Arctic Bay Water Licence Application

Executive Summary

The Hamlet of Arctic Bay has recently identified the need to upgrade their existing solid waste and sewage disposal sites, located approximately 2.5 kilometers southwest of the community. Currently, these sites are insufficient to meet the projected 20-year capacity of the community. Furthermore, problems associated with untreated seepage of raw sewage into Arctic Bay and of the containment of solid waste within the landfill site continue to persist.

Background

In 1997, the Department of Public Works and Services, Baffin Region, retained Reid Crowthers to complete a design brief for the sewage treatment system and solid waste sites. To date, the Hamlet has only initiated improvements to the solid waste site based on recommendations outlined in this report.

In 1999, on behalf of the Department of Public Works and Services, Baffin Region, Dillon Consulting submitted a conceptual design for wetland sewage treatment that incorporated the current sewage disposal site. Improvements to the sewage disposal and wetland treatment areas included an ice-pack holding cell, a series of three berms to allow for temporary ponding, and a re-direction berm that will alter the flow path of runoff drainage. Upgrades to the wetland treatment site are scheduled to begin by summer 2002.

Regulatory Process

The regulation, use and management of water in the Nunavut Settlement Area is the responsibility of the Nunavut Water Board (NWB). According to the NWT Waters Act and the Nunavut Land Claims Agreement, each community is required to have a water license, which describes the intended use of water and water resources in each community. To date, the community of Arctic Bay does not hold a water license.

Following the final approval of the amendment by the NWB, upgrades to the sewage disposal site will begin. Routine monitoring of surface and groundwater conditions will likely be required to ensure that contaminants are not leaching from the solid waste site and that the wetland treatment facility is operating effectively.

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Hᐊᓪᓚᒃᑯᖓᑦ ᐃᒃᐱᐊᕐᔪᑉ ᓇᓗᓇᐃᖅᓯᓵᓚᐅᖅᐳᑦ ᓄᑖᙳᕆᐊᖅᑎᑦᑎᒋᐊᖃᕐᓂᖏᓐᓂᒃ ᑕᑯᒃᓴᐅᔪᓂᒃ ᐊᒃᑕᑯᓂᒃ ᐊᒻᒪ ᖁᕐᕕᖕᓄᑦ ᐃᓂᖃᕐᕕᒋᔭᖏᓐᓂᒃ, ᓂᒡᒋᐊᓂ 2.5 ᑭᓛᒥᑕ ᓄᓇᒋᔭᖓᓂ ᐃᓂᖃᖅᑐᓂ. ᒫᓐᓇ, ᑖᒃᑯᐊ ᐃᓃ ᓈᒻᒪᙱᓚᑦ ᐅᑭᐅᓄᑦ 20-ᓄᑦ ᓇᓚᐅᑦᑖᖅᑕᐅᓯᒪᔪᓄᑦ ᑭᒡᓕᒋᔭᐅᖁᔭᐅᔪᒧᑦ ᓄᓇᒋᔭᐅᔪᒥ. ᐊᒻᒪᓗ, ᓈᒻᒪᙱᑦᑐᑦ ᐊᒃᑐᐊᓂᖃᖅᑐᑦ ᓴᓗᒻᒪᕆᐊᖅᑕᐅᓯᒪᙱᑦᑐᓄᑦ ᐃᑎᕈᕐᓂᑦ ᐃᒃᐱᐊᕐᔪᖕᒧᑦ ᓴᕐᕙᐅᖃᑦᑕᕐᒪᑕ ᑕᒪᓐᓇ ᓈᒻᒪᙱᖃᑕᐅᕗᖅ ᐊᒻᒪ ᐴᖅᑕᐅᓯᒪᓂᖏᑦ ᑕᑯᒃᓴᐅᔪᑦ ᐊᒃᑕᑯᐃᑦ ᑐᐊᐸᒃᑕᕐᕕᖕᒥ ᐱᐅᔭᓐᓇᐃᖅᐸᓪᓕᐊᑐᐃᓐᓇᒻᒪᕆᒃᐳᑦ.

