



WATER USE INSPECTION REPORT FORM

Date: August 13, 2013	Licensee Rep. (Name/Title): Dave Willis, Land Administrator.
Licensee: Peregrine Diamonds – Discovery Camp, Sunrise Camp, CH-6 Camp and Bulk Sample Pit and Aurora Camp	Licence No: 2BE-CHI1218

Comments:

After a number of delays due to weather, the inspection on the Chidliak Project was finally conducted on August 13th, 2013. In attendance were; Mr. Dave Willis of Perigrine Diaminds Ltd, Mr. Andrew Keim – AANDC Inspector, Joel Fortier – QIA Inspector, Courtney Cox – AANDC Summer Student, Peterloosie Papatsie- AANDC Summer Student, Murray Ball, Manager of Waters- AANDC and Bradley Summerfield Water Technician- AANDC. Attending as an observer was Mr. Christopher Wallace of De Beers Canada. Thanks go to Mr. Ron Corey and Mr Sandy MacIntyre (Camp Managers at Discovery and Sunrise) for taking the time out of their day to assist in the inspections and answer the questions posed by Inspectors.

The current License (2BE-CHI1218) is a renewal license authorized by the Nunavut Water Board (NWB) on December 24 2013. The License allows for the use of water and disposal of waste during camp operations and activities related to mineral exploration and includes diamond drilling and large diameter reverse-circulation (RC) drilling for bulk sampling, airborne and ground geophysics, rock sampling, trenching to obtain mini-bulk samples and the use of on-ice landing strips.

The Inspection conducted included all sites covered under the existing license. It is noted that no activities were taking place at either of the Aurora camp or at the CH-6 camp. Neither of these camps was activated this season. The Sunrise Camp was opened for the use of the Canada- Nunavut Geosciences Office who was conducting field work over the course of five weeks this season. The camp remained permitted under the authority of the Peregrine Diamonds License. The Camp (Sunrise) was in the process of being shut down for the season with only the Camp Manger and one CNGO staff member on site to facilitate the removal of equipment by Helicopter and close/ winterize the remaining tents and equipment.

WATER SUPPLY

Source(s): Discovery Camp – Melt Water Stream adjacent to Camp. Sunrise Camp- Unnamed Lake West of Camp	Quantity used: A field log detailing Tank fills was provided at both camps for review. No accurate metering of water was undertaken. Estimates only
Owner:/Operator: Peregrine Dimonds Ltd.	

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

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

Comments: The Inspector noted the following during the period of Inspection.

Discovery Camp: While it appeared to have sufficient flow during the period of Inspection the melt water stream in use may be reduced to such an extent later in the year as to be unusable. It is recommended that an alternative source for water be found for the camp and that monitoring of the stream be maintained. Evidence of up-take in sediment was noted within the water tanks. Water in-take logs were available for review but were based on estimates only. It was determined after conversation with the camp manager that the tanks had been cleaned earlier in the year (camp opening) but not inspected since. A series of Filters and UV were found to be on site and in operations at the time of the Inspection. It is noted that two of three tank lids were not secured during the inspection. It is noted that this stream (following the first year of operation) has provided raw water for the camp over the last three years.



Sunrise Camp: The camp was in the process of closing and the water intake pump from the lake had already been pulled. At the time of the Inspection the lake still had approximately 65% ice cover. This is very late in the season to have so much ice. Water usage logs were again based on the number of fills and estimates as to volume used. The same filter/ UV disinfection system was found on site. The camp, although in the process of being shut down was found to be in order and free of debris and garbage.

No activities or use of water were undertaken at either the **Aurora Camp** or the **CH-6** site during this field season according to Mr. Willis.

WASTE DISPOSAL

Sewage: Sewage Treatment System (Prim./Sec./Ter.): None- Incineration

Natural Water Body: None	Continuous Discharge (land or water): None	
Seasonal Discharge: None	Wetlands Treatment: None	Trench: None

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

Discharge Quality: NA	Decant Structure: NA	Erosion: NA
Discharge Meas. Device: NA	Dyke Inspection: NA	Seepages: NA
Dams, Dykes: NA	Freeboard: NA	Spills: None
Construction: NA	O&M Plan: NA	A&R Plan: NA
Periods of Discharge: NA	Effluent Discharge Rate: NI	

Comments: At the time of the Inspection it was determined that both Camps used Pacto Toilets for human wastes. The bags are incinerated on site. No issues were identified during the period of Inspection.

Greywater sumps in both the Discovery camp and in Sunshine camps were insufficiently constructed and allowed water to be released into areas immediately adjacent to camp infrastructure including tents and roadways. This is to be addressed before the period of the next inspection.

SOLID WASTE MANAGEMENT:

Landfill: NA	Burn & Landfill: NA	Other: Incineration
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Comments: During the period of Inspection the following was noted by the Inspector;

Discovery Camp: An incinerator was noted on site. The licensee was found to be managing their waste stream and while small amounts of metal and cans have been making their way into the unit, work on educating camp staff was on-going. Ash from the incinerator was found in 45 gallon drums awaiting transport to Iqaluit for deposit in the Solid Waste Management Area there. Fuel tanks and barrels in use by the Incinerator were found to be stored on Secondary Containment. No hazardous wastes have been removed from site as of the date of the inspection.

