



Aboriginal Affairs and
Northern Development Canada

Affaires autochtones et
Développement du Nord Canada

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

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

November 11, 2013

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

Attn: Freda Wilson, Office and Finance Administrator

**RE: INDUSTRIAL Water Use N7L1-1788
CLASS B - INDUSTRIAL
Mackenzie River**

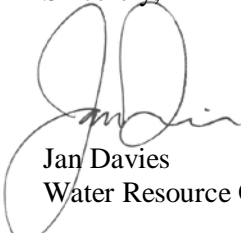
Dear Ms. Wilson,

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)



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November 11, 2013

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

Attn: John Kerkhoven

**RE: INDUSTRIAL Water Use N7L1-1788
CLASS B - INDUSTRIAL
Mackenzie River**

Dear Mr. Kerkhoven,

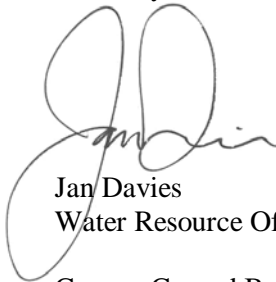
An inspection of the Suncor Energy Inc. Water Licence N7L1-1788 (expiry on September 30, 2007) was conducted on August 27, 2013. The operation under the above mentioned Industrial Water Use was inspected to assess compliance and ensure that the terms and conditions were met. Enclosed is a copy of the Inspection Report (3 pages) for your review and records.

There were no violations identified during the course of this Inspection. The efforts by Suncor Energy Inc. to maintain compliance and further monitoring are to be commended. Please review the concerns and other items in the Inspection Report.

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 #:	N7L1-1788	EXPIRY DATE:	September 30, 2007
LICENCEE:	Suncor Energy Inc.	PREVIOUS INSPECTION:	August 25, 2011
COMPANY REP:	John Kerkhoven	INSPECTION DATE:	August 27, 2013

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

Disposal Method	Drilling Sump								
Off-Site Removal	N	Drilling Sump	Y	Downhole Injection	N	Treat and Landspread	N	Other	N/A

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

Sump Liners	N/A	Sump Treatment	N/A	Freeboard	N/A
Erosion	A	Construction	N/A		
SNP Samples Collected	N/A				

Well Waste Comments:

- There remain larger cracks throughout the sump surface (see Figure 2).
- Well drained sump cap that is well sloped
- Natural drainage flowing across above the north end of the drilling sump.
- Water ponding on north end of drilling sump. According to Suncor Energy Inc. staff this pond was there before the drilling program.
- In between the drilling and camp sumps there is water ponding in a deep depression.
- During the various site visits and inspections this is some of the most water that has been present in the waterbodies on site.
- No erosion seen on site besides the depression in the northwest corner of the drilling sump.

WASTE DISPOSAL – SEWAGE

Disposal Method	Camp Sump								
Mechanical	N	Camp Sump	Y	Natural Water Body	N	Wetland Treatment	N		
Continuous Discharge	N	Intermittent Discharge	N	Seasonal Discharge	N	Land Spread	N		
Accelerated Biological	N	Other	N/A						

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

Discharge Quality	N/A	Decent Process & Structures	N/A	Discharge Measurement Device	N/A
Freeboard	N/A	Method of Sludge Disposal	N/A		
Periods Of Discharge	N/A			SNP Samples Collected	N/A
Effluent Discharge Rates	N/A				



INDUSTRIAL WATER USE INSPECTION REPORT

Sewage Comments:

- Vegetation is well established on camp sump
- No erosion issues noted.

WASTE DISPOSAL – SOLID WASTE

Disposal Method		Landfill					
Open Dump	N	Landfill	Y	Burn & Landfill	N	Underground	N
Offsite Removal	N	Other	N/A				
Owner / Operator	Suncor Energy Inc.						

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

Runoff Diversion	N/A	SNP Samples Collected	N/A
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Solid Waste Comments:

- No waste or debris issues present, site was clean.

GENERAL CONDITIONS/REPORTS/PLANS

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

C &R Plan	N/A	Records & Reporting	A	Final Report	N/A
Geotechnical Inspection	N/A	Posting, Signage	N/A	Contingency Plan	N/A
Restorations Activities	A	Spills	A	O&M Plan	N/A
Maintenance	N/A	Modifications	N/A	Annual Report	A

General Condition Comments:

Concerns:

1. The drill and camp sump caps appear stable aside from ponding and subsidence in the immediate vicinity which is consistent with previous years. The large pond to the northwest of the drill sump appears to be due to natural drainage in the area. The small pond between the drill and camp sumps takes in drainage from between the sumps and the surrounding area. The ponding is away from sump caps but there is still a possibility of influence on sump long term stability. Water ponding near the sumps can have an effect on the containment of wastes and permafrost. Further monitoring remains a prudent measure to identify issues early on before they become larger problems.

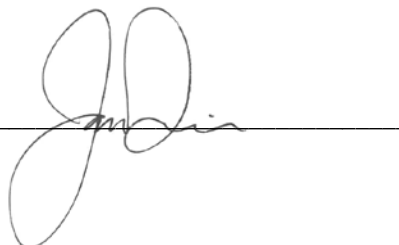
Notes:

- Outstanding Annual Reports for 2004 -2007 have been submitted.
- The 2005 Annual Sump Monitoring Report is now on file.
- Site Visit and Surface Water Sampling Reports for 2006 and 2007 are now on file.
- 2009 Nuna I-30 Wellsite Inspection Report is now on file.
- Vegetation growth of 90% on the drill and camp sumps which is large increase from the Industrial Water Licence Inspection conducted on August 24, 2011.
- Most vegetation growth seen on site and coverage well over the area. Still some bare soil areas with soil mounds throughout sump cap. Mounds potentially created from presence of permafrost as seen on other sumps in the region.
- During the July 27, 2007 site visit there was a white coloration present on the northwestern edge of the drill sump bordering the larger pond (see Figure 1). This has not been seen since during subsequent site visits or inspections.
- It is understood that a site visit had been conducted by Suncor Energy Inc. at around the same time period of this Industrial Water Licence Inspection.

NON-COMPLIANCE/VIOLATIONS OF ACT OR LICENCE

N/A

Inspector's Signature: _____





INDUSTRIAL WATER USE INSPECTION REPORT

Inspection Images:

Figure 1

White coloration present on the western edge of the drill sump bordering the larger pond, July 27, 2007.



Figure 2

On site there were cracks similar to these, which were found on August 23, 2010.



Figure 3

Larger pond on the northwest side of the drilling sump which has increase in water volume from previous inspections.



Figure 4

Small pond and associated subsidence between the drilling and camp sumps. There is more water present than before.



Figure 5

Aerial of Nuna I-30 site with camp and drill sumps in addition to associated waterbodies.



Figure 6

Example of the thickness and extent of vegetation growth on surface of drill and camp sumps.

