

YUKON WATER BOARD

Pursuant to the *Waters Act* and *Regulation*, the Yukon Water Board, hereinafter referred to as the Board, hereby grants to

City of Whitehorse
2121 Second Avenue
Whitehorse, Yukon Y1A 1C2

hereinafter called the Licensee, the right to obtain, divert, store, alter or otherwise use water, and deposit a waste subject to the restrictions and conditions contained in the *Waters Act* and *Regulation* made thereunder and subject to and in accordance with the conditions specified in this licence:

Licence Number: MN00-031

Water Management Area: 02 Yukon

Licence Type: A

Nature of Undertaking: Municipal

Location: Yukon River at Whitehorse.

Tributary of: none

Latitude: 60° 48' 02" (max) Longitude: 135° 08' 00" (max)
Latitude: 60° 47' 02" (min) Longitude: 135° 05' 00" (min)

Purpose: To obtain, divert, store and alter a flow of water and to deposit a waste.

Effective Date of Licence: The date that the signature of the Minister of the Executive Council Office is affixed.

Expiry Date of Licence: November 1, 2018

This licence is an amendment to water use licence MN93-001 and all amendments thereto.

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PART A - GENERAL CONDITIONS

1. Definitions

- a) "Act" means the *Waters Act* and any amendments thereto.
- b) "Application" collectively means Water Use Application MN00-031 and any additional submissions and/or revisions submitted to the Board by the Licensee up to the date of the Board's decision to issue this licence.
- c) "Board" means the Yukon Water Board.
- d) "Dam Safety Guidelines" means the Dam Safety Guidelines issued by the Canadian Dam Association (1999) or its most recent revision.
- e) "Deleterious Substance" means deleterious substance as defined in Section 34(1) of the *Fisheries Act*.
- f) "Inspector" means any person designated as an inspector under the *Act*.
- g) "*Regulation*" means the Waters Regulation.
- h) "Waste" means any substance defined in Section 2 of the *Act*.

Representations, Warranties and Undertakings

- 2. The Board has relied on the representations, warranties and undertakings provided by the Licensee in the material filed in the Application. Such representations, warranties and undertakings are considered by the Board to be a part of the licence, but shall be subject to, and may be modified by, the conditions of the licence.
- 3. Where there is a discrepancy between the Application and the conditions of this licence, the conditions of this licence shall prevail.
- 4. 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.

Other Laws

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

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6. The Licensee shall comply with the requirements of the *Yukon Regulations Respecting Public Health*, pursuant to the *Public Health and Safety Act*, including, but not limited to, any orders issued by the Medical Officer of Health for drinking water quality and drinking water sampling and analysis.

Correspondence

7. 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:

City of Whitehorse
2121 Second Avenue
Whitehorse, Yukon Y1A 1C2
Fax: (867) 668-8386

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 sent by registered mail to the following address:

Yukon Water Board
Suite 106, 419 Range Road
Whitehorse, Yukon Y1A 3V1
Fax: (867) 456-3890

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

Non-Compliance

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

Deleterious Substances

9. Subject to the conditions of this licence, deleterious substances shall be used, transported, stored and disposed of in such a manner that they are not deposited in, or allowed to be deposited in, any waters.

Term of Licence

10. The term of this licence is from the Effective Date to November 1, 2018.

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Reports

11. All monitoring data and reports shall be submitted to the Board in an unbound printed form that is reproducible by standard photocopier and shall be accompanied by five copies.
12. All monitoring data and reports shall also be submitted in digital form, using an IBM compatible format that is readable using commonly available software.

Annual Reports

13. Annual reports shall be submitted to the Board by the Licensee. The reports shall cover the period from January 1 to December 31 of each year and shall be submitted to the Board on or before April 1 of the following year.
14. Annual reports shall include the information required by this licence and by the *Regulation*, including, but not necessarily limited to, summaries of all data generated as a result of the monitoring requirements of this Licence, including analysis and interpretation by a qualified individual or firm and a discussion of any variances from base line conditions or from previous years' data.

