

SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT: Nelson River Construction Inc.
PROPOSAL NAME: Unit 2034
CLASS OF DEVELOPMENT: 1
TYPE OF DEVELOPMENT: Transportation
CLIENT FILE NO.: 5457.00

OVERVIEW:

On April 5, 2010, Manitoba Conservation received a Proposal for the operation of a portable asphalt plant at locations throughout Manitoba. The operating hours of the facility are any time between sunrise and sunset in the months of May to November. The facility produces asphalt for use in road construction and repair. There are particulate matter, VOC, NO_x, odour, and other air emissions associated with the operation of an asphalt plant.

The Department, on April 27, 2010, placed copies of the Proposal in the Public Registries located at 123 Main St. (Union Station) Main Floor, Winnipeg; the Millennium Public Library, 4th Floor, 251 Donald Street, Winnipeg; and the Manitoba Eco-Network, 3rd Floor, 303 Portage Ave., Winnipeg. 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 May 1, 2010. The newspaper and TAC notifications invited responses until June 1, 2010.

COMMENTS FROM THE PUBLIC:

No comments.

Disposition

No action required.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Manitoba Conservation – Aboriginal Relations

The following comments were provided:

The Aboriginal Relations Branch has reviewed the documentation with respect to the above and has the following concerns to register.

Without knowing where the temporary asphalt plants will be located, it is difficult to determine the impacts to the exercise of treaty and Aboriginal rights of First Nations, the Métis community and/or other aboriginal peoples. The Government of Manitoba 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 the First Nation, Métis community or other aboriginal community.

Disposition

Clause 9 of the Draft Environment Act Licence requires that each proposed location be reviewed by the Director. In the event that a proposed location is likely to affect the exercise of a treaty or aboriginal right of a First Nation, Métis Community or other aboriginal community the Aboriginal Relations branch will be notified.

Manitoba Water Stewardship

The following comments were provided:

- Manitoba Water Stewardship recommends an Environment Act Licence to include the following requirements:
 - If a self-supplied water source is used in the industrial process, the proponent may require authorization under *The Water Rights Act*. The proponent's contractor would have to 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: 945-6118.
 - The proponent shall develop and implement an Emergency Response Plan.
 - Any contaminated liquid generated on site (i.e. cleaning of truck boxes, fuel spillage) must be contained and all efforts to ensure the protection of groundwater and surface water resources should be implemented.
 - The siting of a temporary asphalt plant shall be located at least 100 metres from any surface water.
 - An undisturbed native vegetation area, comprising a width of at least 30 metres, shall be maintained between the perimeter of the asphalt site and the surface water.
 - The combined alteration—including new and existing structures—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 a dock and/or 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.
- Manitoba Water Stewardship submits the following comments:
 - The Manitoba Department of Water Stewardship is mandated to ensure the sustainable development of Manitoba's water resources. Manitoba Water Stewardship is committed to the goals of: protecting aquatic ecosystem health;

ensuring drinking water is safe and clean for human health; managing water-related risks for human security; and stewarding the societal and economic values of our waterways, lakes and wetlands; for the best water for all life and lasting prosperity. Manitoba Water Stewardship achieves these goals, in part, through administering legislation, including *The Water Protection Act*, *The Water Rights Act*, and *The Water Power Act*.

- *The Water Rights Act* requires a person to obtain a valid licence to control water or construct, establish or maintain any “water control works.” “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, a person is required to submit an application for a Water Rights Licence to Construct Water Control Works. A person may contact the following Water Resource Officer to obtain an application and/or obtain information.
 - 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.
- Maintaining an undisturbed native vegetation area immediately adjacent to the shoreline of lakes, rivers, creeks, and streams helps stabilize banks, provides aquatic and wildlife habitat and protects water quality through filtering overland runoff. The width of an undisturbed native vegetation area should be the widest width possible and practical. In conjunction with other best management practices such as eliminating fertilizer use adjacent to surface waters, and the proper management and disposal of waste water, maintaining an undisturbed native vegetation adjacent to waterbodies is important to help prevent degradation of water quality.
- The Proposal indicates that the proponent will adhere to the Temporary Asphalt Siting Guidelines developed by the Manitoba Heavy Construction Association. However, these guidelines do not address implementing mitigation measures for asphalt plants located adjacent to surface water and controlling surface runoff.
- The proponent’s Proposal noted that Temporary Asphalt Plant Siting Guidelines will be used in the operations of the plants. Although the Temporary Asphalt Plant Siting Guidelines (1996) state that “asphalt oil is a by-product of petroleum and in itself is environmentally neutral”, Manitoba Water Stewardship does not fully agree with this statement. Petroleum products can contain a variety of contaminants, such as polycyclic aromatic hydrocarbons. The presence of polycyclic aromatic hydrocarbons, in low concentrations, such as µg/L or parts per billion, have a potential to negatively impact aquatic life. The use of binders

