## WATER USE INSPECTION REPORT

<b>Date:</b> January 19 & 20 , 2010	Licensee Rep. (Name/Title): Denis Gourde - General Manager, Stephane Robert – Env. Superintendent	
Licensee: Agnico Eagle		Licence No: 2AM-MEA0813 -Construction

## **Potable Water**

Source(s): Third Portage Lake	Quantity used: 2,420 m³ ( as of Nov 30, 2009)
Owner:/Operator: Agnico-Eagle Ltd.	

Indicate: A - Acceptable U - Unacceptable NA - Not Applicable NI - Not Inspected

Intake Facilities: U	Storage Structure: A	Treatment Sys: A	Chemical Storage: NA
Flow Meas. Device: NI	Conveyance Lines: NA	Pumping Stations: NA	Screen : NA

**Comments:** Water for the camp is currently treated using filters and UV. Inspection of the treatment system found to be in good order with records up to date and on site. Inspection of In-take barge found 2 jerry cans of fuel within the building. Fuel should not be stored in the in-take barge nor within the required 31 meter setback from water.

Other: Potable water treatment plant – buckets of chlorine product are stored on metal flooring beside water storage tanks. It is recommended that this product be stored on material or liner of more compatible substance to prevent further corrosion.

## **WASTE DISPOSAL**

Sewage: Sewage Treatment System (Prim./Sec/Ter.): Primary - Discharge to Tear drop Lake

Natural Water Body: Mine site Continuous Discharge (land or water): Co		r): Continuous
Seasonal Discharge: NA	Wetlands Treatment: NA	Trench: NA

Indicate: A - Acceptable U - Unacceptable NA - Not Applicable NI - Not Inspected

Discharge Quality: NA	Decant Structure: NA	Erosion: A
Discharge Meas. Device: NA	Dyke Inspection: NA	Seepages: A
Dams, Dykes: A	Freeboard: A	Spills: A
Construction: NI	O&M Plan: A	A&R Plan: A
Periods of Discharge: NA.	Effluent Discharge Rate: NA – not recorded	

**Comments:** Sewage wastes treated and discharged to waste water retention area in Tear drop Lake. Sewage/ Grey water main line from camp runs through lift station to equalizer, then either the large Biodisc unit (RBC) or several smaller ones, followed by UV treatment.

Inspection of the treatment system found to be in good order with records up to date (daily) and on site; very low odour.

Samples of the treated effluent were collected and will be analyzed against criteria established under Part D Section 21 of the issued license. The listed criteria were established by the Nunavut Water Board for use during the construction phase of the License and in expectation of transfer of effluent to the Tailings impoundment area.

Other: TSS Dewatering Plant –dewatering of Second Portage Lake, through TSS Plant and into Third Portage Lake. Petroluem products stored near compressor at Plant require secondary containment.

## **Solid Waste:**

Landfill: Constructed	Burn & Landfill: NA	Other: Incinerator & backhaul of Hazardous materials
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**Comments:** Kitchen and paper wastes are incinerated on site. Inspection of the Incinerator building and hazardous materials areas (seacans) found no issues. The Landfill site was not inspected during this visit due to time restrictions and loss of daylight.

Hazardous materials manifests were provided during the inspection. The manifests provided were incomplete. Only Copy 1 of the Movement Document was provided. The licensee is reminded that the final copy signed by the receiver is to be included in the annual report.

Scrap seacans are stored near the fuel tank farm; awaiting on decision from NWB regarding request for disposal on site (burial) request.

#### **FUEL STORAGE:**

Waste Oil Storage: Consolidated in Haz Mat area Indicate: A - Acceptable U - Unacceptable NA - Not Applicable NI - Not Inspected

Berms & Liners: NI	Water within Berms: NA	Evidence of Leaks: NI
Drainage Pipes: NI	Pump Station & Catchments Berm: NI	
Pipeline Condition: NI	Condition of Tanks: A- Unregistered at this time.	

**Comments:** Inspection of the on-site 5 Million Litre tank and transfer area found no issues. 6 on-site waste oil furnaces were located in temporary park-all units. Waste oil was stored adjacent to these units. Secondary containment was present in the majority of cases however this was not the case in all locations and must be addressed.

