

AIR QUALITY PERMIT

Issued To:	NUPAC (Helena Sand & Gravel) P.O. Box 8150 Kalispell, MT 59904-1150	Permit #1125-04 Application Complete: 04/12/04 Preliminary Determination Issued: 05/20/04 Department Decision Issued: 06/07/04 Permit Final: 06/23/04 AFS #777-1125
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An air quality permit, with conditions, is hereby granted to NUPAC a division of Helena Sand & Gravel (NUPAC) 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. Location

NUPAC operates a 1967 Stansteel batch mix asphalt plant and associated equipment. The initial site location has been identified as 2355 Highway 93 North at the SE $\frac{1}{4}$ of Section 23 and the SW $\frac{1}{4}$ of Section 24, Township 29 North, Range 22 West, in Flathead County, Montana. A complete list of permitted equipment is contained in Section I.A of the permit analysis.

B. Current Permit Action

On April 12, 2004, the Department of Environmental Quality (Department) received a complete permit application from Aspen Consulting & Engineering, Inc., on behalf of NUPAC. The application requested that the Department allow NUPAC to use "On-Spec" oil (more commonly referred to a used oil) to fire the plant's asphalt dryer. Emission factors were updated by EPA in March of 2004 for this industrial source and were used to calculate proposed changes in fuel usage for the asphalt plant. Further, since this facility was previously modeled and accounted for within the Kalispell PM₁₀ nonattainment area, as part of the SIP, an addendum is not currently required for this source. However, if the facility moves in or within 10 km of any other PM₁₀ nonattainment area, an addendum may be required. *A Missoula County air quality permit would be required for locations within Missoula County, Montana.*

Section II: Limitations and Conditions

A. Emission Limitations

1. Asphalt plant particulate matter emissions shall be limited to 0.10 gr/dscf (ARM 17.8.749).
2. NUPAC 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 17.8.304 and ARM 17.8.752).
3. NUPAC 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; or 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 and ARM 17.8.752).

4. NUPAC shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control visible fugitive emissions of airborne particulate matter that exhibit an opacity of 5% or greater (RACT).
5. NUPAC 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 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. Pressure drop on the control device and temperature must be recorded daily and kept on site according to Section II.C.2 (ARM 17.8.749).
7. Once a stack test is performed, the asphalt plant production rate shall be limited to the average production rate during the last source test demonstrating compliance (ARM 17.8.749).
8. The total plant production shall be limited to 321,000 tons during any rolling 12-month time period (ARM 17.8.749).
9. If the permitted equipment is used in conjunction with any other equipment owned or operated by NUPAC, 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 time period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).
10. NUPAC shall only use natural gas, fuel oil, or waste oil to fire the drum dryer, and NUPAC shall only use natural gas to fire the asphalt heater (ARM 17.8.749).

B. Emission Testing

1. EPA Methods 1-5 and 9 source tests must be performed on the asphalt plant every 4 years after the initial source test, or according to another testing/monitoring schedule as may be approved by the Department, to demonstrate compliance with the conditions specified in Sections II.A.1 and II.A.2 (ARM 17.8.105 and ARM 17.8.749).
2. Pressure drop and temperature must be recorded during the test and reported as part of the test results specified in Section II.C.2 (ARM 17.8.749).
3. All compliance source tests must be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
4. Since asphalt production will be limited to the average production rate during the test, it is suggested that the test be performed at the highest production rate practical. NUPAC may retest at any time in order to test at a higher production rate (ARM 17.8.749).
5. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. If the 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 (ARM 17.8.765).
2. NUPAC 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 NUPAC 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 at the plant site for inspection by the Department (ARM 17.8.749).
3. NUPAC shall document, by month, the asphalt production from the facility. By the 25th day of each month, NUPAC shall total the asphalt production of the facility during the previous 12 months to verify compliance with the limitation in Section II.A.8. A written report of the compliance verification shall be submitted along with the annual emissions inventory (ARM 17.8.749).
4. NUPAC shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the most recent emission inventory report and sources 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 to calculate operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

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

Section III: General Conditions

- A. Inspection – NUPAC 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 the terms, conditions, and matters stated herein shall be deemed accepted if NUPAC fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving NUPAC of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement action as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals – Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds 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 postpones the effective date of the Department's decision until the conclusion of the hearing and issuance of a final decision by the Board. The Department's decision on the application is not final unless 15 days have elapsed and there is no request for a hearing under this section.
- F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy the air quality permit shall be made available for inspection by the Department 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 NUPAC may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. 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.
- I. NUPAC shall comply with the conditions contained in this permit while operating at any location in Montana, except within those areas having a Department approved permitting program.
- J. NUPAC shall comply with the conditions contained in this permit while operating at any location in Montana, except within those areas having a Department approved permitting program.

