

# **Spill Contingency Plan Canadian Forces Station Alert (ALT), Nunavut**

In support of the  
Nunavut Water Board Licence  
No. 8AC-ALT1929

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Prepared for:  
1 Canadian Air Division,  
Department of National Defence

Originally prepared by:  
Environmental Services  
Defence Construction Canada

Revised by:  
8 Wing Environmental Management  
Department of National Defence

## **Revision Control Page**

<b>Revision No.</b>	<b>Revised By</b>	<b>Date</b>	<b>Issue/Revision Description</b>
1.0	FSC Architects & Engineers	March 2009	Draft.
2.0	Defence Construction Canada	November 2010	Final.
3.0	Department of National Defence	January 2014	Final. Updated: licensee contact, contact lists, fuel tank systems. Added Section 4.4 for the Aboveground Fuel Pipelines.
3.1	Department of National Defence	December 2019	Updated: Licence No, contact lists, licensee contact, changed AANDC to CIRNAC and MSDS to SDS, minor formatting changes, updated SIRS reference in 5.1.3. Added updated SDS sheets for diesel fuel and jet fuel. Added Fuel Management section.

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## **Acronyms**

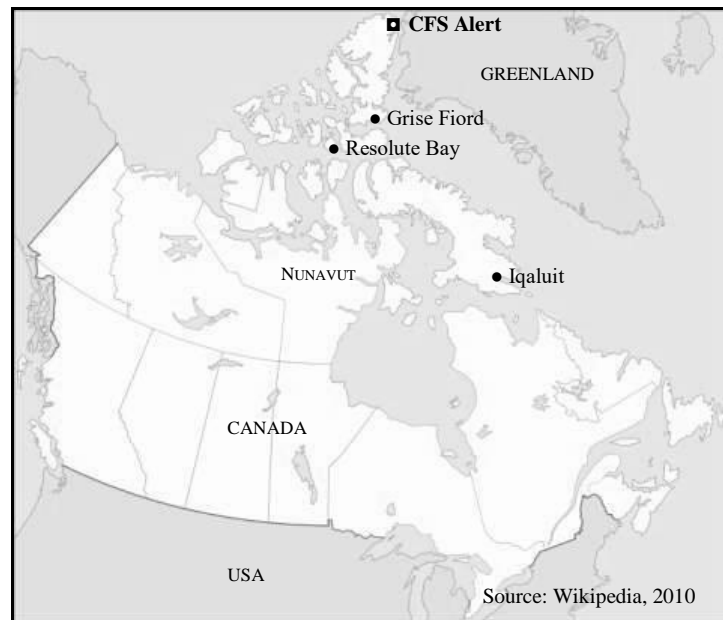
1 CAD	1 Canadian Air Division
8 Wing	8 Wing Trenton
BFDS	Bulk Fuel Delivery System
CARF	Consignment Authorization and Receipt Form
CFS	Canadian Forces Station
CIRNAC	Crown Indigenous Relations and Northern Affairs Canada
DFA	Diesel Fuel Arctic
DND	Department of National Defence
ECCC	Environment and Climate Change Canada
E2P	Environmental Emergency Plan
ERT	Emergency Response Team
HazMat	Hazardous Materials
HazWaste	Hazardous Waste
KIA	Kitikmeot Inuit Association
LTF	Lower Tank Farm
NT-NU	Northwest Territories- Nunavut
NWB	Nunavut Water Board
O&M	Operation and Maintenance Plan
POL	Petroleum Oil Lubricants
QA/QC	Quality Assurance/Quality Control
SDS	Safety Data Sheet
SWO	Station Warrant Officer
UTF	Upper Tank Farm
WHMO	Wing HazMat Officer
WEnvO	Wing Environment Officer



# 1 Introduction

This contingency spill plan for Canadian Forces Station (CFS) Alert has been created to address the requirements of the Nunavut Water Board (NWB) under licence number 3BC-ALT1015 issued to the Department of National Defence (DND) on August 5, 2010 and updated December 2019 to reflect changes under licence no. 8AC-ALT1929 issued to DND on November 1, 2019.

