AIR QUALITY PERMIT

| | | |
|---|---|---|
| Issued To: | NUPAC, Inc.<br>A Division of Helena Sand & Gravel<br>P.O. Box 8150<br>Kalispell, MT 59904 | Permit #1125-05<br>Application Complete: 03/17/05<br>Preliminary Determination Issued: 04/18/05<br>Department Decision Issued: 05/04/05<br>Permit Final: 05/20/05<br>AFS #029-0016 |

An air quality permit, with conditions, is hereby granted to NUPAC, Inc., 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 an AEDCO drum mix asphalt plant and associated equipment and a concrete batch plant and associated equipment. The NUPAC facility is a stationary asphalt and concrete batch operation located at 1285 Stillwater Road, Kalispell, MT 59901, at the SE¼ of Section 23 and the SW ¼ 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 March 17, 2005, the Montana Department of Environmental Quality (Department) received a complete permit application from Aspen Consulting & Engineering, Inc., on behalf of NUPAC, for the modification of Montana Air Quality Permit #1125-04. Specifically, NUPAC requested the replacement of the existing 1967 Stansteel asphalt plant (maximum capacity 200 ton/hr) incorporating wet scrubber particulate control with an AEDCO drum mix asphalt plant (maximum capacity 140 ton/hr) incorporating baghouse particulate control. Further, NUPAC requested that the AEDCO asphalt plant production be limited to a maximum of 400,000 tons of hot mix asphalt (HMA) during any rolling 12-month time period and that asphalt plant operations be limited to a maximum of 2857 hours during any rolling 12-month time period.

In addition, NUPAC requested the addition of a concrete batch plant with a maximum capacity 150 cubic yards of production per hour ($yd^3$/hr) to the permitted operation. NUPAC requested that concrete batch plant operations be limited to a maximum of 5000 hours during any rolling 12-month time period.

Finally, under Permit #1125-04, the NUPAC operation was inadvertently permitted as a portable facility. Under the current permit action NUPAC requested that the permit be changed back to a stationary source permit since NUPAC has no intention of relocating the permitted source from its original operating site.

Section II: Limitations and Conditions

A. Emission and Operational Limitations

1. Asphalt plant particulate matter emissions shall be limited to 0.04 gr/dscf (ARM 17.8.749, ARM 17.8.340, and 40 CFR 60.92).

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 17.8.752, ARM 17.8.340, and 40 CFR 60.92).

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 17.8.752, ARM 17.8.340, and 40 CFR 60.92).

4. A fabric filter baghouse shall be used to control stack particulate emissions from the asphalt plant (ARM 17.8.749).

5. 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).

6. The total asphalt plant production shall be limited to a maximum of 400,000 tons of hot mix asphalt during any rolling 12-month time period (ARM 17.8.749).

7. Asphalt plant operations shall be limited to 2857 hours during any rolling 12-month time period (ARM 17.8.749).

8. NUPAC shall use only natural gas, propane, fuel oil, or waste oil to fire the asphalt plant drum dryer and natural gas, propane, or fuel oil to fire the asphalt heater (ARM 17.8.749).

9. NUPAC shall not cause or authorize to be discharged into the atmosphere, from the concrete batch plant any emissions that exhibit 20% opacity or greater averaged over 6 consecutive minutes (ARM 17.8.304 and ARM 17.8.749).

10. NUPAC shall install, maintain, and operate a rubber particulate containment boot attachment for the loading of concrete trucks from storage bins (ARM 17.8.752).

11. A fabric filter dust collection system shall be used to control particulate emissions from the concrete batch plant cement and fly-ash silos (ARM 17.8.752).

12. Concrete batch plant operations shall be limited to 5,000 hours during any rolling 12-month time period (ARM 17.8.749).

13. 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).

14. 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.13 (ARM 17.8.749).

15. Water and/or chemical dust suppressant shall be available on site at all times and operated as necessary to maintain compliance with the reasonable precautions limitations in Sections II.A.13 (ARM 17.8.749).

16. 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).

B. Emission Testing

1. Within 60 days after achieving maximum production, but no later than 180 days after initial start-up, an Environmental Protection Agency (EPA) Methods 1-5 and 9 source tests must be performed on the asphalt plant to demonstrate compliance with the emission limitations contained in Section II.A.1 and II.A.2. After the initial source test, additional source testing must be performed on the asphalt plant every 4 years, or according to another testing/monitoring schedule as may be approved by the Department (ARM 17.8.105 and 40 CFR 60, Subpart A, General Provisions, and Subpart I).