ᖃᓄᐃᓕᖓᓚᐅᕐᓂᖓ ᓯᕗᓂᐊᓂ

1997-ᒥ, ᓴᓇᔪᓕᕆᔨᒃᑯᑦ, ᕿᑭᖅᑖᓗᖕᒥ, ᕇᑦ ᑯᕈᑎᔅᑯᓐᓂᒃ ᐃᖃᓇᐃᔭᖅᑎᑦᑎᓚᐅᖅᐳᑦ ᑎᑎᕋᐅᔭᖅᑎᑦᑎᑉᓗᑎᒃ ᖁᕐᕕᐅᑉ ᑯᕕᓯᕝᕕᐅᔪᑉ ᐱᓕᕆᔾᔪᓯᒃᓴᖓᓂᒃ ᐊᒻᒪ ᑕᑯᒃᓴᐅᔪᑦ ᐊᒃᑕᑯᐃᑦ ᐃᓂᖃᕐᕕᒃᓴᖓᓐᓂᒃ. ᐅᑉᓗᒥ Hᐊᓪᓚᒃᑯᑦ ᐋᖅᑭᒃᐹᓪᓕᖅᑎᑦᑎᑐᐃᓐᓇᖅᐳᑦ ᑕᑯᒃᓴᐅᔪᓂᒃ ᓯᑎᔪᓂᒃ ᐊᒃᑕᑯᖃᕐᕕᖕᒥᒃ ᒪᓕᒃᓗᒋᑦ ᐊᑐᓕᖁᔭᐅᔪᑦ ᑕᕝᕙᓐᖓᑦ ᐅᓂᒃᑳᖅᑕᐅᔪᒥᑦ.

1999-ᒥ ᑭᕝᒐᖅᑐᖅᓗᒋᑦ ᓴᓇᔪᓕᕆᔨᒃᑯᑦ, ᕿᑭᖅᑖᓗᖕᒥ, ᑎᓕᑦ ᖃᐅᔨᓴᖅᑎᖏᑦ ᑎᑎᕋᐅᔭᖅᑕᖏᓐᓂᒃ ᑐᓂᓯᓚᐅᖅᐳᑦ ᓴᓗᒻᒪᕆᐊᖅᑕᐅᔾᔪᓯᒃᓴᖓᓂᒃ ᖁᕐᕕᖕᓂᑦ ᑯᕕᔭᐅᔪᓂᑦ ᐱᓕᕆᐊᖃᕈᑕᐅᓚᐅᖅᐳᖅ ᒫᓐᓇ ᖁᕐᕕᓕᕆᔾᔪᓯᕐᒧᑦ ᐃᓂᐅᔪᒧᑦ. ᐋᖅᑭᒋᐊᖅᑕᐅᔪᑦ ᖁᕐᕕᓄᑦ ᑯᕕᔭᐅᐸᒃᑐᓄᑦ ᐃᓚᖃᓚᐅᖅᐳᑦ ᖃᐅᓯᖅᑐᑦ ᓴᓗᒻᒪᕆᐊᖅᑕᐅᓂᕆᔭᖏᓐᓂᒃ ᐃᓂᖏᑦᑕ ᐃᓚᐅᓗᒋᑦ ᓯᑯᒥᒃ ᑎᒍᒥᐊᖅᑎᑦᑎᔾᔪᓯᐅᔪᖅ, ᐱᖓᓱᓂᒃ ᐊᕙᓗᓂᒃ ᐃᒪᖅᓱᙳᖅᑎᑦᑎᔾᔪᑕᐅᓚᐅᑲᒃᑐᓂᒃ ᐊᒻᒪ ᐊᕙᓗᖓ ᐊᓯᐊᓂᑦ ᐃᖏᕐᕋᑎᑦᑎᔾᔪᓯᐅᓂᐊᖅᑎᓪᓗᒍ ᐊᐅᓪᓚᖅᐸᑦ ᐋᖅᑭᐅᒪᑎᑦᑎᔾᔪᓯᐅᓂᐊᖅᑐᖅ ᓴᕐᕙᐅᓂᐊᔪᒥᒃ. ᓄᑖᙳᖅᑕᐅᔪᑦ ᖃᐅᓯᖅᑐᒥ ᓴᓗᒻᒪᕆᐊᖅᑕᐅᔪᓂ ᐃᓂᐅᔪᒥ ᐱᓕᕆᐊᖑᓂᐊᖅᐳᑦ ᐊᐅᔭᖓᓂ 2002.

