November 26, 2004

Mr. Jim Wall
Licensing Administrator
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0

Dear Mr. Wall:

RE: Response to Provisions in Water Use Licence No. NWB5EKA0406 – Type "B" for FOX-C Site Investigation

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Thank you for approving and licensing our application to complete the Site Investigation process at the CAM-F (Ekalugad Fiord) DEW Line Site this summer (2004). We have reviewed your licence document and will comply with all terms. As previously discussed, we would like to provide you with documentation required in the licence as follows.

I have attached our final Spill Contingency Plan. This plan is similar to that previously provided to you but has been updated.

A formal Abandonment & Restoration Plan cannot be completed for the site at the conclusion of the Site Investigation since this "project" will form only the first phase of complete Remediation Program, hence, the plan to abandon this will be submitted at that time. However, specific activities will be completed at conclusion of the Site Investigation to fulfill the requirements of the licence as follows:

- wastewater pits/trenches will be closed and re-contoured to match the surrounding topography where required;
- test pits advanced as part of the site investigation and geotechnical work will be closed;
- camp, including tents, tables and all portable structures will be taken down and either stored in permanent structures or removed from the site; and
- other miscellaneous disturbances or issues that may be encountered will be dealt with on a specific basis.

All restoration activities will be completed prior to site closure within the 2 year time span of the licence. Following completion of the site work, a follow up letter will be provided to the Water Board documenting exactly what restoration actions were carried out at the site.

Freshwater quantities pumped from the lake will be estimated and provided to the Water Board at conclusion of the project. Quantities are expected to be well below the maximum volume identified in the licence of 10 cubic meters, however, it should be noted that a water flow meter will not be placed on the water line.

Public consultation has been carried out on the complete Site Remediation project. Further consultation is to be completed in the adjacent communities of Qikiqtarjuaq and Clyde River following completion of the site work where INAC will document the results of the program and the general activities that will be carried out as part of the Remediation program. This information will be documented and provided to the Water Board prior to the end of fiscal year 2004/05.

Signs will be posted at the water intake location(s) identifying the site as a “Water Supply Facility” in both English and Inuktitut. This location, as well as the pit/trench locations, used for wastewater disposal will be permanently identified on the site plan using a global position system.

With the exception of test pitting for the purposes of completing the site investigation and temporary erection of the camp, no construction activities are expected to be carried out as part of this project. If emergency remediation or other unforeseen dyking or damming activities are completed at the site this summer, these design drawings will be stamped and provided to the Water Board for approval.

If you have any questions or comments, please do not hesitate to contact the undersigned at (867) 979-7931.

