



**GWICH'IN LAND AND WATER BOARD
WATER LICENCE APPLICATION**

**BOX 2018 INUVIK NT X0E 0T0
PH 867 777 4954 FX 867 777 2616**

SCHEDULE III

(Subsection 6(1) of the Northwest Territories Water Regulations)

**APPLICATION FOR WATER LICENCE, AMENDMENT OF LICENCE
OR RENEWAL OF LICENCE**

APPLICATION/LICENCE NO: _____
(Amendment or Renewal only)

1. NAME AND MAILING ADDRESS OF APPLICANT

Rhonda Batchelor (Project Coordinator – Environmental)
Box 1320 Yellowknife NT X1A 2L9

Telephone _____ 867 920 8011 _____
Fax _____ 867 873 0288 _____

2. ADDRESS OF HEAD OFFICE IN CANADA IF INCORPORATED

Same as above

Telephone _____
Fax _____

3. LOCATION OF UNDERTAKING

(Describe and attach a map, indicating watercourses and location of any proposed waste deposits)

Longitude 133 13 42 Latitude 68 17 05

4. DESCRIPTION OF UNDERTAKING

(Describe and attach plans)

Raising of road bed by 2 meters and replacement of current culvert crossing with 38.4 meter bridge

5. TYPES OF UNDERTAKING

- 1. Industrial _____
- 2. Mining and milling _____
- 3. Municipal _____
- 4. Power _____
- 5. Agriculture _____
- 6. Conservation _____
- 7. Recreation _____
- 8. Miscellaneous (describe) _____
Permanent bridge installation and roadbed raising
Geotechnical drilling at Water side

6. WATER USE

- To obtain water _____
- Flood control _____
- To cross a water course _____
- To divert water _____
- To modify the bed or bank of a watercourse _____
- To alter the flow of, or store, water _____
- Other (describe) _____
(Stream to be opened up by culvert replacement)

7. QUANTITY OF WATER INVOLVED

(Litres per second, litres per day or cubic metres per year, including both quantity to be used and quality to be returned to source)

8. WASTE DEPOSITED

(Quantity, quality, treatment and disposal)

9. OTHER PERSONS OR PROPERTIES AFFECTED BY THIS UNDERTAKING

(Give name, mailing address and location; attach list if necessary)

10. PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION

See attached Environmental Information Report

11. CONTRACTOR AND SUB-CONTRACTORS

(Names, addresses and functions)

To be Tendered

12. STUDIES UNDERTAKEN TO DATE

(Attach list if necessary)

Dillon Consulting (1998)
Dept. of Transportation

13. PROPOSED TIME SCHEDULE

Start Date: _____ March 2000 _____

Completion Date: _____ October 2000 _____

Rhonda Batchelor
Name (Print)

Project Coordinator - Environmental
Title (Print)

Original signed in Office
Signature

March 20, 2000
Date

FOR OFFICE USE ONLY

Application Fee Amount: \$ _____ Receipt No.: _____

Water Use Deposit Amount: \$ _____ Receipt No.: _____

Environmental Information Report

PERMANENT BRIDGE INSTALLATION AT CAMPBELL RIVER, DEMPSTER HIGHWAY (No. 8), KM 247

This Environmental Information Report outlines the PERMANENT BRIDGE INSTALLATION PROJECT at CAMPBELL RIVER and contains detailed project plans, construction procedures, and project background information. The information in this package follows the requirements of the *MVRMA Screening Report Form, Schedule III of the NWT Water Act*, and *Application for Authorization for Works or Undertakings Affecting Fish Habitat*.

SECTION A: Description of the Development:

This report pertains to the Department of Transportation's wish to replace the crossing at Campbell Creek, which is currently comprised of two 2.4 m (diameter) by 34.5 m (long) multi-plate culverts, with a 38.4 metre, two-lane permanent bridge possessing a pedestrian walkway at km 247 of the Dempster Highway (No. 8). Because of regular, though infrequent, overtopping events during freshet at this location, the roadbed will also be raised by two (2) metres.

