



**Indian and Northern
Affairs Canada**

www.inac.gc.ca

North Mackenzie District
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**Affaires Indiennes
et du Nord Canada**

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Telephone: 867-777-8900
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March 22, 2011

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/or 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: Water Licence Inspection Report and Cover Letter (4 pages)



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March 22, 2011

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,

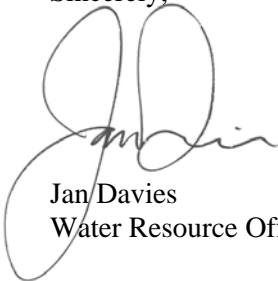
An inspection of the above noted operation was conducted on March 17, 2011 by Water Resource Officer Jan Davies and Resource Management Officer Donald Arey. Enclosed is a copy of the Industrial Water Use Inspection Report.

Shell Canada Ltd. is to be congratulated for their remediation efforts pertaining to the Unipkat I-22 well site, it is clear a lot of work has taken place in regards to this project. At the time of Inspection the site appeared to be clean and orderly. It is encouraging to see a number of steps taken to prevent and respond to spills/emergencies. Please review and address the concerns as indicated in the enclosed Inspection Report.

This report will be sent to the Northwest Territories Water Board for their review and/or public records.

If you have any questions/concerns 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: Water Licence Inspection Report (3 pages)



INDUSTRIAL WATER USE INSPECTION REPORT

LICENCE #:	N7L1-1831	EXPIRY DATE:	September 30, 2013
LICENCEE:	Shell Canada Ltd.	PREVIOUS INSPECTION:	New
COMPANY REP:	Randall Warren	INSPECTION DATE:	March 17, 2011

WATER SUPPLY

Source:	Mackenzie River - Arvoknar Channel	Quantity Used:	< 295 m ³
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/I	Treatment Systems	N/A	Recycling	N/A
Flow Meas. Device	N/I	Conveyance Lines	N/A	Pumping Stations	N/I	Chem. Storage	N/A
						Modifications	N/A

Water Supply Comments:

Notes:

- Potable water is being shipped from the Town of Inuvik.

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	Shell Canada Ltd.	Sludge Disposal	N/A	Other	N/A		
Tailings:	Tailings Pond	N/A	Natural Lake	N/A	Under ground	N/A		
Sewage:	Sewage Treat. System	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.	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	N/A	Spills	A
Conveyance Lines	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:

Notes:

- The camp is situated on a ground fast ice area across the river from the sump excavation.
- Sewage is being transported to the Town of Inuvik Sewage Lagoon. To date one load of 7500 L went out on March 16, 2011 and another load of 7000L on March 22, 2011. Sewage storage area and piping looked clean (see Figure 1).
- The site appeared very clean, no spills were noticed during the inspection. Drip trays were present and being utilized where appropriate (see Figure 2).



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	N/A	Surv. Net. Prog.	N/A
Geotechnical Inspection	N/A	Posting, Signage	N/A	Contingency Plan	A
Restorations Activities	N/A	New Construction	N/A	Fuel Storage	A
Mine Water Discharge	N/A	Chemical Storage	N/A	Annual Report	N/A

General Condition Comments:

Concerns:

1. It was apparent on site that the sand bar and the excavation to the east of the sump have a lot of surficial soil that is being blown around and in some areas the stripped snow cover has soil mixed with it (see Figure 3). According to project staff the soil laden snow will be rolled back on to the excavations when the project is complete and also iced down with water. There are piles of snow surrounding the excavations which is acting as a wind break.
2. It is important to note that attention will need to be paid to the sump excavation, in that if there is excessive wind or dispersal of sump/contaminated material, more wind breaks might be required and/or contaminated soil piles/areas be watered down to maintain control of loose contaminated soil material.

Notes:

- The sandbar to be used as a borrow area to provide fill for the excavation has been stripped of the snow cover in preparation for excavation by the Iron Wolf.
- Contingency Plan and Water Licence were present with other documentation and authorizations.
- Excess material in windrows etc. on the east side of the sump is currently being excavated by the Iron Wolf. This material will be able to be used as fill for the sump excavation (see Figure 4).
- Fuel storage was acceptable, both fuel storage areas (main tanker and the camp generator fuel tank) had a bermed area with a synthetic liner (see Figure 5).
- The camp sump was being excavated by an excavator during the inspection with the flare pit to follow (see Figure 6).

NON-COMPLIANCE/VIOLATIONS OF ACT OR LICENCE

N/A

Inspector's Signature:





INDUSTRIAL WATER USE INSPECTION REPORT

Inspection Images:



Figure 1
Sewage storage area/piping clean and tidy.

Figure 2
Drip trays were being utilized.



Figure 3
Surficial soil being blown onto snow and mixed with stripped snow cover.

Figure 4
Iron Wolf excavating excess material on the east side of the sump.



Figure 5
Main tanker truck fuel storage area - bermed with synthetic liner.

Figure 6
Excavator removing camp sump.