Sincerely,

Bob Martin
Contaminated Sites Project Officer

Encl. Final Spill Contingency Plan

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

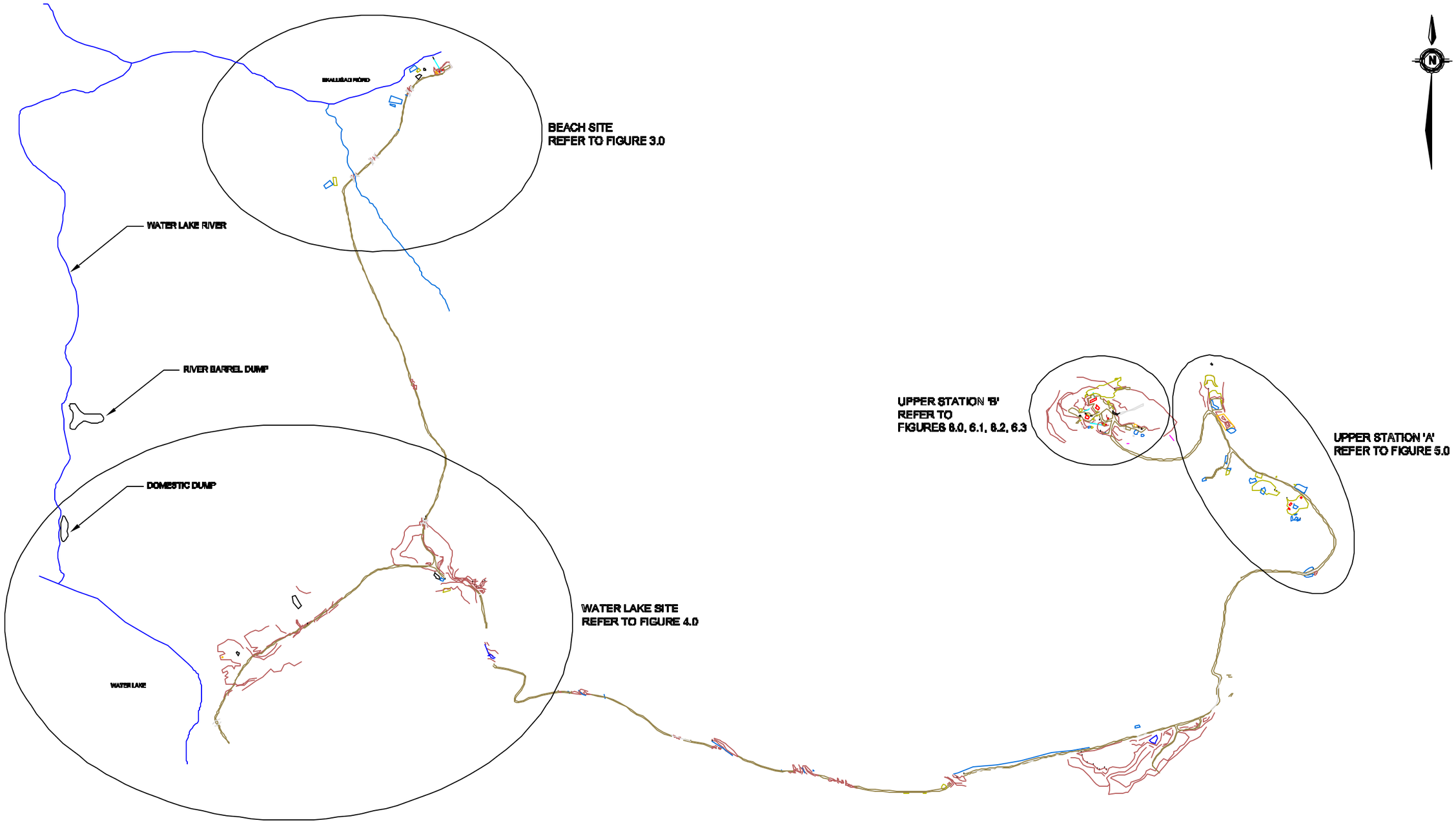
1. In the event of a spill, contact the 24-Hour Spill Report Line and provide them with all the relevant details.
   - Telephone: (867) 920-8130 Fax: (867) 873-6924
2. Environment Canada, as lead agency, shall then be contacted by officials to ensure the appropriate response. The lines are staffed 24 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	Sid Bruinsma 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 Environmental Protection Service Dept. of Sustainable Development 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