The work is scheduled to begin in March, 2000 with geotechnical drilling along the downstream slopes immediately west of the existing culvert location. It is expected that up to six (6) holes, about ten (10) to twenty (20) centimetres in diameter, will be drilled by a truck mounted unit on either side of the creek but within the road right-of-way to determine the presence and/or depth of bedrock or permafrost.

Early in June, 2000, half of the existing road will be closed to vehicle traffic, while the other half remains open to serve as a one-lane detour around the construction site. At this point, the earthworks are slated to begin with the removal of the closed half of the road, including the soil and gravel covering the downstream half of the culverts currently in use at the crossing. The culverts themselves will remain in place at this time. The displaced material will then be used to raise the roadbed by the indicated two (2) metres and to construct the abutments on the west side of the proposed bridge. An additional source of fill will likely have to be found, since it is anticipated that there will be an inadequate recovery of on-site material for the roadbed and the bridge's extended side slopes. The abutments on the east side of the crossing site will take their final shape only at the end of the job, when the detour and culverts are removed.

Subsequently, a maximum of eighteen (18) 340mm (diameter) HSS (hollow structural steel) piles will be driven into each side of the crossing to a depth of eight (8) to twelve (12) metres, depending on the depth at which refusal is reached. The 'add-freeze' piles will then be filled with sand slurry and capped with concrete. A tie-back system

will be used on this stage of the structure's construction to avoid the need for additional, transversely-driven, or battered piles.

The bridge superstructure will then be assembled and launched, the detour removed, and the fill covering the culverts taken out. The culverts themselves will be lifted from beneath the new bridge, and the east abutments given their final shape and slope. Riprap will be placed to a thickness of at least a metre along the abutments from the toe of the slopes to the Ordinary High Water Mark, a run of approximately 2.5 metres.

No fuel will be stored at this site, since the close proximity of Inuvik (about thirty km northwest) will enable fuel trucks to keep the equipment supplied.

The bridge coordinates are:	Latitude	68°17'05" N
	Longitude	133°13'42" W

The site is found on topographic map 107 B/7.

Rationale

The Department of Fisheries and Oceans have become concerned that the crossing currently in use at Campbell Creek is a significant obstruction to fish migration during critical stages of their development and life cycles. The existing dual culvert system, it has been determined, creates a water velocity at the Campbell Creek crossing during freshet which is too strong for the migrating fish to swim against as they attempt to make their way upstream. In addition to these environmental concerns, this particular crossing represents a significant flood risk to one of the only access roads available to Inuvik, NT.

Ecosystem Profile:

The Campbell Creek is a winding water course whose watershed is constituted by approximately 354 km² of fairly flat terrain. The creek itself empties into Campbell Lake, which is located about 2.5 km downstream of the Dempster Highway crossing. Ultimately, the water discharges into the east channel of the Mackenzie River and the Mackenzie Delta. In very close proximity to the crossing location are two Territorial camp sites: one each to the east and west of the Campbell Creek crossing. The campsite on the west side of the highway lies approximately twenty (20) metres from the north bank of the Campbell Creek, while the campsite on the east side of the Dempster Highway begins at a distance of about fifty (50) metres south of the creek's ordinary high water mark.

The topography in the area immediately surrounding the proposed bridge site slopes slowly down to the creek bank, losing only three (3) metres of elevation over a distance of more than fifty (50) metres. Both the north and south sides of the creek exhibit this gentle decline towards the water across approximately thirty (30) metres of

flood plain to the north and some sixty (60) metres to the south. The soil across this flood plain area is clay silt mixed with a moderate amount of gravel and cobble, which is heavily populated by immature willows, grasses, horsetails, and sedges between the campsites and the water's edge. It thus exhibits the growth typical to an area which is enriched by regular flooding.

