SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPOSAL NAME: Wuskwatim Generating Station Wastewater Treatment System

OVERVIEW:

On August 27, 2010, the Department received an Environment Act Proposal (EAP) from Wuskwatim Power Limited Partnership for the construction and operation of a wastewater treatment system to be located within the Wuskwatim Generating Station located at SW 33-75-7WPM. The proposed wastewater treatment system will treat domestic wastewater produced at the station and includes screening, chemical and biological treatment, membrane filtration and ultraviolet (UV) disinfection components and processes. Treated wastewater will be discharged to the Burntwood River.

The Department, on September 20, 2010, placed copies of the EAP report in the Public Registries located at 123 Main St. (Union Station), the Millennium Public Library, Manitoba Eco-Network, and the Thompson Public Library. Copies of the EAP report were also provided to the Canadian Environmental Assessment Agency (CEAA) and Technical Advisory Committee (TAC) members. As well, the Department placed public notifications of the EAP in the Thompson Nickel Belt on Wednesday, September 22, 2010 and the Thompson Citizen on Friday, September 24, 2010. The newspaper and TAC notifications invited responses until October 25, 2010.

Additional information in support of the EAP was requested of the proponent in a January 14, 2011 letter. A February 2, 2011 response was provided and included with the review.

A draft Environment Act Licence is attached.
Wuskwatim Power Limited Partnership
Sewage Treatment Plant
Page - 2 -

COMMENTS FROM THE PUBLIC:

There were no comments from the public.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Conservation and Water Stewardship – Aboriginal Relations Branch

• No concerns.

Conservation and Water Stewardship – Parks and Natural Areas Branch

• No concerns.

Conservation and Water Stewardship – Water Stewardship Division

• Manitoba Water Stewardship requires an Environment Act Licence to include the following requirements:
  o The Licencee shall meet the following effluent discharge limits:
    ▪ 25 BOD mg/L;
    ▪ 25 TSS mg/L; and,
    ▪ Total Ammonia limits, based on effluent pH.
  o The Licencee shall actively participate in any future watershed based management study, plan/or nutrient reduction program, approved by the Director, Water Science and Management Branch, Manitoba Water Stewardship.
    ▪ Note: Manitoba Water Stewardship is concerned with any discharges that have the potential to impact the aquatic environment and/or restrict present and future uses of the water.
• Manitoba Water Stewardship submits the following comments:
  o Manitoba Water Stewardship does not object to this proposal, at this time.
  o 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 proponent needs to be informed that erosion and sediment control measures should be implemented until all of the sites have stabilized.

Installing water saving devices like low-flow shower heads, and low flow toilets reduces the amount of liquid in wastewater collection systems and increases efficiency in wastewater systems. Manitoba Water Stewardship recommends the installation of water saving devices to help maintain the health of the Burntwood River.

The Lake Winnipeg Stewardship Board has recommended that all small wastewater treatment facilities, should meet a phosphorus limit of 1.0 mg/L. The proposed phosphorus limit of 1.0 mg/L is consistent with efforts underway across Manitoba and in upstream jurisdictions to reduce nutrient loads to Lake Winnipeg and its watershed. In the Lake Winnipeg Stewardship Board's December 2006 report to the Minister of Water Stewardship, the Board provides several strategies on how nutrient reduction could be achieved for small wastewater treatment facilities (see recommendations 14-20).

Disposition:

- The draft Environment Act Licence contains a clause that limits the allowable total phosphorus content of the effluent to 1.0 milligrams per litre.
- The draft Environment Act Licence contains a clause that limits total ammonia concentration of the effluent based on pH and temperature.
- The draft Environment Act Licence contains a clause that requires the Licencsee to actively participate in any future watershed based management study, plan or nutrient reduction program, approved by the Director, for the Burntwood River and associated waterways and watersheds.

Conservation and Water Stewardship – Sustainable Resource and Policy Management Branch and Lands Branch

- It is recommended that all operations of the wastewater treatment system be carried out in a way that should any wastewater make its way to Wuskwatim Lake, upstream of the Generating Station, it will not have adverse effects of the habitat or wildlife species found the Parridge Crop Hill Proposed Ecological Reserve (PER).

Disposition:

- The sewage treatment plant discharges to the Burntwood River that flows northeast and away from Wuskwatim Lake.
Infrastructure and Transportation

• No concerns.

COMMENTS FROM FEDERAL REPRESENTATION:

Canadian Environmental Assessment Agency

• The project information that was provided has been reviewed by the Canadian Environmental Assessment Agency (CEAA). Application of the Canadian Environmental Assessment Act (the Act) will not be required.

PUBLIC HEARING:

A public hearing was not requested.

RECOMMENDATION:

Issue an Environment Act Licence in accordance with the attached draft. Enforcement of the licence should be assigned to the Environmental Approvals Branch until construction and any necessary inspections have been completed.

PREPARED BY:

Original Signed By

Robert Boswick, P. Eng.
Environmental Engineer
Environmental Approvals Branch
Manitoba Conservation and Water Stewardship
October 5, 2012

Telephone: (204) 945-6030
Fax: (204) 945-5229
E-mail Address: robert.boswick@gov.mb.ca