Indian and Northern Affairs Canada | Affaires indiennes et du Nord Canada

Nunavut Regional Office (NRO)
P.O. Box 2200
Iqaluit, NU, X0A 0H0

March 31, 2011

Mr. Thomas Kabloona
A/Chief Administrative Officer
Nunavut Water Board
P.O. Box 119, Gjoa Haven,
NU X0B 1J0

Dear Mr. Kabloona:

RE: Cape Christian Remediation Project: 2010 Annual Report for Water Licence No: 1BR-LOR0813 and the Completion/Close out Report

Please find attached the 2010 Annual report for the Water licence No: 1BR-LOR0813 issued for the remediation of the Cape Christian Former Long Range Navigational (LORAN) site.

All activities planned under this project and for which the Water licence No: 1BR-LOR0813 was granted, were completed during the year 2010. A Completion Report dated March 2011 is also being submitted together with this annual report.

If you have any questions or comments, please contact the undersigned or the Project Manager, Dele Morakinyo at dele.morakinyo@inac-ainc.gc.ca, or by telephone at (819) 934-9224

Sincerely,

Natalie Plato

Natalie Plato, Director,
Contaminated Sites Program (NRO)
Tel: (867) 975-4730;
Fax: (867) 975-4736
Email: natalie.plato@inac-ainc.gc.ca

CC: Nunavut Impact Review Board (NIRB), Cambridge Bay, Nunavut

Canada

NWB Annual Report **Year being reported:** 2010

License No: 1BR-LOR0813 **Issued Date:** April 30, 2008
Expiry Date: May 1, 2013

Project Name: Cape Christian Site Remediation Project

Licensee: Indian and Northern Affairs Canada, Contaminated Sites Program

Mailing Address:
PO Box 2200
Iqaluit NU
X0A 0H0

Name of Company filing Annual Report (if different from Name of Licensee please clarify relationship between the two entities, if applicable):

General Background Information on the Project (*optional):

The Cape Christian site is located near the mouth of the River Clyde, on the northeast coast of Baffin Island, Nunavut, at approximately 16 km northeast of the Hamlet of Clyde River.

The United States Coast Guard operated a Long Range Navigation (LORAN) communications station at the site from From 1954 to 1974 when the site was abandoned leaving several contaminants and buildings/infrastures in disrepair at the site.

The remediation (field works) of the Cape Christian site started during the 2008 season and was completed during the 2010 season.

All works at the site have been completed except the concluding partion of site inspection by the Resident Engineer (RE). Partial final inspection of the site was conducted in 2010 by the RE. Works (including camp and sewage lagoon decommissioning) completed by the contractor in October, 2010 could not be inspected due to snow cover. RE will visit site for a 1 or 2 days in July 2011 to inspect these locations.

Licence Requirements: the licensee must provide the following information in accodance with

Part B Item 1

A summary report of water use and waste disposal activities, including, but not limited to: methods of obtaining water; sewage and greywater management; drill waste management; solid and hazardous waste management.

Water Source(s): An unnamed River adjacent to the Cape Christian to Clyde River Road

Water Quantity:	
15/day	Quantity Allowable Domestic (cu.m)
7.6/day (max)	Actual Quantity Used Domestic (cu.m)
None	Quantity Allowable Drilling (cu.m)
None	Total Quantity Used Drilling (cu.m)

Waste Management and/or Disposal

- [x] Solid Waste Disposal
- [x] Sewage
- [ ] Drill Waste
- [x] Greywater
- [x] Hazardous
- [ ] Other:

Additional Details:

Soild waste from the Camp was incinerated and the ash residue was stored in large, covered metal receptacles which was later disposed of in the Non-Hazardous Waste Landfill. Sewage and Greywater were disposed of in the sewage lagoon. All hazardous wastes were properly packaged and stored for shipment to a licenced southern disposal facility

A list of unauthorized discharges and a summary of follow-up actions taken.

Spill No.: None (as reported to the Spill Hot-line)

Date of Spill: None

Date of Notification to an Inspector: N/A

Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

N/A

Revisions to the Spill Contingency Plan

SCP submitted and approved - no revision required or proposed

Additional Details:

None

Revisions to the Abandonment and Restoration Plan

AR plan submitted and approved - no revision required or proposed

Additional Details:

None

Progressive Reclamation Work Undertaken

Additional Details (i.e., work completed and future works proposed)

WORK COMPLETED

Continuing operation of the on-site NHWL (placement of further wastes from the site and crushed barrels from the worked areas);

Excavation of buried barrels from worked areas 2, 5, 7 and 8, venting, crushing and disposal in the landfill of all barrels, including those at worked area # 6;

Completion of the collection of site debris and remaining equipment at the equipment yard and disposal in the NHWL;

Continuing operation of the landfarm facility to treat the PHC contaminated soils – the soil, after it has been confirmed to meet the remediation criteria, will be used for backfilling dug-out areas;

Decommissioning of the existing water reservoir;

Hazardous waste transport and disposal – transport and disposal of packaged hazardous wastes and contaminated soils;

Re-grading;

Camp and facilities (e.g. sewage lagoon etc) decommissioning;

Closure of the on-site NHWL;

Project closure inspection / close-out meeting; and

Demobilization from the site.

FUTURE WORK PROPOSED

Completion of Final Inspection by the Resident Engineer (RE) - Partial final inspection of the site was conducted in 2010 by the RE. Works (including camp and sewage lagoon decommissioning) completed by the contractor in October, 2010 could not be inspected due to snow cover. RE will visit site for a 1 or 2 days in July 2011 to inspect these locations.

Long Term Monitoring (starting in 2011)

Results of the Monitoring Program including:

The GPS Co-ordinates (in degrees, minutes and seconds of latitude and longitude) of each location where sources of water are utilized;

Details attached

Additional Details:

See GPS Co-ordinates below

The GPS Co-ordinates (in degrees, minutes and seconds of latitude and longitude) of each location where wastes associated with the licence are deposited;

Details attached

Additional Details:

See GPS Co-ordinates below

Results of any additional sampling and/or analysis that was requested by an Inspector

No additional sampling requested by an Inspector or the Board

Additional Details: (date of request, analysis of results, data attached, etc)

N/A

Any other details on water use or waste disposal requested by the Board by November 1 of the year being reported.

No additional sampling requested by an Inspector or the Board

Additional Details: (Attached or provided below)

N/A

Any responses or follow-up actions on inspection/compliance reports

No inspection and/or compliance report issued by INAC

Additional Details: (Dates of Report, Follow-up by the Licensee)

N/A

Any additional comments or information for the Board to consider

The Cape christian Remediation Project is now completed. The Completion Report (Close-out report) is sent with this report. An addendum, to the close-out report, which will cover a short report/information on the proposed final inspection by the RE in July 2011, will be sent to the NWB after the completion of the visit.

Issues discovered post-remediation will be dealt with during Long Term Monitoring (LTM) planned for up to 25 years startin from 2011/12. The LTM activities will follow the procedure outlined in the Cape Christian LTM Plan previously submitted to the NWB's office.