The distant perimeter of the flood plain in the area of the crossing is marked by a broad margin of thick willow growth, as is the entirety of the flood plain on the banks opposite the campsites, which gradually gives way to a northern boreal forest mixture of spruce trees (predominantly black spruce), tamarac, shrubs, and ground cover plants. Very few deciduous trees are present, with Alaskan birch being the rare exception. The shrubs most in evidence are hoary, grey, and flat-leaved willows, as well as buffaloberry (*Shepherdia canadensis*), and alder. There are also cranberry, bearberry (*Arctostaphylos uva-ursi*), dwarf rosemary, crowberry (*Empetrum nigrum*), and labrador tea shrubs throughout the forested area. Ground cover includes several wintergreen varieties, bedstraws, and leatherleaf. This plantlife is interspersed with feathermoss types, including stair-step moss, as well as sporadic lichens coverage

At the Campbell Creek crossing, the watercourse is about twenty (20) metres wide. Moving both up and downstream of the crossing, however, this width varies considerably, but becomes generally narrower than it is at the point at which it meets the Dempster Highway. Few sand or gravelbars are evident beyond the single lightly-grassed sandbar that extends east from the north bank just upstream of the crossing. The creek's substrate consists of heavily cobbled silt, with moderate boulder coverage apparent. On the upstream side of the crossing, the slow current permits a lush growth of aquatics, most notably bur-reed. There are also moderate amounts of large organic debris evident along the watercourse, which is probably owing to the regular flooding experienced in this area.

The banks of Campbell Creek are, for the most part, clearly defined. Willow overhang of up to a metre provides ample riparian cover on both banks on the downstream side of the crossing, while only the north bank bears this sort of cover on the upstream side for a distance of approximately 100 metres. The organic debris provides additional instream cover for the substantial fish population which makes use of this stream.

Wildlife in the area is consistent with the forage suggested by the vegetation. Moose, woodland caribou, beaver, muskrat, and hare are commonly evident throughout the area, as are assorted small predators: mink, weasels, and fox. The area is also reported to be used by ducks and other migratory birds for foraging and an historical presence of such raptors as peregrines has also been noted in the area.

According to the study of the region conducted by Dillon Consulting, Campbell Creek experiences high usage by several fish species during their life cycles ("Campbell Creek Site Assessment" pp. 34-36). Such species as northern pike and inconnu are believed to migrate to this area during spring to spawn in the grass and gravel habitat provided by the creek, while lake and broad whitefish, grayling, trout-perch, pike, and

lake chub all use the area for forage during the spring, summer, and fall months. Slimy sculpin, juvenile burbot, and longnose suckers have also been reported to frequent the area ("Campbell Creek Site Assessment" p. 34, "Dempster Highway Environmental Overview", 1975).

The construction schedule overlaps with both summer forage and fall migration activities, so all possible sedimentation and silt control measures will be taken. Only the Dillon Consultants' 1999 Hydrological and Hydraulic Assessment and the Department of Transport's 1975 study have been conducted in this area.

Description of the Undertakings:

1. Pre-construction

In March of 2000, geotechnical drilling will be carried out at this site by a truck mounted unit. Six (6) holes of ten (10) to twenty (20) centimetres' diameter will be drilled to a depth of about eight (8) to twelve (12) metres.

In early June, the equipment necessary to all phases of the project will be mobilized to the site. This will include:

- Track Backhoe (EL300 or equivalent)
- D6 H Cat Bulldozer
- Fifty (50) ton crane
- Two Dump Trucks
- Diesel Hammer Pile Driver
- Concrete Batch Plant
- Loader (Cat 950)
- Geotextile fabric

All construction material and equipment will be stored well beyond the high water mark of the Campbell Creek, along the Department of Transportation's right of way, and measures will be taken to ensure that no debris enters the water at any point during the equipment's storage and use.