CFS Alert is situated on the north-eastern tip of Ellesmere Island, approximately 817 kilometres from the geographic North Pole at coordinates (lat/long) 82°28' N, 62°30' W. (UTM) Easting 552375.7996584666, Northing 6874583.726844844 (Map sheet number 120E05).



The station has been in continuous operations as part of the Canadian Military since September 1958. Staffing on site typically ranges from 50 to 100 military and civilian individuals although for short durations the population can rise to 400 during military exercises.

## 1.1 LICENCEE INFORMATION

8 Wing Environmental Management  
74 Polaris Avenue, Room 305  
PD Box 1000 Stn Forces  
Astra, ON K0K 3W0

On behalf of:

Assistant Deputy Minister (Infrastructure & Environnement) (Carling)  
C/O : Canadian Forces Real Property Operations Group  
Real Property Operations North, Chief of Staff North,  
60 Moodie Drive  
Ottawa, ON, K1A 0K2

## **1.2 INFORMATION OF 24 HOUR CONTACT**

Alert Commanding Officer

## **1.3 GENERAL DESCRIPTION OF THE PROPERTY**

### *Fuel Storage*

The station's Petroleum Oil Lubricant (POL) System consists of a Lower (i.e. airfield) Tank Farm (LTF) located adjacent to the airstrip, an Upper Tank Farm (UTF) midway between the airfield and the station, and a Day Tank at the station. Refer to Photo 1 below and Appendix A, Figure 1. Three types of fuel are used and stored on site, and include JP-8 aviation fuel, diesel fuel arctic and ultra-low sulphur diesel. Fuel consumption at the station is approximately 2,500,000 L/year, most of which is used for power generation and heating.

CFS Alert flies in all the fuel using CC130 Hercules and C-17 Globemaster aircraft. The Bulk Fuel Delivery System consists of several aluminum tanks that are locked into the aircraft cargo compartment, carrying between 16,000 L to 18,000 L per load. When an aircraft lands, the fuel is transferred to two 455,000 L aboveground storage tanks at the LTF near the airstrip. From the LTF diesel fuel arctic is transferred to the UTF, and then led to the Day Tank to supply the station. Any refuelling of aircraft is conducted using fuel from the two-236,000 L JP-8 Aviation Fuel Tanks at the LTF. Vehicles are refuelled from the one 31,400 L ultra-low Sulphur diesel tank at the LTF.

Fuel from the aircraft wings is transferred by the aircraft's pumps. Fuel from the Bulk Fuel Delivery System (BFDS) tank, which is mounted in the cargo compartment of the aircraft is transferred through a 4-inch receiving/transfer coupler manifold at the back of the aircraft to the DFA tanks. The station then transfers the DFA fuel from the LTF to the UTF.



Photo 1. Upper Tank Farm at CFS Alert

#### *Water Supply*

The station's potable water is pumped 2.5 kilometres from Upper Dumbell Lake in a 100 mm diameter aboveground insulated/heated high density polyethylene water line; this is known as the Intake Line. A 50 mm diameter water line (parallel to the intake line) returns untreated (raw) water that has run the 2.5 km pipeline to the Water Treatment Plant back to the source to prevent the intakes from freezing; this is known as the Return Line. The three water intake points are positioned well below the thick ice that forms on the lake. The water is treated, chlorinated and stored in two-227,000 L storage tanks in the Water Treatment Plant Building, and distributed aboveground throughout the station through an independent water distribution system. Buildings at the station supplied with water are identified in Table 1 below. In fall 2010, three magnetic flow meters on the water system were installed on the main Intake Line, the Return Line, and the distribution (Consumption) Line.

#### *Wastewater/sewage*

The station is also serviced by a combined sewage and greywater collection system with insulated/heated high density polyethylene pipeline (i.e. Black Pipeline); this is known as the Sewage Line. The system discharges the wastewater into a new Terrace System, which in turn discharges into Dumbell Bay. Buildings at the station connected to the sewage system are identified in Table 1 below.

Table 1. CFS Alert building and water/sewer status.

