Consulting Engineering Construction Management Services



September 25, 2002

VIA FACSIMILE 867-669-2719

Vicki Losier
Executive Assistant
Northwest Territories Water Board
P.O. Box 1500, Goga Cho Building
Yellowknife, NT X1A 2R3

COPY	
BOARD.	6
G.W.	
E.A.	
W. RES.	OK16
File-	1784

File: PIN-M 3.6

Dear Ms. Losier:

RE: August Surveillance Network Program Report for Licence Number: N7L1-1784

The following information was compiled by UMA Engineering Ltd., on behalf of Defence Construction Canada and the Department of National Defence, to meet the requirements of the above-noted water use licence for PIN-M, Cape Parry.

The Environmental Sciences Group of Kingston, ON carried out all sampling requirements. The analytical testing for Faecal Coliforms and Biological Oxygen Demand were completed by Taiga Laboratories in Yellowknife, NT. Enviro-Test Laboratories in Edmonton, AB carried out all other analytical testing. Copies of the laboratory reports were not available for inclusion with this report; however, they will be included with the annual report.

Work at the site began on July 29, 2002, and the first sample for the surveillance network program (SNP) was collected on August 27, 2002. Table 1 presents a summary of the results:



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403-270-9239



Table 1 - Summary of August Surveillance Network Program Results

Parameter	Units	Max. Concentration of Grab Sample	Max. Average Concentration	27 Aug 02 sample from Station No.: 1784-1
ρH		. 6-9	6-9	7.5
BOD ₅	mg/L	•	30.0	17.4
Total Suspended Solids	mg/L	•	35.0	. 68
Faecal Coliforms	CFU/dL	•	250.0	25×10 ⁵
Oil & Grease	mg/L	-	5.0*	N/A**
Total Arsenic	mg/L	0.2	. 0.1	0.002
Total Chromium	mg/L	0.2	0.1	0.0044
Total Mercury	mg/L	0.0012	0.0006	<0.0002
Total Zinc	mg/L	2,0	1.0	0.08
Dissolved Cadmium	mg/L	0.02	0.01	<0.001
Dissolved Cobalt	mg/L	0.1	0.05	0.0004
Dissolved Copper	mg/L	0.4	0.2	0.0194
Dissolved Lead	mg/L	0.1	0.05	0.0014
Dissolved Nickel	mg/L	0.4	. 0.2 .	0.0028
Phenols	mg/L	0.04	0.02	0.454
Benzene	mg/L	0,0	· 3.0	<0.0005
Ethylbenzene	mg/L	14.0	7.0	<0.0005
Toluene	mg/L	0.4	0.2	<0.0005

^{*} Indicates there are two criteria for this parameter. The criterion listed is for the sewage effluent discharge.

Note: Parameters highlighted in bold exceed the criteria.

There was some misinterpretation of the analytical requirements of the water licence by the project team on-site at PIN-M. As a result, the sewage effluent was analysed for all of the criteria as listed on Page 4 of the licence, rather than the parameters required in the Surveillance Network Program. Therefore, ammonia was not analysed.

^{**} Indicates there is no result available for this parameter because there was insufficient sample volume to run the analyses.

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The analytical results show that the concentrations of faecal coliforms, total suspended solids and phenols exceed the discharge criteria as stated in the licence. Because of the exceedences, there was no discharge of the sewage lagoon, and there will be no discharge until the effluent is treated and does meet the discharge criteria.

We trust the above information meets the requirements of the water use licence.

If you have any questions or concerns, please contact the undersigned.

Sincerely,

UMA ENGINEERING LTD.

Eva Schulz, P.Ag.

Environmental Scientist eschulz@umagroup.com

EMS:elt

cc: Scott Hamilton, DCC

Barry Fedorak/Dave Mitchell, UMA

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