PERMIT ANALYSIS
NUPAC (Helena Sand & Gravel)
Permit #1125-04

I. Introduction/Process Description

A. Permitted Equipment

NUPAC, a division of Helena Sand & Gravel, (NUPAC) operates a portable 1967 Stansteel batch mix asphalt plant (maximum capacity 200 tons per hour (TPH)) with a Stansteel wet scrubber (installed in 1977), and associated equipment.

B. Process Description

A typical operation begins by loading aggregate into hoppers and then conveying the aggregate to the rotary dryer. The material is completely dried and conveyed to the pugmill where it is mixed with hot asphalt oil. A Stansteel scrubber is used to control particulate emissions from the pugmill. The asphalt mixture is then loaded into haul trucks from the pugmill and taken to the current project site.

C. Permit History

On August 30, 1977, Pack and Company, Inc. was issued Permit #**1125-00** for the operation of a 1967 Stansteel #RM 5000 asphalt plant (maximum capacity 200 TPH), with a Stansteel wet scrubber (installed in 1977). The plant is located at 2355 Highway 93 North at the SW¼ of the NW¼ of Section 31, Township 29 North, Range 21 West, in Flathead County, Montana. On September 9, 1993, a stipulation was finalized to keep the 1967 Stansteel asphalt plant in compliance with the particulate matter National Ambient Air Quality Standard (NAAQS) for a "moderate" particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) non-attainment area, as the facility location was designated by Environmental Protection Agency (EPA).

On October 29, 2000, Pack and Company, Inc. was issued a permit that placed limits on the facility to keep the equipment's potential emissions below the Title V Operating Permit threshold. Permit #**1125-01** replaced Permit #1125-00. This permit action reflected an administrative change to Permit #1125-01.

The Department of Environmental Quality (Department) updated the permit to correctly identify the annual production limit necessary for Pack and Company, Inc. to stay below the Department's modeling threshold. The production limitation was changed from 307,500 tons per year to 321,000 tons per year. Permit #**1125-02** replaced Permit #1125-01.

On March 3, 2004, the Department received a letter from Aspen Consulting & Engineering, Inc., on behalf of Pack and Company, Inc. requesting the Department change the corporate name on Permit #1125-02 from Pack and Company, Inc. to NUPAC. The current permitting action changed the name from Pack and Company to NUPAC and updated the permit to reflect current permit language and rule references used by the Department. Permit #**1125-03** replaces Permit #1125-02.

D. Current Permit Action

On April 12, 2004, the Department received a complete permit application from Aspen Consulting & Engineering, Inc., on behalf of NUPAC. The application requested that the Department allow NUPAC to use “On-Spec” oil (more commonly referred to as used oil) to fire the plant’s asphalt dryer. Emission factors were updated by EPA in March of 2004 for this industrial source and were used to calculate proposed changes in fuel usage for the asphalt plant. Further, since this facility was previously modeled and accounted for within the Kalispell PM₁₀ nonattainment area, as part of the SIP, an addendum is not currently required for this source. See Section V of the permit analysis for more detail. However, if the facility moves in or within 10 kilometers (km) of any other PM₁₀ nonattainment area, an addendum will be required. Permit #1125-04 replaces Permit #1125-03.

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 initial analysis associated with each change to the permit.

II. Applicable Rules and Regulations

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

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

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

NUPAC 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 PM₁₀

NUPAC 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, NUPAC shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.
4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.
5. ARM 17.8.322 Sulfur Oxide Emissions—Sulfur in Fuel. Commencing July 1, 1971, no person shall burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions.

6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank truck or trailer is equipped with a vapor loss control device as described in (1) of this rule.
7. ARM 17.8.340 Standard of Performance for New Stationary Sources. The owner and operator of any stationary source or modification, as defined and applied in 40 CFR Part 60, shall comply with the standards and provisions of 40 CFR Part 60. This plant consists of a portable 1967 Stansteel batch mix asphalt plant (maximum capacity 200 tons per hour (TPH)) and associated equipment. The proposed changes would not be considered a modification (under 40 CFR Subpart A, General Provisions, Section 60.14) or reconstruction (under 40 CFR Subpart A, General Provisions, Section 60.15). Therefore, New Source Performance Standards (40 CFR Part 60, Subpart A, General Provisions, and Subpart I, Hot Mix Asphalt Facilities) does not apply to this facility, which was not reconstructed or modified after June 11, 1973.