and additives for viscosity adjustment in the asphalt production phase could increase the presence of other potential contaminants of concern if spills or unintended releases entered water. Hardened asphalt road materials may generally be considered to have little ecological effect, but it is the hot asphalt oil phase where appropriate care and handling is required.

Disposition:

Clauses 9 – 11 of the draft Environment Act Licence address the siting of asphalt plants, clause 36 addresses contaminated liquid and clause 42 addresses emergency response. Existing Manitoba regulations address the remaining expressed concerns.

Manitoba Conservation – Pollution Prevention

The following comments were provided:

- Adequate measures to address fugitive PM sources (roadway, stockpile) are identified in the proposal.
- A wet (venturi) scrubber will be provided on the drying/mixing drum to control PM emissions.
- There will be uncontrolled VOC emission coming from the mixing drum generated from the heating of asphalt cement and RAP. Though wet scrubbers are capable of some incidental control of VOCs, generally they are limited to control PM and high solubility gases (US EPA – CICA Fact Sheet, Venturi Scrubber). Since VOC are compounds that have a high vapour pressure and low water solubility, they will pass through the wet scrubber and emitted to the atmosphere.
- It is recommended that the following be included in the Licence clauses:
 - Releases through the PM control device (wet scrubber) to meet the particulate matter emission limit
 - Adequate maintenance of the pollution control devices to ensure that it is working properly at all times
 - Adherence to a Code of Practice such as the Manitoba Heavy Contractors Association - Environmental Practices Guide (including siting guidelines).
 - Addition of odour and noise nuisance clauses
 - Dryer stack testing (one survey test within two years of operation to ensure the facility is meeting PM emission limits and, thereafter, as may be requested by the Director)

Disposition

Clauses 19 to 35 of the draft Environment Act Licence address concerns related to air emissions.

Manitoba Conservation – Sustainable Resource and Policy Management

The following comments were provided:

Protected areas are lands closed to logging, mining, electric development and any other activities that could adversely or significantly affect habitat. The current network of protected areas is not complete, and the Protected Areas Initiative (PAI) is conducting planning exercises in various areas of the province. Some of the activities listed in the application could harm ecologically sensitive environments. To ensure that any temporary asphalt plant activity does not pose a hazard to protected lands, or lands proposed for protection, it is recommended that:

- Any licence that may be issued should be conditional that no temporary asphalt 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.

Disposition

Clause 9 of the draft Environment Act Licence requires the Licencee to provide advance notification of proposed sites. The Department will complete an evaluation of each individual site once location is known.

Manitoba Conservation - Parks and Natural Areas

The following comments were provided:

Parks and Natural Areas Branch has reviewed the proposal filed pursuant to the Environment Act by Nelson River Construction Inc. for the temporary asphalt plant located in various unidentified locations throughout the province. As this proposal does not list any proposed locations for the operation of this asphalt plant. The Branch recommends that all proposed locations, when known, are forwarded to Manitoba Conservation for review and approval.

The Branch also recommends that the following conditions be incorporated into the Environment Act Licence:

- No asphalt plant without a pollution control device is to be operated within 3km of any developed area of a provincial park (hiking trails, canoe routes, campgrounds etc.) to reduce disturbance to park visitors.
- No asphalt plant is to be operated adjacent to an ecological reserve or protected area within a provincial park to maintain the ecological integrity of these sites.
- No asphalt plant without a pollution control device is to be operated within 3km of any ecological reserve or protected area within a provincial park to maintain the ecological integrity of these sites.

