

SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT: J.C. Concrete Products Ltd.
PROPOSAL NAME: Concrete Batch Plant and Concrete
Crushing/Recycling Plant
CLASS OF DEVELOPMENT: 1
TYPE OF DEVELOPMENT: Concrete Batch Plant & Bulk Materials Handling
Facility (Recycling)
CLIENT FILE NO.: 5437.00

OVERVIEW:

On January 4, 2010, Manitoba Conservation received a Proposal for the construction and operation of a concrete batch plant at SW 17-11-4 EPM in the Rural Municipality of Springfield and for the construction and operation of a concrete recycling plant at SW 17-11-4 EPM in the RM of Springfield and at OTM Lots 1 and 2 in the Parish of St. Paul in the RM of West St. Paul. The facilities will operate Monday to Saturday from 7:00 am to 8:00 pm and have the potential to generate dust and noise emissions.

The Department, on January 11, 2010, placed copies of the Proposal in the Public Registries located at 123 Main St. (Union Station), the Winnipeg Public Library, 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 January 16, 2010. The newspaper and TAC notifications invited responses until February 15, 2010.

COMMENTS FROM THE PUBLIC:

There were no comments received from the public.

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 did include the use of fly ash as SCM.
- 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, 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 baghouse/shaker and daily inspection as emission control measures. Although concrete batch plant is 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 National Pollutant Release Inventory.

Disposition

Clauses 9 – 27 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 Innovation, Energy and Mines – Energy Division

No concerns.

Disposition:

No action needed.

Manitoba Local Government – Community Planning Services

The following comments were provided relevant to the Springfield site:

- The subject lands are located within SW ¼ 17-11-4 EPM in the RM of Springfield at Plessis Road and Grassie Boulevard. The owner (J.M.T. Holdings) proposes the development of a portable concrete batch plant and portable concrete crushing/recycling plant at this location.
- The land is currently designated “Industrial” pursuant to the RM of Springfield Development Plan 98-22 and zoned “M2 – Heavy Industrial District” pursuant to the RM of Springfield Planning Scheme. The M2 District allows for any manufacturing or industrial use on a site a minimum of 5,000 square feet in area and 50 feet in width. As such, the proposed development generally conforms to the provisions of both the RM of Springfield Development Plan and Planning Scheme.
- Please note that as per proposed RM of Springfield Zoning By-law 08-01 (pending third reading), the subject lands will be zoned “MG – Industrial General Zoning District.” The proposed concrete batch plant and recycling plants will fall under the use class “Processing Use,” which is a conditional use in the MG zone. Should the new Zoning By-law be formally adopted prior to the commencement of construction, the proponent will require the approval of a conditional use order by the RM of Springfield.

The following comments were provided relevant to the West St. Paul site.

- The subject lands are located within Lot 3 Plan 28571 in the RM of West St. Paul at the NW corner of the intersection of Second St. and Emes Road. The owner of the property (J.M.T. Holdings) proposes the development of a portable concrete crushing/recycling plant at this location.
- The land is currently designated “Agricultural Area 1” under the Selkirk and District Planning Area (SDPA) Development Plan and zoned “A80 – Agriculture Zone” under the RM of West St. Paul Zoning By-law. There are no policies within the SDPA Development Plan to support the proposal of a concrete crushing/recycling plant in an area designated Agriculture 1. In addition, a concrete crushing/recycling plant is not a permitted/conditional use in areas zoned A80 Agriculture Zone as per the RM of West St. Paul Zoning by-law.
- Please note that as per proposed Selkirk and District Planning Area Development Plan By-law 190/08 (pending third reading) the subject lands will be designated “Business Park”. The proposal would then appear to conform to the proposed SDPA Development Plan, subject to an evaluation as to whether this type of industry might be considered to be a nuisance due to associated noise, dust, traffic, unsightliness, or emissions. Should the new Development Plan be formally adopted prior to commencement of construction, the proponent will require rezoning the site from an “A80 Agriculture Zone” to an “M2 - Industrial Zone”. The proposed concrete crushing-recycling plant will fall under the use class “Manufacturing”, which is a conditional use in an M2 - Industrial zone. As a result, the proponent will require the approval of a conditional use order by the RM of West St. Paul, once site redesignation is approved. The proposed site will be required to meet minimum site requirements for the M2 Industrial Zone of: 1.377 acres in area, and 100 feet in site width.

Disposition

The attached draft Environment Act Licence authorizes operation at the Springfield site. Operation at the West St. Paul site will not be authorized without the appropriate zoning in place.

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 - Environmental Services

The following comments were provided:

- The proposal states that they will be storing diesel fuel and lubricant storage in proper containment but do not reference any requirements in the:
 - THE DANGEROUS GOODS HANDLING AND TRANSPORTATION ACT (C.C.S.M. c. D12) Storage and Handling of Petroleum Products and Allied Products Regulation (MR 188/2001).
- As well the proposal indicates that hazardous waste may be generated on site and will be sent for disposal. The following regulations under the DGH&T Act need to be followed:
 - Classification Criteria for Products, Substances and Organisms Regulation (MR 282/87), Dangerous Goods Handling and Transportation Regulation (MR 55/2003), Generator Registration and Carrier Licensing Regulation (MR 175/87) and the Manifest Regulation (MR 139/88).