Date Submitted:	March 31, 2011	
Submitted/Prepared by:	Natalie Plato	
Contact Information:	**Tel:**	(867) 975-4730
	Fax:	(867) 975-4736
	email:	natalie.plato@inac-ainc.gc.ca

GPS Coordinates for water sources utilized

Source Description	Latitude			Longitude		
	° Deg	' Min	" Sec	° Deg	' Min	" Sec
An unnamed River adjacent to the Cape Christian to Clyde River Road (Water Source)	70	31	0	68	19	3

GPS Locations of areas of waste disposal

Location Description (type)	Latitude			Longitude		
	° Deg	' Min	" Sec	° Deg	' Min	" Sec
Non-Hazardous Waste Landfill	70	31	33.28	68	18	9.3
Camp Wastewater - Permanent Sewage Lagoon	70	30	55.38	68	18	51.35

APPENDIX 1

EXECUTIVE SUMMARY IN ENGLISH AND INUKTUTUIT

Cape Christian Long Range Navigation (LORAN) Station
NWB Licence No. 1BR-LOR0813

Executive Summary of all Plans, Reports, or Studies Conducted under Water Licence No: 1BR-LOR0813

This executive summary document has been prepared to fulfill the requirements of Part B: General Conditions (subsection letter: O) of the NWB Licence No. 1BR-LOR0813. NWB Licence No. 1BR-LOR0813 was issued on April 30, 2008 for the remediation of the abandoned Long Range Navigation (LORAN) Station at Cape Christian, Nunavut. The summary of the main activities carried out under this licence from the time of issuance (April 30, 2008) to March 31, 2011 are summarised as follows:

The former Cape Christian Long Range Navigation (LORAN) radar station is located on the northeast coast of Baffin Island along the Davis Strait, approximately 16 km northeast of the hamlet of Kangiqtugaapik (Clyde River) in Nunavut. Coordinates for the site are 70°31' N, 68°17' W.

Prior to demolition the major site features included a Main Station, a residential building, a dam and water reservoir, an airstrip and terminal, fuel storage facilities including five 102,600 L above ground fuel tanks, an antenna, a garage, storage/emergency buildings and site roads. Physical hazards at the site included unsound structures and unconsolidated site debris. Hazardous and non-hazardous materials were scattered throughout the area. Visible site debris included large pieces of abandoned machinery, boilers, compressed gas tanks, scrap metal, domestic wastes, spools of wire, antennas, and poles. Other environmental hazards included asbestos-containing building materials, PCB- and lead-amended paint, contaminated soils, and petroleum oils and lubricants (POL) left in above ground storage tanks, barrels, and pipelines. Additional environmental concerns included large areas of buried or partially-buried unconsolidated debris and hazardous wastes at the beach areas. Both the upland site soils near the Main Station and areas of beach sands were impacted by historic spills of hydrocarbons, PCBs, and heavy metals.

Remediation work primarily consisted of hazardous materials and contaminated soils testing and mitigation, landfill construction, building and infrastructure demolition, and the collection and disposal of historic buried wastes and barrels at the beach areas.

The remediation contractor for the project was Qikiqtaaluk Logistics Inc. (QL) of Iqaluit, Nunavut. Contractor mobilization began in the fall of 2008, with heavy equipment and supplies brought to a location near Clyde River, and mobilization to Cape Christian occurred in 2009. Remediation work was completed within a 12-week period in 2009 and a 14-week period of site activity in 2010, between late June and early October of each year. Resident Engineering (RE) services were provided by EBA during these periods of activity.

The main components of the two-year site remediation program included the following tasks:

- Provision of a facility to sort and containerize site hazardous wastes and to clean barrels;
- Construction of a non-hazardous landfill to contain building demolition wastes, site debris, and DCC Tier I contaminated soil as defined by the DEW Line Clean-up Protocol;

- Decommissioning and demolition of site infrastructure;
- Containerization/shipping/off-site disposal of hazardous materials and soils;
- Excavation and processing of buried wastes, including whole and crushed barrels, in the beach areas (Worked Areas);
- Design, construction and operation of a landfarm for the on-site treatment of F1-F2 range hydrocarbon-impacted soils;
- Dewatering and decommissioning of the former water reservoir; and
- Restoration of areas affected by work and general re-grading of the work areas.

All works were carried out in accordance with the terms and conditions of the site permits, including a Land Use Permit, the Water License, and Quarry Permit. Conditions for the Contractor's use of the site included enforcing no trespassing in the designated archaeological areas identified during the archaeological assessment of the site.

Contaminated soils at Cape Christian were classified as DCC Tier I, DCC Tier II, PHC F1-F2, PHC F3-F4, or hazardous. Impacted soils originated from Areas of Environmental Concern (AEC), one solid waste excavation on the beach (Worked Area WA-7), an excavation of tetrachloroethylene (TCE) impacted soils near the Main Station that was discovered at the end of 2009, and PAH-impacted soils removed from the vicinity of creosote-treated utility poles. Approximately 19,000 m^3 of buried wastes and soils were excavated at eleven beach areas. An estimated 11,700 barrels were found, all of which were emptied, cleaned, crushed and disposed of in the non-hazardous landfill. Excavated beach sands were stockpiled and tested for chemical quality prior to backfilling in the excavations.

Hazardous materials were collected from the site buildings and nearby areas as well as from the buried debris areas. QL shipped all gaseous, liquid and solid hazardous materials and all Tier II soils off-site to licensed hazardous waste disposal facilities in Quebec and Alberta.

Approximately 360,000 L of phenols-impacted water was collected from the buried barrels at the beach during 2009 and 2010 and treated by QL on-site to meet the Nunavut Water Board Water License discharge criteria prior to discharge.

Eight borrow sources were developed during the Cape Christian remediation project for the purpose of building roads, the landfarm and the non-hazardous landfill. 5 borrow sources were located in previously disturbed areas, roads, or existing stockpiles of aggregates, while the other 3 borrow areas were located in natural areas. An estimated total of 40,750 m^3 of borrow materials was excavated for use during the project.

INAC will manage the post-closure site monitoring and aftercare for the next 25 years and conduct periodic visual inspections of the permanent site facilities including the non-hazardous landfill, the reservoir breach, and the four groundwater monitoring wells installed at the landfill. INAC will also conduct groundwater monitoring at the site periodically over the next 25 years to verify the performance of the non-hazardous landfill. Other permanent features associated with the site that are no longer under the jurisdiction of INAC include an emergency storm shelter now owned by the community of Clyde River and a cabin near the coast to the north owned by a resident of Clyde River.

ᐱᖑᐊᕐᔪᖕᒥ ᐅᖓᓯᒃᑐᒥᒃ ᓇᐅᑦᑎᖅᑐᕐᕕᒃ ᐅᓇᖅᑕᖅᑐᒃᓴᓄᑦ
(LORAN ᖃᓄᓈᑎᑐᑦ ᓇᐃᓈᖅᓯᒍ)
ᓄᓇᕗᒻᒥ ᐃᒪᕐᓄᑦ ᑲᑎᒪᔨᓂᒃ ᓚᐃᓴᖕᓯ
ᓈᓴᐅᑎᓕᒃ 1BR-LOR0813

ᐊᐅᓚᑦᑎᔨᓄᖕᒐᐅᔪᑦ ᓇᐃᓈᖅᑕᐅᓯᒪᔪᑦ ᐅᓂᒃᑲᑦ ᑕᒪᐃᓐᓂᒃ ᐸᕐᓇᐅᑎᓂᒃ, ᐅᓂᒃᑳᓕᐊᓂᒃ, ᖃᐅᔨᓴᖅᑕᐅᓯᒪᔪᓂᒡᓗ ᐊᑖᒍᑦ ᐊᑐᕐᓂᕐᒧᑦ ᐃᒥᖅᑕᕈᓐᓇᕐᓂᕐᒧᑦ ᓚᐃᓴᖕᓯᑎᒍᑦ 1BR-LOR0813

