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P.O Box 2200
Iqaluit, Nunavut
X0A 0H0

Your file - Votre référence

Our file - Notre référence

April 7, 2005

Executive Director
Nunavut Water Board
P.O. Box 119
Gjoa haven, NU X0B 1J0

Dear Executive Director

RE: Water License Number NWB5EKA0406, FOX-C (Ekalugad Fjord) Annual Water Report,

Further to the conversation of April 6 with the Nunavut Water Board, manager of Licencing, following please find the information required for the annual report.

I. The monthly and annual quantities (in cubic metres) of fresh water obtained from all sources;
Answer: The water used from August 16 to September 2, 2004 during the site assessment activities was 11,200 liters.There were approximately 10 people on site for the first 9 days and 24 people on site for last 8 days. During the first 9 days only bottled water was used since most of the equipment could not be transported to site due to weather conditions. For the last 8 days, an average of 1,400 liters of water from glacial stream feeding into Water Lake was used per day. No water was pumped from a local source for any other months as there was no other site activities performed outside of the site assessment period.All potable water was flown to site. Water from the glacial stream was used for washing and kitchen duties only.

ii. A summary of any construction work, modification and major maintenance work carried out on the water supply and solid waste disposal facilities, including all associated structures;
Answer: Not applicable

iii. Tabular summaries for all data and information generated under the "Monitoring Program"
Answer: No monitoring program necessary in 2004. This will be incorporated during the construction phase.

iv. An analysis of data collected during the "Monitoring Program" and a brief description of any future studies planned by the Licensee;
Answer: Monitoring program is documented in the water use application which was forwarded on April 1, 2005. No data was collected in 2004 other than water usage quantity.

v. A summary of any abandonment and restoration work undertaken during the year and an outline of any work anticipated for the next year;
Answer: Please reference the Water Use Application forwarded on April 1, 2005.

vi. A summary of any studies requested by the Board that relate to waste disposal, water use or reclamation, and a brief description of any future studies planned;
Answer: Not Applicable

vii. A list of unauthorized discharges and summary of follow-up actions taken;
Answer: Not Applicable

viii. Any revisions to the "Spill Contingency Plan";
Answer: Please see the attached spill contingency plan. This was part of the Water Use Application forwarded on April 1, 2005

ix. A public consultation/participation report describing consultation with local organizations and the residents of the nearby communities;
Answer: Please see the attached "Summary of Public Consultations, Events and Issues.

x. A brief summary of work done to address concerns or deficiencies listed in the inspection reports and/or compliance reports prepared by an Inspector;
Answer: Not Applicable

xi. An executive summary in English and Inuktitut of all plans, reports, or studies conducted under this Licence; and
Answer: Please see the attached executive summaries

xii. Any other details on water use or waste disposal requested by the Board by November 1st of the year being reported.
Answer: Not applicable

If you have any question or comments, Please contact the project manager, Bob Martin, at 867-9079-7931.

Yours truly

Natalie Plato
Director, Contaminated Sites

CC Water Resources Officer
Nunavut District, Nunavut Region
P.O. Box 100
Iqaluit, NU
X0A 0H0

encl:
Executive Summary in English and Inuktitut
Summary of Public Consultations, Events and Issues
Spill contingency plan

Executive Summary

1. BACKGROUND

The federal government has initiated the Federal Contaminated Sites Accelerated Action Plan (FCSAAP) this year to clean up federally owned contaminated sites and to address their environmental liabilities associated with each site. The FCSAAP program provides funding for the remediation of contaminated sites posing risks to human health and/or the environment. The Department of Indian Affairs and Northern Development (DIAND) has applied for funding during the initial 4-year period of the program and has secured funds under this program for the investigation and remediation of the abandoned intermediate Distant Early Warning (DEW) Line site at FOX-C (near Ekalugad Fjord) in Nunavut.

The former DEW Line site was constructed in 1957 and subsequently closed and abandoned in 1963; the site has not been formally occupied since 1963. A hazardous materials removal program completed in 1985 and an environmental assessment completed in 1994 have corroborated the presence of various hazardous materials and contaminated soils at this site. A number of fuel drum caches were identified during the site investigations, and many of these drums still contained product at that time and were left in-place. In addition to large drum caches, many individual drums were also strewn haphazardly along the river, near the road and in the bottom of the lake nearby. Elevated PCB concentrations were noted in soil and paint samples collected from various locations throughout the site. These investigations, however, did not include an assessment of hydrocarbon contamination, which has the potential to be a significant source of contamination at the site.

The proposed project will include the complete environmental clean up and restoration of the site, based on criteria and guidelines previously used by the Department of National Defense (DND) for similar projects at other abandoned DEW Lines in the north.

2. PROJECT LOCATION

The former FOX-C DEW Line site is located at 68°42' N, 68°33' W on the east coast of Baffin Island on the south shore of Ekalugad Fjord, 195 km south of the community of Clyde River, Nunavut. The terrain at FOX-C consists of high rugged hills cut by rock outcrops. The beaching area is located on Qarmaralik Cove, 3 km NW of the main station area, which overlooks Ekalugad Fjord at an elevation of 770 m above sea level. A gravel road links the beaching area and the freshwater lake to the upper site.

The site is accessible primarily by barge; due to the uneven terrain on site, an airstrip was never constructed at FOX-C. A nearby freshwater lake has previously been used as a landing strip in the winter and a helipad is located at the upper site.

3. PROJECT ACTIVITIES & SCHEDULE

DIAND wishes to initiate the remediation of the FOX-C DEW Line site at Ekalugad Fjord. Site investigation and site characterization phases were completed in Summer 2004. A Remediation Work Plan for the proposed activities was prepared recently and is included in this submission package. Project work is to be initiated in Summer 2005 with mobilization of some equipment to the site. Actual site construction will be carried out in Summer 2006 and 2007. A detailed project schedule is also included in this submission.

All existing site infrastructure will be demolished and the demolition wastes will be segregated into hazardous and non-hazardous waste streams. Hazardous wastes, predominantly lead based painted materials, will be packaged and transported south for disposal. Non-hazardous building debris and other non-hazardous wastes identified at the site will be interred in an on-site engineered landfill that will be constructed as part of the clean up activities.

Waste consolidation activities will continue and will be primarily focused on the estimated 10,000 abandoned oil drums that have been identified at the site, most of which are empty. The proposed work plan for these items is to collect them using all-terrain vehicles and crush them in accordance with the DEW Line Cleanup Criteria for Barrels. A site specific Barrel Clean Up Protocol has been drafted to address the barrels that remain submerged in the site watercourses. This Protocol will ensure that any petroleum product remaining in these barrels is not released into the water. The Protocol will also ensure that fish and fish habitat are not impacted during or following the removal of these barrels.

Exhaustive site investigations have determined that some contaminated soils remain at the site, but that no sediments or surface water have been impacted. Contaminants of concern at the site are similar to those observed at other abandoned DEW Line sites during clean up activities, and include petroleum hydrocarbons (PHC's), some metals and PCB's.

The DEW Line Clean Up Criteria were established in the mid 90's and have been used for other DEW Line remediation projects by DND. DIAND has adopted these criteria but will augment them with those of the Canadian Councils of Ministers of the Environment (CCME) for some PHC contaminated soils. Site Specific Risk Assessments (SSRAs) will be completed where criteria are not available for the contaminant(s) of concern, based on site-specific issues.

A road that is in very poor condition currently connects the three main site areas, and road construction activities will be required to allow the movement of heavy equipment between these areas, particularly for access to the Mid and Upper Sites. Culverts installation will be required in order to cross a glacial stream that discharges into the lake below. Due to the presence of fish and fish habitat in the stream there is some potential for impacts on this resource. A site specific Culvert Installation Protocol has been drafted

to ensure that potential impacts to fish and fish habitat at this location are minimized. Culverts will be removed upon completion of this stage of the project.

A temporary camp with associated sewage treatment ponds will be constructed. This facility will allow for a maximum of 35 personnel to reside on site for the duration of the construction season, which is anticipated to take up to 75 days during the 2006 and 2007 field seasons.

Equipment and personnel will be mobilized to site by helicopter. These means may be augmented with the use of barge vessels at the discretion of the Contractor.

At completion of the project in 2007, the site surface will be restored to the greatest extent possible. A detailed Remediation Work Plan is also included in this submission.

4. SOCIAL IMPACT OF THE PROJECT

During any remediation project, whenever possible, DIAND strives to support and enhance the development of healthy, sustainable communities by leveraging local skills and knowledge into their approach to addressing environmental issues associated with contaminated sites. By these means core competencies are maximized and deployed. Wherever possible, the project will also adopt solutions tailored to the northern environment and its inhabitants; this includes leveraging local knowledge, as well as the incorporation of provisions accounting for the unique needs of northerners and their environments into the development and implementation of policies and procedures.

