

Elaine Briere - MVLWB

From: Tyree Mullaney [tyree@mvlwb.com]
Sent: Thursday, August 27, 2009 7:38 AM
To: permits@mvlwb.com
Subject: FW: Yellowknife Airport Inspection Report (MV2001L3-0012)
Attachments: YK Airport Cover Letter.pdf; YK Airport Inspection Report.pdf; FINAL REPORT - 0910 - 290397.pdf

Please post on the registry.

Tyree Mullaney
Regulatory Officer
Mackenzie Valley Land and Water Board
Phone: 867-766-7471
Fax: 867-873-6610

-----Original Message-----

From: Michael Martin [mailto:Michael.Martin@inac-ainc.gc.ca]
Sent: August-26-09 4:14 PM
To: steve_loutitt@gov.nt.ca
Cc: Terri Bugg; Scott Stewart; tyree@mvlwb.com
Subject: Yellowknife Airport Inspection Report (MV2001L3-0012)

Hello Steve,

Attached is a copy of the Water Licence inspection report for the Yellowknife Airport. The signed original will follow in the mail.

If you have any question please do not hesitate to call.

Sincerely,

Michael W. Martin

Water Resource Officer

Indian and Northern Affairs Canada
South Mackenzie District
16 Yellowknife Airport
Yellowknife, NT. X1A 3T2
Phone: 867-669-2768
Fax: 867-669-2720
E-mail: Michael.Martin@inac-ainc.gc.ca



Indian and Northern
Affairs Canada

Affaires indiennes
et du Nord Canada

16 Yellowknife Airport
Yellowknife, NT. X1A 3T2

File: MV2001L3-0012

August 26th, 2009

Steve Loutitt

Yellowknife Airport Managers Office
Department of Transportation
Government of the Northwest Territories
PO Box 1320
Yellowknife, NT. X1A 2L9

Dear Mr. Loutitt,

RE: MV2001L3-0012 Yellowknife Airport Inspection Report.

An inspection of the Yellowknife Airport was conducted on July 13th, 2009 by Water Resource Officer Michael Martin and Resource Management Officer Marty Sanderson.

Some concerns were noted and are explained in detail in the attached report. The areas of concern include the glycol management plan that was not submitted to the Mackenzie Valley Land and Water Board on February 1, 2009 as well as the 2008 Annual Report which was not submitted as per the requirement of the Water Licence.

A renewal of the current Water Licence will required in this up coming year as it expires on September 6th, 2010. This renewal must take place prior to the expiry of the current Licence

If you have any further questions please do not hesitate to contact me.

Sincerely,

Michael Martin
Water Resource Officer
Indian and Northern Affairs Canada

CC: WRO Files
Tyree Mullaney - MVLWB

INDUSTRIAL WATER USE INSPECTION REPORT

DATE: July 13th, 2009

COMPANY REP: Terri Bugg (GNWT – DOT)

LICENSEE: GNWT - Department of Transportation

LICENCE #: MV2001L3-0012 (Yellowknife Airport)

WATER SUPPLY

Source: **Long Lake (Non-potable)**

Quantity Used: **N/I**

Meter Rdg: **N/A**

Indicate: **A – Acceptable U – Unacceptable N/A - Not Applicable N/I - Not Inspected**

Intake Facilities	A	Storage Structures	A	Treatment Systems	N/I	Recycling	N/I
Flow Meas. Device	N/I	Conveyance Lines	A	Pumping Stations	A	Modifications	N/A

Comments: Temporary storage structures at the Glycol Retention Facility (GRF) are in good repair.

WASTE DISPOSAL

Tailings:	Tailings Pond	N/A	Natural Lake	N/A	Underground	N/A		
Sewage:	Sewage Treat. System	N/A	Tailings pond	N/A	Natural Water Body			
	Continuous Discharge		Inter. Discharge					
Solid Waste:	Open Dump		Landfill		Burn & Bury		Underground	

Comments: Water and sewage is treated, distributed and collected by the City of Yellowknife.