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. NUPAC 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. NUPAC 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. This air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

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

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

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.743 Montana Air Quality Permits—When Required. This rule requires a person to obtain an air quality permit or permit alteration to construct, alter or use any asphalt plant, crusher, or screen that has the Potential to Emit (PTE) greater than 15 tons per year of any pollutant. NUPAC has a PTE greater than 15 tons per year of particulate matter (PM), (PM₁₀), carbon monoxide (CO), and oxides of nitrogen (NO_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, alteration, or use of a source. NUPAC submitted the required permit application for the current permit action. (2) This rule requires that NUPAC notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. NUPAC submitted an affidavit of publication of public notice for the April 17, 2004, issue of the Daily Interlake, a newspaper of general circulation in the Town of Kalispell in Flathead County, as proof of compliance with the public notice requirements.
6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving NUPAC 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 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 (excluding fugitive emissions) of any air pollutant.

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

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. PTE > 100 tons/year of any pollutant,

- b. PTE > 10 tons/year of any one Hazardous Air Pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule, or
 - c. PTE > 70 tons/year of PM₁₀ in a serious PM₁₀ nonattainment area.
2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #1125-04 for NUPAC, the following conclusions were made:
- a. The facility's PTE is less than 100 tons/year for any pollutant.
 - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is not subject to any current NSPS standards.
 - e. This facility is not subject to any current NESHAP standards.
 - 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 NUPAC will be a minor source of emissions as defined under Title V.

III. Best Available Control Technology Analysis

A BACT determination is required for any new or altered source. NUPAC 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. A BACT analysis was conducted for particulate matter, PM₁₀, NO_x, VOC, CO, and SO_x for firing the asphalt drum and to allow used oil as a fuel in doing so.

Calculations for PM and PM₁₀ emissions were used from Department guidance and these emissions inventory factors are more conservative estimates than those currently found in AP-42. Those factors found in AP-42 for PM and PM₁₀ emissions are pollutant control specific, but not fuel specific. However, AP-42 emissions factors to calculate the change in NO_x, VOC, CO, and SO_x are fuel specific, but not pollutant control specific. Because NUPAC requested a fuel change, the Department used the fuel specific emissions inventory factors to calculate the emissions of NO_x, VOC, CO, and SO_x that could be generated for the proposed fuel change. The net result of the Department calculations did not result in any changes to existing limitations in the permit. However, the proposed fuel change resulted in a potential emissions increase of greater than 15 tons per year and did require NUPAC submit a permit application to the Department and for NUPAC to complete the permitting process.

Therefore, a wet scrubber will be used to control emissions from the 1967 Stansteel batch mix asphalt plant. In addition, all visible emissions from the Stansteel drum mix asphalt plant, with attached wet scrubber, are limited to 20% opacity. All asphalt plant particulate matter emissions are limited to 0.10 gr/dscf. The Department determined that maintaining compliance with the emission limitations in Sections II.A.1 and II.A.2 of the permit constitutes BACT when operating the batch mix asphalt plant.

IV. Emission Inventory

Source	tons/year					
	PM	PM ₁₀	NO _x	VOC	CO	SO _x
1967 Batch Asphalt Plant / with Wet Scrubber Control	45.79	36.63	19.26	5.78	64.20	14.12
Elevator, Screens, Bins, and Mixer	6.02	4.82				
Cold Aggregate Handling	8.03	6.42				
Asphalt Heater			4.82	4.17	8.99	0.53
Pile Forming	0.67	0.32				
Haul Roads	2.74	1.23				
Total Emissions	63.25	49.42	24.08	9.95	73.19	14.65

- A complete emission inventory for Permit #1125-04 is on file with the Department.

V. Existing Air Quality Impacts

On July 1, 1987, the EPA promulgated new National Ambient Air Quality Standards (NAAQS) for PM₁₀. Due to exceedances of the national standards for PM₁₀, the city of Kalispell and the nearby Evergreen area have been designated by EPA as nonattainment for PM₁₀. As a result of this designation, EPA required the Department of Health and Environmental Sciences and the Flathead City-County Health Department to submit the Kalispell PM₁₀ State Implementation Plan (SIP) to EPA in November 1991. The SIP consisted of an emission control plan that controlled fugitive dust emissions from roads, parking lots, construction, and demolition, since technical studies determined these sources to be the major contributors of PM₁₀ emissions.

