## AIR QUALITY PERMIT

Issued To: Western Reclamation 506 Quartz Loop Superior, Montana 59872 Permit #3287-00 Application Complete: 10/21/03 Preliminary Determination Issued: 11/25/03 Department Decision Issued: 12/11/03 Permit Final: 12/27/03 AFS #777-3287

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

- Section I: Permitted Facilities
  - A. Permitted Equipment

Western operates a portable screening facility at various locations throughout Montana. A complete list of the permitted equipment is contained in Section I.A of the permit analysis.

B. Plant Location

Western operates a portable screening facility that will initially locate in the NE <sup>1</sup>/<sub>4</sub> of Section 19, Township 18 North, Range 27 West, in Mineral County, Montana. However, Permit #3287-00 applies while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department) approved permitting program, those areas considered to be tribal lands, or those areas in or within 10 kilometers (km) of certain PM<sub>10</sub> nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* 

#### Section II: Conditions and Limitations

- A. Emission Limitations
  - 1. All visible emissions from any non-New Source Performance Standards (NSPS) affected equipment, shall not exhibit an opacity of 20% or greater averaged over 6-consecutive minutes (ARM 17.8.304).
  - 2. Water and water spray bars shall be available on site at all times and used, as necessary, to maintain compliance with the opacity limitation in Section II.A.1 (ARM 17.8.752).
  - 3. Western 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).
  - 4. Western 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.3 (ARM 17.8.752).
  - 5. Western shall not operate more than one screen at any given time and the maximum rated design capacity shall not exceed 117 tons per hour (TPH) (ARM 17.8.749).

- 6. Screen production from the facility shall be limited to 1,024,920 tons during any rolling 12-month time period (ARM 17.8.749).
- 7. Western shall not operate more than one diesel generator at any given time and the maximum rated design capacity shall not exceed 250 Kilowatts (kW) (ARM 17.8.749).
- 8. If the permitted equipment is used in conjunction with any other equipment owned or operated by Western at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month time period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).
- B. Testing Requirements
  - 1. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
  - 2. The Department may require testing (ARM 17.8.105).
- C. Operational Reporting Requirements
  - 1. If this portable screening 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, 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. Western 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 Western 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).
  - 3. Western shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the most recent emission inventory report and sources identified in Section I.A of the permit analysis.

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

4. Western 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).

5. Western shall document, by month, the total screening production for the facility. By the 25th day of each month, Western shall total the screening production during the previous 12 months to verify compliance with the limitation in Section II.A.6. A written report of the compliance verification shall be submitted along with the annual emission inventory (ARM 17.8.749).

#### Section III: General Conditions

- A. Inspection Western 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 Western fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving Western 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 Fees Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by Western 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. Western shall comply with the conditions contained in this permit while operating at any location in Montana, except within those areas having a Department approved permitting program.

## PERMIT ANALYSIS Western Reclamation Permit Number 3287-00

#### I. Introduction/Process Description

A. Permitted Equipment

Western Reclamation (Western) owns and operates a portable screening facility consisting of a portable (5'x16') 3-deck screen (up to 117 tons per hour (TPH)), a diesel generator (up to 250 kilowatts (kW)), and associated equipment. The proposed original location for the facility is the NE ¼ of Section 19, Township 18 North, Range 27 West, in Mineral County, Montana. Permit #3287-00 will apply to the source while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department) approved permitting program, those areas considered to be 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, Montana.

B. Process Description

Western proposes to use this screening plant to screen and sort sand and gravel materials for use in various construction operations. For a typical operational setup, unprocessed materials are loaded into the screening plant by a hopper and transferred by conveyor to the screen; where the material is screened, sorted, and conveyed to stockpile.

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

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

- 4. <u>ARM 17.8.110 Malfunctions</u>. (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. <u>ARM 17.8.111 Circumvention</u>. (1) 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 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 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
  - 5. <u>ARM 17.8.223 Ambient Air Quality Standard for PM<sub>10</sub></u>

Western must comply with the applicable ambient air quality standards.

