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October 28, 2008

Ms. Jacqueline Flikkema  
Knife River Corporation  
P.O. Box 80066  
Billings, MT 59108-0066

Dear Ms. Flikkema:

Air Quality Permit #3065-03 is deemed final as of October 28, 2008, by the Department of Environmental Quality (Department). This permit is for a portable concrete batch 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,

Vickie Walsh  
Air Permitting Program Supervisor  
Air Resources Management Bureau  
(406) 444-3490

Julie A. Merkel  
Air Quality Specialist  
Air Resources Management Bureau  
(406) 444-3626

VW:JM  
Enclosure

## AIR QUALITY PERMIT

Issued To: Knife River Corporation  
21730 Frontage Road  
P.O. Box 9  
Belgrade, MT 59714

Permit #3065-03  
Administrative Amendment (AA)  
Request Received: 01/24/08  
Department Decision on AA: 10/10/08  
Permit Final: 10/28/08  
AFS #777-3065

An air quality permit, with conditions, is hereby granted to Knife River Corporation (Knife River), pursuant to Section 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. Plant Location

Knife River operates a concrete batch plant at various locations throughout the state of Montana. Permit #3065-03 applies while operating at any location within the state of Montana, except within those areas having a Department of Environmental Quality (Department) approved permitting program. *A Missoula County air quality permit will be required for locations within Missoula County.* A list of the permitted equipment is contained in the permit analysis.

#### B. Current Permit Action

On January 24, 2008, the Department received a request to change the name on Permit #3065-02 from JTL Group, Inc. to Knife River. The Department changed the name as requested and updated permit language and rule references to reflect current language and rule references.

### Section II: Limitations and Conditions

#### A. Emission Control Requirements

Knife River shall install, operate, and maintain the baghouse and all other emission control equipment specified in their application for their Montana Air Quality Permit and all supporting documentation (ARM 17.8.752).

1. Knife River shall install, operate, and maintain the baghouse on the silo.
2. Knife River shall maintain the particulate containment boot at their concrete plant as specified in their application for a Montana Air Quality Permit and all supporting documentation.

#### B. Emission Limitations

1. Knife River shall not cause or authorize to be discharged into the atmosphere from the ready mix plant:
  - a. Any vent emission that exhibits greater than 20% opacity averaged over 6 consecutive minutes (ARM 17.8.304 and ARM 17.8.752);
  - b. Any fugitive emissions from any truck loading or unloading, which exhibit

greater than 20% opacity averaged over 6 consecutive minutes (ARM 17.8.308 and ARM 17.8.752); or

c. Any fugitive emissions from any transferring operations, which exhibit greater than 20% opacity averaged over 6 consecutive minutes (ARM 17.8.304 and ARM 17.8.752).

2. Knife River 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).
3. Knife River 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.B.2 (ARM 17.8.752).

C. Emissions Monitoring

1. Knife River shall inspect the baghouse vents on the silo every 6 months of operation to ensure that each collector is operating at the optimum efficiency recommended by the manufacturer. Records of inspections, repairs, and maintenance shall be kept for a minimum of 5 years (ARM 17.8.749).
2. Knife River shall maintain on-site records of inspections, repairs, and maintenance. All records compiled in accordance with this permit shall be maintained by Knife River 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).

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 and 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 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 17.8.749 and ARM 17.8.765).
2. Knife River 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 Knife River 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).
3. Knife River 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 the units required by the Department (ARM 17.8.505).

4. Knife River shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation, or the addition of a new emission unit. The notice must be submitted to the Department, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).

E. Testing Requirements

1. All compliance source tests shall 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).

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 17.8.756).
- 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 who are 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 does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision on the application is final 16 days after the Department's decision is made.
- F. Permit Inspection - As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. 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, the continuing validity of this permit is conditional upon the payment by the permittee of an annual operation fee, 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. Knife River shall comply with the conditions contained in this permit while operating at any location in the state of Montana, except within those areas having a Department-approved permitting program or areas considered tribal lands.

PERMIT ANALYSIS  
Knife River Corporation  
Permit Number 3065-03

I. Introduction/Process Description

A. Permitted Equipment

Knife River Corporation (Knife River) operates a 1998 Erie Strayer central mix concrete batch plant, (maximum capacity 300 cubic yards per hour); two 1998 Svedalla 30" x 60' stackable conveyors; and associated equipment. Particulate emissions are controlled by a 1998 Stephens S.O.S. 4000 Ozone Super Flow Dust Collection System.

B. Process Description

For a typical operational setup, washed coarse and fine aggregate for concrete production are stored on site. The material is transferred by loader from the stockpiles to a conveyor and into the aggregate storage bins. The bins transfer material to the mixer via internal conveyor. Finally, the cement silo transfers material into the mixer, where water is added, mixed, and ultimately loaded into mixing trucks for use in construction operations.

C. Permit History

On August 29, 1999, Polson Ready Mix Concrete, Inc. (Polson Ready Mix) was issued **Permit #3065-00** to operate a portable 1998 Erie Strayer central mix concrete batch plant (maximum capacity 300 cubic yards per hour); a 1994 CAT diesel generator (320 kilowatt (kw)); two 1998 Svedalla 30" x 60' stackable conveyors; and associated equipment. The facility was permitted to initially operate at Section 16, Township 20 North, Range 3 East, in Cascade County, Montana (i.e. the Great Falls International Airport).