Receptor modeling (a model that identifies contributions based on actual area and industrial emissions and ambient data) was originally used to demonstrate attainment of the federal PM₁₀ standard in the SIP. The EPA is now requiring the Department to use a dispersion model (a model that incorporates allowable emission rates from facilities) to assure that attainment can still be demonstrated if individual sources are operating at their maximum allowable emission rates.

Dispersion modeling conducted, using emissions from the NUPAC facility at its potential to emit (emissions associated with maximum design capacity or as limited by ARM 17.8.310), indicated that some emission points within the facility contributed significantly to the PM₁₀ concentrations in the Kalispell non-attainment area. As used in the preceding sentence, the term "significantly" means that the PM₁₀ emissions from NUPAC, when modeled, were greater than 5 micrograms per cubic meter impact for at least one receptor point within the Kalispell nonattainment area, consistent with the FCAA, implementing regulations found at 40 CFR Part 51, and pertinent EPA guidance.

In order to demonstrate compliance (through dispersion modeling) with the PM₁₀ NAAQS in the Kalispell nonattainment area, it was deemed necessary to reduce or establish new emission limitations for the NUPAC facility. The new emission limitations in this document, in conjunction with similar limitations on other Kalispell area facilities, were determined by the Department, through dispersion modeling to comply with the NAAQS for PM₁₀. The reductions

in allowable emissions were enforced through a signed stipulation. With the proper utilization of control equipment and application of reasonable control techniques (watering or application of dust suppressant) for haul road dust, the Department determined that the NUPAC facility could operate at maximum design rates and remain in compliance with the stipulated emission limitations.

This permit is for a drum mix asphalt plant located at 2355 Highway 93 North at the SE $\frac{1}{4}$ of Section 23 and the SW $\frac{1}{4}$ of Section 24, Township 29 North, Range 22 West, in Flathead County, Montana. The amount of controlled emissions generated by this project will not cause concentrations in the ambient air that exceed the set standard.

VI. Taking or Damaging Implication Analysis

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

VII. Environmental Assessment

An environmental assessment, as 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, Montana 59620
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FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued For: NUPAC
(Helena Sand & Gravel)
P.O. Box 8150
Kalispell, MT 59904-1150

Permit Number: #1125-04

Preliminary Determination Issued: May 20, 2004

Department Decision Issued: June 7, 2004

Permit Final: June 23, 2004

1. *Legal Description of Site:* NUPAC submitted an application to operate a portable hot mix asphalt plant at 2355 Highway 93 North at the SE $\frac{1}{4}$ of Section 23 and the SW $\frac{1}{4}$ of Section 24, Township 29 North, Range 22 West, in Flathead County, Montana. Permit #1125-04 would apply while operating at any location in Montana, except within those areas having a Department approved permitting program or those areas considered tribal lands, and those areas considered nonattainment for PM₁₀. If the facility moves in or within 10 km of certain other PM₁₀ nonattainment areas than the Kalispell PM₁₀ nonattainment area, an addendum will be required. Since this facility was previously modeled and accounted for within the Kalispell PM₁₀ nonattainment area, as part of the SIP, an addendum is not currently required for this source. *A Missoula County air quality permit would be required for locations within Missoula County, Montana.*
2. *Description of Project:* The permit application proposes the construction and operation of a portable 1967 Stansteel batch mix asphalt plant, with a wet scrubber and associated equipment. A typical operation begins by loading aggregate into hoppers and then conveying it to the rotary dryer. The material is completely dried and conveyed to the pugmill where it is mixed with hot asphalt oil. A Stansteel scrubber is used to control particulate emissions from the pugmill. The asphalt mixture is then loaded into haul trucks from the pugmill and taken to the current project site.
3. *Objectives of Project:* NUPAC, in an effort to produce business and revenue for the company, submitted a complete permit application for the portable batch mix asphalt plant. NUPAC requested to be allowed to use "On-Spec" oil (more commonly referred to as used oil) to fire the plant's asphalt dryer. Additionally NUPAC would be allowed to operate the portable batch mix asphalt plant at various locations throughout Montana, including the proposed initial site location.
4. *Additional Project Site Information:* In many cases, this portable hot mix asphalt plant may move to a general site location or open cut pit, which has been previously permitted through IEMB. If this were the case, a more extensive EA would have been conducted for the site and would be found in the Mined Land Reclamation Permit for that specific site.
5. *Alternatives Considered:* In addition to the proposed action, the Department 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 NUPAC demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.