Effluent Discharge Rate:	N/A	Samples Collected:	None
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Discharge Quality	N/A	Conveyance Lines	N/I	Disch. Meas. Dev.	N/A	Freeboard	N/A
Decant Structures	N/A	Pond Treatment	N/A	Dams, Dykes	N/A	Seepages	N/A
Dyke Inspections	N/A	Runoff Diversion	A	Erosion	A	Spills	N/A

GENERAL CONDITIONS

Ore & Waste Rock Stockpiles	N/A	Records & Reporting	U	Surv. Net. Prog.	A
Geotechnical Inspection	N/A	Posting, Signage	A*	Contingency Plan	U
Restorations Activities	N/A	New Construction	N/A	Fuel Storage	N/A
Mine Water Discharge	N/A	Chemical Storage	N/A	Annual Report	U

Comments:

- 1) Records and Reporting/Annual Report: The last Annual Report received for this Water Licence was for the 2007 operating year. As per Part B Section 1 of the water licence the licensee is required to submit an annual report by **March 31st of each year**. It is not the responsibility of the Inspector to remind the licensee of their requirements to adhere to the conditions of the licence. This is not the first time that this condition has not been complied with. It is expected that all annual reports will be submitted within the timeline prescribed.
- 2) Contingency Plan: There was a temporary storage authority for glycol, which is to be contained in a tank adjacent to the glycol retention pond, granted on October 16th, 2008. A condition of this temporary storage was to have a glycol management plan submitted to the board by February 1st, 2009 and to have the plan implemented prior to the commencement of the 2009 de-icing season. It is nearing the end of August and the glycol management plan has not yet been submitted. There has also been a request submitted by the Department of Transportation to construct a new glycol retention pond to deal with this seasons glycol impacted water. It is the Inspectors opinion that a continuance of the temporary storage period should not be permitted as ample time was permitted to allow the appropriate plan to be

submitted and implemented. It would not be sensible to impact the site further with this new glycol retention pond as the inspector has given the Department of Transportation ample time to avoid this situation to begin with. The inspector expects to see the glycol impacted water removed from site and taken to an improved disposal facility prior to the 2009 de-icing season.

3) Posting and Signage: SNP station signs are in place but have faded over time. The signs should be refreshed to make them more easily identifiable

4) SNP: Samples were taken at SNP Stations "S1" and "GRF". All results fell within the criteria described in the licence (See attached Lab Result)

Licensee Representative

Terri Bugg - GNWT

Inspector's Name

Michael Martin - INAC

Inspector's Signature



Taiga Environmental Laboratory
4601-52nd Ave., Box 1500, Yellowknife, NT. X1A 2R3
Tel: (867)-669-2788 Fax: (867)-669-2718

Taiga Batch No.:
290397

- FINAL REPORT -

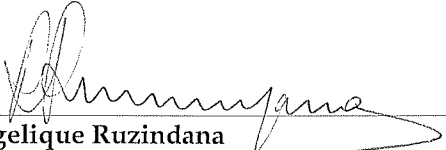
Prepared For: South MacKenzie District
DIAND

Address: 140 Bristol Ave.
Yellowknife, NT
X1A 3T2

Attn: Mike Martin

Facsimile: (867) 669-2720

Final report has been reviewed and approved by:



Angelique Ruzindana
Quality Assurance Officer

NOTES:

- Test methods and data are validated by the laboratory's Quality Assurance Program. Taiga Environmental Laboratory is accredited by the Canadian Association of Environmental Analytical Laboratories (CAEAL) as a testing laboratory for specific tests registered with CAEAL.
- Routine methods are based on recognized procedures from sources such as
 - Standard Methods for the Examination of Water and Wastewater APHA AWWA WEF;
 - Environment Canada
 - USEPA
- Samples shall be kept for thirty (30) days after the final report is issued. All microbiological samples shall be disposed of immediately upon completion of analysis to minimize biohazardous risks to laboratory personnel. Please contact the laboratory if you have any special requirements.
- Final results are based on the specific tests at the time of analysis and do not represent the conditions during sampling.