2. Pressure drop and temperature must be recorded during the asphalt plant compliance source test and must be 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. 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).

2. NUPAC shall document, by month, the asphalt production from the facility. By the 25$^{th}$ day of each month, NUPAC shall total the facility asphalt production for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.6. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

3. NUPAC shall document, by month, the hours of operation of the asphalt plant. By the 25th day of each month, NUPAC shall total the asphalt plant operating hours for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.7. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

4. NUPAC shall document and maintain ongoing records indicating the fuel-type used to fire the asphalt plant and the asphalt heater. 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).

5. NUPAC shall document, by month, the hours of operation of the concrete batch plant. By the 25th day of each month, NUPAC shall total the concrete batch plant operating hours for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.12. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

6. 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).

7. 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 does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.

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

G. Permit Fee – Pursuant to Section 75-2-220, MCA, 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. 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).

PERMIT ANALYSIS
NUPAC, Inc., A Division of Helena Sand & Gravel
Permit #1125-05

## I. Introduction/Process Description

### A. Permitted Equipment

NUPAC, a division of Helena Sand & Gravel, (NUPAC) operates a portable AEDCO batch mix asphalt plant (maximum capacity 140 tons per hour (TPH)) with fabric filter baghouse particulate control and associated equipment. In addition, NUPAC operates a concrete batch plant (maximum capacity 150 cubic yards per hour ($yd^3$/hr)) and associated equipment. The NUPAC plant is located at 1285 Stillwater Road, Kalispell, MT 59901, at the SE¼ of Section 23 and the SW ¼ of Section 24, Township 29 North, Range 22 West, in Flathead County, Montana

### B. Process Description

Typical asphalt plant operations begin by loading aggregate into hoppers and then conveying the aggregate to the rotary dryer. After the material is completely dried, it is mixed with hot asphalt cement. A fabric filter baghouse is used to control particulate emissions from the process. The asphalt mixture is then sent to bins for storage and ultimately loaded into haul trucks and taken to the current project site.

Typical cement batch plant operations begin with raw materials arriving on the site via haul truck. The raw materials are either dumped into storage piles or conveyed to storage silos. Sand and course aggregate are typically stored in piles while cement and fly ash are stored in silos. The raw materials are combined in a weigh hopper and mixed to form the final concrete product. Upon demand for concrete, the final product is loaded into concrete haul trucks, mixed with water, and ultimately sent to the 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 ($PM_{10}$) 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.

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 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 $PM_{10}$ nonattainment area, as part of the SIP, an addendum was not required for this source. See Section V of the permit analysis to Permit #1125-04 for more detail on this issue. Permit **#1125-04** replaces Permit #1125-03.

D. Current Permit Action

On March 17, 2005, the Department received a complete permit application from Aspen Consulting & Engineering, Inc., on behalf of NUPAC, for the modification of Montana Air Quality Permit #1125-04. Specifically, NUPAC requested the replacement of the existing 1967 Stansteel asphalt plant (maximum capacity 200 ton/hr) incorporating wet scrubber particulate control with an AEDCO drum mix asphalt plant (maximum capacity 140 ton/hr) incorporating baghouse particulate control. Further, NUPAC requested that the AEDCO asphalt plant production be limited to a maximum of 400,000 tons of hot mix asphalt (HMA) during any rolling 12-month time period and that asphalt plant operations be limited to a maximum of 2857 hours during any rolling 12-month time period.

In addition, NUPAC requested the addition of a concrete batch plant with a maximum capacity 150 cubic yards of production per hour ($yd^3$/hr) to the permitted operation. NUPAC requested that concrete batch plant operations be limited to a maximum of 5000 hours during any rolling 12-month time period.

Further, the NUPAC operation was previously modeled and accounted for within the Kalispell $PM_{10}$ nonattainment area, as part of the State Implementation Plan (SIP). Therefore, because the pre-modification NUPAC facility $PM_{10}$ emissions have been accounted for under the SIP and the overall $PM_{10}$ emissions associated with the proposed permit modification will decrease, the current permit action will not result in additional adverse impact to the nonattainment area.

