SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT:	**Rock Lake Holding Ltd.**
PROPOSAL NAME:	**Biocarbon Demonstration Project**
CLASS OF DEVELOPMENT:	**1**
TYPE OF DEVELOPMENT:	**Gasification plant**
CLIENT FILE NO.:	**5553.00**

OVERVIEW:

On November 30, 2011, Manitoba Conservation received a Proposal dated November 22, 2011 for the construction and operation of carbonizer to convert woody biomass to biocarbon and syngas at SW 1-13-1 WPM. The biocarbon will be used as a coal replacement for heating and the syngas will be used in the generation of combined heat and power.

The Department, on December 20, 2011, 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, and the Selkirk and St. Andrews Regional Library in Selkirk. 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 Selkirk Journal on January 6, 2012. The newspaper and TAC notifications invited responses until January 20, 2012.

COMMENTS FROM THE PUBLIC:

The following is a summary of the comments received from the public:

- Rock Lake Colony has a poor environmental record
- There was no previous public consultation regarding this project
- Air emission information is based on supplier estimates. There is a concern air emissions may be different than what is predicted and may result in health effects.
- Landfill locations for waste from the project should be identified and reviewed to determine if they are appropriate disposal sites.
- This site should have been considered for the Biogas Conversion Project as this may have addressed community concerns related to odour associated with the livestock operation at Rock Lake Colony.
- Hauling wood chips hundreds of kilometres is inappropriate.
- Rock Lake Colony may not be capable of appropriately managing this project and regulatory agencies may not effectively regulate this project.
- The project should be disallowed.

Disposition:

The environmental assessment and licensing process included public participation. Rock Lake Colony will be required to comply with the terms and conditions of an Environment Act Licence. Clauses 9 – 25 of the draft Environment Act Licence address air emissions, and clauses 39 and 40 address waste disposal. The other comments provided are beyond the purview of this review.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Canadian Environmental Assessment Agency

The Canadian Environmental assessment agency provided notification that Natural Resources Canada (NRCan) is Responsible Authority for this project and is therefore conducting a screening level environmental assessment under the Canadian Environmental Assessment Act.

Disposition:

The current review will continue as a cooperative environmental assessment as per the Canada-Manitoba Agreement on Environmental Assessment Cooperation.

Environment Canada

The following comments were provided:

- If construction activities are to take place between May 1 – August 13, Environment Canada (EC) recommends that a survey be conducted by a qualified wildlife/avian biologist to determine the presence of any species at risk. EC requests the results of the surveys and corresponding mitigation measures along with any changes to the project activities scheduling.
- EC would like to remind the proponent of the requirement of SARA notification under section 79(1) of the *Species at Risk Act* which states that:
    - "Every person who is required by or under and Act of Parliament to ensure that an assessment of the environmental effects of a project is conducted must, without delay, notify the competent minister or ministers in writing of the project if it is likely to affect a listed wildlife species or its critical habitat."
    - "The person must identify the adverse effect of the project on the listed wildlife species and its critical habitat and, if the project is carried out, must ensure that measures are taken to avoid or lessen those effects and to monitor them. The measures must be taken in a way that is consistent with any applicable recovery strategy and action plans."
- EC recommends that the proponent note that particulate matter less than 2.5 microns in size has been declared toxic under CEPA and a danger to human and environmental health. Please visit the following site: http://www.ec.gc.ca/air/default.asp?lang=En&n=2C68B45C-1 to find a fact sheet

outlining the health effects of particulate matter. The proponent should also note that the following substances are declared toxic under the CEPA 1999: PM_{10}, Sulphur Oxides, Nitrogen Oxides.