Monthly Reports

15. Unless otherwise specified in this licence, the Licensee shall forward to the Board a copy of all data collected as part of the monitoring programs of this licence. The data shall be forwarded to the Board no more than thirty days after the conclusion of the month in which that data was collected.

Spills and Unauthorized Discharges

16. Within 90 days of the Effective Date, the Licensee shall submit a spill contingency plan to the Board. Any revisions to the plan shall be delivered to the Board within ten days of the revision.
17. The Licensee shall immediately contact the 24-hour Yukon Spill Report telephone number (867) 667-7244 and implement the most recent spill contingency plan that has been filed with the Board, 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 delivered to the Board not later than ten days after its occurrence.

Hazardous Materials Storage

18. A complete inventory of chemicals, fuels, oils, lubricants and other hazardous materials contained in facilities relating to the water uses authorized by this licence shall be maintained by the Licensee.

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19. Hazardous materials, except for those required to operate and maintain equipment relating to the water uses authorized by this licence, shall be stored or transferred a minimum of thirty metres from any watercourse.

PART B - OPERATING CONDITIONS

20. Subject to the terms of this licence, the Licensee is hereby authorized to:
- a) obtain water from Schwatka Lake, upstream of the Whitehorse Rapids Hydroelectric Dam on the Yukon River, and from wells in the Selkirk and Whitehorse aquifers at a total rate not exceeding 20,000 m³ per day; and
 - b) convey the water via pumps and pipelines; and
 - c) store the water in reservoirs; and
 - d) use the water for municipal purposes; and
 - e) collect and convey sewage to the Crestview, Whitehorse and Livingston Trail sewage treatment facilities; and
 - f) store wastewater in the Crestview, Whitehorse and Livingston Trail sewage treatment facilities; and
 - g) construct and operate a treated wastewater discharge pipeline and outfall from the Livingston Trail Environmental Control Facility to the Yukon River; and
 - h) discharge treated wastewater to the Yukon River from the Livingston Trail Environmental Control Facility; or
 - i) discharge treated wastewater to the Pothole Lake from the Livingston Trail Environmental Control Facility; and
 - j) discharge treated wastewater to groundwater from the Crestview wastewater treatment facility; and
 - k) collect, convey and discharge stormwater to the Yukon River through existing stormwater outfalls,

all as described in the Application, and subject to the terms and conditions of this licence. Where there is a discrepancy between the Application and this licence, the terms of this licence shall prevail.

21. Wastewater from Crestview shall be directed to the Crestview wastewater treatment facility.

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22. All water supply, sewage collection, sewage treatment, sewage disposal and stormwater systems shall be maintained in good repair and in a manner which is consistent with generally accepted municipal practices for the types of systems being used.
23. All wastewater biosolid disposal areas shall be fenced and posted with warning signs.
24. The Licensee may discharge treated municipal wastewater to the Pothole Lake during the period of August 1 to October 31 or to the Yukon River during the period of September 1 to October 31.
25. If the Licensee elects to discharge treated wastewater to the Yukon River in any year, notification shall be provided to the Board no later than July 15 of that year together with evidence of public notice having been made to the same effect.
26. The water level in the Pothole Lake shall be maintained at least two metres below the natural lowest height of land surrounding the lake.

PART C - EFFLUENT QUALITY STANDARDS

27. Treated wastewater discharged from the Livingston Trail Environmental Control Facility to either the Yukon River or the Pothole Lake shall meet the following effluent quality standards:

Parameter	Concentration
Faecal coliforms	2000 MPN/100 ml
BOD	45 mg/L
pH	6 - 9
Suspended solids	60 mg/L
Oils and Greases	5 mg/L
96-hour Static LT ₅₀ Bioassay (100% concentration)	Non-toxic

PART D - RECEIVING WATER STANDARDS

28. The Licensee shall ensure that the receiving water standards specified below are met outside of the initial mixing zones. For faecal coliform, the initial mixing zone is defined as a distance extending 750 metres downstream from the point of discharge to the Yukon River. For all other parameters, the initial mixing zone is defined as a distance extending 300 metres downstream from the point of discharge to the Yukon River.

