



Montana Department of
ENVIRONMENTAL QUALITY

Marc Racicot, Governor

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September 29, 2000

James Schumacher
Thiessen Team USA
1840 Sharps Access Road
P.O. Box 6119
Elko, NV 89801

Dear Mr. Schumacher:

Air Quality Permit #3127-00 is deemed final as of September 29, 2000 by the Department of Environmental Quality. This permit is for a dry mix shotcrete manufacturing plant. All conditions of the department's decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the department,

David L. Klemp
Air Permitting Section Supervisor
Air & Waste Management Bureau
(406) 444-3490

DK:jw

Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Air Quality Permit #3127-00

Thiessen Team USA
1840 Sharps Access Road - P.O. Box 6119
Elko, Nevada 89801

September 29, 2000



AIR QUALITY PERMIT

Issued To: Thiessen Team U.S.A., Inc.
1840 Sharps Access Road
P.O. Box 6119
Elko, NV 89801

Permit #3127-00
Application Complete: 07/24/00
Preliminary Determination Issued: 8/28/00
Department Decision Issued: 9/13/00
Permit Final: 9/29/00
AFS #~~097-0002~~
777-3127

An air quality permit, with conditions, is hereby granted to the above-named permittee, hereinafter referred to as "Thiessen," pursuant to Sections 75-2-204 and 211, Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.701, *et seq.*, as amended, for the following:

Section I: Permitted Facilities

- A. Equipment: The facility manufactures Dry Mix Shotcrete. Dry Mix Shotcrete is a high-strength dry concrete mix used to coat the tunnel walls and ceilings of underground mines, providing a safer work environment. A complete list of the permitted equipment is located in the permit analysis.
- B. Plant Location: One mile north of Big Timber within Section 12, Township 1 North, Range 14 East, Sweet Grass County, Montana.

Section II: Limitations and Conditions

- A. Operational Limitations and Conditions
 1. All visible emissions from the plant shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304 and ARM 17.8.715).
 2. Thiessen shall install, operate, and maintain fabric filter baghouses to control particulate emissions from the drying cycle, the mixing cycle, and the cement silo filling operations (ARM 17.8.715).
 3. Thiessen shall install, operate, and maintain particulate containment boots at the material entrance to the mixer and the mixer discharge point (ARM 17.8.715).
 4. Thiessen shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308 and ARM 17.8.715).
 5. Thiessen 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.4 (ARM 17.8.710).
 6. Shotcrete production shall be limited to 175,200 cubic yards during any rolling 12-month time period (ARM 17.8.710).
 7. If the permitted equipment is used in conjunction with any other equipment owned or operated by Thiessen, 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 of Environmental Quality (department) (ARM 17.8.710).

B. Testing Requirements

1. All 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).

C. Reporting Requirements

1. Thiessen shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. The records compiled in accordance with this permit shall be maintained by Thiessen as a permanent business record for at least 5 years following the date of the measurement, shall be submitted to the department upon request, and shall be available at the plant site for inspection by the department (ARM 17.8.710).
2. Thiessen 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 (ARM 17.8.505).

3. Thiessen shall notify the department of any construction or improvement project conducted pursuant to ARM 17.8.705(1)(r) that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emissions unit. The notice must be submitted to the department, in writing, 10 days prior to start-up or use of the proposed de minimis change or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change and must include the information requested in ARM 17.8.705(1)(r)(iv) (ARM 17.8.705).

Section III: General Conditions

- A. Inspection - The recipient shall allow the department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver - The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if the recipient fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations - Nothing in this permit shall be construed as relieving the permittee of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.701, *et seq.* (ARM 17.8.717).
- D. Enforcement - Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401 *et seq.*, MCA.

- E. Appeals - Any person or persons jointly or severally adversely affected by the department 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 department's decision on the application is not final unless 15 days have elapsed and there is no request for a hearing under this section. The filing of a request for a hearing postpones the effective date of the department decision until the conclusion of the hearing and issuance of a final decision by the Board.
- F. Permit Inspection - As required by ARM 17.8.716, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by department personnel at the location of the permitted source.
- G. Construction Commencement - Construction must begin within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked.
- H. Permit Fees - Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay by the permittee of an annual operation fee may be grounds for revocation of this permit, as required by that Section and rules adopted thereunder by the Board.

