

REASONS FOR DECISION

WATER USE APPLICATION MN07-071

Selkirk First Nation

Pelly Crossing

The Yukon Water Board (“the Board”) has concluded deliberations pertaining to Water Use Licence Application MN07-071 for a Type A Licence for a municipal undertaking submitted by Selkirk First Nation.

The purpose of the application is the operation of a sewage sludge disposal facility 5 km south of Pelly Crossing, 300 m west of the Klondike Highway.

Notice of this application was provided in accordance with the requirements of the *Waters Act*. In response, the Board received interventions from the following parties:

Government of Yukon (“GY”), Department of Environment, and Selkirk Renewable Resources Council (“RRC”).

Notice of public hearing was provided in accordance with the *Waters Act* and the hearing was held on September 3, 2008.

In making licensing decisions pertaining to this application, the Board took into account the *Waters Act*, *Waters Regulation*, the application, recommendations from the interveners, the transcripts of the public hearing, the Board's standard licence requirements, Territorial Resource Base Map 115I/15, the *Yukon Environmental and Socio-economic Assessment Act* (“YESAA”) Decision Document, Chapter 14 of the Umbrella Final Agreement (“UFA”) and Board policies.

Environmental Assessment

This application required an environmental assessment under the YESAA.

Prior to making licensing decisions, the Board reviewed the YESAA Decision Document that is included in the water use register. As per section 86 of YESAA, the Board is also satisfied that the issuance of licence MN07-071 is not contrary to the terms and conditions included in the YESAA Decision Document.

Monitoring and Reporting

As part of the application, the Licensee did not provide any information on the proposed monitoring program for the facility. The Board included in condition 12 of the licence a list of monitoring and reporting requirements for the undertaking that will ensure that adequate information is obtained from monitoring the site and assessed to provide for ongoing assessment of the efficacy of operations and status of the facility.

Public Education

The Board considered the concern of the RRC that chemicals and hydrocarbons may be disposed of via the septic holding tanks and subsequently transferred to the sludge disposal facility. The Licensee committed to work with the RRC in formulating and implementing a plan to educate the public as per the proper disposal of household hazardous wastes and hydrocarbons. Although the Board did not include a condition in the licence to require an education program be implemented, the Board encourages both parties to continue to work cooperatively in educating the public. The licence does require the Licensee, in condition 12(k), to advise the Board of any activities that are conducted during the year to achieve this goal be reported in the Annual Report.

Composted Sludge

At the hearing, GY proposed criteria for composted sludge, to which the Licensee agreed. The criteria put forward by GY were based on standards developed in Saskatchewan. Questions were raised at the hearing as to why GY was proposing standards developed in Saskatchewan as opposed to those developed nationally. GY stated that the Canadian Council of Ministers of the Environment ("CCME") Guideline for Compost Quality (2005) was developed for municipal composting facilities where sewage sludge is not a major component and are not appropriate for use at this site.

Subsequent review of the CCME guideline indicates that they were developed for various feedstocks including wastewater treatment solids ("sludge"). Furthermore, the values proposed by GY at the hearing are the same as those outlined in the CCME Guideline for Compost Quality for Type B compost. Type B compost is intended for use in a restricted area, similar to the proposed use at this facility, where it can only be used for on-site reclamation purposes. Therefore, the Board determined that the CCME guideline is applicable for use for composted sewage sludge being generated at this site. The criteria for on-site use of composted sludge are outlined in condition 18 of the licence.

The Decision Document prohibits the removal of composted sludge offsite. As outlined in condition 18, composted sewage sludge must remain on site for on-site reclamation purposes. If the Licensee wants to remove the composted sludge for offsite use, they will need to apply for an amendment of the licence and have the proposed activity assessed under YESAA.

Groundwater Monitoring

GY recommended that a groundwater monitoring plan should be developed and implemented for the monitoring of groundwater quality downgradient of the facility. The Licensee responded to the intervention by agreeing that a groundwater monitoring program should be developed. The number of wells that should be installed as part of the program was discussed at the hearing. The Licensee agreed that, at a minimum, 3 wells would be needed to ensure the delineation of the groundwater flow direction and to ensure that the downstream monitoring wells are in the plume.

The Board determined that the licence should require, at a minimum, 3 wells, one upgradient and 2 downgradient of the sewage sludge disposal facility. Requirements for the groundwater monitoring plan are outlined in conditions 20 and 21 of the licence.

The Board also discussed the timing of the sampling of the wells and determined that the wells should be sampled annually between June 15 and August 15. The Board determined that this timeframe will allow the Licensee some flexibility in conducting the sampling, but will also ensure that if water is present in the wells that it will be in a liquid state and samples can be obtained.

At the hearing, GY proposed a list of parameters that should be included in the groundwater monitoring program, to which the Licensee agreed. The Board, in condition 30 of the licence, expanded the list proposed in the hearing to include a broader suite of parameters that should be monitored to assess any potential impacts to groundwater quality due to the operation of the facility. Extractable Petroleum Hydrocarbons (“EPH”) was selected over Total Petroleum Hydrocarbons by the Board as an appropriate measure for hydrocarbons in groundwater as it is consistent with *Protocol No. 5: Petroleum Hydrocarbon Analytical Methods and Standards*, which is a protocol prepared pursuant to the *Contaminated Sites Regulations* under the *Environment Act*.

Adaptive Management

The use of an adaptive management approach for prevention and detection of potential hydrocarbon contamination in the receiving environment was discussed at the hearing. The Board has directed that the Licensee is to submit an adaptive management plan in two steps as outlined in conditions 22 and 23 of the licence. A conceptual plan is to be submitted within 6 months of the effective date of the licence and must outline the key components of the proposed adaptive management plan including monitoring, assessment, indicators, triggers for action, and development of action plans. The final adaptive management plan is then to be submitted to the Board by October 31, 2008. This time frame was selected to provide the Licensee with sufficient time to incorporate the groundwater monitoring wells into the adaptive management plan.

UFA-Chapter 14

Map15I/15 is included in the Selkirk First Nation Final Agreement.

The project is not located on settlement land, however the Board noted that settlement land parcel SFN R-3A (located east of the North Klondike Highway) is approximately 300m east of the project.

In regards to Chapter 14 of the UFA, as to quantity, quality and rate of flow of water flowing on, through or adjacent to settlement land, including seasonal rate of flow the Board made the following determination:

In regards to quantity and quality of water, the Board concluded that the undertaking will not substantially alter the quantity, quality or rate of flow of water flowing on, through or adjacent to settlement land, including seasonal rate of flow.

Conclusion

The Board has approved the issuance of Water Use Licence MN07-071.



Chairperson
Yukon Water Board

December 10, 2028

Date