

AIR QUALITY PERMIT

Issued To: Jim Gilman Excavating, Inc. Permit #2542-03
3099 Grand Ave. Administrative Amendment (AA)
Butte, MT 59701 Received: 3/9/07
Department's Decision on AA: 5/31/07
Permit Final: 6/16/07
AFS #777-2542

An air quality permit, with conditions, is granted to Jim Gilman Excavating, Inc. (Gilman), pursuant to Sections 75-2-204 and 211, Montana Codes Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

Section I: Permitted Facilities

A. Plant Location

Gilman owns a portable asphalt plant that may operate at various locations throughout Montana. Permit 2542-03 applies while operating at any location in Montana, except those areas having a Department of Environmental Quality (Department)-approved permitting program or areas considered tribal lands. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.*

See Section IA. of the permit analysis for a list of equipment.

Addendum 2 applies to Gilman while operating at any location in or within 10 km of nonattainment areas for particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) during the summer months (April 1 – September 30) and at sites approved by the Department during the winter months (October 1 – March 31).

B. Current Permit Action

On March 9, 2007, the Department received a request from Gilman to administratively amend their permit to specifically identify the existing asphalt heater and various generators currently permitted as “associated equipment,” and to replace the current permit condition expressed in hours per year with an equivalent production limit. Gilman later requested to limit operations to maintain their synthetic minor status. Permit #2542-03 will replace permit #2542-02.

Section II: Limitations and Conditions

A. Emission Limitations

1. Asphalt plant particulate matter emissions shall be limited to 0.04 gr/dscf (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60 Subpart I).
2. The asphalt plant production shall be limited to a maximum of 550,000 tons during any rolling (12) twelve month period (ARM 17.8.749 and ARM 17.8.1204).
3. Gilman 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).

4. Gilman 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 17.8.308).
5. Gilman 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).
6. Gilman 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.5 (ARM 17.8.752).
7. Gilman shall operate and maintain all control equipment (ARM 17.8.749).
8. 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 (ARM 17.8.749).
9. Once a stack test is performed, the asphalt production rate shall be limited to the average production rate during the last source test demonstrating compliance (ARM 17.8.749).
10. Gilman shall comply with all applicable standards and limitations, and the reporting, record keeping, and notification requirements contained in 40 CFR Part 60, Subpart I, *Standards of Performance for Hot Mix Asphalt Facilities*, for any applicable equipment (ARM 17.8.340, 40 CFR 60, Subpart I).
11. Gilman shall operate no more than three diesel generators with a total capacity not to exceed 1100 kilowatts (KW) (ARM 17.8.749).
12. Gilman shall limit diesel generator operation to less than a combined total of 3,600 hours on a rolling 12-month basis (ARM 17.8.749).
13. Gilman shall comply with all applicable standards and limitations, and the reporting, record keeping, and notification requirements contained in 40 CFR Part 60, Subpart III, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*, for any applicable diesel engines (ARM 17.8.340, 40 CFR 60, Subpart III).
14. If the permitted equipment is used in conjunction with any other equipment owned or operated by Gilman, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons of emissions 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. An EPA Methods 1-5, and 9 source test must be performed on the asphalt plant every four years after the initial source test, which was completed during July of 1996, to demonstrate compliance with the conditions specified in Section II.A.1, 3, and 4 (ARM 17.8.105 and ARM 17.8.749).

2. Pressure drop on the control device and temperatures must be recorded during the test and reported as part of the test results (ARM 17.8.749).
3. 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 17.8.749).
4. Gilman may retest at any time in order to test at a higher production rate (ARM 17.8.749).
5. All source tests must be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
6. The Department may require further testing (ARM 17.8.105).

C. Reporting Requirements

1. If this asphalt plant is moved to another location, an Intent to Transfer form must be sent to the Department. In addition, a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made. This Change of Location notice must be published at least 15 days prior to the move. The Intent to Transfer form and the proof of publication (affidavit) of the Change of Location Form must be submitted to the Department prior to the move. These forms are available from the Department. Once the asphalt plant is moved to another location, the facility shall not operate in the new location for more than one year (ARM 17.8.765).
2. Gilman shall maintain on-site records showing daily hours of operation and daily production rates for the last twelve (12) months. The records compiled in accordance with this permit shall be maintained by Gilman as a permanent business record for at least five (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 17.8.749).
3. Gilman shall document, by month, the tons of asphalt produced by the facility. By the 25th of each month, Gilman shall total the 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.2. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
4. Gilman shall document, by month, the hours of operation of the diesel generator(s). By the 25th day of each month, Gilman shall calculate the hours of operation for the diesel generator(s) 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).
5. Gilman 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. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505). Gilman shall submit the following information annually to the Department by March 1 of each year, which may be submitted with the annual emission inventory (ARM 17.8.505):

- annual asphalt production
 - annual hours of operation for all diesel engines
6. Gilman 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 startup or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(l)(d) (ARM 17.8.745).
7. Gilman shall annually certify that its emissions are less than those that would require the facility 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 along with the annual emissions inventory information (ARM 17.8.749 and ARM 17.8.1204).
- D. Gilman shall comply with Addendum 2 while operating at any location in or within 10 kilometers of the following PM₁₀ nonattainment areas: Libby, Kalispell, Columbia Falls, Whitefish, Thompson Falls, and Butte.

