

SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT: Barkman Concrete Ltd.
PROPOSAL NAME: Barkman Concrete Ltd.
CLASS OF DEVELOPMENT: 1
TYPE OF DEVELOPMENT: Manufacturing -
CLIENT FILE NO.: 5679.00

OVERVIEW:

Manitoba Conservation and Water Stewardship received a Proposal on September 20, 2013 for the expansion and continued operation of a precast concrete products manufacturing facility at 152 Brandt Street in Steinbach, Manitoba. The facility manufactures precast concrete products for residential, commercial, agricultural and municipal applications.

The Department, on October 17, 2013, placed copies of the Proposal in the Public Registries located at Legislative Library (200 Vaughan Street), the Winnipeg Millennium Public Library in Winnipeg and online at

<http://www.gov.mb.ca/conservation/eal/registries/5679barkman/index.html>

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 Steinbach Carillon on October 17, 2013. The newspaper and TAC notifications invited responses until November 15, 2013.

COMMENTS FROM THE PUBLIC:

No Comments.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Canadian Environmental Assessment Agency

No Comments.

Manitoba Agriculture – Land Use Branch

No Response.

Manitoba Conservation and Water Stewardship – Watershed and Protected Area Branch

No Concerns.

Manitoba Conservation and Water Stewardship –Compliance and Enforcement Branch

Please find the following concerns regarding the noted Environment Act License proposal.

- 1. While it is true that, as indicated numerous times throughout the proposal, Environmental Compliance and Enforcement Branch – Eastern Region does not have record of any formal complaints regarding daily operation at the Barkman facility, it is important to note that the subject site has residential development on all four sides that may be affected by an increase in traffic, dust and noise associated with the proposed expansion.*
- 2. Floor drains within the main plant are directed to settling pits, which release into the City of Steinbach's storm water collection system, which eventually flows to the Manning Canal. This is an issue because:*
 - a. The proposal indicates that approximately 1,658 m³ of washwater from pressure washing hopper buckets, work stations and some machinery, etc., is directed to these floor drains annually. The proposal also indicates that washwater from the main plant has the potential to increase pH and may contain a number of other contaminants, some of which may contain ingredients considered harmful to aquatic organisms. The only solution presented to address pH and other potential contaminants is dilution from additional inputs to the storm water system, such as precipitation. There is no data presented that quantifies pH or harmful constituents of the wastewater prior to release to the City's storm water system.*
 - b. 23 forklifts on site reportedly use approximately 72,470 L of diesel annually (and this is projected to increase by 15% with the proposed expansion). Accidental releases of diesel in the main plant from this equipment may result in diesel entering the floor drains, and eventually the storm water system.*
 - c. Appendix C lists materials used during production, some of which may contain ingredients considered harmful to aquatic organisms. While the proposal indicates that these materials will be stored away from surface water drains, there remains potential for accidental release of any of these materials during handling or production activities in the main plant, where floor drains, and eventually surface water, could be threatened.*
 - d. Hydraulic and other fluids accidentally released from process equipment in the main plant also threaten floor drains and the storm water system.*

Proponent Response (December 3, 2013):

- 1. Barkman has been in operation at the Steinbach location since 1948 and is located on a site zoned M1 Light Industrial under the City of Steinbach Zoning By-Law (By-Law No. 1882). Over the years, the existing development surrounding the Barkman facility including residential development has encroached on the operating Barkman site.*

As indicated in EAP Section 5.3.1.1 , sources of noise at the Barkman site during operation will include trucks, silo overfilling alarms (rare) and daily operations within the main plant and proposed paver plant. It is anticipated that the number of trucks travelling to and from the site for material deliveries (between 7:00 am and 6:00 pm) will not substantially change once the proposed paver plant is operational. This includes aggregate deliveries to the three in-ground aggregate hoppers at the proposed paver plant and the four existing outdoor aggregate hoppers at the existing plant. It also includes cement/fly ash deliveries to the existing three silos at the main plant and cement deliveries to the three storage silos at the proposed paver plant. The three new cement storage silos at the proposed paver plant will be sized so that material deliveries will occur between 7:00 am and 6:00 pm and no overfilling alarms will be required. There is no proposed traffic access to the Barkman site via Giesbrecht Street.