ReportDate: Monday, July 27, 2009
Print Date: Monday, July 27, 2009



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Taiga Batch No.:
290397

- CERTIFICATE OF ANALYSIS -

Client Sample ID: S1

Taiga Sample ID: 001

Client Project: MV2001L3-0012
Sample Type: Freshwater
Received Date: 13-Jul-09
Sampling Date: 13-Jul-09
Sampling Time: 13:30
Location: YK Airport
Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<u>Inorganics - Physicals</u>						
Alkalinity, Total (as CaCO ₃)	195	0.4	mg/L	13-Jul-09	SM2320:B	
Conductivity, Specific (@ 25°C)	359	0.4	µS/cm	13-Jul-09	SM2510:B	
pH	6.90		pH units	13-Jul-09	SM4500-H:B	
<u>Inorganics - Nutrients</u>						
Ammonia as Nitrogen	0.03	0.01	mg/L	15-Jul-09	SM4500-NH3:	
Biochemical Oxygen Demand	No Container		mg/L		SM5210:B	16
Phosphorous, Dissolved	0.03	0.01	mg/L	21-Jul-09	SM4500-P:D	
Phosphorous, Total	0.23	0.01	mg/L	22-Jul-09	SM4500-P:D	
<u>Major Ions</u>						
Calcium	58.5	0.1	mg/L	14-Jul-09	SM4110:B	
Chloride	1.4	0.7	mg/L	14-Jul-09	SM4110:B	
Hardness	219	0.7	mg/L	14-Jul-09	SM2340:B	
Magnesium	17.8	0.1	mg/L	14-Jul-09	SM4110:B	
Nitrate	< 0.01	0.01	mg/L	14-Jul-09	SM4110:B	

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Client Sample ID: S1

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Nitrite	< 0.01	0.01	mg/L	14-Jul-09	SM4110:B
<u>Trace Metals, Dissolved</u>					
Aluminum	15.8	0.6	µg/L	22-Jul-09	EPA200.8
Antimony	0.1	0.1	µg/L	22-Jul-09	EPA200.8
Arsenic	18.2	0.2	µg/L	22-Jul-09	EPA200.8
Barium	43.3	0.1	µg/L	22-Jul-09	EPA200.8
Beryllium	< 0.1	0.1	µg/L	22-Jul-09	EPA200.8
Cadmium	< 0.05	0.05	µg/L	22-Jul-09	EPA200.8
Cesium	< 0.1	0.1	µg/L	22-Jul-09	EPA200.8
Chromium	0.5	0.1	µg/L	22-Jul-09	EPA200.8
Cobalt	1.1	0.1	µg/L	22-Jul-09	EPA200.8
Copper	< 0.2	0.2	µg/L	22-Jul-09	EPA200.8
Iron	17900	5	µg/L	22-Jul-09	EPA200.8
Lead	< 0.1	0.1	µg/L	22-Jul-09	EPA200.8
Lithium	4.5	0.2	µg/L	22-Jul-09	EPA200.8
Manganese	1240	0.1	µg/L	22-Jul-09	EPA200.8
Molybdenum	< 0.1	0.1	µg/L	22-Jul-09	EPA200.8
Nickel	0.5	0.1	µg/L	22-Jul-09	EPA200.8
Rubidium	1.3	0.1	µg/L	22-Jul-09	EPA200.8
Selenium	< 0.3	0.3	µg/L	22-Jul-09	EPA200.8
Silver	< 0.1	0.1	µg/L	22-Jul-09	EPA200.8
Strontium	175	0.1	µg/L	22-Jul-09	EPA200.8
Thallium	< 0.1	0.1	µg/L	22-Jul-09	EPA200.8
Titanium	0.8	0.1	µg/L	22-Jul-09	EPA200.8

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Client Sample ID: S1

Taiga Sample ID: 001

Uranium	< 0.1	0.1	µg/L	22-Jul-09	EPA200.8
Vanadium	0.4	0.1	µg/L	22-Jul-09	EPA200.8
Zinc	< 0.4	0.4	µg/L	22-Jul-09	EPA200.8

Trace Metals, Total

Aluminum	54	5	µg/L	22-Jul-09	EPA200.8
Antimony	0.3	0.1	µg/L	22-Jul-09	EPA200.8
Arsenic	60.3	0.2	µg/L	22-Jul-09	EPA200.8
Barium	81.4	0.1	µg/L	22-Jul-09	EPA200.8
Beryllium	< 0.1	0.1	µg/L	22-Jul-09	EPA200.8
Cadmium	< 0.1	0.1	µg/L	22-Jul-09	EPA200.8
Cesium	< 0.1	0.1	µg/L	22-Jul-09	EPA200.8
Chromium	1.5	0.1	µg/L	22-Jul-09	EPA200.8
Cobalt	1.3	0.1	µg/L	22-Jul-09	EPA200.8
Copper	2.1	0.2	µg/L	22-Jul-09	EPA200.8
Iron	56100	5	µg/L	22-Jul-09	EPA200.8
Lead	0.4	0.1	µg/L	22-Jul-09	EPA200.8
Lithium	4.8	0.2	µg/L	22-Jul-09	EPA200.8
Manganese	1320	0.1	µg/L	22-Jul-09	EPA200.8
Molybdenum	0.2	0.1	µg/L	22-Jul-09	EPA200.8
Nickel	1.0	0.1	µg/L	22-Jul-09	EPA200.8
Rubidium	1.3	0.1	µg/L	22-Jul-09	EPA200.8
Selenium	< 0.5	0.5	µg/L	22-Jul-09	EPA200.8
Silver	< 0.1	0.1	µg/L	22-Jul-09	EPA200.8
Strontium	184	0.1	µg/L	22-Jul-09	EPA200.8