6. *A Listing of Mitigation, Stipulations, and Other Controls:* A listing of the enforceable permit conditions and a permit analysis, including a BACT analysis, would be contained in Permit #1125-04.
7. *Regulatory Effects on Private Property Rights:* The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and would not unduly restrict private property rights.
8. *The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The “no action alternative” was discussed previously.*

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

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

A. Terrestrial and Aquatic Life and Habitats

Terrestrials would use the same area as the asphalt plant operations. The asphalt plant operations would be considered a minor source of emissions, by industrial standards, with intermittent and seasonal operations. The permit would contain limitations on daily production and visible emissions. Further, the area in question is an existing permitted gravel pit with little vegetation and terrestrial life. Therefore, only minor effects on terrestrial life would be expected as a result of equipment operations or from pollutant deposition.

Only minor amounts of water would be used for pollution control on the surrounding area, so little impact is expected upon aquatic life. At the initial site location, the nearest surface water is an unnamed pond, which is approximately ¾ of a mile away. Further, an existing roadway is in-between the facility and the pond and is an existing obstacle (also a barrier and deterrent) to both water runoff and terrestrial migration. Therefore, any impacts to the terrestrial and aquatic life and habitat from surface water runoff (as described in Section 8.B) and facility emissions (as described in Section 8.F) would be minor.

B. Water Quality, Quantity, and Distribution

Water would be used for dust suppression on the surrounding roadways and areas of operation and for pollution control for equipment operations. However, water use would only cause a minor disturbance to the area since only relatively small amounts of water would be needed and no surface water resources are near the proposed project site. Any impacts from this proposed project would be minor as a result of using water for dust suppression and equipment operations, because only small amounts of water would be required and the project would be temporary and intermittent in nature. Further, equipment operations would result in the emissions of air pollutants, which would disperse before reaching any surrounding water resources. Since the emissions from the facility would be relatively minor, intermittent, and short-lived and pollutant emissions would be widely disperse before reaching these distant water resources, any impacts from pollutant deposition or from equipment operations on the water resources would be minor.

C. Geology and Soil Quality, Stability, and Moisture

The soils in the proposed site locations would be impacted by the asphalt plant. However, the facility would be relatively small (by industrial standards), would be portable and temporary in nature, would be located in an existing permitted open-cut pit, and corresponding pollutants would be widely dispersed. Therefore, any effects on geology and soil quality, stability, and moisture from operating this facility would be minor.

D. Vegetation Cover, Quantity, and Quality

As described in Section 8.F of this EA, the impacts from the air emissions of this facility would be minor. As a result, the corresponding deposition of the air pollutants on the surrounding vegetation would also be minor. Also, equipment construction and operations would result in only minor soil and water disturbance (as described in Sections 8.B and 8.C). Therefore, because the facility would locate in an area where pollutant dispersion would occur, would locate in an area where little vegetation would be affected, and would be a minor source of emissions and temporary in nature, impacts from the emissions of the asphalt plant would be minor. Thus, corresponding vegetative impacts would also be minimal.

E. Aesthetics

The asphalt plant operations would be visible and would create additional noise in the area. Noise would also be produced from Highway 93, which is approximately 1 mile away. Permit #1125-04 would include conditions to control emissions, including visible emissions, from the plant. Since the asphalt plant operations would result in a minor amount of emissions, would be portable, would have seasonal and intermittent operations, and would locate within an area having little agricultural or recreational value. Any visual and noise impacts would be minor.

F. Air Quality

The air quality impacts from the asphalt plant operations would be minor because Permit #1125-04 would include conditions limiting the opacity from the plant and surrounding operational area, as well as would require a wet scrubber to control air pollution from the plant. Additionally, the facility is considered a minor source of air pollution by industrial standards and would be located in an area where good air pollutant dispersion would occur. Therefore, the air impacts would be minor.

