendum 2 be modified to allow the permitted facility to operate in or within 10 km of certain PM₁₀ nonattainment areas during the summer months (April 1, 2001, through September 30, 2001). The Department agreed to the change and modified **Permit #2985-03**, which replaced Permit #2985-02 and **Addendum 3** replaced Addendum 2.

On December 3, 2001, LHC requested that Permit #2985-03 be modified to allow the permitted facility to operate in or within 10 km of the Kalispell and Thompson Falls PM₁₀ nonattainment areas during the winter season (October 1 through March 31). In addition, LHC requested to operate the permitted facility in or within 10 km of other PM₁₀ nonattainment areas in Montana during the summer season (April 1 through September 30). The modification of Permit #2985-03 allows the facility to operate in or within 10 km of the Kalispell and Thompson Falls PM₁₀ nonattainment areas during the winter season and to operate during the summer season in or within 10 km of certain PM₁₀ nonattainment areas, including, but not limited to Libby, Kalispell, Columbia Falls, Whitefish, Thompson Falls, and Butte. **Permit #2985-04** replaced Permit #2985-03 and **Addendum 4** replaced Addendum 3.

On February 1, 2005, a transfer of ownership request was submitted to the Department to transfer the equipment listed in Section I.A of Permit #2985-04 from LHC, Inc. to Thompson. Additionally, Thompson requested a summertime addendum (April 1 through September 30) for operations in or within 10 km of certain PM₁₀ nonattainment areas. Additionally, the permit was updated with current language and rule references used by the Department. **Permit #2985-05** replaced Permit #2985-04 and **Addendum 5** replaced Addendum 4.

D. Current Permit Action

On August 17, 2006, the Department received a request from Thompson for an administrative amendment to Permit #2985-05 to allow for wintertime operations (October 1 through March 31) at certain locations in or within 10 km of the Butte, Columbia Falls, Libby, Kalispell, Thompson Falls, and Whitefish PM₁₀ nonattainment areas. **Permit #2985-06** replaces Permit #2985-05 and **Addendum 6** replaces Addendum 5.

E. Additional Information

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

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

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

1. ARM 17.8.101 Definitions. This rule is a list of applicable definitions used in this 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).

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

4. ARM 17.8.110 Malfunctions. (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 which, without resulting in reduction in 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 that a public nuisance is created.

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

1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
4. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
5. ARM 17.8.223 Ambient Standard for PM₁₀.

Thompson must comply with the applicable ambient air quality standards.

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

1. ARM 17.8.304 Visible Air Contaminants. This rule 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, Thompson shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
 3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section.
 4. ARM 17.8.310 Particulate Matter, Industrial Processes. This rule requires that no person shall cause or allow to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.
 5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this rule.
 6. ARM 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR 60, Standards of Performance for New Stationary Sources (NSPS). Based on the information submitted by Thompson, the portable 1974 Aedco Drum Mix Asphalt Plant (maximum production rate 100 TPH) and associated equipment; therefore, NSPS (40 CFR Part 60, Subpart A, General Provisions, and Subpart I, Hot Mix Asphalt Facilities) applies to the 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. Thompson shall submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. Thompson was not required to submit a permit application fee for the current permit action because it is administrative.
 2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department. This 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 which pro-rate the required fee amount.

- E. ARM 17.8, Subchapter 7, Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:
1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a facility to obtain an air quality permit or permit alteration 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. Thompson has a PTE greater than 15 tons per year of total particulate matter (PM), PM₁₀, oxides of nitrogen (NO_x), and carbon monoxide (CO), and oxides of sulfur (SO_x); 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. (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. Thompson was not required to submit a permit application or public notice for the current permit action because the current permit action is an administrative action.
 6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
 7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section IV 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 Thompson 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 altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 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 Thompson, 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 Modifications-- Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the Federal Clean Air Act (FCAA) that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source, because it is not a listed source and does not have the potential to emit more than 250 tons per year (excluding fugitive emissions) or more of any air pollutant. Therefore, the Thompson facility is not subject to the Prevention of Significant Deterioration (PSD) program at this time.