2. Earthworks

In June of 2000, the existing road will be partially closed to traffic, while the west side of the roadbed and underlying material are removed to be used as common fill for the side slopes on the west side of the north and south approaches to the bridge. Clean soil and gravel will be obtained to construct the abutment slopes themselves, with a one metre thickness of riprap being placed along their lower 2.5 metres, right to the toe of the slopes. This stage of the process will be preceded by the installation of a floating silt curtain at a distance of about two (2) metres from the eventual toes of the abutments' slopes to enclose the sedimentation that will result from advancing the abutments beyond the bank into

the watercourse. As the preliminary design drawing suggests, the new abutment toes will extend about seven (7) or eight (8) metres into the scoured area immediately adjacent to the culverts' outlets. This loss in fish habitat will be compensated by the ultimate removal of the culverts themselves.

During this stage of the project, extensive approaches to the new crossing will also be constructed. Because the bridge will be offset from the centre line of the existing road alignment, the new approaches will begin their decline from the roadbed about 7.5 metres farther west than they currently do. As well, to accommodate the change in the existing road alignment, these approaches will extend one hundred (100) metres from the bridge to the north and one hundred fifty (150) metres along the Dempster Highway to the south.

These procedures will mark the end of the first phase of the earthworks. The second phase will begin only after the bridge is constructed and put in place, during September, 2000. At that point, traffic will be allowed to use the bridge, while the existing roadbed and underlying material are removed, with much of it being incorporated into the approach slopes on the east side of the new superstructure at the ends that are farthest from the waters of Campbell Creek. Using a backhoe, the remaining soil over the culverts will be removed, and the culverts themselves will be lifted from the streambed.

It is anticipated that all work at this site will be completed by October 2000, with site clean-up, reseeding, and equipment demobilization.

3. Bridge Pre-Construction

In June 2000, the Dempster Highway will be barricaded midway along its length for a distance of approximately one hundred fifty (150) metres both north and south of the Campbell Creek crossing. This arrangement will produce a one lane detour, through which traffic will be able to flow alternately in both directions.

4 . Construction and Launch of the Bridge Superstructure

Four (4) I-beam girders will be set along the piling cap by crane, and bolted into place. Atop the secured girders, concrete forms will be constructed and the deck poured, complete with curbs. The bridge rail will then be installed along the curb, as will the handrail along the west edge of the pedestrian walkway.

5. Construction of the Bridge Approaches

Once the bridge superstructure is in place, the final approaches to the bridge will be constructed. This work will be conducted wholly along the new alignment's right-of-way. It will involve the final distribution of common fill and gravel to create permanent approaches and stable side slopes. The approaches will then be seeded with 'Winter Road Mix' and fertilized. This mix is constituted by a mixture of wheat grass, meadow foxtail, red fescue, and timothy grass.

SECTION B: PHYSICAL / CHEMICAL EFFECTS

1. Ground Water

There will be no effect upon the ground water from this project.

2. Impacts to Surface Water Quality

There will be a temporary and controlled effect on the creek when the west abutments are installed and when the culverts are extracted from the watercourse. This effect will be caused by the introduction of soil for the abutments and the disturbance created by the culverts' removal. Sedimentation and siltation control methods will be employed.

Since the existing roadway will be used as a detour, no instream crossings by any equipment will need to take place.

Long term effects on water quality, stream flow, and fish habitat should be positive, as the new crossing will eliminate the recurring problem for fish migrating through the crossing. Construction activities, however, may present a risk of surface water contamination:

A) Fuel Spills and Leaks

The work will involve heavy equipment and the delivery of fuel; therefore there is always a chance that a spill could occur. Diesel fuel and other combustible fluids will be used on the job site during the operation of heavy machinery, but not stored there. Fuel Spills could occur at the following times:

1. Transfer of the fuel from the fuel trucks to the machinery
2. As a result of leakage from working machinery
3. As a result of a fuel truck accident, en route to or from the work site

Discussion and Mitigation

Fuel will be delivered to the site as required by fuel truck, supplied from a local station. Vehicles will be refueled in a designated area, at least 100 metres beyond the high water mark. The use of fuel and all hazardous materials will be subject to a Spills Contingency Plan which is attached. All DoT personnel and contractors will be familiar with the Spills Contingency Plan. A copy of the plan will be on the work site at all times.

