

Response to the Comments of CIRNAC dated June 12,2020 on Resolute Water licence application. WL # Type B 3BM-RUT1520 to Type A 3AM-RUT----

B. Results of Overview:

1. Quantity of Water requested:

The current permit is 126,020 cubic meters for the population of 288 in 2020. In 2030, the population projection is 293 according to Nunavut Bureau of Statistics 2010.

Therefore the projected permit required for the population of 293 in 2030 is 128,208 cubic meters , Considering all the other variables are constant.

The Utilidor was upgraded in 2016 and hydraulic test in the pipe was done and found no leak. There was not any significant change of population in the community. The extraction volume shown in 2018, 2019 and 2020 are being investigated and considered the flow meter at pump station might be recording wrong information. A new flow meter is going to be installed to correctly reading the extraction volume. Also another flow meter will be installed at the Macerator unit. From each house hold water meter, amount of water consumption is calculated and sewage volume is also considered the same volume of water use. We are trying to find out actual bleed volume as well. In the final design phase of the WWTP, this scope will be considered in the Consultant's scope of work.

Currently for the safe side operation, for 293 population in 2030, annual permit is requested for 150,000 cubic meters.

2. Plan of char Lake Pump Station.

Ans. Clarification: There are two intakes line. One from Pump station to WTP and this line was constructed already sothat connection could be made with the new pump house once construction is completed.

The second intake is from the new pump house to the char Lake for extraction of water from there.

2.1: The contractor has mobilized to the site. They will be working on the land. Prior to start working in water body, the Environmental Management Plan will be available. It is anticipated to be completed within 60days if COVID 19 Pandemic situation is not worsen any further.

2.2: The existing Pump house will not be decommissioned until the new one is built , commissioned and found successfully functioning. However, a decommissioning Plan will be submitted 60 days prior to start decommissioning of this old pump house.

2.3: CIRNAC comments on the integrity of the water Intake pipe insulation will be considered during construction and shown in the as built drawings and O&M manual after successfully commissioning.

3.0 Wastewater Treatment Plant:

3.1: Yes, will be followed.

3.2: The weekly Truck water delivery volume will be considered as equal to the weekly sewage discharge volume.

3.3: Due to COVID 19 Pandemic and Nunavut Travel restriction, this project might be delayed. However,

Raw Wastewater quality and the sewage effluent quality from the end of the discharge pipe will be tested 3 to 4 times in summer. The Truck raw sewage will be mixed with the Utilidor sewer pipe effluent and acts as the inflow into the WWTP. The Plant process design will be established to treat this mixed wastewater volume (inflow volume) on daily basis. The effluent quality has been recommended by ECCC in their comment where $BOD_5=25\text{mg/L}$ or less and $TSS=25\text{mg/L}$ or less will be expected.

The site selection and the Preliminary design approach was recommended by the consultant exp services Inc. The second phase of this project is to develop the detailed design for construction.

The 2012 preliminary Design Brief will be replaced with the Final Design Brief which will be completed in phase 2. The Final design brief will guide all the construction drawings.

Unfortunately, the 2nd phase of the project is expected to be delayed for unknown duration, may be 6 to 12 month due to COVID 19 Pandemic situation.

Yes, The Detailed Design Brief and construction drawings will be submitted to NWB at least 60 days prior to start construction.

4.00: Operation and Maintenance Manuals:

4.1: Yes, O&M manual of the WTP will be made available once the as built drawings are prepared soon after completion of the rehabilitation of the Plant.

4.2: In principle, Utilidor system is not completely upgraded yet. The Outfall line was not touched yet. This discharge pipe length about 500m from the Macerator unit to the sea will be replaced at the same time of the construction of the new WWTP. When all the components are completely upgraded, a detailed O&M manual will be required to operate this facility.

4.3: This Macerator Building will be dismantled once the new WWTP is built because this unit will have no use. This unit is not functioning as it was built in 1978. A flow meter is planned to be installed in the Macerator unit to record the discharge volume. The flow meter will be there until the new WWTP is built and commissioned.

The detailed filed information is required in order to prepare an O&M manual of the Macerator unit. During this COVID 19 Pandemic situation and under GN Travel restriction, it might take minimum 6 months or more to present an O&M manual of the Macerator unit. The O&M will be prepared based on the modified as built drawings. It is suggested to include this item as the condition of the new Licence.

5. Reclamation Plans for Sewage Treatment Infrastructure:

Agreed. The new Water licence 's conditions will be honoured and implement on time.

6. Informing Residents how to address leaks in Utlidor laterals:

The individual House owner should inform the local housing corporation who is the client. Housing could contact local contractor ATCO , Hamlet and Asset Management Division (AMD) of Pond inlet GN-CGS at 867 8997302 or 867899 7303.

The other Government and privately owned facility owners are encouraged to directly contact AMD of Pond inlet GN-CGS

7. Monitoring :

Yes, this will be followed.

8. QA/QC Plan:

8.1 : QA/QC will be updated following the future monitoring points once the new WWTP is built.

Yes, glad to see as the condition of the new Licence.

8.2:

This is the direction from NWB to follow.

9.0 Spill Contingency Plan:

Yes, follow the conditions once established as the requirement of the new Water Licence.

This SCP will be upgraded once the new WWTP is built and commissioned.