AIR QUALITY PERMIT

Issued To: United Materials of Great Falls, Inc. Permit #3162-00

Box 1690

Great Falls, MT. 59404 Pro

Preliminary Determination Issued: 7/16/01 Department Decision Issued: 8/01/01

Application Complete: 6/06/01

Permit Final: 8/17/01 AFS # 777-3162

An air quality permit, with conditions, is granted to United Materials of Great Falls, Inc. (United), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.701, *et seq.*, as amended, for the following:

Section I: Permitted Facilities

- A. Permitted Equipment: United is proposing to operate a portable 2001 batch mix asphalt plant with attached baghouse and associated equipment. A list of permitted equipment is included in Section I.A of the Permit Analysis.
- B. Location: United is proposing to operate a portable hot mix asphalt plant to initially be located at the Northwest ½ of Section 7, Township 20 North, Range 3 East, in Cascade County, Montana. Permit #3162-00 applies while operating at any location within the State of Montana, except within those areas having a Department of Environmental Quality (Department) approved permitting program. A Missoula County air quality permit will be required for locations within Missoula County. A list of the permitted equipment is contained in the permit analysis.

Section II: Limitations and Conditions

A. Emission Limitations

- 1. Asphalt plant particulate matter emissions shall be limited to 0.04 gr/dscf (ARM 17.8.340, ARM 17.8.715, and 40 CFR 60, Subpart I).
- 2. United shall not cause or authorize to be discharged into the atmosphere, from the asphalt plant, stack emissions that exhibit 20% opacity or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.715, and 40 CFR 60, Subpart I).
- 3. United shall not cause or authorize to be discharged into the atmosphere from systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler; systems for mixing hot mix asphalt; and the loading, transfer, and storage systems associated with emission control systems, any visible emissions that exhibit opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.715, and 40 CFR 60, Subpart I).

- 4. United shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308 and ARM 17.8.715).
- 5. United shall treat all unpaved portions of the haul roads, access roads, and the general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.4 (ARM 17.8.715).
- 6. A device to measure the pressure drop (magnehelic gauge, manometer, etc.) on the control device (baghouse) 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 according to Section II.C.2 (ARM 17.8.710).
- 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 17.8.710).
- 8. Total asphalt plant production shall not exceed 478,000 tons of asphalt during any rolling 12-month period (ARM 17.8.710).
- 9. The asphalt plant shall not exceed 1195 hours of operation during any rolling 12-month period (ARM 17.8.715).
- 10. The 800 KW diesel generator shall not exceed 1195 hours of operation during any rolling 12-month time period (ARM 17.8.710).
- 11. If the permitted equipment is used in conjunction with any other equipment owned or operated by United, 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 17.8.710).
- 12. United shall install, operate, and maintain a baghouse on the asphalt plant drum as specified in permit application #3162-00 (ARM 17.8.715).
- 13. United shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR Part 60, Subpart I, as it applies to this asphalt operation (ARM 17.8.340 and 40 CFR 60, Subpart I).

B. Testing Requirements

1. Within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, an EPA Methods 1-5 and 9 source test shall be performed on the asphalt plant to demonstrate compliance with Section II.A.1, Section II.A.2, and Section II.A.3 (ARM 17.8.105 and ARM 17.8.710).

- 2. An EPA Methods 1-5 and 9 source test 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 Section II.A.1, Section II.A.2, and Section II.A.3 (ARM 17.8.105 and ARM 17.8.710).
- 3. Pressure drop on the control device and temperature must be recorded daily and kept on site according to Section II.B.6 (ARM 17.8.710).
- 4. Pressure drop on the control device and temperatures must be recorded during the test and reported as part of the test results (ARM 17.8.710).
- 5. All source tests must be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- 6. Since asphalt production will be limited to the average production rate during the test, it is suggested the test be performed at the highest production rate practical (ARM 17.8.710).
- 7. United may retest at any time in order to test at a higher production rate (ARM 17.8.710).
- 8. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