B) Storage of materials

Gravel, riprap, and excavated material, will need to be stored on site, but the intervals will be brief, since they will be used almost immediately upon their acquisition.

Discussion and Mitigation:

All materials will be stored safely, on-site, well back of the creek high level mark. There will be no chance of material contaminating the water body. There will be no hazardous materials involved. All waste materials will be removed from the site following construction activity and will be disposed of appropriately.

C) Erosion and damage to the stream-bed / sediment loading

Substantial amounts of fill will be both introduced and removed from the watercourse during this project's completion.

Discussion and Mitigation

Erosion and siltation control measures will be fully employed during and after construction. At the areas of excavation in and near the river, floating silt curtains will be employed during construction. Riprap and reseeded will be used to control post-construction erosion.

3. Noise

The intermittent stages of the construction activity will generate a fair amount of noise. Loaders, dump trucks, and bulldozers will be active throughout the work period. This heavy equipment will be required to prepare the site and construct the new bridge. The work will be performed on the Dempster Highway at the Campbell Creek crossing, so no settlements will feel the impingement of noise levels. The closest communities to this area are Inuvik (25 km to the north of the crossing) and Tsiigehtchic (104 km south of the proposed bridge site). Noise in these areas should not be a problem for human residents.

Fish and wildlife will inevitably be disturbed during the construction intervals by the noise produced at this site, but the term for this disturbance should be brief.

4. Land

There should be no negative impacts on the area land resources.

5. Non-Renewable Resources

There will be no impact on non-renewable resources.

6. Air / Climate / Atmosphere

There should be no impact on air, climate or water quality.

7. Deposition of Waste

There will be no waste deposited in the Ochre River. All construction and camp waste will be transported away from the site and disposed of appropriately.

SECTION C: BIOLOGICAL ENVIRONMENT

1. Vegetation

The area around the bridge site is heavily vegetated. Thick margins of willow line both banks of Campbell Creek at a short distance both up and downstream from the crossing. Immediately to either side of the crossing, grass and sedges grow prolifically. The right-of-way will be reseeded following construction. The newly constructed approach and abutment slopes will be planted with a grass mixture to both limit erosion and to create riparian cover for fish.

2. Wildlife and Fish

As noted, the creek is likely a forage and/or a spawning area for sculpin, suckers, whitefish, grayling, and northern pike. Juvenile fish may remain in the creek until winter where they likely move into larger rivers. During these months, it seems likely that they act as prey for the larger of the species.

Discussion and Mitigation

Because some fish species spawn in the fall, construction activity may overlap with the fall migration. Although flow disruptions are anticipated, it is expected that they will be brief. Every possible effort will be made to maintain water quality at all times. The activity and noise levels of the construction also will likely disturb local wild populations. These disturbances will be temporary, however, and cannot be avoided if the bridge is to be constructed.

Negative impacts from construction will be mitigated with known technologies. Geotextile fabric will be used to construct silt curtains in order to contain and collect silt and sediment from the abutment construction. The project will not result in a net loss of fish habitat since the watercourse itself will be opened to a far greater extent than it will be narrowed by the construction of the abutment slopes. The net effect of this project should be advantageous since the permanent structure will reduce recurring migration and overtopping problems at this crossing.

SECTION D: Interacting Environment

1. Habitat and Communities

There should be no permanent negative impact on the habitat and communities in the area. The job itself has the objective of alleviating an unfavourable condition for fish migration through this crossing.

2. Social and Economic

The bridge and road alignment construction should have a positive socio-economic impact on the adjacent communities through short-term employment , long term safe transportation corridors, and a radical reduction in the number of overtopping events experienced at Campbell Creek.

Summary of People affected by the Undertakings

There should be no individuals negatively affected by the undertakings. This permanent bridge should, in fact, improve travel across this crossing by eliminating the danger of overtopping, except in extreme flood situations. Individuals or communities downstream could be negatively affected in the event of a fuel spill.

