



North Mackenzie District
P.O. Box 2100
Inuvik, NT X0E 0T0

Telephone: 867-777-8900
Fax: 867-777-2090

November 9, 2011

Northwest Territories Water Board
P.O. Box 2531
Inuvik, NT X0E 0T0

Attn: Freda Wilson, Office and Finance Administrator

**RE: Industrial Water Use N7L1-1759
CLASS B - INDUSTRIAL
Mackenzie River**

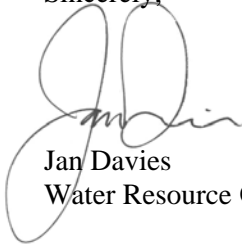
Dear Ms. Wilson,

Please find the enclosed Inspection Report for your review and records.

An electronic copy (un-editable Adobe pdf.) has also been provided by e-mail.

If you have any questions or concerns regarding the enclosed, and/or if additional information is required please contact me at (867) 777-8909.

Sincerely,



Jan Davies
Water Resource Officer

Cc: Conrad Baetz, District Manager, North Mackenzie District, Inuvik, NT

Enclosure: Industrial Water Use Inspection Report and Cover Letter (4 pages)



North Mackenzie District
P.O. Box 2100
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November 9, 2011

Suncor Energy Inc.
P.O. Box 2844
150 - 6th Avenue S.W.
Calgary, AB T2P 3E3

Attn: John Kerkhoven

**RE: Industrial Water Use N7L1-1759
CLASS B - INDUSTRIAL
Mackenzie River**

Dear Mr. Kerkhoven,

An inspection of the Suncor Energy Inc. Water Licence N7L1-1759 (expiry on November 30, 2002) was conducted on August 24, 2011. The operation under the above mentioned Industrial Water Use was inspected to assess compliance and ensure that the terms and conditions were met. Enclosed is a copy of the Inspection Report (3 pages) for your review and records.

Unfortunately, there were two violations during this inspection period. Our records indicate that the 2000 Annual Report and the Interim Abandonment and Restoration Plan as required by the Water Licence has not been received by the Northwest Territories Water Board. Please review and address the violations and other concerns throughout the Inspection Report.

Please note that it is the Licensee's responsibility to ensure compliance with all of the terms and conditions of its Water Licence. A copy of this report will be sent to the Northwest Territories Water Board for their review and public records.

If you have any questions regarding the enclosed and/or if additional information is required, please do not hesitate to contact me at (867) 777-8909.

Sincerely,

Jan Davies
Water Resource Officer

Cc: Conrad Baetz, District Manager, North Mackenzie District, Inuvik, NT

Enclosure: Industrial Water Use Inspection Report (3 pages)



INDUSTRIAL WATER USE INSPECTION REPORT

LICENCE #:	N7L1-1759	EXPIRY DATE:	November 30, 2002
LICENCEE:	Suncor Energy Inc.	PREVIOUS INSPECTION:	January 31, 2002
COMPANY REP:	John Kerkhoven	INSPECTION DATE:	August 24, 2011

WATER SUPPLY

Source:	Mackenzie River	Quantity Used:	N/A, See Annual Reports
Owner/Operator:	Suncor Energy Inc.	Meter Reading:	N/A

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

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

Water Supply Comments:

- N/A

WASTE DISPOSAL

Well Waste:	Off-Site Removal	N/A	Drilling Sump	A ¹	Downhole	N/A	Land spread	N/A
Solid Waste:	Open Dump	N/A	Landfill	A	Burn & Bury	N/A	Under ground	N/A
	Owner / Operator	N/A	Sludge Disposal	N/A	Other	N/A		
Tailings:	Tailings Pond	N/A	Natural Lake	N/A	Under ground	N/A		
Sewage:	Sewage Treat. System	N/A	Camp Sump	N/A	Natural Water Body	N/A	Wetland Treatment	N/A
	Continuous Discharge	N/A	Inter. Discharge	N/A	Seasonal Discharge	N/A	Trench	N/A

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

Discharge Quality	N/A	Construction	N/A	Disch. Meas. Dev.	N/A	Freeboard	N/A
Decant Structures	N/A	O&M Plan	N/A	Dams, Dykes	N/A	Seepages	N/A
Dyke Inspections	N/A	A&R Plan	N/A	Erosion	A ^{1,2}	Spills	A
Conveyance Lines	N/A	Pond Treatment	N/A	Runoff Diversion	N/A	Sump Treatment	N/A
Sump Liners	N/A		SNP Samples Collected		N/A		
Periods of Discharge	N/A		Effluent Discharge Rate		N/A		

Waste Disposal Comments:

Concerns:

