# APPENDIX A: Executive Summary (Inuktitut)

# ᐅᓂᒃᑳᓕᐅᕈᑦ ᓇᐃᓈᖅᓯᒪᔪᖅ

ᕗᕌᓐᓯ ᐃᓐᕙᐃᕋᒥᓐᑐᓪ ᐃᓐᑯᐊᐳᕇᑎᑦ (ᕗᕌᓐᓯ) ᐱᓕᕆᑎᑕᐅᓯᒋᓐᓇᓚᐅᖅᐳᑦ ᐃᓄᓕᕆᔨᑐᖃᒃᑯᓐᓄᑦ ᑲᓇᑕᒥ ᐱᓕᕆᐊᖃᖅᑎᑕᐅᓪᓗᑎᒃ ᐱᖓᔪᐊᓐᓂ ᐊᕐᕌᒍᒥ ᐊᑯᓂᐅᔪᒥ ᖃᐅᔨᓴᖅᐸᓪᓕᐊᓂᕐᒧᑦ ᓯᓕᕆᐊᖑᔪᒥᒃ CAM-F ᐅᓇᓖᑦ ᓈᓚᕝᕕᒥᓂᖓᓂ ᑭᖑᕋᕐᒥ, ᓄᓇᕗᒻᒥ ᒪᓕᒃᑐᑎᒃ ᐃᓄᓕᕆᔨᑐᖃᒃᑯᓐᓄᑦ ᑲᓇᑕᒥ CAM-F-ᒧᑦ ᑭᖑᕋᕐᒥ ᐊᑯᓂᐅᔪᒥ ᖃᐅᔨᓴᖅᐸᓪᓕᐊᓂᕐᒧᑦ ᐸᕐᓇᒍᑎᖏᓐᓂᒃ. ᑖᓐᓇ ᐱᓕᕆᐊᖑᔪᖅ ᐱᔭᕇᖅᑕᐅᓚᐅᖅᑐᖅ ᐊᑖᓂ ᐃᓄᓕᕆᔨᑐᖃᒃᑯᑦ ᑲᓇᑕᒥ ᐊᑐᐃᓐᓇᐅᑎᑕᐅᖏᓐᓇᖅᑑᑉ ᓈᓴᐅᑎᓕᐅᑉ 01-09-6038-ᒥᒃ, ᐅᖄᓚᐅᑎᒃᑯᑦ ᓈᓴᐅᑎᖓ 02, ᑎᑎᕋᖅᑕᐅᓯᒪᕕᐅᑉ ᓈᓴᐅᑎᖓ 1632-11/01-09-6038.

ᑕᐃᓐᓇ CAM-F ᑭᖑᕋᕐᒥ ᐃᓂᒋᔭᐅᔪᖅ ᐃᓂᖃᖅᐳᖅ ᐊᒥᑦᑐᒥ ᕿᑭᖅᑕᓂ ᐊᕕᑦᑐᖅᓯᒪᓂᖓᓂ ᓄᓇᕘᑉ, 110 ᑭᓚᒦᑕᓂᒃ ᐅᖓᓯᓐᓂᖃᖅᑐᖅ ᓂᒋᐊᑕ ᐱᖓᓐᓇᖓᓂ ᐃᒡᓗᓕᐅᑉ ᐊᒻᒪ 85 ᑭᓚᒦᑕᓂᒃ ᐱᖓᓐᓇᖓᓂ Ωᓂᕋᔭᐅᑉ. ᐃᓂᖓ ᓴᓇᔭᐅᓚᐅᖅᓯᒪᕗᖅ 1957-ᒥ ᐊᑯᓐᓈᕿᔪᖅ (ᐆᑦᑐᕋᐅᑎᒋᓗᒍ, ᐊᑯᕐᖓᓐᓃᑦᑐᖅ ᓈᓚᕝᕕᓪᓗᐊᑕᐃᕐ) ᐅᓇᓖᑦ ᓈᓚᕝᕕᖓᑦ ᐊᒻᒪ ᐊᐅᓚᑎᑕᐅᓪᓗᓂ ᑕᐃᒪᑦᑑᓪᓗᒍ ᑎᑭᑦᑐᒍ 1963. ᐊᑐᖅᑕᐅᕙᓚᐅᖅᑐᖅ ᓯᓇᑐᐃᓐᓇᕐᓂᒃ ᖃᐅᔨΩᕐᕕᐅᓪᓗᓂ ᐊᑯᕐᖓᓂ 1977 ᐊᒻᒪ 1988.

