

SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT: Perimeter Concrete Ltd.
PROPOSAL NAME: Concrete Batch Plant
CLASS OF DEVELOPMENT: 1
TYPE OF DEVELOPMENT: Concrete Batch Plant
CLIENT FILE NO.: 5413.00

OVERVIEW:

On June 23, 2009, Manitoba Conservation received a Proposal dated June 23, 2009 for the construction and operation of a portable concrete batch plant to be operated at locations throughout Manitoba. The facility will produce ready mix concrete for use in construction projects.

The Department, on July 6, 2009, placed copies of the Proposal in the Public Registries located at 123 Main St. (Union Station), the Manitoba Eco-Network, and the Millennium Public Library. Copies of the Proposal were also provided to the Technical Advisory Committee (TAC) members. A notice of the Environment Act proposal was also placed in the Winnipeg Free Press on July 11, 2009. The newspaper and TAC notifications invited responses until August 14, 2009.

COMMENTS FROM THE PUBLIC:

No comments received.

Disposition:

No action needed.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Canadian Environmental Assessment Agency

No concerns.

Disposition:

No action needed.

Environment Canada

The following is a summary of the comments provided:

- Portable or mobile concrete plants can emit significant amounts of fine and coarse particulates and gaseous emissions. Particulate matter less than 2.5 microns in size (PM_{2.5}) has been declared toxic under CEPA because of human health and environmental concerns. (A good fact sheet outlining environmental and health effects of PM is available at http://www.ec.gc.ca/air/p-matter_e.html)
- Concrete is made by mixing Portland cement, water, and coarse (stone) and fine (sand) aggregates and may include the addition of admixtures (chemicals to control setting properties). Supplementary cementing materials (SCMs) may also be used to replace a portion of the cement. SCMs used include fly ash (by-product of coal-fired power generation), ground blast furnace slag

(by-product of metals smelting) and micro silica (silica fume). This project description indicates the use of fly ash as SCM.

- It should be noted that the concrete manufacturing process releases the following substances declared toxic under the Canadian Environmental Protection Act, 1999 (CEPA)
 - PM10, Sulphur Oxides, Nitrogen Oxides, Volatile Organic Compounds (VOC), and Ground-level Ozone
- Particulate matter is the main substance of concern released from this sector, accounting for about 1.6% of the total PM from Canadian sources. PM is mainly released through fugitive emissions during materials handling and storage activities. For details please see http://www.ec.gc.ca/cleanair-airpur/Concrete-WSB02E25FD-1_En.htm.
- Environment Canada has concerns regarding these types of operations, and refers the proponent to the Canada-Wide Standards for PM and Ozone that was developed by the CCME to address the industrial sector where emission reduction strategies for PM were developed. Batch plants such as the above project can emit significant amounts of PM and gases if not equipped with proper air pollution control devices or if these control devices are not operated or maintained properly. More information on the CCME initiatives and the joint initial actions for the hot mix asphalt sector can be found at http://www.ccme.ca/initiatives/standards.html?category_id=61.
- EC acknowledges the proponent's use of a Modular Dust Collecting Enclosure as emission control measures. Although concrete batch plants are not specifically referred to in the following document, EC however, recommends that the proponent be required to implement the Best Available Techniques (BAT) as outlined in Section 4.2 of the "*Multi-pollutant Emission Reduction Analysis Foundation (MERAf) for the Hot-Mix Asphalt Sector (September 2002)*" This report is available at www.ccme.ca/assets/pdf/hot_mix_asphalt_final_meraf_e.pdf
- The proponent should also be aware that concrete batch plants are required to report under the National Pollutant Release Inventory.

Disposition

Clauses 8 – 25 of the draft Environment Act Licence address air emissions.

Manitoba Infrastructure and Transportation (MIT) – Highway Planning and Design Branch

No concerns.

Disposition:

No action needed.

Manitoba Science, Technology, Energy and Mines – Energy, Climate Change & Green Strategy Initiatives

No concerns.

Disposition:

No action needed.

Manitoba Culture, Heritage and Tourism – Historic Resources Branch

The following comment was provided:

No concerns with regard to this project's potential to impact heritage resources. If at any time however, significant heritage resources are recorded in association with these lands during development, the Historic Resources Branch may require that an acceptable heritage resource

management strategy be implemented by the developer to mitigate the effects of development on the heritage resources.

Disposition:

No action needed.