1. Local river flooding and other conditions are contributing to erosion of the sump cap for the drill sump. Sump cap edges are sloughing due to erosion but it is now a 90 degree hard edge as compared to a sloping edge to the ground surface. This is much more susceptible to continued erosion. Further vegetation growth and establishment is needed to prevent further erosion over the long term.
2. Both the drill sump and camp sump have bare soils present which need more vegetation growth. There has been an improvement for the drill sump and only slightly so for the camp sump. The vegetation growth is needed to protect the soil and ensure better protection for the sump caps

Note:

- Sumps appear to be stabilized, especially the camp sump that doesn't have such a pronounced sump cap as compared to the drilling sump.
- Site was clean and void of any garbage or solid waste.



INDUSTRIAL WATER USE INSPECTION REPORT

GENERAL CONDITIONS

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

Ore & Waste Rock Stockpiles	N/A	Records & Reporting	U ^{1,3}	Surv. Net. Prog.	N/A
Geotechnical Inspection	N/A	Posting, Signage	N/A	Contingency Plan	N/A
Restorations Activities	A ²	New Construction	N/A	Fuel Storage	N/A
Mine Water Discharge	N/A	Chemical Storage	N/A	Annual Report	U ^{1,3}

General Condition Comments:

Concerns:

1. The 2000 Annual Report has not been received by the Northwest Territories Water Board for the term the Water Licence that was active during that year. This is a violation of Part B: General Conditions, Item 1 of the Water Licence. Annual Reports are required for the terms of the Water Licences.

There needs to be notification of the Board of the activities that occurred during the year 2000 time period of the Water Licence. If nothing occurred there needs to be a letter for the Annual Report that complies with Part B: General Conditions, Item 1 and its conditions. Please note that all data and information required by the Surveillance Network Program including the results of the approved Quality Assurance Plan needs to be submitted with the Annual Report for the time period being reported.

2. There was a 2003 Sump Monitoring Report titled "Environmental Imaging (EI) To Investigate Subsurface Conditions At Three Sump Locations North and Northwest of Inuvik, Northwest Territories" produced by Essis Ltd. It contained environmental imaging – EM38/31 data for the Kurk M-15 sump. It was stated in the report "The EM31 map suggests the potential northward migration of subtle ionic contamination extending up to approximately 30 m north of the pond." There needs to be further sampling of the soil/water and more environmental imaging - EM38/31 conducted at the site to confirm the potential northward migration of ionic contamination.

3. The Interim Abandonment and Restoration Plan was not received by the Northwest Territories Water Board and is a violation of Part H: Conditions Applying to Abandonment and Restoration, Item 1 of the Water Licence.

Notes:

- Camp sump appears stable and well drained. The vegetation coverage is ~70%. There is ponding surrounding the sump on most sides. Do not observe any issues with the sump itself (see Figures 5 and 6).

- Drilling sump has what is estimated to be natural ponding surrounding the sump on all sides. It still appears stable and the sump cap is intact and well drained. Soil is good silt/clay like quality and is compacted. Did not observe any issues as waste appears to be contained and no subsidence is evident (see Figures 1-4).

- The 2001 and 2002 Annual Reports were received by the Northwest Territories Water Board.

- Site visits during August 23, 2010 observed the similar conditions, ponding surrounding sumps and good vegetation cover but bare soil was present with erosion off edges of both sumps.

NON-COMPLIANCE/VIOLATIONS OF ACT OR LICENCE


Part B: General Conditions, Item 1,

"The Licensee shall file an Annual Report with the Board not later than March 31 of the year following the calendar year reported..."

Part H: Conditions Applying to Abandonment and Restoration, Item 1,

"The Licensee shall submit to the Board for approval within one year of issuance of this Licence, an Interim Abandonment and Restoration Plan in accordance with the Board's "Guidelines for Mines in the Northwest Territories," September 1980, or subsequent edition."

Inspector's Signature:





INDUSTRIAL WATER USE INSPECTION REPORT

Inspection Images:



Figure 1
Kurk M-15 drilling sump. Eastern side of sump with ponding surrounding the sump and poor vegetation cover, August 23, 2010.

Figure 2
North end of drilling sump. Erosion occurring with sump cap edges, August 23, 2010.



Figure 3
Western side of drilling sump, August 23, 2010

Figure 4
South west side of drilling sump. Improved vegetation growth, coverage ~70%, August 24, 2011.



Figure 5
Kurk M-15 camp sump, south end. Vegetation coverage ~70%, August 24, 2011.

Figure 6
Northwest end of camp sump. Sump cap is not very elevated and has a more gradual slope, August 24, 2011