<b>Building</b>	<b>Water</b>	<b>Bleeder</b>	<b>Sewer</b>	<b>Status</b>
Water Treatment Plant	Yes	No	Yes	Operational
Standby Power Plant	Yes	Yes-1	Yes	Operational
Main Power Plant	Yes	No	Yes	Operational
Main Supply & Warehouse	Yes	Yes-1	Yes	Operational
Main Workshop & Firehall	Yes	No	Yes	Operational
Maintenance Transport	Yes	No	Yes	Operational
Transport Storage Building	No	No	No	Operational
Main Ops	Yes	Yes-1	Yes	Operational
Chimo Quarters	Yes	Yes-2	Yes	Operational
Ladner Quarters	Yes	Yes-2	Yes	Operational
Whitehouse Quarters	Yes	Yes-1	Yes	Operational
Churchill Hall	Yes	No	Yes	Operational
Cold Storage Building	No	No	No	Operational
Incinerator Building	Yes	Yes-1	Yes	Operational
Gymnasium Building	Yes	Yes-1	Yes	Operational
Curling Rink Building	No	No	No	

## **2 Project Facility Description**

### **2.1 WASTEWATER/SEWAGE**

The wastewater collection and discharge system is designed to prevent freeze ups. The wastewater flows under gravity, the system was designed so there are no low locations where the wastewater may accumulate and freeze. There are several different piping arrangements for the wastewater collection system. Each support building has a single wastewater line that joins before crossing the compound at the southeast end to discharge to the wastewater (i.e., sewage) outfall. The main complex has a separate wastewater pipe that collects wastewater from the complex and discharges it to the wastewater (i.e. sewage) outfall. Food waste is disposed of through a garbage disposal unit (i.e., garburator) connected to the wastewater collection system.

### **2.2 SOLID WASTE**

All combustible garbage is compacted, bailed and incinerated before disposal at the dump site.

## **2.3 FUEL STORAGE**

CFS Alert fuel storage facility consists of a total of 16 fuel tanks at the following three locations: UTF, Day Tank Farm and LTF. The UTF, comprised of eight tanks, uses pumps to feed the Day Tank which supplies diesel fuel arctic to the main station. The LTF comprised of seven fuel tanks, is situated adjacent to the airstrip, refer to Appendix A, Figure 2 for the location of the fuel storage tanks. The number of tanks, tank sizes, locations and contents are as follows:

Table 2. CFS Alert Fuel Tank Summary

<b>Location</b>	<b>Number &amp; sizes of Tanks</b>	<b>Contents</b>
Upper Tank Farm	8 X 455,000 L	Diesel fuel Arctic
Day Tank Farm	1 X 30,000 L	Diesel fuel arctic (supplies main station)
Lower (i.e., airfield) Tank farm	2 X 455,000 L 1 X 236,000 L 2 X 236,000 L 1 X 236,000 L 1 X 31,400 L	Diesel fuel arctic Diesel fuel arctic JP8-Aviation fuel Ultra-low sulphur diesel Ultra-low sulphur diesel (day tank for fuelling vehicles)

## **2.4 CHEMICALS AND HOUSEHOLD DETERGENTS**

The only chemicals used on the station are typical household cleaners/detergents for cleaning and laundry, and chlorine for treating the stations potable water at the Water Treatment Plant; as a result, wastewater from CFS Alert is non-hazardous in nature.

## **2.5 SAFETY DATA SHEETS**

Refer to Appendix B for the Safety Data Sheets (SDS) for diesel and JP8 fuel.

# **3 Type and Amount of Contaminants Stored at Site**

## **3.1 DOMESTIC SEWAGE**

Domestic sewage is not stored on site; it is piped through a gravity collection system to the sewage outfall. There is no lift station where sewage may accumulate.

## **3.2 SOLID WASTE**

All combustible garbage is compacted, bailed and incinerated before disposal at the dumpsite.

### **3.3 WASTE LUBRICANTS**

All waste lubricants are used to fuel the waste oil furnace in the garage.

### **3.4 FUEL**

As previously indicated diesel arctic fuel, JP8 and ultra low-sulphur diesel fuel are stored in 16 fuel tanks at the station. Refer to Appendix A, Figure 2 for tank farm locations at CFS Alert.