Disposition

Clause 9 of the draft Environment Act Licence requires the Licencee to provide advance notification of proposed sites. The Department will complete an evaluation of each individual site once location is known. Clause 13 prohibits operation without a pollution control device.

Environment Canada

The following comments were provided:

In general, the Environment Act Proposal project description provides little information on the potential environmental impacts of the proposed mobile/portable asphalt plant, including the combustion of asphalt oil.

Temporary/portable or mobile asphalt 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.ccme.ca/assets/pdf/peer_review_rpt_e.pdf)

Environment Canada has concerns regarding these types of operations, and refers the proponent to the Canada-wide Standards for Particulate Matter (PM) and Ozone that was developed by the CCME. The hot-mix asphalt sector is one industrial sector where emission reduction strategies for PM was developed as asphalt plants 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/assets/pdf/pmozone_standard_e.pdf

The proponent states that the resulting emissions include “steam”, “heat”, “minute dust particles and gasses resulting from normal combustion of recycled (de-ashed) oil or propane”. This does not provide sufficient information on the type of pollution control system that is installed to mitigate the emission of particulate matter and other gaseous emissions such as Volatile Organic Content (VOCs), or how fugitive emissions will be controlled. The potential impacts of these emissions need to be considered as part of the environmental impact assessment.

EC recommends that Manitoba Conservation require portable/temporary/mobile asphalt plants to install secondary air emission controls to reduce their particulate and gaseous emissions. Emission control technology is readily available for mobile plants and is required in some provinces in Canada. Requiring mobile asphalt plants to install secondary controls will greatly reduce asphalt plant emissions.

Environment Canada also 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)*”, as prepared by Canadian Ortech Environmental Inc. and John Emery Geotechnical Engineering Limited for the CCME and Environment Canada. This report is available at the following website:

http://www.ccme.ca/assets/pdf/hot_mix_asphalt_final_meraf_e.pdf.

The proponent should also be aware that temporary (*mobile or portable*) asphalt plants are required to report under National Pollutant Release Inventory (NPRI).

Disposition

The proponent has proposed the use of a wet scrubber as a secondary emission control device. Clauses 19 to 35 of the draft Environment Act Licence address concerns related to air emissions and clause 18 addresses acceptable fuel types.

Manitoba Infrastructure and Transportation

No concerns

Disposition

No action required.

Manitoba Conservation – Wildlife and Ecosystem Protection

The following comments were provided:

Without having specific locations for the sites it is difficult to provide anything but general comments.

- Sites will not be allowed within 1.6 km of a Provincial Wildlife Management Area, Provincial Wildlife/Bird Refuge, Provincial Park, Ecologically Significant Area or Protected Area as defined under Manitoba’s Network of Protected Areas.
- Sites will not be allowed on crown lands coded through CLCC for wildlife or outdoor recreation.
- Sites will not be allowed within 400 metres of raptor nests, heron rookeries, Class 3, 4, 5 and 6 wetlands or significant riparian areas.
- Sites will not be allowed on areas of native grassland ie: tall or mixed –grass prairie
- Certain areas including some developed and undeveloped road allowances provide habitat for rare, threatened and endangered flora and fauna and should be avoided. The proponent can contact Wildlife And Ecosystem Protection Branch - Conservation Data Centre for specifics once potential sites are selected.
- Federal and Provincial endangered species legislation applies to all developments with respect to disturbance/destruction of habitat required by a listed species. This

would apply to both private and crown lands. The proponent can contact Wildlife And Ecosystem Protection Branch Conservation Data Centre for specifics once sites are selected.

Disposition

Clause 9 of the draft Environment Act Licence requires the Licencee to provide advance notification of proposed sites. The Department will complete an evaluation of each individual site once location is known.

PUBLIC HEARING:

A public hearing is not recommended.

RECOMMENDATION:

The Proponent should be issued a Licence for the operation of an asphalt plant in accordance with the specifications, terms and conditions of the attached draft Licence. Enforcement of the Licence should be assigned to Environmental Operations.

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