- 1. If the asphalt plant is moved to another location, 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 17.8.734).
- 2. United 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 United as a permanent business record for at least 5-years following the date of the measurement, shall be submitted to the Department upon request, and shall be available at the plant for inspection by the Department (ARM 17.8.710).
- 3. United 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 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 units as required by the Department (ARM 17.8.505).
- 4. United shall document, by month, the total plant production of asphalt. By the 25th day of each month, United shall total the production of asphalt 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 by March 15 and may be submitted with the annual emission inventory (ARM 17.8.710).
- 5. United shall document, by month, the hours of operation of the asphalt plant. By the 25th day of each month, United shall total the hours of operation of the asphalt plant during the previous 12-months to verify compliance with the limitation in Section II.A.9. A written report of the compliance verification shall be submitted by March 15 and may be submitted with the annual emission inventory (ARM 17.8.710).
- 6. United shall document, by month, the hours of operation of the diesel generator. By the 25th day of each month, United shall total the hours of operation of the 800 KW diesel generator during the previous 12-months to verify compliance with the limitation in Section II.A.10. A written report of the compliance verification shall be submitted by March 15 and may be submitted with the annual emission inventory (ARM 17.8.710).
- 7. United shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.705(1)(r) 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 17.8.705(1)(r)(iv) (ARM 17.8.705).
- 8. United shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit as required by ARM 17.8.1204(3)(b). The annual certification shall comply with the certification requirements of ARM 17.8.1207. The annual certification shall be submitted with the annual emissions inventory information.

Section III: General Conditions

A. Inspection - The recipient shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.

- B. Waiver The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if the recipient fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving the permittee of the responsibility for complying with any applicable federal or Montana statute, rule or standard, except as specifically provided in ARM 17.8.701, *et seq.* (ARM 17.8.717).
- D. Enforcement Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties, or other enforcement, as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The 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. 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.
- F. Permit Inspection As required by ARM 17.8.716, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. 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.
- H. Permit Fees Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, the continuing validity of this permit is conditional upon the payment by the permittee of an annual operation fee, as required, by that Section and rules adopted thereunder by the Board.
- I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.
- J. United shall comply with the conditions contained in this permit while operating at any location in the State of Montana, except within those areas having a Department approved permitting program.

Permit Analysis United Materials of Great Falls, Inc. Permit #3162-00

I. Introduction

A. Permitted Equipment

United Materials of Great Falls, Inc. (United) operates a portable 2001 CMI hot mix asphalt plant (400 TPH), an 800 KW diesel generator, and associated equipment. Particulate emissions from the drum mix asphalt plant are controlled by a high efficiency baghouse. Particulate emissions from the mineral silo are controlled by a pulse jet bag vent.

B. Process Description

A typical operation for the hot mix asphalt plant begins by loading the aggregate into the 4-bin feeder. The aggregate is then conveyed to the asphalt plant drum dryer for drying. The aggregate is then conveyed to a surge bin or hot mix silo, where it is mixed with hot oil and lime to create asphalt cement. Hot asphalt is then loaded into trucks for transport to project sites.

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, Sub-Chapter 1, General Provisions, including, but not limited to:

- 1. <u>ARM 17.8.101 Definitions</u>. This rule is a list of applicable definitions used in this chapter unless indicated otherwise in a specific sub-chapter.
- 2. <u>ARM 17.8.105 Testing Requirements</u>. 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. <u>ARM 17.8.106 Source Testing Protocol</u>. 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).

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

- 4. <u>ARM 17.8.110 Malfunctions</u>. 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. No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created.
- B. ARM 17.8, Sub-Chapter 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

United must comply with the applicable ambient air quality standards.

- C. ARM 17.8, Sub-Chapter 3, Emission Standards, including, but not limited to:
 - 1. <u>ARM 17.8.304 Visible Air Contaminants.</u> 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. <u>ARM 17.8.308 Particulate Matter Airborne</u>. Under this section, United 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. <u>ARM 17.8.309 Particulate Matter Fuel Burning Equipment</u>. This section requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section.