### **3.5 CHEMICALS AND HOUSEHOLD DETERGENTS**

All products are purchased in Canada, and where required, registered with applicable legislation.

### **3.6 RADIOACTIVE MATERIALS**

No known radiation sources are stored on site, unless as part of telecommunications systems. They are all removed and shipped to the support base for disposal if/when required.

## **4 Spill Prevention Measures**

### **4.1 DOMESTIC SEWAGE**

The sewage system is designed to be in continuous motion to prevent blockage and breakage due to freeze-up. Sewage lines run through the heated spaces in the buildings before entering the outfall line. No chemicals, petroleum products or waste other than sewage and garburated food scraps are permitted to be disposed of via the wastewater collection system.

### **4.2 SOLID WASTE**

All combustible is compacted bailed and incinerated in proper facilities to ensure safe disposal.

### **4.3 FUEL STORAGE**

The 31,400 L and 30,000 L fuel tanks are doubled walled; one tank is located at the Ultra-low Sulphur Diesel dispensing site (and connected to the one 236,000 L ultra low sulphur diesel fuel tank system in the Lower Tank Farm) and one tank at the Day Tank Facility (connected to the Upper Tank Farm). All other tanks are housed within containment berms, and include:

Upper Tank Farm:

- Eight 455,000 L diesel fuel arctic tanks

Lower (i.e. Airfield) Tank Farm:

- Two 455,000 L diesel fuel arctic tanks
- One 236,000 L diesel fuel arctic tanks
- Two 236,000 L JP8 aviation fuel tanks
- One 236,000 L ultra low-m sulphur diesel fuel tank

Conditions along with effluent limits for discharge of contained materials and water accumulation in the secondary containment (i.e. berm) at the tank farms are outlined in the CFS Alert's Operation and maintenance (O&M) Plan. Conditions specify that water will be sampled and analysed from the secondary containment prior to the release of effluent to ensure the water meets the NWB criteria.

When transferring fuels only trained personnel operated and supervise the transferring process. Sumps and fuel storage tanks are located at a distance greater than 31 m from any water body high water mark and inspected regularly. Maintenance and servicing of equipment is to be conducted only in designated areas. Secondary containments such as drip pans and portable berms are to be used to manage vehicle fluids and contain potential product releases.

### **4.4 ABOVEGROUND FUEL (POL) PIPELINE**

A new aboveground fuel pipeline was commissioned in September 2013, and extends around the Main Station Complex (Appendix A, Figure 3). There are seven (7) pipeline air bridges at road crossings.

In the event of an emergency arising in which there is either a known leak or other loss of product with the fuel system:

1. Evacuate any unsafe areas immediately.
2. Switch off all pumps (located at the Day Tank Facility Pump house Building) and other electrical equipment if it is safe to do so.
3. Close dispenser valves
4. Close all tank valves.

5. Notify the Station Fire Chief (Smokey) and the Emergency Response Team as soon as it is safe to do so.
6. Implement Section 5.1 of this Spill Contingency Plan.

## **4.5 FUEL MANAGEMENT**

### **Daily Inspections**

The intention of the daily visual inspection is to look for evidence of pipeline failures in order to mitigate a potential spill but it is understood that not all of the pipeline can be easily seen from a vehicle due to distance and snow cover. In 2013 an additional 1.15 km of above ground pipeline was added to the POL infrastructure, bringing the total above ground pipeline to 2.65km,

### **Weekly Inspections**

For personnel safety, the inspection/walking of the POL pipeline as shown in this Drawing will be a two person procedure throughout the year.

### **Monthly Inspections**

For personnel safety, the inspection/walking of the POL pipeline as shown in this Drawing will be a two person procedure throughout the year.

### **Main Day Tank Compound Area – Daily:**

- Personnel will proceed to Building 15, the Pump House at the Main Day Tank, and will undertake a visual inspection of the Main Day Tank pipeline compound for leaks.
- The visually inspection will include the Main Day Tank, associated piping inside the berm, piping to the fuel pump house, piping inside the fuel pump house, piping within the immediate vicinity of these facilities, and the pumps.
- The visual inspection of the Main Compound area will occur once daily before refueling activity.
- This visual inspection of the Main Day Tank compound cannot be undertaken simultaneous with re-fueling operations and is a new duty with the installation of the new POL infrastructure.
- Keep entire system area free from all safety, fire and explosive hazards.
- Ensure fire extinguishing equipment is easily accessible and not located near installations where fire would make it impossible to reach.