ᐅᑯᐊ ᐊᐅᓚᑦᑎᔨᓄᑦ ᑐᕌᖓᔪᑦ ᑎᑎᕐᑲᐃᑦ ᓴᓇᔭᐅᓯᒪᔪᑦ ᒪᓕᒋᐊᕐᑲᕐᓂᕐᒧᑦ ᒪᓕᒐᕐᓂᒃ B–ᖓᓃᑦᑐᓂᒃ: ᑕᒪᐃᓐᓂᒃ ᒪᓕᒐᒃᓴᐃᑦ (ᑎᑎᕐᑲᒃᑲᓐᓂᖅᑲᖅᓱᑎᒃ: 0–ᒥᒃ) ᓄᓇᕗᒻᒥ ᐃᒪᕐᓄᑦ ᑲᑎᒪᔨᓂᒃ ᐃᒥᖅᑕᕈᓐᓇᕐᓂᕐᒧᑦ ᓚᐃᓴᖕᓯᑖᖅᑎᑕᐅᓯᒪᔪᓄᑦ ᓇᓴᐅᑎᓕᖕᒥᒃ 1BR-LOR0813–ᒥᒃ. ᑖᓐᓇ ᓄᓇᕗᒻᒥ ᐃᒪᕐᓄᑦ ᑲᑎᒪᔨᓂᒃ ᓚᐃᓴᖕᓯᐅᔪᖅ 1BR-LOR0813 ᑐᓂᔭᐅᓚᐅᖅᓯᒪᔪᖅ ᐋᐳ 30, 2008–ᒥ, ᓴᓗᒻᒪᖅᓴᖅᑕᐅᔭᕆᐊᕐᑲᕐᓂᖕᒋᓐᓄᑦ ᕿᒪᒃᑕᐅᑐᐃᓐᓇᕐᓂᑯᑦ ᐅᓇᑕᖅᑐᒃᓴᐃᑦ ᐅᖓᓯᒃᑐᒥᒃ ᓇᐅᑦᑎᖅᑐᖅᕕᕕᓂᖓᑦ, ᐱᖑᐊᕐᔪᖕᒥ, ᓄᓇᕗᒻᒥ. ᐱᓕᕆᐊᖑᓗᐊᓚᐅᖅᑐᑦ ᐊᑖᒍᑦ ᑖᔅᓯᒪ ᓛᐃᓴᖕᓯᐅᑉ ᐱᒋᐊᖅᓱᑎᒃ ᐋᐳ 30, 2008-ᒥᒃ ᒫᔾᔨ 31, 2011–ᒧᑦ, ᓇᐃᓈᖅᑕᐅᓯᒪᓪᓗᑎᒃ ᐃᒪᐃᓕᖓᕗᑦ:

ᐱᖑᐊᕐᔪᒥ (Cape Christianson–ᒥ) ᐅᖓᓯᒃᑐᒥᒃ ᐅᓇᑕᖅᑐᒃᓴᓄᑦ ᓇᐅᑦᑎᖅᑐᖅᕕᕕᓂᖅ ᓈᓚᒡᕕᒃ ᐃᓂᖃᕐᒪᑦ ᐅᐊᖕᓇᖕᒐᑕ ᑲᓇᖕᓇᖅᐸᓯᐊᓂ ᓯᒡᔭᒥ ᕿᑭᖅᑖᓗᖕᒥᒃ, ᑕᐅᕘᓇ ᑕᓐᓄᕈᑎᑎᒍᑦ, ᖃᓂᒋᔾᔮᓂᒃ 15 ᑭᓛᒥᑕᓂᒃ ᐅᖓᓯᖕᓂᓕᒃ Hᐊᓪᒪᓚᑦᑯᓐᓂᒃ ᑲᖏᖅᑐᓖᐱᖕᒥᒃ, ᓄᓇᕗᒻᒥ. ᓄᓇᖑᐊᕐᒥ ᐅᕙᓃᑦᑐᖅ ᓇᓄᓇᐃᒃᑯᑕᓕᖕᒥᒃ: 70°31’ N, 68°17’ W.

ᓯᕗᓂᐊᒍᑦ ᐲᔭᖅᑕᐅᓚᐅᖏᓐᓂᖏᓐᓂ ᐊᖏᔪᑏᑦ ᐃᒡᓗᕕᓂᑦ ᐱᕐᑯᑎᕕᓃᑦᓗ, ᐃᓚᕐᑲᓚᐅᖅᐳᑦ ᓇᔪᖅᑕᐅᓂᖅᐹᖑᕙᓚᐅᖅᑐᓂᒃ ᐃᒡᓗᒥᒃ, ᑐᔪᕐᒥᕕᐊᓗᖕᒥᒃ ᐃᒡᓗᕕᓂᕐᒥᒃ, ᓯᒥᒃᑎᓇᔾᔪᑎᒥᒃ ᐃᒪᕐᒥᒃ ᐊᓪᒪᓗ ᐃᒥᖅᑕᕐᕕᖕᒥᒃ, ᒥᑦᑕᕐᕕᖕᒥᒡᓗ ᐊᓪᒪᓗ ᐅᑕᕐᑭᕕᖕᒥᒃ, ᐅᖅᓱᐊᓗᕐᑲᑕᐅᓂᒃ ᑐᕐᑯᖅᓯᓯᒪᕝᕕᖕᒥᒃ, ᐃᓚᕐᑲᖅᓱᑎᒃ ᑕᑦᓕᒪᓂᒃ (5–ᓂᒃ) 102,600 L ᕐᑯᓛᓃᑦᑐᓂᒃ ᓄᓇᒥ ᐅᖅᓱᐊᓗᕐᑲᑕᐅᑎᓂᒃ ᖃᑦᑕᐅᔭᕐᔪᐊᕐᓂᒃ, ᓈᓚᐅᑎᓄᑦ ᓴᕕᒐᐅᔭᕐᒥᒃ, ᓄᓇᒃᑰᕈᑎᓂᒃ ᓴᓇᕝᕕᖕᒥᒃ, ᑐᕐᑯᖅᓯᓯᒪᕝᕕᖕᒥᒃ/ᑐᐊᕕᕐᓇᖅᑐᓕᕆᕝᕕᖕᒥᒃ ᐃᒡᓗᕐᔪᐊᕕᓂᕐᓂᒃ ᐊᓪᒪᓗ ᑕᐅᕙᓂ ᓄᓇᒥ ᐊᕐᑯᑎᓂᒃ. ᑎᒥᒎᑦ ᐅᓗᕆᐊᓇᖅᑐᑦ ᑕᐅᕙᓃᑦᑐᑦ ᓄᓇᒥ ᐃᓚᕐᑲᓚᐅᖅᑐᑦ ᒪᑭᑕᑦᑎᐊᕈᓐᓃᖅᑐᓂᒃ ᓇᑉᐸᖓᔪᕕᓂᐅᔪᓂᒃ ᐊᓪᒪᓗ ᓇᓂᑐᐃᓐᓈᖅᑐᓂᒃ ᐊᒃᑕᑯᓂᒃ ᐱᕐᑯᑎᕕᓂᕐᓂᒃ ᑕᐅᕙᓂ ᓄᓇᒦᑦᑐᓂᒃ. ᐅᓗᕆᐊᓇᖅᑐᑦ ᐅᓗᕆᐊᓴᖏᑦᑐᓪᓗ ᐱᕐᑯᑎᕕᓂᑦ ᓇᓂᑐᐃᓈᓚᐅᖅᐳᑦ ᑕᐅᕙᓂ. ᑕᑯᒃᓴᐅᑦᑎᐊᖅᑐᑦ ᐊᒃᑕᑯᐃᑦ ᐱᕐᑯᑎᕕᓂᐊᓗᐃᑦ ᐃᓚᕐᑲᓚᐅᖅᑐᑦ ᐊᖏᔫᑎᐊᓗᖕᓂᒃ ᕿᒪᒃᑕᐅᓯᒪᔪᓂᒃ ᐊᐅᓚᐅᑎᕕᓂᓕᐊᓗᖕᓂᒃ, ᐆᓇᖅᑐᓕᐅᕈᑎᓂᒃ ᐃᒪᕐᒥᒃ, ᐸᑦᓚᓛᑦ ᐅᖅᓱᐊᓗᕐᑲᐅᐄᑦ ᓴᕕᕋᔭᐃᑦ, ᓴᕕᕋᔭᕕᓂᐊᓗᐃᑦ, ᐃᓄᖕᓂᒃ ᐊᒃᑕᑯᕕᓃᑦ, ᓴᕕᒐᐅᔭᕐᓄᑦ ᐃᕙᓗᒃᓴᐅᑎᐊᓗᐃᑦ ᐊᖓᓗᖅᑐᑦ, ᓈᓚᐅᑎᓄᑦ ᐊᖅᑯᐃᑦ, ᐊᓪᒪᓗ ᓇᐸᔪᕐᔪᐊᑦ. ᐊᓯᖏᑦ ᐅᓗᕆᐊᓇᖅᑐᕐᑲᓚᐅᕐᒥᔪᑦ ᐃᓚᕐᑲᖅᑐᕕᓃᑦ ᓄᖑᔪᐃᑦᑐᓕᖕᓂᒃ ᐃᓗᐹᕈᑎᒃᓴᓕᐅᕈᑎᕕᐊᓗᖕᓂᒃ (ᐊᔅᐱᐊᔅᑕᔅ–ᖑᓂᕋᖅᑕᐅᕙᒃᑐᑦ) ᐃᒡᓗᕐᔪᐊᓄᑦ ᐊᑐᖅᑐᕕᓃᑦ, ᓄᖑᔪᐃᑦᑑᑦ ᓯᑯᕐᓇᖅᑑᑦ

