

## Air Quality Permit

Issued to: Slope Company  
942 First Street East  
Roundup, MT 59072

Permit # 3143-02  
Administrative Amendment Request Received: 9/08/03  
Department Decision on Administrative  
Amendment: 10/31/03  
Permit Final: 11/18/03  
AFS #777-3143

An air quality permit, with conditions, is hereby granted to Slope Company (Slope Co.), pursuant to Sections 75-2-204, 211, and 215, Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

### Section I: Permitted Facilities

#### A. Plant Location

Slope Co. proposes to operate a portable thermal desorption unit (capable of treating petroleum-contaminated soils) and crushing/screening equipment in various locations throughout Montana. Permit #3143-02 applies while operating at any location within Montana, except those areas having a Department of Environmental Quality (Department) approved permitting program, those areas considered Tribal Lands, or those areas in, or within, 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County.* An addendum to this air quality permit will be required for locations in, or within, 10 km of certain PM<sub>10</sub> nonattainment areas. A list of permitted equipment is contained in Section I.A of the permit analysis.

#### B. Current Permit Action

On September 8, 2003, Slope Co. requested an administrative amendment to Permit #3143-01 to add a cone crusher (maximum capacity 75 tons per hour) and a screen (maximum capacity 75 tons per hour). The change is considered a de minimis addition of equipment, as described in ARM 17.8.745(1)(a), because potential emissions are less than 15 tons/year and the proposal would not violate any conditions of the existing permit. The permit was also updated to reflect current language and rule references used by the Department.

### Section II: Limitations and Conditions

#### A. Operational Requirements

1. Slope Co. shall not incinerate any material other than petroleum contaminated soils, excluding gasoline contaminated soils (ARM 17.8.749).
2. Slope Co. shall provide written notice to the Department and obtain approval from the Department if material other than petroleum contaminated soils is to be incinerated (ARM 17.8.749).
3. The secondary chamber operating temperature of the Rotary Dryers/Kilns shall be maintained above 1600 °F. The operating temperature shall be maintained during operation and for 2 hours after the feed has stopped (ARM 17.8.749).

4. Slope Co. shall develop incinerator operating procedures, print those procedures in an incinerator operation procedures manual and require all personnel who operate the incinerator to familiarize themselves with the operation procedures. A copy of this manual shall be supplied to the Department (ARM 17.8.752).
5. Slope Co. shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308 and ARM 17.8.752).
6. Slope Co. shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.5. (ARM 17.8.752).
7. Water and spray bars shall be available and used, as necessary, to maintain compliance with the opacity limitations in Sections II.B.2. and II.B.3 (ARM 17.8.752).
8. If the permitted equipment is used in conjunction with any other equipment owned or operated by Slope Co., at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month time period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).
9. All soils cleaned shall be limited to a maximum petroleum product concentration of 25,000 ppm on a weight basis (ARM 17.8.749).
10. Slope Co. shall conduct a soil analysis at each site to verify compliance with Section II.A.9 (ARM 17.8.749).

B. Emission Limitations

1. Slope Co. shall not cause or authorize to be discharged into the atmosphere from the Rotary Dryer/Kilns:
  - a. Any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.752); and
  - b. Any particulate emissions in excess of 0.10 gr/dscf corrected to 12% CO<sub>2</sub> (ARM 17.8.752).
2. All visible emissions from any Standards of Performance for New Stationary Source (NSPS) affected crusher shall not exhibit an opacity of 15% or greater averaged over 6-consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
3. All visible emissions from any other NSPS affected equipment, such as screens or conveyor transfers, shall not exhibit an opacity of 10% or greater averaged over 6-consecutive minutes (ARM 17.8.340 and 40 CFR, Subpart OOO).
4. All visible emissions from any non-NSPS affected equipment shall not exhibit an opacity of 20% or greater averaged over 6-consecutive minutes (ARM 17.8.304).

5. Slope Co. shall not cause or authorize to be discharged into the atmosphere from all other equipment used in conjunction with this facility, such as screens or transfer points, any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.308 and ARM 17.8.752).

C. Monitoring Requirements

Slope Co. shall install, calibrate, maintain, and operate continuous monitoring and recording equipment on the Rotary Dryer/Kilns for the secondary chamber temperature. Slope Co. shall also record the daily quantity of material incinerated/cremated and the daily hours of operation for the Rotary Dryer/Kilns (ARM 17.8.752).

D. Operational Reporting Requirements

1. If this thermal desorption unit or associated equipment 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, at least 15 days prior to the move. The Intent to Transfer Form and the proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.765).