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Parameter	Receiving Water Standard
Faecal Coliform	Concentration not to exceed 200 MPN per 100 ml.
Dissolved Oxygen	Decrease from a point upstream of the point of discharge to the Yukon River not to exceed 10% and in no case shall the concentration be less than 4 mg/L.
Oil and Grease	Concentration not to exceed 1.0 mg/L at the river surface.
Organisms	No undesirable change in productivity.
Floating solids and scum	Negligible increase.
Metals	Negligible increase.

PART E - DESIGN, CONSTRUCTION AND MAINTENANCE

29. During the term of this licence, the Licensee shall maintain all works in good order in accordance with sound engineering and environmental practices.
30. The Licensee shall submit to the Board final detailed design construction drawings, specifications, quality assurance/quality control procedures and/or operating procedures for the construction of any facilities or structures authorized by this licence, but shall not begin construction until such time as the Board has notified the Licensee to proceed. All such submissions shall be sealed by a Professional Engineer licenced to practice in Yukon. These facilities and structures shall include but not be limited to a treated wastewater discharge pipeline and outfall from the Livingston Trail Environmental Control Facility to the Yukon River.
31. At least ten days prior to the proposed date of commencement of construction of any structure or facility, the Licensee shall submit to the Board a written notification, together with a detailed construction schedule and the name and contact number(s) of the construction superintendent.
32. During construction, where site conditions require minor design modifications to a structure or facility authorized by this licence, the Licensee shall notify the Board, in advance of implementation, of the details of any modifications or variations from final detailed designs, specifications and quality assurance/quality control procedures previously submitted to the Board. The notice shall include an explanation of the reasons for the change and an assessment of the potential impact on the performance of the structure. The notice shall be sealed by a Professional Engineer licenced to practice in Yukon.
33. All disturbed ground surfaces resulting from construction activities shall be revegetated by planting or seeding.
34. As-constructed (record) drawings and construction reports for all structures and facilities shall be submitted to the Board within ninety days of the completion of construction. Each submission shall be sealed by a Professional Engineer licenced to practice in Yukon.

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35. The Licensee shall maintain signage around the perimeters of the Livingston Trail Environmental Control Facility, the Crestview wastewater treatment facility, the Pothole Lake, and along the bank of the Yukon River in the vicinity of monitoring stations YRB-1 and YRB-2 warning the public of the existence of a sewage treatment facility and the potential for diminished surface and groundwater quality.

PART F - MONITORING AND SURVEILLANCE

36. All earthfill water and wastewater storage structures shall be inspected by September 30 of each year of this licence by a Professional Engineer licenced to practice in Yukon. The results of the inspection, including all problems identified, remedial measures proposed, and remedial measures implemented, shall be compiled in a report that shall be submitted to the Board by November 30 of each year.
37. Each year between September 15 and October 15, the bank of the Yukon River extending from a point 200 metres upstream of monitoring station YRB-2 to a point 200 metres downstream of monitoring station YRB-1 shall be inspected by a Professional Engineer licenced to practice in Yukon, for evidence of seepage or instability relating to treated wastewater discharge to the Pothole Lake. A report on the inspection and any recommended remedial measures shall be submitted to the Board by November 30 of each year.
38. All data collection and analysis shall be conducted in accordance with the current edition of Standard Methods for the Examination of Water and Waste Water, prepared and published jointly by the American Water Works Association and the Water Pollution Control Federation.
39. The Licensee shall comply with the monitoring program attached as Schedule A to this licence.