Section III: General Conditions

- A. Inspection – Gilman 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 Gilman fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Gilman of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided for in ARM 17.8.740, et seq. (ARM 17.8.756)
- D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401, et seq., MCA.
- E. Appeals – Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefor, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is

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

- F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. Permit Fee – Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by Gilman 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 be begin within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked (ARM 17.8.762).
- I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.
- J. Gilman shall comply with the conditions contained in this permit while operating in any location in Montana, except within those areas that have a Department-approved permitting program.

Permit Analysis
Gilman Excavating, Inc.
Permit #2542-03

I. Introduction/Process Description

Gilman Excavating, Inc. (Gilman) owns and operates a portable asphalt plant operated at various locations throughout Montana.

A. Permitted Equipment

Gilman operates a portable asphalt plant with a maximum production rate of 500 tons per hour (TPH). The plant includes the following equipment:

- 1996 GenCor Drum drier heated by a diesel-fired burner (maximum capacity 500 TPH of asphalt, limited to the maximum production rate during the most recent stack test). The asphalt plant and hydrated lime storage silo are controlled by a portable baghouse;
- 2000 CEI Diesel-fired asphalt heater, rated at 20 gallons per hour (GPH);
- Aggregate handling equipment;
- Asphalt storage silo;
- Diesel generators – up to 3 generators for a total of 1100 kilowatts (KW); and
- Associated equipment.

B. Source Description

A typical operation begins by loading the aggregate into hoppers and then conveying it to the rotary dryer. The material is completely dried and mixed with hot asphalt oil. A baghouse is used to control particulate emissions. The asphalt mixture is loaded into a silo, then loaded into haul trucks and taken to the project site.

C. Permit History

On April 10, 1989, Gilman Excavating, Inc was issued **permit #2542-00** to operate a 1979 Barber Green DM-65 (8'X30') Portable Drum-Mix Asphalt Plant #DM65X247 and associated equipment.

On November 11, 1996, Gilman Excavating, Inc was issued permit #2542-01 which reflected the fact that Gilman replaced their previously permitted drum dryer with a 1996 GenCor Drum Dryer (maximum production rate 500 TPH) and replaced the existing control equipment with a 1996 GenCor baghouse. **Permit #2542-01** replaced permit #2542-00.

On April 30, 1998, Gilman requested to be allowed to operate the facility in or within 10 kilometers of any PM-10 nonattainment area through September 30, 1998. The Department issued the permit on June 1, 1998. **Permit #2542-02** replaced permit #2542-01.

D. Current Permit Action

On March 9, 2007, the Department received a request from Gilman to administratively amend their permit to specifically identify the existing asphalt heater and various generators currently permitted as “associated equipment,” and to replace

the current permit condition expressed in hours per year to an equivalent production limit. Gilman later requested to limit operations to maintain their synthetic minor status. **Permit #2542-03** will replace permit #2542-02.

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, are included in the 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 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. ARM 17.8.101 Definitions. This rule is a list of applicable definitions used in this chapter unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment, including instruments and sensing devices, and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department. The Department has determined for the current permit action that testing every four years is necessary.
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.*, MCA.

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

4. ARM 17.8.110 Malfunctions. The Department must be notified promptly by phone 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 four hours.
5. ARM 17.8.111 Circumvention. No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant which 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:

The following ambient air quality standards or requirements may apply, 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 17.8.213 Ambient Air Quality Standard for Ozone
5. ARM 17.8.220 Ambient Air Quality Standards for Settled Particulate Matter; and
6. ARM 17.8.221 Ambient Air Quality Standard for Visibility
7. ARM 17.8.223 Ambient Standards for PM10

Gilman must comply with the applicable ambient air quality standards.

C. ARM 17.8, Sub-Chapter 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 20% for all fugitive emission sources, and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Gilman 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 a limitation of particulate emissions caused by the combustion of fuel which is to be discharged from any stack or chimney into the atmosphere in excess of the hourly rate outlined in this rule.
4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires a limitation of particulate emissions be calculated using the process weight rule. Total allowable particulate emissions shall be determined using the maximum thru-put rates supplied in the permit application.
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. The commercial grade propane gas burned in the new drum dryer contains a negligible amount of sulfur compounds. Therefore, this unit will be in compliance with this rule.
6. ARM 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR 60, Standards of Performance for New Stationary Sources (NSPS). The owner or 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.

Based on the information submitted by Gilman, the portable 1996 Gencor drum-mix asphalt plant and associated equipment are subject to NSPS (40 CFR Part 60), including:

- Subpart A General Provisions;
- Subpart I, Standards of Performance of Hot-Mix Asphalt Facilities;
- Subpart III, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines – this portable permit is written ‘de minimis friendly,’ which allows Gilman to swap out diesel generators as long as the total does not exceed 1100 KW. If a facility’s diesel generator is manufactured after April 1, 2006, or modified, or reconstructed after July 11, 2005, then Gilman is subject to 40 CFR 60, Subpart III.

D. ARM 17.8, Sub-Chapter 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. Gilman 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. Gilman is not required to submit a fee for this permit modification, since it is classified as an administrative 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; and the air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

The annual assessment and collection of the air quality operation fee, as described above, shall take place on a calendar year basis. The Department may insert into any final permit issued after the effective date of these rules such conditions as may be necessary to require the payment of an air quality operation fee on a calendar year basis, including provisions which 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. Gilman has a PTE greater than 15 tons per year of NO_x, CO, PM/PM₁₀, and VOC; therefore, an air quality permit is required.
3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.