Finally, under Permit Action #1125-04, the NUPAC operation was inadvertently permitted as a portable facility. Under the current permit action NUPAC requested that the permit be changed back to a stationary source permit since NUPAC has no intention of relocating the permitted source from its original operating site. Permit **#1125-05** replaces Permit #1125-04.

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 $PM_{10}$

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 an affected batch mix asphalt plant and associated equipment; therefore, New Source Performance Standards (40 CFR Part 60, Subpart A, General Provisions, and Subpart I, Hot Mix Asphalt Facilities) apply to all affected units covered under this permit.

   40 CFR 60, Subpart I

   NUPAC was unable to provide the Department with a definitive date of manufacturing for the AEDCO asphalt plant and thus the Department was unable to determine whether or not the plant is an affected facility under 40 Code of Federal Regulations (CFR) Part 60, Subpart I, Standards of Performance for Hot Mix Asphalt Facilities. Therefore, to assure compliance with potentially applicable New Source Performance Standards (NSPS) requirements under 40

CFR 60, Subpart I, the Department assumes that the AEDCO plant manufacturing date was post June 11, 1973, and conditioned the permit accordingly as an NSPS affected 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. 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 less than 10 microns ($PM_{10}$) and carbon monoxide (CO); 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 March 8, 2005, 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.

17. 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*.

18. 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 $PM_{10}$ in a serious $PM_{10}$ nonattainment area.

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

d. This facility is subject to NSPS standards under 40 CFR 60, Subpart I, as applicable.

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 determined that NUPAC is a minor source of emissions, as defined under the Title V operating permit program.

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 $PM_{10}$, $NO_x$, VOC, CO, and $SO_x$ from firing the asphalt plant using natural gas, propane, fuel oil, and used oil. In addition, a $PM_{10}$ BACT analysis was conducted for the proposed concrete batch plant operations and for the overall plant fugitive dust emissions.

Asphalt Plant

The Department derived the asphalt plant $PM_{10}$, $NO_x$, VOC, CO, and $SO_x$ emissions using worst-case emission factors contained in AP-42, Chapter 11.1. Based on the relatively low gaseous emissions ($NO_x$ and CO) resulting from the proposed asphalt plant operations, the Department determined that any add-on controls for these pollutants would be cost-prohibitive. However, good combustion practices are capable of significant reduction in gaseous pollutants from asphalt plant operations; therefore, the Department determined that good combustion practices will constitute BACT for $NO_x$ and CO emissions from asphalt plant operations. Similarly, the relatively low VOC and $SO_x$ emissions from the asphalt plant operations dictate that add-on controls would be cost prohibitive. Therefore, no additional controls will constitute BACT for the control of VOCs and $SO_x$ from the asphalt plant operations.

NUPAC proposed the installation and operation of a fabric filter baghouse to control $PM_{10}$ emissions from the asphalt plant operations. Because fabric filter baghouse control provides the highest level of $PM_{10}$ control that is technically feasible for asphalt plant operations and because this control strategy is capable of achieving the permitted $PM_{10}$ emission limits, the Department determined that fabric filter baghouse control will constitute BACT, in this case.

Concrete Batch Plant

NUPAC did not provide the Department with a BACT analysis for the control of $PM_{10}$ emissions resulting from the displacement of air from the cement and fly-ash silos associated with the concrete batch plant operations. Based on recent similar source BACT determinations, the

Department determined that particulate vent emissions from the storage silos shall be controlled with a fabric filter dust control system. Further, as proposed by NUPAC, emissions from the loading facility will be controlled by a particulate containment boot. The boot fits inside the truck and eliminates the loss of product and minimizes particulate emissions.

All visible emissions from any cement and cement supplement silo (or vent), truck loading or unloading operations, or any material transferring operations shall be limited to less than 20% opacity. NUPAC shall use a fabric filter dust collector to control particulate emissions from the cement and fly-ash silos and a rubber containment boot load-out spout on the cement batcher. The Department determined that the fabric filter dust control and the particulate containment boot, as detailed above, and the opacity limitations contained in the permit constitute BACT for the concrete batch operations.