The majority of noise-generating activities at the Barkman site occur indoors. The proposed paver press machine will be in an enclosed sound protection cabin on its own isolated foundation providing a reduction in noise to approximately 78 to 81 dB outside of the press machine enclosure. This sound enclosure will be enclosed within the proposed paver plant building that will further reduce related operational noise emissions. The doors located on the west side of the proposed paver plant will also typically remain closed during operation, which will mitigate exposure of the operational noise to the neighbours. It should be noted that a similar process occurs within the existing main plant building and no noise complaints have resulted. If noise complaints are received during operation, Barkman will address these concerns as they arise on an individual basis.

As indicated in EAP Section 5.3.1.2, dust within the main plant and the proposed paver plant will continue to be mitigated with the use of filters (baghouse, socks, and cartridges) as described in EAP Sections 2.1 and 2.2. Cyclone filtration systems within the main plant will also continue to be used along with the other dust collection systems as described in EAP Section 2.1. Any dust collected within the main plant or the proposed paver plant will continue to be transported to the yard bunker for storage and collection by Diamond Construction and Gravel. Yard dust generated from vehicle and equipment movement at the site will be managed through the application of dust control agents (magnesium hydroxide or similar product) and the preferential use of paved areas.

Any fugitive dust generated during the disconnection of the feed lines from the truck hoses during cement delivery is anticipated to be very small and will continue to be managed through good housekeeping practices.

As described in the EAP and above, Barkman has enacted a number of measures and committed to operating in a manner that addresses noise, air quality, and aesthetic effects of its operations at the site.

- 2.a. To date, the City of Steinbach has not instructed Barkman to monitor its discharge or alter the discharge to convey its washwater to the City's sanitary system. If required by the City of Steinbach and/or Manitoba Conservation and Water Stewardship, Barkman will cooperate with regulators and develop a monitoring program to further characterize the wastewater so that the method of handling wastewater will comply with license

requirements. It is assumed that such a monitoring program would include determination of pH levels in the washwater in the settling pits and the concentrations of other relevant wastewater constituents.

2. b. There is no storage of fuels inside the main plant or in the proposed paver plant. As indicated in Section 2.1.6 of the EAP, there are two existing doubled-walled aboveground storage tanks (one diesel and one gasoline tank) located near the clearance section of the yard with concrete barriers protecting them as shown in Figure 3 of the EAP. There is no intention to relocate these tanks or add additional fuel storage tanks at this time. In terms of refuelling, all forklift operators at Barkman are certified and refueling training is provided as part of the certification. Barkman currently is in the process of creating a spill response team/policy in the event of a spill that will include the use of spill kits.

Equipment is regularly inspected by the operators and/or mechanics on either a daily, weekly or monthly basis, depending on the type of equipment. Barkman employs 16 experienced mechanics with two dedicated to forklift repairs and four dedicated to production equipment preventative maintenance and inspections/repairs to ensure that all equipment is properly maintained.

A total of 23 forklifts operate at the Site and 16 of them are diesel-fuelled. Of the 16 diesel-fuelled units, only two are operated within the main plant building. As the fuel is appropriately stored and dispensed outside at the existing AST, the equipment is well maintained, and only 2 diesel-fuelled units are used in the main plant, the risk of a spill within the plant is relatively low. The current development of a spill response plan will further reduce the potential risk of a diesel fuel release to the floor drains within the main plant building.

2. c. While materials are typically stored away from surface water drains in the plant, barrels that are in active use are stored on spill containment pallets to further minimize the potential for operational spillage.

Barkman is also in the process of developing a spill response team/policy for the facility incorporating the use of spill kits.

Admixtures are stored inside the facility in small quantities during winter months on open racking storage. Most of the materials used in concrete production are dry and any potential spills are noticeable and cleaned up immediately.

As indicated in 2.b., Barkman is committed to working with Manitoba Conservation and Water Stewardship to develop a monitoring program to determine any relevant potential contaminants that may be present in the wash water of the settling pits prior to discharge to the City of Steinbach's storm water collection system if required.