PART G - STUDIES

Stormwater Discharge Study

40. Within six months of the Effective Date of this licence, the Licensee shall submit to the Board a plan to conduct a study of stormwater discharges to the Yukon River; however, the Licensee shall not implement the plan until notified by the Board to do so. The study shall address, at a minimum:
 - a) the characterization of stormwater discharge quality, including those under different precipitation conditions;
 - b) the impacts of the discharges;
 - c) the development of appropriate stormwater discharge standards; and
 - d) the development of a plan to mitigate any significant negative impacts identified.

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- 41. The Stormwater Discharge Study Plan shall include a schedule for reporting data, conclusions and any proposed mitigative measures.
- 42. The Licensee shall carry out the Stormwater Discharge Study when instructed to do so by the Board.

PART H - DECOMMISSIONING

- 43. In the event of decommissioning of the undertaking, all structures and appurtenances authorized by this licence shall either be removed or left in stable condition which does not present a risk to people or the environment. Prior to the commencement of decommissioning work, the Licensee shall submit to the Board a final plan for the reclamation of the project site. The plan shall be designed to ensure long-term stability, maintenance and/or replacement of any structures remaining after closure, minimize and/or mitigate environmental impacts, and provide for ongoing monitoring.

Approved:

This 28 day of July, 2003

Karyn Amour
Witness

[Signature]
Minister, Executive Council Office

Issued by the Yukon Water Board:

This 29 day of July, 2003

[Signature]
Witness

[Signature]
Chairperson

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SCHEDULE A - PART 1 - LOCATIONS OF MONITORING STATIONS

Station	Description
WH 1	Raw water supply from Yukon River and Schwatka Lake at the Selkirk pumphouse.
WH 2	Raw water supply from Selkirk Aquifer at the pumphouse.
WH 3	Treated water supply at the Selkirk pumphouse.
WH 4	Discharge from storm sewers at Strickland Street outfall.
WH 5	Influent to Crestview sewage lagoon.
WH 6a	Influent to Marwell lift station.
WH 6b	Influent from upper Porter Creek.
WH 6c	Combined Marwell and Porter Creek influent to Livingston Trail Environmental Control Facility.
WH 7	Treated wastewater from primary cells of the Livingston Trail Environmental Control Facility.
WH 8	Influent to long term storage impoundment at the Livingston Trail Environmental Control Facility.
WH 9a	Water from the long term storage impoundment at the Livingston Trail Environmental Control Facility collected as depth-integrated composite samples at four stations in the impoundment.
WH 9b	Treated wastewater from the discharge manhole at the Livingston Trail Environmental Control Facility.
WH 10	Yukon River immediately upstream of outfall from the Livingston Trail Environmental Control Facility (mid channel).
WH 11	Yukon River approximately 300 metres downstream of outfall from the Livingston Trail Environmental Control Facility (mid channel).
WH 12	Yukon River approximately 750 metres downstream of outfall from the Livingston Trail Environmental Control Facility (mid channel).
GW-1	Monitoring well approximately 30 metres southeast of the primary anaerobic storage lagoons at the Livingston Trail Environmental Control Facility.
GW-2	Monitoring well southwest of facultative lagoons at the Livingston Trail Environmental Control Facility.
GW-3	Monitoring well southwest of long-term storage impoundment at the Livingston Trail Environmental Control Facility.
GW-4	Monitoring well near northern margin of long-term storage impoundment at the Livingston Trail Environmental Control Facility.
PHL	A site situated within the Pothole Lake at 10280N, 3693.6E, 682.49 m asl.
YRB-1	Monitoring well located in the bed of the Yukon River at the waters edge 850m due south of the Pothole Lake at 9483N, 3896E, 628.09 m asl.
MW-1	Monitoring well located between PHL and Yukon River approximately 500m north-northwest from closest point to Yukon River at 9973.68N, 3734.52E, 682.49 m asl.
MW-2	Monitoring well located between PHL and Yukon River approximately 300m north-northwest from closest point to Yukon River at 9769.43N, 3808.34E, 654.91 m asl.
MW-4a	Monitoring well located between PHL and Yukon River approximately 30m due north from closest point to Yukon River at 9509.4N, 3870.7E, 634.75 m asl.

