



PRELIMINARY DETERMINATION  
ON PERMIT APPLICATION

Date of Mailing: December 7, 2011

Name of Applicant: U.S. Concrete On-Site, Inc.

Source: Portable Batch Concrete Plant

Proposed Action: The Department of Environmental Quality (Department) proposes to issue a permit, with conditions, to the above-named applicant. The application was assigned Permit Application #4702-00.

Proposed Conditions: See attached.

Public Comment: Any member of the public desiring to comment must submit such comments in writing to the Air Resources Management Bureau (Bureau) of the Department at the above address. Comments may address the Department's analysis and determination, or the information submitted in the application. In order to be considered, comments on this Preliminary Determination are due by December 22, 2011. Copies of the application and the Department's analysis may be inspected at the Bureau's office in Helena. For more information, you may contact the Department.

Departmental Action: The Department intends to make a decision on the application after expiration of the Public Comment period described above. A copy of the decision may be obtained at the above address. The permit shall become final on the date stated in the Department's Decision on this permit, unless an appeal is filed with the Board of Environmental Review (Board).

Procedures for Appeal: Any person jointly or severally adversely affected by the final action may request a hearing before the Board. Any appeal must be filed by the date stated in the Department's Decision on this permit. The request for a hearing shall contain an affidavit setting forth the grounds for the request. Any hearing will be held under the provisions of the Montana Administrative Procedures Act. Submit requests for a hearing in triplicate to: Chairman, Board of Environmental Review, P.O. Box 200901, Helena, MT 59620.

For the Department,

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VW:CH

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**DRAFT ENVIRONMENTAL ASSESSMENT (EA)**

*Issued For:* U.S. Concrete On-Site, Inc.  
3189 West Ward Rd. Suite 101  
Dunkirk, MD 20754

*Montana Air Quality Permit (MAQP) Number:* #4702-00

*Preliminary Determination on Permit Issued:* 12/7/2011

*Department Decision Issued:*

*Permit Final:*

1. *Legal Description of Site:* U.S. Concrete On-Site, Inc. (U.S. Concrete) submitted an application to operate a portable batch concrete plant. The location of the plant will be at the S½ of Section 34, Township 36 North, Range 4 West, Toole County Montana. In addition, MAQP #4702-00 would apply while operating at any location in the state of Montana, except within those areas having a Department approved permitting program or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>) nonattainment areas. An addendum would be required for locations in or within 10 km of certain PM<sub>10</sub> nonattainment areas. *A Missoula County air quality permit would be required for locations within Missoula County, Montana.*
2. *Description of Project:* The permit application is for the construction and operation of a portable batch concrete plant. The plant has a maximum capacity of 150 cubic yards per hour (yd<sup>3</sup>/hr). The site also has an 810 horsepower (hp) diesel generator and associated equipment. The process description is discussed in the permit analysis Section I.B of MAQP #4702-00.
3. *Objectives of Project:* The permit would allow U.S. Concrete to utilize aggregate and cement for the production of concrete for an awarded wind farm project.
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 plant. However, the Department does not consider the "no-action" alternative to be appropriate because U.S. Concrete 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 listing of the enforceable permit conditions and a permit analysis, including a BACT analysis, would be contained in MAQP #4702-00.
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 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.

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 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 areas that the batch concrete plant operations occupy. However, the batch concrete plant operations alone would present only minor impacts upon terrestrial life in the area because of the temporary nature of the operation. It is not expected that aquatic life would be significantly affected. The batch concrete site location is southeast of Long Lake by approximately 2 miles in an existing agricultural area. It is also located approximately 0.75 miles from Mud Lake which appears to be only a seasonal surface water body.

B. Water Quality, Quantity, and Distribution

Although there would be an increase in air emissions in the area where the batch concrete plant would operate, there would be minor impacts on water quality, quantity, and distribution because of the temporary nature, size, operational requirements, and conditions placed in MAQP #4702-00 for the plant. Further, as described in Section 7.F of this EA, the Department determined that any impacts from deposition of pollutants would be minor. In addition, any accidental spills or leaks from equipment would be required to be handled according to the appropriate environmental regulations in an effort to minimize any potential adverse impact on the immediate and surrounding area. Water would be used for dust suppression, but would only cause a minor disturbance to the area. The water source for this plant will be trucked in from the Rim Rock Community approximately 3 miles away and stored in a 20,000 gallon tank.