2. d. As indicated in 2.b., process equipment is inspected by the operators and/or mechanics on either a daily, weekly or monthly basis, depending on the type of equipment. Barkman also employs 16 experienced mechanics with two dedicated to forklift repairs and four

dedicated to production equipment preventative maintenance and inspections/repairs so that any potential leaks are addressed quickly and the equipment down-time and the potential risk of a release to the floor drains is minimized. Barkman's spill response team/policy for the facility (presently under development) will incorporate spill kit usage as well. With the preventative maintenance measures in place as well as the spill response system currently being developed, Barkman will have a system in place to minimize the risk of a release of hydraulic or other process equipment fluids to the floor drains in the main plant.

Compliance and Enforcement Comments (December 12, 2013):

Please find the following comments regarding the proponent's response to concerns raised by Environmental Compliance and Enforcement Branch regarding the noted Environment Act License proposal.

The proponent has appropriately considered potential issues related to traffic, dust and noise associated with the proposed expansion. It is expected that these issues will be addressed in the licence.

The proponent has proposed to reduce the risk of release of hazardous materials into the City of Steinbach's storm water collection system via floor drains in the main plant through the following:

- 1. If required by the licence, develop a monitoring program to characterize the wastewater/washwater prior to discharge,*
- 2. Regular equipment inspection and maintenance,*
- 3. The development of a spill response plan, team and policy which will include the use of spill kits,*
- 4. The use of spill containment pallets for hazardous materials that are in active use in the main plant,*

In order to prevent non-compliance with Sections 30.1 and 30.2 of the Environment Act, a monitoring program should be developed, as suggested by the proponent, to determine the concentration of any potential contaminants that may be present in the washwater of the settling pits prior to discharge to the City of Steinbach's storm water collection system. It is expected that wastewater will be addressed by the licence.

The proposed measures to prevent the accidental release of hazardous substances to the drain system appear appropriate. These items should be addressed in the licence.

The Compliance and Enforcement Branch has no further comments.

Disposition

The proponent provided additional information addressing traffic, dust and noise, management as well as washout water and wastewater handling and characteristic monitoring. The proponent also addressed diesel fuel, hydraulic oil and other chemicals spill containment issues and proposed to develop a spill response plan in place. Environmental Complacence and Enforcement has reviewed the responses and has no further comments. In addition the draft

Environment Act Licence clauses 8, 9, 11 and 12 addresses air pollution issues while clauses 26 to 31 address wastewater management and washout wastewater handling.

Manitoba Conservation and Water Stewardship – Programs and Strategies Branch – Air Quality Section

The air quality section has the following comments on the proposal:

- *Provided that the cyclone filtration system as well as other mitigation system (e.g., baghouse, socks, and cartridge) are appropriately operated and maintained to minimize the potential dust pollution. It is expected that concerns regarding air pollution will be addressed.*
- *It is suggested that the EA Clause regarding noise nuisance be included.*

Disposition

Clauses 8, 9, 11, 12 and 14 of the draft Environment Act Licence address noise issues and air pollution and air pollution control equipment.

Manitoba Conservation and Water Stewardship – Wildlife Branch

No Concerns

Manitoba Conservation and Water Stewardship – Parks and Natural Areas Branch

No Comments.

Manitoba Conservation and Water Stewardship – Forestry Branch

No Response.

Manitoba Conservation and Water Stewardship – Aboriginal Relations Branch

No Response.

Manitoba Conservation and Water Stewardship – Lands Branch

No Comments.

Manitoba Conservation and Water Stewardship – Water Quality Management Section

I reviewed the above noted file with respect to surface water quality on behalf of the Water Quality Management Section of Manitoba Conservation and Water Stewardship.

To protect downstream water bodies from potential deleterious effects of sedimentation and concrete wash water, inclusion of standard license conditions found in licenses recently issued

for concrete batch plants such as files: 5637.00 and 5644.00 and 5560.00 regarding waste water is recommended.

Disposition

Clauses 26 to 31 of the draft Environment Act Licence address wastewater management and handling.

Manitoba Conservation and Water Stewardship – Groundwater Management Section

No Response.

Manitoba Conservation and Water Stewardship– Fisheries Branch

No Response.

Manitoba Conservation and Water Stewardship – Office of Drinking Water

No Concerns

Manitoba Conservation and Water Stewardship– Water Use Licensing Section

No Response.

