AIR QUALITY PERMIT

Issued To: International Malting Company
170 Black Eagle Road
Great Falls, MT 59403

Permit #3290-00
Application Complete: 12/03/03
Preliminary Determination Issued: 12/05/03
Department Decision Issued: 12/23/03
Permit Final: 01/08/04
AFS #: 777-3290

An air quality permit, with conditions, is hereby granted to International Malting Company (IMC), pursuant to Sections 75-2-204 and 211 of the 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

IMC operates a portable truck mix concrete batch plant. A complete list of the permitted equipment is contained in Section I.A of the permit analysis.

B. Plant Location

IMC operates a portable truck mix concrete batch plant operation, which will originally locate in Section 30, Township 21 North, Range 4 East, in Cascade County, Montana. However, Permit #3290-00 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 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_{10}) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* An addendum to this air quality permit will be required for locations in or within 10 km of certain PM_{10} nonattainment areas.

Section II: Limitations and Conditions

A. Emission Control Requirements

1. IMC shall install, operate, and maintain the fabric filter dust collector and a rubber boot load-out spout as specified in their Montana Air Quality Permit and all supporting documentation (ARM 17.8.752):

   a. IMC shall install, operate, and maintain the fabric filter dust collector on the cement silo; and

   b. IMC shall install, operate, and maintain the rubber boot load-out spout on their concrete plant for product loadout.

2. IMC shall not cause or authorize to be discharged into the atmosphere from the ready mix plant:

   a. Any vent emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304 and ARM 17.8.752).

b. Any fugitive emissions from the source, or from any material transfer operations, including, but not limited to, truck loading or unloading, which exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.308 and ARM 17.8.752).

3. IMC 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. IMC shall treat all unpaved portions of the haul roads, access roads, parking lots, and the general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.3 (ARM 17.8.752).

5. Total plant production shall be limited to 876,000 cubic yards of concrete during any rolling 12-month time period (ARM 17.8.749).

6. If the permitted equipment is used in conjunction with any other equipment owned or operated by IMC, at the same site, production shall be limited to correspond with an emissions 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. Emissions Monitoring

1. IMC shall inspect the baghouse and its vents, which are used for controlling emissions from the silo and weigh hopper, every 6 months of operation to ensure that each collector is operating at the optimum efficiency. Records of inspections, repairs, and maintenance shall be kept for a minimum of 5 years (ARM 17.8.749).

2. IMC shall maintain on-site records of inspections, repairs, and maintenance. All records compiled in accordance with this permit shall be maintained by IMC 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 17.8.749).

C. 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).

D. Operational Reporting Requirements

1. If this concrete batch 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. IMC shall maintain on-site records showing daily hours of operation and daily production rates, and temperature and pressure drop readings, for the last 12 months. All records compiled in accordance with this permit must be maintained by IMC as a permanent business record for at least 5 years following the date of the measurement, must be submitted to the Department upon request, and must be available at the plant site for inspection by the Department (ARM 17.8.749).

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

   Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units 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. IMC shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted to the Department, in writing, 10 days prior to startup or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(l)(d) (ARM 17.8.745).

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

Section III: General Conditions

A. Inspection – IMC 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 IMC fails to appeal as indicated below.

C. Compliance with Statutes and Regulations - Nothing in this permit shall be construed as relieving IMC 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 conclusion of the hearing and issuance of a final decision by the Board. The Department's decision on the application is not final until 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 the annual operation fee by IMC 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. IMC shall comply with conditions contained in this permit while operating at any location in Montana, except within those areas having a Department approved permitting program.

Permit Analysis
International Malting Company
Permit #3290-00

I. Introduction

A. Permitted Equipment

International Malting Company (IMC) operates a portable truck mix concrete batch plant, which includes an electrical powered 1968 Ross Model 100 Uniplant Truck Mix Concrete Batch Plant (maximum capacity of 100 cubic yards per hour) and associated equipment. Particulate emissions from the cement silo are controlled by a fabric filter dust collector. Particulate emissions from the cement batcher are controlled by a rubber boot load-out spout**.**

B. Process Description

IMC proposes to use this concrete batch plant to produce wet mix concrete for use in various construction operations. For a typical operational setup, aggregate materials are loaded into an aggregate storage bin and appropriately metered and fed to a conveyor. The cementitious material is pneumatically loaded into a silo (using fabric filters to control particulate emissions) and appropriately metered via a screw auger onto a conveyor and loaded into a truck mixer (through the rubber boot load-out spout to control particulate emissions). Water is also loaded into the truck mixer. Materials are then mixed and are ready to be transported as cement to the construction site.

