

YUKON WATER BOARD

Pursuant to the *Waters Act and Regulation*, the Yukon Water Board hereby grants a Type B water use licence for a municipal undertaking to:

McNevin Management Ltd.
705-601 Spadina Cres.
Saskatoon, SK S7K 3G8

LICENCE NUMBER: MN06-070

LICENCE TYPE: B

UNDERTAKING: MUNICIPAL

LOCATION: Km 371 Dempster Highway

MAP CO-ORDINATES: Latitude: 66° 22' N Longitude: 136° 43' W

PURPOSE: To obtain a maximum of 42.0 cubic metres of water per day from an infiltration groundwater well for municipal water supply and to operate an existing wastewater treatment and disposal facility through an existing sewage lagoon.

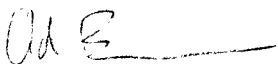
EFFECTIVE DATE: The effective date of this licence shall be the date that the signature of the Chairperson of the Water Board is affixed.

EXPIRY DATE: March 31, 2009

This licence shall be subject to the restrictions and conditions contained herein and to the restrictions and conditions contained in the *Waters Act* and the *Regulation* made thereunder.

Dated this 9 day of
November, 2007

Approved:



Witness



Chairperson
YUKON WATER BOARD

PART A - GENERAL CONDITIONSDefinitions

1.
 - a) "Act" means *Waters Act* and any amendments thereto.
 - b) "Application" means Water Use Application MN06-070, including any additional submissions and/or revisions, submitted to the Board by the Licensee, up to the date of the Board's decision.
 - c) "Board" means the Yukon Water Board.
 - d) "Inspector" means any person designated as an inspector under the Act.
 - e) "Regulation" means the *Waters Regulation* made under the Act.
 - f) "Waste" means any substance as defined in the Act.
 - g) "Watercourse" means any stream, lake, pond, river, creek, spring, ravine, or swamp whether ordinarily containing water or not.

Representations, Warranties and Undertakings

2. In this licence, the Board has relied on the representations, warranties and undertakings provided by the applicant in the material filed in the Application.

Other Laws

3. No condition of this licence limits the application of any other federal, territorial, first nation or municipal legislation.

Monthly Reports

4. The Licensee shall submit to the board, monthly reports that provide an update on the progress of designs and schedule for a new wastewater treatment facility.
5. Records shall be maintained of all water use, including at a minimum but not necessarily limited to, the quantity of water obtained measured in cubic metres per day, the date water was obtained and a description of the visible impacts that the withdrawal of water from the well has on the water level of the Eagle River. The Licensee shall provide the records to the Board as part of a monthly report.

Annual Reports

6. On or before the anniversary of the date of issuance of this licence, and for each year during which this licence is in effect, the Licensee shall submit an annual report to the Board. The report shall include the information required by the *Regulation* including, but not necessarily limited to:
 - a) copies of all orders, directions and correspondence relating to drinking water sampling or analysis from the Medical Health Officer or from a Health Officer,
 - b) the results of all analyses required by the monitoring program,
 - c) the results of the sampling from stations EP-1, EP-2 and EP-3, and
 - d) the inspection results, including photographs, repairs or plans for modification, required by the physical monitoring program.

Reports

7. Unless otherwise specified in this licence, all reports shall be submitted to the Board in an unbound form that is reproducible by standard photocopier and shall be accompanied by five (5) copies.
8. All reports shall be submitted in digital form on computer diskette using an IBM compatible format that is readable using commonly available software.

Correspondence

9. Where any direction, notice, order, or report under this licence is required to be in writing, it shall be given:
 - a) to the Licensee, if delivered, faxed or mailed by registered mail to the following address:

McNevin Management Ltd.
705-601 Spadina Cres.
Saskatoon, SK S7K 3G8
Fax: 306-653-0292

and shall be deemed to have been given to the Licensee on the day it was delivered or faxed, or seven (7) days after the day it was mailed, as the case may be.

- b) to the Board, if delivered, faxed or mailed by registered mail to the following address:

Yukon Water Board
Suite 106, 419 Range Road
Whitehorse, YT Y1A 3V1
Fax: 867-668-3628

and shall be deemed to have been given to the Board on the day it was delivered or faxed, or seven (7) days after the day it was mailed, as the case may be.

- c) The Board or the Licensee may, by notice in writing, change its address for delivery.

Non-Compliance

10. In the event that the Licensee fails to comply with any provision or condition of this licence, the Board may, subject to the Act, cancel the licence.