C. Geology and Soil Quality, Stability, and Moisture

As a result of the portable batch concrete plant operation, there would be minor impacts to the geology and soil quality, stability, and moisture near the equipment’s operational area because of the increased vehicle traffic and deposition of pollutants the plant. As explained in Section 7.F of this EA, the plant’s size, operational requirements, temporary nature of the operation, and conditions placed in MAQP #4702-00 would minimize the impacts from deposition. In addition, the plant would be

relatively small in size. Disturbance for the siting of the equipment would be new but the physical disturbance size would be limited to the equipment specified within MAQP #4702-00 and thereby limiting the potential impact to the local geology and soil quality, stability, and moisture.

D. Vegetation Cover, Quantity, and Quality

Because small amounts of vegetation would be disturbed during the setup of the portable concrete batch plant operations, and small amounts of pollutant deposition would occur on the surrounding vegetation, there would be minor impacts on the local vegetative cover, quantity, and quality. As explained in Section 7.F of this EA, the Department determined that as a result of the size and nature of the operation and conditions placed in MAQP #4702-00, any impacts on vegetative cover, quantity, and quality from the deposition of pollutants would be minor. Once the project is completed, topsoil removed at the start of the project would be re-spread.

E. Aesthetics

The batch concrete plant operations would be visible to some of the closest neighbors and would create additional noise in the area. The permit application indicates the closest neighbor is located 1.5 miles to the proposed site. However, MAQP #4702-00 would include conditions to control emissions, including visible emissions, from the plant. The plant would be relatively small and temporary in nature to support an awarded project. Therefore, any aesthetic and noise impacts would be minor.

F. Air Quality

The air quality emission impacts from the batch concrete plant operations would be minor because MAQP #4702-00 would include conditions limiting the visible emissions (opacity) from the plant and reducing the hours of operation to reduce the emissions of air pollution. In addition, the plant would be required to utilize water spray bars and other means to control air pollution. The operations would be limited by MAQP #4702-00 to total particulate emissions of 250 tons/year or less from non-fugitive sources at the plant, in addition to any additional equipment at the site. Because of the size and temporary nature of the operation and conditions placed in MAQP #4702-00, impacts from the deposition of pollutants would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The proposed project would have a minor impact on any unique endangered, fragile, or limited environmental resources. The Department, in an effort to identify any species of special concern associated with the proposed site location, contacted the Montana Natural Heritage Program (MNHP). Search results have concluded a single species of concern in the area. Area, in this case, is defined by the township, range and section of the proposed site, with an additional one-mile buffer. The species of concern identified in the search include the following vertebrate animal:

1. Ferruginous Hawk

Some new minor, if any, impacts would be likely within the immediate footprint of the batch concrete plant as the land is currently agricultural.

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

The operation of the batch concrete plant would only require small quantities of water, air, and energy for proper operation, due to the relatively small size of the plant. Small amounts of water would be used for dust control on the surrounding roadways and job site as well as the for the batch concrete plant operation. As described in Section 7.F of this EA, pollutant emissions generated from the plant would have minimal impacts on air quality in the immediate and surrounding area. Energy would be generated from the portable generator, so no other sources of power would be necessary to operate the

plant. The generator would consume energy in the form of diesel fuel, a non-renewable resource. Overall, the equipment is relatively small and would have operational restrictions placed in MAQP #4702-00. Because the plant operations would be seasonal and temporary, demands and impacts to the environmental resource of water, air and energy would be minor. Water for the operation will be trucked in from a nearby community and stored in a temporary water tank.

I. Historical and Archaeological Sites

The batch concrete plant operations would locate in an area currently used for agriculture. According to the Montana State Historic Preservation Office, there is low likelihood of adverse disturbance to any known archaeological or historic site within the area. Therefore, the operation would not have an effect on any known historic or archaeological site.