(ᐱᓯᐼᓂᒃ) ᐊᒻᒪᓗ ᖃᕐᔪᒃᓴᔅᓯᕐᓂᒃ ᐃᓚᖃᖅᑐᓂᒃ ᒥᖑᐊᕙᓃᑦ, ᐊᒥᐊᕙᓃᑦ, ᓱᑭᖅᓯᒪᔪᑦ ᐃᒃᔪᐃᑦ ᓄᓇᖏᑦ, ᐊᒻᒪᓗ ᐅᖅᓱᐊᓗᕙᓂᐊᓗᐃᑦ, ᐅᖅᓯᖅᑎᕈᑎᕙᓂᐊᓗᐃᓪᓗ ᕿᒪᒃᑕᐅᓯᒪᑐᐃᓐᓇᖅᓱᑎᒃ ᖁᑦᑎᖕᓂᕐᒦᑦᑐᓂ ᓄᓇᒥ ᑐᖅᑯᖅᓯᓯᒪᕙᐊᓗᖕᓂᒃ ᐅᖅᓱᐊᓗᖃᐅᑎᓂᒃ, ᖃᑦᑕᐅᔭᕐᔪᐊᕐᓂᒃ, ᐊᒻᒪᓗ ᓱᓪᓗᓕᐊᓗᖕᓂᒃ. ᐊᓯᖏᓐᓂᒃᑕᐅᖅ ᐊᕝᕕᑎᒥᒃ ᐃᓱᒪᓘᑕᐅᓚᐅᕐᒥᔪᑦ ᐃᓚᖃᓚᐅᖅᑐᑦ ᐊᖏᔾᔪᑎᐊᓗᖕᓂᒃ ᓇᐅᔭᐅᓯᒪᔪᓂᒃ ᐊᒻᒪᓗ ᐃᓚᐃᓐᓇᖏᓐᓂ ᓴᐅᔭᐅᓯᒪᔪᓂᒃ ᓇᓂᑐᐃᓐᓈᖅᑐᑦ ᐊᒃᑕᑯᕙᓃᑦ, ᐅᓗᕆᐊᓇᖅᑐᖃᖅᑐᓪᓗ ᐊᒃᑕᑯᐃᑦ ᓯᒡᔭᒦᕋᔭᖅᑐᑦ. ᑕᒪᕐᒥᒃ ᖁᑦᑎᖕᓂᕐᒥ ᓄᓇᒦᓐᓂᖏᑦ ᓄᓇᐃᑦ ᐃᐸᔪᐃᑦ ᖃᓂᒋᔮᓂ ᓇᔪᖅᑕᐅᓂᖅᐹᖑᕙᓚᐅᖅᑐᒥ ᐃᒡᓘᕐᔪᐊᕐᒥ, ᐊᒻᒪᓗ ᐃᓚᖏᑦ ᓯᒡᔭᒥ ᓯᐅᕋᐃᑦ ᐊᒃᑐᖅᑕᐅᓯᒪᓚᐅᕐᒥᔪᑦ ᑯᕙᕙᐅᓯᒪᓂᑰᓪᓗᑎᒃ ᐅᖅᓱᐊᓗᕙᓂᐊᓗᖕᓄᑦ, ᓄᖑᔪᐃᑦᑐᓕᖕᓄᑦ ᓱᑭᕐᓇᖅᑐᓄᑦ (ᐱᓯᐼᓄᕐ) ᐊᒻᒪᓗ ᐅᕐᑯᒪᐃᑦᑐᓄᑦ ᓴᕙᕋᔭᓕᖕᓄᑦ.

ᓴᓗᒻᒪᖅᓴᖅᑕᐅᓂᖏᓐᓂ ᐱᓕᕆᐊᖃᓗᐊᓚᐅᖅᑐᑦ ᐅᓗᕆᐊᓇᖅᑐᓕᕆᓂᕐᒥᒃ ᐱᕐᑯᑎᓂᒃ ᐊᒻᒪᓗ ᓱᑭᖅᑕᐅᓯᒪᔪᓂᒃ ᐃᐸᔪᕐᓂᒃ ᓄᓇᒥᒃ ᖃᐅᔨᓴᕐᓂᕐᒥᒃ ᐊᒻᒪᓗ ᐱᔪᓐᓂᖅᑎᑦᑎᕚᓪᓕᕋᓱᐊᕐᓂᖅ, ᓄᓇᒥᒃ ᓴᐅᓯᒋᐊᒃᑲᓐᓂᕐᓂᖅ ᓯᐅᕋᕐᒧᑦ, ᐃᒡᓗᕐᔪᐊᕙᓃᑦ ᓇᐸᐸᖕᖓᕚᓚᐅᖅᑐᓪᓗ ᐲᔭᖅᑕᐅᓂᖏᓐᓂᒃ, ᐊᒻᒪᓗ ᑲᑎᖅᓱᖅᑕᐅᓂᖏᑦ ᓄᐊᑕᐅᓂᖏᑦ ᐊᒃᑕᖅᑕᐅᑦᑎᐊᕐᓂᖏᓪᓗ ᖃᖓᓂᑖᓗᐃᑦ ᐊᒃᑕᑯᕙᓂᑦ ᐊᒻᒪᓗ ᖃᑦᑕᐅᔭᕐᔪᐊᕙᓃᑦ ᓯᒡᔭᒦᑦᑐᑦ.