2. Slope Co. shall supply the Department with annual production information for all emission points, as required by the Department, in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the most recent emission inventory report and sources identified in Section I.A of the permit analysis.

Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. 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).

3. Slope Co. shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. All records compiled in accordance with this permit shall be maintained by Slope Co. as a permanent business record for at least 5 years following the date of the measurement, shall be available at the plant site for inspection by the Department, and shall be submitted to the Department upon request (ARM 17.8.749).
4. Slope Co. shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted to the Department, in writing, 10 days prior to start-up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d)(ARM 17.8.745).

- E. Testing Requirements
  - 1. All compliance source tests shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
  - 2. The Department may require testing (ARM 17.8.105).

### Section III: General Conditions

- A. Inspection – Slope Co. 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 Slope Co. fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Slope Co. of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals – Any person or persons, jointly or severally, adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing postpones the effective date of the Department's decision until the conclusion of the hearing and issuance of a final decision by the Board. The Department's decision on the application is not final unless 15 days have elapsed and there is no request for a hearing under this section.
- F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy 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 Fee – Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay by Slope Co. of an annual operation may be grounds for revocation of this permit, 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. Slope Co. shall comply with the conditions contained in this permit while operating at any location in Montana, except within those areas having a Department approved permitting program.

I. Introduction/Process Description

A. Permitted Equipment

Slope Company (Slope Co.) is permitted to operate a portable thermal desorption unit/facility consisting of the following equipment:

- 4'X20' Rotary Dryer/Kiln (up to 10 tons per hour (TPH))
- 4'X16' Rotary Dryer/Kiln (up to 10 TPH)
- 4'X15' Oxidizer Using Propane Fuel (up to 91 gallons per hour (GPH))
- Feeder and Conveyors
- Baghouse
- Jaw Crusher (up to 110 TPH)
- Roll Crusher (up to 420 TPH)
- Cone Crusher (up to 100 TPH)
- Crusher (up to 75 TPH)
- Screen (up to 250 TPH)
- Screen (up to 90 TPH)
- Screen (up to 75 TPH)
- Diesel Generator Set (up to 160 kilowatts (kW))

B. Source Description

Slope Co. proposed to operate a portable thermal desorption unit capable of treating petroleum contaminated soils in various locations throughout Montana.

C. Permit History

On June 28, 2001, Slope Co. was issued **Permit #3143-00** for the installation and operation of a portable thermal desorption unit to be used for treatment of petroleum contaminated soils, excluding gasoline contaminated soils.

On June 28, 2002, Slope Co. requested a modification to Permit #3143-01 to add a cone crusher (maximum capacity 100 tons per hour) and a screen (maximum capacity 90 tons per hour). The change was considered de minimis, as described in ARM 17.8.705 (1)(r), because the potential emissions were less than 15 tons/year and the proposal did not violate any conditions of the existing permit. **Permit #3143-01** replaced Permit #3143-00.

D. Current Permit Action

On September 8, 2003, Slope Co. requested an administrative amendment to Permit #3143-01 to add a cone crusher (maximum capacity 75 tons per hour) and a screen (maximum capacity 75 tons per hour). The change is considered a de minimis addition of equipment, as described in ARM 17.8.745(1)(a), because potential emissions are less than 15 tons/year and the proposal would not violate any conditions of the existing permit. The permit was also updated to reflect current language and rule references used by the Department. **Permit #3143-02** replaces Permit #3143-01.

E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT) determinations, air quality impacts, and environmental assessments, is 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 (ARM) and are available, upon request, from the Department. Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

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

1. ARM 17.8.101 Definitions. This rule is a list of applicable definitions used in this subchapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).  
  
Slope Co. shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.
4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly, by telephone, whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation, or to continue for a period greater than 4 hours.
5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created.

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

1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide

4. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
5. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
6. ARM 17.8.223 Ambient Air Quality Standard for PM<sub>10</sub>

Slope Co. must comply with the applicable ambient air quality standards.

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

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Slope Co. shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount set forth by this rule.
4. ARM 17.8.316 Incinerators. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any incinerator, particulate matter in excess of 0.10 grains per standard cubic foot of dry flue gas, adjusted to 12% carbon dioxide and calculated as if no auxiliary fuel had been used. Also, no person shall cause or authorize to be discharged into the outdoor atmosphere from any incinerator emissions which exhibit an opacity of 10% or greater averaged over 6 consecutive minutes. This rule does not apply to the Rotary Dryer/Kilns because Slope Co. has applied for and received an air quality permit in accordance with ARM 17.8.748 and MCA 75-2-215.
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, New Source Performance Standards (NSPS), shall comply with the standards and provisions of 40 CFR Part 60. There is no existing New Source Performance Standards (NSPS) requirement for incinerators of this type.