The operations would be limited, by Permit #1125-04, to total emissions of 250 tons/year or less of any regulated pollutant from non-fugitive sources at the plant, including any additional

equipment operated at the site. Emissions controls upon the surrounding plant area would include the use of water to reduce emissions from equipment operations, storage piles, and haul roads. Also, the operation would have temporary and intermittent use, thereby further reducing potential air quality impacts from the facility. Therefore, air quality impacts 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, contacted the Montana Natural Heritage Program (MNHP). Search results concluded there are two such environmental resources found within the defined area. The defined area, in this case, is defined by the township and range of the proposed site, with an additional one-mile buffer.

The black tern has been sighted approximately 1 mile away, on private land, during the summer months. Though this species may be affected by the proposed operations and does have the ability to move from where it has been sited, it is unlikely that the species of special concern would be more than minimally affected by operations at the current location because the facility is a portable and temporary source, NUPAC would apply emissions controls upon the equipment and surrounding area of operations, NUPAC would operate in an existing permitted open cut pit in an industrial area that previously been used for similar operations. The proposed site is an existing open cut pit, with an existing roadway between the proposed site and where that species of concern was sighted. Further, the open cut pit and immediate surrounding pit area does not currently have an environment more suitable to support the black tern than the area in which the species already chose. Therefore, any effects would be minor and shortlived.

Bull trout are found within the confluences of the Stillwater River, which is over 3/4 mile away from the proposed project site. Because pollutants would be widely dispersed before reaching the river and because the river is outside the 100 meter buffer zone identified by the Natural Heritage Program (an area in which all such construction activities would need to take into consideration the effects upon this species of concern), the facility would only have, at most, minimal impacts upon this species of concern.

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

Due to the size of the facility, the asphalt plant operations would only require small quantities of water, air, and energy for proper operation. Small quantities of water would be used for dust suppression upon the surrounding operational area and for the wet scrubber being operated at the site. Furthermore, the particulate emissions would be controlled by a wet scrubber and water would also be used to control pollutant emissions on the surrounding area of operations. Energy requirements would also be small because the facility is small by industrial standards, could be electrically powered, and would have seasonal and intermittent operations. In addition, impacts to air resources would be minor because the source is small by industrial standards, with intermittent and seasonal operations, and because air pollutants generated by the facility would be widely dispersed. Therefore, any impacts to water, air, and energy resources 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 area of construction/operation. Search results concluded that there are no previously recorded historical or archaeological resources of concern within the area proposed for initial operations. According to correspondence from the Montana State Historic Preservation Office, given the previous industrial disturbance in the area, there would be a low likelihood of adverse disturbance to any known archaeological or historic site. Therefore, no impacts upon

historical or archaeological sites would be expected as a result of the proposed asphalt plant operations.

J. Cumulative and Secondary Impacts

The asphalt plant operations would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because the facility would have seasonal and intermittent use and because the facility is considered a minor source of air pollutants by industrial standards. Additionally, NUPAC’s operations would include mobile sources that would be present and would also have air emissions. The Kalispell PM₁₀ nonattainment area, surrounding the proposed project site, also contains mobile sources that fluctuate in quantity and usage. Therefore, no overall changes to existing air quality within this area are expected to occur as a result from this proposed project. Additionally, this facility would also have additional restrictions while operating at the initial site location, which would further control pollutant emissions. The facility would generate emissions of PM, PM₁₀, NO_x, VOC, CO, and SO_x. Noise would also be generated from the site. Emissions and noise would cause minimal disturbance, due to the site location. Additionally, this facility, in combination with the other emissions from the site would not be permitted to exceed 250 tons per year of non-fugitive emissions.

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

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

SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS: The

Department has prepared the following comments.

A. Social Structures and Mores

The asphalt plant operation would cause no disruption to the social structures and mores in the area because the source is a minor source of emissions and temporary in nature. Additionally, the equipment would be located adjacent to an existing roadway and is separated from the general population. Further, the nearest residence has been identified as more than ¼ mile away. Also, the facility would be a minor source of air pollution and would be required to operate under the conditions in Permit #1125-04. Thus, no native or traditional communities would be affected by the proposed project operations and no impacts upon social structures or mores would result. The predominant use of the surrounding area would not change as a result of this project.

B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of the area would not be impacted by the proposed asphalt plant operations because the site is separated from the general population and because the site is more than ¼ mile from the nearest home. Additionally, the facility would be considered a portable/temporary source with seasonal and intermittent operations and the predominant use of the surrounding area would not change as a result of this project.