4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, alteration, or use of a source. A permit application was not required for the current permit action because the permit change is considered an administrative permit change. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. An affidavit of publication of public notice was not required for the current permit action because the permit change is considered an administrative permit change.
6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Gilman of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, et seq.
10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
11. ARM 17.8.760 Additional Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those applications that require an environmental impact statement.
12. 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.

13. 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).
14. 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.
15. 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.
16. ARM 17.8.770 Additional Requirements for Incinerators. This rule specifies the additional information that must be submitted to the Department for incineration facilities subject to 75-2-215, Montana Code Annotated (MCA).

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

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
2. ARM 17.8.818 Review of Major Stationary Sources and Major Modification--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

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

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

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

- a. PTE > 100 tons/year of any pollutant
- b. PTE > 10 tons/year of any one 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 particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) in a serious PM₁₀ nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #2542-03 for Gilman, the following conclusions were made.

- a. The facility's PTE is less than 100 tons/year for any pollutant.
- b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.
- c. This source is not located in a serious PM₁₀ nonattainment area.
- d. This facility is subject to current NSPS, including 40 CFR 60, Subpart I.
- e. This facility is not subject to any current (National Emission Standards for Hazardous Air Pollutants)NESHAP standards.
- f. This source is not a Title IV affected source or a solid waste combustion unit.
- g. This source is not an EPA designated Title V source.

Based on these facts, the Department has determined that Gilman is not subject to the Title V Operating Permit Program. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, Gilman will be required to obtain a Title V Operating Permit.

- h. ARM 17.8.1204(3). The Department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable limitations which limit that source's PTE.
 - i. In applying for an exemption under this section the owner or operator of the facility shall certify to the Department that the source's PTE does not require the source to obtain an air quality operating permit.
 - ii. Any source that obtains a federally enforceable limit on PTE shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.

3. ARM 17.8.1207 Certification of Truth, Accuracy, and Completeness. The compliance certification submittal by ARM 17.8.1204(3) shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this subchapter 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. BACT Determination

A BACT determination is required for each new or altered source. Gilman 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 determination was not required for the current permit action because the permit change is considered an administrative permit change.

IV. Emission Inventory--Permit #2542-03

| SOURCE | Tons/Year (Restricted) | | | | | |
|--|------------------------|------------------|-----------------|--------------|--------------|-----------------|
| | PM | PM ₁₀ | NO _x | VOC | CO | SO _x |
| 1996 Gencor Asphalt Drum Mix Plant with Baghouse | 2.26 | 1.58 | 15.13 | 8.80 | 35.75 | 3.03 |
| Asphalt Heater (20 GPH #2 diesel) | 0.31 | 0.31 | 1.75 | 0.04 | 0.44 | 0.61 |
| Aggregate Piles | 1.77 | 0.84 | | | | |
| Cold Aggregate Handling (Pile to Bin) | 0.03 | 0.03 | | | | |
| Aggregate Bins, Screening, Conveying | 2.57 | 0.86 | | | | |
| Asphalt Storage (Silo Filling) | 0.16 | 0.16 | | 3.36 | 0.32 | |
| Asphalt Loadout into Trucks | 0.14 | 0.14 | | 1.14 | 0.37 | |
| Three Diesel Generators (total up to 1100 KW) | 5.76 | 5.76 | 82.01 | 6.70 | 17.66 | 5.40 |
| Total Non-Fugitive | 13.00 | 9.68 | 98.89 | 20.04 | 54.54 | 9.04 |
| Haul roads | 12.68 | 3.60 | | | | |
| TOTAL - Fugitive & Non-Fugitive | 25.68 | 13.28 | 98.89 | 20.04 | 54.54 | 9.04 |

Rotary Drum-Mix Asphalt Plant with Baghouse

1996 Gencor Asphalt Drum-Mix Plant with Baghouse
Gencor Diesel Dryer Burner (44.1 MCF/hr)

Process Rate 355 ton/hr* 500 tons/hr unrestricted
Air Flow: 30,060 dscfm*
Hours of operations: 1100 hr/yr**
Restricted Annual Throughput: 550,000 ton/yr*

*restriction, either based on permit or based on June 17, 2004 source test info; process rate not allowed to exceed this hourly rate
**previous permit restriction was in hours; revised to reflect 550,000 tons production per year.

PM Emissions (controlled)

Emission Factor 0.04 gr/DSCF (#2542-02 Permit Limit)
Calculations 0.04 gr/DSCF * 30,060 dscfm * 60 min/hr/7000 gr/lb = 10.31 lb/hr
10.31 lb/hr / 500 ton/hr unrestricted = 0.0206 lb/ton
0.0206 lb/ton * 550,000 ton/yr * 0.0005 ton/lb = 5.67 ton/yr

OR

Emission Factor 0.0113 gr/DSCF (Stack Test June 17, 2004)
Calculations 0.0113 gr/DSCF * 30,060 dscfm * 60 min/hr/7000 gr/lb = 2.91 lb/hr
2.91 lb/hr / 355 ton/hr unrestricted = 0.0082 lb/ton
0.0082 lb/ton * 550,000 ton/yr * 0.0005 ton/lb = 2.26 tons/yr

PM-10 Emissions (controlled)

Emission Factor 70% PM (AP-42 Table 11.1-7 3/2004)
Calculations 70% PM * 10.31 lb/hr = 7.22 lb/hr
70% PM * 2.26 ton/yr = 1.58 ton/yr