In order for a crushing/screening plant to be subject to NSPS requirements, two specific criteria must be met. First, the crushing/screening plant must meet the definition of an affected facility and, second, the equipment in question must have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted by Slope Co., at the time of issuance of Permit #3143-02, the crushing/screening equipment to be used under Permit #3143-02 is not currently subject to NSPS requirements because the equipment does not meet both the specified capacity requirements or the NSPS applicability date (40 CFR Part 60, Subpart A General Provisions, and Subpart OOO, Non-Metallic Mineral Processing Plants).

D. ARM 17.8, Subchapter 5, Air Quality Permit Application, Operation and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. Slope Co. 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. Slope Co. was not required to submit a permit application fee for the current permit action because this permit action reflects an administrative action in accordance with ARM 17.8.745.
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. The air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

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

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

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit alteration to construct, modify, or use any asphalt plant, crusher, or screen that has the Potential to Emit (PTE) greater than 15 tons per year of any pollutant. Slope Co. has a PTE greater than 15 tons per year of total particulate matter (PM), particulate matter of 10 microns or less (PM<sub>10</sub>), and oxides of nitrogen (NO<sub>x</sub>); therefore, an air quality permit is required. Furthermore, the facility contains an incinerator, so a 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. This rule requires that a permit application be submitted prior to installation, modification, or use of a source. Slope Co. was not required to submit a permit application for the current permit action because it is an administrative action. (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. Slope Co. was not required to submit a permit application for the current permit action because it is an administrative action.

6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The BACT analysis is contained in Section IV of this permit analysis.
8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Slope Co. of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond those found in its permit, unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.

14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an air quality permit may be transferred from one location to another if the Department receives a complete notice of Intent to Transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.

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

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

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

G. MCA 75-2-103, Definitions, provides, in part, as follows:

1. "Incinerator" means any single or multiple-chambered combustion device that burns combustible material, alone or with a supplemental fuel or catalytic combustion assistance, primarily for the purpose of removal, destruction, disposal, or volume reduction of all or any portion of the input material.
2. "Solid waste" means all putrescible and non-putrescible solid, semisolid, liquid, or gaseous wastes, including, but not limited to air pollution control facilities.

H. MCA 75-2-215, Solid or hazardous waste incineration - additional permit requirements:

1. MCA 75-2-215 requires air quality permits for all new commercial solid waste incinerators. In a previous permitting action Slope Co. complied with this requirement.
2. MCA 75-2-215 requires the applicant to provide, to the Department's satisfaction, a characterization and estimate of emissions and ambient concentrations of air pollutants, including Hazardous Air Pollutants (HAP) from the incineration of solid waste. The Department determined that the information submitted in the application for Permit #3143-00 fulfilled this requirement. The current permit action does not increase HAP emissions analyzed during Permit #3143-02. Therefore, an estimate and characterization of emissions was not required.
3. MCA 75-2-215 requires that the Department reach a determination that the projected emissions and ambient concentrations constitute a negligible risk to public health, safety, and welfare. The Department did not complete a health risk assessment to demonstrate negligible risk because there was no increase in HAPs from the incinerator for this permitting action. However, the Department

previously determined negligible risk through a health risk assessment. Therefore, negligible risk to public health, safety, and welfare is demonstrated by compliance with the ambient air standards for criteria pollutants.

4. MCA 75-2-215 requires the application of pollution control equipment or procedures that meet or exceed BACT. For this permitting action, a de minimus addition of criteria air pollutant emissions, there is no need of a BACT analysis; therefore, MCA 75-2-215 does not apply.

### III. BACT Analysis

A BACT determination is required for each new or altered source. Slope Co. shall install on the new or altered source the maximum air pollution control capability, which is technically practicable and economically feasible, except that BACT shall be utilized. A BACT analysis was not required for the current permit action because the change was determined to be de minimis.

### IV. Emission Inventory

An emission inventory was completed for Slope Co.'s proposal. A complete emission inventory for criteria pollutants and HAPs is on file with the Department.