Date: OCTOBER 05, 2004

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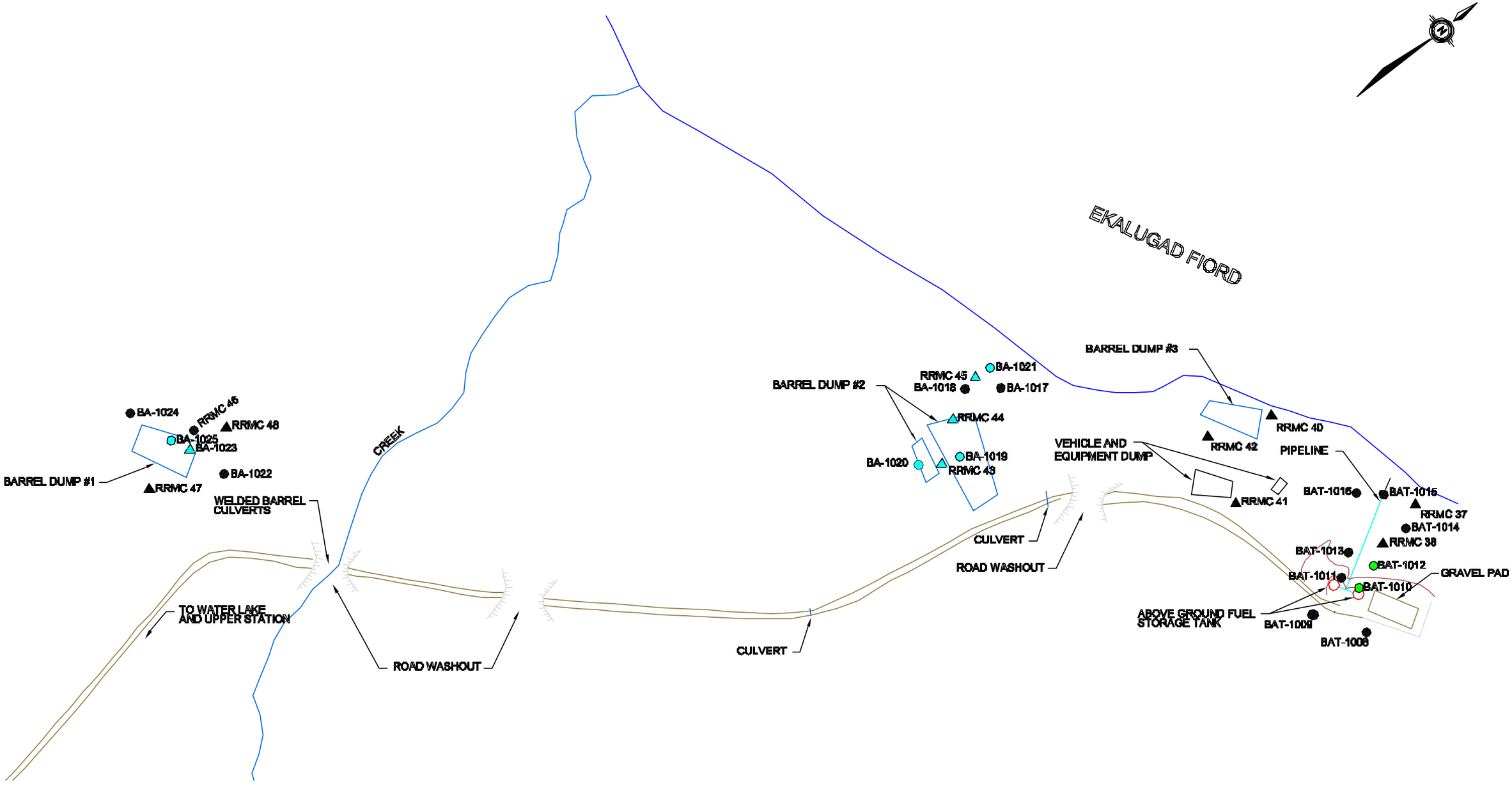
PWGSC
FOX–C DEW LINE
SITE PLAN
Figure 1.0



Date: OCTOBER 05, 2004

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Legend

○ SOIL SAMPLE	PCBs EXCEEDANCE	PCBs CONTAMINATION PLUME
△ RRMC SAMPLE	METALs EXCEEDANCE	METALs CONTAMINATION PLUME
	PHCs EXCEEDANCE	PHCs CONTAMINATION PLUME
	PAHs EXCEEDANCE	PAHs CONTAMINATION PLUME
	NONE	

PWGSC

FOX–C DEW LINE SITE – BEACH AREA

SPILL CONTINGENCY PLAN

Figure 2.0

HUT REMAINS

LIKELY DIRECTION OF FUEL SPILL FLOW

RRMC 67

CAT AND CRANE ATTACHMENTS

BARREL DUMP

2004 CAMP/HYDROCARBON & SPILL CONTAINMENT EQUIPMENT STORAGE AREA

ROAD TO BEACH AREA

WL-1006

RRMC 62

WL - 1001

WL - 1002

WL - 1003

WL - 1006

WL - 1007

WL - 1005

WL - 1004

WATER LAKE

RRMC 59

RRMC 66

RRMC 69

HELICOPTER LANDING PAD (2004)