Presentations were conducted in Clyde River and Qikiqtarjuaq in May 2004 to inform the applicable Hamlet Councils, Hunters & Trapper Organizations and Qikiqtani Inuit Association of the proposed site work. Presentations were generic in scope and focused on the fact that FOX-C near Ekalugad Fjord is targeted for clean up. The community presentations were used to complete the following objectives:

- Introduce the project to the community.
- Obtain site-specific information from the Inuit who are familiar with current conditions at the site or were familiar with on-site activities during facility operation.
- Identify resources (labour and equipment) in the community that would assist in the execution of the project.
- Identify the issues and concerns the communities had with the site and the proposed work.

Based on these meetings, the most common concerns from the communities of Qikiqtarjuak and Clyde River regarding the site were:

- The safe human consumption of arctic char from the lake. This lake is a popular fishing area for both communities and they would like to be sure that the fish caught in the lake are safe to eat.
- The potential for contamination resulting from the barrels strewn about the site, in the lake, and along the river leading from the lake to the fjord.

Several arctic char were caught from the lake and sampled for potential contamination; however, levels of contaminants were not elevated above levels noted in fish sampled at other locations throughout the eastern arctic. A long term monitoring program at the site will make provisions for the sampling and analysis of char.

Barrels residing in site water bodies will be removed as part of the clean up work.

DIAND held open public presentations in both Clyde River and Qikiqtarjuaq in December 2004.

Numerous comments and concerns were communicated to DIAND during these presentations. DIAND staff attempted to record these comments and has documented them in an attached spreadsheet, together with appropriate responses from DIAND where applicable.

Separate presentations were held with federal officials in Iqaluit in December 2004. Their comments and concerns are also presented as part of this submission.

FOX-C-Γ ᑎᐅᓪᓗᐊᓂ ᕿᒪᖅᓂᓂᖅᓂ ᓴᓗᒪᖅᓴᐃᔨᔪᑎᑲᖅᓂ ᐃᒪᓕᓚᐅᑦᓂᓄᑦ ᐊᑐᖅᓇᐅᑎᑎᑦ ᑐᐃᔪᕐᑎᑦ ᓴᓕᓴᕐᒥᒪᔪᓂ (DIAND) ᑲᓇᑕᒥ

ᓇᐃᒃᓕᓕᒫᖅᑐᑦᓯᓂᖅ

1. ᐱᒋᐊᖅᓯᓪᓚᐅᑕᓕᐊ

ᓴᖅᒪᒪᑐᖅᑲᖅᓂ ᐱᒋᐊᖅᑎᑎᓕᓕᖅᒪᑕ ᑲᓇᑕᐅᑦ ᓄᓇᕆᑎᖅᑭᖅᓂᖅ ᓕᕆᔨᖅᑕᐅᓕᔨᓂᖅ ᕿᓚᒥ ᓴᓗᒪᖅᓴᐃᔨᔪᑎᑲᖅᓂᖅ (FCSAAP) ᑕᒪᑐᒪᓂ ᐅᑭᐅᑎᖅᓂ ᓴᓗᒪᖅᓴᖅᑲᐅᑕᐅᓂᖅᑐᑦ ᓴᖅᒪᒪᑐᖅᑲᖅᓂ ᐱᕆᔪᖅᑭᑦ ᐊᒪᒪᓗ ᑭᐅᓕᓕᓴᖅᓯᒪᓂᖅ ᑕᒪᖅᓂᐊᓕᓂᖅᑕᑦᑕᖅᓴᒪᕆᐅᓂᖅ ᓴᓇᖅᕃᐃᓂᓂᖅ ᕿᒪᖅᑕᐅᓕᔨᓂᖅ ᓄᓇᒧᑦ ᐊᖅᑎᑦᑕ ᐃᓕᖅᐸᐅᑐᖅᑲᓂᖅ ᐅᑎᖅᑎᑕᐅᑎᐊᓕᖅᓂᖅ. FCSAAP-ᓂᑦ ᑭᓇᐅᔭᖅᑕᖅᑎᑕᐅᖅᓯᒪᑕ ᐊᕆᑭᓕᐃᔨᒪᑎᑲᖅᓂᖅ ᕿᒪᖅᑕᐅᓕᔨᓂᖅ ᓄᓇᓕᖅᓂᖅ ᐊᑦᑕᕆᓇᕈᑕᐅᔨᓂᖅ ᐅᒪᔨᓄᓕ-ᐊᖅᑎᑦᑎᓐᓄᑦᓗ. ᐃᓄᓕᓚᔨᑐᖅᑲᓂᖅ (DIAND) ᑕᒃᓂᓇᖅᓯᑦ ᑭᓇᐅᔭᖅᑕᑦ ᑐᓴᕐᑐᖅᑲᓕᓕᖅᑕᑦ ᐅᑭᐅᓂᑦ ᓂᑕᒪᓂᑦ ᓂᐳᑦᓕᖅᑐᒥ ᐊᕿᖅᓂᕆᐅᐃᔨᔪᑕᐅᓂᐊᖅᑐᓂᖅ ᐊᒪᒪᓗ ᑕᖅᑲᑦ ᑐᓴᕐᑐᖅᑲᓕᓕᖅᑕᑦ ᓄᓇᓂᑦ ᖃᐅᔨᔪᑎᑕᐅᓕᖅᓯᒪᓂᖅᑐᓂᖅ ᓄᓇᓂᑦ ᖃᐅᔨᓴᓴᑎᖅᑲᓂᖅ ᐊᒪᒪᓗ ᐊᕿᖅᓂᕆᐅᐃᔨᒪᑎᑲᖅᓂᖅ ᕿᒪᖅᑕᐅᓕᔨᓂᖅ ᑎᑎᖅᑕᐅᓂᖅ (DEW) ᐃᓕᐅᑎᖅᑲᓇᐃᓂᓂᖅ FOX-C-Γ (ᐃᖅᓗᓚᐃᑦ ᑲᖏᖅᓂᕆᓚᓂ) ᓄᓇᕐᒥ.

ᑎᐅᓪᓗᐊᓂᑦ ᑕᒪᓂ ᐃᓕᐅᑎᖅᑲᐃᓕᐅᓕᐅᖅᓂᕆᔨᒪᑕ 1957-Γ ᕿᒪᖅᓂᐊᖅᓴᓗᓄᑦ 1963-Γ ᒪᑐᐅᐅᓕᓐᓂᑎᒃ; ᑕᐃᒪᖅᓚᓂᑦ ᑕᕿᓐ ᐅᑎᖅᓇᐅᓕᐅᖅᓂᕆᔨᖏᑦᑐᑦ 1963-Γᓂᑦ. ᑐᖅᓂᓐᓇᖅᑐᑦᑕᖅᑲᐅᖅᑐᑦ ᐱᐅᖅᑕᐅᓕᐅᖅᑐᑦ 1985-Γ ᐊᒪᒪᓗ ᖃᓄᑎᒥ ᐊᑦᑎᑦᑎᓐᓄᑦ ᐃᐅᐱᖅᓇᓂᖅᑕᖅᑐᑦ ᖃᐅᔨᓴᓴᑎᖅᑕᐅᓕᐅᓐᓄᑎᒃ 1994-Γ ᑕᐃᓕᒪᓂ ᐊᒥᓕᓂᑦ ᓇᓂᓕᖅᑕᑦᑕᖅᓕᒪᓕᒃᑕ ᐊᑦᑕᖅᓇᓂᓂᖅᖃᖅᑐᑦ ᐱᓇᖅᑐᒥᓂᑦ ᐅᐊᕐᑎᓂᓗ ᑯᐃᔪᐅᓕᒪᓂᑯᓂᖅ ᒪᓂᕆᔪᓐᓇᖅ. ᐊᒥᓕᓂᓗ ᐅᖅᓕᐊᓗᖅᐅᑎᓂᖅ ᑕᒪᐅᖅᑐᓗᓐᓂᖅ ᕿᒪᐃᓕᒪᓐᓗᐃᑦ ᕿᒥᕐᒥᔪᖅᑕᑦ ᑕᒪᐅᖅᑐᓗᓐᓂᖅ ᑕᑯᓕᐅᖅᑎᓐᓂᖅ ᐊᒥᓕᓂᑦ ᐊᑦᑕᖅᓇᖅᑐᑦ, ᐊᖅᑐᑯᐃᓂᐅᑦ ᓴᓂᐊᑯᑦᑐᑦ ᐊᒪᒪᓗ ᑕᓕᖅᑕ ᐃᖅᖢᖅᓂᓂ ᕿᒥᕐᒥᔪᖅᑕᑦ PCBᓂᖅ ᑕᒪᓂ ᒪᓂᕆᖅᓂ ᐃᑦᓴᐅᑎᓕᒪᔨᓂᖅ ᐊᒥᐊᕐᑎᓂᖅᓯᓂᓗ ᑕᒪᖅᑯᐊ ᑲᑎᒪᓂᖅᑐᑦᑎᓐᓄᑦ ᖃᐅᔨᓴᓴᑎᖅᑕᐅᓂᐊᖅᑐᑦ. ᑕᒪᖅᑯᓂᖅᓱᑐᖅᑭᖅ ᕿᓐᓄᐊᓂ ᑲᑎᒪᓂᖅᑐᑦᑎᓐᓄᑦ ᐊᒥᓕᓂᑦ ᐊᑦᑕᖅᓇᖅᑐᑦ, ᐊᖅᑐᑯᐃᓐᓇᓂᐅᑦ ᓴᓂᐊᑯᓂᑦ ᐊᒪᒪᓗ ᑕᓕᖅᑕᑦ ᐃᖅᖢᖅᓂᓂ ᐅᑎᖅᑎᑕᐅᓕᐅᖅᓂᕆᔨᒪᑕ ᐊᒥᐊᕐᑎᓂᖅᓯᓂᓗ.