- C. ARM 17.8, Subchapter 3 Emission Standards, including, but not limited to:
  - 1. <u>ARM 17.8.304 Visible Air Contaminants</u>. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
  - 2. <u>ARM 17.8.308 Particulate Matter, Airborne</u>. (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, Western shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
  - 3. <u>ARM 17.8.309 Particulate Matter, Fuel Burning Equipment</u>. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.
  - 4. <u>ARM 17.8.310 Particulate Matter, Industrial Processes</u>. This rule requires that no person shall cause or allow to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.
  - 5. <u>ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel</u>. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this rule.

- 6. <u>ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products</u>. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank truck or trailer is equipped with a vapor loss control device as described in (1) of this rule.
- 7. <u>ARM 17.8.340 Standards of Performance for New Stationary Sources</u>. 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, NSPS, shall comply with the standards and provisions of 40 CFR Part 60.

In order for a screening plant to be subject to NSPS requirements, two specific criteria must be met. First, the 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 Western, at the time of issuance of Permit #3287-00, the screening equipment to be used under Permit #3287-00 is not currently subject to NSPS requirements because the screen is not operated in conjunction with a crusher (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. <u>ARM 17.8.504 Air Quality Permit Application Fees</u>. This rule requires that Western 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. Western submitted the appropriate permit application fee as required for the current permit action.
  - 2. <u>ARM 17.8.505 Air Quality Operation Fees</u>. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department. This operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

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

- E. ARM 17.8, Subchapter 7 Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:
  - 1. <u>ARM 17.8.740 Definitions</u>. 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. Western has the PTE more than 15 tons per year of total particulate matter (PM),  $PM_{10}$ , and oxides of nitrogen (NO<sub>x</sub>); therefore, an air quality permit is required.

- 3. <u>ARM 17.8.744 Montana Air Quality Permits--General Exclusions</u>. This rule identifies the activities that are not subject to the Montana Air Quality Permit Program.
- 4. <u>ARM 17.8.745 Montana Air Quality Permits—Exclusion for De Minimis</u> <u>Changes</u>. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
- 5. <u>ARM 17.8.748 New or Modified Emitting Units--Permit Application</u> <u>Requirements.</u> (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. Western submitted the required permit application for the current permit 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. Western submitted an affidavit of publication of public notice for the October 1, 2003, issue of the *Clark Fork Valley Press*, a newspaper of general circulation in the Town of Plains in Mineral County, as proof of compliance with the public notice requirements.
- 6. <u>ARM 17.8.749 Conditions for Issuance or Denial of Permit</u>. 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. <u>ARM 17.8.752 Emission Control Requirements</u>. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that Best Available Control Technology (BACT) shall be utilized. The required BACT analysis is included in Section IV of this permit analysis.
- 8. <u>ARM 17.8.755 Inspection of Permit</u>. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
- 9. <u>ARM 17.8.756 Compliance with Other Requirements</u>. This rule states that nothing in the permit shall be construed as relieving Western 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. <u>ARM 17.8.759 Review of Permit Applications</u>. 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. <u>ARM 17.8.762 Duration of Permit</u>. 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. <u>ARM 17.8.763 Revocation of Permit</u>. 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. <u>ARM 17.8.764 Administrative Amendment to Permit</u>. 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. <u>ARM 17.8.765 Transfer of Permit</u>. (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. <u>ARM 17.8.801 Definitions</u>. This rule is a list of applicable definitions used in this subchapter.
  - <u>ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--</u> <u>Source Applicability and Exemptions</u>. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

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

- G. ARM 17.8, Subchapter 12 Operating Permit Program Applicability, including, but not limited to:
  - 1. <u>ARM 17.8.1201 Definitions</u>. (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 a lesser quantity as the Department may establish by rule; or
    - c. PTE > 70 tons/year of  $PM_{10}$  in a serious  $PM_{10}$  nonattainment area.
  - <u>ARM 17.8.1204 Air Quality Operating Permit Program Applicability</u>. (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 #3287-00 for the Western facility, 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 of any one HAP and less than 25 tons/year of all HAPs.
    - c. This source is not located in a serious  $PM_{10}$  nonattainment area.
    - d. This facility is not subject to any current NESHAP standards.
    - e. This facility is not currently subject to NSPS standards.
    - f. This source is not a Title IV affected source nor a solid waste combustion unit.
    - g. This source is not an EPA designated Title V source.

Based on these facts, the Department determined that Western will be a minor source of emissions as defined under Title V.