- The National Pollutant Release Inventory (NPRI) provides Canadians with access to information on the releases and transfers of key pollutants in their communities. It is an important consideration in managing risks to the environment and human health as well as in monitoring indicators for the quality of our air, land, and water. It is also an indicator for corporate environmental performance. Legislated under the *Canadian Environmental Protection Act* (CEPA) 1999, the NPRI requires companies to report information on releases and transfers of pollutants to the Government of Canada on an annual basis. Please see the following link for details: http://www.ec.gc.ca/inrp-npri

Disposition:

Construction activities are not expected to occur between May 1 and August 13. The other comments and notifications are provided to the proponent by way of this Summary Report.

Manitoba Conservation and Water Stewardship – Air Quality Section

The following comments were provided:

- The Screen3 model results attached to the proposal may not be representative of the facility emissions. The emission rates used in the model are the ones listed in Table 3 (page 6 of the report) which characterizes the flue-gas stack emissions from the carbonizer system. Emissions from the Stirling engine, waste heat boiler and occasional flaring may not be included in the numbers used in the model.
- Volatile Organic Compounds (VOC) are not included in the predicted emissions and may need to be added. There may be a significant VOC emission resulting from the direct combustion (not cleaned by condenser or ESP) of pyrolysis gas because the combustion will also include combustion products from tar and condensables. [Note: The emission rates used (from the carbonizer) were based from directly burning untreated (not cleaned by condenser or ESP) pyrolysis gas (Section 9.2.2.2, page 26 of the proposal)]
- Potential PM emission from the feedstock handling and briquetting system are adequately addressed. Similarly, there is no significant concern for noise nuisance.

Disposition

Clauses 9 to 25 of the draft Environment Act Licence address air emissions.

Manitoba Conservation and Water Stewardship– Lands Branch

No concerns.

Disposition

No action needed.

Manitoba Conservation and Water Stewardship – Parks and Natural Areas Branch

No concerns.

Disposition

No action needed.

Manitoba Conservation and Water Stewardship– Sustainable Resource and Policy Branch

No concerns. The following comment was provided:

- The requirement for 2000 tonnes of wood chips as a biomass feedstock may provide an economic opportunity for existing forest companies in the central region if the demonstration project is successful and becomes a viable source for alternative energy.

Disposition

No action needed.

Manitoba Conservation and Water Stewardship – Water Stewardship Division

The following comments were provided:

- The Water Stewardship Division requires an *Environment* Act Licence to include the following:
    - The Licencee shall install backflow prevention equipment in accordance with the requirements of the Manitoba Plumbing Code, on the water supply connected to briquette making machine(s).
- The Water Stewardship Division submits the following comments:
    - The Water Stewardship Division does not object to this proposal, at this time.
    - The proponent needs to list all applicable regulations which with any use or disposal of liquid condensate must maintain compliance.
    - The proponent needs to be informed of the following for information purposes:
        - Erosion and sediment control measures should be implemented until all of the sites have stabilized.
        - *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 Conservation and Water Stewardship, Box 4558, Stonewall, Manitoba R0C 2Z0, telephone: (204) 467-4450, email: geoff.reimer@gov.mb.ca.

Disposition:

Existing legislation addresses the concern with respect to backflow prevention. Clause 39 of the draft Environment Act Licence addresses liquid condensate. The comments submitted as information are provided to the proponent by way of this Summary Report.

Manitoba Conservation and Water Stewardship – Wildlife & Ecosystem Protection Branch

No concerns.

Disposition

No action needed.

Manitoba Infrastructure and Transportation – Highway Planning and Design Branch

No concerns.

Disposition

No action needed.

PUBLIC HEARING:

A public hearing is not recommended.

CROWN-ABORIGINAL CONSULTATION:

It has been determined that Crown-Aboriginal consultation is not required for this project as it will be constructed on privately owned previously developed land and there are not expected to be any off property impacts.

RECOMMENDATION:

The Proponent should be issued a Licence for the construction and operation of a carbonizer to convert woody biomass to biocarbon and syngas in accordance with the specifications, terms and conditions of the attached draft Licence. Enforcement of the Licence should be assigned to the Environmental Operations Branch of Manitoba Conservation.

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

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