- 4. <u>ARM 17.8.310 Particulate Matter Industrial Process</u>. This section 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 17.8.340 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 2001 CMI Hot Mix Asphalt Plant (maximum production rate 400 TPH) 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 the facility.
- D. 17.8, Sub-Chapter 5, Air Quality Permit Application, Operation and Open Burning Fees, including, but not limited to:
 - 1. <u>ARM 17.8.504 Air Quality Permit Application Fees</u>. United 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. United submitted the appropriate permit application fee for the current permit action.
 - 2. <u>ARM 17.8.505 Air Quality Operation Fees</u>. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department. This operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

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

- E. ARM 17.8, Sub-Chapter 7, Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:
 - 1. <u>ARM 17.8.704 General Procedures for Air Quality Preconstruction Permitting.</u> An air quality preconstruction permit shall contain requirements and conditions applicable to both construction and subsequent use of the permitted equipment.
 - 2. <u>ARM 17.8.705 When Permit Required-Exclusions</u>. Permits are required for asphalt plants that have the potential to emit more than 5 tons per year of any pollutant. JTL has the potential to emit more than 5 tons per year of particulate matter, PM-10, NO_x, VOC, CO, and SO_x; therefore, a permit is required.

- 3. ARM 17.8.706 New or Altered Sources and Stacks Permit Application
 Requirements. This rule requires that an application for an air quality permit be submitted for a new or altered source or stack. United submitted the proper application for this permitting action.
- 4. <u>ARM 17.8.710 Conditions for Issuance of Permit</u>. This rule requires that the source demonstrate compliance with applicable rules and standards before a permit can be issued. Also, a permit may be issued with such conditions as are necessary to assure compliance with all applicable rules and standards. United demonstrated compliance with applicable rules and standards as required for permit issuance.
- 5. <u>ARM 17.8.715 Emission Control Requirements</u>. United is required to install on the new or altered source the maximum air pollution controls capability that is technically practicable and economically feasible, except that Best Available Control Technology (BACT) shall be utilized. The required BACT analysis is included in Section IV of this permit analysis.
- 6. <u>ARM 17.8.716 Inspection of Permit</u>. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
- 7. <u>ARM 17.8.717 Compliance with Other Statutes and Rules</u>. This rule states that nothing in the permit shall relieve United of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.701, *et seq*.
- 8. <u>ARM 17.8.720 Public Review of Permit Applications</u>. This rule requires that United notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. As proof of publication, United submitted an affidavit of publication of public notice from the Great Falls Tribune, in Great Falls, Montana, on June 13, 2001.
- 9. <u>ARM 17.8.731 Duration of Permit</u>. An air quality permit shall be valid until revoked or modified, as provided in this sub-chapter, 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.
- 10. ARM 17.8.733 Modification of Permit. An air quality permit may be modified for changes in any applicable rules or 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 in emissions because of the changed conditions. A source may not increase its emissions beyond those found in its permit unless the source applies for and receives another permit.

- 11. <u>ARM 17.8.734 Transfer of Permit</u>. (1) An air quality permit may be transferred from one location to another if written notice of Intent to Transfer is sent to the Department. (2) An air quality permit may be transferred from one person to another if a written notice of Intent to Transfer, including the names of the transferor and transferee, is sent to the Department.
- F. ARM 17.8, Sub-Chapter 8, Prevention of Significant Deterioration of Air Quality, including, but not limited to:
 - 1. <u>ARM 17.8.801 Definitions</u>. This rule is a list of applicable definitions used in this sub-chapter.
 - 2. <u>ARM 17.8.818 Review of Major Stationary Sources and Major Modification-Source Applicability and Exemptions</u>. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the Federal Clean Air Act (FCAA) that it would emit, except as this sub-chapter would otherwise allow.

This facility is not a major stationary source, because it is not a listed source and does not have the potential to emit more than 250 tons per year (excluding fugitive emissions) of any air pollutant.

- G. ARM 17.8, Subchapter 12 Operating Permit Program Applicability, including, but not limited to:
 - 1. <u>ARM 17.8.1201 Definitions</u>. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. Potential To Emit (PTE) > 10 ton/year of any one Hazardous Air Pollutant (HAP), PTE > 25 ton/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule.
 - b. PTE > 100 ton/year of any pollutant.
 - c. Sources with the PTE > 70 ton/year of PM-10 in a serious PM-10 nonattainment area.
 - 2. <u>ARM 17.8.1204 Air Quality Operating Permit Program Applicability</u>. 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 #3162-00 for United the following conclusions were made:
 - a. The facility's PTE is less than 100 ton/year for any pollutant.
 - b. The facility's PTE is less than 10 ton/year for any one HAP and less than 25 ton/year of all HAPs.
 - c. This source is not located in a serious PM-10 nonattainment area.

