

Technical Summary of Clyde River Sewage Lagoon

Clyde River is a community located on Patricia Bay on the east coast of Baffin Region of Nunavut. Its geographical coordinates are 70°27'N latitude and 68°33'W longitude. Its current population is about 937.

Presently the annual average wastewater discharge volume of this community is about 36,636 cubic meters. The existing wastewater treatment facility is undersized to satisfy the present demand of the community and failed to meet the conditions of the Water License. A condition assessment study was conducted in 2003 and recommended for expansion.

A new lagoon has been designed which will operate jointly with the existing facility. The both lagoons will function as a storage cell lagoons with the capacity of existing cell being 11,600 cubic meters and the capacity of new lagoon being 46,900 cubic meters. The lagoons will work in conjunction with a vast area of wetlands of 23.5 ha. The life time of the project has been designed for 20 years.

The expected levels of BOD and TSS of the effluent from the lagoons is 97 mg/L and 116 mg/L respectively and expected of BOD and TSS of the effluent at the end of the wetlands is 18 mg/L and 22 mg/L respectively. The existing facilities will be easy to operate, meet the community demand and satisfy the conditions of the Water license issued by Nunavut Water Board. The lagoons and wetlands are expected adequately function even to address the future CCME guidelines.