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Thallium	< 0.1	0.1	µg/L	22-Jul-09	EPA200.8
Titanium	2.6	0.1	µg/L	22-Jul-09	EPA200.8
Uranium	0.2	0.1	µg/L	22-Jul-09	EPA200.8
Vanadium	1.2	0.1	µg/L	22-Jul-09	EPA200.8
Zinc	< 5	5	µg/L	22-Jul-09	EPA200.8

Subcontracted Organics

Diethylene Glycol	< 10	10	mg/L	20-Jul-09	EPA8000
Ethylene Glycol	< 10	10	mg/L	20-Jul-09	EPA8000
Propylene Glycol	< 10	10	mg/L	20-Jul-09	EPA8000
Tetraethylene Glycol	< 10	10	mg/L	20-Jul-09	EPA8000
Triethylene Glycol	< 10	10	mg/L	20-Jul-09	EPA8000

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Taiga Batch No.:
 290397

- CERTIFICATE OF ANALYSIS -

Client Sample ID: GRF1

Taiga Sample ID: 002

Client Project: MV2001L3-0012
 Sample Type: Freshwater
 Received Date: 13-Jul-09
 Sampling Date: 13-Jul-09
 Sampling Time: 13:30
 Location: YK Airport
 Report Status: Final

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<u>Inorganics - Physicals</u>						
Alkalinity, Total (as CaCO ₃)	494	0.4	mg/L	13-Jul-09	SM2320:B	
Conductivity, Specific (@ 25°C)	1690	0.4	µS/cm	13-Jul-09	SM2510:B	
pH	5.26		pH units	13-Jul-09	SM4500-H:B	
<u>Inorganics - Nutrients</u>						
Ammonia as Nitrogen	0.05	0.01	mg/L	15-Jul-09	SM4500-NH3:	
Biochemical Oxygen Demand			mg/L	14-Jul-09	SM5210:B	62
Phosphorous, Dissolved	0.02	0.01	mg/L	21-Jul-09	SM4500-P:D	
Phosphorous, Total	0.02	0.01	mg/L	22-Jul-09	SM4500-P:D	
<u>Major Ions</u>						
Calcium	394	0.1	mg/L	14-Jul-09	SM4110:B	
Chloride	5.7	0.7	mg/L	14-Jul-09	SM4110:B	
Hardness	1040	0.7	mg/L	14-Jul-09	SM2340:B	
Magnesium	13.3	0.1	mg/L	14-Jul-09	SM4110:B	
Nitrate	< 0.01	0.01	mg/L	14-Jul-09	SM4110:B	
Nitrite	< 0.01	0.01	mg/L	14-Jul-09	SM4110:B	

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Client Sample ID: GRF1

Taiga Sample ID: 002

Subcontracted Organics

Diethylene Glycol	< 10	10	mg/L	20-Jul-09	EPA8000
Ethylene Glycol	1800	10	mg/L	20-Jul-09	EPA8000
Propylene Glycol	140	10	mg/L	20-Jul-09	EPA8000
Tetraethylene Glycol	< 10	10	mg/L	20-Jul-09	EPA8000
Triethylene Glycol	< 10	10	mg/L	20-Jul-09	EPA8000

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- CERTIFICATE OF ANALYSIS -

Client Sample ID: GRF1

Taiga Sample ID: 002

- DATA QUALIFIERS -

Data Qualifier Descriptions:

- 16 *Test requested but no sample bottle received*
- 62 *Residual DO was less than 1 mg/L. No result available.*

* Taiga analytical methods are based on the following standard analytical methods
SM - Standard Methods for the Examination of Water and Wastewater
EPA - United States Environmental Protection Agency