Please note that proposed amendments for Regulations 282/87, 175/87 and 139/88 are currently under review and changes may occur in the upcoming year.

Disposition

The proponent has been made aware of these existing legislative requirements.

Manitoba Conservation – Environmental Operations

The following comments were provided:

- Operations has responded to complaints at similar operations where settling ponds have been allowed to fill to overflowing resulting in material flowing into and down drainage ditches. The solids then tend to harden filling in the ditches rendering them useless. What would the proponent propose to address this circumstance?
 - *The proponent responds that solids will be removed from the settling ponds on a regular basis and used as base material for roads and parking lots. When the ponds reach 75% capacity aggregate will be removed from the primary ponds, stockpiled, crushed, then reused.*
- The diesel storage tank must comply with MR /2003. Storage of hazardous wastes must comply with DGHTA and associated regulations (under review), not just TDG as noted in the proposal.

- It is also recommended any licence issued for this operation contain a “neat and tidy” clause to ensure the operation is well maintained.

Disposition

Clause 31 of the Draft Environment Act Licence addresses operation of the settling ponds. The proponent has been made aware of the other legislative requirements.

Manitoba Conservation - Manitoba Conservation – Sustainable Resource & Policy Management Branch

No concerns.

Disposition

No action needed.

Manitoba Conservation – Wildlife & Ecosystem Protection Branch

No concerns.

Disposition

No action needed.

Manitoba Conservation – Parks and Natural Areas Branch

No concerns.

Disposition

No action needed.

Manitoba Conservation – Pollution Prevention Branch

The following comments were provided:

- The proposal adequately addressed the potential sources of air pollution which are the cement silo, aggregate storage pile, the conveyor system, vehicle traffic areas and material handling/storage.
- It is suggested that the operation adhere to the Best Environmental Management Practices (BEMP) for Redi-Mix Concrete Plants document prepared by the Manitoba Heavy Construction Association and the Canadian Ready Mixed Concrete Association’s Environmental Management Practices for Ready Mixed Concrete operations in Canada.

- Although there is a potential to generate noise specifically the crushing operation, it is expected not to be significant considering the absence of residences and the limited industrial and commercial use in the immediate vicinity.

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.
 - A contact person is Mr. Geoff Reimer C.E.T., Senior Water Resource Officer, Water Control Works and Drainage Licensing, Manitoba Water Stewardship, Box 4558, Stonewall, Manitoba R0C 2Z0, telephone: (204) 467-4450, email: geoff.reimer@gov.mb.ca.
- 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 truck washout containment area and settling ponds (section 7.3 and 8) shall be built to prevent leaking of washout water on the ground. The slurry material that will be removed from the settling pond should be allowed sufficient time to harden, before being re-used.
- The *Environment Act* Proposal indicates there is minimum risk of significant adverse environmental effects to water quality from the activities proposed. The list of preventative, or where appropriate, remedial actions to control specific environmental hazards is quite comprehensive.

- The use of an environmentally responsible surfactant for the control of dust emissions was suggested as a remedial measure where the application of water to travel routes has not been effective.
- The Department recommends an *Environment Act* Licence to include the following requirements:
 - Page 8 of 9The Licencee shall contact Manitoba Conservation to obtain approval for the release of surfactant.
 - The Licencee shall meet or exceed the environmental management guidelines put forward by the Ready Mixed Concrete Operations in Canada.
 - The Licence shall require all maintenance and washout areas, as well as the specific location of the concrete batch plant, to be located a minimum of 100 metres from any surface water.
 - The Licence shall state that wastewater shall not be discharged beyond the boundaries of the property on which the concrete batch plant is located and every effort shall be made to prevent the seepage of wastewater such that the groundwater beneath the development and surface water do not become contaminated.
 - The proponent indicates that well water will be used in the production of center and for onsite dust management.
 - Therefore, the proponent will require authorization under *The Water Rights Act*. The proponent's contractor shall contact Manitoba Water Stewardship's Water Use Licensing Section at least 2 weeks in advance of the anticipated usage date.
 - A contact person is Mr. Rob Matthews, Manager, Water Use Licensing Section, Manitoba Water Stewardship, telephone: 945-6009.

Disposition:

The proponent has been made aware of these existing legislative requirements. Clause 30 of the draft Environment Act Licence addresses wastewater discharge.

PUBLIC HEARING:

A public hearing is not recommended.

RECOMMENDATION:

The Proponent should be issued a Licence for the construction and operation of a concrete batch plant and concrete crushing/recycling 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.

Prepared by:

Ryan Coulter, M.Sc., P.Eng.
Environmental Engineer
Municipal, Industrial, and Hazardous Waste Section
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Telephone: (204) 945-7023
Fax: (204) 945-5229
E-mail Address: ryan.coulter@gov.mb.ca