- d. This facility is not subject to any current NESHAP standards.
- e. This source is not a Title IV affected source nor a solid waste combustion unit.
- f. This source is not an EPA designated Title V source.

United is not subject to Title V Operating Permit requirements because federally enforceable limitations have been established which limit the source's potential to emit below the major source threshold. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, United will be required to obtain an Operating Permit.

- g. The Department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable limitations that limit the source's potential to emit.
 - i. In applying for an exemption under this section, the owner or operator of the source shall certify to the Department that the source's potential to emit... does not require the source to obtain an air quality-operating permit.
 - ii. Any source that obtains a federally enforceable limit on potential to emit shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality-operating permit.

The Department has determined that the annual reporting requirements contained in the permit are sufficient to satisfy this requirement.

3. ARM 17.8.1207 Certification of Truth Accuracy and Completeness. The compliance certification submittal required by ARM 17.8.1204(3) should contain certification by a responsible official of truth, accuracy, and completeness by a responsible official. This certification and any other certification required under this sub-chapter shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

III. Emission Inventory

| | Ton/Year | | | | | | | |
|--|----------|-------|--------|------|-------|--------|--|--|
| Source | TSP | PM-10 | NO_x | VOC | CO | SO_x | | |
| 2001 CMI Hot Mix Asphalt Plant w/ Baghouse | 7.98 | 3.99 | 28.68 | 7.65 | 95.60 | 21.03 | | |
| Elevator, Sceens, Bins, and Mixer | 8.96 | 7.17 | | | | | | |
| Cold Aggregate Handling | 11.95 | 9.56 | | | | | | |
| Asphalt Heater | | | 0.66 | 0.00 | | 0.48 | | |
| Diesel Generator (800 KW) | 0.45 | 0.45 | 15.38 | 0.41 | 3.53 | 1.29 | | |
| Haul Roads | 2.74 | 1.23 | | | | | | |
| Total | 32.08 | 22.40 | 44.72 | 8.06 | 99.13 | 22.80 | | |

• A complete emissions inventory is on file with the Department.

IV. BACT Determination

A BACT determination is required for any new or altered source. United shall install on the new or altered source the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. A BACT analysis was conducted for Particulate, PM-10, NO_x, VOC, CO, And SO_x.

A baghouse will be used to control emissions from the 2001 CMI hot mix asphalt plant. A pulse jet bag vent will be used to control emissions from the mineral silo. In addition, all visible emissions from the 2001 CMI hot mix asphalt, with attached baghouse and pulse jet bag vent, are limited to 20% opacity. All asphalt plant particulate matter emissions are limited to 0.04 gr/dscf. United must take reasonable precautions to limit fugitive emissions of particulate matter from haul roads, access roads, parking areas, and the general plant property. The Department determined that maintaining compliance with the emission limitations in Sections II.A.1, II.A.2, and II.A.3 of the permit and the reasonable precaution limitations constitutes BACT for the asphalt plant. Also, the baghouse is required as part of the BACT determination for the control of particulate emissions from the asphalt plant.

A BACT analysis was also conducted for NO_x , VOC, CO, and SO_x emissions. The Department determined that add-on control for NO_x , VOC, CO, and SO_x were not economically feasible because the emissions of NO_x , VOC, CO, and SO_x will be relatively low. Furthermore, limitations were placed in Permit #3162-00 that reduces the emissions of NO_x , VOC, CO, and SO_x .