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 of Environmental Quality (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 Montana Clean Air Act, 75-2-101, *et seq*., Montana Code Annotated (MCA).

IMC 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. (2) The Department must be notified promptly by telephone whenever a malfunction occurs, which 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 as to create a public nuisance.

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. ARM 17.8.223 Ambient Air Quality Standard for PM_{10}

IMC 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, IMC 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 or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section.

4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.

5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this section.

6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (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. ARM 17.8.340 Standards of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR 60, Standards of Performance for New Stationary Sources (NSPS). The owner or operator of any stationary source or modification, as defined and applied in 40 CFR Part 60, shall comply with the standards and provisions of 40 CFR Part 60. This plant consists of a 1968 Ross Model 100 Truck Mix Plant and associated equipment. NSPS (40 CFR Part 60, General Provisions and Subpart F, Portland Cement Plants) does not apply because the truck mix plant does not meet the definition of an affected facility.

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 rule requires that IMC 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. IMC submitted the appropriate permit application fee as required for the current permit action.

2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department. 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, as described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions 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. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit alteration to construct, alter or use any asphalt plant, crusher or screen that has the Potential to Emit (PTE) greater than 25 tons per year of any pollutant. IMC has the potential to emit more than 25 tons per year of total particulate matter and particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}); therefore, an air quality permit is required.

3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit Program.

4. ARM 17.8.745 Montana Air Quality Permits—Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.

5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, alteration or use of a source. IMC 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. IMC submitted an affidavit of publication of public notice for the November 19, 2003**,** issue of the *Great Falls Tribune*, a newspaper of general circulation in the Town of Great Falls**,** in Cascade County, as proof of compliance with the public notice requirements.

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 Best Available Control Technology (BACT) shall be utilized. The required BACT analysis is included 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 IMC of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*.

10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.

11. ARM 17.8.760 Additional Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those applications that require an environmental impact statement.

12. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition

providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.

13. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of IMC, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).

14. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.

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

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

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.

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

This facility is not a major stationary source because it is not listed and does not have a PTE of greater 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. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:

a. PTE > 100 tons/year of any pollutant,
b. PTE > 10 tons/year of any one Hazardous Air Pollutant (HAP), PTE >

25 tons/year of a combination of all HAPs, or 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.

2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #3290-00 for IMC, the following conclusions were made:

a. The facility's PTE is less than 100 tons/year for any air 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 NSPS.

e. This facility is not subject to any current NESHAP 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.

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

III. Emission Inventory

Source	Tons/Year PM	PM_{10}
Aggregate Delivery to Ground Storage	2.82	1.35
Sand Delivery to Ground Storage	0.66	0.31
Aggregate Transfer to Hopper	2.82	1.35
Sand Transfer to Hopper	0.66	0.31
Aggregate Transfer to Conveyor Loadout	2.82	1.35
Sand Transfer to Conveyor Loadout	0.66	0.31
Cement Unloading to Storage Silo	0.08	0.05
Cement Supplement Unloading to Storage Silo	0.05	0.02
Truck Mix Loading of Cement/Supplement/Sand/Aggregate	51.53	12.67
Total	62.10	17.72

- A complete emission inventory for Permit #3290-00 is on file with the Department.

IV. BACT Determination

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

All visible emissions from any cement and cement supplement silo (or vent), truck loading or unloading operations, or any material transferring operations shall be limited to less than 20% opacity. IMC must also take reasonable precautions to limit the fugitive emissions of airborne particulate matter from haul roads, access roads, parking areas, and the general plant property. IMC shall use a fabric filter dust collector for the cement silo and IMC shall use a rubber boot load-out spout on the cement batcher. The Department determined that using a fabric filter dust collector, a load-out spout, water spray and/or chemical dust suppressant, to maintain compliance with the opacity and reasonable precaution limitations constitutes BACT for these sources.

V. Existing Air Quality

Permit #3290-00 is issued for the operation of a portable truck mix concrete batch plant to be originally located in Section 30, Township 21 North, Range 4 East, in Cascade County, Montana. This facility would be allowed to operate at this proposed site and any other areas designated as attainment or unclassified for all National Ambient Air Quality Standards (NAAQS); 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 without an additional permitting action required. 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. Ambient Air Quality Impacts

This permit is for a portable truck mix concrete batch plant to be located in various locations around Montana. The amount of controlled particulate emissions generated by this project should not cause concentrations of PM_{10} in the ambient air that exceed the set standard. In addition, this source is portable and any air quality impacts will be minimal.