Manitoba Conservation – Sustainable Resource & Policy Management Branch

The following comments were provided:

- Any licence that may be issued should be conditional that no portable concrete batch plant will be set-up or operated prior to Manitoba Conservation reviewing and approving the specific site location(s) proposed for the plant.
- The list of proposed specific site locations should be forwarded to the Director, Sustainable Resource and Policy Management Branch for review by Manitoba Conservation.
- Clause 8 of the Licence should be revised to read “The Licensee shall operate the concrete batch plant only at locations approved by the Director after full consultation with Manitoba Conservation.

Disposition

Clause 8 of the Draft Environment Act Licence requires the Director to approve each site. The level of departmental consultation a decision of the Director, not a responsibility of the Licensee.

Manitoba Conservation – Parks and Natural Areas Branch

The following comments were provided:

- The Branch must review and approve the proposed locations of the concrete batch plant prior to their establishment.
- The concrete batch plant should not be permitted within 3 kilometres of any developed area of a provincial park (hiking trails, canoe routes, campgrounds) to reduce disturbance to park visitors, nor within 1.5 kilometres of any provincially designated protected area to maintain the ecological integrity of these sites.
- The branch also requires that the dust collector systems be used when they are placed beside a provincial park or designated area.

Disposition

Clause 8 of the Draft Environment Act Licence requires the Director to approve each site and clauses 8 – 23 address air emissions and pollution control requirements.

Manitoba Conservation – Environmental Services

No concerns.

Disposition

No action needed.

Manitoba Water Stewardship

The following comments were provided:

- *The Water Rights Act* indicates that no person shall control water or construct, establish or maintain any “water control works” unless he or she holds a valid licence to do so. “Water control works” are defined as any dyke, dam, surface or subsurface drain, drainage, improved natural waterway, canal, tunnel, bridge, culvert borehole or contrivance for carrying or conducting water, that temporarily or permanently alters or may alter the flow or level of water, including but not limited to water in a water body, by any means, including drainage, OR changes or may change the location or direction of flow of water, including but not limited to water in a water body, by any means, including drainage. If a proposal advocates any of the aforementioned activities, an application for a Water Rights Licence to Construct Water Control Works is required. Application forms are available from any office of Manitoba Water Stewardship.
- The proponent needs to be informed that if the proposal in question advocates any construction activities, erosion and sediment control measures should be implemented until all of the sites have stabilized.
- The proponent is directed to contact Manitoba Water Stewardship to determine if the project’s water use—self-supplied water in their process—requires licensing under *The Water Rights Act*. A contact person is Mr. Rob Matthews, Manager, Water Use Licensing Section, Manitoba Water Stewardship, telephone: 204-945-6118.
- The Department recommends an *Environment Act* Licence to include the following requirements:
 - In order to protect riparian areas, establish and maintain an undisturbed native vegetation area located upslope from the ordinary high water mark and adjacent to all waterbodies and waterways connected to the provincial surface water network:
 - A functioning riparian area of undisturbed native vegetation helps stabilize banks, provides aquatic and wildlife habitat and protects water quality. In circumstances where native vegetation is limited or absent, re-establishment of this vegetation should occur through natural succession or assisted through planting of vegetation native to the area.
 - A 15-metre undisturbed native vegetation area is recommended for lands located adjacent to first and/or second order drains;
 - A 30-metre undisturbed native vegetation area is recommended for lands located adjacent to third and/or higher order drains and/or waterbodies;
 - The siting of a concrete batch plant shall be setback at least 30 metres from the ordinary high water mark of all surface waters.
 - Alteration within this undisturbed native vegetation area is limited to a maximum of 25 % of the shoreline length (for example: 25 metres per 100 metres of shoreline length) of each lot for a boat house, path, dock, etc.; and,
 - Alteration within this undisturbed native vegetation area (including the removal of near shore or stream aquatic habitat) shall not occur unless an activity conforms to a Department of Fisheries and Oceans Canada Operational Statement or an activity is reviewed by the Department of Fisheries and Oceans Canada.

Disposition

Clause 8 of the Draft Environment Act Licence requires the Director to approve each site. The above provided comments will be considered in that review.

Manitoba Conservation – Environmental Operations

No concerns.

Disposition

No action needed.

PUBLIC HEARING:

A public hearing is not recommended.

RECOMMENDATION:

The Proponent should be issued a Licence for the operation of a concrete batch plant in accordance with the specifications, terms and conditions of the attached draft Licence. Enforcement of the Licence should be assigned to the Central Region of Manitoba Conservation.

A draft Environment Act Licence is attached for the Director's consideration.

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