III. Emission Inventory

		Tons/Year				
Source	PM	$PM_{10}$	NO <sub>x</sub>	VOC	CO	SO <sub>x</sub>
(5'x14') 3-deck screen (up to 117 TPH)	8.07	3.84				
Material Transfer	3.72	1.79				
Pile Forming	6.46	3.07				
Bulk Loading	2.15	1.02				
Diesel Generator (up to 250 kW)	3.23	3.23	45.52	3.63	9.81	3.01
Haul Roads	2.74	1.23				
Total	26.37	14.18	45.52	3.63	9.81	3.01

A complete emission inventory for Permit #3287-00 is on file with the Department.

## IV. BACT Determination

A BACT determination is required for any new or modified source. Western shall install on the new or modified source the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be used.

Western shall not cause to be discharged into the atmosphere from the existing equipment any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes. Western must take reasonable precautions to limit the fugitive emissions of airborne particulate matter from haul roads, access roads, parking areas, and the general area of operation. Western is required to use water spray bars and water and/or chemical dust suppressant, as necessary, to maintain compliance with the opacity and reasonable precaution limitations. The Department determined that using water spray bars and water and/or chemical dust suppressant to maintain compliance with the opacity requirements and reasonable precaution limitations constitutes BACT for these sources.

Due to the amount of PM,  $PM_{10}$ ,  $NO_x$ , CO, VOC, and  $SO_x$  emissions produced by the diesel generator, add-on controls would be cost prohibitive as the source is small (a minor industrial emissions source). Thus, the Department determined that no additional control constitutes BACT for the generator. The control options selected have controls and control costs similar to other recently permitted similar sources and these controls are capable of achieving the established emissions limits.

## V. Existing Air Quality

Permit #3287-00 will cover the operation while operating at any location within Montana, excluding those counties that have a Department approved permitting program, those areas considered Tribal Lands, or those areas in or within 10 km of certain  $PM_{10}$  nonattainment areas. The permit contains operational conditions and limitations that would protect air quality for this site and the surrounding area. Also, this facility is a portable source that would operate on an intermittent and temporary basis so any effects to air quality will be minor and short-lived.

## VI. Air Quality Impacts

Permit #3287-00 will cover the operations of this portable screening plant while operating at any location within Montana, excluding those counties that have a Department approved permitting program, those areas that are tribal lands, or those areas in or within 10 km of certain  $PM_{10}$  nonattainment areas. The initial site location has been identified in the NE <sup>1</sup>/<sub>4</sub> of Section 19, Township 18 North, Range 27 West, in Mineral County, Montana. Based on the information provided by Western and the conditions established in Permit #3287-00, the amount of controlled emissions generated by this facility will not exceed any set ambient air quality standard. In addition, this source is portable so any air quality impacts will be minimal.

## VII. Taking or Damaging 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

An environmental assessment, required by the Montana Environmental Policy Act (MEPA), was completed for this project. A copy is attached.

DEPARTMENT OF ENVIRONMENTAL QUALITY Permitting and Compliance Division Air Resources Management Bureau 1520 East Sixth Avenue P.O. Box 200901 Helena, Montana 59620-0901 (406) 444-3490

## FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued For:

Western Reclamation

506 Quartz Loop Superior, Montana 59872

Permit Number: #3287-00

Preliminary Determination Issued: November 25, 2003 Department Decision Issued: December 11, 2003 Permit Final: December 27, 2003

- 1. Legal Description of Site: Western submitted an application to operate a portable screening plant in the NE ¼ of Section 19, Township 18 North, Range 27 West, in Mineral County, Montana. Permit #3287-00 would apply while operating at any location in Montana, except within those areas having a Department approved permitting program, those areas considered to be tribal lands, or those areas in or within 10 km of certain PM<sub>10</sub> nonattainment areas. A Missoula County air quality permit would be required for locations within Missoula County, Montana.
- 2. *Description of Project*: The permit application proposes the construction and operation of a portable screening plant that would consist of a portable (5'x16') 3-deck screen (up to 117 TPH), a diesel generator (up to 250 kW), and associated equipment. For a typical operational setup, unprocessed materials are loaded into the screening plant by a hopper and transferred by conveyor to the screen, where the material is screened, sorted, and conveyed to stockpile.
- 3. *Objectives of Project*: The objective of the project would be to produce business and revenue for the company through the increased sale and use of aggregate. The issuance of Permit #3287-00 would allow Western to operate the permitted equipment at various locations throughout Montana, including the proposed initial site location.
- 4. *Additional Project Site Information*: In many cases, this screening operation may move to a general site location or open cut pit, which has been previously permitted through the Industrial and Energy Minerals Bureau (IEMB). If this were the case, additional information for the site would be found in the Mined Land Reclamation Permit for that specific site.
- 5. *Alternatives Considered*: In addition to the proposed action, the Department considered the "noaction" alternative. The "no-action" alternative would deny issuance of the air quality preconstruction permit to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because Western demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.
- 6. *A Listing of Mitigation, Stipulations, and Other Controls*: A listing of the enforceable permit conditions and a permit analysis, including a BACT analysis, would be contained in Permit #3287-00.