Other Uses

11. If, subsequent to the issuing of this licence, the Licensee uses water and/or deposits Waste in one or more ways not authorized in this licence, and the combined effect of those uses and/or deposits of Wastes, as determined by an Inspector:
 - a) has no potential for significant adverse environmental effects,
 - b) does not interfere with existing rights of other water users or Waste depositors, and
 - c) satisfies the criteria set out in column 2 of Schedule 8 of the *Regulation*,no amendment to this licence will be required for that use of water and/or deposit of Waste.

Spills and Unauthorized Discharges

12. The Licensee shall immediately contact the 24-hour Yukon Spill Report number (867) 667-7244 and implement the Spill Contingency Plan, should a spill or an unauthorized discharge occur. A detailed written report on any such event, including but not limited to, dates, quantities, parameters, causes and other relevant details and explanations, shall be submitted to the Board not later than ten (10) days after the occurrence.
13. All personnel shall be trained in procedures to be followed and the equipment to be used in the containment of a spill.

General

14. Where there is a discrepancy between the Application and the conditions of this licence, the conditions of this licence shall prevail.
15. All work authorized by this licence shall occur on property that the Licensee has the right to enter upon and use for that purpose.
16. Maintenance equipment shall be mechanically sound and free of leaks.

Term of Licence

17. The term of this licence is for the period from the effective date to March 31, 2009.

PART B - OPERATING CONDITIONS

Description of Water Use and Deposit of Waste

18. The Licensee is hereby authorized to:
- a) obtain a maximum quantity of 42.0 cubic metres of water per day from a well located within the bridgehead reserve and adjacent to the Eagle River; and
 - b) store municipal wastewater in existing sewage lagoon; and
 - c) discharge municipal wastewater via exfiltration to ground,
- as described in the Application, and subject to the conditions of this licence.

Existing Sewage Lagoon

19. The Licensee shall operate and maintain the existing sewage lagoon in such a manner that there will be no discharge to surface waters or to land outside of the sewage lagoon.
20. A freeboard of not less than 0.60 metres shall be maintained in the sewage lagoon at all times.
21. The perimeter of the sewage lagoon shall be fenced so as to exclude the public and animals.
22. The fence surrounding the sewage lagoon shall include posted warning signs to alert the public of the presence and hazards of the sewage lagoon. The signage shall be placed every 15 metres along the fence and at the roadway entrances to the sewage lagoon and shall be repaired or replaced as required.
23. Surface runoff shall not enter the sewage lagoon.

Sludge Disposal

24. The Licensee shall submit to the Board, at least ninety (90) days prior to the disposal of any sludge, details of the proposed method of removal and disposal and the location of disposal.
25. All sludge disposal areas operated by the Licensee shall be located, posted and fenced so as to adequately ensure public safety.
26. The Licensee shall remove sludge buildup at the bottom of the lagoon, should the sludge be compromising the effectiveness of the sewage lagoon.

Design of New Sewage Treatment Facility

27. The Licensee shall design a new sewage treatment facility and provide monthly updates on the progress of designs and schedule for construction for a new wastewater treatment facility.

Monitoring Program

28. The Licensee shall comply with the following monitoring program:

- a) The location of the sampling stations, as indicated in Figure 3 of the Application, shall be as follows:

<u>Sampling Station</u>	<u>Description</u>
EP-1	Located approximately 1 kilometre directly downgradient from the sewage lagoon, within a small Watercourse,
EP-2	Located in a small Watercourse downstream of EP-3, and approximately 1 Km downstream of EP-1,
EP-3	Control station located in an adjacent Watercourse not affected by the Eagle Plains Lodge or Dempster Highway.

- b) Stations EP-1, EP-2 and EP-3 shall be monitored annually in the months of June and August and shall be sampled for the following parameters:

pH	conductivity
total nitrogen (as N)	nitrites and nitrates (as N)
total phosphorus (as P)	organic phosphorus (as P)
inorganic phosphorus (as P)	oil and grease
faecal coliform (no./100ml)	Total Suspended Solids (mg/l)
sulfate (mg/L)	chloride (dissolved mg/L)
BOD (mg/L)	ammonia (as N)
total ICP metals	flow
temperature	

- c) Results of the sampling from stations EP-1, EP-2 and EP-3 shall be submitted to the Board within 30 days of sampling.
- d) All sampling and sample preservation shall be done according to commonly accepted methods.
- e) All analyses shall be conducted in accordance with methods prescribed in the current edition for "Standard Methods for the Examination of Water and Wastewater".

Physical Monitoring Program

29. Within one year of the effective date of this licence, the Licensee shall submit to the Board a stability assessment of the existing sewage lagoon, sealed by a Professional Engineer licensed to practice in Yukon.
30. The Licensee shall inspect the existing sewage lagoon monthly and repair the lagoon as required.
31. Inspection results, including photographs, repairs or plans for modification, shall be included in the monthly report.