### **Annually**

- Each year, preferably in the spring, the Petroleum mechanic will carry out a detailed inspection of the general condition of the buildings, tanks, lines, pumps, fences, roadways, drainage, etc.. Any defects noted during this and other inspections are to be promptly reported in a CM work request and repairs affected as soon as possible.



- Each autumn, special precaution shall be taken in cold weather to ensure water does not freeze in pump bleeders, small drains, traps, small pipelines, pumps and valves which may cause damage. Certain types of portable foam fire extinguishers and instruments with liquid seals shall be stored in buildings where the temperature does not fall below freezing. A special inspection is to be made each autumn to see that these precautions have been taken and that all drains are functioning correctly.

### **Pumping Stations**

The pump inspections shall be done for all station POL pumps including the lower tank farm pumphouse, upper tank farm pump house and pump house B015.

All pumps are to be inspected for alignment, wear condition of valves, packing, seating of valves, corrosion, lubrication etc.

Check pump grease cups and refill accordingly. (Only grease supplied or approved by the pump manufacturer is to be used).

### **Pumping water from Dykes and Berms**

Before any dyke is pumped,

1. notification to 8 Wing Environment is required, as soon as possible,
2. obtain approval from the Nunavut Water Board and CIRNAC Inspector. Dyke water is now a controlled and regulated substance where the disposal (pumping) requires approval.
3. Testing is occurring before pumping, as of 2011.
4. 8 Wing Environmental Management conducts the testing and pays for the analytical as per management of the Nunavut Water Board Licence.
5. After receipt of the analytical results, a 10-day notice to the CIRNAC Inspector for the intent to pump dyke water is required.
6. If water is contaminated, usage of the water filtration system at CFS Alert shall be used to pump the dyke,
7. Water to be tested at the beginning, middle and end of the pumping process.
8. Pumping should be conducted in the presence of 8 Wing Environment Staff.

### **Refueling Aircraft / Vehicles**

During the process of refueling or defueling vehicles and aircraft at the station product transfer drip trays will be deployed under the insertion point of the refueling nozzle and the low point of the hanging hose. This is to ensure any waste drip or spillage of fuel is captured within the tray and does not make it to ground.

Portable drip tray(s) are provided and stored within each refueling point.

Portable spill kits are provided within each refueling point and replenished if used.

The refueling or offloading of fuel from aircraft will only be conducted at the "Spot 1" product transfer area location on the runway.

The refueling of vehicles will be conducted at the ULSD refueling station product transfer area located at the runway location.

## **4.6 CHEMICALS AND HOUSEHOLD DETERGENTS**

All chemicals and household detergents are stored within a proper fire proof and spill proof storage unit. Care is taken when using or transferring these materials. Only containers in good condition, properly labelled, and free of defects/damage shall be used.

## **4.7 HAZARDOUS WASTE**

Hazardous Waste (HazWaste) Shipping and Manifesting are regulated at CFS Alert under CFS Alert's Water License and the *Interprovincial Movement of Hazardous Waste Regulation (IMHWR)* of the Canadian *Environmental Protection Act (CEPA)*.

Hazardous waste is shipped from CFS Alert to 8 Wing Trenton in DND transport aircraft (i.e., Supply – HazWaste Facility) that follows a direct (non-international) flight path, as a requirement under the *Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations (EIHWRRM)* of CEPA.

The Department of National Defence CFS Alert, Government of Nunavut issued Hazardous Waste Generator number is: NUG100048 and the Hazardous Waste Carrier number is: NUC200012. HazWaste is tracked using the standard Movement Document/Manifest (MOE 04-1917 07/07) provided by the Territory of Nunavut Department of Environment. Copies are kept at CFS Alert Traffic/Shipping Section, with copies at 8 Wing Trenton's Wing Environmental Management Office and Wing Supply-HazWaste Section.