ᐱᓕᓚᐊᖅᓴᖅ ᑕᒪᐃᓐᓂᖅ ᐊᑦᑎᓐᓄᓂᓂ ᓴᓗᒪᖅᓴᐃᔨᔪᑎᑲᖅᓂᖅ ᐃᓕᓴᕐᒥᒪᔪᓂᑦ ᓄᓇᓖᑦ ᐅᑎᖅᑎᓕᓗᒪᔪᓂ, ᐊᑐᐊᒪᐃᑦ ᒪᓕᓗᑎᑦ ᐊᑐᐊᒪᓕᐊᓚᕆᐅᕐᓂᕆᔨᓂᖅ ᑕᐃᓕᒪᓂ ᐅᓇᑕᖅᑐᐅᖅᓴᖅᑎᑦ (DND) ᕿᒪᐃᓕᓕᖅᓂᒃᑕᖅ ᓴᓗᒪᖅᓴᐃᔨᔪᑎᑲᖅᓯᓂᑦ ᒪᓕᓗᑎᑦ ᑎᑎᖅᑕᐅᓂᖅ ᓴᓇᖅᕃᐃᓂᓂᖅᓯᒪᓂᖅᑐᓂᖅ.

2. ᓴᓗᒪᖅᓴᖅᑲᖅᑕᐅᓕᐅᖅᑐᑦ ᓇᒥᒪᖅᓂᒃ

FOX-C-Γ ᑎᐅᓪᓗᐊᓂᑦ ᐃᓕᐅᑎᖅᑲᖅᓂᐊᖅᓂᒃ ᓄᓇᖅᔪᐊᑎᔪᑦ ᐅᓪᓚᕐᑐᖅ 68°42' N, 68°33' ᕿᑭᖅᑕᒧᑦ ᓂᒃᑭᖅᓂᖅᓂᓂ ᐃᖅᑲᓚᐃᑦ ᑲᖏᖅᓯᖅᓂᒃᑕ ᓯᕐᕿᓂᖅᓂᖅᓂᓂ, 195-ᑭᒧᒥᑐᑦ ᐅᖅᓂᓯᓂᓚᓂᖅ ᑲᖏᖅᓯᒋᐊᐅᑦ ᓄᓇᓕᖅᓂᒃᑕ ᓂᒃᑭᖅᓂᖅᓂᓂ, ᓄᓇᒧᑦ. ᑕᒪᓐᓇ ᓄᓇᑐᔨᖅ FOX-C-Γ ᐱᖅᔪᓚᐅᐃᓐᓇᐃᑦ ᐅᐃᕐᓯᔨᔪᓚᐅᐃᓐᓇᐅᑦᑕᓂᓂ. ᓯᓴᖅᓂᓂ ᖃᓚᒪᕐᑕᐅᑦ ᑕᓯᐅᐃᖅᓂᒃᑭᓂ, 3-ᑭᒧᒥᑐᑦ ᐅᐊᖅᓄᓇᖅᓂᒃᑯᓯᓂ ᑎᑎᖅᑕᐅᓂᐊᖅᑐᑦ, ᑕᐅᓄᖅᓂ ᑕᒻᒥᓴᐅᔨᖅ ᐃᖅᑲᓚᐃᑦ ᑲᖏᖅᓯᖅᓂᒃᑭᓂ ᖃᓄᑎᖅᓯᓂᖅᑐᓂᖅᑕ 770-ᐃᑐᖅ ᑕᑦᑕᐅᖅᓂ ᐅᓪᓘᖅᓂᓂᑦ. ᐊᖅᑐᒪᓂᖅᓴᓂᓄᓂ ᑐᐊᑕᖅᓂᒃ ᓯᓚᖅᓂᓂᑦ ᑕᑦᑕᐅᖅᓂ ᑕᓯᐅᖅᓂᓄᑦ ᐱᖓᓱᑦ ᖃᓄᖅᓂᓄᑦ.

ᑕᒪᐅᖅᓂᖃᑦᑕᖅᑐᑦ ᓄᓇᓕᒃ ᐅᑦᑕᐅᑎᔪᓐᓇᖅᑐᖅ ᓯᓄᐅᑐᓄᒃᑯᑦ ᐊᐅᓄᒃᑯᑦ ᑭᓯᐅᓂ; ᓄᓇᖅᓂ ᒪᓂᕆᐅᖅᓯᖅᓗᐊᖅᓯᑦ, ᒥᑦᑕᕆᓚᐅᑕᓕᐅᖅᓯᒪᖅᓯᖏᑦᑐᑦ FOX-C-Γ. ᑕᓯᖅ ᐅᑭᐅᖅᑯᑦ ᒥᑦᑕᕆᓚᐅᑕᓕᐅᖅᑐᖅᑲᓂᖅ ᐊᒪᒪᓗ ᖃᓄᑕᒻᒥᔪᓕᒻᒧᑦ ᒥᑦᑕᕆᓚᖃᖅᓄᓇᒃ ᖃᓄᖅᑎᑦᑎᓐᓄᑦ.

3. ᓴᓇᔨᐅᓂᐊᖏᑐᑦ ᖃᖏᓴᐅᓂᐊᕐᒪᖏᓪᓕᓪᒃ

ᐃᓄᓕᓚᐅᑐᑎᑲᓂᑦ ᓴᓗᒪᖏᓴᖏᑕᐅᑎᑕᓯᐅᓂᐊᕐᓕᒪᑕ FOX C-Γ ᑎᐅᓪᐃᐧᑲᑦ ᑕᐃᒪᖏᓯᒪᕐᕕᐃᓂᐊᓂᑦ ᐃᖏᓪᓗᐃᑦ ᑲᖏᖏᓯᖏᓂᓂᑦ ᐊᒪᒪᓪ ᖏᓄᐃᑦᑐᓂᖏᓂᒃ ᓄᓪᓄᐃᐃᔨᐃᑦᓪᓗᑎᒃ 2004 ᐊᐅᔨᖏᓂ. ᐊᖏᒃᓯᐃᐃᔨᔪᑕᐅᓂᐊᖏᑐᑦ ᓄᓇᖏᓂᒃ ᕿᖏᓇᐅᑕᐅᓯᒪᓕᖏᑐᑦ ᑲᒪᒋᔨᐅᒋᐊᓕᑦ 2005 ᐊᐅᔨᖏᓂᓂ ᓄᓪᓄᐃᐃᔨᖏᑕᐅᓕᐅᖏᑐᑦ ᐃᓕᓕᐅᑎᔨᑐᑦ ᑕᕆᑐᖏᓂ ᐅᓂᒃᑲᒧᑦ. ᐱᒋᐊᓕᖏᓂᔨᑦ ᑕᒪᐅᖏᓂᐅᔨᐅᓪᓗᒃ ᓴᓗᒪᖏᓴᐃᔨᔪᑎᒃᓴᓂ ᓴᓇᖏᒋᑎᑦ. ᓴᓇᔨᓄᑦ ᐃᓗᓪᓕᐃᑦ ᐊᖏᒃᓯᖏᑕᐅᓕᖏᓂᔨᑦ 2006 ᐊᒪᓚᓪ 2007 ᐊᐅᔨᖏᓂᓂ.

