Nunavut Water Board Att. Manager of Licensing P.O. Box 119 Gjoa Haven, Nunavut X0B 1J0 licensing@nwb-oen.ca

RE: Request for Approval for the Use of Water Without a License

Please accept this cover letter as our formal request for approval for the use of water without a license, for the High Arctic Assessment Project which is being conducted under the federal Contaminated Sites Program.

Executive Summary:

The High Arctic Assessment Project includes six (6) individual sites that have been grouped together for efficiency and cost effectiveness. The six sites include Rea Point, Drake Point, Dale Payne, Lougheed Island (L1), Thor Island and Romulus. Contamination at the sites is a result of oil and gas exploration activities.

In the summer 2015 field season, Phase III Environmental Site Assessment work will be conducted at all six sites. This phase III work will be relatively non-intrusive involving mainly soil sampling and possibly a small amount of geotechnical work if deemed necessary. For this work we plan to establish a small base camp at Rea Point and use helicopter and fixed wing aircraft to access the other sites. Should the Rea Point site not be suitable at that particular time, we will use Drake Point as the alternate base camp. The camp would house no more than 20 people in tents for a period of approximately three weeks, and would require the use of approximately 1 cubic metre of water per day from a local water source for the operation of the camp. The Rea Point camp, and location of the stream would be at approximately 75.3700 and -105.7317, whereas the alternate camp at Drake Point would be close to the airstrip which can be found at approximately 76.4130 and -108.5001. The water extracted from the seasonal stream will be used for cooking, and washing, while drinking water will be brought to the site in bottles on resupply flights. Since drinking water will be brought in, there is no need to do drinking water monitoring.



Water will be pumped from the seasonal stream directly into the camp tank using a 5hp pump with a 2" hose. The water intake hose will be covered with a screen (maximum screen size of 2.54 millimetres and maximum screen approach velocity of 0.038 metres/second) to ensure that no fish become trapped. The camp tank will be filled on an as need basis. Other than this, there will be no other storage of water on site.

With respect to general waste management, an incinerator will be onsite to burn all solid waste. Storburn or Pacto toilets will be used for blackwater resulting in no blackwater being discharged to the site. A greywater sump will be dug, and a grease tramp installed in the kitchen. At the end of camp, lime will be added to the pit before backfilling.

Following this Phase III Site Assessment work, a Remediation and Risk Management Plan (RRMP), Environmental Impact Assessment (EIA) and a detailed site remediation cost estimate (indicative level) will be developed. This is an essential step towards the remediation of these six high arctic contaminated sites.

The following is more site specific information for each of the locations:

1. Rea Point

Rea Point is approximately 320 km from the closest community which is Resolute Bay, Nunavut. All historical buildings, drums and major debris have been buried or removed from the site. There is currently a minimal amount of metal and wood debris scattered throughout the site. Some building footprints, roadways and trails are visible. The airstrip was known to be in good condition during the time of the Phase II ESA.

2. Drake Point

Drake Point/Melville Island is located about 420 km northwest of the closest community which is Resolute Bay, Nunavut. All historical buildings, drums and major debris have been buried or removed from the site. Some building footprints, roadways and trails are visible.

3. Lougheed Island

Lougheed Island is located about 430 km northwest of Resolute Bay, Nunavut, which is the closest community. The main site, consisted of a Hercules airstrip, a fuel and material storage area, and a suspected camp. Currently there are two drum caches, burn pits, and scattered metal and wood debris. Petroleum Hydrocarbon (PHC) stains and odours were also noted in the area.

4. Dale Payne

Dale Payne is located on the west side of Lougheed Island, about 410 km west northwest of the closest community which is Resolute Bay, Nunavut. The site currently consists of sleigh mounted structures, sleigh mounted fuel tanks, two small track mounted machines, scattered drums and scattered debris.

5. Thor Island

Thor Island, is located about 440 km northwest of the closest community which is Resolute Bay, Nunavut. The Thor Island site currently consists of three airstrips, two well markers, two suspected well sumps, a burn pit, disturbed ground, trails and a minor amount of debris.

6. Romulus

Romulus is located on the west side of Ellesmere Island with the nearest community being Grise Fiord, Nunavut, which is approximately 400 km south. Any historical buildings and most major debris have been removed from the site. There is currently a moderate amount of metal, wood, rubber, and plastic debris scattered throughout the site. The well head, trails and areas of disturbed ground that are suspected to be the locations of historic sumps, drill rig infrastructure and a camp area are present at the site.

Should you have any further questions or concerns please don't hesitate to get in touch.

Thanking you for your time in this matter,

Mark Yetman, Sr. Project Advisor Contaminated Sites Program

Aboriginal Affairs and Northern Development Canada

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