NO_x Emissions

Emission Factor 0.055 lb/ton (AP-42 Table 11.1-7 3/2004)
Calculations 0.055 lb/ton * 500 lb/hr unrestricted = 27.50 lb/hr

| | | |
|-----------------|---|--------------|
| VOC Emissions | 0.055 lb/ton * 550,000 ton/yr * 0.0005 ton/lb = | 15.13 ton/yr |
| Emission Factor | 0.032 lb/ton (AP-42 Table 11.1-6 3/2004) | |
| Calculations | 0.032 lb/ton * 500 lb/hr unrestricted = | 16.00 lb/hr |
| | 0.032 lb/ton * 550,000 ton/yr * 0.0005 ton/lb = | 8.80 ton/yr |

| | | |
|-----------------|--|--------------|
| CO Emissions | | |
| Emission Factor | 0.130 lb/ton (AP-42 Table 11.1-7 3/2004) | |
| Calculations | 0.13 lb/ton * 500 lb/hr unrestricted = | 65.00 lb/hr |
| | 0.13 lb/ton * 550,000 ton/yr * 0.0005 ton/lb = | 35.75 ton/yr |

| | | |
|---------------------------|---|-------------|
| SO ₂ Emissions | | |
| Emission Factor | 0.011 lb/ton (AP-42 Table 11.1-7 3/2004) | |
| Calculations | 0.011 lb/ton * 500 lb/hr unrestricted = | 5.50 lb/hr |
| | 0.011 lb/ton * 550,000 ton/yr * 0.0005 ton/lb = | 3.03 ton/yr |

Asphalt Heater (20 GPH #2 diesel)

Firing Rate: 20 GPH
Hours of operations: 8760 hr/yr

PM Emissions (controlled)

| | | |
|-----------------|---|-------------|
| Emission Factor | 3.3 lb/10 ³ gal (AP-42 Table 1.3-1 9/1998) | |
| Calculations | 3.3 lb/10 ³ gal * 20 GPH / 1000 gal = | 0.07 lb/hr |
| | 0.07 lb/hr * 8760 ton/yr * 0.0005 ton/lb = | 0.31 ton/yr |

PM-10 Emissions (controlled)

| | | |
|-----------------|---|-------------|
| Emission Factor | 3.3 lb/10 ³ gal (AP-42 Table 1.3-1 9/1998) | |
| Calculations | 3.3 lb/10 ³ gal * 20 GPH / 1000 gal = | 0.07 lb/hr |
| | 0.07 lb/hr * 8760 ton/yr * 0.0005 ton/lb = | 0.31 ton/yr |

NO_x Emissions

| | | |
|-----------------|--|-------------|
| Emission Factor | 20 lb/10 ³ gal (AP-42 Table 1.3-1 9/1998) | |
| Calculations | 20 lb/10 ³ gal * 20 GPH / 1000 gal = | 0.40 lb/hr |
| | 0.4 lb/hr * 8760 ton/yr * 0.0005 ton/lb = | 1.75 ton/yr |

VOC Emissions

| | | |
|-----------------|--|-------------|
| Emission Factor | 0.34 lb/10 ³ gal (AP-42 Table 1.3-1 9/1998) | |
| Calculations | 0.34 lb/10 ³ gal * 20 GPH / 1000 gal = 0.01 lb/hr | |
| | 0.01 lb/hr * 8760 ton/yr * 0.0005 ton/lb = | 0.04 ton/yr |

CO Emissions

| | | |
|-----------------|---|-------------|
| Emission Factor | 5 lb/10 ³ gal (AP-42 Table 1.3-1 9/1998) | |
| Calculations | 5 lb/10 ³ gal * 20 GPH / 1000 gal = | 0.10 lb/hr |
| | 0.1 lb/hr * 8760 ton/yr * 0.0005 ton/lb = | 0.44 ton/yr |

SO₂ Emissions Assumes Diesel @ 0.05% sulfur

| | | |
|-----------------|---|-------------|
| Emission Factor | 7.1 lb/10 ³ gal (AP-42 Table 1.3-1 9/1998) | |
| Calculations | 7.1 lb/10 ³ gal * 20 GPH / 1000 gal = | 0.14 lb/hr |
| | 0.14 lb/hr * 8760 ton/yr * 0.0005 ton/lb = | 0.61 ton/yr |

Material Transfer (SCC 3-05-020-06, controlled)

Aggregate Piles

Process Rate: 500 ton/hr
Number of Piles: 2 piles

Restricted Annual Throughput: 550,000 tons/yr (restricted)

PM Emissions (controlled)

| | | |
|-----------------|---|------------------------------|
| Emission Factor | 0.00322 lbs/ton | (AP-42 Section 13.2.4, 1/95) |
| Calculations | 0.00322 lbs/ton * 500 tons/hr * 2 piles = | 3.22 lb/hr |
| | 0.00322 lbs/ton * 550,000 tons/yr * 2 Piles * 0.0005 tons = | 1.77 ton/yr |

PM-10 Emissions (controlled)

| | | |
|-----------------|---|------------------------------|
| Emission Factor | 0.00153 lbs/ton | (AP-42 Section 13.2.4, 1/95) |
| Calculations | 0.00153 lbs/ton * 500 tons/hr * 2 piles = | 1.53 lb/hr |
| | 0.00153 lbs/ton * 550,000 tons/yr * 2 Piles * 0.0005 tons = | 0.84 ton/yr |

Cold Aggregate Handling (Pile to Bin)

Process Rate: 500 ton/hr
Number of Transfers: 1 Transfer
Restricted Annual Throughput: 550,000 tons/yr (restricted)