RRMC 62

VEHICLE AND BARREL DUMP

RRMC 64

RRMC 51

RRMC 53

RRMC 52

WL-1008

SURFACE STAIN
18 sq.m. IN SIZE

SURFACE STAIN
90 sq.m. IN SIZE

RRMC 63

PARTIALLY BURIED
CRANE DEBRIS

WL-1007

WL-1006

WL-1005

WL-1004

ROAD TO UPPER SITE

Date: OCTOBER 05, 2004

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Scale 1:4000

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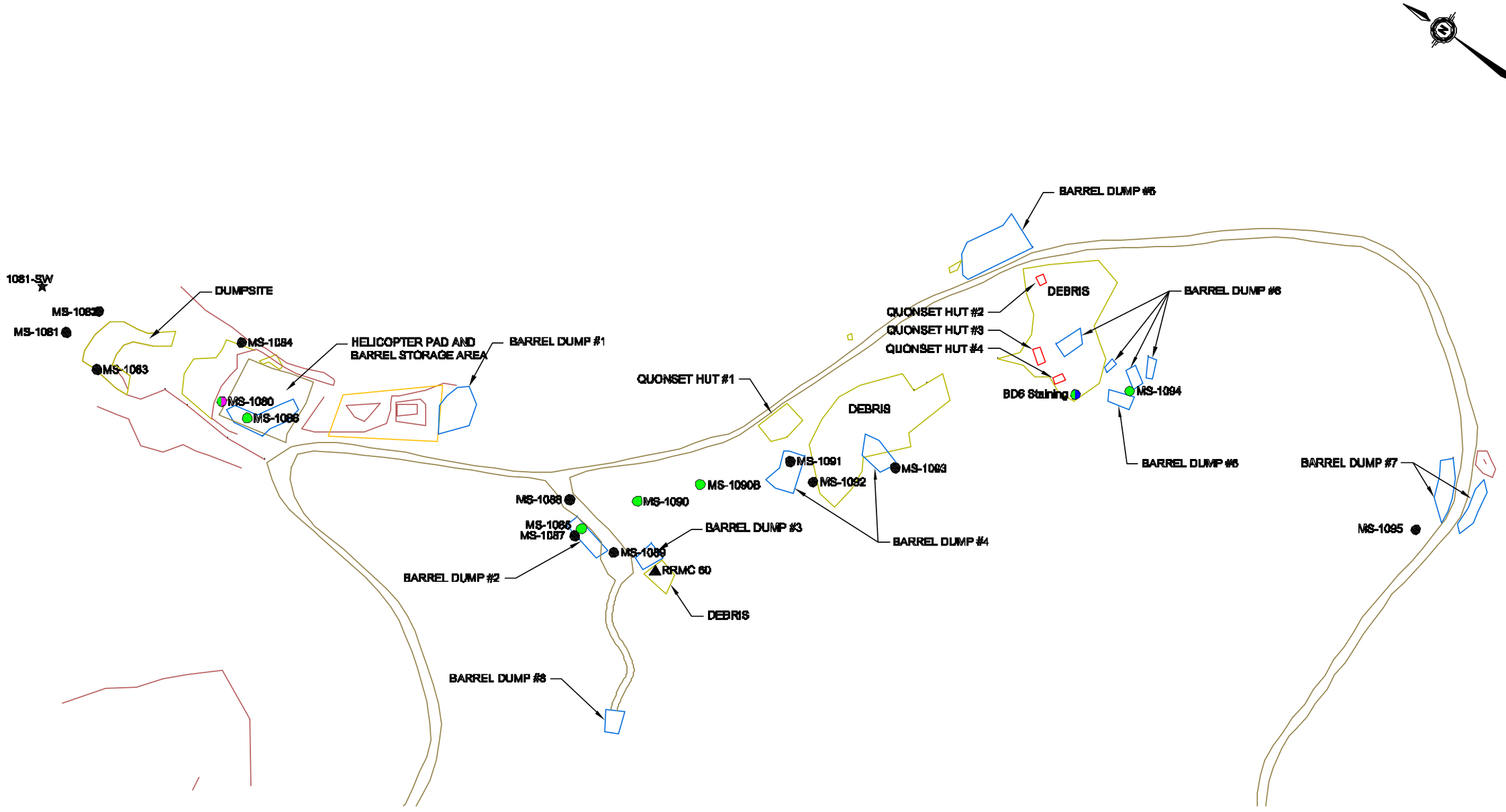
Legend

○ SOIL SAMPLE	PCBs EXCEEDANCE	PCBs CONTAMINATION PLUME
△ RRMC SAMPLE	METALs EXCEEDANCE	METALs CONTAMINATION PLUME
	PHCs EXCEEDANCE	PHCs CONTAMINATION PLUME
	PAHs EXCEEDANCE	PAHs CONTAMINATION PLUME
	NONE	

PWGSC
FOX–C DEW LINE SITE – WATER LAKE
SPILL CONTINGENCY PLAN
Figure 3.0



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Legend

○ SOIL SAMPLE	PCBs EXCEEDANCE	PCBs CONTAMINATION PLUME
△ RRMC SAMPLE	METALs EXCEEDANCE	METALs CONTAMINATION PLUME
☆ WATER SAMPLE	PHCs EXCEEDANCE	PHCs CONTAMINATION PLUME
	PAHs EXCEEDANCE	PAHs CONTAMINATION PLUME
	NONE	

PWGSC

FOX–C DEW LINE SITE – MID STATION

SPILL CONTINGENCY PLAN

Figure 4.0