J. Cumulative and Secondary Impacts

The batch concrete plant operations would cause minor cumulative and secondary impacts to the physical and biological environment in the immediate area because the plant would generate emissions of particulate matter and nitrogen oxides. The Department expects this plant to operate in compliance with all applicable rules and regulations as would be outlined in MAQP #4702-00.

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

		Major	Moderate	Minor	None	Unknown	Comments Included
A.	Social Structures and Mores				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 operation of the batch concrete plant would not alter or disrupt any local lifestyles or communities (social structures or mores) in the area of operation because the plant would be relatively small and would operate intermittently. Therefore, the existing social structures and mores would not be affected as a result of this permitting action.

B. Cultural Uniqueness and Diversity

The batch concrete plant operations would have no impact on the cultural uniqueness and diversity of the area because the source would be small and temporary and would be operating in location intended for the duration of the awarded project. Furthermore, the area surrounding the proposed site would remain predominantly unchanged because project plans call for equipment removal once the project is complete, and re-spreading of topsoil.

C. Local and State Tax Base and Tax Revenue

The batch concrete plant operations itself would have little, if any, effect on the local and state tax base and tax revenue because the plant would be a seasonal source; therefore, it would not remain at the proposed site for an extended period of time. However, the supply of concrete for this project is part of a much larger project called the Rim Rock Wind Farm currently slated to have 129 turbines. The impact of the much larger project will have a significant impact on the area resources.

D. Agricultural or Industrial Production

The batch concrete plant operations proposed project would locate in a parcel currently agricultural. Topsoil will be scraped and saved from the disturbed acreage with rehabilitation possible when the batch concrete plant ceases operation. Further, the concrete batch plant operations would be small by industrial standards and, thus, would have only a minor impact on local industrial production.

E. Human Health

MAQP #4702-00 would incorporate conditions to ensure that the concrete batch plant operations 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. Since these conditions would be incorporated, only minor impacts would be expected from this batch concrete plant.

F. Access to and Quality of Recreational and Wilderness Activities

The batch concrete plant operations would not affect any access to recreational and wilderness activities because of the lack of wilderness areas in the proximity. However, minor effects on the quality of recreational activities would be created by noise from the site as some recreational may occur on the surrounding lands such as hiking and hunting.

G. Quantity and Distribution of Employment

The batch concrete plant operations would have a minor effect on the quantity and distribution of employment in the area because U.S. Concrete would employ between ten and twenty employees. These employees would be employed by U.S. Concrete on a seasonal or temporary basis and would not likely permanently locate to the area.

H. Distribution of Population

The batch concrete plant operations would not disrupt the normal population distribution in the area because of the remote location of the site and the size of the operations.

I. Demands of Government Services

Minor increases would be seen on traffic on existing roadways in the area while the batch concrete plant operations are in progress. In addition, government services would be required for acquiring the appropriate permits from government agencies. Demands for government services would be minor.

J. Industrial and Commercial Activity

The batch concrete plant operations would represent only a minor increase in the industrial activity in the given area because small size of the operations and the portable and seasonal nature of the plant. Traffic would increase as delivery of cement, aggregate, sand and water to the site will occur. Additionally, shipments of finished concrete will be outbound to the surrounding area. Other industrial and commercial activity will occur once turbine installation begins

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. The state and national ambient air quality standards would protect the proposed site and the environment surrounding the site.

L. Cumulative and Secondary Impacts

The batch concrete plant operations would cause minor cumulative and secondary impacts to the social and economic environment in the immediate area because the plant is a portable, temporary source. Small increases in traffic would have minor effects on local traffic in the immediate area. Because the source is a relatively small, temporary source, only minor economic impacts to the local economy could be expected from the operation of the plant. The Department believes that this plant could be expected to operate in compliance with all applicable rules and regulations as would be outlined in MAQP #4702-00.

*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 plant are minor; therefore, an EIS is not required. In addition, the source would be applying the Best Available Control Technology and the analysis indicates compliance with all applicable air quality rules and regulations.

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

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

EA Prepared By: Craig Henrikson  
November 30, 2011