

# **POST CONSTRUCTION RECLAMATION PLAN SUMMARY**

Part of

Project Environmental Protection Plan  
Cambridge Bay Water Treatment Facility

## **Purpose**

The purpose of this document is to provide a summary steps and measures taken to ensure the project site is remediated back to its original state and to acceptable environmental and ecological state.

## **Introduction**

Reclamation is the process whereby the impact created by exploration upon the environment is minimized, and where the environmental disturbance to an area is remediated to the point where the land: Is safe and stable Is restored as near as possible to its pre-disturbance condition; Has its environmental values safeguarded and has an appropriate sustainable ecosystem. An integral part of a project is to plan operational objectives in advance of any activity taking place. Operational objectives should also include a well-defined reclamation objective that is properly planned, in order to meet any requirements under the regulations and laws.

The role of reclamation and closure in any project is considered one of the final responsibilities in the life of that project. Site reclamation processes begin prior to the commencement of the project by assessing and evaluating the existing conditions of the site, so that the contractor has a set expectation and a guideline as to how to return the site to its original state, and what to do to perform the site reclamation at the end of the project.

The reclamation of the site must be planned in multiple stages:

- 1) Pre-Construction Evaluation and Assessment
- 2) Monitoring During the Construction Phase
- 3) Reclamation Work
- 4) Post Construction Monitoring

## **Pre-Construction & Construction Monitoring**

This plan briefly discusses the work undertaken to ensure that pre-construction conditions are surveyed.

- 1) Environmental Site Assessment to be carried out to identify the background conditions of soil and groundwater.
- 2) Ecological / Habitat study carried out to identify area / site habitat, vegetation and any other ecological features.
- 3) A photographic / video-graphic survey of all aspects of the site prior, during and after construction. A similar survey is also required once the reclamation activities end.

Baseline studies are required, prior to any substantial disturbance of the surroundings, sampling the: Water, Soil, Air (if required), Vegetation, Wildlife, habitats.

Prior to the commencement of any work on the project, a planning session to consider the environmental aspects of the project, and: Identify those sensitive environmental features that may require some form of protection, prior to the start of the project appropriate consultation may be required with local inhabitants, aboriginal groups, hunters and trappers organizations, and local regulatory authorities. Identification of what baseline environmental studies are required for the level of work is to be undertaken.

## **Construction Monitoring**

While construction activities are taking place, monitoring of all environmental and ecological aspects will be monitored to ensure no drastic changes occur and no part or parts of any of the above mentioned base studies is affected. Once an occurrence is noted, immediate measures are taken to ensure response is carried out and preventative measures are taken to minimize or illuminate any future occurrences.

Monitoring may include random and/or scheduled sampling. This will be to the discursion of the engineer.

## **Site Reclamation**

Reclamation activities to be completed at the site are included within the site specific Environmental Protection Plan (EPP), with additional details from the remedial design, habitat assessments, and sedimentation and erosion control plan incorporated throughout project execution. The purpose of this documentation is to provide a summary of reclamation activities that have been completed to date.

The objectives of this reclamation plan, as outlined are to:

- 1) Effectively use reclamation techniques that prevent surface material loss from wind and water erosion;
- 2) Establish a vegetative cover compatible with surrounding vegetation and land uses IF ANY;
- 3) Comply with approval conditions, including all permits and landowner commitments;
- 4) Re-establish the right-of-way or Project Site in a stable condition acceptable for operational requirements; and

- 5) Maintain equivalent land capability, ensuring the ability of the land to support various land uses similar to the uses that existed before construction, but not necessarily identical.

A Phase II Environmental Site Assessment maybe completed once all reclamation activities are wrapped up to ensure the

## **Post Construction Monitoring**

Post-construction monitoring will proceed as presented in the site-specific EPP. The objectives of the monitoring program are to assess the success of environmental mitigation measures implemented to minimize potential environmental impacts identified prior to construction and to identify the necessity for follow-up actions.

The monitoring activity will:

- 1) Assess the success of the remedial works and mitigation measures implemented during construction
- 2) Document opportunities for procedural learnings and improvement
- 3) Review the success of re-establishing equivalent land capability

The Project will follow Mine Site Reclamation Policy of Nunavut requirements for Monitoring which ensures compliance with specific reclamation performance expectations and conditions.

Once all activities are completed, and all reclamation measures have been executed, a monitoring program will be implemented at the site via the following means:

- 1) Soil and Groundwater monitoring
- 2) Vegetation and Habitat Monitoring
- 3) Operational Monitoring of the plant and possible influences it may have on the surrounding environment and habitat.
- 4) Air Quality Monitoring if required.