Fugitive Emissions: Facility-Wide

Two types of emissions controls are readily available and used for dust suppression of fugitive emissions at the site of asphalt and concrete batch plant operations. These two control methods are water and chemical dust suppressant. Chemical dust suppressant could be used for dust suppression on the area surrounding the operation. However, because water is more readily available, is more cost effective, is equally effective as chemical dust suppressant, and is more environmentally friendly, water has been identified as the most appropriate method of pollution control of particulate emissions for the general plant area. In addition, water suppression has been required as BACT for other recently permitted similar sources. However, since chemical dust suppressant is effective in the control of fugitive dust emissions, NUPAC may use chemical dust suppressant for the purpose of controlling fugitive particulate emissions from the proposed operations.

NUPAC shall not cause or authorize to be discharged into the atmosphere any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes. Further, NUPAC must use reasonable precautions to limit the fugitive emissions of airborne particulate matter from haul roads, access roads, parking areas, and the general area of operation. NUPAC is required to have water available on site (at all times) and to apply the water, as necessary, to maintain compliance with the opacity and reasonable precaution limitations. As described above, NUPAC may also use chemical dust suppression for this purpose. The Department determined that using water and/or chemical dust suppressant to maintain compliance with the opacity requirements and reasonable precaution limitations constitutes BACT for the control of general plant fugitive dust emissions.

The control options that have been determined to be BACT have controls and control costs similar to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

## IV. Emission Inventory

| tons per year | | | | | |
|---|---|---|---|---|---|
| **Emitting Unit** | **$PM_{10}$** | **$NO_x$** | **CO** | **VOC** | **$SO_2$** |
| **Asphalt Plant Emitting Units/Processes** | | | | | |
| Drum Mix Asphalt Plant | 5.88 | 11.00 | 26.00 | 6.40 | 11.60 |
| Asphalt Heater | 0.00 | 3.9 | 0.00 | 0.02 | 2.8 |
| Elevator, Screens, and Bins | 6.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Cold Aggregate Handling | 8.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Haul Roads – Asphalt Plant | 3.86 | 0.00 | 0.00 | 0.00 | 0.00 |
| Pile Forming | 0.32* | 0.00 | 0.00 | 0.00 | 0.00 |
| Wash Plant | 0.60 | 0.00 | 0.00 | 0.00 | 0.00 |

| | | | | | |
|---|---|---|---|---|---|
| **Asphalt Plant Total** | **24.66** | **14.90** | **26.00** | **6.42** | **14.40** |
| **Cement Plant Emitting Units/Processes** | | | | | |
| Aggregate Dump to Ground | 0.49 | 0.00 | 0.00 | 0.00 | 0.00 |
| Sand Dump to Ground | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 |
| Aggregate Dump to Conveyor | 0.49 | 0.00 | 0.00 | 0.00 | 0.00 |
| Sand Dump to Conveyor | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 |
| Aggregate Conveyor to Weigh Hopper | 0.49 | 0.00 | 0.00 | 0.00 | 0.00 |
| Sand Conveyor to Weigh Hopper | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 |
| Cement Silo Unloading (Pneumatic) | 0.004 | 0.00 | 0.00 | 0.00 | 0.00 |
| Fly-Ash Silo Unloading (Pneumatic) | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 |
| Weigh Hopper Loading | 1.43 | 0.00 | 0.00 | 0.00 | 0.00 |
| Cement Dump to Truck Mix | 5.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| Haul Roads – Cement Plant | 7.28 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Cement Plant Total** | **15.71** | **0.00** | **0.00** | **0.00** | **0.00** |
| **Total Facility-Wide Emissions** | **40.37** | **14.90** | **26.00** | **6.42** | **14.40** |

* Emissions established under Permit #1125-04

- A complete emission inventory for Permit #1125-05 is contained in the complete application for this permit modification and is on file with the Department.

## V. Existing Air Quality

On July 1, 1987, the EPA promulgated new National Ambient Air Quality Standards (NAAQS) for $PM_{10}$. Due to exceedances of the national standards for $PM_{10}$, the city of Kalispell and the nearby Evergreen area have been designated by EPA as nonattainment for $PM_{10}$. 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 $PM_{10}$ 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 $PM_{10}$ 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 $PM_{10}$ 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 $PM_{10}$ concentrations in the Kalispell non-attainment area. As used in the preceding sentence, the term "significantly" means that the $PM_{10}$ 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 $PM_{10}$ 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 $PM_{10}$. 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 under the conditions and limits contained in the air quality

permit and maintain compliance with the stipulated emission limitations.
The current permit action is a permit modification for the replacement of the existing Stansteel asphalt plant (wet-scrubber control) with the proposed AEDCO asphalt plant (fabric-filter baghouse control) and the addition of a concrete batch plant. Overall, permitted $PM_{10}$ emissions are reduced by the current permit action; therefore, the Department is reasonably certain that the proposed facility will not cause concentrations in the ambient air that exceed the set $PM_{10}$ ambient air quality standard and the current permit action will not adversely impact the Kalispell $PM_{10}$ nonattainment area.

