

Eureka High Arctic Weather Station

INTERIM ABANDONMENT & RESTORATION PLAN

Executive Summary

All facilities must eventually cease their activities, either temporarily or permanently. When such operations cease, the owner and operator must close the facility in a way that ensures it will not pose a future threat to human health and the environment. Therefore, an Abandonment and Restoration Plan is used to achieve “clean closure.” This Plan has been implemented for the Eureka High Arctic Weather Station (HAWS) which is located on the north side of Slidre Fjord, at the northwestern tip of Fosheim Peninsula, Ellesmere Island, Nunavut at site coordinates 79°59'41"N and 85°48'48"W.

The purpose of this interim Abandonment and Restoration Plan (the Plan) is to provide:

- Conceptual detail on the reclamation of the components of the Eureka site which will not be closed until near the end of its useful life; and
- Operational detail for components which are to be progressively reclaimed now or in the near future.

The approach taken to develop this Plan is supported by Environment Canada's (EC) commitment to the following global objectives:

- Physical Stability: remaining items will be constructed or modified at closure to be physically stable such that they do not erode, subside or move from their intended location.
- Chemical Stability: remaining items will be chemically stable; the remaining chemical constituents should not endanger public, wildlife or environmental health and safety.
- Future Use and Aesthetics: the site will be compatible with the surrounding lands once abandonment activities have been completed.

The specific actions of the Plan to remediate each of the facility components are, in turn, based on more detailed objectives formulated to achieve the above global intentions. The Plan is an evolutionary document and thus reclamation activities will be more fully described as new information is made available from progressive restoration activities (and associated studies), associated environmental assessments and monitoring results of the aforementioned restoration activities

The Plan consists of the following elements:

1. specific abandonment and restoration objectives and actions to be taken to achieve those objectives for each of the facility components for both temporary and permanent closure;
2. details of measures to be employed for progressive restoration;
3. monitoring program to be employed in recording the success of on-going restoration activities;
4. description of the final landscape and how aesthetic concerns will be factored into the restoration process; and
5. post-closure treatment potentially required for drainage water that is not acceptable for discharge.