

SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT: Vidir Machine Shop Ltd.
PROPOSAL NAME: Arborg BEST Heating Unit
CLASS OF DEVELOPMENT: 1
TYPE OF DEVELOPMENT: Gasification Plant
CLIENT FILE NO.: 5300.00

OVERVIEW:

On September 5, 2007, Manitoba Conservation received a Proposal for the continued operation of gasification plant located at Lot 2, Plan 35658 WLTO, NE 33-23-2 EPM in the Rural Municipality of Bifrost. The facility operates from 9:00 am to 5:00 pm daily, for a maximum of 45 hours per week, during the months of November to April and processes wheat straw to generate heat

The Department, on November 8, 2007, placed copies of the Proposal in the Public Registries located at 123 Main St. (Union Station), the Winnipeg Public Library, the Manitoba Eco-Network, the Millennium Public Library, the Selkirk-St. Andrews Regional Library and the RM of Bifrost municipal office. 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 Interlake Spectator on November 16, 2007. The newspaper and TAC notifications invited responses until December 12, 2007

COMMENTS FROM THE PUBLIC:

No public responses were received.

Disposition:

No action needed.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Canadian Environmental Assessment Agency

No concerns.

Disposition:

No action needed.

Manitoba Health

No comments received.

Disposition:

No action needed.

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

No concerns.

Disposition:

No action needed.

Manitoba Agriculture, Food and Rural Initiatives – Land Use Branch

No comments received.

Disposition:

No action needed.

Manitoba Science, Technology, Energy and Mines – Petroleum Branch

No concerns.

Disposition:

No action needed.

Manitoba Science, Technology, Energy and Mines – Mines Branch

No concerns

Disposition:

No action needed.

Manitoba Culture, Heritage and Tourism – Heritage

No concerns.

Disposition:

No action needed.

Manitoba Conservation

The following comments were provided:

- More information regarding the ash storage area including a description of how runoff is prevented from escaping the property is required.
 - *The proponent responds that the ash from the furnace is augured directly into a storage bin. When the bin is full, the ash is spread on nearby land.*
- The distance to the nearest off-site residences or other critical receptors (e.g. schools, hospitals, churches, etc.) is required.
 - *The proponent responds that the nearest off-site residence is across the provincial road and that this neighbour has never complained about the operation of the gasifier. The Inter-lake Mennonite Fellowship School and a church are located three miles away and the nearest hospital is in Arborg 12 miles away.*
- The source testing report provided with the proposal indicates that the particulate concentration in the exhaust stream exceeds Manitoba Conservation's limit of 0.23 grams per dry standard cubic metre. A factor affecting the particulate emissions is that the only particulate control on the system is a cyclone, which is more effective for larger-sized particles typically associated with mechanical sources of particulates than for the smaller-sized particles associated with combustion. The Arborg BEST Heating Unit should be required to reduce particulate emissions to below the emission limit and undertake testing to demonstrate compliance with provincial criteria.
 - *The proponent responds that since the source testing was completed in 2005, the gasifier has gone through significant improvements in terms of fuel feeding and digital control. These improvements ensure the fuel is fed into the system in the appropriate quantity at the right time, and that the oxygen supply is optimized. As a result the gasification/combustion process has improved, and the proponent expects that this has resulted in a reduction of particulate emissions. The proponent further points out that the 0.24 g/m³ result was from a high moisture bale of around 25%. At that time Vidir did not routinely cover the straw fuel bales. Now Vidir is covering its fuel bales resulting in lower moisture fuel.*

Disposition:

The proponent provided responses that satisfactorily addressed the concerns. In addition, records of stack testing completed by Manitoba Conservation on a Vidir gasifier at an alternate location showed compliance with the particulate emission limit. Clause 8 of the draft Environment Act Licence addresses particulate emissions.

Manitoba Intergovernmental Affairs and Trade

No comments provided.

Disposition:

No action needed.

Manitoba Water Stewardship – Ecological Services Division

No concerns.

Disposition:

No action required.

PUBLIC HEARING:

A public hearing is not recommended.

RECOMMENDATION:

The Proponent should be issued a Licence for the continued operation of a gasification plant in accordance with the specifications, terms and conditions of the attached draft Licence. Enforcement of the Licence should be retained by the Environmental Assessment and Licensing Branch.

A draft environment act licence is attached for the Director's consideration.

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