ᓴᓗᒻᒪᖅᓴᐃᔨᐅᓂᕐᒧᑦ ᑳᓐᑐᕋᒃᑎᐅᓚᐅᖅᑐᑦ ᐱᓕᕆᑎᑕᐅᔪᓂ ᕿᑭᖅᑖᓗᖕᒥ ᓚᔾᔨᔅᑎᒃᓴᑯᑦ ᑲᒻᐸᓂᖓᑦ, ᐃᖃᓗᖕᒥᐅᑕᐃᑦ, ᓄᓇᕗᒻᒥ. ᑳᓐᑐᕋᒃᑎᐅᔪᑦ ᓅᒋᐊᖅᐸᓪᓕᐊᓚᐅᖅᓯᒪᔪᑦ ᐅᑭᐊᒃᓵᒃᑯᑦ 2008–ᒥ, ᐅᖁᒪᐃᑦᑑᑎᑦ ᓄᓇᒃᑰᕈᑎᐊᓗᐃᑦ ᐱᖁᑏᓪᓗ ᐊᓯᖅᑕᐅᓪᓗᑎᒃ ᑕᐅᕗᖓ ᖃᓂᒋᔮᓄᑦ ᑲᖏᖅᑐᒑᐱᐅᑉ, ᐊᒻᒪᓗ ᓄᒃᑎᕆᐊᓕᓚᐅᖅᓯᒪᓪᓗᑎᒃ ᐱᖑᐊᕐᔪᖕᒧᑦ 2009–ᖑᓕᖅᑎᓪᓗᒍ. ᓴᓗᒻᒪᖅᓴᓚᐅᖅᓯᒪᔪᑦ ᐱᔭᕇᓚᐅᖅᑐᑦ 12–ᓂᒃ ᐱᓇᓱᐊᕈᓯᕐᒥᒃ ᐊᑯᓂᐅᓂᓕᖕᒥᒃ 2009–ᖑᑎᓪᓗᒍ, ᐊᒻᒪᓗ 14–ᓂᒃ ᐱᓇᓱᐊᕈᓯᕐᓂᒃ ᐱᓕᕆᓚᐅᖅᓱᑎᒃ 2010–ᖑᑎᓪᓗᒍ, ᐊᑯᓐᓂᖏᓐᓂᒃ ᑕᕐᕿᑦ ᔫᓐ ᐃᓱᐊᓂᒃ ᐊᒻᒪᓗ ᐅᑭᐊᒃᓵᒥ ᐊᒃᑐᐱᓇᖑᓵᖅᑐᒥ ᐊᕐᕋᒍᑕᒪᖅ. Resident Engineering–ᑯᑦ ᐊᐅᓚᐅᓯᕆᔩᑦ ᑲᒻᐸᓂᖓᑦ ᑐᓂᔭᐅᓚᐅᖅᑐᑦ ᐊᕝᕕᑎᓕᕆᓂᕐᒥᒃ ᐅᓂᒃᑳᓕᐊᓂᒃ ᑕᐃᒃᑯᓂᖓ ᐱᓕᕆᐊᖑᓚᐅᖅᑐᓂᒃ.

ᐱᓕᕆᐊᖃᓗᐊᓚᐅᖅᐳᑦ ᒪᕐᕉᖕᓂᒃ ᐊᕐᕋᒎᖕᓂᒃ ᓴᓗᒻᒪᖅᓴᐃᓂᖏᓐᓂᒃ ᒪᑯᓂᖓ ᐱᓕᕆᓂᖏᓐᓂ:

- ᐊᑐᐃᓐᓇᐅᑎᑦᑎᓂᖅ ᐱᖁᑎᕐᔪᐊᒥᒃ ᐊᒡᒍᖅᑎᖅᑕᐅᓂᖏᓐᓄᑦ ᐃᓕᐅᖅᑲᖅᑕᐅᓂᖏᓐᓄᓪᓗ ᓄᓇᒦᑦᑐᑦ ᐅᓗᕆᐊᓇᖅᑐᑦ ᐊᒃᑕᑯᕙᓂᑦ ᐊᒻᒪᓗ ᓴᓗᒻᒪᖅᓴᖅᑕᐅᓂᖏᓐᓄᑦ ᖃᑦᑕᐅᔭᕐᔪᐊᕙᓃᑦ;
- ᓴᓇᔭᐅᓂᖓ ᐅᓗᕆᐊᓇᖏᑦᑐᓄᑦ ᐊᑦᓯᕙᒃᓴᖅ ᐃᓕᐅᖅᑲᐃᕝᕙᒃᓴᐅᓪᓗᓂ ᐃᒡᓗᕐᔪᐊᕙᓂᕐᓂᒃ ᐲᔭᖅᑕᐅᓯᒪᔪᓂᒃ ᐊᒃᑯᓂᒃ, ᓄᓇᒥᑦᑐᓂᒃ ᐊᒃᑯᓂᒃ, ᐊᒻᒪᓗ ᖁᑦᑎᖕᓂᕐᒥᒃ ᓯᕗᓪᓕᕐᒥᒃ I–ᒥᒃ, ᓱᑭᖅᓯᒪᔪᓂᒃ ᐃᐸᔪᕐᓂᒃ ᓄᓇᓂᒃ, ᒪᓕᒃᑕᐅᓪᓗᑎᒃ ᐅᓇᑕᖅᑐᒃᓴᐃᑦ ᐊᒥᐊᓕᒃᑲᒥᐅᑦ ᐃᓂᕙᓂᖏᓐᓂᒃ ᓴᓗᒻᒪᖅᓴᐃᓂᕐᒧᑦ ᐊᖏᕈᑕᐅᓯᒪᔪᑦ;
- ᐲᔭᖅᑕᐅᓂᖏᑦ ᐊᑐᕈᓐᓃᖅᑎᑕᐅᓂᖏᓪᓗ ᓄᓇᖓᓃᑦᑐᑦ ᐱᖁᑎᕙᓂᐊᓗᐃᑦ;
- ᐊᕙᒃᑐᖅᑕᐅᓂᖏᑦ/ᐃᓕᐅᖅᑲᖅᑕᐅᓂᖏᑦ/ᐴᖅᑲᖅᑕᐅᓂᖏᑦ ᐊᓯᐊᓄᑦ ᐊᒃᔭᖅᑕᐅᓂᐊᖅᑐᑦ ᐊᑦᓯᕙᖑᑦ ᐊᓯᐊᓃᑦᑐᒥ ᐅᓗᕆᐊᓇᖅᑐᑦᐱᖁᑏᓪᓗ ᐃᐸᔪᐃᓪᓗ ᓱᑭᖅᓯᒪᔪᑦ;
- ᐳᐊᕐᓇᔭᖅᑕᐅᓚᐅᖅᑐᑦ ᐊᒻᒪᓗ ᑲᒪᒋᔭᐅᓪᓗᑎᒃ ᓴᐅᔭᐅᓯᒪᔪᑦ ᐊᒃᑕᑯᐃᑦ, ᐃᓚᖅᑲᖅᓱᑎᒃ ᐃᓗᐃᑦᑐᓐᓂᒃ ᐊᒻᒪᓗ ᓯᖃᓕᖅᑎᑕᐅᓯᒪᔪᓂᒃ ᖃᑦᑕᐅᔭᕐᔪᐊᕙᓂᕐᓂᒃ, ᓯᐅᔭᖅᐸᓯᖕᒦᑦᑐᓂ (ᐱᓕᕆᕝᕙᐅᓯᒪᔪᓂ ᓄᓇᓂ);