Sunrise Camp: An incinerator was found on site. The licensee was found to be working on managing their waste stream however scrap metal including the frame for a lawn chair was found to have been put into the unit. It is noted that the CNGO was using the camp at this time and not the Licensee, however, the Licensee is reminded that the use of the camp is covered under their license and as such they are responsible to ensure compliance with their authorizations. Ash from the incinerator was found in 45 gallon drums awaiting transport to Discovery camp and retrograde to Iqaluit for deposit in the Solid Waste Management Area there. Fuel tanks and barrels in use by the Incinerator were found to be stored on Secondary Containment. No hazardous wastes have been removed from site as of the date of the inspection but were scheduled to be transported to Discovery camp in the next few days.

Both camps were noted to having duel burner, top loading incinerators.



Waste Oil Storage: Both camps were found to have waste oil on site. The Licensee is reminded that pursuant to their issued authorizations, when that waste is transported off site for final disposal, The Licensee is required to maintain records of all waste backhauled, and maintain records of confirmation of proper disposal. These records shall be made available to an Inspector upon request. All hazardous waste shall be disposed of only at a licensed waste disposal site or facility.

MONITORING AND THE SURVEILLANCE NETWORK PROGRAM (SNP)

Samples		Owner /Operator: None as of date of the Inspection	
AANDC		One (1) Raw water sample was collected at Discovery Camp.	
Signs Posted	SNP: NONE		Warning: None posted
Records & Reporting: Records and sampling results are to be provided to the Inspector			
Geotechnical Inspection: No reports provided.			

Comments: The Inspector noted the following during the period of Inspection;

Discovery and Sunrise Camps:

- It was unclear at the time of the Inspection what if any sampling had been undertaken by the licensee in relation to the raw water source.
- Records of water usage are to be based on accurate measures of water use and not estimates
- No extra monitoring has been requested by the Inspector at this time.

Aurora camp:

- Camp not in use. No monitoring was required by the Inspector at the time of the Inspection.

CH-6:

- The site of the mini Bulk sample was found to have slumped and be filled with approximately 1 meter of water in some places.
- The Licensee is required by the monitoring program to conduct sampling to ensure that water released from the Bulk sample pit does not exceed the criteria set out in Part D item 15. These results are to be provided to the Inspector upon receipt. Sampling was scheduled for later in the week following the Inspection.
- The licensee is required to have back filled the Bulk sample/ trench and returned the area to a natural state upon completion of the bulk sample. Due to subsidence and settling of the overburden used to back fill the trench a large pond of water now has developed. There appears to be off site migration and standing water in small pools adjacent to the trench. It was noted that the Licensee has installed silt fencing to slow the flow of suspended solids from the trench area and is therefore aware of the problem. When questioned on the reclamation of the site, the Licensee proposed a period of monitoring that would include the sampling required by the License.
- The Licensee shall provide the Inspector a plan to address the monitoring and remedial work necessary to reclaim the site and prevent migration of this water into surrounding areas. This is to be provided to the Inspector before September 30th, 2013. If approved, the plan shall be implemented in the 2014 field season. If not approved the Inspector may order such work as is required to remediate the site as necessary.

NON-COMPLIANCE OF ACT OR LICENCE:

A number of housekeeping and administrative issues were identified during the inspection and brought to the attention of the licensee, these included;

- Signage and labelling throughout the camps
- Accurate metering of water usage is mandatory
- Insufficient Spill Clean-up materials including Soda ash or other for batteries found on site



- Sumps and waste water discharge locations must be constructed to sufficiently contain grey water without overland dispersion in camp. Outfall of these sumps is to be moved from present locations to an area 31 meters above the regular high water mark of any water body and beyond and/or outside of the foot print of the camp.

One final issue identified by the Inspector during the Inspection does require the immediate attention of the Licensee.

- On the day of the Inspection the state of the Aurora camp was found not to be acceptable. It appears that following a windstorm that occurred between July 7th and 21st (dates unconfirmed) the camp was partially blown down. Wind-blown timbers and plywood along with other camp debris were found to be scattered throughout the area and some were found to have been ejected from the camp area and out onto the lake adjacent to camp. This debris was found to have been transported out and away from the camp and found littering the shoreline of the Lake. It was unclear how long the Licensee has been aware of the issue.

The Licensee shall take such measures as are necessary to clean up and secure the debris from the Aurora camp and shall do so before August 31st 2013. Once completed, a report showing evidence of this work including photographs taken at the end shall be provided to the Inspector within 10 days following the cleanup. Failure to comply with this will result in a more formal enforcement action being undertaken by the Inspector.

Inspector's Name

Sent by E-mail (Original signed and on files)

Inspector's Signature

Cc:

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