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File: **W2007L2-0003**

December 6th, 2011.

Diavik Diamond Mines Inc.,
P.O. Box 2498
5007-50th Ave.
Yellowknife, NT. X1A 2P8.

Attention: David Wells,
Superintendent, Environment.

Re: Water Use Inspection Report, Water Licence W2007L2-0003

Dear Mr. Wells:

An Inspection of the Diavik Mine licensed under the *Mackenzie Valley Resource Management Act* was conducted on November 28th, 2011, by Tracy Covey (Resource Management Officer). David Wells was also present throughout the Inspection. The Inspection Report and photographs illustrating Water Licence conditions & practices observed during the Inspection can be found in the pages which follow this cover letter. This report outlines the areas that were inspected, comments and concerns which were noted, as well as any issues or items that need to be addressed. All aforementioned items were discussed during the course of the inspection, as well as in a close-out meeting held on November 28th, 2011 (attended by yourself & Steve Bourne).

The following aspects of the Water Licence were specifically inspected (details of the findings are in the attached inspection report):

- Outside the Process Plant (site of NWT Spill 11-089)
- EPKC Sump 1/base of PKC dam.
- Fuel Transfer Station & Large Fuel Storage Tank Farm.
- AN Storage Building.
- Wind Turbine Site Preparation work.

Meetings/updates were also held with regards to status of the Wind-Power Project, M-lakes Project, and proposed West-Island Project. The Inspector requires/ recommends the following action items to resolve ongoing Water License issues* & concerns**:

- * Water is to be removed from the Large Fuel Storage Tank Farm during the summer of 2012 (and subsequent to that date as well).
- * Cleanup of Spill 11-089 must be completed as soon as the PK thaws & removal can be safely/effectively completed (i.e., during summer, 2012).
- * Please provide notification to the Inspector when the components of the Turbine are en-route to site & on the Winter Road.

If you have any questions or concerns about this report, please do not hesitate to contact me at (867) 669-2763 or coveyt@inac.gc.ca.

Sincerely,

A handwritten signature in blue ink that reads "Tracy Covey". The signature is written in a cursive style with a stylized "T" and "C".

Tracy Covey
Resource Management Officer III,
South Mackenzie District
Aboriginal Affairs and Northern Development Canada

cc. *Mike Martin* (Aboriginal Affairs and Northern Development Canada)
Ryan Fequet (Wek'eezhii Land & Water Board)



INDUSTRIAL WATER USE INSPECTION REPORT

DATE: <i>November 28th, 2011</i>	COMPANY REP(S): <i>David Wells</i>
LICENSEE: <i>Diavik Diamond Mines Inc.</i>	LICENCE #: <i>W2007L20003</i>

WATER SUPPLY

Indicate: "A" - Acceptable "U" - Unacceptable "N/A" - Not Applicable "NI" - Not Inspected

Source: <i>Lad de Gras</i>	Quantity Used: <i>September, 2011: 48,058 m³</i>	Meter Reading: <i>N/A. Rate of pumping at EPKC Sump 1 = 1.5 L/sec as of November 28th, 2011 at Pumphouse.</i>					
Intake Facilities	<i>NI</i>	Storage Structures	<i>A</i>	Treatment Systems	<i>NI</i>	Recycling	<i>A</i>
Flow Meas. Device	<i>NI</i>	Conveyance Lines	<i>A</i>	Pumping Stations	<i>A</i>	Modifications	<i>N/A</i>

Comments*/ Concerns** with regards to aspect inspected:

Pumphouse

- No environmental concerns were noted with the Pump House.
- Figure 1 shows seepage flows in the well at "EPKC Sump 1". At the time of inspection, this water was being pumped back to the PKC Facility (as per Part H of the W.L.) at a rate of 1.5 L/sec (down from 4.5 L/s in mid October).