## VI. Ambient Air Impact Analysis

The proposed NUPAC operation would be located within the Kalispell $PM_{10}$ nonattainment area. The NUPAC operation was previously modeled (air dispersion modeling) and $PM_{10}$ emissions were accounted for within the Kalispell $PM_{10}$ nonattainment area, as part of the State Implementation Plan (SIP). Because the pre-modification NUPAC facility $PM_{10}$ emissions have been accounted for under the SIP and the overall $PM_{10}$ emissions associated with the proposed permit modification will decrease, the current permit action will not result in additional adverse impact to the nonattainment area. Therefore, the Department believes that the current permit action will not result in any negative impact to ambient air quality in the area. Any potential impacts would be minor and positive impacts.

## VII. 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.

## VIII. 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
(406) 444-3490

**FINAL ENVIRONMENTAL ASSESSMENT (EA)**

Issued For: NUPAC
A Division of Helena Sand & Gravel
1285 Stillwater Rd.
Kalispell, MT 59901

*Permit Number*: #1125-05

*Preliminary Determination Issued*: April 18, 2005
*Department Decision Issued:* May 4, 2005
*Permit Final:* May 20, 2005

1. *Legal Description of Site*: NUPAC submitted an application to operate a hot mix asphalt plant and a concrete batch plant at 1285 Stillwater Road, Kalispell, MT 59901, at Section 24, Township 29 North, Range 22 West, in Flathead County, Montana.

2. *Description of Project*: The current permit action would allow the simultaneous or separate operation of an asphalt plant and a concrete batch plant. Typical asphalt plant operations would begin by loading aggregate into hoppers and then conveying the aggregate to the rotary dryer. After the material is completely dried, it would be mixed with hot asphalt cement. A fabric filter baghouse would be used to control particulate emissions from the process. The asphalt mixture would then be sent to bins for storage and ultimately loaded into haul trucks and taken to the current project site.

   Typical cement batch plant operations would begin with raw materials arriving on the site via haul truck. The raw materials would either be dumped into storage piles or conveyed to storage silos. Sand and course aggregate would typically be stored in piles while cement and fly ash would be stored in silos, which would be controlled by a fabric filter dust collection system. The raw materials would be combined in a weigh hopper and mixed to form the final concrete product. Upon demand for concrete, the final product would be loaded into concrete haul trucks, mixed with water, and ultimately sent to the project site.

3. *Objectives of Project*: NUPAC, in an effort to increase business and revenue for the company, submitted a complete permit application for the replacement of the existing portable batch mix asphalt plant and the addition of the portable concrete batch plant.

4. *Additional Project Site Information*: Under Permit #1125-04, the NUPAC operation was inadvertently labeled a portable facility. Under the current permit action NUPAC requested that the permit be changed back to a stationary source permit since NUPAC has no intention of relocating the permitted source from its original operating 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 #1125-05.

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 proposed asphalt and concrete batch plant operations; however, the current permit modification would result in similar industrial activities and an overall decrease in all regulated air pollutant emissions from the plant, thereby resulting in only minor impacts. Further, due to the seasonal nature of asphalt and concrete batch plant operations in Montana's climate, plant operations would be temporary, intermittent, and seasonal, effectively limiting any minor impacts that would occur. In addition, the area of operation would be an existing industrial gravel pit, which has been previously permitted by the Department's Industrial and Energy Minerals Bureau (IEMB). Therefore, the operating site would have already realized similar source industrial impacts and any minor impacts that would result from the proposed operation would be typical and characteristic of the area.