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

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any source having:
 - a. PTE > 100 ton/year of any pollutant;
 - b. PTE > 10 ton/year of any one Hazardous Air Pollutant (HAP), PTE > 25 ton/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. (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 Air Quality Permit #2985-06 for Thompson, the following conclusions were made:
 - a. The facility's PTE is less than 100 tons/year for all criteria pollutants.
 - 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 current NSPS (40 CFR Part 60, Subpart A and 40 CFR Part 60, Subpart I) standards.
 - e. This facility is not subject to any current NESHAP standards.
 - f. This source is not a Title IV affected source, nor a solid waste combustion unit.
 - g. This source is not an EPA designated Title V source.

Based on these facts, the Department determined that the Thompson asphalt plant is 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, Thompson will be required to obtain an operating permit.

III. BACT Determination

A BACT determination is required for each new or altered source. Thompson shall install on the

new or altered source the maximum air pollution control capability which is technically practicable and economically feasible, except that BACT shall be utilized. The current permit action is an administrative action and does not involve permitting any new or altered sources; therefore, a BACT analysis is not required.

IV. Emission Inventory

Source	Tons/Year					
	PM	PM ₁₀	NO _x	VOC	CO	SO _x
1974 Acedo Drum Mix Asphalt Plant w/ Wet Scrubber	3.22	2.57	24.09	14.02	56.94	25.40
Elevator, Sceens, Bins, and Mixer	16.43	13.14				
Cold Aggregate Handling	21.90	17.52				
Haul Roads	2.74	1.23				
Total	44.29	34.46	24.09	14.02	56.94	25.40

- A complete emission inventory for Permit #2985-06 is on file with the Department.

V. Existing Air Quality

Permit #2985-06 is issued for the operation of a portable asphalt plant facility to operate at various locations throughout Montana. This facility would be allowed to operate at any area designated as attainment or unclassified for all National Ambient Air Quality Standards (NAAQS); 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 PM₁₀ nonattainment areas. *A Missoula County air quality permit would be required for locations within Missoula County, Montana.* Addendum #6 of Permit #2985-06 would cover this portable crushing/screening plant while operating at locations in or within 10 km of a PM₁₀ nonattainment area during the winter season (October 1 through March 31). Addendum #6 of Permit #2985-06 would also allow for summertime operations (April 1 – September 30) at any location in or within 10 km of the Butte, Columbia Falls, Libby, Kalispell, Thompson Falls, and Whitefish PM₁₀ nonattainment areas.

VI. Air Quality Impacts

This permit is for a portable asphalt plant facility to be located at various locations around Montana. The Department has determined that, with conditions and limitations, Thompson will maintain compliance with all ambient air quality standards. Permit #2985-06 outlines the conditions and limitations that apply when Thompson operates in or within 10 km of a PM₁₀ nonattainment area. This 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. Further, the amount of controlled particulate emissions generated by this project should not cause concentrations of PM₁₀ in the ambient air that exceed the set standard.

VII. Taking or Damaging Implication Analysis

As required by 2-10-101 through 105, MCA, the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

VIII. Environmental Assessment

An Environmental Assessment is not required for the current permitting action because the

change is considered an administrative permit change.

Addendum #6
Knerr, Inc. dba Thompson Falls Sand and Gravel
Permit #2985-06

An addendum to air quality Permit #2985-06 is issued to Knerr, Inc. dba Thompson Falls Sand and Gravel (Thompson) pursuant to Sections 75-2-204 and 75-2-211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.734, as amended, for the following:

I. Permitted Equipment

The facility includes a portable 1974 Aedco Drum Mix Asphalt Plant (maximum production capacity of 100 Tons Per Hour (TPH)) with a 1999 Aedco Madsen wet scrubber, and associated equipment in or within 10 kilometers (km) of the following particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas: Libby; Kalispell; Columbia Falls; Whitefish; Thompson Falls; and Butte.

II. Seasonal and Site Restrictions

Addendum #6 applies to the Thompson facility while operating at any location in or within 10 km of certain PM₁₀ nonattainment areas. Additionally, seasonal and site restrictions apply to the facility as follows:

- A. During the winter season (October 1-March 31) - The only location(s) in or within 10 km of certain PM₁₀ nonattainment area where Thompson may operate is:
- Section 15, Township 21 North, Range 29 West; and
 - Any other site that may be approved, in writing, by the Department of Environmental Quality (Department).
- B. During the summer season (April 1-September 30) – Thompson may operate at any location in or within 10 kilometers of certain PM₁₀ nonattainment areas, (Libby, Thompson Falls, Kalispell, Whitefish, Columbia Falls, and Butte).
- C. Thompson shall comply with the limitations and conditions contained in Addendum #6 to Permit #2985-06 while operating in or within 10 km of any of the previously listed PM₁₀ nonattainment areas. Addendum #6 shall be valid until revoked or modified. The Department reserves the authority to modify Addendum #6 at any time based on local conditions of any future site. These conditions may include, but are not limited to, local terrain, meteorological conditions, proximity to residences or other businesses, etc.