3. Cultural and Heritage

There should be no negative impacts on heritage or cultural resources.

SECTION E: RECEIPIENTS OF ENVIRONMENTAL INFORMATION REPORT

Copies of this application have been distributed to:

**The Department of Fisheries and Oceans
The Department of Indian Affairs and Northern Development
The Department of Renewable Resources
Gwich'in Land and Water Board**

SECTION F: SUMMARY AND CONCLUSIONS

The proposed work will see the installation of a permanent bridge at Campbell Creek km 247 of the Dempster Highway (No. 8). The work will be undertaken from March to October 2000.

Silt curtains and a heavy layer of riprap will be put in place while the abutment slopes are being constructed, and all excavated areas will be reseeded once construction is completed to reduce erosion.

Demobilization will be carried out expeditiously and carefully, with all equipment and any waste materials being transported out of the area.

**Spills Contingency Plan
Permanent Bridge Installation
Campbell Creek, KM 247, Dempster Highway (No. 8)**

SECTION A: BACKGROUND

Dates of Operation: March to October, 2000

Project Description: The Department of Transportation intends to install a permanent bridge at this location.

Site Description: This work will take place along the new road alignment of the Mackenzie Highway Winter Road at the Ochre River crossing. The coordinates for the new bridge are

Latitude 68°17'05"N
Longitude 133°13'42" W

Types of Contaminants: Diesel fuels and vehicle lubricants will be used on the work site.

Storage of Contaminants: Fuel will not be stored on-site for equipment .

Use of Fuel Truck/Route: When necessary, fuel will be transported locally from Inuvik.

Spills Containment and Clean Up Training: The Construction Foreman has reviewed the 1997 NWT Spills Containment and Clean Up Course

SECTION B: POTENTIAL SPILL INCIDENTS:

1. Refueling of Vehicles

Incident: Refueling hose could break, spring a leak, fall out of the gas receptacle, or the tank could be overfilled, thereby spilling fuel on the refueling area.

Consequences:

- i) Limited area puddles of fuel
- ii) Hose breaks off at truck, spraying large amount of fuel over a large area; slick flows steadily from truck

Preventative Measures:

- i) All refueling should occur in an area well back of the high water mark. Crew should be aware of emergency shut-offs
- ii) Site should be stocked with a complement of spills management material

2. Vehicle Storage and Operation:

Incidents: Vehicles could leak fuel while in operation or during overnight storage. Vehicles could experience mechanical problems, discharging fluids.

Consequences: At best, small puddles of fuel, at worst, the entire contents of the vehicle tank could be discharged.

Preventative measures:

- i) Vehicles should be stored in an area well back of the high water mark.
- ii) Site should be stocked with a minimum complement of spills management materials (Sphagdry Spill Kit)

3. Fuel Truck Accident en-route to site

Incident: Fuel truck has accident and overturns while servicing site.

Consequences: Worst case scenario, truck overturns, potentially discharging contents over a wide area. Accident could happen without knowledge of DoT or the Contractor.

Preventative Measures:

- i) Coordination and communication between DoT, Contractor, and fuel supplier, including routes and times of delivery

- ii) The fuel supply company should have a Spills Contingency Plan
- iii) The fuel truck should be stocked with spill containment equipment
- iv) The DoT personnel and the construction crew should be prepared to mobilize to contain the spill. The on-site crew may be the closest equipment to the spill

4. Fuel Storage Tank

Incidents: Fuel could leak from the tanks during refilling
Fuel could leak from the tanks while standing

Consequences: At best, small puddles of fuel, at worst, the entire contents of the tank could be discharged.