7. *Regulatory Effects on Private Property Rights*: The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and to demonstrate compliance with those requirements and would not unduly restrict private property rights.

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

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

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

A. Terrestrial and Aquatic Life and Habitats

Terrestrials would use the same area as the screening operations. The screening operations would be considered a minor source of emissions, by industrial standards, with intermittent and seasonal operations. Therefore, only minor effects on terrestrial life would be expected as a result of equipment operations or from pollutant deposition because the emissions from the facility would be minor.

Impacts on aquatic life could result from storm water runoff and pollutant deposition, but such impacts would be minor as the facility would be a minor source of emissions (with seasonal and intermittent operations) and only minor amounts of water would be used for pollution control. Since only a minor amount of air emissions would be generated, only minor deposition (see Section 8.F of this EA) would occur. Therefore, only minor and temporary effects to aquatic life and habitat would be expected from the proposed screening operation.

B. Water Quality, Quantity, and Distribution

Water would be used for dust suppression on the surrounding roadways and areas of operation and for pollution control for equipment operations. However, water use would only cause a minor disturbance to this area, since only relatively small amounts of water would be needed. At most, only minor surface and groundwater quality impacts would be expected as a result of using water for dust suppression because only small amounts of water would be required and deposition of air pollutants would be minor (as described in Section 8.F of this EA).

## C. Geology and Soil Quality, Stability, and Moisture

The screening operations would have minor impacts on soils at this site location (due to the construction and use of the screening facility) because the facility would be relatively small in size, would use relatively small amounts of water for pollution control, would result in minor deposition on the surrounding soils, and would have seasonal and intermittent operations. Therefore, any effects upon geology and soil quality, stability, and moisture at this or any other proposed operational site would be minor.

## D. Vegetation Cover, Quantity, and Quality

Because the facility would be a minor source of emissions by industrial standards and would typically operate in areas previously designated and used for the screening of aggregate, impacts from the emissions from the screening facility would be minor.

As described in Section 8.F of this EA, the amount of air emissions from this facility would be minor. As a result, the corresponding deposition of the air pollutants on the surrounding vegetation would also be minor. Also, because the water usage is minimal, as described in Section 8.B, and the associated soil disturbance is minimal, as described in Section 8.C, corresponding vegetative impacts would be minor.

## E. Aesthetics

The screening operation would be visible and would create additional noise while operating in this area. However, Permit #3287-00 would include conditions to control emissions, including visible emissions, from the plant. Also, because the screening operation would be portable, would operate on an intermittent and seasonal basis, and would be locating within an existing open-cut pit, any visual and noise impacts would be minor and short-lived.

## F. Air Quality

The air quality impacts from the screening operations would be minor because Permit #3287-00 would include conditions limiting the opacity from the plant, as well as requiring water spray bars and other means to control air pollution. Additionally, the facility's production capacity would be limited and the facility's emissions would be considered small by industrial standards. Because the facility would be a minor source of air pollution, and Permit #3287-00 would limit total emissions from the screening operation and include other permit limitations (such as limiting additional equipment operated by Western at the site to 250 tons/year or less, excluding fugitive emissions), the facility effects upon air quality would be minor.