PART C- DECOMMISSIONING AND/OR ABANDONMENT

32. The Licensee shall notify the Board one year prior to any decommissioning and/or abandonment of the existing sewage lagoon and shall comply with the following requirements:
 - a) The Licensee shall decommission and remove the complete sewage lagoon and associated structures, as described in the Application, and submit a report to the Board verifying that the sewage lagoon has been removed, the site remediated and reclaimed.
 - b) All disturbed ground surfaces shall be re-graded in a manner which is consistent with the topography of the site and which prevents erosion and surface runoff from carrying sediment into any Watercourse. Where soil conditions permit, disturbed areas shall be re-vegetated with appropriate reclamation seeds and/or plants.
 - c) All construction materials, equipment, temporary structures and debris shall be removed from the site upon completion of the work.
-

REASONS FOR DECISION

WATER USE APPLICATION MN06-070 MCNEVIN MANAGEMENT LTD. EAGLE PLAINS COMPLEX

The Yukon Water Board ("the board") has concluded deliberations pertaining to Water Use Licence Application MN06-070 for a Type B Licence for a municipal undertaking. The purpose of the application is to obtain water from a groundwater infiltration well for drinking water and to deposit a waste to an existing sewage lagoon at the Eagle Plains Complex, Dempster 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:

Vuntut Gwitchin First Nation, and
Government of Yukon-Environment ("GY").

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 board's standard licence requirements, Mining Maps 116I/02 and 116I/07, *Yukon Environmental and Socio-economic Assessment Act* ("YESAA") Decision Document, Chapter 14 of the Umbrella Final Agreement ("UFA") and board policies.

Request for Public Hearing

The board received a request for a public hearing from Vuntut Gwitchin First Nation. During initial deliberations of this application the board determined that notice would be given for a public hearing to hear from parties regarding the continued use of the existing sewage lagoon and potential effects to the downstream water quality. After the notice was published, the Licensee responded to the interventions providing the board with an argument that a public hearing would be unnecessary and proposed the licence term be shortened to 16 months to design and construct a new sewage lagoon. The board determined that a public hearing would be cancelled in light of the fact the existing sewage lagoon would be decommissioned in the near future and a new facility will be proposed for wastewater and sewage treatment resulting from the Eagle Plains Complex.

Term of Licence

Various proposals were made in regards to the term of the licence. Originally, the Licensee proposed that the licence expire in the year 2031 which would have provided a term of approximately 24 years. Vuntut Gwitchin First Nation recommended that the licence term be a maximum of 2 years which should include a licence requirement for an engineered sewage facility. GY recommended that the term be 2 to 3 years to allow studies to be conducted to determine downstream effects. The Licensee responded to the interventions requesting the board issue a licence for a term of 16 months which would allow the Licensee time to design and construct a new treatment facility. The board further noted that the Licensee proposed that the

board consider issuing a licence from August 13, 2007 to December 13, 2008. August 13, 2007 was the expiry date of licence MN01-040 and the Board determined that the licence term would not predate the board's deliberation of application MN06-070.

The board set the expiry date of the licence as March 31, 2009 to provide the Licensee with a 16 month term in which to design a new wastewater treatment facility for the Eagle Plains Complex.

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 MN06-070 is not contrary to the terms and conditions included in the Decision Document.

Compliance with Licence Conditions

Vuntut Gwitchin First Nation indicated concern that conditions of the licence were not being complied with by the Licensee and that the board should implement mechanisms to ensure compliance with the licence. It is the board's responsibility as a regulator to include any conditions in a water licence that the board deems necessary for any particular undertaking. The board diligently strives to ensure that conditions of a licence are written so as to be understood by any party reading the licence, as well as, being enforceable. It is not the responsibility of the board to monitor a Licensee or the undertaking to ensure compliance with conditions of a licence, that role is the responsibility of Government of Yukon.

New Wastewater Treatment System

The board advises all parties that Water Use Licence MN06-070 does not authorize the construction of, or use of, a new wastewater treatment system. The board expects the Licensee to apply for a new water use licence that includes a proposal to construct and use a new wastewater treatment facility for the Eagle Plains Complex, along with the typical information requirements for type B municipal undertakings that include sewage disposal, which includes the requirement for design drawings sealed by a Professional Engineer licenced to practice in Yukon. The new application may require environmental assessment as well as the requirement for a water use licence and the Licensee is advised to consider submitting applications for these processes well in advance of the expiry date of licence MN06-070.

Due to the short term of this licence, the board has included a requirement in the licence for the Licensee to submit monthly reports to the board. The monthly reports are to include an update on the progress of designs and schedule for the construction of the new wastewater treatment facility. The monthly reports will be distributed to various government departments.