- ᑎᑎᕋᐅᔭᖅᑕᐅᓂᖏᑦ, ᓴᓇᔭᐅᓂᖏᑦ, ᐊᐅᓚᑕᐅᓂᖏᓪᓗ ᓄᓇᒥ ᐅᖅᓱᐊᓗᖃᐅᑎᐊᓗᐃᑦ ᑕᐅᕙᓂ ᓴᓗᒻᒪᖅᓴᖅᑕᐅᓂᐊᕐᒪᑕ F1-F2−ᒦᑦᑐᑦ ᓄᓇᐃᑦ ᐅᖅᓱᐊᓗᕚᓐᓇᐃᑦ ᓄᓇᐅᓂᖏᑦ ᐃᑉᔪᖏᓪᓗ;
- ᐃᒪᐃᔭᖅᑕᐅᔪᑦ ᐊᒻᒪᓗ ᐊᑐᕈᓐᓇᐃᓕᑎᑕᐅᔪᑦ ᐃᒥᖅᑕᕐᕕᕕᓂᖅ; ᐊᒻᒪᓗ
- ᐋᕿᒋᐊᖅᑕᐅᑦᑎᐊᒃᑲᓂᕐᓂᖏᑦ ᓄᓇᐃᑦ ᐊᒃᑐᖅᑕᐅᓯᒪᔪᑦ ᓴᓇᔭᐅᔪᓄᑦ ᐊᒻᒪᓗ ᒪᓂᖃᖅᓴᖅᑕᐅᑦᑎᐊᒃᑲᓐᓂᖅᓯᑎᒃ ᐱᓕᕆᕕᐅᓯᒪᓚᐅᖅᑐᑦ ᓄᓇᐃᑦ.
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ᑕᒪᕐᒥᒃ ᐱᓕᕆᐊᖑᔪᑦ ᑲᔪᓯᓚᐅᖅᑐᑦ ᒪᓕᒃᑕᐅᓗᑎᒃ ᒪᓕᒐᐅᑎᑕᐅᔪᑦ ᖃᓄᐃᓕᖓᕐᑯᔭᐅᔪᓪᓗ ᓄᓇᒥᒃ ᐱᔪᓐᓇᐅᑎᑎᒍᑦ, ᐃᓚᖃᖅᓱᑎᒃ ᑕᐃᒃᑯᐊ ᓄᓇᒥᒃ ᐊᑐᕈᓐᓇᕐᓂᕐᒥᒃ ᐱᔪᓐᓇᐅᑎᓂᒃ, ᐃᒪᕐᒥᒃ ᓚᐃᓴᓐᓯᒥᒃ, ᐊᒻᒪᓗ ᓯᐅᕋᖅᑕᕈᓐᓇᕐᓂᕐᒧᑦ ᐱᔪᓐᓇᐅᑎᒥᒃ. ᖃᓄᐃᓕᖓᕐᑯᔭᖏᑦ ᑲᓐᑐᓛᒃᑎᐅᔫᑉ ᐊᑐᕐᓂᖓᓂᒃ ᓄᓇᒥᒃ ᐃᓚᖃᓚᐅᖅᐳᖅ ᒪᓕᒐᖃᖅᑎᑦᑎᓂᖅ ᐅᕐᓂᒃᑕᐅᓯᒪᑎᑦᑎᑕᐃᓪᓕᒪᓂᖅ ᐃᓄᖕᓄᑦ ᑕᐃᒃᑯᐊ ᓇᓗᓇᐃᖅᑕᐅᓯᒪᔪᑦ ᐃᑦᑕᕐᓂᑕᕕᓂᓕᑦ ᓄᓇᐃᑦ, ᓇᓗᓇᐃᖅᑕᐅᓚᐅᖅᓯᒪᔪᑦ ᐱᖁᑎᕕᓂᖅᓯᐅᕐᕕᐅᑎᓪᓗᒋᑦ ᖃᐅᔨᓴᖅᑕᐅᓪᓗᑎᒃ ᐃᑦᑕᕐᓂᑕᖃᕐᒪᖔᑕ ᑕᐅᕙᓂ ᓄᓇᓂ.

