

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

DRAFT ENVIRONMENTAL ASSESSMENT (EA)

Issued For: Naeseth's Redi-Mix
Box 1078
Fort Benton, MT 59442

Permit Number: #3247-01

Preliminary Determination Issued: February 29, 2008
Department Decision Issued:
Permit Final:

RECEIVED

MAR 03 2008

LEGISLATIVE ENVIRONMENTAL
POLICY OFFICE

1. *Legal Description of Site:* Naeseth's Redi-Mix (Naeseth) would operate a portable concrete batch plant initially located in Sections 1 and 12, Township 24 North, Range 8 East, in Chouteau County, Montana. Montana Air Quality Permit (MAQP) #3247-01 would apply 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 (PM₁₀) 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 PM₁₀ nonattainment areas.
2. *Description of Project:* For a typical operation, aggregate is stockpiled for use at the batch plant. The cement silo transfers cement into the batch plant along with the aggregate (sand and gravel) and water. The combined mixture is loaded into a truck where all materials are mixed together to form concrete. The concrete is transported and used at various construction operations.
3. *Objectives of Project:* The objective of the project would be to produce business and revenue for the company by the sale and use of concrete. The issuance of MAQP #3247-01 would allow Naeseth to operate the permitted equipment at various locations throughout Montana.
4. *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 Naeseth has demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.
5. *A Listing of Mitigation, Stipulations, and Other Controls:* A list of enforceable conditions, including a Best Available Control Technology (BACT) analysis, would be included in Permit #3247-01.
6. *Regulatory Effects on Private Property Rights:* The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that 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			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 Resources			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

There is a possibility that terrestrials would use the same area as the concrete batch plant. Impacts on terrestrial and aquatic life could result from storm water runoff and pollutant deposition, but such impacts would be minor because the plant operation would be considered a minor source of emissions, and would have intermittent and seasonal operations. Furthermore, the air emissions would have only minor effects on the terrestrial and aquatic life because facility emissions would be well dispersed in the area of operation (See Section 7.F of this EA). Therefore, only minor and temporary effects to terrestrial and aquatic life and habitat would be expected from this operation.

B. Water Quality, Quantity, and Distribution

Although there would be an increase in air emission in the area where the concrete batch plant would operate, there would be little, if any, impacts on water quality, quantity, and distribution because of the relatively small size and temporary nature of the operation. Water would be used for making the concrete and for dust suppression on the surrounding roadways and areas of operation. However, water use would only cause a minor disturbance to these areas, since only relatively small amounts of water would be needed. Overall, the concrete batch plant operations would result in only minor impacts to water quality, quantity, and distribution.

C. Geology and Soil Quality, Stability, and Moisture

There would be minor impacts to the geology and soil quality, stability, and moisture near the plant's operational area due to increased vehicle traffic, the use of water to control dust, and the deposition of pollutants from concrete batch operations. Because the source is relatively small by industrial standards, portable, and equipment operations would take place within a previously disturbed gravel pit, any associated impacts to soil stability and composition would be minor. Minor increases in traffic would occur, but would be on an intermittent and temporary basis and would be primarily on existing roadways - resulting in minimal impacts to the soil quality, stability, and moisture in the area. Further, only relatively small amounts of water would need to be applied to control dust on the surrounding roadways, for the facilities pollution control operations, and for dust control within the gravel pit. Thus, the soil moisture content, soil stability, and soil quality would only be minimally affected by the proposed project.

D. Vegetation Cover, Quantity, and Quality

Because the facility would operate in an existing open-cut pit, would operate in an area where good pollutant dispersion would occur, would be a minor source of emissions, and would be temporary in nature, impacts to vegetation cover, quality, and quantity would be minor.

As described in Section 7.F of this EA, the impacts from the air emissions from this facility would be minor. As a result, the corresponding deposition of the air pollutants on the surrounding vegetation would also be minor. Also, because the associated water resource and soil disturbance would be minimal, as a result of equipment construction and operation (as described in Sections 7.B and 7.C), corresponding vegetative impacts would also be minor.