ᑕᒪᐃᑕᓕᒫᖅ ᓀᐸᔨᑦ ᐃᒃᓗᐃᑦ ᓭᕋᑎᖏᑕᐅᓂᐊᖏᑐᑦ ᐊᑲᑕᖏᑕᐅᓂᐊᕐᓕᒪᑕ ᓀᓗᓀᐃᔨᕋᖏᑕᐅᓗᑎᒃ ᑐᔪᓀᖓᖏᑐᑦ ᖃᓄᐃᑦᑐᓂᓗᓐᓂᓗ ᐊᑲᑕᔪᓀᐃᑦ. ᑐᔪᓀᖓᖏᑐᑦ ᐊᑲᑕᔪᓀᐃᑦ, ᒪᓀᐊ ᓴᐃᕋᐅᐃᑦ ᓪᓕᖏᖏᑐᑦ ᐊᒥᐊᑭᑎᑦ, ᐅᖏᖏᑕᐅᓂᐊᖏᑎᒃ ᐊᒪᒪᓪ ᖃᓄᐅᑦᑐᑕᐅᓗᑎᒃ ᑕᐃᒪᓕᐃᑦᑐᓂᒃ ᐊᑲᑕᔪᓀᐃᑦᓀᓐᓂᒃ ᐊᑲᑕᔪᓀᐃᑦᓀᓐᓂᒃ ᐊᑐᓕᓚᐅᑐᑦ ᑕᐃᒪᓕᐃᑦᑐᓂᒃ ᐃᓕᓴᐅᓐᓇᖏᑐᑦᓀᓐᓂᒃ ᐊᑐᓕᔪᒍ ᑎᐅᓪᐃᐧᑲᑦ ᓴᓗᒪᖏᓴᐃᔨᔪᑎᒃᓴᓂᒃ ᐊᑐᓕᔪᒍ ᑕᐃᒪᓕᐃᑦᑐᓂᒃ ᐊᑐᓕᔪᒍ ᐃᓕᓴᐅᓐᓇᖏᑐᑦ ᐊᑐᓕᔪᒍ ᑕᐃᒪᓕᐃᑦᑐᓂᒃ

FOX-C-Γ ᑎᐅᓪᓗᒃᑯᑦ ᖃᒪᓂᑯᓂᓂ ᓴᓗᒪᓐᓇᐅᔨᔪᑎᓐᓴᓂᒃ ᐃᒪᓕᓚᐅᒃᑯᓐᓄᑦ ᐊᑐᕐᓇᐅᑎᒥᒃ ᑐᐱᕆᐊᑎᐊ ᓕᐃᓴᑕᒪᔪᑦ ᐃᓄᓕᓚᑐᑐᖅᑯᒃᑯᑦ (DIAND) ᑲᓇᑕᒥ

ᐅᖃᖓᑕᑐᑦ ᓴᓇᖅᑯᑎᑦ ᐃᖅᑲᓇᐃᔨᖅᑎᓪᓗ ᑕᒪᐅᖓᓴᖅᑎᑕᐅᖅᑕᕐᓂᐊᖅᑐᑦ ᖃᓄᐅᒪᔭᓚᐅᑦ. ᑕᒪᐅᖓᖅᑕᕐᑭᓇᓂᐊᖅᑐᑦ ᓱᑲᐅᑭᓚᑯᑦ ᐱᔪᒃᓴᑦ ᑲᑎᕐᑐᑦ.

ᐱᐊᕐᓂᖅᓴᑦ 2007 ᐊᐅᔨᖓᓂᒃ, ᒪᓂᕆᖓ ᐃᓕᓂᖅᑯᑯᓗᖅᖓᓄᑦ ᐅᑎᖅᑎᑕᐅᕐᓂᐊᖅᑐᖅ ᐊᑐᐊᖏᐃᑦ ᒪᓕᓗᑎᑦ ᐱᓕᓚᐊᓱᐅᑎᐊᕐᓂᓂ ᒎᓕᑯᐊ <ᓇᓚᐅᑕᐅᓱᒪᔪᑦ ᐅᓂᒃᑲᓂᑦ ᐃᓕᓴᐅᑎᔾᔪᑎᑦ ᑕᕐᕈᓂ.

4. ᑕᒧᓂᕆᐅᑦ ᐃᓅᓱᖓᓐᓂᓄᑦ ᐃᒃᐱᖏᓇᓂᓂᖅᑭᑕᐅᔨᑦ ᓴᓇᔨᓄᑦ

ᑕᒪᑐᒪᓂ ᓴᓗᒪᓐᓴᐃᑎᑦᓗᑎᑦ, ᐊᔨᔪᓇᖏᓂᑲᖅᓄᑦ, ᐃᓄᓕᓚᔭᑐᖅᑲᖅᑯᑦ ᑕᐃᒪᖏᓂᑦ ᐃᑲᔨᖅᓴᕆᔨᐊᖅᑲᑕᑦᑕᖅᑐᑦ ᐃᓗᐊᖅᓱᓪᓕᓕᓚᓂᖅᓴᓗᒍ ᖃᓄᐃᓕᐅᑎᐊᖅᑐᓂᒃ, ᑲᔨᔨᑎᑎᑭᓇᓂᖅᑐᓄᒃ ᓄᓇᓕᖅᑲᐃᓇᑯᓂᓗᑎᑦ ᑕᒥᓂᕆᐅᓂᒃ ᐃᑲᑲᖅᑕᖅᑑᓂᒃ ᓄᓇᓕᖏᓂ ᖃᐅᔨᒪᔪᓕᐅᑎᓂᒃᑐᖅᓂᒃ ᓄᓇᓕᓚᔨᐅᓂᒃ ᐊᐅᑎᖏᓐᓄᓂ ᐅᓱᔨᐃᑐᐃᓇᓚᐅᖏᓐᓂᒃ ᓄᓇᓕᖏᓂ ᖃᓄᐃᓕᐅᑎᐊᖅᑐᓂᒃ ᓴᓗᒪᓐᓴᐃᑎᑦᓗᑎᑦ. ᐃᓕᓴᖅᑕᐅᓪᓗᑎᒃ ᖃᐅᔨᒪᓕᕆᖅᑭᓕᕆᖅᑕᖅᑐᑦ ᐊᑐᖅᑕᐅᑦᓄᓇᓕᖅᑎᑦ ᓴᓗᒪᓐᓴᐃᑎᑦᓗᑎᑦ. ᐃᓕᓴᖅᑕᐅᓪᓗᑎᒃ ᖃᐅᔨᒪᓕᕆᖅᑭᓕᕆᖅᑕᖅᑐᑦ ᐊᑐᖅᑕᐅᑦᓄᓇᓕᖅᑎᑦ ᓴᓗᒪᓐᓴᐃᑎᑦᓗᑎᑦ. ᐊᔨᔪᓇᖏᓂᑲᖅᓄᑦ ᓴᓇᖅᑯᑎᑦ ᓴᓇᐅᔨᓂᓗ ᐊᖏᑦᑐᓂᖅᑕᐅᖅᑕᕐᓂᐊᖅᑐᑦ ᑕᒥᓂᕆᐅᑦ ᐃᓄᓕᓚᑐᑐᖅᑯᑯᓗᖅᖓᓄᑦ ᐊᑐᖅᑕᐅᑦᓄᓇᓕᖅᑎᑦ ᐅᑭᐅᖅᑕᕐᓂᐊᖅᑐᑦ ᐃᒃᐱᖏᓇᓂᓂᖅᑭᑕᐅᔨᑦ ᐱᓕᕆᔨᒃᑯᑦ ᐃᓄᓕᓚᑐᑐᖅᑯᑯᓗᖅᖓᓄᑦ ᐊᑐᖅᑕᐅᑦᓄᓇᓕᖅᑎ

FOX-C-Γ ᑎᐅᓪᒪᓐᔪᑦ ᕈᒪᖅᓂᔪᕐᓂᓂ ᓴᓗᒪᖏᖅᐃᐅᔨᔪᑎᑐᖏᖅᓂᖅᑲᓂᖅ ᐃᒪᓕᓂᐸᖅᔪᓐᓇᓚᑦ ᐊᑐᕈᓐᓇᐅᑎᒥᖅ ᑐᖅᔪᕐᐅᑎᐊ ᓪᐃᔭᕆᕈᒪᔨᑦ ᐃᓇᓕᓂᐸᑐᖏᖅᔪᑦ (DIAND) ᑲᓇᑕᒥ

ᐊᑐᓂ ᐅᓂᖅᑲᐅᔾᔨᐅᒋᐊᖅᑐᖏᖅᑕᑕᓕᐅᔾᔨᒥᔨᑦ ᓚᖓᒪᑎᑐᖏᖅᔪᓐᓇᓂ ᐃᖅᑲᓇᐃᔭᖅᑎᑦ ᐃᖅᓗᓐᓂ ᑎᒋᐱᓚ 2004Γ. ᐅᖅᑲᐅᒋᓐᓂᑦ ᐃᒋᒪᒋᔭᖅᓂᓪᓗ ᐃᓕᓴᐅᑎᔾᔨᐅᓕᐅᔾᔨᒥᔨᑦ ᐅᓂᖅᑲᓂᑎᓐᓂ.