Preventative Measures:

- i) Regular visual checks should be carried out to ensure no spills have occurred.
- ii) All tanks should be stored at a safe distance from the ordinary high water mark.
- iii) Site should be stocked with a minimum complement of spills management materials (Sphagdry Spill Kit)
- iv) Crews should be aware of emergency shut off valves for the tanks.
- v) All tanks should be enclosed by adequate berms and/or dykes

Section C: List of On-Site Spills Containment and Management Equipment

Heavy Equipment	Remove soiled material, construct containment ditches, etc
Hand Tools	same
Spill Kit	45 gallon drums of sphagnum absorbents, gloves, disposal containers for immediate removal of contaminated materials

Section D: Spills Reporting Procedure

Contact Phone Numbers:

NWT Spills Hotline: (867)-920-8130

Department of Transportation
Head Structures Section, Ranjit Tharmalingam (867)-873-7564
Construction Foreman, Peter Praetzel (867)-920-6469
Manager, Environmental Affairs, Marcy Bast (867)-873-7063

Contractors

To be tendered

NWT Water Board (867)-920-8191

Department of Fisheries and Oceans
Area Habitat Biologist, Pete Cott (867)-669-4912

Environment Canada; Environmental Protection Division
Stephen Harbicht (867)-669-4700

Department of Indian and Northern Affairs
David Jessiman (867)-669-2660

Municipal and Community Affairs
Environmental Planner, Mark Davy (867)-920-8038

Section E: Spill Response Procedures

The following procedure is to be followed in the event of a spill. Steps are listed in the order of importance; however, depending on circumstances, conditions, and potential injuries, this order may need to be altered to meet specific needs.

1. Identify the product spilled:

If the identity is unknown, and if identification means further risks, then action must be based on the assumption that the product is extremely dangerous. The crew is not to smell, taste, touch or attempt to reach ruptured containers if they are surrounded by the contaminant.

2. Assessment of dangers and hazards:

Immediate determinations must be made about the direction of the spill's progress, whether downhill, towards the water, or already in the water. As well, careful attention will be paid to the full nature of the incident: is this solely a surface contaminant, or are fumes an additional factor; are there any injuries current or possible.

3. Stop the flow at source:

Has the flow been stopped or is it still leaking? Is there an emergency Shut-off valve? Have holes in the container been patched? Is the container empty? PRECAUTION: ONLY ATTEMPT TO STOP THE FLOW IF IT IS SAFE TO DO SO.

4. Take actions to contain the spill:

Prompt containment can reduce environmental exposure and risk. Containment measures may be land or water based. Land based measures include application of sorbants, construction of berms and diversion/collection trenches. Water based measures could include dams, dykes, and floating booms.

5. Report Action to the NWT Spills Hotline:

When calling the NWT Spills Hotline, the person reporting the spill shall give as much of the following information as possible:

- date and time of spill
- direction spill is moving (or if it has stopped)
- name and phone number of persons close to the location of the spill
- type of contaminant spilled and quantity spilled
- cause of spill
- whether the spill is continuing or has stopped

- description of the existing containment
- Actions taken to recover, clean-up and dispose of spilled contaminant
- Name, address and phone number of person reporting the spill
- Name of person in charge of management or control at time of spill

NOTE: The operators for the Spills Hotline are NOT experts in spill management. The information supplied to them is for relay purposes only.

Section F: Reporting Procedure Chain of Events

1. Worker Notices spill
 - a) Is the source of the spill still flowing?
 - b) Can the source be safely turned off? - If yes, turn off.
2. Worker notifies DoT construction foreman or supervisor

Depending on circumstances:

- a) the project engineer or foreman will either decide to take immediate actions to stop the source of the flow or contain the flow

Or

- b) the project engineer/foreman calls the NWT Spills Hotline to file a report and request further information about who should be called.

3. Foreman or Project Engineer notifies:

DoT Inuvik and Yellowknife
Community of Inuvik

The NWT Spills Hotline notifies:

Environment Canada
Department of Indian Affairs and Northern Development
Department of Fisheries and Oceans

4. The on-site personnel receive directions about the appropriate personnel to call from the NWT Spills Line
5. The appropriate personnel arrive on site to clean-up/contain the spill