E. Aesthetics

The concrete batch plant's operation would be visible and would create additional noise in the area. According to the applicant, the nearest house is located approximately $\frac{3}{4}$ mile away. MAQP #3247-01 would include conditions to control emissions, including visible emissions, from the plant. Since the concrete batch plant operation would be portable and would operate on an intermittent and seasonal basis, any visual aesthetic impacts would be minor and short-lived.

F. Air Quality

Air quality impacts from the proposed project would be minor because this facility would operate on an intermittent and temporary basis. In addition, MAQP #3247-01 would include conditions limiting the facility's opacity and operation. Water would be required on site at all times to control emissions. In addition, a fabric filter dust collector and a rubber boot load-out spout would be required to control emissions from the concrete batch plant. The permit would also limit total emissions from the plant and additional Naeseth equipment operated at the same site to 250 tons/year or less, excluding fugitive emissions.

Pollutant deposition from the facility would be minimal because pollutants emitted would be widely dispersed (from factors such as wind speed and wind direction) and would have minimal deposition on the surrounding area (due to site topography of the area and minimal vegetative cover in the area). Therefore, air quality impacts from operating the concrete batch in this area would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

In an effort to identify any unique endangered, fragile, or limited environmental resources in the proposed area of construction and operation, the Department contacted the Montana Natural Heritage Program, Natural Resources Information System (NRIS). NRIS search results concluded that there are five known species of concern and one inferred species of concern within the search locale. The search locale is defined by the section, township, and range of the proposed site, with an additional 1-mile buffer. The known species of concern include the Sturgeon Chub, Sauger, Blue Sucker, Greater Short-horned Lizard, and Townsend's Big-eared Bat. These species are listed as sensitive. The inferred species of concern includes the Bald Eagle. While these resources may be found in specific habitats through the defined area, the NRIS search did not indicate that these species of concern would locate directly on or relatively near the proposed site. Therefore, it is unlikely that these species of concern would realize any impacts from the proposed project beyond minor air emissions impact.

H. Demands on Environmental Resource 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. 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 disperse. Energy would be provided by electrical power. Therefore, any impacts to water, air, and energy resources would be minor.

I. Historical and Archaeological Sites

The Department 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. Search results concluded that there is one previously recorded site within the designated search locale. This site is a historic transmission line. In addition to the site there have been a few previously conducted cultural resource inventories done in the area. SHPO felt that there would be a low likelihood that cultural properties would be impacted and therefore, felt that a cultural resource inventory would be unwarranted at this time.

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 generally have only seasonal, intermittent, and temporary use, and because the facility would be considered a minor source of air pollutants by industrial standards. The concrete batch plant would generate emissions of particulate matter (PM) and PM₁₀. Noise would also be generated from operation of the concrete batch plant, but would cause minimal disturbance because the site is in an existing pit and in a relatively remote location. Addition, this facility may operate in combination with other facilities owned and operated by Naeseth. However, total emissions from Naeseth's operations at the site would not be permitted to exceed 250 tons per year, excluding fugitives. Overall, any cumulative and secondary impacts to the physical and biological aspects of the human environment would be minor.

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				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 following comments have been prepared by the Department.

A. Social Structures and Mores

The concrete batch plant operation would cause no disruption to the social structures and mores in the area because the source would be relatively small and temporary in nature. Additionally, the equipment would initially be located in a relatively remote location ($\frac{1}{4}$ of a mile from the nearest home) in a gravel pit that has been previously developed along Highway 87, and would be a minor source of air pollution. Thus, no native or traditional lifestyles or communities would be affected by the proposed project operations and the predominant use of the surrounding area would not change as a result of this project.

B. Cultural Uniqueness and Diversity

The concrete batch plant operation would have no impact on the cultural uniqueness and diversity of this area of operation because the use of the site and surrounding area would not change. The facility is a relatively small and temporary source that would be operating at a relatively remote location. The nearest residence would be approximately $\frac{3}{4}$ mile away and the nearest town would be Fort Benton, Montana, which is approximately 1 mile southwest of the proposed location.