III. Limitations and Conditions

- A. Operational Limitations and Conditions – **Winter Season (October 1 – March 31)**
1. Asphalt plant particulate matter emissions shall be limited to 0.04 gr/dscf (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart I).
 2. All visible emissions from the asphalt plant stack shall not exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).
 3. Thompson 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 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).

4. Thompson shall treat all unpaved portions of the access roads, parking lots, and general plant area with water and/or chemical dust suppressant, as necessary to maintain compliance with the 10% opacity limitation (ARM 17.8.749).
5. Thompson's asphalt plant production shall be limited to 1,042 tons during any rolling 24-hour time period (ARM 17.8.749).

B. Operational Limitations and Conditions – Summer Season (April 1 – September 30)

1. Asphalt plant particulate matter emissions shall be limited to 0.04 gr/dscf (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart I).
2. All visible emissions from the asphalt plant stack shall not exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).
3. Thompson 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 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).
4. Thompson shall treat all unpaved portions of the access roads, parking lots, and general plant area with water and/or chemical dust suppressant, as necessary to maintain compliance with the 10% opacity limitation (ARM 17.8.749).
5. Thompson's asphalt plant production shall be limited to 2,400 tons during any rolling 24-hour time period (ARM 17.8.749).

C. Operational Reporting Requirements

1. Thompson shall provide the Department with written notification of job completion within 10 working days of job completion (ARM 17.8.749).
2. Thompson shall provide written notice of relocation of the permitted equipment at least 15 days prior to the physical transfer of equipment (ARM 17.8.734).
3. Production information for the site(s) covered by this addendum must be submitted to the Department within 30 days of completion of the project or expiration of Addendum #6. The information shall include (ARM 17.8.749):
 - a. Daily tons of asphalt produced
 - b. Daily hours of operation
 - c. Type and amount of fuel used for the plant
 - d. Fugitive dust information consisting of a listing of all plant vehicles, including the following for each vehicle type:

- i. Number of vehicles
 - ii. Vehicle type
 - iii. Average vehicle weight
 - iv. Number of tires on vehicle
 - v. Annual on-site vehicle miles traveled
 - vi. Average on-site vehicle speed
 - vii. Vehicle fuel usage (gasoline or diesel) annual total
 - e. Fugitive dust control for haul roads and general plant area:
 - i. Hours of operation of water trucks
 - ii. Application schedule for chemical dust suppressant, if applicable.
4. Thompson shall document, by day, the total asphalt plant production during the winter season. Thompson shall sum the total asphalt plant production during the previous 24 hours to verify compliance with the limitations in Section III.A.5. A written report of compliance verification and the emissions inventory shall be submitted to the Department annually. The report for the previous calendar year shall be submitted along with the annual emission inventory (ARM 17.8.749).
5. Thompson shall document, by day, the total asphalt plant production during the summer season. Thompson shall sum the total asphalt plant production during the previous 24 hours to verify compliance with the limitations in Section III.B.5. A written report of compliance verification and the emissions inventory shall be submitted to the Department annually. The report for the previous calendar year shall be submitted along with the annual emission inventory (ARM 17.8.749).

Addendum #6 Analysis
Knerr, Inc. dba Thompson Falls Sand and Gravel
Permit #2985-06

I. Permitted Equipment

Knerr, Inc. dba Thompson Falls Sand and Gravel (Thompson) operates a portable 1974 Aedco Drum Mix Asphalt Plant (maximum production rate of 100 TPH) with a 1999 Aedco Madsen wet scrubber and associated equipment.

II. Process Description

A typical operation for the hot mix asphalt plant begins by loading gravel into a cold feed bin. The gravel is then conveyed to the hot asphalt plant. The gravel is mixed with hot oil in the asphalt plant to create asphalt. Hot asphalt then exits the plant and is transported to the current project site.