Summary of Public Consultation Events & Issues

Department of Indian Affairs and Northern Development (DIAND) have carried out an extensive consultation process in relation to the remediation of the FOX-C DEW Line site at Ekalugad Fjord, Nunavut. Various local groups, communities and individuals have been consulted on both the site investigation and remediation work plan.

A summary of these consultations follows:
May 2004: initial meetings with Hunters & Trappers Organizations, Hamlet Councils, Qikiqtani Inuit Association representatives and the public in Clyde River and Qikiqtarjuaq to briefly introduce the project, especially the planned site investigation.

July 2004: initial meeting with Nunavut Impact Review Board (NIRB) & Nunavut Water Board (NWB) representatives to introduce project and obtain feedback on regulatory approval requirements and submissions.

August 2004: transported Hunters & Trappers and Hamlet representatives from Qikiqtarjuaq to the site during investigation work to illustrate work being carried out and to familiarize them with the site and specific issues.

December 2004: presented the results of site investigation and preliminary remedial design options to regulators. A summary of comments and concerns is attached.

December 2004: community public consultations in Clyde River & Qikiqtarjuaq; results of the site investigations and preliminary remediation work plans were presented. A summary of comments and concerns is attached.

December 2004 Qikiqtaaluk Environmental was contracted to review the Site Specific Risk Assessment (SSRA) and to interview Clyde River and Qikiqtarjuaq elders about the project and project area.

February 2005: presented summary results of site investigation and preliminary remediation options to NIRB. NIRB has drafted a "checklist" of submission requirements and provided these to DIAND/PWGSC to be included with the Ekalugad regulatory submission.

February 2005: presented a brief overview of the project to Fisheries and Oceans Canada (FOC) representatives with specific focus on aquatic and marine elements. Based on the discussions, a Barrel Removal & Culvert Installation Protocol has been completed. This document is included in this submission.

March 2005: PWGSC presented the government contracting process to Inuit businesses.

March 200: met with potential contractor bidders to familiarize them with the remedial project specifics.

DIAND has made a concerted effort to identify and address concerns raised by members of the public and pertinent regulators through a variety of means.

A document summarizing comments and concerns noted during the December 2004 public meetings in Clyde River and Qikiqtarjuaq (FOX-C Public Consultation Issues Summary) is attached; in this document, all issues have been categorized by type, and DIAND has identified how these issues will be handled. The final Remediation Work Plan was modified to incorporate comments and to address community concerns, wherever possible.
A second document identifying issues relayed to departmental representatives during the December 2004 presentation to the regulators (Environment Canada, DIAND Land Administration personnel, FOC and NWB) is also attached.

A second meeting that focused on similar project-related issues was held with the Nunavut Impact Review Board in February 2005.

While the scope of comments and concerns has covered a wide variety of types, a few issues have consistently been identified as areas of significant concern that require detailed discussions and effective solutions. The following table identifies some of the major concerns raised by the public and/or regulators throughout the consultation period, as well as DIAND's planned responses to address each of these issues in turn.

Category	Residents' Concerns	DIAND's Response
Health and Safety	Locals ingesting contaminated fish from site water bodies	Site Investigation work plan was modified to include tissue analysis of fish taken from site waters. It was determined that fish present at the site do not contain contaminants at levels above other fish populations in the eastern arctic.
Environment	The location of site landfills	There was some concern that leachate from site landfills would impact on adjacent water bodies. DIAND demonstrated that the landfills are being sited a considerable distance from water bodies and will be adequately engineered using proven northern technologies.
Waste Management	The potential for wastes remaining at the bottom of the lake	2004 site investigation focused on sampling water and sediments in lake. No contaminants were identified. DIAND does not believe further action is required at this time. See attached letter for further details.
Waste Management	Barrels remaining in the river and glacial stream	All barrels will be removed during the remediation project. To ensure that this is done in a consistent, environmentally responsible manner a site specific Barrel Removal Protocol has been completed and is attached.

Business Opportunities	Jobs for locals	DIAND will implement a contracting process that increases the credibility of the project within the communities.

Please refer to attached documents for specific comments and responses.

DIAND also provided funding and invited Qikiqtaaluk Corporation (QC) to comment on the SSRA. QC did a thorough review of the assessment and provided a number of conclusions in the form of a report. DIAND has officially responded to these conclusions in the form of a letter.

Three of the four QC comments focused on the technical protocols used by the risk assessors. It was determined that these were attributable to professional differences in approach and were not weaknesses in the assessor's risk model.

The fourth comment was that DIAND should not be solely relying on the results of the risk assessment to formulate the site clean up criteria. In fact, DIAND will use these site specific risk based criteria only where no suitable criteria is available.

CONTINGENCY PLANS

For the Clean Up of FOX-C Intermediate DEW Line Site

Submitted by: Department of Indian Affairs and Northern Development
Northern Affairs Program
Nunavut Regional Office

Prepared by: Public Works and Government Services Canada
Real Property Services
Architectural & Engineering Services
Environmental Services
Western Region

November 2004

Contingency Plans

1 General

1.1 The following contingency plans present the prescribed course of action to be followed in the case of unanticipated events during the site investigation such as fuel or chemical spills, potentially dangerous wildlife encounters, and the discovery of heritage resources. The plans will enable persons in a particular contingency situation to maximize the effectiveness of the environmental response and meet all regulatory requirements for reporting to the appropriate authorities. The plans also describe the locations where hydrocarbons (fuel) and spill response equipment will be stored at the site.

1.2 Spill contingency plans for the site will be included in the Site Specific Investigation Plans and will be posted on-site during the investigation. The following information will be included:

1. a description of pre-emergency planning;
2. personnel roles, lines of authority and communication;
3. emergency alerting and response procedures;
4. evacuation routes and procedures, safe distances and places of refuge;
5. emergency alerting and response procedures;
6. directions/methods of getting to the nearest medical facility;
7. emergency decontamination procedure;
8. emergency medical treatment and first aid;
9. emergency equipment and materials;
10. emergency protective equipment;
11. procedures for reporting incidents; and
12. spill response and containment plans for all materials that could potentially be spilled.

2 Fuel and Hazardous Material Spills

2.1 The objective of the fuel-related contingency plan is to protect the environment and human health by minimizing the impacts of spill events through clear and concise instructions to all personnel.

2.2 A variety of fuels (diesel, gasoline and lubricating oils) may be used during the site investigation of the DEW Line sites. As fuels are usually stored and transferred in barrels of 205 liters or smaller capacity, any spill quantity would likely be small.

2.3 Transportation of fuels must comply with the *Transportation of Dangerous Goods Act and Regulations.*

2.4 The most common pollution incidents would probably involve spills of diesel or gasoline onto land resulting from: human error during transfer, rupture of barrels from deterioration or damage, seepage from fittings or valves, or equipment failure. Daily checking of equipment and preventative maintenance would also identify damage to the fuel system and reduce the risk of spills or leaks.

2.5 In the event of a spill, protection of human health and safety is paramount. Contamination of personnel involved in clean up is a real possibility as is contamination of the surrounding workplace and environment.

The individual responding to a spill shall:

1. Ensure personnel are appropriately trained.
    a. All employees working on the FOX-C DEW Line Site Cleanup project, including contractors and sub-contractors, will be trained in the safe operation of all machinery and tools, as well as in the handling of materials to help prevent and respond to hazardous material spills in a timely and effective manner. All employees on site will also be trained for initial spill response in the event of a spill. The recommended training for these purposes consists initially of the 40-Hour Hazardous Waste Operations and Emergency Response (HAZWOPER) course offered by various environmental firms and the 8-Hour HAZWOPER refresher course every two (2) years thereafter.
2. Make use of materials and equipment available for adequate response to fuel spills, such as excavators for creating earthen dykes and hydrocarbon absorbent booms.
3. Warn people in the immediate vicinity and evacuate the area if necessary.
4. Wear protective clothing as required for handling spills.
5. Isolate and eliminate all ignition sources.
6. Identify the spilled material if possible, and take all safety precautions before approaching it.
7. Attempt to immediately stop the leakage and contain the spill, if safe to do so, by implementing the Spill Response Actions summarized in Section 2.5.1 below.
8. Report to the Field Team Leader the spill location, type of material, volume and extent, status of spill (direction of movement), and prevailing meteorological conditions.
9. Follow all applicable federal/territorial regulations and guidelines or the disposal of spill materials.
10. Document all events and actions taken. Include information required by applicable regulations and guidelines.