ᐊᕙᑎᒥᒃ ᐅᑎᖅᑎᑦᑎᕙᓪᓕᐊᓂᕐᒧᑦ ᐱᓕᕆᐊᖑᔪᖅ ᐱᓕᕆᐊᖑᓚᐅᖅᓯᒪᕗᖅ ᐃᓂᖓᓂ ᐊᑯᕐᖓᓂ 2005 ᐊᒻᒪ 2008. ᓯᓕᕆᐊᖑᔪᑦ ᐃᓚᖃᓚᐅᖅᑐᑦ ᐲᔭᖅᑕᐅᓂᖏᓐᓂᒃ ᐊᒻᒪ ᐊᑦᑕᖅᑕᐅᓂᖏᓐᓂᒃ ᐃᓪᓗᐃᑦ, ᓇᑉᐸᖅᑕᐅᓯᒪᔪᑦ ᐊᒻᒪ ᐊᓯᖏᑦ ᓴᓃᑦ, ᐊᒻᒪᓗᑦᑕᐅᖅ ᓴᓗᒻᒪᓴᖅᑕᐅᓂᖏᓐᓂᒃ ᐅᓗᕆᐊᓇᖅᑐᑦ ᐱᖁᑎᑦ. ᐸᓚᐃᖅᓯᒪᔪᖅ ᐃᔾᔪᒥᒃ ᐊᑦᑕᕐᕕᒃ ᐊᒻᒪ ᐅᓗᕆᐊᓇᖏᑦᑐᓄᑦ ᐊᒃᓯᕕᒃ ᓴᓇᔭᐅᓚᐅᖅᐳᒃ ᐅᑎᖅᑎᑦᑎᕙᓪᓕᐊᓂᕐᒥ ᓯᐊᒻᒪᖅᑎᔾᔭᐃᖅᓯᒪᓇᓱᐊᖅᑐᒋᑦ ᐃᓚᖏᑦ ᐲᔭᖅᑕᐅᓯᒪᔪᑦ ᐱᖁᑎᑦ ᐊᒻᒪ ᐳᐊᕐᓇᔭᖅᑕᐅᓯᒪᔪᑦ ᐃᔾᔪᑦ. ᑕᐃᒃᑯᐊ ᓇᑉᐸᖅᑕᐅᓯᒪᔪᑦ ᓯᑕ ᐱᑕᖃᖅᐳᑦ ᐃᓂᖓᓂ.

ᕗᕌᓐᓯᒃᑯᑦ ᐱᓕᕆᐊᖃᓚᐅᖅᐳᑦ ᓄᓇᒥ ᓯᓕᕆᐊᖑᔪᓂᒃ ᐱᖓᔪᕆᔭᒧᑦ ᐊᕐᕌᒍᒥ CAM-F-ᒥ ᐊᑯᓂᐅᔪᒥ ᖃᐅᔨᓴᖅᐸᓪᓕᐊᔾᔪᑎᒥ ᓰᑏᕝᕙ 7-ᒥ ᐊᒻᒪ 8-ᒥ, 2010-ᖑᑎᓪᓗᒍ, ᐃᓂᖃᖅᑐᑎᒃ ᖃᓂᒋᔭᖓᓂ ᓄᓇᓕᖕᒥ ᐃᒡᓗᓕᖕᒥ.