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**SCHEDULE A, PART 2
MONITORING SCHEDULE, SAMPLING LOCATIONS AND PARAMETERS**

Table 1 of 5

Monitoring Location/Parameter	WH-1	WH-2	WH-3	WH-4	WH-5	WH-6a	WH-6b	WH-6c
Water Level or Flow	D	D	D			D	D	D
pH				B	Q(C)			Q(C)
Temperature (°C)					Q(C)			Q(C)
Ammonia (mg/L)					Q(C)			Q(C)
BOD (mg/L)					Q(C)			Q(C)
COD (mg/L)				MS				
Oil & Grease (mg/L)				BMS	Q(C)			Q(C)
Total Suspended Solids (mg/L)					Q(C)			Q(C)
Faecal Coliforms (MPN/100 ml)				B	Q(C)			Q(C)
Total Coliforms (MPN/100 ml)					Q(C)			Q(C)
Conductivity (µmhos/cm)					Q(C)			Q(C)
Total Phosphate (mg/L as P)					Q(C)			Q(C)
Chloride (mg/L)				B				
Total Zinc (mg/L)				B				
Total Copper (mg/L)				B				
Total Cadmium (mg/L)				B				
Total Lead (mg/L)				B				
Phenols (mg/L)				MS				
Giardia					Q(C)			Q(C)

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Schedule A Part 2, Table 2 of 5

Monitoring Location/Parameter	WH-7	WH-8	WH-9a	WH-9b	WH-10	WH-11	WH-12
Water Level or Flow			PD	DD(3)			
pH	Q ₁	Q ₁	PD	DD(3)	PDAD	PDAD	
Temperature (°C)	Q ₁	Q ₁	PD	DD(3)	PDAD	PDAD	
Ammonia (mg/L)	Q ₁	Q ₁	PD	DD(3)	PDAD	PDAD	
BOD (mg/L)	Q ₁	Q ₁	PD	DD(3)			
Oil & Grease (mg/L)			PD	DD(3)			
Dissolved O ₂ (mg/L)	Q ₁	Q ₁	PD	DD(3)	PDAD	PDAD	
Total Suspended Solids (mg/L)	Q ₁	Q ₁	PD	DD(3)			
Faecal Coliforms (MPN/100 ml)	Q ₁	Q ₁	PD	DD(3)	PDAD	PDAD	PDAD
Total Coliforms (MPN/100 ml)			PD				
Conductivity (µmhos/cm)			PD	DD(3)	PDAD	PDAD	
Total Phosphate (mg/L as P)	Q ₁	Q ₁	PD	DD(3)	PDAD	PDAD	
Chloride (mg/L)				DD(3)			
Nitrate & Nitrite (mg/L)				DD(3)			
ICP Total Metals*			PD	DD(3)	PDAD	PDAD	
LT ₅₀ Bioassay (100%)			PD	DD(3)			
Giardia	Q ₁	Q ₁	PD	DD(3)			

Schedule A, Part 2, Table 3 of 5

Monitoring Location/Parameter	GW-1	GW-2	GW-3	GW-4
pH	TA	TA	TA	TA
Temperature (°C)	TA	TA	TA	TA
Ammonia (mg/L)	TA	TA	TA	TA
BOD (mg/L)	TA	TA	TA	TA
Dissolved O ₂ (mg/L)	TA	TA	TA	TA
Faecal Coliforms (MPN/100 ml)	TA	TA	TA	TA
Conductivity (µmhos/cm)	TA	TA	TA	TA
Chloride (mg/L)	TA	TA	TA	TA
Nitrate & Nitrite (mg/L)	TA	TA	TA	TA Y W B