11. Notify appropriate government agencies using the contact list. Report spills immediately on the 24-Hour Spill Report Line (867) 902-8130.

2.5.1 Petroleum Hydrocarbon - SPILL RESPONSE ACTIONS

ON LAND

- Do not flush into ditches or drainage systems.
- Block entry into waterways and contain with earth, snow or other barrier.
- Remove small spills with sorbent pads.
- On tundra use peat moss and leave in place to degrade, if practical.

ON SNOW & ICE

- Block entry into waterways and contain with snow or other barrier.
- Remove minor spills with sorbent pads and/or snow.
- Use ice augers and pump to recover diesel under ice.
- Slots in ice can be cut over slow moving water to contain oil.
- Burn accumulated diesel from the surface using Tiger Torches if feasible and safe to do so.

ON MUSKEG

- Do not deploy personnel and equipment on marsh or vegetation.
- Remove pooled diesel with pumps and skimmers.
- Flush with low pressure water to herd diesel to collection point.
- Burn only in localized areas, e.g., trenches, piles or windrows.
- Do not burn if root systems can be damaged (low water table).
- Minimize damage caused by equipment and excavation.

ON WATER

- Contain spill as close to release point as possible.
- Use spill containment boom to concentrate slicks for recovery.
- On small spills, use sorbent pads to pick up contained oil.
- On larger spills, use skimmer on contained slicks.
- Do not deploy personnel and equipment onto mudflats or into wetlands

RIVERS & STREAMS

- Prevent entry into water, if possible, by building berm or trench.
- Intercept moving slicks in quiet areas using (sorbent) booms.
- Do not use sorbent booms/pads in fast currents and turbulent water.

3 Wildlife Encounter

3.1 Bears are a potential hazard to workers at all times and the situation can be exacerbated by the presence of any substance that a bear perceives to be food.

3.2 EMPLOY DEDICATED WILDLIFE MONITORS AT ALL TIMES DURING CLEAN UP OPERATIONS.

3.3 Be familiar with bear deterrent procedures. Be familiar with the GNWT "Safety in Bear Country" manual and make available a reference copy at the site.

3.4 Operators of vehicles and equipment shall make every effort to avoid encounters with large mammals. Congregations of animals near food or garbage are a potential problem, which can be overcome by proper disposal of food wastes. Concentrations of scavenging animals, such as wolves, foxes and bears, increase the risk of diseases, particularly rabies, and danger to personnel. The following precautions and actions are to be taken at each site:

1. The killing of wildlife for any reason at variance with the Wildlife Act and regulations is an offence. Co-ordinate procedures for handling wildlife problems and incidents with the regional Nunavut wildlife office.
2. Use vehicle, noisemakers and, if necessary, a firearm to frighten the bear away from the site.
3. Shoot the bear only if the bear returns repeatedly, refuses to leave or directly threatens human safety. Killing is considered a last resort and, if at all possible, the appropriate wildlife officer should be contacted to alert them of the problem. If a bear is to be shot, assign the task only to a person familiar with and competent with the camp firearm. Wounded or otherwise aggravated bears can be extremely dangerous.
4. Report the death of a bear to the Field Team Leader and the appropriate wildlife officer who will issue instructions as to the disposal of the carcass and the formal reporting procedures to be followed.
5. Due to the possibility of rabies, shoot any animal that bites a human and retain the carcass intact pending instructions from the appropriate wildlife officer. If possible, notify the wildlife officer before any drastic action is taken. Seek medical advice from the appropriate medical facility for treatment of animal-inflicted wounds.

4 Heritage Resources

4.1 All site personnel are prohibited from knowingly disturbing any archaeological or other heritage site or collecting any artifacts. Removing artifacts is a criminal offence.

4.2 In the event of finding heritage resources:

1. Do NOT remove any artifacts or other associated objects from the site unless their integrity is threatened in any way.
2. Mark the site's visible boundaries and avoid the area.
3. Report the discovery of the site to the appropriate regulatory agency.
4. Document the discovery.

4.3 In the event of a discovery of human remains:

1. Advise the PMO of the discovery and they will contact the nearest detachment of the RCMP. The RCMP will make the decision as to whether the territorial coroner or archaeological department should be contacted.
2. Halt all activities around the area of discovery. Until determined otherwise, the remains should be treated as evidence in a criminal investigation. If the remains are found in the bucket of heavy equipment, the bucket should not be emptied, as physical evidence may be destroyed.
3. Secure the area and designate it as out of bounds to all personnel. Depending on weather conditions, the human remains should be provided with non-intrusive protection such as a cloth or canvas tarp (non-plastic preferred).
4. Document the discovery.

5 Key Contact List

5.1 24-Hour Spill Report Line

1. In the event of a spill, contact the 24-Hour Spill Report Line and provide them with all the relevant details.
   - Telephone: (867) 920-8130 Fax: (867) 873-6924
2. Environment Canada, as lead agency, shall then be contacted by officials to ensure the appropriate response. The lines are staffed 24 hours a day and can also be used to co-ordinate a response in the event of a non-spill emergency outside of normal working hours.

5.2 Other Contacts

1. In the event of a non-spill emergency (e.g. related to wildlife, fisheries, heritage resource, etc.), contacts are provided in Table 1.

Table 1: Contact List

Resource	Location	Phone Number
24 Hour Spill Line	NWT/Nunavut	867-920-8130
Local Fire Department	Gerald Pickett, Chief Fire Marshal Office of the Fire Marshal Nunavut Emergency Services Division Department of Community Government and Transportation Iqaluit, Nunavut	867-975-5310
Environment Canada, Enforcement Branch	Environment/Emergencies Enforcement Officer Iqaluit, NT	867-975-4644
Indian and Northern Affairs Canada	Peter Kusugak Iqaluit Region District Operations Manager	867-975-4295
	Iqaluit Office	867-975-4500
Renewable Resources Officer Stations – Baffin Region	Gladis Lemus, Ph.D. Manager Pollution Control & Air Quality Department of Environment c/o Environmental Protection Government of Nunavut Iqaluit, Nunavut	867-975-5907
Indian and Northern Affairs Canada – Project Proponent	Iqaluit Office	867-975-4500
	Robert Martin	867-979-7931
Public Works and Gov't Svcs. Canada – Project Management	Site Supervisor – Ken Gilmet	780-497-3883
	Program Manager – Jared Buchko	780-497-3886
	Project Manager – Brad Thompson	780-497-3862

Northwest Territories

NWT SPILL REPORT

(Oil, Gas, Hazardous Chemicals or other Materials)

24 – Hour Report Line
Phone: (867) 920-8130
Fax: (867) 873-6924

A Report Date and Time	B Date and Time of spill (if known)	C ☐ Original Report ☐ Update no._____	Spill Number

D Location and map coordinates (if known) and direction (if moving)

E Partly responsible for spill

F Product(s) spilled and estimated quantities (provide metric volumes/weights if possible)

G Cause of spill

H Is spill terminated? ☐ yes ☐ no	I If spill is continuing, give estimated rate	J Is further spillage possible? ☐ yes ☐ no	K Extent of contaminated area (in square meters if possible)

L Factors effecting spill or recovery (weather conditions, terrain, snow cover, etc.)	M Containment (natural depression, dikes, etc.)