Additionally, the proposed operations would be removed from the general population, would be relatively small and portable, and would be locating in an area previously used for such purposes. Therefore, impacts upon the cultural uniqueness and diversity of the area would not occur.

C. Local and State Tax Base and Tax Revenue

The concrete batch plant operation would have little, if any, affect on the local and state tax base and tax revenue because the facility would be a temporary source and would be small by industrial standards. The facility would only need three employees to operate, so only minor impacts to the local and state tax base and revenue would be expected from the use of the employees and from the facility production. Furthermore, any impacts to local tax base and tax revenue would be minor because the source would be portable and the money generated for taxes would be widespread.

D. Agricultural or Industrial Production

The proposed concrete batch plant would locate on privately owned land, which has previously been used for the mining of gravel. The surrounding land has been used for grazing activities and growing wheat. Because of the surrounding land use, past land use of the site, and seasonal, temporary, and intermittent use of the facility, only minor effects to agricultural land could be expected. Any such effects would be addressed by Naeseth, as Naeseth owns the land surrounding the site. The land is also adjacent to an existing highway (Highway 87). Further, the concrete batch plant operation is relatively small by industrial standards and, thus, would have only a minor impact on local industrial production.

E. Human Health

MAQP #3247-01 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 7.F of this EA, the air emissions from this facility would be minimized by the use of water spray and opacity limitations, as established in MAQP #3247-01. Therefore, since these conditions would be incorporated into the permit and because the facility is relatively small and would locate in an area with good air dispersion, any associated impacts to human health would be minor.

F. Access to and Quality of Recreational and Wilderness Activities

The concrete batch plant operation would not affect any access to recreational and wilderness activities because of its immediate proximity to an improved roadway and historic industrial usage of the area. However, minor effects on the quality of recreational activities may be created by noise from the site. Any noise impacts from the site would be minor, intermittent, and temporary, due to the portable nature of the concrete batch plant operation and the operation's proximity to Highway 87.

G. Quantity and Distribution of Employment

Given the relatively small size and portable nature of the operation, the quantity and distribution of employment in this area would only be minimally affected. Naeseth would use three existing employees for the project. Additionally, because the facility is a small and temporary source, any changes in the quantity and distribution of employment from the use of this relatively small industrial source would be minor and short-lived.

H. Distribution of Population

Given the relatively small size and temporary nature of the concrete batch plant, the surrounding land usage, and the fact that the facility would be utilizing only three existing employees, the normal population distribution in the area would not be affected.

I. Demands of Government Services

Minor increases would be seen on 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 to verify compliance with the permits that would be issued. However, any increase of demand for government services would be minor given the temporary and portable nature of the project.

J. Industrial and Commercial Activity

The concrete batch plant would represent only a minor increase in the industrial activity in the area because of the relatively small size, portable, and temporary nature of the facility. No additional industrial or commercial activity would be 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 that would be affected by the proposed project. Therefore, no effects on such plans and goals would be expected.

L. Cumulative and Secondary Impacts

The concrete batch plant operation would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area because the source is a portable and temporary source. Minor increases in traffic would have minor effects on local traffic in the immediate area, thus, would have a direct effect on the social environment. Because the source is a relatively small and temporary source, only minor economic impacts to the local economy could be expected from the operation of the facility. Thus, only minor (but temporary) cumulative effects would also result to the economic and social resources of the area.

Recommendation: An EIS is not required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is for the construction and operation of a concrete batch plant. MAQP #3247-01 includes conditions and limitations to ensure the facility will operate in compliance with all applicable rules and regulations. In addition, there are no significant impacts associated with this proposal.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

Individuals or groups contributing to this EA: Department of Environmental Quality – Air Resources Management Bureau, Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

EA prepared by: Moriah Peck, P.E.

Date: February 25, 2008