On February 12, 2001, Polson Ready Mix requested that Permit #3065-00 be transferred to JTL: Group, Inc. (JTL). The permit was also updated to reflect the current permit language and rule references used by the Department of Environmental Quality (Department). **Permit #3065-01** replaced Permit #3065-00.

On March 8, 2002, JTL submitted a request to remove the 320 kw Diesel Generator from Permit #3065-01. According to JTL's request, the batch plant was moved to a permanent location where the use of a generator was no longer required. **Permit #3065-02** replaced Permit #3065-01.

D. Current Permit Action

On January 24, 2008, the Department received a request to change the name on Permit #3065-02 from JTL to Knife River. The Department changed the name, as requested and updated permit language and rule references to reflect current language and rule references. **Permit #3065-03** replaces Permit #3065-02.

E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT)/Reasonably Available Control Technology (RACT) determinations, air quality impacts, and environmental assessments, is included in the analysis associated with each change to the permit.

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, Sub-Chapter 1, General Provisions, including, but not limited to:

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

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

4. ARM 17.8.110 Malfunctions. The Department must be notified promptly by 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 that would otherwise violate an air pollution control regulation. No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created.

B. ARM 17.8, Sub-Chapter 2, Ambient Air Quality, including, but not limited to:

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

Knife River must comply with the applicable ambient air quality standards.

C. ARM 17.8, Sub-Chapter 3, Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
  2. ARM 17.8.308 Particulate Matter, Airborne. 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. New Source Performance Standards (NSPS) requirements do not apply to concrete batch plant operations.
- D. ARM 17.8, Sub-Chapter 5, Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:
1. ARM 17.8.504 Air Quality Permit Application Fees. Knife River shall submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. Knife River was not required to submit a permit application fee 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, 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, Sub-Chapter 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 air contaminant sources that have the potential to emit (PTE) greater than 25 tons per year of any pollutant. Knife River has the PTE greater than 25 tons per year of



particulate matter with an aerodynamic diameter of less than 10 microns (PM<sub>10</sub>); 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. Knife River was not required to submit an application for the current permit action because it is considered an administrative action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. Knife River was not required to submit a public notice because it is considered an administrative action.
6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Knife River of the responsibility for complying with any applicable federal, or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be

amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack which do not result in an increase in emissions because of the 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.

14. ARM 17.8.765 Transfer of Permit. 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, Sub-Chapter 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 sub-chapter.
2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the Federal Clean Air Act (FCAA) that it would emit, except as this sub-chapter 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 more than 250 tons per year, excluding fugitive emissions, of any air pollutant.

### III. BACT Determination

A BACT determination is required for each new or altered source. Knife River shall install on the new or altered source the maximum air pollution control capability which is technically practicable and economically feasible, except that BACT shall be utilized. A BACT analysis is not required for this permit action because it is considered an administrative action.

### IV. Emission Inventory

<u>Source</u>	<u>Tons/Year</u>					
	<u>TSP</u>	<u>PM-10</u>	<u>NO<sub>x</sub></u>	<u>VOC</u>	<u>CO</u>	<u>SO<sub>x</sub></u>
Cement Handling Emissions	0.08	0.04	0	0	0	0
Weigh Hopper Loading of Sand/Aggregate	40.47	20.24	0	0	0	0
Dumping: Sand/Aggregate on Stock Piles	10.12	4.05	0	0	0	0
Truck Mixer Loading of Cement/Sand/Aggregate		23.78	11.89	0	0	0
<u>Haul Roads</u>	<u>2.74</u>	<u>1.23</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	77.19	37.45	0	0	0	0

- A complete emission inventory for Permit #3065-03 is on file with the Department.

### V. Existing Air Quality and Impacts

On July 1, 1987, the Environmental Protection Agency (EPA) promulgated new National Ambient Air Quality Standards (NAAQS) for PM<sub>10</sub>. Due to exceedances of the national standards for PM<sub>10</sub>, the cities of Kalispell (and the nearby Evergreen area), Columbia Falls, Butte, Whitefish, Libby, Missoula, and Thompson Falls were designated by EPA as nonattainment for PM<sub>10</sub>. As a result of this designation, EPA required the Department and the City-County Health Departments to submit PM<sub>10</sub> State Implementation Plans (SIP). The SIPs consisted of emission control plans that controlled fugitive dust emissions from roads, parking lots, construction, and demolition, since technical studies determined these sources to be the major contributors to PM<sub>10</sub> emissions.

In the view of the Department, the amount of controlled emissions generated by the operation will not exceed any set ambient standard.

#### VI. Taking or Damaging Implication Analysis

As required by 2-10-101 through 105, MCA, the Department conducted the following private property taking and damaging assessment.

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

#### VII. Environmental Assessment

An environmental assessment was not required for this permit action because it is considered an administrative action.

Permit Analysis Prepared by: Julie Merkel  
Date: September 22, 2008