PERMIT ANALYSIS
Thiessen Team U.S.A., Inc.
Permit Number 3127-00

I. Introduction/Process Description

A. Introduction

On July 24, 2000, Thiessen Team U.S.A., Inc. (Thiessen) submitted a complete permit application to operate a Dry Mix Shotcrete manufacturing plant. The application was assigned permit #3127-00.

B. Permitted Equipment

Process equipment includes a dryer infeed hopper, an aggregate drum dryer with a baghouse, a dryer discharge auger, two mix feed hoppers, a mix feed conveyor, a dryer discharge auger, a mixer infeed hopper, and a cement powder storage silo. The plant utilizes baghouse control for various emission points along the drying, mixing, and silo filling processes. Further, the mixing process also incorporates particulate containment boots at the entrance and discharge to and from the mixer. In addition, various material transfer points for the mixing process are enclosed within a building.

C. Process Description

The shotcrete manufacturing process involves two cycles: the drying cycle and the mixing cycle. In the drying cycle, material at 5-6% moisture content is transferred from stockpiles to the dryer infeed hopper. From the dryer infeed hopper the material passes through the rotary aggregate dryer, at approximately 260°F, to remove all moisture. Air expelled from the drying process is vented through a baghouse (99.2% collection efficiency) to the atmosphere. Dust particles collected by the baghouse join the dried material and exit the dryer via a material discharge auger. The dryer discharge auger transfers the material to stockpile #1 and stockpile #2 located within an enclosed building.

The mixing cycle begins when material from stockpile #1 and stockpile #2 is transferred by loader into the mixer feed hoppers. From the mixer feed hoppers, the material is transferred to the mixer charge conveyor and is transferred through a containment boot, along with cement powder, to the mixer. After mixing, the material exits the mixer via a discharge auger and is transferred to 1-yard storage bags through a hooded containment boot. Various emission points in the mixing process, including both containment boots, are controlled by baghouse (99.2% control efficiency) pick-ups. The 1-yard bags are then sealed and stretch wrapped for shipment and use in underground mines.

In addition to the drying and mixing cycles, the shotcrete manufacturing process also involves cement silo filling, which is a separate source of potential emissions. Cement powder is transferred from trucks via an air blower at a rate of 800 cubic feet per minute (cfm). The cement silo filling process is controlled by a baghouse with 99.2% control efficiency.

II. Applicable Rules and Regulations

The following are partial quotations 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.*, MCA.

Thiessen 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 by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
5. ARM 17.8.111 Circumvention. No person shall cause or permit the installation or use of any device or any means 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, 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 Standards for Settled Particulate Matter, and
5. ARM 17.8.223 Ambient Air Quality Standards for PM-10.

Thiessen must comply with the appropriate ambient air quality standards. Reference Section V, Existing Air Quality and Impacts.

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. This rule requires an opacity limitation of 20% for all fugitive emissions, and that no person shall authorize the production, handling, transportation, or storage of any material unless reasonable precautions to control airborne particulate matter are taken.

3. ARM 17.8.310 Particulate Matter, Industrial Processes. This rule requires a limitation of particulate emissions be calculated using the process weight rule. Total allowable particulate emissions shall be determined by using the maximum thru-put rates supplied in the permit application.
 4. ARM 17.8.340 Standards of Performance for New Stationary Sources. The owner and operator of any stationary source or modification, as defined and applied in 40 CFR Part 60, shall comply with the standards and provisions of 40 CFR Part 60. NSPS (40 CFR Part 60) requirements do not apply to the permitted operation.
- 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. This section requires that an applicant 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. Thiessen has submitted the appropriate application fee as required.
 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, 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 17.8.704 General Procedures for Air Quality Pre-construction Permitting. An air quality pre-construction permit shall contain requirements and conditions applicable to both construction and subsequent use.
 2. ARM 17.8.705 When Permit Required--Exclusions. This rule requires a facility to obtain an air quality permit or permit alteration if they construct, alter, or use an air contaminant source which has the potential to emit more than 25 tons per year of any pollutant.
 3. ARM 17.8.706 New or Altered Sources and Stacks--Permit Application Requirements. This rule requires that an application for an air quality permit be submitted for a new or altered source or stack.
 4. ARM 17.8.707 Waivers. ARM 17.8.706 requires the permit application be submitted 180 days before construction begins. This rule allows the department to waive this time limit. The department hereby waives this limit.

