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January 8, 2008

Dr. Pascal Lee
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RE: Water License Inspection of Haughton Crater Mars Project August 2nd, 2007

The Water Resources Officer (WRO) appreciates the assistance and cooperation provided by Mr. Pascal Lee, Project Leader for the Project who accompanied the Inspector during the inspection of the Camp site.

The following report is based on observations made at the time of the inspection at the Haughton Crater site, results of samples collected during the inspection and items outlined during a review of the terms and conditions of the license with Mr. Lee. Immediately following the inspection an Industrial Water Use Inspection Report outlining any concerns was signed by both Mr. Lee and the Inspector.

Part A: Scope and Conditions

No issues were found with respect to the location of the camp as it relates to the information contained within the current license.

Part B: General Conditions

The issue of water use fees and security were not included within the context of this inspection.

A review of the Nunavut Water Board FTP – Public Registry was conducted during the writing of this report.

As this is the first year for this License there were no annual reports to be reviewed. It should be noted however that it has been noted that this is not the first year this project has been in operation.

The proponent is reminded that an annual report is required to be filed by March 31st 2008 for the year ending December 31st 2007. The annual report must include but should not be limited to those items listed in Section 2 i through vi of this Part.

The licensee is reminded that it is the responsibility of the licensee to ensure that any documentation submitted by the licensee to the Nunavut Water Board is acknowledged by the Manager of Licensing.

Part C: Conditions Applying to Water Use

At the time of the inspection the licensee was allocated the use of 5 Cubic Meters annually of water from Lowell Creek for domestic and all purposes. It was noted that there were no meters installed for recording accurately volumes of water used by the licensee. This must be addressed by the next inspection.



An inspection of the pumping facilities at the intake was conducted and found to be in good order.

The Inspector was concerned during the inspection when the low water levels were noted within the Lowell creek basin adjacent to camp. It was noted that because of a depression within the creek bed water collected and was thus available for pumping up into camp. As the creek is a melt flow channel and does not have a permanent and sustainable source the Licensee is cautioned against drawing the volume down below a sustainable level. Alternative sources may be required and as such an amendment to the current license will be required and must be approved before making use of any identified alternate source.

Part D: Conditions Applying to Waste Disposal

During the period of Inspection it was noted that an incinerator (Salisbury) unit was on site. This unit is not a forced air unit. The Inspector is concerned that if, as indicated in the Supplementary camp application documents, Human wastes are burned in the unit that full and complete combustion may not be possible. This is to be addressed by the next inspection.

The Licensee is reminded to ensure that the capability of any incinerator unit installed on site meets the Canada-wide Standards for Dioxins and Furans and the Canada-wide Standard for Mercury Emissions.

The proponent was directed during the inspection period to include in the 2007 annual report due on March 31st, 2008 a list of any hazardous materials shipped out of the camp, the treatment received, and the location of the approved treatment facility to which they were sent. Shipping and receiving invoices are not required so long as the records are available for inspection during the 2008 inspection season.

During the period of inspection the Inspector noted the camp sump was not adequate and did not meet the needs of the camp. A flow channel was noted flowing from the sump down hill and away from the camp. This above ground flow with associated vegetation growth reflects an obvious pattern of over flows from the sump area. A verbal direction to enhance the sump, to include proper drainage, screens and other implementation of other basic steps to prevent the overflow of grey water through the camp was issued at the time of the inspection.

Part E: Conditions For Camps, Access Infrastructures And Operations

No issues with this section of the license were noted during the period of inspection. The camp is used during the short summer months only. No permanent works or earth works have been undertaken by the licensee.

Part F: Conditions Applying To Drilling Operations

During the period of Inspection no scientific drilling via the RCV's was on-going. Any drilling conducted on site by the licensee will not include the use of any salt or water. Holes are drilled dry and only to a depth of a maximum of 5 meters.

No issues with this section of the license were noted during the period of inspection.

Part G: Conditions Applying to Modifications

No modifications were brought to the attention of the inspector during the period of inspection. A search of the Nunavut Water Board FTP site did not locate a request for modification during the writing of this report.



Part H: Conditions Applying To Spill Contingency Planning

A review of the Water Board FTP site found a Spill Contingency Plan this plan was not available on site for review and thus the Inspector did not comment at that time. Subsequently a review of the document leads the inspector to recommend as follows;

Addition of the following to the contacts list;

Emergencies and Enforcement Officer, Environment Canada – Iqaluit 867-975-4644.
Water Resources Officer – Indian and Northern Affairs Canada – Iqaluit 867-975-4289

The Licensee is reminded that **All spills** are to be documented and reported to the **24 hour Spill Line at (867) 920-8130**. Additionally a report for any spill is required to be filed with the Inspector (INAC) within 30 days of the incident.

The licensee is reminded that it is the responsibility of the licensee to ensure that any documentation submitted by the licensee to the Nunavut Water Board is acknowledged by the Manager of Licensing.

The proponent is reminded that secondary containment for fuel storage is required as it prevents uncontrolled and accidental discharges to water and the environment. This includes fuel stored at the camp and at all other locations. It was noted during the period of inspection that there was very little secondary containment anywhere within the camp. This will be a priority in the 2008 Inspection season.

The licensee is reminded that section 5 of this part requires the licensee to ensure that any equipment maintenance and servicing be conducted only in designated areas and to implement special procedures to prevent spills of these products from entering the environment.

Part I: Conditions Applying To Abandonment And Restoration or Temporary Closing

The Licensee is cautioned that while a prepared plan is not required at this time the Licensee should have in place methods and practices that will ensure the site can be reclaimed to its original condition upon completion of the program.

A formalized plan may be required in the future

Part J: Conditions Applying To The Monitoring Program

The Licensee is reminded to include in the 2007 Annual Report, due for submission to the Nunavut Water Board no later than March 31st 2008 the following information;

- Volumetric summary of water use for all purposes for the 2007 year
- GPS coordinates for all water sources
- GPS coordinates for all locations where waste was deposited

While no additional sampling was imposed by the inspector during the inspection period it is highly recommended that all potable sources be sampled annually by the licensee to address any human health and safety concerns.

The licensee is reminded that it is the responsibility of the licensee to ensure that any documentation submitted by the licensee to the Nunavut Water Board is acknowledged by the Manager of Licensing.



Non-Compliance:

During the inspection a number of items were noted and discussed with Mr. Lee. These issues required corrective action to be undertaken prior to the date of the next inspection and submission of a record showing these activities had been completed was requested.

Specifically these were;

- Fuel storage (barrels) without secondary containment – Airstrip
- Fuel storage at site without secondary containment – Camp
- Metering equipment is not installed on pump intake.
- Shipping off-site of bulk and hazardous waste – Transportation records.
- Enhancement work to camp sump
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During the period of the inspection water samples were collected from the potable source.

x

Andrew Keim
Inspector's Name

Inspector's Signature

Attached under separate cover;
Photos taken during Inspection of June 27th, 2007

Cc:
Peter Kusugak – Manager Field Operations Section- Indian and Northern Affairs Canada
Phyllis Beaulieu – Manager licensing – Nunavut Water Board