Though air quality would be affected as a result of pollutant emissions from facility operations, the emissions generated would be small, due to the reasons previously mentioned. Additionally, the facility would operate on a temporary and intermittent basis, which would further minimize effects upon air quality. Also, deposition from the facility would be minimal because the pollutants would be widely dispersed as a result of good pollutant dispersion of emissions in this area. Therefore, emissions would have only minor effects upon the surrounding soils, vegetation, water resources, residential populations, and terrestrial and aquatic life as a result of the pollutant deposition because ventilation of these pollutants would result in minimal accumulation in any given area. Therefore, air quality impacts would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department, in an effort to assess any potential impacts to unique endangered, fragile, or limited environmental resources in the proposed area of operations, contacted the Montana Natural Heritage Program (MNHP) to identify any species of concern associated with the initial proposed site location (Section 19, Township 18 North, Range 27 West, in Mineral County, Montana). Search results concluded there are 4 known environmental resources within the defined area. The defined area, in this case, is defined by the township and range of the proposed site, with an additional one-mile buffer.

Two of the species of special concern are plant species. Both the Clustered Lady's-Slipper and the Coville's Rush are plant species that are approximately 1 mile away from the proposed operational site. Because pollutants would be widely dispersed before leaving the proposed operational site and reaching the plant species, and the facility would be a portable/temporary source, these species would not be affected by facility operations.

One fish species of concern, the Bull Trout, is located within the defined area. However, the Bull Trout would not be affected by the proposed operations because the Yellowstone River containing these fish is more than 100 meters away (a previously identified buffering zone distance by MNHP for these aquatic species) from the proposed operational site location. Therefore, the proposed operations would have, at most, minor effects on these species of concern.

One animal species of special concern, having been identified as potential occupying the area, is the Lynx. While the site in question has been identified as potential habitat (from many miles of generalized habitat types) and is included within the defined area, it is unlikely that the specific site would be found within an existing open cut pit. This is because the pit is an actively used site that is located adjacent to existing railways and roadways. Further, these transportation routes are actively used to service the nearby town of Saint Regis. Therefore, it is unlikely that the Lynx would be affected by the proposed operations.

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

Due to the size of the facility, the screening operation would only require small quantities of water, air, and energy for proper operation. Small quantities of water would be used for dust suppression and would control emissions being generated at the site. Energy requirements would also be small, as the facility would be powered by one small industrial diesel generator that would use minor amounts of fuel. The facility would have limited production and would have seasonal and intermittent use. In addition, impacts to air resources would be minor because the source is a small industrial source of emissions, with intermittent and seasonal operations, and because air pollutants generated by the facility would be widely dispersed (see Section 8.F of this EA). Therefore, any impacts to water, air, and energy resources at this site or any other area would be minor.

I. Historical and Archaeological Sites

The screening operations would take place within a previously disturbed open-cut pit. According to correspondence from the Montana Historical Preservation Office, there would be a low likelihood of disturbance to any known archaeological or historical site given any previous industrial disturbance in a given area of operation. Therefore, the screening operations would have, at most, only a minor impact on any historical or archaeological sites in this area of operation.

## J. Cumulative and Secondary Impacts

The screening operation would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because the facility would generate emissions of particulate matter (PM),  $PM_{10}$ , NOx, VOC, CO, and SOx. Noise would also be generated from the site. Emissions and noise would cause minimal disturbance to the surrounding environment because the equipment is small and the facility would be expected to operate in areas designated and used for aggregate screening, which would include the proposed initial site location. Additionally, this facility may operate in combination with other facilities owned and operated by Western. However, total emissions from Western equipment operations at the site would not be permitted to exceed 250 tons per year of non-fugitive emissions. Overall, any cumulative or secondary impacts to the physical and biological aspects of the human environment would be minor.

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

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

# **SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS**: The following comments have been prepared by the Department.

A. Social Structures and Mores

The screening operation would cause no disruption to the social structures and mores in the area because the source is a minor industrial source and would only have intermittent operations. Additionally, the equipment would be expected to operate in an area previously designated and used for industrial operations. Further, the facility would initially locate in an area removed from the general population, would be a minor source of air pollution, and would be required to operate according to the conditions that would be placed in Permit #3287-00. Thus, no native or traditional communities would be affected by the proposed project operations and no impacts upon social structures or mores would result.

## B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of this area would not be impacted by the proposed screening operation because the site has been previously designated and used for screening operations and is separated from the general population. Additionally, the facility would be considered a portable/temporary source with seasonal and intermittent operations. Therefore, the predominant use of the surrounding areas would not change as a result of this project.

