

## NWB Annual Report

Year being reported: 2008 ▼

License No: 2BE-QAM0813

Issued Date: June 2, 2008

Expiry Date: September, 31, 2013

Project Name: Turqavik - Aberdeen Project or (Qamanaarjuk Lake Project)

Licensee: Rebecca Hunter

Mailing Address: Cameco Corporation  
2121-11th St W  
Saskatoon, Saskatchewan  
S7M 1J3

Name of Company filing Annual Report (if different from Name of Licensee please clarify relationship between the two entities, if applicable):

Same as above.

## General Background Information on the Project (\*optional):

The 2008 program included the remaining construction of the exploration camp that was initiated in 2006 and continued throughout 2007, and construction of a core shack. The 2008 Exploration program consisted of drilling, prospecting, mapping, sampling, and wildlife monitoring, as well as ground gravity geophysical survey.

Licence Requirements: the licensee must provide the following information in accordance with

Part B ▼

Item 1 ▼

A summary report of water use and waste disposal activities, including, but not limited to: methods of obtaining water; sewage and greywater management; drill waste management; solid and hazardous waste management.

Water Source(s):	Qamanaarjuk Lake, other lakes for drilling	
Water Quantity:	3	Quantity Allowable Domestic (cu.m)
	~0.7	Actual Quantity Used Domestic (cu.m)
	55	Quantity Allowable Drilling (cu.m)
	~35	Total Quantity Used Drilling (cu.m)

## Waste Management and/or Disposal

- ☒ Solid Waste Disposal  
☒ Sewage  
☒ Drill Waste  
☒ Greywater  
☒ Hazardous  
☐ Other:

Additional Details:

**Summary Report:**

A summary report of water use and waste disposal activities includes a detailed description of methods of obtaining water and its purification for domestic use, and description of greywater and sewage management. The following report outlines the

description of greywater and sewage management. The following report outlines the water use and waste disposal practices on the Turqavik – Aberdeen Project.

Potable water for use at the exploration camp is taken from Qamanaarjuk Lake, located down the hill from the camp. From the lake, water is pumped with a gasoline-driven high-pressure pump. At the intake location of the suction hose, approximately 7 m away from the shore, there is a standard 2" pond strainer that ensures that no organisms get accidentally sucked into the hose. Through the hose, water is pumped into a 5000 L tank and later, during the transfer to a smaller tank, it is treated by UV radiation. This filter is a UV20 Series PURA set-up for small commercial application. During the filtering process, water is passed through a series of polyester filters that first remove sediments 10 µ and larger and then remove any particles as small as 5 µ. In addition, the system includes a charcoal filter and, as a final step, large UV filter. This filtered and treated water is used for consumption, washing and for washing of kitchen supplies only. It is not used for disposal of waste. On average, 0.7 cu.m of water is used daily. Water intake was monitored by a mounted standard meter that is used in municipal supply distribution systems (Nutating Disc Displacement Flow Meter). During a visit to the camp, the meter was inspected and approved by one of the INAC representatives. Logs of water consumption were kept on a regular basis and are included with this report.

At the camp there are four 200 L capacity sumps. All greywater from domestic use (from cooking, dish washing, showering, washing machine, etc.) is disposed into either one of the sumps. These sumps are located at a distance of well above the minimum 30 metres from the high water mark of the lake, near the main two buildings (used for kitchen, dry and office) and are cribbed with perforated steel drums. The kitchen waste sump is also equipped with a baffled grease trap.

All sewage and domestic waste are efficiently incinerated. On premises, there are two incinerators. One incinerator that is currently under repair contains a fuel spray with a blower and includes own fuel supply. This incinerator was purchased during the 2008 field season but was not used during the summer. The second incinerator is manufactured by 'Elastec Inc.' and is a very efficient cyclonic barrel burner. It consists of a 200 L capacity drum with manual fuel supply. During incineration, waste is reduced to approximately 3% ashes by volume. The incinerator is designed to use liquid fuel such as diesel or Jet A. All sewage, kitchen food waste, and solid waste (such as glass and plastic jars, paper, wood shavings, etc.) are incinerated and turned into ash. Upon completion, incinerated ashes are removed by hand, packed into cardboard boxes and safely secured in additional double plastic bags. These packages are then transported to municipal disposal grounds in Baker Lake. Records of when the incinerated waste was delivered to town are attached with this report.