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

V. Existing Air Quality Impacts

This permit is for a portable hot mix asphalt plant to initially be located in Northwest ½ of Section 7, Township 20 North, Range 3 East, in Cascade County, Montana. In the view of the Department, the amount of controlled particulate emissions generated by this project will not cause concentrations of pollutants in the ambient air that exceed any 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 taking 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 and Waste Management Bureau P.O. Box 200901, Helena, Montana 59620 (406) 444-3490

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued For: United Materials of Great Falls, Inc. Box 1690 Great Falls, MT. 59404

Air Quality Permit Number: #3162-00

Preliminary Determination Issued: 7/16/01 Department Determination Issued: 8/01/01 Final Determination Issued: 8/17/01

- 1. Legal Description of Site: This permit would allow the operation of a portable hot mix asphalt plant. United plans to initially locate at the Northwest ½ of Section 7, Township 20 North, Range 3 East, in Cascade County, Montana.
- 2. Description of Project: Operation of a portable hot mix asphalt plant.
- 3. Purpose of Proposal: Increased business and revenue for the company.
- 4. Alternative Considered: In addition to the proposed action, the Department also considered the "no-action" alternative. The "no-action" alternative would deny issuance of the air quality preconstruction permit to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because United has demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.
- 5. A Listing of Mitigation, Stipulations, and Other Controls: A list of enforceable conditions, including a BACT analysis, would be contained in Permit #3162-00.
- 6. Regulatory Effects on Private Property: The Department considered alternatives to conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.

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

| Potential Physical and Biological Effects | | | | | | | |
|---|---|-------|----------|-------|------|---------|----------------------|
| | | Major | Moderate | Minor | None | Unknown | Comments Included |
| A | Terrestrial and Aquatic Life and Habitats | | | X | | | yes |
| В | Water Quality, Quantity, and Distribution | | | X | | | yes |
| С | Geology and Soil Quality, Stability, and Moisture | | | X | | | yes |
| D | Vegetation Cover, Quantity, and Quality | | | X | | | yes |
| Е | Aesthetics | | | X | | | yes |
| F | Air Quality | | | X | | | yes |
| G | Unique Endangered, Fragile, or Limited Environmental Resource | | | | X | | yes |
| Н | 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 Department has prepared the following comments.

A. Terrestrial and Aquatic Life and Habitats

Terrestrials would use the same areas as the asphalt plant. However, the asphalt operations alone would present only minor effects to the terrestrial life.

B. Water Quality, Quantity, and Distribution

Water would be required for dust suppression, but would only cause a minor disturbance to the area. No additional surface water or ground water quality problems would result from using water for pollution control or as the result of any accidental spills or leaks from equipment.

C. Geology and Soil Quality, Stability, and Moisture

The soils in the affected pit area would be impacted by the asphalt operations. The potential impacts would be minor, due to the relatively small size of the operation.

D. Vegetation Cover, Quantity, and Quality

The existing vegetative cover would be affected by the proposed project. However, any impacts would be minor due to the portable and temporary nature of the operation.

E. Aesthetics

The asphalt operations would be visible and would create additional noise in the area. Permit #3162-00 would include conditions to control emissions (including visible emissions) from the plant. Since the asphalt operations are small and temporary, any aesthetic impact would be minor.

F. Air Quality

The air quality impacts from the asphalt operations would be minor. Permit #3162-00 would include conditions limiting the opacity from the plant, as well as requiring a baghouse and other means to control air pollution. Furthermore, this facility would be subject to 40 CFR Subpart I, so additional limitations would apply to the United facility.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department contacted the Montana Natural Heritage Program (MNHP) in an effort to identify any species of special concern that may be found in the proposed initial area of operation. Search results have concluded that there are no such environmental resources in the area. Area, in this case, was defined by the township and range of the proposed site, with an additional 1-mile buffer.

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

The asphalt operations would only require small quantities of water, air, and energy for proper operation. Generally, the operations are seasonal, which would result in smaller demands on the environmental resources. Any impacts would be minor.

I. Historical and Archaeological Sites

The asphalt operations would initially take place within a permitted open-cut pit. According to the State Historical Preservation Office, given the previous disturbance in the area, there would be a low likelihood of disturbance to any archaeological or historical site while operating in previously disturbed pit. Therefore, the asphalt operations would not have an effect on any historical or archaeological site.