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

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 Resources Management Bureau
P.O. Box 200901, Helena, Montana 59620
(406) 444-3490

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued For: International Malting Company
170 Black Eagle Road
Great Falls, MT 59403

Air Quality Permit Number: #3290-00

Preliminary Determination Issued: December 5, 2003
Department Decision Issued: December 23, 2003
Permit Final: January 8, 2004

1. *Legal Description of Site:* This permit is for the operation of a portable concrete batch plant to be initially located at Section 30, Township 21 North, Range 4 East, in Cascade County, Montana. Permit #3290-00 would apply while operating at any location in Montana, except within those areas having a Department approved permitting program, those areas considered tribal lands, or those areas in or within 10 kilometers (km) of certain PM_{10} nonattainment areas. *A Missoula County air quality permit would be required for locations within Missoula County, Montana.* An addendum to this air quality permit would be required for locations in or within 10 km of certain PM_{10} nonattainment areas.

2. *Description of Project:* IMC submitted a permit application for the construction and operation of a portable truck mix concrete batch plant, which would include an electrical powered 1968 Truck Mix Concrete Batch Plant (maximum capacity of 100 cubic yards per hour) and associated equipment. Particulate emissions from the cement silo are controlled by a fabric filter dust collector. Particulate emissions from loading the cement batcher are controlled by a rubber boot load-out spout.

3. *Objectives of the Project:* IMC, in an effort to increase business and revenue for the company through the construction of their malting plant, submitted a complete application for a concrete batch plant. The concrete batch plant would be used to supply wet mix concrete to various IMC construction projects and would allow IMC to operate the portable equipment at various locations throughout Montana, including the proposed initial site location.

4. *Additional Project Site Information:* In many cases, the truck mix concrete batch plant 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, a more extensive EA for the site would have been conducted and would be found in the Mined Land Reclamation Permit for that specific site.

5. *Alternatives Considered:* In addition to the proposed action, the Department also considered the "no-action" alternative. The "no-action" alternative would deny issuance of the air quality preconstruction permit to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because IMC 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 list of enforceable conditions, including a BACT analysis, would be contained in Permit #3290-00.

7. *Regulatory Effects on Private Property:* The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do 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	Unknown	Comments Included
A.	Terrestrial and Aquatic Life and Habitats			X			yes
B.	Water Quality, Quantity, and Distribution			X			yes
C.	Geology and Soil Quality, Stability, and Moisture			X			yes
D.	Vegetation Cover, Quantity, and Quality			X			yes
E.	Aesthetics			X			yes
F.	Air Quality			X			yes
G.	Unique Endangered, Fragile, or Limited Environmental Resource			X			yes
H.	Demands on Environmental Resource of Water, Air, and Energy			X			yes
I	Historical and Archaeological Sites			X			yes
J.	Cumulative and Secondary Impacts			X			yes

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

A. Terrestrial and Aquatic Life and Habitats

Terrestrials would use the same area as the concrete batch plant operations. However, the area around the facility would be fenced to limit access to the facility and would act as a barrier to most animals trying to enter the area. Further, the concrete batch plant operations would be considered a minor source of emissions, with intermittent and seasonal operations, and would not affect the predominant use of the surrounding area. The surrounding area is primarily used for agricultural purposes, but the immediate site has been designated for industrial usage. Also, because the air dispersion characteristics of the area are good, any impacts to the surrounding area from air emissions would be minor. Therefore, at most, only minor effects on terrestrial life would be expected as a result of equipment operations or from pollutant deposition.

Impacts on aquatic life could result from 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 because only minor amounts of water would be required to be used for pollution control. Since good dispersion of air pollutants would occur in the proposed area of operation and only a minor amount of air emissions would be generated, only minor deposition would occur (see Section 8.F of this EA). Additionally, the proposed operational site is located approximately ¼ away from a spring. Therefore, only minor and temporary effects to aquatic life and habitat would be expected from the proposed concrete batch plant operations because only minor amounts of pollutants

would reach the stream (due to pollutant dispersion, the facilities intermittent operations, and the distance from the stream to the operational site). Further, this spring flows into the Missouri River, which is some two miles away. Therefore, any effects to the Missouri River would be even more insignificant than to the stream (because of the increased distance the Missouri River is to the proposed operations and the much larger volume of water that the Missouri River contains relative to the stream).

