



### INDUSTRIAL WATER LICENCE INSPECTION REPORT

DATE: July 24, 2003

COMPANY REP: Scott Machej and Baub Kyle of IEG

LICENSEE: Shell Canada Ltd.

LICENCE #: N7L1-1770 / West Channel

#### WATER SUPPLY

Source: Mackenzie River      Quantity Used: None      Meter Rdg: 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		Conveyance Lines	N/A	Pumping Stations	N/A	Modifications	N/A

**Comments:**

At this time there was no water use from the Mackenzie River. Furthermore, there were no facilities (pumps etc.) installed to extract water from the river. For an aerial view of the site please refer to Figure 1 attached. As discussed below, under general comments, the bioremediation project was fully decommissioned. As a result no water from the Mackenzie River was required.

#### WASTE DISPOSAL

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

Indicate:	A - Acceptable	U - Unacceptable	N/A - Not Applicable	N/I - Not Inspected			
Discharge Quality	N/A	Conveyance Lines	N/A	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	N/A	Erosion	N/A	Spills	A

Effluent Discharge Rate:	N/A	Samples Collected:	No Samples collected as there have been no recent discharges of waste water.
--------------------------	-----	--------------------	--

**Comments:**

-All sewage is contained on Grubens barge facility (~80 person capacity)(Figure 1). At the time of inspection there were approximately 10 people staying at the facility. It is understood that no discharge of sewage to the Mackenzie River is occurring. Sewage is stored and then transported back the Inuvik and/or Aklavik for proper disposal.  
 -No Spills and/or unauthorized discharge of waste indicated by staff.

#### 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	Received
Restorations Activities	N/A	New Construction	N/A	Fuel Storage	U
Mine Water Discharge	N/A	Chemical Storage	A	Annual Report	Received

**Comments:**

-In general the area was neat and tidy and operations were acceptable.  
 -At the time of inspection the fuel storage area was poorly bermed and would not contain fuel (diesel) if a major leak occurred (Figure 2). At the time of inspection fuel storage consisted of a 12000 gallon dual contained DuraGreen tank and contained ~7000 gallons. This volume is a concern considering the close proximity of this facility to the Mackenzie River (~30m) (Figure 2). A verbal direction was given to representatives to address the concerns. Specifically, the concerns were inadequate berm height, and incomplete berm around the Northwest corner of the containment area (Figure 3). Lack of a complete berm at the Northwest corner is a concern because the general topography of the area sloped in this direction. The above concerns were also discussed with Mike Muller of IEG. It was agreed that the above issue would be addressed.  
 -It is important to note that all staff involved with the inspection were friendly, informative and cooperative. Much thanks!

**Violations of Act of Licence:** 1. No copy of water licence on site. However, this licence was for a previous project that was discontinued.

**General Comments:**

-At the time of the inspection most facilities and operations relating to the in situ bioremediation cells, as described in the April 2001 Project Description and prepared by IEG, were decommissioned and no longer in use. This project was deemed ineffective. At the time of inspection a new project was occurring and consisted of a "tilling and aeration" project using an Alu bucket (Figure 3,4). Operations are to finish around August 10<sup>th</sup>, 2003. It was indicated by IEG staff that the new remediation plans were reviewed and approved by the NWT Water Board.

-Future plans are to monitor soils and water around the area for a number of years to ensure remediation objectives.

-Noted personal on site included Colin Gordon (ILA), IEG Staff Scott Machej and Baub Kyle, Lennard Gordon (Wildlife), Henry Steene (maintenance), Mike Norris (medic).

-Kurt Curr of IEG (Project Manager) was off for two weeks and was not on site.

-As a reminder, upon completion of the Remediation activities, the licensee shall ensure that all equipment and materials are removed from the site.....Part G of the licence.


**-This water licence expires July 31, 2003**

Additional Comments Attached:    Yes                      No                      X

Licensee Representative's Title                      Scott Machej and Baub Kyle - IEG Representatives/Project Managers

Licensee Representative's Signature                      Electronic Form

Inspector's Name                      Kevin R. Glowa - Water Resources Officer

Inspector's Signature                      



Comments: All samples in container on licence page (Fig 1) - 30 litres capacity (Fig 1) - At the time of inspection there were approximately 10 people working at the facility. It is estimated that no discharge of sewage or the effluent flow is occurring. Sewage is stored and then transported from the facility under Alberta's program. The spill and/or uncontrolled discharge of water indicated by staff.

**GENERAL CONDITIONS**


Comments: In general the area was not well and only the operations were acceptable. At the time of inspection the first sewage was poorly treated and would not exceed the (limit) if a major leak occurred (Figure 2). At the time of inspection the first sewage consisted of 12000 gallons contained in 12000 gallons (Figure 2). A water discharge The volume is a concern considering the flow entering the facility in the March 2001 (Figure 2). A water discharge was given to representatives to address the concern. Specifically, the concern was that the water was not being treated. The effluent cover of the treatment area (Figure 2). Lack of a complete cover in the treatment area is a concern because the effluent topography of the area played in our direction. The above concern was the discussion with Mike Mather of IEG. It was agreed that the above issue would be addressed. It is important to note that all staff involved with the inspection were friendly, informative and cooperative. Thank you!



## List of Figures for Industrial Water Licence Inspection Report

Date: July 24, 2003

Company Rep/s: Scott Machej / Baub Kyle

Licencee: Shell Canada Ltd.

Licence #: N7L1-1770

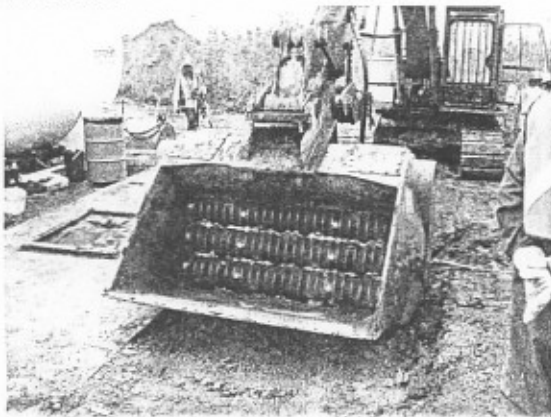
**Figure 1.** Aerial View of Shell Canada Ltd. West Channel Remediation Project.



**Figure 2.** Southeast corner of containment berm.



**Figure 3.** Alu bucket located to the northwest of the fuel storage tank. Please note the absence of a containment berm in this area.



**Figure 4.** Excavated contaminated area showing aerated soil in background. The soil is to be placed back in excavated area by Alu bucket.