Schedule A, Part 2, Table 4 of 5

Monitoring Location/Parameter	Pothole Lake prior to discharge		Pothole Lake during discharge		Pothole Lake Post Discharge		Groundwater Monitors
	PHL	YRB-1	PHL	YRB-1	PHL	YRB-1	
Water Level or Flow	PD	PD	D	1xDD	Q ₂	Q ₂	MW1, 2 & 4A
pH		PD		1xDD		Q ₂	W/M4
Temperature (°C)		PD		1xDD		Q ₂	
Ammonia (mg/L)		PD		1xDD		Q ₂	
Oil & Grease (mg/L)		PD		1xDD		Q ₂	
Dissolved O ₂		PD		1xDD		Q ₂	
Total Suspended Solids (mg/L)		PD		1xDD		Q ₂	
Total Dissolved Solids (mg/L)		PD		1xDD		Q ₂	
Faecal Coliforms (MPN/100 ml)		PD		1xDD		Q ₂	
Chloride (mg/L)		PD		1xDD		Q ₂	Q ₁
Nitrate & Nitrite (mg/L)		PD		1xDD		Q ₂	Q ₁
ICP Dissolved Metals*		PD		1xDD		Q ₂	
Total Organic Carbon (mg/L)		PD		1xDD		Q ₂	
Total Phosphate (mg/L as P)		PD		1xDD		Q ₂	

Schedule A, Part 2, Table 4 of 5

Parameter	Location/Sampling Frequency
Sludge	Sludge elevations shall be monitored annually in the primary treatment cells of the Crestview and Whitehorse wastewater treatment facilities and every five years in the primary treatment cells of the Livingston Trail Environmental Control Facility.

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SCHEDULE A, PART 3 - SAMPLING FREQUENCIES/NOTES

Key	Frequency
D	Daily
M	Monthly during discharge
Q ₁	Quarterly
Q ₂	Quarterly beginning within 2 weeks after end of discharge
Q(C)	Quarterly (24 hour Composite Sample)
B	During Break-up
PD	Prior to Discharge
PDAD	Prior to, During and After Discharge
1xDD	Once During Discharge
DD(3)	Three Times During Discharge
MS	Mid-season and September
BMS	During Break-up, Mid-season and September
TA	Three times per year
W/M4	Weekly during discharge and Monthly for a period of four months after the end of discharge

Note: * ICP Dissolved and Total Metals Analysis shall include Al, Sb, As, Ba, Be, Bi, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mn, Mo, Ni, P, K, Se, Si, Ag, Na, Sr, S, Tl, Ti, V, Zn

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Reasons For Decision
Water Use Licence MN00-031, Amendment to MN93-001
City of Whitehorse

The Water Board has concluded deliberations pertaining to water use application MN00-031, which is an application from the City of Whitehorse ("the City") to amend water use Licence MN93-001, a Type A licence for municipal undertaking. The purpose of the amendment application was to allow the discharge of treated effluent from the Livingston Trail Environmental Control Facility to a pothole lake. Discharge via the pothole lake has been licensed in the past, for fixed periods of time, in order to test the system.

Notice of public hearing was provided in accordance with the requirements of the *Yukon Waters Act*. In response, the Board received interventions from:

Indian Affairs and Northern Development Canada ("DIAND")
Government of Yukon, Community and Transportation Services
Government of Yukon, Environmental Health

A public hearing into the application was held in Whitehorse June, 2002. Subsequently, a draft licence was issued and all parties were invited to participate, through written submissions, in a technical edit of the draft licence.

Subsequent to the public hearing, the Board circulated a draft licence for technical review by all parties. Comments were received from the City and DIAND. Where appropriate, the Board has corrected typographical errors and provided clarifying language in response to questions raised.

These reasons address only those areas where the licence differs from the application and/or the recommendations of the interveners, or where the Board has determined that further elaboration will be helpful.

Canadian Environmental Assessment Act

Prior to making the licencing decisions, a review of the application pursuant to the requirements of the *Canadian Environmental Assessment Act* ("CEAA") was undertaken by DIAND, who reached a section 20(1)(a) determination, which is:

" 20(1)(a) taking into account the implementation of any mitigation measures that the responsible authority considers appropriate, the project is not likely to cause significant adverse effects. The responsible authority may exercise any power or perform any duty or function that would permit the project to be carried out and shall ensure that any mitigation measures that the responsible authority considers appropriate are implemented."