B. Water Quality, Quantity, and Distribution

Water would be used for dust suppression on the surrounding roadways and areas of operation. However, water use would only cause a minor disturbance to the 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 (as described in Section 8.H of this EA). Also, deposition of air pollutants on waterways would be minor (as described in Section 8.F of this EA) because the nearest surface water resource, a spring, is approximately ¼ mile away. Also, pollutant emissions would be minor and pollutants would be dispersed. As described in Section 8.F, good ventilation exists at the proposed site to disperse the pollutants generated from the concrete batch operations.

C. Geology and Soil Quality, Stability, and Moisture

The construction and use of the concrete batch plant would have only minimal impacts upon soils at the proposed site location since the concrete batch plant is relatively small in size and would have seasonal and intermittent operations. Also, this facility would be locating at a previously disturbed site, so little change to existing soil conditions would occur. While the facility would be used in the construction of the IMC malting plant, in an area already designated for industrial operations, the construction operations would disturb only a relatively small portion of the IMC property. Further, the topography of the site would limit emissions impacting the surrounding area of operations because of good ventilation characteristics of the area (as described in Sections 8.D and 8.F of this EA). Therefore, any effects on geology and soil quality, stability, and moisture at the proposed operational site would be minor.

D. Vegetation Cover, Quantity, and Quality

The IMC property has already been designated for the construction and use of a malting plant and the proposed concrete batch plant would be used to assist in that construction. The IMC property, in anticipation of this permitted development, has already been disturbed in preparation for the malting plant construction. The IMC property is on a gentle sloping hill, above the Missouri River, in an area that would provide for good ventilation. Therefore, though the area surrounding the proposed IMC facility is primarily used for agricultural purposes, the concrete batch plant would only generate a minor amount of emissions and the impacts on the surrounding environment would be minor due to dispersion of facility emissions (as described in Section 8.F of this EA). Further, the concrete batch plant would operate on a temporary and intermittent basis and because corresponding water usage would be minimal (as described in Section 8.B) and the associated soil disturbance would be minimal (as described in Section 8.C) corresponding vegetative impacts would also be minimal.

E. Aesthetics

The concrete batch plant operations would be a relatively small industrial facility. The facility would be visible, including visible emissions from the plant. However, Permit #3290-00 would include conditions to control emissions, including visible emissions, from the plant. Operating the facility would also result in additional noise in the area. However, noise impacts from this facility on the surrounding area would be minor because the noise from the facility would be relatively quiet when

compared to other common area noise sources, including nearby Highway 87. Additionally, the concrete batch plant would operate on an intermittent and seasonal basis and the nearest households are between ¼ and ½ mile away. Therefore, any associated impacts upon aesthetics from the construction and use of the concrete batch plant would be minor and short-lived.

F. Air Quality

The air quality impacts from the concrete batch plant would be minor because Permit #3290-00 would include conditions limiting the facility's opacity, as well as would require a fabric filter dust collector and rubber boot load-out spout to control facility emissions. Furthermore, Permit #3290-00 would limit total emissions from IMC's concrete batch plant and any additional IMC equipment operated at the site to 250 tons/year or less, excluding fugitive emissions. The permit would also require dust suppression to control fugitive emissions. Also, the plant would be operated intermittently and would have a facility production limit (thereby further reducing potential air quality impacts from the facility), and could operate at other locations.

The proposed concrete batch plant operations would initially locate at a previously disturbed site and would operate in an area that would effectively ventilate and dissipate air emissions. As described in Section 8.D, the topography of the area would allow for good ventilation. Further, as described in Permit #3238-00, wind direction would primarily carry the pollutants to the north and east and the modeled concentrations would not exceed applicable ambient air quality standards. Therefore, because the concrete batch plant operations would be located at the same site and emissions in Permit #3290-00 would be less than those of the malting plant, applicable ambient air quality impacts would not be exceeded either. The associated operations would be intermittent and short-lived, as the concrete batch plant is being used specifically for the construction of the malting plant. Thus, the amount of pollutants generated from the concrete batch plant would be small and intermittent amounts of deposition generated from the concrete batch plant would only have minor impacts upon the surrounding environment. Hence, because good pollutant dispersion would occur in the proposed area of operations and the facility would locate in a previously disturbed industrial site that is separated from the general population, any effects upon the human health and the surrounding environment would be minor. 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 initial proposed area of operation, previously contacted the Montana Natural Heritage Program (MNHP). MNHP search results concluded there are two such environmental resources found within the surrounding area, but none within the defined search area of concern. The defined area of concern, in this case, includes the Section, Township, and Range where the proposed facility would locate with an additional 1-mile buffer. While the two plant species (*Entosthodon Rubiginosus* and the *Funaria Americana),* were previously recorded within a 5-mile radius (Near the Missouri River and approximately 2 miles from the proposed concrete batch plant operations), no species of special concern were identified within the defined search area. Further, the prevailing wind direction (as previously identified in the issuance of the malting plant permit, Permit 3238-00) is north and east and would not carry emissions toward the area where these plant species of special concern were identified. Therefore, any impacts upon these resources from the concrete batch operations would be minor and short-lived.