N Action, if any, taken or proposed to contain, recover, clean up or dispose of product(s) and contaminated materials

O Do you require assistance? ☐ no ☐ yes, describe:	P Possible hazards to person, property, or environment; eg: fire, drink water, fish or wildlife

Q Comments or recommendations

FOR SPILL LINE USE ONLY

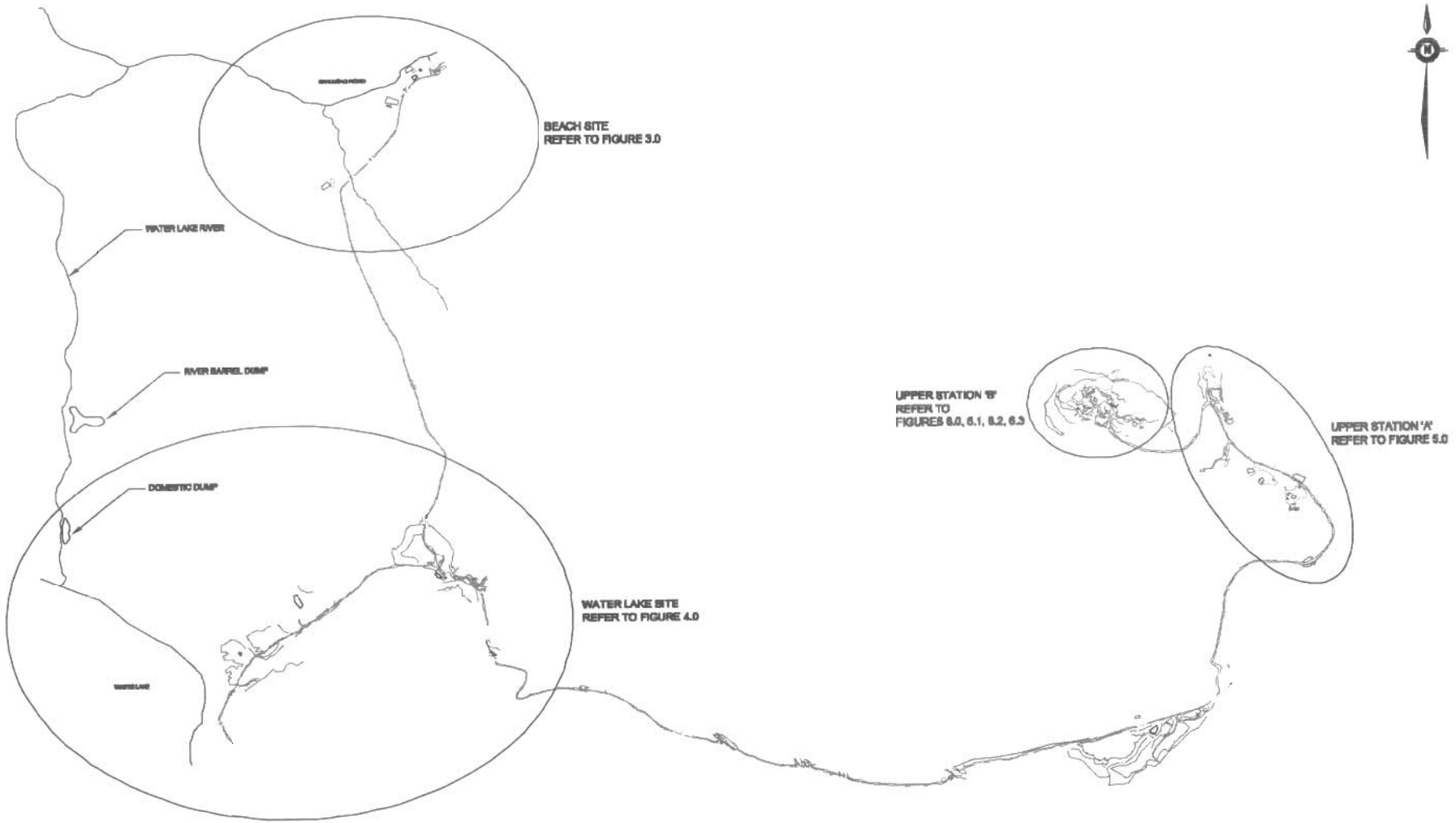
Lead agency

Spill significance

Lead Agency contact and time

Is this file now closed? ☐ yes ☐ no

Reported by	Position. Employer, Location	Telephone
Reported to	Position. Employer, Location	Telephone



Date: OCTOBER 05, 2004

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Scale 1:16000

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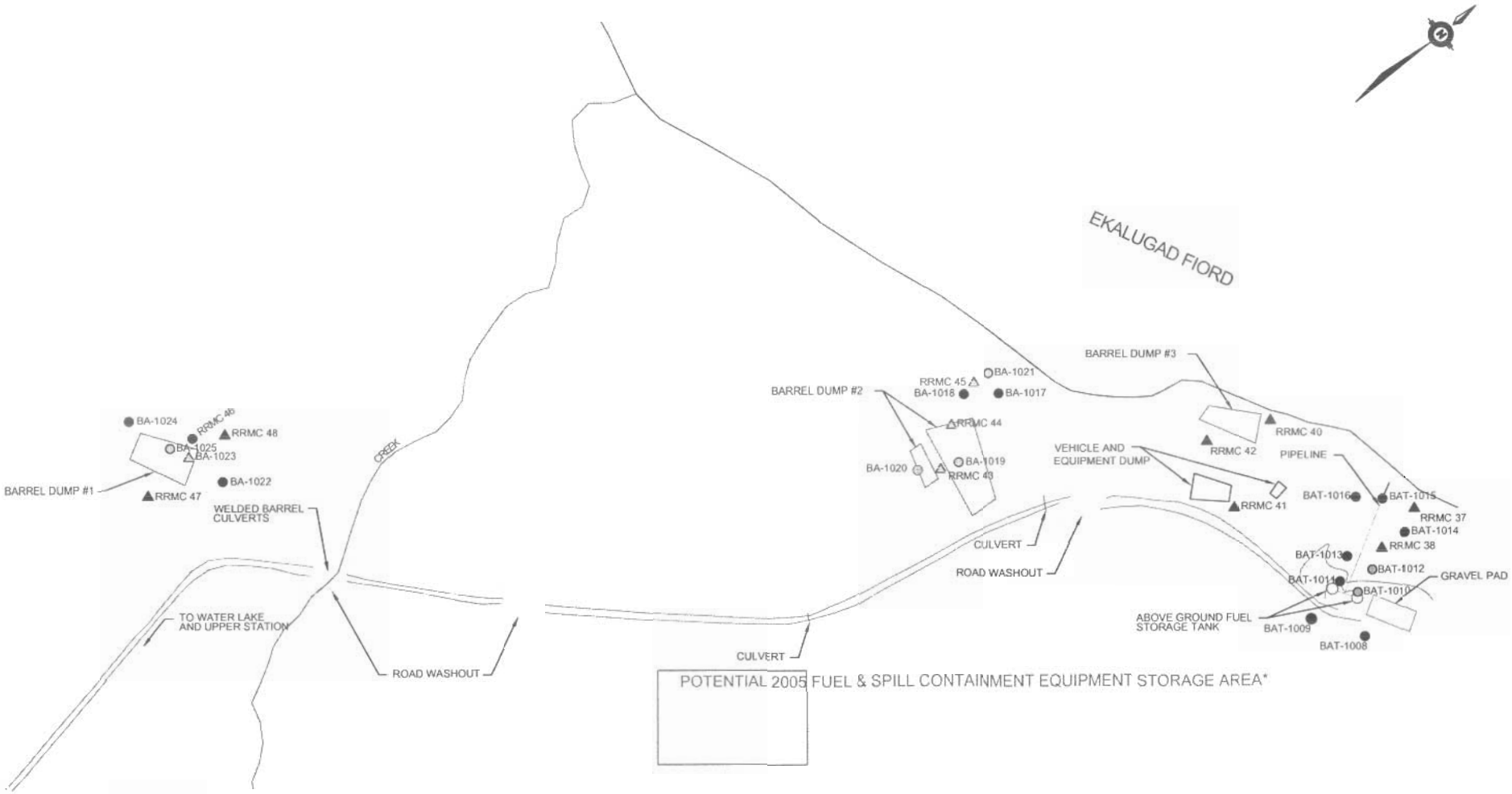
PWGSC

FOX-C DEW LINE

SITE PLAN

Figure 1.0



Date: OCTOBER 05, 2004

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Scale 1:2000

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A Tyco International Ltd. Company

Legend

- ○ SOIL SAMPLE
- △ RRMC SAMPLE

- PCBs EXCEEDANCE
- METALs EXCEEDANCE
- PHCs EXCEEDANCE
- PAHs EXCEEDANCE
- NONE
- PCBs CONTAMINATION PLUME
- METALs CONTAMINATION PLUME
- PHCs CONTAMINATION PLUME
- PAHs CONTAMINATION PLUME