ᑕᒃᑯᓴᓂᒃ ᓇᐅᑦᑎᓯᕐᓂᒃᑯᑦ 2010-ᒥ ᓄᓇᒥ ᓯᓕᕆᐊᖑᔪᓂᑦ ᐃᓱᒪᓇᕈᑕᐅᕗᑦ ᐊᓯᕈᖅᑐᖅᑲᑦᑐᐊᖅᓯᒪᓐᖏᓐᓂᖓᓂᒃ ᑭᖑᓪᓕᖅᐹᓂ ᐱᖓᓯᓂ ᐅᑭᐅᖑᓚᐅᖅᑐᓂ CAM-F-ᒥ ᐅᓇᓖᑦ ᓈᓚᕝᕕᖑᓯᓂ ᐊᒻᒪ ᑕᐃᒃᑯᐊ ᑕᒪᒃᑮᒃ ᐸᓚᐃᖅᓯᒪᔪᖅ ᐃᔾᔪᒥᒃ ᐊᑦᑕᕐᕕᒃ ᐊᒻᒪ ᐅᓗᕆᐊᓇᖏᑦᑐᓄᑦ ᐊᒃᓯᕕᒃ ᐊᑑᑎᖃᖅᑐᑎᒃ ᓴᓇᔭᐅᔾᔪᑎᒋᓯᒪᔭᖏᓐᓂᒃ ᐊᒻᒪ ᓯᐊᒻᒪᔭᐃᒃᑯᑕᐅᓪᓗᑎᒃ ᐴᖅᓯᒪᔪᓄᑦ ᐊᑦᑕᑯᓄᑦ. ᓯᓚᒥᑦ ᑲᑎᖅᓯᓚᐃᑦ ᐃᓱᒪᓇᕈᑕᐅᕗᑦ ᑕᐃᓐᓇ ᐸᓚᐃᖅᓯᒪᔪᖅ ᐃᔾᔪᒥᒃ ᐊᑦᑕᕐᕕᒃ ᑕᐃᒫᒃᓴᐃᓐᓇᓕᕙᑦᓕᐊᓕᓇᐊᒃᓴᖑᓄᑦ, ᐊᒻᒪ ᐱᕈᕐᕕᐅᔪᓐᓇᕐᓂᖓ ᑎᑭᐅᑎᔭᒍᓐᓃᖅᑐᓂ ᓯᕈᕐᓂᑰᓂᖓᓄᑦ.

ᐃᓚᒋᔭᐅᔪᓂᒃ ᑕᒃᑯᓴᓂᒃ ᐊᒻᒪ ᓯᓚᒥᒃ ᓇᐅᑦᑎᓯᕐᓂᕐᒧᑦ, ᕗᕌᓐᓯᒃᑯᑦ ᓄᐊᑦᑎᓚᐅᖅᐳᑦ ᐃᔾᔪᒥᒃ ᐊᒻᒪ ᓄᓇᒥᑦ ᐃᒥᕐᒥᒃ ᖃᐅᔨᓰᒃᓴᓂᒃ ᖃᐅᔨᒋᐊᕈᑎᒃᓴᓂᒃ ᓯᕐᕋᐅᑎᓂᖃᖅᑎᒋᓂᖓᓂᒃ ᐸᓚᐃᖅᓯᒪᔫᑉ ᐃᔾᔪᒥᒃ ᐊᑦᑕᕐᕕᐅᑉ. ᕿᒥᕐᕈᓂᒃᑯᑦ ᖃᐅᔨᓴᐅᔪᑦ ᐃᔾᔪᒥᑦ ᖃᐅᔨᓰᒃᓴᓂᑦ ᓄᐊᑦᑎᓚᐅᖅᑐᓂᑦ ᐊᕙᑖᓂᑦ ᐸᓚᐃᖅᓯᒪᔫᑉ ᐃᔾᔪᒥᒃ ᐊᑦᑕᕐᕕᐅᑉ ᓈᒻᒪᑉᐳᑦ ᐊᑖᓂ ᐊᑐᐊᖅᓯᔾᔪᑎᑦ ᓯᑭᕐᓇᖅᑐᓄᑦ ᐃᓯᒫᓗᓇᖅᓯᑐᐃᓐᓇᓇᐊᖅᑲᖅᑐᓄᑦ ᐃᓂᖓᓂ. ᐃᑕᖅᑲᖅᑎᒋᓂᖏᑦ ᓯᑭᕐᓇᖅᑐᑦ ᐃᓯᒫᓗᓇᖅᑐᑦ ᓄᓇᒥᑦ ᐃᒥᕐᒥ ᖃᐅᔨᓰᒃᓴᓂ ᑐᖏᓃᑉᐳᑦ ᓃᒻᒪᑭᔭᐅᑦ ᐊᖏᓂᖅᐹᒃᔪᐊᓐᓇᖅᑐᑦ ᓇᓕᒧᑎᑕᐅᑎᑦᑐᒥᑦ ᓯᕗᓂᖓᓂ ᖃᐅᔨᓴᐅᖃᑦᑕᖅᓯᒪᔭᓄᑦ.