Storage of other liquids like glycol and oil in totes were noted around the site both inside and outside of buildings. Storage of these containers outside should require barrier devices and mandatory secondary containment to prevent loss of product due to spills or impacts.

Other: Maintenance garage area —evidence of grease and oil used outside on ground. Drip pans should be utilized and spills cleaned up immediately. Inside garage area: gravel strip beside main floor pad is used for storage of petro-products and other liquids. This area needs to be mitigated and lined properly to prevent migration of liquids to the environment.

**Fuel spill:** On January 17<sup>th</sup>, 2010 a 40,000 L tanker truck over turned on the access road to site. Preliminary work to contain the spill and remediate the site was undertaken prior to the arrival of Inspectors. While on site, Inspectors visited the spill site and recommended another 2 - 4 inches of the top soil should be excavated to get rid of the contaminated soil and the area affected should be reclaimed. That section of the road should also be widened and steel posts and metal fencing should be built where it curves. This would prevent fuel trucks and heavier vehicles from sliding on the side of the road and give drivers some protection during blizzards. Apparently, there have been other accidents that involved semi trucks that jacked knifed around that curve.

## **SURVEILLANCE NETWORK PROGRAM (SNP)**

Samples Collec	ollected Owner /Operator: Ag		gnico-Eagle Ltd.
4		<b>INAC:</b> Potable water, used in on-ice drilling	Effluent, TSS Dewatering plant and water from Drill procedure.
Signs Posted	SNP: some		Warning: Present
Records & Reporting: Monthly summary reports to November 2009.			
Geotechnical Inspection: N/A			

**Comments:** Samples were collected at the 4 sites. Samples were sent to Taiga labs for analysis.

## On-lce Drilling Activity: (under License 2BE-MEA0813) but run and administered by Mine office.

Indicate: A - Acceptable U - Unacceptable NA - Not Applicable NI - Not Inspected

Secondary Containment: A	Return Water: U	Sludge: A ( samples collected)
Fuel storage : ∪	Pump Station & Catchments Berm: Modification may be required	
Drill Platform : A	Drill Waste : U	Condition of Tanks: A

**Comments:** Inspection of the on-ice drilling activities on site found the following;

Drill additives / Flocculent used by Drilling company (Orbit) for Agnico –Eagle are added to the return water carrying sludge/ Drill cuttings. Sludge is collected in settling tanks and water returned to lake. This may be contrary to the existing license (2BE-MEA0813 Part Sections 2 and 5) such that modifications to the system are required to ensure that no waste re-enters the lake (as was found) and/or that the return water is proven to be non-toxic and meet the criteria in the water licence. Test results were not provided on site.

Fuel storage at drills was found to be adequate however fuel transportation and hauling for transfer tanks were found on the ice.

# **Mill Spill Containment:**

Mill Operational: Not commissioned prior to visit.	Spill containment: Foundation of building and individual bermed processing areas.	Sealed concrete: containment berms not sealed.
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**Comments:** It was brought to the licensee's attention that the containment areas within the mill would better serve clean ups and not leave contaminated concrete for disposal during decommissioning of the facility if the bermed area were epoxy (or equivalent) lined.

# Non-Compliance of Act or Licence:

Construction activities are on-going throughout the site.

The site covers a large footprint. Currently, because of the level of activity and because of the limited time Inspectors have spent on the site it is impossible to determine accurately if instances of significant non-compliance exist.

It is clear that there have been issues of non-compliance with respect to Dyke construction and this remains an open issue for the coming season.

The Licensee is required to provide water quality results with respect to the On-Ice Drilling activities that are being conducted from the site. These results are due within 30 days. Additional proof of modification to the existing process is required to ensure that cuttings and other sludge are not being deposited into the lake.

It is again the recommendation of the Inspectors that an inspection of the site be conducted on a monthly basis to keep up with the rapid and dramatic changes on-going at the site especially during the construction phase.

This may be revisited once the mine is into production.

A.Keim	Sent by E-mail
Inspector's Name	Inspector's Signature