PART 3: SOLID WASTE MANAGEMENT

Questions from ECCC (letter dated 2017 July 19) and responses:

• ECCC recommends that the Proponent limit the practice of open burning to only the wastes identified in the Nunavut Guideline for the Burning and Incineration of Solid Waste. All other wastes should be disposed of properly.

Ans.: The hamlet is in the process of segregating wastes. Only paper, construction wood wastes excluding food items are allowed for open burning at the designated area within the landfill site.

The O&M manual has been revised attached.

It is noted that the new capital project of waste management for Pangnirtung is advancing very fast and the new facility is expected to be built and commissioned sometimes in 2024. Until such time the existing waste facilities will be kept active and operated under the guidelines of the attached revised O&M manual.

ECCC recommends that the Proponent address the previously requested information
on the solid waste leachate (i.e., how leachate from the solid waste sites behaves
and is sampled), past results for leachate quality, the overland area that is affected
by leachate, and an estimate of volumes. The approximate area that is considered
as a treatment wetland for the leachate should be shown on a map or diagram.

Ans.: A Map is attached showing the wetland area. The landfill site is enclosed by dikes all three sides except the boundary parallel to the road but fully fenced all four sides. There is a leachate collector drain along the inside of the sea side dyke, which only discharges leachate to the wetland.

The lab test results submitted to the NWB are only available. The current WL was issued in 2014 where additional sampling points were established like PAN 5 and PAN-6.

Now, the sludge is contained in geo-tubes.

• ECCC recommends that the Proponent include SNP PAN-6 in the tables on pages 8 and 30, and PAN-5 frequency in Table 7: Monitoring Station on page 30 of the Revised Solid Waste Operation and Maintenance Plan.

Ans.: The table 7 of the Waste Management O&M document has been revised and attached.

- ECCC recommends that the Proponent remove the Environment Canada 24-hour telephone number ([867]975-4464) from the Pangnirtung Spill Contingency Plan. Ans.: The document has been revised by exp and attached.
- ECCC's preference is for the Hamlet of Pangnirtung Renewal-Amendment Water Licence Technical Meeting, Pre-Hearing Conference and Public Hearing to be in written form.

Ans.: NWB 's decision was published on October 30,2017 to conduct the Public hearing on Dec.5 and 6, 2017.



Questions from INAC (letter dated 2017 July 28) and responses:

- INAC recommends that the old sewage lagoon remain under a renewed licence until
 such time as it is decommissioned. We also recommend that the Licensee clarify if the
 sewage lagoon to be decommissioned is distinct from the sewage treatment wetland
 receiving leachate from the metal dump. If they are in fact the same, it may have an
 important impact of the reclamation effort required.
 - Ans.: Yes, the sewage lagoon to be decommissioned is distinct from the sewage treatment wetland. Refer to the attached photo. Leachate from the metal dump would flow directly to the shore line, it does not flow through the lagoon.
- INAC recommends that the Licensee correct the O&M Plan so that it is coherent with regards to fish waste and correct the contradiction between the Fish Process Plant Waste Management Plan and the O&M Plan.
 - Ans.: The waste management O&M document has been upgraded to correct the issue in item 3.1.
 - The fish plant authority started exporting all fish wastes to the International market. Recently it was stopped. Currently the fishermen clean turbot fish at the point of catch (the wastes are thrown into the sea). During the month of August, the plant is processing Arctic char and dumps about 3000 pounds of wastes in the landfill site. If they could go back to the International market again, the situation might change. (As per interview with the Plant Manager on August 10, 2017).
- INAC recommends that the Licensee be required to present a plan for managing surface water at the metal dump as well as a timetable for its implementation.
 Ans.: The rehabilitation of the existing waste facilities is planning to implement the attached drainage Plan. The Hamlet has started implementing this plan and expected to be complete by October 2017.
- INAC recommends that the Licensee collect, analyze and report the leachate/runoff samples at the monitoring stations specified in the water licence to form a clearer picture of the environmental threat caused by the landfill and metal dump.

We recommend the Licensee submit a modified waste management strategy that limits the spread of contaminants in the environment from the landfill and metal dump leachate/runoff, unless results indicate action is not necessary. Actions may include executing the suggestion of the O&M manual for the metal dump, making



it a lined facility. If the sewage treatment wetland is to be part of the attenuation strategy, samples need to be taken downstream of the wetland to demonstrate that the receiving environment is not being impacted.

Ans.: O&M has been upgraded to address the issues of item 3.3. The Capital Project for waste facilities for this Community is advancing so first. The existing waste facilities will be decommissioned once the new waste management facility is built and commissioned. The area currently occupied by the existing waste facilities will be used for different purposes as per the Zonal Plan attached. Hamlet is expecting a new waste facility sometimes in 2024. However, a detailed drainage plan is being implemented immediately to address and resolve these current issues.

 INAC recommends that Licensee act on the recommendation it makes in the O&M Plan regarding lining the hazardous waste storage area and provide the NWB with an implementation schedule.

Ans.: These solid wastes and metal wastes facilities are very temporary in nature. Currently Hamlet is planning to segregate wastes and retain hazardous wastes in the designated area. The first step is to supply a container for battery storage. The next step is to retain all the propane and waste oil drums on the wooden platforms and isolate the area. This process is expected to be completed in 2018.

- We recommend that a future version of the O&M plan re-word the operations section to be more affirmative.
 - Ans. Yes, it is updated and the revised document is attached.
- INAC recommends that the license should be renewed for 10 years.

Ans.: Yes, this recommendation will be welcome, however, the Hamlet will be requesting a 15-year renewal.

