ROBERTS BAY / IDA BAY REMEDIATION PROJECT
MONITORING PLAN (INCLUDING THE LONG TERM MONITORING)

GPS coordinates of all sampling points as well as a detailed schematic map identifying all monitoring station sites in relation to infrastructure and topography

- *The GPS coordinates are currently unavailable. They will be obtained by the contractor at the commencement of the 2009-10 field season and will be made available to Nunavut Water Board (NWB).*

The specific components of the visual, soil/water and thermal monitoring program, the sampling frequency, and the physical and chemical parameters for analyses:

- *Identified in the Comments/Plan column below or in the Long Term Monitoring Plan*

Monitoring	Station Description	Parameters	Frequency of Monitoring	Comments/Plan
ROB-1*	Water supply intake at un-named pond adjacent to the camp	Volume	Daily	The daily volume intake will be recorded by the contractor when remediation starts.
ROB-2*	Water supply intake at Robert's Lake	Volume	Daily	The daily volume intake will be recorded by the contractor when remediation starts.
ROB-3	Sewage pumped to the Sewage Disposal Facility	Volume	Monthly and Annually during remediation	An amendment to the original sewage management plan is the use of the NOMADIC™ Sewage Wastewater System. Sewage influent volumes will be recorded based on the outlet volumes. The Normadic unit has a volume measurement device at the outlet. An inlet device could be fitted to the system if required.
ROB-4	Final Point of Discharge from the Sewage Lagoon	Volume and Water Quality	Once upon commencement	An amendment to the original sewage management plan is the use of the NOMADIC™ Sewage

			of discharge and once prior to completion of discharge during remediation	Wastewater System. Sewage effluent volumes will be recorded at the outlet of the treatment unit. The Normadic unit has a volume measurement device at the outlet. Samples will be collected and tested to confirm compliance with treatment criteria specified in Part D (Page 18) of the Roberts Bay Water Licence (1BR-ROB0813).
ROB-5	Discharge from the Tailings Pond	Volume and Water Quality	During periods of flow	An amendment to the AMEC Remediation Plan is that the Tailings Water will not be disposed of in the Adit. Section 01 11 00 summary of Work of the Project Specifications identifies that the Tailings Pond will be dewatered and sampled to determine the disposal option. The new plan is to pump out the water and treat it if necessary prior to discharge on land. If the water cannot be treated, it will be disposed of off site.
ROB-6	The stream flowing south to Roberts Lake (main watershed)	Water quality	Annually after spring melt	Water sample at a location in the stream (GPS to be provided) will be taken and analysed to meet the Canadian Council of Ministers of the Environment (CCME) Canada Water Quality Guidelines (CWQG) for the protection of aquatic life
ROB-7	The stream or streams flowing north and west around the bedrock high (northern site drainage)	Water quality	Annually after spring melt	Water sample (s) at a location (s) in the stream (s) (GPS to be provided) will be taken and analysed to meet the Canadian Council of Ministers of the Environment (CCME) Canada Water Quality Guidelines (CWQG) for the protection of aquatic life
ROB-8	Any streams flowing west to Roberts Bay located below the Tailings Pond, Solid Waste Disposal Facility, and Landfill sites (to detect possible leachate from those facilities)	Water quality	Annually after spring melt	Water sample (s) at a location (s) in the stream (s) (GPS to be provided) will be taken and analysed to meet the Canadian Council of Ministers of the Environment (CCME) Canada Water Quality Guidelines (CWQG) for the protection of aquatic life
ROB-9	Roberts Lake (for background and color)	Water quality	Annually after spring melt	Water Samples will be taken from Roberts Lake. The samples will be analysed to meet the Canadian

				Council of Ministers of the Environment (CCME) Canada Water Quality Guidelines (CWQG) for the protection of aquatic life
ROB-10**	Runoff and Leachate from the Solid Waste Disposal Facility/Tailings Pond	Water quality	Annually after spring melt	Long Term Monitoring Plan attached
ROB-11**	Runoff and Leachate from the Landfill	Water quality	Annually after spring melt	Note:- same as ROB-10 Long Term Monitoring Plan attached
ROB-12	Tailings	Temperature	As determined by re-evaluation of need for post closure monitoring	Long Term Monitoring Plan attached

* Based on the outcome of the analysis of the water samples taken from ROB-1 and ROB-2, either of these two will eventually be used as the water supply source during the remediation project.

** ROB-10 and ROB-11 are the same.