

Operation and Maintenance Procedure of Wastewater Treatment by Lagoons of the Hamlet of Igloolik

The Hamlet of Igloolik has four Sewage Lagoons in series. The first cell is called old cell and is not used. The cells 2, 3 and 4 are all are exfiltration type lagoons and are used by the Hamlet. During summer, water infiltrates through the sea side berms. Even though, the Hamlet uses syphoning system for additional decanting. These facilities are roughly 1km away from the Community,

These three cells receive roughly 55,000 cubic meters raw sewage from the Community on annual basis. In order of the structural stability and to maintain 1m free board, lagoons are decanted also by using pump. During decanting, samples are taken at the monitoring points and tested in Caduceon Lab in Ottawa, ON.

These lagoons have fencing along the road side and each one has its individual chute. They can function Independently but infiltrates through the middle berm from cell 1 to 2 and 2 to 3. The sea side berms infiltrate to the wetland.

Hamlet does maintain these lagoons in order to just keep using. Trucking is the only mode of collection Domestic Sewage and disposing into the lagoons.

Hamlet follows Spill Contingency Plan. Hamlet SAO is the contact if any spill happens in the Community. SAO along with the Hamlet Foreman fills the spill reporting form and either e-mail or fax to Spill hot line. They clean up the spill using the standard procedure and report to AANDC and NWB on monthly basis until Cleanup work is complete.

The cells 2, 3 and 4 are being rehabilitated soon and converted into two cells. A new cell is planned to build next to the 4th cell. The first cell will be used as the storage of sludge which will be removed from cells 2, 3 and 4 prior to rehabilitation.

As built drawings and a new O&M manual will be available soon after the construction is complete.