PM Emissions (truck unloading)

| | | |
|------------------|---|-----------------------------------|
| Emission Factors | 0.0001 lbs/ton | (AP-42 Section 11.19.2-2, 8/2004) |
| Calculations | 0.0001 lbs/ton * 500 tons/hr * 1 Transfer = | 0.05 lb/hr |
| | 0.0001 lbs/ton * 550,000 tons/yr * 1 Transfer * 0.0005 tons = | 0.03 ton/yr |

PM-10 Emissions (controlled)

| | | |
|------------------|---|-----------------------------------|
| Emission Factors | 0.0001 lbs/ton | (AP-42 Section 11.19.2-2, 8/2004) |
| Calculations | 0.0001 lbs/ton * 500 tons/hr * 1 Transfer = | 0.05 lb/hr |
| | 0.0001 lbs/ton * 550,000 tons/yr * 1 Transfer * 0.0005 tons = | 0.03 ton/yr |

Aggregate Bins, Screening, Conveying

Process Rate: 500 ton/hr
Number of Transfers: 4 Transfers
Restricted Annual Throughput: 550,000 tons/yr (restricted)

PM Emissions (screening & conveyor, controlled)

| | | |
|-----------------|---|-----------------------------------|
| Emission Factor | 2.34E-3 lbs/ton | (AP-42 Section 11.19.2-2, 8/2004) |
| Calculations | 0.00234 lbs/ton * 500 tons/hr * 4 Transfers = | 4.68 lb/hr |
| | 0.00234 lbs/ton * 550,000 tons/yr * 4 Transfers * 0.0005 tons = | 2.57 ton/yr |

PM-10 Emissions (screening & conveyor, controlled)

| | | |
|-----------------|--|-----------------------------------|
| Emission Factor | 7.86E-04 lbs/ton | (AP-42 Section 11.19.2-2, 8/2004) |
| Calculations | 0.000786 lbs/ton * 500 tons/hr * 4 Transfers = | 1.57 lb/hr |
| | 0.000786 lbs/ton * 550,000 tons/yr * 4 Transfers * 0.0005 tons = | 0.86 ton/yr |

Asphalt Storage (Silo Filling)

Process Rate: 500 ton/hr
Temperature (T, default): 325 deg F
Asphalt volatility (V, default): -0.5
Restricted Annual Throughput: 550,000 tons/yr (restricted)

PM Emissions

| | | |
|-----------------|---|---------------------------------|
| Emission Factor | 5.86E-04 lbs/ton | (AP-42 Section 11.1-14, 3/2004) |
| Calculations | 0.00586 lbs/ton * 500 tons/hr = | 0.29 lb/hr |
| | 0.00586 lbs/ton * 550,000 tons/yr * 0.0005 tons = | 0.16 ton/yr |

PM-10 Emissions (screening & conveyor, controlled)

| | | |
|-----------------|--|---------------------------------|
| Emission Factor | 5.86E-04 lbs/ton | (AP-42 Section 11.1-14, 3/2004) |
| Calculations | 0.000586 lbs/ton * 500 tons/hr = | 0.29 lb/hr |
| | 0.000586 lbs/ton * 550,000 tons/yr * 0.0005 tons = | 0.16 ton/yr |

VOC Emissions

| | | |
|-----------------|--|---------------------------------|
| Emission Factor | 1.22E-02 lbs/ton | (AP-42 Section 11.1-14, 3/2004) |
| Calculations | 0.0122 lbs/ton * 500 tons/hr = | 6.10 lb/hr |
| | 0.0122 lbs/ton * 550,000 tons/yr * 0.0005 tons = | 3.36 ton/yr |

CO Emissions

| | | |
|-----------------|--|---------------------------------|
| Emission Factor | 1.18E-03 lbs/ton | (AP-42 Section 11.1-14, 3/2004) |
| Calculations | 0.000118 lbs/ton * 500 tons/hr = | 0.59 lb/hr |
| | 0.000118 lbs/ton * 550,000 tons/yr * 0.0005 tons = | 0.32 ton/yr |

Asphalt Loadout Into Trucks

| | |
|---------------------------------|------------------------------|
| Process Rate: | 500 ton/hr |
| Temperature (T, default): | 325 deg F |
| Asphalt volatility (V, default) | -0.5 |
| Restricted Annual Throughput: | 550,000 tons/yr (restricted) |

PM Emissions

| | | |
|-----------------|---|--------------------------------|
| Emission Factor | 5.22E-04 lbs/ton | (AP-42 Section 11.1-14 3/2004) |
| Calculations | 0.00522 lbs/ton * 500 tons/hr = | 0.26 lb/hr |
| | 0.00522 lbs/ton * 550,000 tons/yr * 0.0005 tons = | 0.14 ton/yr |

PM-10 Emissions

| | | |
|-----------------|--|--------------------------------|
| Emission Factor | 5.22E-04 lbs/ton | (AP-42 Section 11.1-14 3/2004) |
| Calculations | 0.000522 lbs/ton * 500 tons/hr = | 0.26 lb/hr |
| | 0.000522 lbs/ton * 550,000 tons/yr * 0.0005 tons = | 0.14 ton/yr |

VOC Emissions

| | | |
|-----------------|---|--------------------------------|
| Emission Factor | 4.16E-02 lbs/ton | (AP-42 Section 11.1-14 3/2004) |
| Calculations | 0.00416 lbs/ton * 500 tons/hr = | 2.08 lb/hr |
| | 0.00416 lbs/ton * 550,000 tons/yr * 0.0005 tons = | 1.14 ton/yr |