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

Due to the size of the facility, the concrete batch plant would only require small quantities of water, air, and energy for proper operation. Small quantities of water would be used for dust suppression and for the concrete batching operations. Approximately 20 gallons of water would be needed for every cubic yard of concrete produced. Impacts to air resources would be minor because the source is small

by industrial standards, with intermittent and seasonal operations, and because air pollutants generated by the facility would be dissipated. Energy would be provided by electrical power that would be generated off-site. Therefore, any impacts to water, air, and energy resources would be minor.

I. Historical and Archaeological Sites

The Department previously conducted a site visit and also contacted the Montana Historical Society - State Historical Preservation Office (SHPO) in an effort to identify any historical and/or archaeological sites that may be present in the proposed area of construction/operation. Through those efforts, the Department concluded that there are no previously recorded historical or archaeological resources of concern within the proposed area of operations. The area was previously used for farming and has since been disturbed for industrial development. Also, according to past correspondence from the Montana State Historic Preservation Office, given the previous disturbance in the area, there would be a low likelihood of adverse disturbance to any known archaeological or historic site. Therefore, no impacts upon historical or archaeological sites would be expected as a result of operating the proposed concrete batch plant.

J. Cumulative and Secondary Impacts

The concrete batch plant would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because the facility would generate emissions of PM and PM_{10}. Noise would also be generated from the site. Emissions and noise would cause minimal disturbance because the site is located in an area that has good ventilation and is a relatively quite industrial operation. Further, noise generated from the facility would be minor because it would be overshadowed by the noise generated from highway traffic. However, noise would be considered as having minor, but cumulative, effects on noise in the existing area. Additionally, this facility may be used in conjunction with another concrete batch plant that IMC owns (to construct the malting plant), but the combined emissions of these operations would be limited to 250 tons per year of any pollutant (excluding fugitive emissions) at the site. Overall, any 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	Unknown	Comments Included
A.	Social Structures and Mores				X		yes
B.	Cultural Uniqueness and Diversity				X		yes
C.	Local and State Tax Base and Tax Revenue			X			yes
D	Agricultural or Industrial Production			X			yes
E.	Human Health			X			yes
F.	Access to and Quality of Recreational and Wilderness Activities			X			yes
G	Quantity and Distribution of Employment			X			yes
H.	Distribution of Population				X		yes
I.	Demands for Government Services			X			yes
J.	Industrial and Commercial Activity			X			yes
K.	Locally Adopted Environmental Plans and Goals			X			yes

L.	Cumulative and Secondary Impacts			X			yes

SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS: The Department has prepared the following comments.

A. Social Structures and Mores

The concrete batch plant would cause no disruption to the social structures and mores in the area because of the location of the source, size of the source, portable and temporary nature of the source, and intermittent and seasonal operations of the source. The equipment would be located at a site that is designated for industrial usage, is removed from the general population, and would be located between ¼ and ½ mile away the nearest household. Additionally, the facility would be a minor source of air pollution, is relatively small sized industrial operation, and would be required to operate under the conditions in Permit #3290-00. Also, the predominant use of the surrounding areas would not change as a result of this project. Thus, no impacts upon social structures or mores would result.

B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of the area would not be impacted by the proposed concrete batch plant because the site is currently designated and used for industrial 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 concrete batch plant operations 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 and would operate seasonally and intermittently. The facility operations would require the use of only a few employees for this project. 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 is expected to be minor because the source would also be portable and the money generated for taxes would be widespread.