At the drill site, water is used for circulation down the drill hole to cut through the rock and to wash out the hole. Water hose line for the drill ranged from 100 to 1100 m. Water was pumped from the closest lake that was also large enough to supply approximately 35 cu.m of water per day. Water intake was monitored by the pump set-up itself with a moving rate of 10 gallons of water per minute (approximately 38 litres/minute or 0.038 cu.m). Circulated water ran off from the drill site and percolated into the ground. No mineralization was intersected during the 2008 program and the cuttings were collected around the base of the drill without any additional treatment.

To prevent spilling of hazardous waste, all fuel drums at camp and at the drill site were stored in berms. For the exploration program 9 berms were purchased, 8 of which have dimensions of 10'x10'x1' and hold 15 drums. And one berm has dimensions of 10'x15'x1' and holds approximately 25 drums. The berms are made of

dimensions of 10'x15'x1' and holds approximately 25 drums. The berms are made of synthetic fuel compatible and sturdy vinyl fabric. Rain water that collects in the berms is filtered and returned as greywater. The filters used in the process are incinerated. At the drilling site fuel drums are stored in a 10'x10'x1' berms, as well as the pump set-up near the lake is also mounted on a small platform and protected by a berm.

#### A list of unauthorized discharges and a summary of follow-up actions taken.

Spill No.:  (as reported to the Spill Hot-line)  
 Date of Spill:   
 Date of Notification to an Inspector:   
 Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

#### Revisions to the Spill Contingency Plan

SCP submitted and approved - no revision required or proposed



Additional Details:

#### Revisions to the Abandonment and Restoration Plan

AR plan submitted and approved - no revision required or proposed



Additional Details:

#### Progressive Reclamation Work Undertaken

Additional Details (i.e., work completed and future works proposed)

Exploration program is ongoing with a similar plan for 2009 program.

#### Results of the Monitoring Program including:

The GPS Co-ordinates (in degrees, minutes and seconds of latitude and longitude) of each location where sources of water are utilized;

Details attached



Details attached ▼

Additional Details:

Report on locations where sources of water are utilized with corresponding photos is attached.

**The GPS Co-ordinates (in degrees, minutes and seconds of latitude and longitude) of each location where wastes associated with the licence are deposited;**

Details described below ▼

Additional Details:

See attached Excel sheet for GPS coordinates. At the camp, four sumps are used for disposal of greywater. Incineration of sewage and other waste also take place at the camp location. Circulated water at the drill sites is allowed to percolate back into the ground on location.

**Results of any additional sampling and/or analysis that was requested by an Inspector**

No additional sampling requested by an Inspector or the Board ▼

Additional Details: (date of request, analysis of results, data attached, etc)

**Any other details on water use or waste disposal requested by the Board by November 1 of the year being reported.**

No additional sampling requested by an Inspector or the Board ▼

Additional Details: (Attached or provided below)

Samples taken by the inspector (INAC) but no results have been forwarded.

**Any responses or follow-up actions on inspection/compliance reports**

Inspection Report received by the Licensee (Date): ▼

Additional Details: (Dates of Report, Follow-up by the Licensee)

As identified by inspection in 2007, during 2008 field program:  
 1. Installed a water meter at camp and regularly recorded water intake into logs.  
 2. Used berms for secondary containment of fuel drums at the camp and at the drill site.  
 3. Purchased a proper incinerator for waste management.

**Any additional comments or information for the Board to consider**

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**Date Submitted:**

March 30, 2009

**Submitted/Prepared by:**

Rebecca Hunter

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