Manitoba Conservation and Water Stewardship – Water Control Works Licensing Section

No Response.

Manitoba Conservation and Water Stewardship– Climate Green Initiative Branch

No Response.

Manitoba Conservation and Water Stewardship– Regional Services Branch

No Response

Manitoba Culture, Heritage and Tourism – Heritage Branch

No Response.

Manitoba Innovation Energy and Mines – Energy Development Branch

No Response.

Manitoba Innovation Energy and Mines – Petroleum Branch

No Response.

Manitoba Infrastructure and Transportation – Flood Forecasting Branch

No Response.

Manitoba Infrastructure and Transportation – Highway Planning and Design Branch

No Concerns.

Manitoba Intergovernmental Affairs

Steinbach Community and Regional Planning reviewed this application for any potential areas of concern to be addressed as part of the environmental evaluation pursuant to The Environment Act. The proposal is for Barkman Concrete Ltd. to expand their concrete product production through the establishment of a new paver plant on the west side of their existing site. The new plant would also require a new retention pond to the north of the site on leased City of Steinbach land.

The Barkman Concrete Ltd. Plan is designated partly “Industrial” partly “Commercial” and partly “Residential Policy Areas” in the City of Steinbach Official Community Plan. The proposed new paver plant will be located in the “Residential Policy Area” designation. This use does not meet the intent of the Official Community Plan. The subject land is zoned “M1” Light Industrial in the City of Steinbach Zoning By-law. Light Manufacturing is considered a permitted use in this Zone.

The Official Community Plan is the long term vision for how the land is to be developed and used. This office questions if allowing the expansion to an industrial use in a designated Residential Policy Area complies to the overall long term vision. As such we recommend that the Official Community Plan be amended to align with the Zoning Bylaw.

There are a number of residential properties as well as a church use in close proximity to the proposed application sites. There are 2 duplexes residences approximately 190 feet from the proposed aggregate dumping area. There are 2 duplexes residences approximately 130 feet from the proposed receiving Silos. Furthermore there are 3 four-plex residential dwellings within approximately 30 feet, directly adjacent, to the proposed retention pond. This raises concerns about separation distances and the impact of noise, aesthetics, odour and dust on adjacent dwellings.

Proponent Response (December 3, 2013):

Barkman has been in operation at the Steinbach location since 1948 and is located on a site zoned M1 Light Industrial under the City of Steinbach Zoning By-Law (By-Law No. 1882). Over the years, the existing development surrounding the Barkman facility including residential development has encroached on the operating Barkman site.

All construction works that have been completed or had permits applied for, including site grading, foundation building permit, retention pond construction, and the lease agreement for the retention pond have been approved by the City of Steinbach with public input as deemed appropriate by the City of Steinbach. As outlined in EAP Section 2.8, a public variance hearing was held at the Steinbach City Hall (Variation V-13-16) to address a height variance of approximately 0.4 m for the new paver plant. The City of Steinbach approved the Variation (V-13-16) on July 12, 2013, the variation process included public comment and notice.

The land leased from the City of Steinbach for the proposed new retention pond is currently a green space. This retention pond area will be grassed with regular maintenance (such as mowing) conducted by Barkman, as needed. The approximately 50 m space between the three four-plex residential dwellings to the north of the Site and the proposed new retention pond presently includes a parking lot and trees/shrubs which would remain. Aside from construction of the retention pond and drainage connection, normal activities in this area would be limited to vegetation maintenance.

The proposed paver plant will be a metal clad structure and will be visually similar to existing buildings at the Barkman site. Along Giesbrecht Street on the west side of the Barkman property boundary, newer smaller willow trees have been planted and Barkman has also planted shrubs along their property boundary on Giesbrecht Street. Barkman employs full time yard maintenance staff who regularly inspect and maintain the site including collection of loose waste and debris into bins for periodic removal from the site.