CO Emissions

| | | |
|-----------------|---|--------------------------------|
| Emission Factor | 1.35E-03 lbs/ton | (AP-42 Section 11.1-14 3/2004) |
| Calculations | 0.00135 lbs/ton * 500 tons/hr = | 0.68 lb/hr |
| | 0.00135 lbs/ton * 550,000 tons/yr * 0.0005 tons = | 0.37 ton/yr |

Haul Roads

| | |
|---|-----------|
| Vehicle miles traveled (estimate): | 5 VMT/day |
| Control Efficiency is included in Emission Factor | |

PM Emissions (controlled)

| | | |
|---|-----------------------------|-------------------------------|
| Emission Factor (Rated Load Capacity <50 tons): | 13.90 lbs/VMT | (AP-42 Section 13.2.2, 12/03) |
| Calculations | 5 VMT/day * 13.90 lbs/VMT = | 69.5 lb/day |
| | | 12.68 ton/yr |

PM-10 Emissions (controlled)

| | | |
|---|----------------------------|------------------------------|
| Emission Factor (Rated Load Capacity <50 tons): | 3.95 lbs/VMT | (AP-42 Section 13.2., 12/03) |
| Calculations | 5 VMT/day * 3.95 lbs/VMT = | 19.75 lb/day |
| | | 3.60 ton/yr |

Three Diesel Generators (total up to 1100 KW)

| | | | |
|------------------|----------------|---------------------|-------------|
| Horsepower = | 1475 Hp | 1 KW = | 1.341 Hp |
| Generator Size = | 1100 KW | 1 Hp-hr = | 7000 Btu |
| Btu/hr = | 10.33 MMBtu/hr | Hours of Operation: | 3600 hrs/yr |

PM Emissions

| | | |
|-----------------|--|----------------------|
| Emission Factor | 0.31 lbs/MMBtu | (AP-42 3.3-1, 10/96) |
| Calculations | 10.33 MMBtu/hr * 0.31 lbs/MMBtu = | 3.20 lb/hr |
| | 3.20 lbs/hr * 3600 hr/yr * 0.0005 tons = | 5.76 ton/yr |

PM-10 Emissions

| | | |
|-----------------|--|-----------------------------|
| Emission Factor | 0.31 lbs/MMBtu | (AP-42 Section 3.3-1 10/96) |
| Calculations | 10.33 MMBtu/hr * 0.31 lbs/MMBtu = | 3.20 lb/hr |
| | 3.20 lb/hr * 3600 hr/yr * 0.0005 tons/lb = | 5.76 ton/yr |

NO_x Emissions

| | | |
|-----------------|---|-----------------------------|
| Emission Factor | 4.41 lbs/MMBtu | (AP-42 Section 3.3-1 10/96) |
| Calculations | 10.33 MMBtu/hr * 4.41 lbs/MMBtu = | 45.56 lb/hr |
| | 45.56 lb/hr * 3600 hr/yr * 0.0005 tons/lb = | 82.01 ton/yr |

VOC Emissions

| | | |
|-----------------|--|-----------------------------|
| Emission Factor | 0.36 lbs/MMBtu | (AP-42 Section 3.3-1 10/96) |
| Calculations | 10.33 MMBtu/hr * 0.36 lbs/MMBtu = | 3.72 lb/hr |
| | 3.72 lb/hr * 3600 hr/yr * 0.0005 tons/lb = | 6.70 ton/yr |

CO Emissions

| | | |
|-----------------|--|-----------------------------|
| Emission Factor | 0.95 lbs/MMBtu | (AP-42 Section 3.3-1 10/96) |
| Calculations | 10.33 MMBtu/hr * 0.95 lbs/MMBtu = | 9.81 lb/hr |
| | 9.81 lb/hr * 3600 hr/yr * 0.0005 tons/lb = | 17.66 ton/yr |

SO_x Emissions

0.05 % sulfur

| | | |
|-----------------|--|-----------------------------|
| Emission Factor | 0.29 lbs/MMBtu | (AP-42 Section 3.3-1 10/96) |
| Calculations | 10.33 MMBtu/hr * 0.29 lbs/MMBtu = | 3.00 lb/hr |
| | 3.00 lb/hr * 3600 hr/yr * 0.0005 tons/lb = | 5.40 ton/yr |

V. Existing Air Quality

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

Addendum 2 to Permit #2542-03 is for a portable asphalt plant to locate at sites in or within 10 km of certain PM₁₀ nonattainment areas during the winter season (October 1 – March 31). Winter season (October 1 – March 31) operations may include only the locations listed in Section II.A of Addendum 2. Addendum 2 would also allow for summertime operations (April 1 – September 30) at any location in or within 10 km of the Butte, Columbia Falls, Libby, Kalispell, Thompson Falls, and Whitefish PM₁₀ nonattainment areas.

VI. Air Quality Impacts

This permit is for a portable asphalt plant located in various locations around Montana. In the

view of the Department, the amount of controlled particulate emissions generated by this project will not cause concentrations of PM₁₀ in the ambient air that exceed the set standard. In addition, this source is portable and any air quality impacts will be minimal.