J. Cumulative and Secondary Impacts

The asphalt operations would cause minor effects to the physical and biological environment. There is potential for other operations to locate at this site. However, any operations would have to apply for and receive the appropriate permits from the Department prior to operation. These permits would address the environmental impacts associated with the operations at the proposed site. The asphalt operations would be limited by Permit #3162-00 to total particulate emissions of 250 ton/year or less from non-fugitive asphalt operations and any other additional equipment used at the site.

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

| Potential Social and Economic Effects | | | | | | | |
|---------------------------------------|---|-------|----------|-------|------|---------|----------------------|
| | | Major | Moderate | Minor | None | Unknown | Comments Included |
| A | Social Structures and Mores | | | | X | | yes |
| В | Cultural Uniqueness and Diversity | | | | X | | yes |
| С | Local and State Tax Base and Tax Revenue | | | X | | | yes |
| D | Agricultural or Industrial Production | | | X | | | yes |
| Е | Human Health | | | X | | | yes |
| F | Access to and Quality of Recreational and Wilderness Activities | | | X | | | yes |
| G | Quantity and Distribution of Employment | | | X | | | yes |
| Н | 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 SOCIAL AND ECONOMIC EFFECTS: The Department has prepared the following comments.

A. Social Structures and Mores

The asphalt operation would cause no disruption to native or traditional lifestyles or communities of any potential site or area of operation.

B. Cultural Uniqueness and Diversity

The asphalt operations would not have an impact on the cultural uniqueness and diversity on any proposed site or area of operation.

C. Local and State Tax Base and Tax Revenue

The proposed asphalt operations would have little, if any, effect on local and state tax base and tax revenue. The facility would be a temporary source; therefore, it would not remain at any individual site for a substantial period of time.

D. Agricultural or Industrial Production

The asphalt operations would initially locate at the Northwest ½ of Section 7, Township 20 North, Range 3 East, in Cascade County, Montana; a previously disturbed industrial area. The asphalt operations are small by industrial standards and, thus, would have only a minor impact on industrial activity in the area.

E. Human Health

Permit #3162-00 would incorporate conditions to ensure that the asphalt operations would be operated in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. Impacts on human health would be minor.

F. Access to and Quality of Recreational and Wilderness Activities

The asphalt operations would not affect any access to recreational and wilderness activities. However, minor affects on the quality of recreational activities might be created by the noise from the facility.

G. Quantity and Distribution of Employment

The activities from the asphalt operations would not directly affect the quality and distribution of employment in the area. Indirect affects may result, but such affects would be temporary and minor.

H. Distribution of Population

The activities from the asphalt operations would not disrupt the normal population distribution in the area.

I. Demands of Government Services

Minor increases would be seen in traffic on existing roads in the area while the asphalt 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 minimal.

J. Industrial and Commercial Activity

The asphalt operations would represent only a minor increase in the industrial activity in any given area. No additional industrial or commercial activity would result from the asphalt operations.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans or goals that would be affected by the proposed project.

L. Cumulative and Secondary Impacts

The asphalt operations would cause a minor effect on the social and economic environment. There is potential for other operations to locate at this site. However, any operations would have to apply for and receive the appropriate permits from the Department prior to operation. These permits would address the environmental impacts associated with the operations at the proposed site. The asphalt operations would be limited by Permit #3162-00 to total particulate emissions of 250 ton/year or less from non-fugitive asphalt operations and any other additional equipment used at the site.

Recommendation: No EIS is required.

- If an EIS is not required, explain why the EA is an appropriate level of analysis: Since this plant is a relatively small source and the impacts from the plant will be minor, an EIS is not necessary. Permit #3162-00 would include conditions and limitations that, if properly applied, would safeguard any potential environmental threat created by the proposed asphalt operation.
- Other groups or agencies contacted or that may have overlapping jurisdiction: Department of Environmental Quality Permitting and Compliance Division (Air and Waste Management Bureau and Industrial and Energy Minerals Bureau); Montana Natural Heritage Program; and State Historic Preservation Office (Montana Historical Society).
- Individuals or groups contributing to this EA: Department of Environmental Quality Permitting and Compliance Division (Air and Waste Management Bureau and Industrial and Energy Minerals Bureau), Montana Natural Heritage Program, State Historic Preservation Office (Montana Historical Society).

EA prepared by: Ron Lowney

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