5. ARM 17.8.710 Conditions for Issuance of Permit. This rule requires that the source demonstrate compliance with applicable rules and standards before a permit can be issued. Also, a permit may be issued with such conditions as are necessary to assure compliance with all applicable rules and standards as required for permit issuance. The source has demonstrated compliance with the applicable rules and standards as required for permit issuance.
6. ARM 17.8.715 Emission Control Requirements. Thiessen is required to install on the new or altered source the maximum air pollution control capability which is technically practicable and economically feasible. A Best Available Control Technology (BACT) review was conducted for the new or altered source and can be found in Section IV of the permit analysis.
7. ARM 17.8.716 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.
8. ARM 17.8.717 Compliance with Other Statutes and Rules. This rule requires the permit holder to comply with any applicable federal or Montana statute, rule or standard, except as specifically provided for in ARM 17.8.101, *et.seq.*
9. ARM 17.8.720 Public Review of Permit Applications. This rule requires that Thiessen notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application of its application for permit. Thiessen has submitted proof of publication to the department.
10. ARM 17.8.731 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.
11. ARM 17.8.733 Modification of Permit. An air quality permit may be modified for changes in any applicable rules and standards adopted by the board or changed conditions of operation at a source or stack which do not result in an increase in emissions because of the changed conditions of operation. A source may not increase its emissions beyond those found in its permit unless the source applies for and receives another permit.

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 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the Federal Clean Air Act that it would emit, except as this subchapter would otherwise allow.

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

III. Emission Inventory

Source		Tons/Year					
		PM	PM-10	NO _x	VOC	CO	SO _x
Cement Handling Emissions		0.065	0.032	0	0	0	0
Dryer Infeed Hopper Loading of Aggregate	2.40	1.20	0	0	0	0	0
Aggregate Dryer		5.63	2.82	9.00	8.28	4.32	6.72
Material Discharge Auger		0.35	0.18	0	0	0	0
Dried Aggregate Pile Forming: Stockpile #1 and #2		0.20	0.10	0	0	0	0
Aggregate to Mix Feed Hoppers		0.48	0.24	0	0	0	0
Aggregate to Mix Charge Conveyor		0.35	0.18	0	0	0	0
Mixer Loading Aggregate and Cement		3.07	1.73	0	0	0	0
Aggregate and Cement Mixing		0.05	0.02	0	0	0	0
Product Packaging		1.53	0.77	0	0	0	0
Haul Roads		2.74	1.23	0	0	0	0
Diesel Generator (225 kw)		2.91	2.91	40.97	3.26	8.83	2.71
Total		19.77	11.21	49.97	11.55	13.15	9.43

- A complete emission inventory for permit #3127-00 is on file with the department.
- Emissions based on a maximum production rate of 20 cubic yards of product per hour.

IV. BACT Determination

A BACT determination is required for any new or altered source. Thiessen shall install on the new or altered source the maximum air pollution control capability which is technologically practicable and economically feasible, except that Best Available Control Technology shall be used.

All visible emissions from any equipment on site are limited to 20% opacity. Thiessen proposes to control particulate vent emissions from the drying and mixing cycles and the cement silo fill operations with fabric filter baghouses. In addition, emissions from the mixing operations will further be controlled by particulate containment boots at the mixer material entrance and discharge. The containment boots will be utilized as a means of decreasing the loss of product and minimizing particulate emissions.

Also, Thiessen must take reasonable precautions to limit the fugitive emissions of airborne particulate matter on haul roads, access roads, parking areas, and general plant property. Thiessen shall use water spray bars and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation. The department has determined that the baghouse, particulate containment boots, opacity limit, and reasonable precautions limitation contained in Section II.A.1 of the permit constitute BACT for this source.

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

V. Existing Air Quality and Impacts

Permit #3127-00 is issued for the operation of a dry mix shotcrete manufacturing plant to be originally located in Section 12, Township 1 North, and Range 14 East in Sweet Grass County, Montana. In the view of the department, the amount of controlled emissions generated by this project will not exceed any set ambient standard.