Addendum 2
Gilman Excavating, Inc.
Permit #2542-03

An addendum to air quality permit #2542-03 is issued to Gilman Excavating, Inc. (Gilman) pursuant to Section 75-2-204 and 75-2-211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, as amended, for the following:

I. Permitted Equipment

Gilman operates a portable asphalt plant with a maximum production rate of 500 tons per hour (TPH). The plant includes the following equipment:

- 1996 GenCor Drum drier heated by a diesel-fired burner (maximum capacity 500 TPH of asphalt, limited to the maximum production rate during the most recent stack test). The asphalt plant and hydrated lime storage silo are controlled by a GenCor portable baghouse;
- 2000 CEI Diesel-fired asphalt heater, rated at 20 gallons per hour (GPH);
- Aggregate handling equipment;
- Asphalt storage silo;
- Diesel generators – up to 3 generators for a total of 1100 KW; and
- Associated equipment.

II. Seasonal and Site Restrictions – Winter and Summer Seasons

Addendum 2 applies to the Gilman facility while operating at any location in or within 10 km of certain PM₁₀ nonattainment areas. Additionally, seasonal and site restrictions apply to the facility as follows:

- A. During the winter season (October 1–March 31) – Gilman may operate at any site that may be approved, in writing, by the Department, in or within 10 km of a PM₁₀ nonattainment area.
- B. During the summer season (April 1–September 30) – Gilman may operate at any location in or within 10 km of the Libby, Thompson Falls, Kalispell, Whitefish, Columbia Falls, and Butte PM₁₀ nonattainment areas.
- C. Gilman shall comply with the limitations and conditions contained in Addendum 2 to permit #2542-03 while operating in or within 10 km of any of the previously listed PM₁₀ nonattainment areas. Addendum 2 shall be valid until revoked or modified. The Department reserves the authority to modify Addendum 2 at any time based on local conditions of any future site. These conditions may include, but are not limited to, local terrain, meteorological conditions, proximity to residences or other businesses, etc.

III. Limitations and Conditions

- A. Operational Limitations and Conditions – **Winter Season (October 1 – March 31)**
 - 1. Asphalt plant particulate matter emissions shall be limited to 0.04 gr/dscf (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60 Subpart I).
 - 2. Water spray bars must be operated when necessary on all conveyors whenever the plant is operating (ARM 17.8.749).
 - 3. All visible emissions from the plant may not exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).

4. Gilman shall not cause or authorize to be discharged into the atmosphere from systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler; systems for mixing hot mix asphalt; and the loading, transfer, and storage systems associated with emission control systems any visible emissions that exhibit an opacity of 10% (ARM 17.8.749).
5. Gilman shall not cause or authorize to be discharged into the atmosphere from haul roads, access roads, parking lots, or the general plant property any visible fugitive emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).
6. Gilman shall treat all unpaved portions of the access roads, parking lots, and general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the 10% opacity limitation (ARM 17.8.749).
7. The asphalt plant production shall be limited to a maximum of 2,850 tons per day (ARM 17.8.749).
8. Gilman shall not operate more than three diesel engines, and the combined maximum-rated design capacity of the engines shall not exceed 1100 KW. The combined hours of operation of the three diesel engines shall not exceed 5.5 hours per day (ARM 17.8.749).

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

1. Asphalt plant particulate matter emissions shall be limited to 0.04 gr/dscf (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60 Subpart I).
2. Water spray bars must be operated when necessary on all conveyors whenever the plant is operating (ARM 17.8.749).
3. All visible emissions from the plant may not exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).
4. Gilman shall not cause or authorize to be discharged into the atmosphere from systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler; systems for mixing hot-mix asphalt; and the loading, transfer, and storage systems associated with emission control systems any visible emissions that exhibit an opacity of 10% (ARM 17.8.749).
5. Gilman shall not cause or authorize to be discharged into the atmosphere from haul roads, access roads, parking lots, or the general plant property any visible fugitive emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).
6. Gilman shall treat all unpaved portions of the access roads, parking lots, and general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the 10% opacity limitation (ARM 17.8.749).
7. The asphalt plant production shall be limited to a maximum of 550,000 tons during any rolling 12-month period. In addition, the asphalt plant production shall be limited to the average production rate during the last source test demonstrating compliance (ARM 17.8.749 and ARM 17.8.1204).

C. Operational Reporting Requirements

1. Gilman shall provide the Department with written notification of job completion within 10 working days of job completion (ARM 17.8.749).
2. Gilman shall provide written notice of relocation of the permitted equipment at least 15 days prior to the physical transfer of equipment (ARM 17.8.765).
3. Production information for the sites covered by this addendum must be submitted to the Department with the annual emission inventory request or within 30 days of completion of the project. The information must include (ARM 17.8.749):
 - a) Tons of asphalt produced.
 - b) Hours of operation.
 - c) Type and amount of fuel used for the plant.
 - d) Fugitive dust information consisting of a listing of all plant vehicles including the following for each vehicle type:
 - i) number of vehicles;
 - ii) vehicle type;
 - iii) average vehicle weight;
 - iv) number of tires on vehicle;
 - v) annual on-site vehicle miles traveled;
 - vi) average on-site vehicle speed; and
 - vii) vehicle fuel usage (gasoline or diesel) annual total.
 - e) Fugitive dust control for haul roads and general plant area:
 - i) Hours of operation of water trucks; and
 - ii) Application schedule for chemical dust suppressant, if applicable.
4. Gilman shall document, by day, the production of the asphalt plant during the winter season. Gilman shall total, daily, the production of the asphalt plant to verify compliance with the limitation in Addendum 2, Section A.7. A written report of compliance verification and the emissions inventory shall be submitted to the Department annually. The report for the previous calendar year shall be submitted along with the annual emission inventory (ARM 17.8.749).
5. Gilman shall document, by day, the total hours of operation for any diesel generators on-site during the winter season. Gilman shall total, daily, the total generator operational hours to verify compliance with the limitation in Addendum 2 Section A.8. A written report of compliance verification and the emissions inventory shall be submitted to the Department annually. The report for the previous calendar year shall be submitted along with the annual emission inventory (ARM 17.8.749).
6. Gilman shall document, by day, the production of the asphalt plant during the summer season. Gilman shall total, daily, the production of the asphalt plant to verify compliance with the limitation in Addendum 2 Section B.7. A written report of compliance verification and the emissions inventory shall be submitted to the Department annually. The report for the previous calendar year shall be