ᐊᑐᐊᒐᓕᕆᓂᕐᒧᑦ ᐱᓕᕆᔾᔪᓯᐅᔪᖅ

ᐊᑐᐊᒐᓕᕆᔾᔪᓯᐅᔪᖅ, ᐊᑐᖅᑕᐅᓂᖓ ᐊᐅᓚᑕᐅᓂᖓᓗ ᐃᒪᐅᑉ ᓄᓇᕗᑦ ᓇᖕᒥᓂᖅ ᓄᓇᑖᖑᓯᒪᔪᒥ ᑲᒪᒋᔭᐅᔪᒃᓴᐅᑕᐅᕗᖅ ᓄᓇᕗᑦ ᐃᒪᓕᕆᓂᕐᒧᑦ ᑲᑎᒪᔨᒃᑯᓐᓄᑦ. ᒪᓕᒡᓗᒍ ᓄᓇᑦᑎᐊᖅ ᐃᒪᕐᒧᑦ ᒪᓕᒐᖅ ᐊᒻᒪ ᓄᓇᕗᑦ ᓇᖕᒥᓂᖅ ᓄᓇᑖᖑᓯᒪᔪᒥ ᐊᖏᕈᑎᓕᐊᖅ, ᐊᑐᓂ ᓄᓇᓖᑦ ᐃᒪᕐᒧᑦ ᓚᐃᓴᖃᕆᐊᖃᖅᐳᑦ, ᓇᓗᓇᐃᖅᓯᔪᓂᒃ ᐃᒪᖅ ᖃᓄᖅ ᐊᑐᖅᑕᐅᓂᐊᕆᐊᒃᓴᖓᓂᒃ ᐊᒻᒪ ᐃᒪᖅ ᐊᒃᑐᐊᓂᖃᖅᑐᓄᑦ ᓄᓇᓕᖕᓂ. ᐅᑉᓗᒥᒧᑦ ᑎᑭᓪᓗᒍ, ᓄᓇᒋᔭᖓᑦ ᐃᒃᐱᐊᕐᔪᑉ ᐃᒪᕐᒧᑦ ᓚᐃᓴᖃᙱᓚᑦ.

ᐊᖏᖅᑕᐅᕐᓂᒃᑎᓪᓗᒍ ᐋᖅᑭᒋᐊᖅᑕᐅᔪᖅ ᑭᖑᓪᓕᖅᐹᖅ ᓄᓇᕗᑦ ᐃᒪᓕᕆᓂᕐᒧᑦ ᑲᑎᒪᔨᒃᑯᓐᓂᑦ, ᓄᑖᙳᖅᑎᖅᑕᐅᓂᖓ ᖁᕐᕕᒧᑦ ᐃᓂᐅᔪᒧᑦ ᑲᔪᓯᒋᐊᖅᑎᑕᐅᓂᐊᖅᐳᖅ. ᓇᐅᑎᑦᑐᖅᑕᐅᓂᖏᑦ ᒪᓂᕋᐅᑉ ᐊᒻᒪ ᒪᓂᕋᐅᑉ ᐃᒪᖓᓂ ᐃᓕᖅᑯᓯᐅᔪᑦ ᐱᓕᕆᐊᖑᒋᐊᖃᕐᓂᐊᖅᑐᒃᓴᐅᕗᑦ ᐋᓐᓂᐊᕐᓇᖅᑐᑦ ᓱᕈᕐᓇᖅᑐᑦ ᓯᑦᑎᕈᑎᖁᙱᓪᓗᒋᑦ ᑕᑯᒃᓴᐅᔪᓂᑦ ᐊᒃᑕᑯᖃᕐᕕᓂᑦ ᐊᒻᒪ ᖃᐅᓯᖅᑐᓂᑦ ᓴᓗᒻᒪᕆᐊᑕᐅᕝᕕᐅᔪᖅ ᐊᐅᓚᑕᐅᓂᖃᑦᑎᐊᖁᓗᒍ ᐃᖏᕐᕋᓂᖃᑦᑎᖁᖅᑐᒃᑯᑦ.