### CRITERIA POLLUTANTS

Source	Tons/Year					
	PM	PM <sub>10</sub>	NO <sub>x</sub>	VOC	CO	SO <sub>x</sub>
4'x20' Cedar Rapids Rotary Kiln/Drum Dryer	10.89	5.44	3.29	3.02	1.58	2.45
4'x16' Barber Green Rotary Kiln/Drum Dryer	11.27	5.64	3.29	3.02	1.58	2.45
Thermal Oxidizer (Propane Fuel)	0.24	0.24	7.57	0.20	1.28	0.04
Jaw Crusher (up to 110 TPH)	1.20	0.58				
Rolls Crusher (up to 420 TPH)	4.60	2.21				
Cone Crusher (up to 100 TPH)	1.10	0.53				
Crusher (up to 75 TPH)	0.82	0.39				
Screen (up to 250 TPH)	17.25	8.21				
Screen (up to 90 TPH)	6.21	2.96				
Screen (up to 75 TPH)	5.17	2.46				
Material Transfer	11.43	5.52				
Pile Forming	1.84	0.88				
Bulk Loading	1.84	0.88				
Diesel Generator (up to 160 kW)	2.07	2.07	29.13	2.32	6.28	1.93
Haul Roads	2.74	1.23				
<b>Total</b>	<b>78.67</b>	<b>39.24</b>	<b>43.28</b>	<b>8.56</b>	<b>10.72</b>	<b>6.87</b>

## HAZARDOUS AIR POLLUTANTS

HAP	Emission Factor	Units	PTE (lb/hr)	PTE (g/s)	Model Conc. (ug/m <sup>3</sup> )	Table 1 Conc. (ug/m <sup>3</sup> )	Table 2 Conc. (ug/m <sup>3</sup> )
Hexane	0.4	Liquid%	0.014	0.0018	2.98E-03		2.00E+00
Benzene	0.6	Liquid%	0.021	0.0026	4.48E-03	1.20E-02	7.10E-01
Toluene	1.0	Liquid%	0.035	0.0044	7.46E-03		4.00E+00
Ethylbenzene	0.4	Liquid%	0.014	0.0018	2.98E-03		1.00E+01
Xylene (m-)	1.4	Liquid%	0.049	0.0062	1.04E-02		3.00E+00
Antimony	1.8E-07	lb/ton	1.3E-06	1.6E-07	2.69E-07		2.00E-03
Arsenic	5.6E-07	lb/ton	3.9E-06	4.9E-07	8.35E-07	2.33E-05	5.00E-03
Cadmium	4.1E-07	lb/ton	2.9E-06	3.6E-07	6.12E-07	5.56E-05	3.50E-02
Chromium	5.5E-06	lb/ton	3.9E-05	4.9E-06	8.21E-06	8.33E-06	2.00E-05
Lead	1.5E-05	lb/ton	1.1E-04	1.3E-05	2.24E-05		1.50E-02
Manganese	7.7E-06	lb/ton	5.4E-05	6.8E-06	1.15E-05		5.00E-04
Mercury	2.6E-06	lb/ton	1.8E-05	2.3E-06	3.88E-06		3.00E-03
Nickel	6.3E-05	lb/ton	4.4E-04	5.6E-05	9.40E-05	3.85E-04	2.40E-03
Selenium	2.4E-06	lb/ton	1.7E-05	2.1E-06	3.58E-06		5.00E-03

- Organic compound emission factors are from the speciation profile of Tanks 4.0 for crude oil. Metal emission factors are from AP-42, Table 11.1-12 for Drum Mix Hot Mix Asphalt Plants, Oil Fired with Fabric Filter.

### V. Air Quality Impacts

A minimal increase of criteria pollutant emissions would result from permitting the de minimis addition of equipment, under Permit #3143-02. This permitting action would not increase emissions of HAPs and, therefore, would not increase risk to public health, safety, and welfare and risk to the environment. Therefore, modeling was not required. Also, when modeling was initially done, Permit #3143-00 demonstrated no more than negligible risk to public health, safety, and welfare in accordance with ARM 17.8.748 and MCA 75-2-215. These standards are designed to be protective of both human health and the environment. The current permit action would not affect the health risk assessment that was previously completed on the incinerator.

### VI. Health Risk Assessment

A health risk assessment was conducted for Permit #3143-00 to determine if the Slope Co. incinerator could comply with the negligible risk requirement of MCA 75-2-215. The Department determined the facility represents no more than negligible risk to public health, safety, and welfare. A copy of the risk assessment conducted for the Slope Co. facility is on file with the Department. The current permit action would not require a health risk assessment because projected emissions and ambient concentrations will constitute a negligible risk to the public health, safety, and welfare and to the environment.

### VII. Taking or Damaging Implication Analysis

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

### VIII. Environmental Assessment

The current permitting action is considered an administrative action. Therefore, an Environmental Assessment is not required by the Montana Environmental Policy Act.

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