ᑕᐃᒪᐃᒍᑎᖃᖅᑐᑎᒃ ᑕᑯᒃᓴᓂᒃ ᐊᒻᒪ ᐅᖅᑰᓇᓂᕐᒥᒃ ᓇᐅᑦᑎᓱᕐᓂᒃᑯᑦ ᐊᒻᒪ ᕿᒥᕐᕈᓂᒃᑯᑦ ᖃᐅᔨᔭᐅᔪᓂᒃ 2010-ᒥ ᓄᓇᒥ ᐱᓕᕆᔾᔪᑎᒥᑦ, ᕗᕌᓐᓯᒃᑯᑦ ᐃᓱᒪᕗᑦ ᑕᐃᓐᓇ ᐃᓂᒋᔭᖅ ᐊᓱᐳᓪᓗᐊᖅᓯᒪᓱᒋᓇᒍ ᑭᖑᓪᓕᖅᐹᒥᑦ ᖃᐅᔨᓴᖅᐸᓪᓕᐊᓂᐅᓯᒪᔪᒥᑦ, ᐋᒡᒌᓯ 2009-ᒥ, ᑕᐃᒃᑯᐊ ᐊᑦᑕᕐᕖᑦ ᐊᐅᓪᓚᑦᑎᐊᖏᓐᓇᖅᑐᑎᒃ ᓴᓇᔭᐅᔾᔪᑎᒋᓯᒪᔭᖏᑎᑐᑦ ᐊᒻᒪ ᑕᐃᓐᓇ ᐃᓂᒋᔭᖅ ᐊᑦᑕᓇᕈᑕᐅᓇᓂ ᐊᕙᑎᖓᓄᑦ. ᒪᓕᒃᑐᒋᑦ ᓄᓇᒥᒃ ᓇᐅᑦᑎᓱᕐᓃᑦ, ᕗᕌᓐᓯᒃᑯᑦ ᐊᑐᓕᖅᑯᔨᕗᑦ ᐃᒫᒃ:

1. ᐃᔾᔪᒥᒃ ᖃᐅᔨᓵᒃᓴᒥᒃ ᓄᐊᑦᑎᓂᖅ ᐃᓚᓕᐅᔾᔭᐅᓗᓂ ᖃᐅᔨᓴᖅᐸᓪᓕᐊᔾᔪᑎᒧᑦ ᐃᓚᖓᓐᓄᑦ ᑭᓂᕆᕖᑦ ᐸᓚᐃᖅᓯᒪᔪᒥ ᐃᔾᔪᒥᒃ ᐊᑦᑕᕐᕕᒻᒥ ᑭᓂᕇᓐᓇᓯᓐᓂᖅᐸᑦ ᐅᕝᕙᓘᓐᓃᑦ ᓄᑖᓂᒃ ᓇᓗᓇᖏᔾᔪᑎᓂᒃ ᐊᒃᓯᕕᐅᑉ ᐱᐅᔪᓐᓃᐸᓪᓕᐊᓂᖓᓂᒃ ᓴᖅᑭᖅᑐᖃᕆᐊᖓ ᖃᓂᒋᔭᖓᓂ ᓇᓕᐊᒃ ᑕᐃᒃᑯᐊ ᑭᓂᕆᕖᑦ;
2. ᓄᑖᒥᒃ ᐊᑦᑐᖏᐅᑎᒥᒃ ᓇᑦᑕᖅᑐᖃᕐᑐᓂ ᖃᐅᔨᓴᖅᐸᓪᓕᐊᕕᒻᒧᑦ MW0601-ᒧᑦ, ᖃᓂᒋᔭᖓᓃᑦᑐᖅ ᐅᓗᕆᐊᓇᙱᑦᑐᓄᑦ ᐊᒃᓯᕕᐅᑉ; ᐊᒻᒪ
3. ᕿᐅᒃᑲᔭᐃᒃᑯᑎᓄᑦ ᔫᒥᓃᑦ ᐃᓗᐊᓃᑦᑐᑦ ᐅᖅᑰᓇᓂᕐᒥᒃ ᑲᑎᖅᓱᒐᕐᓂᒃ ᓄᐊᑦᑎᔾᔪᑎᑦ ᐊᓯᔾᔨᖅᑕᐅᓗᓂ ᑭᖑᓪᓕᕐᒥ ᐃᓂᖓᓅᖅᑐᖃᖅᐸᑦ.