Further, the proposed modification would require the use of water, as necessary, to reduce fugitive dust impacts. However, only minor amounts of water would be necessary for this purpose; therefore, little impact would be expected upon aquatic life. The nearest surface water

would be an unnamed pond, which is approximately ¾ of a mile from the proposed operating site. Also, an existing roadway would separate the facility and the pond acting as an obstacle to both water runoff and terrestrial/aquatic life migration. 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. Overall, the proposed permit modification would result in only minor impacts to any existing terrestrial and aquatic life and habitats that may be located at the proposed operating site.

B. Water Quality, Quantity, and Distribution

Water would be used for dust suppression on the surrounding roadways and areas of operation, for pollution control for equipment operations, and for concrete production. However, water used for the control of fugitive dust emissions and concrete production would result in only a minor impact to the area since only relatively small amounts of water would be necessary for these purposes. Further, due to the seasonal nature of asphalt and concrete batch plant operations in Montana's climate, plant operations would be temporary, intermittent, and seasonal at any given location, effectively limiting any minor impacts that would occur.

Further, equipment operations would result in the emission of air pollutants; however, the current permit modification would result in similar industrial activities and an overall decrease in all regulated air pollutant emissions from the plant. Due to the relatively low concentration of pollutants and the nature of pollutant emissions from sources of this type, good pollutant dispersion would likely occur prior to reaching any nearby water resources that may be present at a given operating site. Since emissions from the proposed project would be relatively minor, intermittent, temporary, and seasonal, any impacts from pollutant deposition or from equipment operations on the water resources would be minor. Overall, any impacts to the water quality, quantity, and distribution in the area from the proposed project would be minor.

C. Geology and Soil Quality, Stability, and Moisture
D. Vegetation Cover, Quantity, and Quality
E. Aesthetics

The current permit action would result in minor impacts to the above referenced resources in the proposed area of operation due to the nature of asphalt and concrete batch plant operations. However, because of the seasonal nature of asphalt and concrete batch plant operations in Montana's climate, plant operations would be temporary, intermittent, and seasonal, effectively limiting any minor impacts that would occur. In addition, the area of operation would be an existing industrial gravel pit, which has been previously permitted by the IEMB. Therefore, the operating site would have already realized similar source industrial impacts and any minor impacts that would result from the proposed operation would be typical and characteristic of the area. Overall, any impacts to these resources located in the proposed area of operation would be minor.

F. Air Quality

Under the current permit action, NUPAC proposed the addition of equipment that would result in the potential to emit PM, $PM_{10}$, $NO_x$, VOC, CO, and $SO_x$ from the permitted facility. However, the proposed permit modification would result in a decrease in potential air pollutant emissions through greater utilization of pollution controls, fuel requirements, and limited operational hours and work practices. Therefore, the air quality impacts from the proposed project would be minor and decreased from existing permitted operations. Permit #1125-05 would include conditions limiting emissions from the emitting units proposed under the current permit action. In the view of the Department, because the proposed project would result in a decrease in potential emissions, the proposed project would not cause or contribute to an exceedance of any applicable ambient

air quality standard and would not further contribute to the Kalispell $PM_{10}$ nonattainment area status. Overall, any impacts to air quality from the proposed project would be minor and likely positive.

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 Black Tern and the Bull Trout. 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. Further, Bull Trout live in the Stillwater River, which is approximately 3/4 mile away from the proposed project site. Since the proposed changes would likely result in a reduction in pollutant emissions through greater utilization of pollution controls, fuel requirements, and limited operational hours and work practices, the Department determined that any impacts to any existing unique endangered, fragile, or limited environmental resource due to the deposition of air pollutants would be minor and likely would be positive. Overall, any impact to any existing unique endangered, fragile, or limited environmental resource in the proposed project area would be minor.

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

The current permit action would result in minor impacts to the water, air and energy resources in the proposed area of operation due to the nature of asphalt and concrete batch plant operations. However, because of the seasonal nature of asphalt and concrete batch plant operations in Montana's climate, plant operations would be temporary, intermittent, and seasonal, effectively limiting any minor impacts that would occur. In addition, the area of operation would be an existing industrial gravel pit, which has been previously permitted by the IEMB. Therefore, the operating site would have already realized similar source industrial impacts and any minor impacts that would result from the proposed operation would be typical and characteristic of the area. Overall, any impacts to these resources located in the proposed area of operation 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 SHPO, given the previous industrial disturbance in the area, there would be a low likelihood of adverse disturbance to any archaeological or historic site. Therefore, no impacts upon historical or archaeological sites would be expected as a result of the current permit action.