## C. Local and State Tax Base and Tax Revenue

The screening operation would have little, if any, impact on the local and state tax base and tax revenue because the facility would be a relatively small industrial source (minor source) and would have seasonal and intermittent operations. The facility would require the use of only three part time employees. Thus, only minor, if any, impacts to the local and state tax base and revenue could be expected from the employees and facility production. Furthermore, the impacts to local tax base and revenue would be minor because the source would also be portable and the money generated for taxes would be widespread.

## D. Agricultural or Industrial Production

The screening operations would have only a minor impact on local industrial production since the facility is a relatively small industrial source of emissions and would typically locate in areas previously designated for industrial operations. There would be minor effects on agricultural land, but the facility operations would be small and temporary in nature, and would be permitted with operational conditions and limitations that would minimize impacts on surrounding vegetation (as described in Section 8.D of this EA). Additionally, pollution control would be utilized for equipment operations and production limits would be established to minimize emissions.

## E. Human Health

Permit #3287-00 would incorporate conditions to ensure that the screening facility would be operated in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. As described in Section 8.F. of this EA, the air emissions from this facility would be minimized by the use of water spray. Other conditions would be established in Permit #3287-00 to minimize emissions, as well. Furthermore, dispersion of pollutants would result in minimal impacts upon the surrounding area of operations (see Section 8.F of this EA). Therefore, only minor impacts would be expected on human health from the proposed screening facility.

## F. Access to and Quality of Recreational and Wilderness Activities

The screening plant would initially and typically operate within the confines of an existing opencut pit. Therefore, only minor impacts upon the access to, and quality of, recreational and wilderness activities would result. Additionally, noise from the facility would be minor because the facility is a screen that would operate within an existing industrial site and within the confines of an existing pit. As a result, the amount of noise generated from the screening operation would be minimal. Also, the facility would operate on a seasonal and intermittent basis and would be a relatively minor industrial source of emissions. Therefore, any changes in the quality of recreational and wilderness activities created by operating the equipment at a given site would be expected to be minor and intermittent. G. Quantity and Distribution of Employment

The screening operation would be a small, portable source, with seasonal and intermittent operations. Facility operations would not be expected to affect the quantity and distribution of employment in this proposed area of operation, since they would be expected to utilize existing employees for the project. Therefore, no effects upon the quantity and distribution of employment in this area would be expected.

H. Distribution of Population

The portable screening operation is small and would only require three part time employees to operate. Therefore, the screening facility would not disrupt the normal population distribution in this area of operation.

I. Demands of Government Services

Minor increases would be seen in traffic on existing roadways in a given area while the screening operation is in progress. In addition, government services would be required for acquiring and maintaining compliance with the appropriate permits and for providing corresponding government services to maintain roads. Demands for government services would be minor.

J. Industrial and Commercial Activity

The screening operation would represent only a minor increase in the industrial activity in this or any other area of operation because the source would be a relatively small industrial source that would be portable and temporary in nature. No additional industrial or commercial activity would be expected as a result of the proposed operation.

K. Locally Adopted Environmental Plans and Goals

Western would be allowed, by permit, to operate in areas designated by EPA as attainment or unclassified, including the proposed initial site location. Permit #3287-00 would contain limits for protecting air quality and to keep facility emissions in compliance with applicable ambient air quality standards. Because the facility would be a small and portable source, and would have intermittent and seasonal operations, any effects from the facility would be minor and short-lived. Further, the Department is unaware of any corresponding locally adopted environmental plans and goals.

L. Cumulative and Secondary Impacts

The screening operations would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate areas of operation because the source is a small portable and temporary source. Further, no other industrial sources are expected to result from the permitting of this facility. Minor increases in traffic would have minor effects on local traffic in the immediate areas, thus, having a direct effect on the human environment. Because the source is relatively small and temporary, only minor economic impacts to the local economy would be expected from operating the facility. Further, this facility may be operated in conjunction with other equipment owned and operated by Western, but any cumulative impacts upon the social and economic aspects of the human environment would be minor and short-lived. Thus, only minor and temporary cumulative effects would result to the local economy.

Recommendation: An EIS is not required.

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

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

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

*EA prepared by*: Ron Lowney *Date*: October 23, 2003