*SPILL KITS WILL ALSO BE CARRIED ON SUPPORT VEHICLES THAT SERVICE EQUIPMENT

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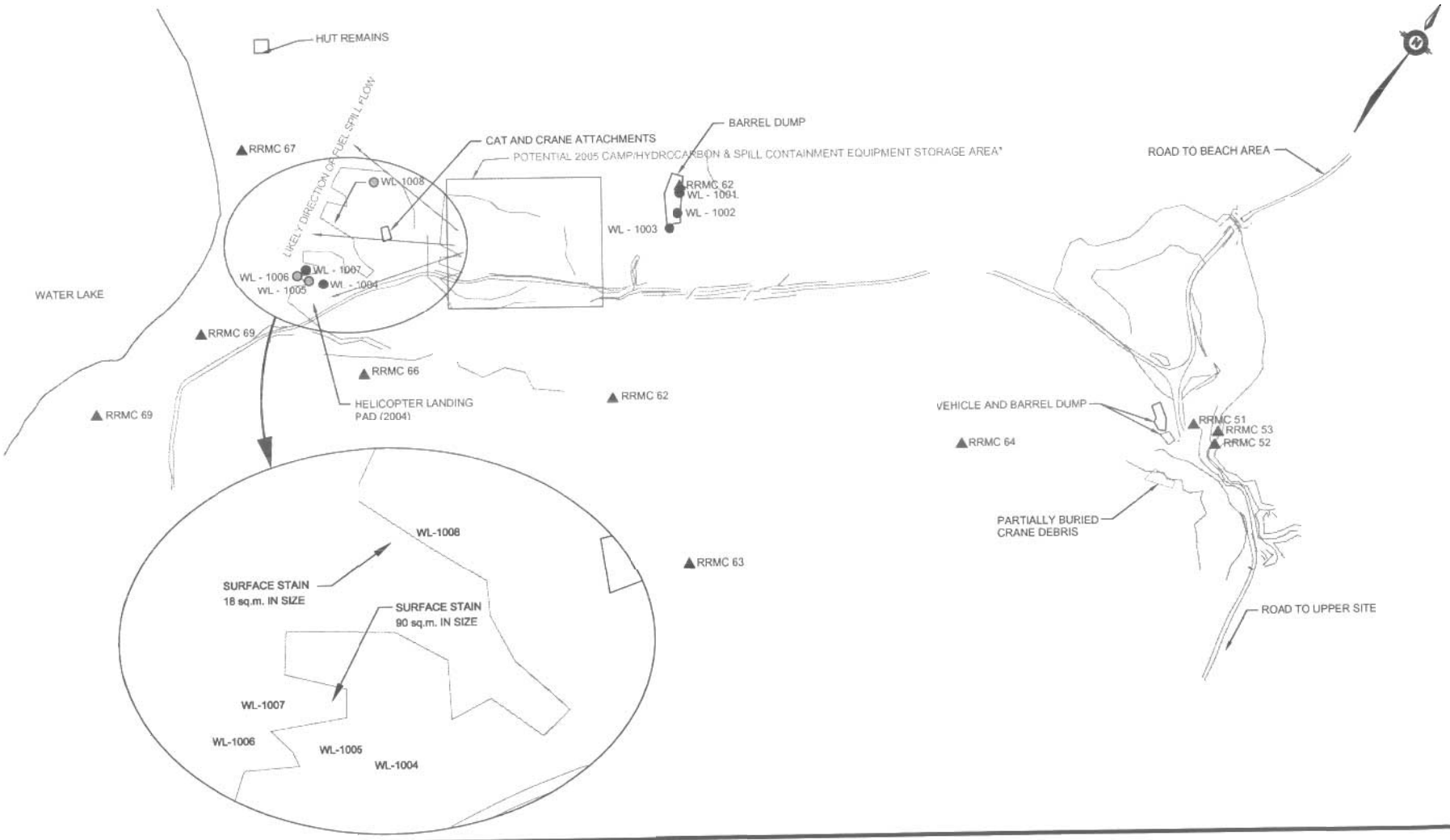
FOX-C DEW LINE SITE - BEACH AREA

SPILL CONTINGENCY PLAN

Figure 2.0



Date: OCTOBER 05, 2004

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Scale 1:4000

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Legend

- SOIL SAMPLE
- RRMC SAMPLE

- PCBs EXCEEDANCE
- METALs EXCEEDANCE
- PHCs EXCEEDANCE
- PAHs EXCEEDANCE
- NONE

- PCBs CONTAMINATION PLUME
- METALs CONTAMINATION PLUME
- PHCs CONTAMINATION PLUME
- PAHs CONTAMINATION PLUME

*SPILL KITS WILL ALSO BE CARRIED ON SUPPORT VEHICLES THAT SERVICE EQUIPMENT

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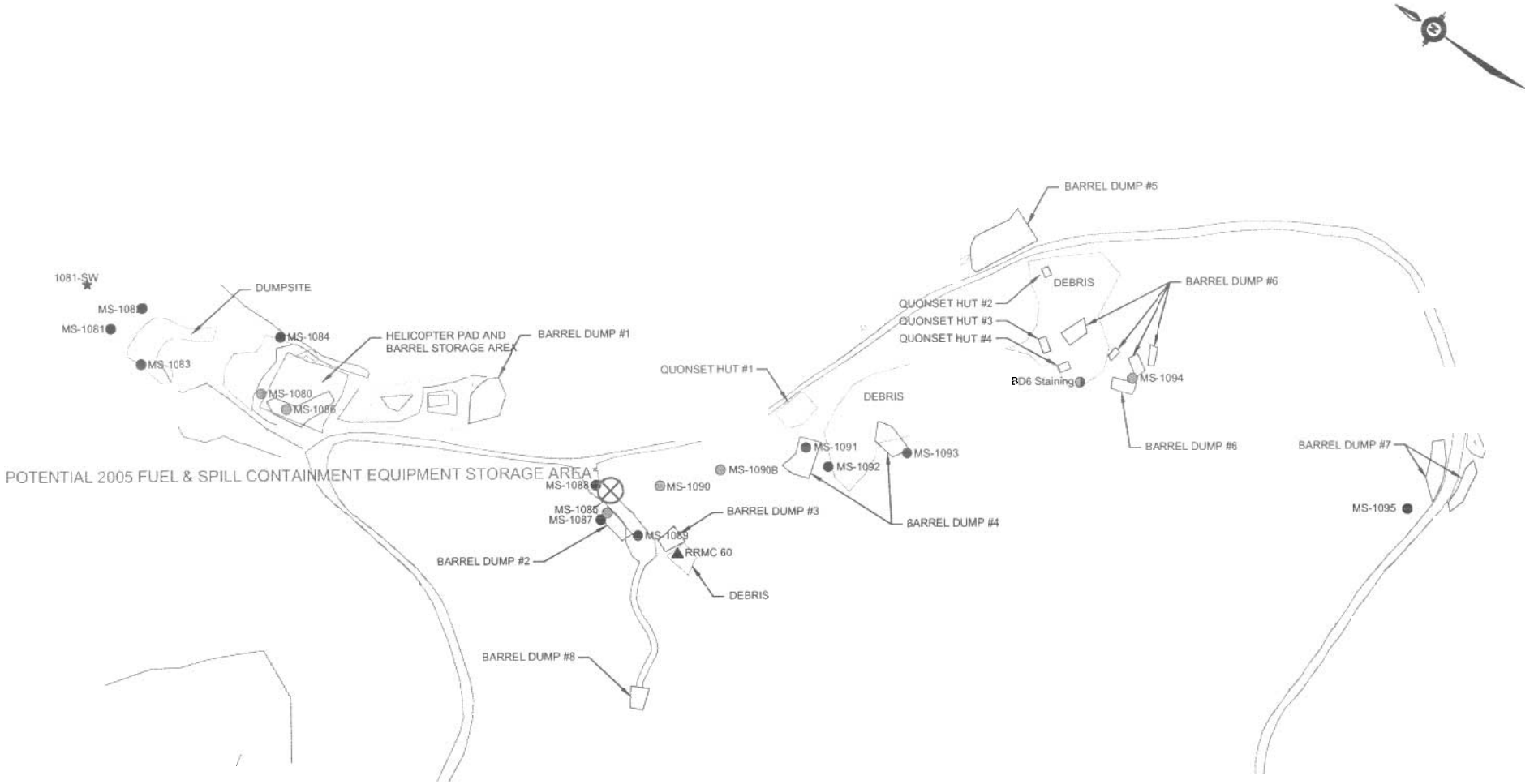
FOX-C DEW LINE SITE - WATER LAKE

SPILL CONTINGENCY PLAN

Figure 3.0



Date: OCTOBER 05, 2004

0 25 50 75 100

Scale 1:2500

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Legend

- SOIL SAMPLE
- RRMC SAMPLE
- WATER SAMPLE

- PCBs EXCEEDANCE
- METALs EXCEEDANCE
- PHCs EXCEEDANCE
- PAHs EXCEEDANCE
- NONE

- PCBs CONTAMINATION PLUME
- METALs CONTAMINATION PLUME
- PHCs CONTAMINATION PLUME
- PAHs CONTAMINATION PLUME

*SPILL KITS WILL ALSO BE CARRIED ON SUPPORT VEHICLES THAT SERVICE EQUIPMENT

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FOX-C DEW LINE SITE - MID STATION

SPILL CONTINGENCY PLAN

Figure 4.0