III. Current Permit Action

On August 17, 2006, the Department of Environmental Quality (Department) received a request from Thompson for an administrative amendment to Permit #2985-05 to allow for wintertime operations (October 1 through March 31) at certain locations in or within 10 km of the Butte, Columbia Falls, Libby, Kalispell, Thompson Falls, and Whitefish PM₁₀ nonattainment areas.

IV. Applicable Rules and Regulations

The following are partial quotations 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.

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

1. 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.
2. 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. A source may not increase its emissions beyond those found in its permit unless the source applies for and receives another permit.

3. ARM 17.8.765 Transfer of Permit. An air quality permit may be transferred from one person to another if:
 - a. Written notice of Intent to Transfer location and public notice is sent to the Department.
 - b. The source will operate in the new location for a period of less than 1 year.
 - c. The source will not have any significant impact on any nonattainment area or any Class I area.

Thompson will have to submit proof of compliance with the transfer and public notice requirements when they transfer to the location covered by this addendum and will only be allowed to stay in the new location for a period of less than 1 year. Also, the conditions and controls of this addendum will keep Thompson from having a significant impact on any PM₁₀ nonattainment areas covered by this permit.

V. Emission Inventory

Source	Lb/Day					
	PM	PM ₁₀	NO _x	VOC	CO	SO _x
1974 Acedo Drum Mix Asphalt Plant w/ Wet Scrubber	7.65	6.12	57.31	33.35	135.47	60.44
Elevator, Sceens, Bins, and Mixer	39.08	31.26				
Cold Aggregate Handling	52.10	41.68				
Haul Roads	1.19	2.93				
Total	100.02	81.99	57.31	33.35	135.47	60.44

Note: Emission inventory for winter season.

Source	Lb/Day					
	PM	PM ₁₀	NO _x	VOC	CO	SO _x
1974 Acedo Drum Mix Asphalt Plant w/ Wet Scrubber	17.62	14.09	132.00	76.80	312.00	139.20
Elevator, Sceens, Bins, and Mixer	90.00	72.00				
Cold Aggregate Handling	120.00	96.00				
Haul Roads	2.74	6.75				
Total	230.36	188.84	132.00	76.80	312.00	139.20

Note: Emission inventory for summer season.

- A complete emission inventory for Addendum #6 is on file with the Department.

VI. Existing Air Quality

On July 1, 1987, the Environmental Protection Agency (EPA) promulgated new National Ambient Air Quality Standards (NAAQS) for PM₁₀. Due to exceedances of the national standards for PM₁₀, the cities of Kalispell (and the nearby Evergreen area), Columbia Falls, Butte, Whitefish, Libby, Missoula, and Thompson Falls were designated by EPA as nonattainment for PM₁₀. As a result of this designation, EPA required the Department and the City-County Health Departments submit PM₁₀ State Implementation Plans (SIP). The SIPs consisted of emission control plans that controlled fugitive dust emissions from roads, parking lots, construction, and demolition, since technical studies determined these sources to be the major contributors to PM₁₀ emissions.

Addendum #6 to Permit #2985-06 is for a portable asphalt plant to locate at sites in or within 10 km of certain PM₁₀ nonattainment areas during the winter season (October 1 through March 31). Winter season (October 1 through March 31) operations many include only the locations listed in Section II.A of Addendum #6. Addendum #6 of Permit #2985-06 would also allow for summertime operations (April 1 – September 30) at any location in or within 10 km of the Butte, Columbia Falls, Libby, Kalispell, Thompson Falls, and Whitefish PM₁₀ nonattainment areas.

VII. Air Quality Impacts

Thompson applied for an air quality permit to operate a portable asphalt plant to be located at various locations throughout Montana. Permit #2985-06 and Addendum #6 will cover the Thompson asphalt plant while operating at any location within Montana, excluding those counties that have a Department-approved permitting program and those areas considered tribal lands. Based on the information provided, the amount of controlled emissions generated by this facility will not exceed any ambient air quality standard. In addition, this source is portable and any air quality impacts will be minimal.

VIII. Taking or Damaging Implication Analysis

As required by 2-10-101 through 2-10-105, MCA, the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

IX. Environmental Assessment

An Environmental Assessment was not required for this permit action because the permit action is an administrative amendment.

Analysis prepared by: Eric Thunstrom

Date: August 28, 2006