VI. Taking or Damaging Implication Analysis

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

VII. Environmental Assessment

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

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

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued For: Thiessen Team, Inc.
1840 Sharps Access Road
P.O. Box 6119
Elko, NV 89801

Permit Number: 3127-00

Preliminary Determination on Permit Issued: August 28, 2000

Department Decision Issued: September 13, 2000

Final Permit Issued: September 29, 2000

1. *Legal Description of Site:* The facility is located in the Section 12, Township 1 North, Range 14 East, in Sweet Grass County, Montana.
2. *Description of Project:* The permit application is for the construction and operation of a Dry Mix Shotcrete manufacturing plant. The process description is discussed in permit #3127-00.
3. *Benefits and Purpose of Proposal:* Business and revenue for the company.
4. *Description and analysis of reasonable alternatives whenever alternatives are reasonably available and prudent to consider:* The "no action alternative" consists of not issuing the permit and was considered but dismissed, given that the current permit action, as proposed, will maintain compliance with all applicable rules and standards.
5. *A listing of mitigation, stipulations and other controls:* A listing of the enforceable permit conditions and a permit analysis, including a Best Available Control Technology analysis, are contained in permit #3127-00.
6. *Regulatory effects on private property rights:* The department has considered alternatives to the conditions imposed in this permit as part of the permit development. The department has determined the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights

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

		Major	Moderate	Minor	None	Unknown	Comments Included
A.	Terrestrial and Aquatic Life and Habitats			✓			yes
B.	Water Quality, Quantity, and Distribution			✓			yes
C.	Geology and Soil Quality, Stability, and Moisture			✓			yes
D.	Vegetation Cover, Quantity, and Quality			✓			yes
E.	Aesthetics			✓			yes
F.	Air Quality			✓			yes
G.	Unique Endangered, Fragile, or Limited Environmental Resource			✓			yes
H.	Demands on Environmental Resource of Water, Air, and Energy			✓			yes
I.	Historical and Archaeological Sites				✓		yes
J.	Cumulative and Secondary Impacts			✓			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 areas in which the operations occur. However, the operations alone would present only minor affects to the terrestrial life.

B. Water Quality, Quantity, and Distribution

Water would be used for dust suppression, but would only cause a minor disturbance to the area. No surface water or ground water quality problems would be expected as a result of using water for dust suppression. Any accidental spills or leaks from equipment would be handled according to the appropriate environmental regulations in an effort to minimize any potential adverse impact on the immediate and surrounding area.

C. Geology and Soil Quality, Stability, and Moisture

The soils would be impacted by the operations. The impacts would be minor due to the relatively small size of the operation.

D. Vegetation Cover, Quantity, and Quality

The quality and quantity of vegetation cover would be affected by the operations. However, given that the operations would occur in a previously disturbed industrial gravel pit and the relatively small size of the facility, any impacts would be minor.

E. Aesthetics

The operations would be visible and would create additional noise in the area. Permit #3127-00 includes conditions to control emissions (including visible emissions) from the plant. Since the operations are relatively small, any noise impacts would be minimal.

F. Air Quality

The air quality impacts from the operations would be minor. Permit #3127-00 includes conditions limiting the opacity from the plant, as well as requiring fabric filter baghouses, particulate matter containment boots, and water to control air pollution. The concrete batch operations are limited, by permit #3127-00, to total particulate emissions of 250 tons/year or less from non-fugitive sources at the plant, in addition to any additional equipment at any individual site.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The department has contacted the Montana Natural Heritage Program (MNHP) in an effort to identify any species of special concern associated with the proposed site location. Search results have concluded there are two such environmental resources in the area. Area, in this case, will be defined by the township and range of the proposed site, with an additional 1-mile buffer. These species of special concern include the Bald Eagle and the Yellowstone Cutthroat Trout. While these resources are found within the defined area, the MNHP search did not indicate any species of special concern located directly on the proposed site. Therefore, it is unlikely that any of the previously listed species will be adversely affected by the proposed project.