As indicated in EAP Section 5.3.1.1 , sources of noise at the Barkman site during operation will include trucks, silo overfilling alarms (rare) and daily operations within the main plant and proposed paver plant. It is anticipated that the number of trucks travelling to and from the site for material deliveries (between 7:00 am and 6:00 pm) will not substantially change once the proposed paver plant is operational. This includes aggregate deliveries to the three in-ground aggregate hoppers at the proposed paver plant and the four existing outdoor aggregate hoppers at the existing plant. It also includes cement/fly ash deliveries to the existing three silos at the main plant and cement deliveries to the three storage silos at the proposed paver plant. The three new cement storage silos at the proposed paver plant will be sized so that material deliveries will occur between 7:00 am and 6:00 pm and no overfilling alarms will be required. There is no proposed traffic access to the Barkman site via Giesbrecht Street.

The majority of noise-generating activities at the Barkman site occur indoors. The proposed paver press machine will be in an enclosed sound protection cabin on its own isolated foundation providing a reduction in noise to approximately 78 to 81 dB outside of the press machine enclosure. This sound enclosure will be enclosed within the proposed paver plant building that will further reduce related operational noise emissions. The doors located on the west side of the proposed paver plant will also typically remain closed during operation, which will mitigate exposure of the operational noise to the neighbours. It should be noted that a similar process occurs within the existing main plant building and no noise complaints have resulted. If noise complaints are received during operation, Barkman will address these concerns as they arise on an individual basis.

As is currently the case, no substantial odours will be generated from the concrete production processes at the Barkman site.

As indicated in EAP Section 5.3.1.2, dust within the main plant and the proposed paver plant will continue to be mitigated with the use of filters (baghouse, socks, and cartridges) as described in EAP Sections 2.1 and 2.2. Cyclone filtration systems within the main plant will also continue to be used along with the other dust collection systems as described in EAP

Section 2.1. Any dust collected within the main plant or the proposed paver plant will continue to be transported to the yard bunker for storage and collection by Diamond Construction and Gravel. Yard dust generated from vehicle and equipment movement at the site will be managed through the application of dust control agents (magnesium hydroxide or similar product) and the preferential use of paved areas.

Any fugitive dust generated during the disconnection of the feed lines from the truck hoses during cement delivery is anticipated to be very small and will continue to be managed through good housekeeping practices.

As described in the EAP and above, Barkman has enacted a number of measures and committed to operating in a manner that addresses noise, air quality, and aesthetic effects of its operations at the site.

Disposition

The proponent provided additional information addressing aesthetics, setback distance from neighbours, dust, odour and noise issues. Community Planning Services has reviewed the responses and has no further comments. In addition the draft Environment Act Licence clauses 8, 9, 11 and 12 addresses noise and dust emission.

Manitoba Health – Environmental Health Unit

No Response.

Manitoba Labour – Office of Fire Commissioner

The Office of the Fire Commissioner (OFC) recommends that with respect to the expansion of this concrete products manufacturing facility, a building permit and an occupancy permit for the addition be obtained from the authority having jurisdiction, that being the City of Steinbach Building Permit Office .

The OFC also recommends that an updated Fire Safety /Emergency Response Plan be filed with the local fire authority, the Steinbach Fire Department.

Disposition

The proponent is notified of the recommendation to obtain a building and occupancy permit and to file an updated fire safety/ emergency response plan. In addition the Licence cover letter requires the licensee to comply with any other legislative requirements.

Manitoba Labour – Work Place Safety & Health

No Response

PUBLIC HEARING:

A public hearing is not recommended.

CROWN-ABORIGINAL CONSULTATION:

The Government of Manitoba recognizes that it has a duty to consult in a meaningful way with First Nations, Métis communities and other Aboriginal communities when any proposed provincial law, regulation, decision or action may infringe upon or adversely affect the exercise of a treaty or Aboriginal right of that First Nation, Métis community or other Aboriginal community.

This facility is located on a private land with an existing precast concrete products manufacturing plant. There would be no infringement of aboriginal or treaty rights under Section 35 of the Constitution Act, 1982. Therefore, it is concluded that Crown-Aboriginal consultation is not required for the project.

RECOMMENDATION:

The Proponent should be issued a Licence for the expansion and continued operation of a precast concrete products manufacturing plant in accordance with the specifications, terms and conditions of the attached draft Licence. Enforcement of the Licence should be assigned to the Environmental Compliance and Enforcement Branch of Manitoba Conservation and Water Stewardship.

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

Prepared by:

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December 13, 2013

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