C. Local and State Tax Base and Tax Revenue

The asphalt plant operations would have little, if any, impact on the local and state tax base and tax revenue because the facility would be a temporary source and small by industrial standards. The facility operations would not require the use of any new employees. Thus, only minor impacts to the local and state tax base and revenue could be expected from the employees and facility production. Furthermore, the impacts to local tax base and revenue is expected to be minor because the source would be portable and the money generated for taxes would be widespread.

D. Agricultural or Industrial Production

The asphalt plant operations would have only a minor impact on local industrial production since the facility is small by industrial standards and would locate in an industrial use area. At most, only minor effects to agricultural land are expected to occur, because the facility would initially operate in an existing open-cut pit with no agricultural usage and because the facility is a portable/temporary source with minor amounts of emissions. As described in Section 8.D, impacts upon surrounding vegetation would be minimal. Also, pollution control would be utilized on equipment operations and operational limits would be established to protect the surrounding environment. Therefore, any effects on agricultural or industrial production would be minor and short-lived.

E. Human Health

Permit #1125-04 would incorporate conditions to ensure that the asphalt plant 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 8.F., the air emissions from this facility would be minimized by the use of a wet scrubber and emission limits established in Permit #1125-04. Therefore, only minor impacts would be expected on human health from the proposed asphalt plant.

F. Access to and Quality of Recreational and Wilderness Activities

The asphalt plant would be operated at a site approximately 4 miles northeast of the town of Kalispell and approximately 1 mile west of Highway 93. The facility would have no impacts upon the access to recreational and wilderness activities. Further, the facility would have only minor impacts to the quality of recreational and wilderness activities; due to noise, facility emissions, and traffic from facility operations. For the initially proposed site, operations would not affect access to recreational and wilderness activities in the area because the site is private property that has little wilderness or recreational value, as it is an existing open-cut pit, and because the proposed operational site is near an existing roadway. Thus, no changes to recreational and wilderness activities, or access to those activities, are expected from the operation of the asphalt plant. Additionally, noise impacts from the facility would be minimal because the facility would operate near an existing roadway and on a temporary and intermittent basis. Therefore, emissions from the facility would be minor. Thus, any changes in the quality of recreational and wilderness activities from emissions or noise, created by operating the equipment at the site, would be minor and intermittent.

G. Quantity and Distribution of Employment

The asphalt plant is a small and temporary source, which would have only minor effects on the quantity and distribution of employment in the area because NUPAC would not use any new employees for the project. Thus, because no new employees would be needed for such operations, any effect on the quantity and distribution of employment in the area would be minor and short-lived.

H. Distribution of Population

The asphalt operation is a minor source (relatively small) by industrial standards and no new employees would be expected for the operation of the facility. Also, no individuals are expected to permanently relocate to the area as a result of operating the asphalt plant. Therefore, the asphalt plant operations would not impact the normal population distribution in the initial area of operation or any future operating site.

I. Demands of Government Services

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

J. Industrial and Commercial Activity

The asphalt plant operations would represent only a minor increase in the industrial activity in the given area because of the size of the operations (relatively small by industrial standards) and the portable and temporary nature of the facility. No additional industrial or commercial activity would be expected as a result of the proposed operations.

K. Locally Adopted Environmental Plans and Goals

NUPAC would be allowed, by permit, to operate in areas designated by EPA as attainment unclassified, or in or within 10 kilometers of the Kalispell PM₁₀ nonattainment areas, including the initial site location (the SE¼ of Section 23 and the SW ¼ of Section 24, Township 29 North,

Range 22 West, Flathead County, Montana). Permit #1125-04 would contain limits, which would be protective of air quality and the ambient air quality standards while the facility is operating in these designated areas, as a locally adopted environmental plan or goal. Additionally, because the facility is a relatively small (by industrial standards) and portable source that will operate at multiple sites, on an intermittent and temporary basis, the Department believes that any impacts to existing air quality in these areas of operation would be minor and short-lived.

L. Cumulative and Secondary Impacts

The asphalt plant would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area because the source is a portable, temporary source. Minor increases in traffic would have minor effects on local traffic in the immediate area, thus, having a direct effect on the social environment. Because the source is relatively small (by industrial standards) and temporary, only minor economic impacts to the local economy could be expected from the operation of the facility. Thus, minor and temporary cumulative effects would result to the local economy.

Recommendation: An EIS is not required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: All potential effects resulting from construction and operation of the proposed facility are minor; therefore, an EIS is not required.

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

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

EA prepared by: Ron Lowney

Date: May 14, 2004