D. Agricultural or Industrial Production

The concrete batch plant operations would have only a minor impact on local industrial production since the facility is relatively small by industrial standards. Land disturbed by the plant operations would be relatively small compared to the surrounding IMC property. Further, there would be minor effects from air emissions on agricultural land (as the IMC property is surrounded by agricultural land) and minor amounts of emissions from the concrete batch plant may deposit on the surrounding area. However, the facility operations are small and temporary in nature, and would be permitted with operational conditions and limitations that would minimize air impacts upon surrounding vegetation, as described in Section 8.D of this EA. Additionally, pollution control would be utilized on equipment operations and production limits would be established to protect the surrounding environment.

E. Human Health

Permit #3290-00 would incorporate conditions to ensure that the concrete batch plant 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., the air emissions from this facility would be minimized by the use of a fabric filter dust collector, a rubber boot load-out spout, and production and opacity limits established in Permit #3290-00. Also, since no recreational

opportunities would exist within the IMC property, the nearest residence would be between ¼ and ½ mile away, and the nearest recreational opportunity has already been identified over ½ mile away (the Anaconda Hills Golf Course), pollutants would be dispersed before reaching any surrounding residence. Therefore, only minor and temporary impacts would be expected on human health from the proposed concrete batch plant.

F. Access to and Quality of Recreational and Wilderness Activities

The concrete batch plant would have no impacts on the access to recreational and wilderness activities because the facility would be operating on private property, at a site that has been designated for industrial use. However, minor effects to the quality of recreational and wilderness activities would result from the visual observation of the facility, visual emissions from the facility, and noise from equipment operations. The facility would operate in an area removed from the general population and where topography would allow for good dispersion of emissions from the facility. The IMC property is adjacent to Highway 87, where noise is generated from traffic and where traffic traveling upon the highway could entrain and diffuse pollutant emissions. Also, noise from the concrete batch plant operations may be muffled by existing traffic, but would result in minor cumulative increases of noise in the area. Operations of the facility would also be intermittent and temporary. Therefore, any effects on quality of recreational and wilderness activities would be minor and short-lived.

G. Quantity and Distribution of Employment

The concrete batch plant would have only minor effects on the quantity and distribution of employment in the area because only a few IMC employees would be used for such operations, the facility is a portable source, and the facility would have seasonal and intermittent operations.

H. Distribution of Population

The portable concrete batch plant is small and may create a few employment opportunities with IMC. However, since the company is small and would be operating on a seasonal and intermittent basis, the concrete batch plant is not expected to disrupt the normal population distribution in the initial area of operation, or any future areas of operation.

I. Demands of Government Services

Minor increases would be seen in traffic on existing roadways in the area while the concrete batch plant is operating. In addition, government services would be required for acquiring the appropriate permits from government agencies and for government personnel to verify compliance with the permits. Demands for government services would be minor.

J. Industrial and Commercial Activity

The concrete batch plant would only result in minor amounts of industrial activity at the proposed operational site because the source is a minor emissions source and is relatively small and portable in nature. The facility would be used as part of the construction of IMC malting plant, a previously approved industrial/commercial activity, and the associated concrete batching operations are expected to be intermittent and temporary operations (having limited production and utilizing appropriate pollution controls).

K. Locally Adopted Environmental Plans and Goals

IMC would generally be allowed, by permit, to operate in areas designated by EPA as attainment or unclassified. The permitted production limits and opacity limits would be protective of air quality

while the facility is operating. Because the facility would be a small and portable source and because the facility would have intermittent and seasonal operations, any effects on locally adopted environmental plans and goals from operating the facility would be minor and short-lived.

L. Cumulative and Secondary Impacts

The concrete batch plant would cause minor cumulative and secondary impacts to the economic aspects of the human environment in the immediate area because the source would be used in the construction of the malting plant (a stationary, more permanent source), though the concrete batch plant is a portable, temporary source. Because the source is relatively small and temporary, only minor, but cumulative impacts to the local economy could be expected from the operation of the concrete batch plant. Secondary impacts to the local economy would occur as a by-product of constructing the malting plant, once the malting plant is operating. The concrete batch plant would cause minor cumulative and secondary impacts to the social aspects of the human environment in the immediate area because the source would cause minor (cumulative) increases in facility traffic and would have minor (secondary) effects on local traffic in the immediate area. Therefore**,** the concrete batch plant would cause minor cumulative and secondary impacts to the economic and social aspects of the human environment at the proposed operational site.

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 Natural Heritage Program, and State Historic Preservation Office (Montana Historical Society).

EA prepared by: Ron Lowney
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