J. Cumulative and Secondary Impacts

Overall, cumulative and secondary impacts from the proposed project on the physical and biological resources of the human environment in the immediate area of proposed asphalt and concrete batch plant operations would be minor due to the fact that the predominant use of the

surrounding area would not change as a result of the proposed project and the project would result in an overall decrease in potential emissions. The Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as would be outlined in Permit #1125-05.

*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
B. Cultural Uniqueness and Diversity

The proposed project would not impact the social structures and mores or the cultural uniqueness and diversity of the proposed area of operation because the project would include adding equipment to the permitted facility to facilitate operations similar to existing operations at the facility. The predominant use of the surrounding area would not change as a result of the proposed project; therefore, no impacts to the above-cited resources would be expected as a result of the current permit action.

C. Local and State Tax Base and Tax Revenue

The proposed project would result in only a minor impact the local and state tax base and tax revenue because the project would only slightly change current practices at the proposed operating site. Any economic impact to the area would be minor because the proposed project would not change typical operations. Further, the project would require only a limited amount of new construction and only a limited number of existing employees/operators and likely no new employees would be required for normal operations of the proposed equipment. Overall, any impact to local and state tax base and tax revenue would be minor as a result of the installation

and operation of the proposed new equipment at the facility.

D. Agricultural or Industrial Production

The proposed project would not impact or displace any land used for agricultural production because the proposed project would operate within an existing open cut pit previously permitted through the IEMB. Further, the proposed project would result in only a minor amount of additional, but similar, industrial production through operation of the concrete batch plant. Otherwise, the current permit action would not alter the general nature of industrial activities at the site.

E. Human Health

Permit #1125-04 would incorporate conditions to ensure that the asphalt and concrete batch plants would operate in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. Therefore, only minor impacts would be expected on human health from the proposed project.

F. Access to and Quality of Recreational and Wilderness Activities

The proposed project would add and replace equipment at the NUPAC facility but would not impact any access to or quality of any recreation or wilderness activities in the area because the proposed project would operate within an existing open cut pit, which normally accommodates operations of this kind. Therefore, no additional impacts to the access and quality of recreational and wilderness activities would be realized as a result of the current permit action.

G. Quantity and Distribution of Employment

H. Distribution of Population

The installation and operation of the proposed new equipment at the Malmstrom base would utilize existing Malmstrom personnel for operations and would likely not require any new or only a limited amount of new employment. Therefore, the proposed project would have little or no impact on the quantity and distribution of employment and population in the area.

I. Demands of Government Services

Government services would be required for acquiring the appropriate permits from government agencies. In addition, the permitted source of emissions would be subject to periodic inspections by government personnel. Overall, demands for government services would be minor.

J. Industrial and Commercial Activity

The proposed project would result in only minor impact on local industrial and commercial activity because the proposed project would be similar to existing activity and would operate within the existing industrial open cut pit. Further, the proposed project would require only a small amount of new construction and would not result in additional industrial production. Overall, any potential impact to the industrial and commercial activity in the proposed area of operation would be minor.

K. Locally Adopted Environmental Plans and Goals

The NUPAC facility would be located in an area currently designated as a $PM_{10}$ nonattainment area. However, the NUPAC operation was previously modeled (Ambient Air Impact Analysis –

Air Dispersion Modeling) and accounted for within the Kalispell $PM_{10}$ nonattainment area, as part of the State Implementation Plan (SIP). Therefore, because the pre-modification NUPAC facility $PM_{10}$ emissions have been accounted for under the SIP and the overall $PM_{10}$ emissions associated with the proposed permit modification would decrease, the current permit action would not result in additional adverse impact to the nonattainment area.

The Department is unaware of any other locally adopted environmental plans or goals in the immediate area affected by the proposed project. The state standards would be protective of the proposed project area.

L. Cumulative and Secondary Impacts

Overall, cumulative and secondary impacts from the proposed project on the economic and social resources of the human environment in the immediate area would be minor due to the fact that the predominant use of the surrounding area would not change as a result of the proposed project. The Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as would be outlined in Permit #1125-05.

*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 (Industrial and 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*: M. Eric Merchant
*Date*: March 28, 2005