



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

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

December 28, 2012

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

Attn: Mike Harlow, Executive Director

**RE: Industrial Water Use N7L1-1831
CLASS B - INDUSTRIAL
Mackenzie River – Arvoknar Channel**

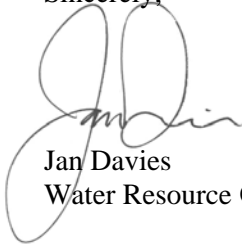
Dear Mr. Harlow,

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
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December 28, 2012

Shell Canada Ltd.
400 - 4th Avenue S.W.
P.O. Box 100, Station M
Calgary, AB T2P 2H5

Attn: Randall Warren

**RE: Industrial Water Use N7L1-1831
CLASS B - INDUSTRIAL
Mackenzie River – Arvoknar Channel**

Dear Mr. Warren,

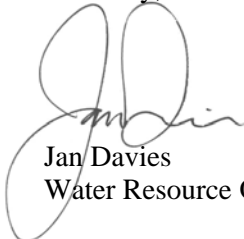
An inspection of the Shell Canada Ltd. Water Licence N7L1-1831 (expiry on September 30, 2013) was conducted on October 2, 2012. The operation under the above mentioned Industrial Water Use was inspected to assess compliance and ensure that the terms and conditions were met. Enclosed is a copy of the Inspection Report (3 pages) for your review and records.

The 2011 and 2012 Annual Reports in addition to the 2012 Monitoring and Sampling Program Report have been provided. The compliance of Shell Canada Ltd with their Water Licence is acknowledged and appreciated. Please review and address the 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 #:	N7L1-1831	EXPIRY DATE:	September 30, 2013
LICENCEE:	Shell Canada Ltd.	PREVIOUS INSPECTION:	August 24, 2011
COMPANY REP:	Randall Warren	INSPECTION DATE:	October 2, 2012

WATER SUPPLY

Source:	Mackenzie River – Arvoknar Channel	Quantity Used:	N/A, see water records
Owner/Operator:	Shell Canada Ltd	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	A	Drilling Sump	N/A	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. Subsidence depressions on northside of backfilled sump excavation. Continued monitoring is needed but to aid in long term stability appropriate action is needed such as filling in the subsidence.
2. Large cracking throughout backfilled excavation. Increased erosion on excavation along riverbank edge. As stated in the Inspection from last year it appears that the erosion is progressing further and larger as time progresses.



INDUSTRIAL WATER USE INSPECTION REPORT

Notes:

- Area is in a state of stabilization and is a dynamic environment given the recent excavation and backfilling that has occurred.
- Waste material was excavated from the drilling sump and transported to approved Landfills - Solid Waste Disposal Facilities down south.
- North of the backfilled sump there remains residual contamination from the sump presence.

GENERAL CONDITIONS

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

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

General Condition Comments:

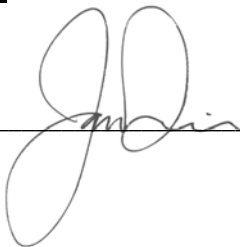
Notes:

- The 2012 Monitoring and Sampling Program Report has been submitted and according to the Licensee is to be used to satisfy Part B: General Conditions, Item 1 of the Water Licence regarding the 2012 Annual Report. The 2011 Annual Report was submitted on November 24, 2011.
- Evidence of grass coming back to exposed backfilled sump excavation surface.
- Sand bar borrow area looked acceptable still see imprint of excavation.
- The thermistor noted during the previous Inspection on August 24, 2011 that had fallen into the river was no longer present.

NON-COMPLIANCE/VIOLATIONS OF ACT OR LICENCE

N/A

Inspector's Signature:





INDUSTRIAL WATER USE INSPECTION REPORT

Inspection Images:



Figure 1
Unipkat I-22 area and associated erosion, August 24, 2011.



Figure 2
Unipkat I-22 area with further erosion (than seen in Figure 1) of actual sump excavation backfill material and river bank, October 2, 2012.



Figure 3
Close up of erosion and further river embankment that has been washed away, October 2, 2012.



Figure 4
Sink hole at the sump excavation. Continued monitoring is needed to assess any further subsidence and to mitigate possible risks to site stability, October 2, 2012.



Figure 5
Erosion channel that exists on site. Continued monitoring is needed to mitigate possible risks to site stability by increased erosion, October 2, 2012.



Figure 6
Sand bar borrow source for backfilling the Unipkat I-22 sump excavation, October 2, 2012.