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Drinking Water Quality Monitoring

The licence contains the Board's standard requirement to comply with the requirements of the *Yukon Regulations Respecting Public Health*, pursuant to the *Public Health and Safety Act*, including, but not limited to, any orders issued by the Medical Officer of Health for drinking water quality and drinking water sampling and analysis. At the hearing, DIAND confirmed that this would meet the *CEAA* screening requirements regarding the drinking water supply. The Board anticipates that such orders would also include a requirement to carry out a risk assessment to evaluate effectiveness and adequacy of water treatment system as required by the *CEAA* screening report.

Spill Contingency Plan

The application did not contain a spill contingency plan. The existing licence (MN93-001) contained general requirements relating to spills; however, the Board considered these to be inadequate in the current context. Accordingly, the Board has included a requirement to submit a spill contingency plan within 90 days of the Effective Date of the licence and to keep the plan current.

Stormwater Outfalls

The Licensee requested approval to construct new stormwater outfalls to the Yukon River but provided no other information regarding such outfalls. The licence authorizes the use of existing stormwater outfalls, but does not authorize the construction of new ones. The Board's intent is that the construction of any new outfall will require a licence amendment.

Discharge to Pothole Lake or Yukon River

The licence authorizes the discharge of treated wastewater to either the Pothole Lake or the Yukon River. However, discharge to the Yukon River cannot take place until the construction of the outfall pipeline authorized by the licence has been completed. Such construction cannot take place until various design documents have been submitted to the Board and the Board has provided direction to proceed. The termination of monitoring requirements relating to the use of the Pothole Lake will require an amendment when the use of the lake has been ended and the outfall pipeline has been commissioned.

Groundwater Monitoring Between Pothole Lake and Yukon River

There was discussion at the public hearing regarding the monitoring of groundwater quality between the Pothole Lake and the Yukon River. The City took the position that such monitoring should not be required because the feasibility of using the Pothole Lake had already been proven. DIAND argued in favour of continued monitoring. The *CEAA* screening report requires **YWB**

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continued monitoring; however, DIAND in its role as the Responsible Authority advised at the hearing that the use of an indicator parameter might be adequate rather than the use of a broader suite of parameters. The Board determined that three locations along the apparent groundwater flow route from the Pothole lake to the Yukon River should be monitored for the indicator parameters of chloride, nitrate and nitrite.

Acquisition of Land

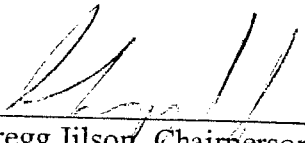
The *CEAA* screening report requires that the City acquire title to lands between the Pothole Lake and the Yukon River, around the Crestview Lagoon, and between the Crestview Lagoon and the Yukon River. At the public hearing, the City reported that arrangements with the Government of Yukon for the acquisition of the land were in progress but incomplete. A requirement for land acquisition has not been included in the licence, as the Board cannot mandate such an agreement on a third party. The Board has instead relied on DIAND's advice at the hearing that evidence of progress toward the *CEAA* requirement would be adequate and considers that the evidence presented by the City at the hearing fulfills that criterion.

Signage


The *CEAA* screening report requires that warning signage be installed and maintained around the wastewater treatment facilities. Subsequent to the public hearing, the Board received notification from the City that such signage had been installed. Accordingly, the licence contains a requirement to maintain the signage for the term of the licence. The licence also contains a requirement to install signage around biosolid disposal areas.

Stormwater Discharge Study

To meet the mitigation requirements of the *CEAA* screening report, the Board has included a requirement for the City to submit a plan for a Stormwater Discharge Study and to implement the study when directed to do so by the Board. The licence describes the minimum components of the plan and the reporting process. The required components include the development of appropriate stormwater discharge standards as required by the *CEAA* screening.



Gregg Jilson, Chairperson
YUKON WATER BOARD



Date

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