ᓯᑭᖅᓯᒪᔪᑦ ᓄᓇᐃᑦ ᐃᑉᔪᐃᑦ ᐱᖑᐊᕐᔪᖕᒥ ᓇᓗᓇᐃᖅᑕᐅᓯᒪᓚᐅᖅᑐᑦ ᐃᒫᒃ,DCC ᐳᖅᑐᓂᓕᐊᖑᓯᒪᔪᖅ ᓯᕗᓪᓕᖅᐹᖅ I, DCC ᐳᖅᑐᓂᓕᐊᖑᓯᒪᔪᖅ ᑐᒡᓕᖅᐹᖅ II, PHC F1-F2, PHC F3-F4, ᐅᕝᕙᓗᓐᓃᑦ ᐅᓗᓇᐊᓇᕐᓂᕐᒥᒃ. ᐊᒃᑐᖅᑕᐅᓯᒪᔪᑦ ᓄᓇᐃᑦ ᐃᑉᔪᐃᑦ ᐃᓚᒋᔭᐅᔪᑦ ᓄᓇᓄᑦ ᐊᕙᑎᐊᓂᒃ ᐃᓯᒪᓘᑕᐅᔪᓂᒃ, ᐊᑕᐅᓯᕐᒥᒃ ᓯᑎᔪᒥᒃ ᐊᒃᑕᑯᓂᒃ ᖃᓗᕋᖅᑕᐅᓯᒪᔪᓂᒃ ᓯᒡᓴᒥᒃ (ᖃᓗᓈᑎᑐᑦ ᑕᐃᔭᐅᔪᖅ WA-7), ᐳᐊᕐᓇᔭᖅᑕᐅᓚᐅᕐᓂᖏᓐᓂᒃ ᖃᓗᕋᖅᑕᐅᓚᐅᕐᓂᖏᓐᓂ ᓄᓇᐃᑦ ᓯᑭᕐᓇᖅᑐᓕᑦ ᐸᓂᖅᑐᒥᒃ ᓴᓗᒻᒪᖅᓴᐅᑕᐅᓂᕋᖅᑕᐅᔪᒥᒃ tetrachloroethylene−ᒥᒃ (TCE) ᓯᑭᖅᓯᒪᔪᑦ ᓄᓇᐃᑦ ᐃᑉᔪᐃᑦ ᖃᓂᒋᔮᓂᒃ ᓇᔪᖅᑕᐅᓂᖅᐹᖑᕙᓚᐅᖅᑐᓂ ᐃᖃᓇᐃᔭᕐᕕᕕᓂᕐᒥᒃ, ᖃᐅᔨᔭᐅᓚᐅᖅᑐᓂ 2009−ᖑᑎᓪᓗᒍ, ᐊᒻᒪᓗ PAH−ᖏᓐᓇᐅᔪᑦ ᓯᑭᕐᓇᖅᑐᓕᑦ ᓄᓇᐃᑦ ᐃᑉᔪᐃᑦ ᐲᔭᖅᑕᐅᓚᐅᕐᒥᔪᑦ ᐅᖅᓱᖅᑎᖅᑕᐅᓯᒪᔪᕕᓂᐅᔪᑦ ᓇᐸᔪᐃᑦ ᖃᓂᒋᔮᓃᑦᑐᑦ. ᖃᓂᒋᔮᓂ ᐊᖏᓂᓖᑦ 19,000 m^3 ᓴᐅᔭᐅᓯᒪᔪᑦ ᐊᒃᑕᑯᕕᓃᑦ ᐊᒻᒪᓗ ᐃᑉᔪᐃᑦ ᓯᑭᖅᓯᒪᔪᑦ ᐳᐊᕐᓇᔭᖅᑕᐅᓚᐅᖅᑐᑦ ᖃᓗᕋᖅᑕᐅᓚᐅᖅᑐᑦ ᑕᒪᐃᓐᓂ 11−ᖑᔪᓂ ᓯᒃᓴᖅᐸᓯᐊᓈᓐᓂᖏᓐᓂᒃ. ᖃᓂᒋᔭᖏᑦ ᓇᓚᐅᑖᖅᑕᐅᓯᒪᔪᑦ 11,700 ᖃᑦᑕᐅᔭᕐᔪᐊᕕᓃᑦ ᓇᓂᔭᐅᓯᒪᓚᐅᖅᑐᑦ, ᑕᒪᕐᒥᒃ ᐃᒪᐃᔭᖅᑕᐅᓪᓗᑎᒃ, ᓴᓗᒻᒪᖅᓴᖅᑕᐅᓪᓗᑎᒃ, ᓯᖃᓕᖅᑎᖅᑕᐅᓪᓗᑎᒃ ᐊᒃᑕᖅᑕᐅᓪᓗᑎᒃ ᐅᓗᓇᐊᓇᖏᑦᑐᓄᑦ ᐊᑦᓯᕕᖕᒧᑦ. ᒪᒃᐱᖅᑕᐅᓚᐅᖅᑐᑦ ᓯᐅᕋᖅᑕᖅᑕᐅᓚᐅᖅᑐᑦ ᓯᐅᕋᐃᑦ ᓯᖕᒥ ᐃᓚᐅᖅᑲᖅᑕᐅᓚᐅᖅᑐᑦ ᐊᑕᐅᓯᕐᒧᑦ ᐊᒻᒪᓗ ᐆᒃᑐᖅᑕᐅᓪᓗᑎᒃ ᓯᑭᕐᓇᖅᑐᖃᖅᑎᒋᓂᖏᑦ, ᓯᕗᓂᐊᒍᑦ ᐅᑎᖅᑎᑕᐅᓚᐅᖏᓐᓂᖏᓐᓂ ᓴᐅᔭᐅᔾᔭᑎᒃᓴᓄᑦ ᓯᐅᕋᕐᒧᑦ ᐊᑐᖅᑕᐅᓂᐊᖅᑐᓄᑦ.

ᐅᓗᓇᐊᓇᖅᑐᑦ ᐱᖁᑎᕕᓂᐊᓗᐃᑦ ᓄᐊᑕᐅᓂᑯᑦ ᑲᑎᖅᓱᖅᑕᐅᓚᐅᖅᑐᑦ ᐃᒡᓗᕐᔪᐊᕕᓂᕐᓂᒃ ᖃᓂᒋᔭᖏᓐᓂᓗ, ᐊᒻᒪᓗ ᓴᐅᔭᐅᓯᒪᔪᓂᒃ ᐊᒃᑕᑯᕕᓃᑦ. ᕿᑭᖅᑕᓂ ᓚᔾᔅᑎᒃᓯᒃᑯᑦ ᐊᐅᓪᓚᖅᑎᑦᑎᑕᐅᖅᑐᑦ ᑕᒪᓐᓂᒃ ᐳᓪᓚᓕᖕᓂᒃ ᑯᕕᔪᓕᖕᓂᒃ ᐊᒻᒪᓗ ᓯᑎᔪᓂᒃ ᐅᓗᓇᐊᓇᖅᑐᖃᖅᑐᓂᒃ ᐱᖁᑎᕕᓂᕐᓂᒃ, ᑕᒪᐃᓐᓂᓪᓗ ᐳᖅᑐᓂᓕᖕᒥᒃ ᑐᒡᓕᐹᒥᖓᖅᓯᒪᔪᓂᒃ ᐃᑉᔪᕐᓂᒃ ᓄᓇᒥᒃ, ᐊᓯᐊᓄᑦ ᓄᓇᒧᑦ ᓚᐃᓴᓐᓯᖃᖅᑐᓄᑦ ᐅᓗᓇᐊᓇᖅᑐᓂᒃ ᐊᑦᓯᕕᖃᖅᑐᓂᒃ ᑯᐸᐃᖕᒥ ᐊᓪᐴᑕᒥᓗ.

ᖃᓂᒋᔭᖏᓃᑦᑐᑦ 360,000 L ᓖᑕᐃᑦ ᓴᖏᐊᓗᖕᓂᒃ ᑐᖁᓐᓇᖅᑐᖃᖅᑐᓂᒃ ᓴᓗᓕᒻᒪᓴᖅᓴᐅᑎᒃᓴᓄᑦ ᐃᓚᒃᓴᓕᑦ ᐃᒪᐃᑦ ᐃᒥᖅᑕᖅᑕᐅᓚᐅᖅᑐᑦ ᓴᐅᔭᐅᓯᒪᔪᓂᒃ

ᖃᒡᑕᐅᔪᖅᓯᐊᖅᓂᒃ ᓄᓇᕗᒃ, 2009–ᖁᑎᓪᓗᒍ ᐊᓚᒪᓗ 2010–ᖁᑎᓪᓗᒍ, ᐊᓚᒪᓗ ᓴᓗᒪᓕᖅᓴᖅᑕᐅᓪᓗᑎᒃ ᐃᓕᓴᐅᓄᒪᓕᒍᓪᓗᑎᒃ ᖃᑭᖃᑕᓂᒃᓄᑦᓄᖅᑐᑦ ᓕᐃᔨᑎᒃᓄᐊᓂᖅᑐᓄᑦ, ᒪᓕᒋᐊᖃᖅᓂᖅᑐᓄᑦ ᓄᓇᕘᒻᒥ ᐃᒪᖅᓄᑦ ᑲᑎᒪᔨᑦ ᐃᒪᓕᓚᓂᖅᓗᑦ ᓕᐃᓴᓄᒃᓄᐊᖅᑐᕐᑐᑦ ᒪᓕᑕᐃᑦ ᑯᐊᓂᖅᑕᕐᓂᖅᓄᑦ, ᐊᒃᑕᖅᑕᐅᔪᓄᓇᓕᐅᕈᖅᑐᓂᖅᑐᓄᑦ.