WASTE DISPOSAL

Indicate: "A" - Acceptable "U" - Unacceptable "N/A" - Not Applicable "NI" - Not Inspected

Tailings: <i>Processed Kimberlite Containment Facility.</i>	<i>A</i>	Underground	<i>NI</i>
Sewage: <i>Sewage Treatment Plant</i>	<i>NI</i>		
Solid Waste: <i>Landfill, Waste Transfer Area (WTA), Landfarm</i>	<i>A</i>		

Discharge Quality	<i>A</i>	Conveyance Lines	<i>A</i>	Discharge Point	<i>A</i>	Freeboard	<i>A</i>
Erosion	<i>A</i>	Pond Treatment	<i>A</i>	Dams, Dykes	<i>A</i>	Seepages	<i>A*¹</i>
Sumps/liners	<i>A</i>	Runoff Diversion	<i>A</i>	Dyke Inspections	<i>A</i>	Spills	<i>A*²</i>

Effluent Discharge Rate: <i>September, 2011: 1,473,826 m³.</i>	Samples Collected: <i>By DDMI, in SNP report</i>
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Comments*/ Concerns** with regards to aspect inspected:

No environmental concerns were noted with regards to waste disposal.

*¹ Figure 1 shows seepage flows in the well at "EPKC Sump 1". At the time of inspection, this water was being pumped back to the PKC Facility (as per Part H of the W.L.) at a rate of 1.5 L/sec (down from 4.5 L/s in mid October).

*² As detailed in the July 18th, 2011 Inspection Report, further cleanup of NWT Spill 11-089 is required. The Inspector acknowledges that safety challenges exist with the proposed clean-up which delayed cleanup in the summer 2011, & expects that the spill cleanup will be completed in the summer of 2012 (when the material in question thaws out).

FUEL STORAGE

Indicate: "A" - Acceptable "U" - Unacceptable "N/A" - Not Applicable "NI" - Not Inspected

Condition of Tanks	<i>NI</i>	Evidence of leaks/containment breach	<i>N/A</i>
Berms and Liners	<i>NI</i>	Pipeline Condition	<i>NI</i>
Pump (transfer) Station and Catchment Berm	<i>NI</i>	Drainage Pipes	<i>NI</i>
Water within berm	<i>A¹</i>	Runoff Diversion	<i>NI</i>

Comments*/ Concerns** with regards to aspect inspected:

*¹. Water (ice) remains in the large Fuel Storage Tank Farm. As per discussion with mine staff, a long-term solution for water management within the main tank farm will be in place for the summer of 2012.

* Figure 2 shows effective fuel management at the fuel transfer facility (secondary containment & adherence with best practices).



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GENERAL CONDITIONS

Indicate: "A" - Acceptable "U" - Unacceptable "N/A" - Not Applicable "NI" - Not Inspected

Ore & Waste Rock Stockpiles	A	Records & Reporting	A	Surveillance Netw. Progr.	A
Geotechnical Inspection	A	Posting, Signage	A	Contingency (Spill) Plan, Emergency Response Plan	A
Restoration (Closure & Reclamation) Activities	A	New Construction	NI	Fuel Storage	A
Mine Water Discharge	A	Chemical Storage	NI	Annual Report	A

Comments*/ Concerns** with regards to aspect inspected:

- No environmental concerns were noted with regards to General Conditions of the Water License.

- Figure 3 shows the AN storage building at the time of the inspection. No environmental concerns were noted.

This Report was completed off-site (post-inspection) & delivered to the Licensee Representative

Tracy Covey
Inspector


Inspector's Signature



INDUSTRIAL WATER USE INSPECTION REPORT



Figure 1. Seepage flows in the well at “EPKC Sump 1”. At the time of inspection, this water was being pumped back to the PKC Facility (as per Part H of the W.L.) at a rate of 1.5 L/sec (down from 4.5 L/s in mid October). The green hose (photo bottom) is the hose returning seepage water to the PKC. The large yellow duct (photo top) is directing hot air into the hole to keep the seepage water from freezing.



Figure 2. Effective fuel management at the fuel transfer facility (secondary containment & adherence with best practices).



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Figure 3. AN storage building as viewed from one of the new wind turbine pads (under construction). An inspection of the building showed no environmental concerns (it was being operated as per best practices, with AN stored below the height of the cement walls).