ᑖᓐᓇ ᐅᓂᒃᑳᓕᐅᕈᑦ ᓇᐃᓈᖅᓯᒪᔪᖅ ᐅᖃᓕᒫᖅᑕᐅᔪᒃᓴᐅᕗᖅ ᐃᓚᒋᔭᐅᓗᒍ ᐅᓂᒃᑳᓕᐅᕈᑎᓪᓚᑦᑖᒧᑦ ᐊᒻᒪ ᑕᐃᒫᒃᓴᐃᓐᓇᖅ ᑭᓪᓕᖃᖅᑎᑕᐅᕗᖅ ᐅᖃᐅᓯᕆᔭᐅᓯᒪᔪᓂᒃ ᐃᓚᖓᓂ 9.0-ᒥ.

# APPENDIX B: Executive Summary (English)

# EXECUTIVE SUMMARY

Franz Environmental Inc. (FRANZ) was retained by Indian and Northern Affairs Canada (INAC) to conduct the third year of long-term monitoring activities at the former CAM-F Distant Early Warning (DEW) Line site at Sarcpa Lake, Nunavut as prescribed by INAC's CAM-F Sarcpa Lake Long-Term Monitoring Plan. This project was completed under INAC standing offer number 01-09-6038, call-up number 02, file number 1632-11/01-09-6038.

The CAM-F Sarcpa Lake site is located on the Melville Peninsula in the Baffin Region of Nunavut, 110 km southwest of Igloolik and 85 km west of Hall Beach. The site was constructed in 1957 as an intermediate (i.e., between main stations) DEW line site and operated as such until 1963. It was used as a scientific research station between 1977 and 1988.

An environmental remediation project was conducted at the site between 2005 and 2008. Activities included the demolition and disposal of buildings, structures and other debris, as well as the cleanup of hazardous materials. A secure soil disposal facility (SSDF) and non-hazardous waste landfill (NHWL) were constructed during remediation to contain some of the demolished materials and excavated soils. These structures remain present at the site.

FRANZ conducted the field activities for the third year of the CAM-F long-term monitoring program on September 7 and 8, 2010, while based in the nearby community of Igloolik.

Physical observations from the 2010 field activities suggest that there has been little significant change over the last three years at the CAM-F DEW Line site and that both the SSDF and the NHWL are performing as designed and are containing the enclosed waste. Temperature data suggest that the SSDF is reaching equilibrium, and that the active layer is no longer penetrating to the depth of the contaminated material.

In addition to physical and temperature observations, FRANZ collected soil and groundwater samples to assess the performance of the SSDF. Analytical results for soil samples collected in the vicinity of the SSDF satisfy guidelines for contaminants of potential concern at the site. Concentrations of contaminants of concern in groundwater samples are below the acceptable maximum when compared with historical results.

As a result of the physical and thermal observations and analytical results of the 2010 field program, FRANZ believes that the site is little changed from the last monitoring event, in August 2009, that its facilities continue to operate as designed and that the site poses no imminent threat to the natural environment. Based on field observations, FRANZ recommends that:

1. a soil sample collection be added to the monitoring program for one of the seepage points on the SSDF should seepage persist or new signs of landfill deterioration appear near any of these points;
2. a new lock be brought for the monitoring well MW0601, near the NHWL; and
3. the desiccant cartridges inside the thermistor data loggers be replaced during the next site visit.

This executive summary should be read in conjunction with the main report and is subject to the same limitations described in Section 9.0.