8-ᓂᒃ ᓄᐅᕐᖅᑕᕐᕕᒋᐅᓕᐅᖅᑐᑦ ᖃᓄᐊᕐᓂᑦ ᐱᖓᐊᕐᔨᑦ ᓴᓗᒪᓕᖅᓴᖅᑕᐅᓂᖓᓄᒃ ᐊᑐᕐᐊᖅᑐᑕᒃ ᐊᖅᑯᓄᐅᕐᓂᕐᒥᒃ, ᐅᖅᓄᐊᔪᑐᖅᐅᑎᐊᔪᖓᓂᒃ ᐊᒪᓚᓗ ᐅᓗᓚᐊᓇᖅᑎᑕᒍᓄᑦ ᐊᒃᑕᑯᓕᐅᓂᖓᓕᕐᒥᑦ. ᑕᑦᑕᒪᐃᑦ 5 ᓄᐅᕐᖅᑕᕐᕕᒃᓴᐃᑦ ᓇᓂᖏᐅᓕᐅᖅᑐᑦ ᓄᔾᓂᐊᒍᑦ ᐊᑐᖅᑕᐅᓄᐱᒐᓂᖏᑐᑐᐊᓂᒃ, ᐊᖅᖁᑯᑎᓕᓂᒃ ᐅᕙᓪᓕᓗᓂᒃ ᐱᑕᖅᑎᓕᐊᓂᒃᑐᓂ ᑲᑎᒪᓂᖏᑐᐱᒐᓂᖏᑐᓂ ᑐᐊᕐᓴᖅᓴᖅᑎᒃᓂᑐᓂ, ᑕᐃᒃᑯᐊᓗᓐ ᐱᔪᓐᓇᓂᒃ 3 ᓄᐅᕐᖅᑕᕐᕕᓕᐊᑦ ᓇᓂᖏᐅᓕᐅᖅᑐᑦ ᐊᒃᑐᖅᑕᐅᓄᐱᓚᕐᑕᑐᓂ. ᑲᑎᓪᓗᑕᑦ ᐊᖏᓂᖅᑎᓕᐅᖅᑐᑦ 40,750 m^{3-}ᓂᒃ ᓄᐅᖅᑲᖅᑕᐅᑎᒃᓴᓂᒃ ᖃᓗᑕᖅᑕᐅᓕᐅᖅᑐᑦᓂᒃ ᐱᓕᓚᐊᓂᖏᑐᓄᑦ.

ᐃᓄᓕᓚᓴᑐᖅᑯᑦ ᐊᐅᓕᑎᑎᓂᐊᖅᑐᑦ ᑭᖓᔪᓂᐊᒍᑦ ᒪᑐᐅᔭᖓᓂᑐᓂᒃ ᓄᓇᐃᑦ ᖃᐅᔨᓴᖅᑕᐅᔾᔨᓕᐊᖏᓪᓚᕆᐊᖅᑐᖅᑐᒃ ᐊᒪᓚᓗ ᑭᖓᔪᓂᐊᒍᑦ ᑲᒪᒋᐅᔭᕆᐊᖃᓕᖏᓂᖏᓪᓕᖅᑐᒃ 25–ᖁᓂᐊᓕᖅᑐᑦ ᐊᖅᖁᒍᓄᑦ, ᐊᒪᓚᓗ ᐃᓕᓴᐅᓂᐊᓕᔨᖏᓪᓗᒃ ᑕᑯᔭᖅᑐᑦᖃᕐᓂᒃᑐᓂᒃ ᖃᐅᔨᓴᖅᑕᐅᔨᖃᑕᓂᓂᐊᖅᑐᑦ ᑕᐅᔾᔨᓂᖏᓪᓚᕆᐊᖅᑐᑦ ᐱᔪᑯᑎᓕᖏᓪᓚᕆᐊᖅᓯᒪᔪᑦ, ᐃᓕᖅᑲᖅᓯᒪᓄᒃ ᐅᓗᓚᐊᓇᖅᑎᑕᒍᓄᑦ ᐊᑦᓯᕕᓕᖏᓪᓚᕆᐊᖅᓯᒪᔪᑦ, ᐃᒥᖅᑕᕐᕕᒃᓴᒃᑎᒃ ᐊᑭᓗᓕᐊᖏᓪᓚᕆᐊᖅᓯᒪᔪᖅᓴᖅ, ᓄᑕᒪᐃᓕᓴᐅᓗ ᓄᓇᕗᑦᑕᑐᓂᒃ ᖃᐅᔨᓴᖅᑲᐃᑦ ᐃᒥᖅᑕᕐᕕᒃᓴᒃᑎᒃ ᐊᑭᓗᓕᐊᖏᓪᓚᕆᐊᖅᓯᒪᔪᑦ. ᐃᓄᓕᓚᓴᑐᖅᑯᑦᑕᐅᖅᑐᒃ ᓄᓇᕗᑦᖃᓄᐃᒃᑐᑦᓂᒃ ᐃᒪᖅᓂᒃ ᖃᐅᔨᓴᖅᑲᐃᐊᑭᓗᓕᐊᖏᓪᓚᕆᐊᖅᑐᖅᑐᒃ 25–ᓄᑦ ᐊᖅᖁᒍᓄᑦ, ᖃᐅᔨᓴᓪᓚᕆᐅᓕᐊᓚᐊᖅᑐᖅᓂᒃᓴᖅᑐᓄᑦ ᖃᐅᔨᓄᓐᓄᓪᓚᒃ ᐊᑦᓯᕕᓕᖏᓪᓚᕆᐊᖅᓯᒪᔪᑦ ᐅᓗᓚᐊᓇᖅᑎᑕᒍᓂᒃ. ᐊᓯᖅᑎᑕ ᑕᐅᑭᐅᖅᑐᕐᓂᖅᑐᑦᓂᖅᑐᑦ ᓴᓇᔨᐅᓯᒪᔪᑦ ᐃᓕᖅᑲᖅᓯᒪᔪᑦ ᑐᐊᕐᓴᖅᓴᖅᑕᐅᓂᖅᓴᖅ, İᖅᓇᐅᑕᖅᑐᖅᓴᖅ ᐱᖁᓂᑎᑎᕆᐅᑕᖅᑐᖅᓴᖅ ᑲᖅᑎᑎᑕᐃᓚᐅᓇᑦ ᐊᒪᓚᓗ ᐃᓱᓗᓀᓂᖅ ᓄᓇᕗᒻᒥ ᐅᐊᖅᓴᖅ, ᐃᓇᖅᒧᑦ ᑲᖅᑎᑎᑕᐃᓚᐅᓇᑦ ᐱᖁᓂᑎᑎᕆᐅᑕᒧᑦ ᐱᖁᓂᑎᑎᕆᐅᓯᒪᔪᖅᓴᖅ.

APPENDIX 2

WATER AND WASTES TRACKING / MONITORING LOCATION STATIONS

(See Section 5.4 of the Final Completion Report)

APPENDIX 3

SPILLS DURING CONSTRUCTION

NONE DURING 2010

APPENDIX 4

SOME BEFORE AND AFTER REMEDIATION PHOTOS

Cape Christian Main Station (Before Remediation)

Cape Christian Main Station (After Remediation)

The Five (5) 100,000 Litres each Aboveground Storage Tanks (Before Remediation)

Location of the Five (5) Storage Tnaks (After Remediation)

Beach Tank (100,000 Litres) (Before Remediation)

Location of the Beach Tank (After Remediation)

Equipment Yard (Before Remediation)

Equipment Yard (After Remediation)

The interior of the Hazmat Building (Before Remediation)

The interior of the Hazmat Building (now renamed Storm Shelter) (After Remediation)

Worked Area # 1 (at the start of Remediation)

Worked Area # 1 (After Remediation)

Worked Area # 6 (During remediation)

Worked Area # 6 (After Remediation)

Worked Area # 8 (Before Remediation)

Worked Area # 8 (After Remediation)