Because Bald Eagles are highly mobile in daily activities and migratory in nature, the department will discuss possible impacts from the proposed operation in more detail. According to the Montana Bald Eagle Management Plan (July 1994), an operation such as that which has been proposed by Thiessen should not directly impact the eagle outside of its recognized breeding/courtship/nesting period (Feb. 1 - Aug. 15). During this period, in Montana, Bald Eagles almost exclusively occupy either riparian or lacustrine environments. The proposed Pit location and surrounding area is not considered either a riparian or lacustrine environment and thus, Bald Eagle habitation during the breeding/courting/-nesting period is unlikely. The Bald Eagle will occasionally exploit upland areas (such as the proposed gravel pit) for food and or roosting sites, especially during the winter (ref. Montana Bald Eagle Management Plan).

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

The operations would only demand small quantities of water, air, and energy for proper operating.

I. Historical and Archaeological Sites

The proposed project is to operate within a previously disturbed industrial site. According to the Montana State Historic Preservation Office, there is low likelihood of adverse disturbance to any known archaeological or historic site, given previous industrial disturbance within the area. Therefore, it is unlikely the operation will have an adverse effect on any known historic or archaeological site.

J. Cumulative and Secondary Impacts

Overall, cumulative and secondary impacts from this project would result in minor impacts to the physical and human environment in the immediate area. Air pollution from the facility would be controlled by department-determined BACT and conditions in permit #3127-00. The department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as outlined in permit #3127-00.

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

		Major	Moderate	Minor	None	Unknown	Comments Included
A.	Social Structures and Mores				✓		yes
B.	Cultural Uniqueness and Diversity				✓		yes
C.	Local and State Tax Base and Tax Revenue			✓			yes
D.	Agricultural or Industrial Production				✓		yes
E.	Human Health			✓			yes
F.	Access to and Quality of Recreational and Wilderness Activities				✓		yes
G.	Quantity and Distribution of Employment				✓		yes
H.	Distribution of Population				✓		yes
I.	Demands for Government Services				✓		yes
J.	Industrial and Commercial Activity				✓		yes
K.	Locally Adopted Environmental Plans and Goals				✓		yes
L.	Cumulative and Secondary Impacts			✓			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 operation would cause no disruption to the native or traditional lifestyles or communities of the area.

B. Cultural Uniqueness and Diversity

The operation will have no impact on the cultural uniqueness and diversity of the area.

C. Local and State Tax Base and Tax Revenue

The operations would have little, if any effect on the local and state tax base and tax revenue.

D. Agricultural or Industrial Production

The proposed project would not displace or otherwise affect any agricultural land or practices. In addition, the proposed operations would not impact local industrial production.

E. Human Health

Permit #3127-00 incorporates conditions to ensure that the operations would be operated in compliance with all applicable rules and standards. These rules and standards are designed to be protective of human health.

F. Access to and Quality of Recreational and Wilderness Activities

The proposed operations would not affect any access to or aesthetic attribute of recreational and wilderness activities in the area.

G. Quantity and Distribution of Employment

Activities from the proposed operations would not affect the quantity and distribution of employment in the area. Thiessen would use a few company employees for the project.

H. Distribution of Population

The proposed operations would not disrupt the normal population distribution in the area.

I. Demands of Government Services

Government services would be required for acquiring the appropriate permits from government agencies. Demands for government services would be minimal.

J. Industrial and Commercial Activity

No additional industrial or commercial activity is expected as a result of the proposed operation.

K. Locally Adopted Environmental Plans and Goals

The department is not aware of any locally adopted environmental plans or goals. The state standards would protect the proposed site and the environment surrounding the site.

L. Cumulative and Secondary Impacts

Overall, cumulative and secondary impacts from this project would result in minor impacts to the physical and human environment in the immediate area. Air pollution from the facility would be controlled by department-determined BACT and conditions in permit #3127-00. The department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as outlined in permit #3127-00.

Recommendation: An EIS is not required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: The source would be applying the Best Available Control Technology; the analyses indicate compliance with all applicable air quality rules and regulations.

Other groups or agencies contacted or which may have overlapping jurisdiction: None

Individuals or groups contributing to this EA: Department of Environmental Quality - Air and Waste Management Bureau.

EA prepared by: M. Eric Merchant, MPH

Date: August 22, 2000