Effluent Standards

GY proposed that the licence include effluent discharge standards should there be an emergency release of effluent from the existing sewage lagoon. The board determined that the licence will not include effluent standards for a surface discharge as the only authorized discharge of effluent from this facility shall be via exfiltration to ground.

Studies to Determine Environmental Effects

GY recommended that further studies should be required with respect to aquatic life, soils and streamside vegetation including delineation of the flow path from the lagoon and that the results of the studies should be provided within a two year period. The board determined that the recommended studies will not be included in this licence due to the short term of this licence along with the board's expectation that the existing sewage lagoon would be decommissioned in the near future. The board advises the Licensee that a proposal for the studies referenced above, are to be included as part of the application for the new wastewater treatment facility.

Monitoring Program

GY recommended that the licence include a fourth control monitoring station as part of the monitoring program and that the station be located in an adjacent tributary. GY also proposed the board add a sampling station within the lagoon itself and another sampling station to be at a seep, when present, that is down slope of the sewage lagoon. The Licensee responded and agreed with the recommendation but requested that these recommendations be included in the studies to determine environmental effects.

The board determined that the recommendation of GY regarding the additional control and sampling stations would not be included in the licence. The Licensee is to include these details as part of the proposal for studies to be conducted, which the board expects to see as part of the application for the new wastewater treatment facility.

The licence does include the monitoring stations that were previously included in licence MN01-040 and will be satisfactory for the term of this licence. The board however, strongly advises the Licensee of the responsibility to ensure that the requirements of the monitoring program in the licence are carried out completely. GY indicated that the remoteness of the site, logistical issues and poor planning on behalf of the Licensee resulted in a failure to meet the sampling and reporting requirements of the licence. Licence MN06-070 requires the monitoring to occur in the month of June and August and will leave the timing during those months to be determined by the Licensee. Due to the short duration of this licence, the monitoring will only occur in the year 2008. The Licensee has at least six months from the issuance of licence MN06-070 to plan for the monitoring and sampling events to ensure compliance with the licence.

GY also provided a list of parameters that should be included in the licence that are consistent with the requirements of expired licence MN01-040, with the addition of temperature and flow. The board determined that the licence will include the list of parameters proposed by GY including the addition of temperature and flow.

GY recommended that the lab results from the analysis of the samples taken as part of the monitoring program be submitted to the board and to the regulator within 30 days of receipt of lab results. The Licensee agreed to the recommendations made by GY in relation to the monitoring program but requested the board consider submission of the lab results within 60 days. The board determined that, due to the short term of this licence, the licence will include the requirement for the lab results to be submitted in 30 days.

Physical Monitoring Program

GY recommended that the licence include a requirement for monthly inspections and an annual inspection by a Professional Engineer with a report of the inspections to be submitted as part of the annual report.

In regards to monthly inspections, the board determined that the licence will only require repairs to be conducted since the existing sewage lagoon will be decommissioned in the near future. The licence does not authorize upgrades to the existing sewage lagoon. The board determined that the licence will require monthly submissions of inspections results due the short term of licence.

The board determined that the licence will require the Licensee to submit a stability assessment of the existing sewage lagoon, sealed by a Professional Engineer licenced to practice in Yukon within one year of the effective date of the licence.

UFA-Chapter 14

Maps 116I/02 and 116I/07 are included in the Vuntut Gwitchin First Nation Final Agreement. The board reviewed Mining Maps 116I/02 and 116I/07 for the location of settlement land in relation to the Eagle Plains Complex. The Board determined that the Eagle Plains Complex is adjacent to Vuntut Gwitchin First Nation settlement land parcel R-6A.

The Licensee proposed in the application to obtain a maximum quantity of 42 cubic metres of water per day from an existing groundwater infiltration well, which is located with the bridgehead reserve and adjacent to the Eagle River. The purpose of the use of water is for drinking water at the Eagle Plains Complex.

The board determined that the use of water from the well would not substantially alter the quantity or rate of water flowing on, through or adjacent to settlement land, including seasonal rate of flow in the Eagle River.

In review of the quality of water, parties expressed concerns related to the potential impact that the subsurface discharge of effluent from the sewage lagoon might flow to surface waters and might negatively impact down gradient vegetation.

In review of the information provided by the parties, including the responses provided by the Licensee, the board determined that sufficient evidence has not been provided to conclude that there is a substantial alteration to the quality of water. Therefore, the board determined that the quality of water flowing on, through or adjacent to settlement land will not be substantially altered.



Chairperson
Yukon Water Board

November 21, 2007
Date