Addendum 2 Analysis
Gilman Excavating, Inc.
Permit #2542-03

I. Permitted Equipment

Gilman operates a portable asphalt plant with a maximum production rate of 500 tons per hour (TPH). The plant includes the following equipment:

- 1996 GenCor Drum drier heated by a diesel-fired burner (maximum capacity 500 TPH of asphalt, limited to the maximum production rate during the most recent stack test). The asphalt plant and hydrated lime storage silo are controlled by a GenCor portable baghouse;
- 2000 CEI Diesel-fired asphalt heater, rated at 20 gallons per hour (GPH);
- Aggregate handling equipment;
- Asphalt storage silo;
- Diesel generators – up to 3 generators for a total of 1100 KW; and
- Associated equipment.

II. Permit History

On April 10, 1989, Gilman Excavating, Inc. was issued permit #2542-00 to operate a 1979 Barber Green DM-65 Portable Drum-Mix Asphalt Plant and associated equipment.

On November 9, 1996 a permit modification was done for the replacement of the Barber Green with a 1996 GenCor Drum Dryer (maximum production rate 500 TPH) and 1996 GenCor baghouse. **Permit #2542-01** replaced permit #2542-00.

On June 1, 1998, permit #2542-02, to issue **Addendum 1**, allowed Gilman to operate the GenCor Asphalt plant and baghouse in or within 10 kilometers of any PM₁₀ nonattainment area. Gilman proposed operations at NE¼, Section 5, Township 2 North, Range 7 West, in Silver Bow County.

III. Current Permit Action

On March 9, 2007, the Department received a request from Gilman to administratively amend their permit to specifically identify the existing asphalt heater and various generators currently permitted as “associated equipment,” and to replace the current permit condition expressed in hours per year to an equivalent production limit. Gilman later requested to limit operations to maintain their synthetic minor status. **Permit #2542-03** will replace permit #2542-02 and **Addendum 2** will replace Addendum 1.

IV. Applicable Rules and Regulations

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

1. ARM 17.8.749 Conditions for Issuance of Permit. Gilman is expected to be in compliance with all applicable rules and standards.
2. ARM 17.8.733 Modification of Permit. A permit may be modified if there are changed conditions of operation which do not result in an increase in emissions because of the changed conditions.

3. ARM 17.8.734 Transfer of Permit. An air quality permit may be transferred from one location to another if written notice of intent to transfer is sent to the Department.

The conditions and controls of this addendum will keep Gilman from having a significant impact on any of the PM₁₀ nonattainment areas.

V. Emission Inventory -- Addendum 2

| Wintertime Addendum lbs/day (Restricted) | | |
|--|------------------|-------------------------------|
| | <u>PM</u> | <u>PM₁₀</u> |
| 1996 Gencor Asphalt Drum-Mix Plant with Baghouse | 58.7 | 41.1 |
| Asphalt Heater (20 GPH #2 diesel) | 1.7 | 1.7 |
| Aggregate Piles | 9.2 | 4.4 |
| Cold Aggregate Handling (Pile to Bin) | 0.3 | 0.3 |
| Aggregate Bins, Screening, Conveying | 26.7 | 9.0 |
| Asphalt Storage (Silo Filling) | 1.7 | 1.7 |
| Asphalt Loadout into Trucks | 1.5 | 1.5 |
| Three Diesel Generators (total up to 1100 KW) | 17.6 | 17.6 |
| <u>Haul roads</u> | <u>16.5</u> | <u>4.7</u> |
| TOTAL - Fugitive & Non-Fugitive | 133.9 | 82.0 |

VI. Existing Air Quality

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

Addendum 2 to Permit #2542-03 is for a portable asphalt plant to locate at sites in or within 10 km of certain PM₁₀ nonattainment areas during the winter season (October 1 – March 31). Winter season (October 1 – March 31) operations may include only the locations listed in Section II.A of Addendum 2. Addendum 2 would also allow for summertime operations (April 1 – September 30) at any location in or within 10 km of the Butte, Columbia Falls, Libby, Kalispell, Thompson Falls, and Whitefish PM₁₀ nonattainment areas.

VII. Air Quality Impacts

This permit is for a portable asphalt plant located in various locations around Montana. In the view of the Department, the amount of controlled particulate emissions generated by this project will not cause concentrations of PM₁₀ in the ambient air that exceed the set standard. In addition, this source is portable and any air quality impacts will be minimal.

VIII. Taking or Damaging Implication Analysis

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

IX. Environmental Assessment

An environmental assessment was not required for the current permit action because it is considered an administrative action, with no new or altered sources being addressed.

Analysis prepared by: Christine Weaver

Date: April 5, 2007