HazWaste is internally tracked using DND's Manifest Tracking System. Hazardous waste is shipped only once the Consignment Authorization and Receipt Form (CARF) is completed and identifies whether the cargo is a dangerous good. CARF's (i.e., manifests) are kept on file at the 8 Wing Trenton Supply-HazWaste Section. This facility receives and properly disposes of hazardous waste through contractors. Refer to Appendix C for the CARF template; form reference number DND 690 (5-94) NSN: 7530-21-903-1515.

All hazardous waste disposal activities are reported to the NWB annually through the annual report.

## 5 Spills

### 5.1 IN CASE OF SPILL

#### 5.1.1 Initial Response

All spills of fuel or hazardous materials, regardless of size, must be immediately reported to the Emergency Response Team. The Emergency Response Team is comprised of the following responders listed in sequence of notification: Site Manager or Fire Chief, HazMat/Environmental Technician, Fuel Technicians (i.e., Zippo) or Station Furnace Technician (i.e., heating). CFS Alert must notify the 8 Wing Environmental Officer or the 8 Wing Assistant Environment Officer at 8 Wing Trenton of the spill as soon as possible.

Table 3. Contact Information for Spill Response.

Contact	Telephone No.
<b>CFS Alert</b>	
Site Manager (Contractor)	(613) 945-3145 x3262
Fire Chief (Call sign: Smokey) (Military)	(613) 945-3145 x3394
Deputy Fire Chief (Call sign: Bandit) (Military)	(613) 945-3145 x3301
HazMat/Environmental Technician (Contractor)	(613) 945-3145 x3342
Fuel Technician (Contractor)	(613) 945-3145 x3211
Furnace/Boiler Technician (Contractor)	(613) 945-3145 x3211
Station Warrant Officer (Military)	(613) 945-3145 x3218
<b>8 Wing Trenton</b>	
8 Wing Environmental Officer	(613) 392-2811 x3930
8 Wing Assistant Environment Officer	(613) 392-2811 x4821

Refer to Appendix D for the Roles and Responsibilities of the qualified responders. The excerpt from Appendix D is from the Environmental Emergency Plan (E2P) that are located on all transfer points of regulated fuel storage tank systems as per the *Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations* of CEPA. Additional copies of the E2P are stored with at the station in the Site Manager (or Contractor's Main Office) and the Station Fire Chief's Office in the Station Fire Hall. The Master copies are stored at 8 Wing Environmental Management Office in Trenton, Ontario.

Initial response:

1. Containment of the spill is the responsibility of the unit/persons experiencing the incident.

2. Immediately contact the Emergency Response Team (ERT).
3. Secure the area until the ERT arrived to the spill/incident site. The Emergency Response Team handles HazMat spills/incidents and associated clean-up.

Complete a Hazardous Material incident Report Form upon resolution of the incident and submit to 8 Wing Environmental Management by the Chain of Command and as per Section 5.1.6.

### **5.1.2 Methods of Containment**

The main objective of containment shall be to limit the area affected by the spill and to prevent its spread to adjoining waterways or surface drainage systems.

1. Containment dikes or berms – constructed of impermeable or absorbing materials will be the main method of containing spills on land.
2. Dams – a system that is useful for small streams is to dam the stream with earth material.
3. Containment booms – a barrier to contain or deflect the spill, and flotation or support to maintain the position in the water. To keep the boom effective within a current, position the boom in a diversionary manner deflecting the spill to a recovery location. For fast-moving streams, the boom must be angled quite sharply to prevent losses under the boom.
4. Trenches or Storage pits – used for temporary storage of spilled liquids and as intercepting channels for large spills. This can be used when the spill zone has a significant slope.
5. Spills on pavement – tend to spread very quickly and flow toward the drainage systems. In most cases, it is important to prevent this from happening, or at least minimizing the amount of the spill that enters the surface drains or catch basins.
6. Small spots – to be cleared with absorbent material in granular or blanket form to immobilize or absorb the spilled liquid.
7. Spills in winter – frozen ground is much less permeable to fluids, and therefore spilled material will flow differently in winter than summer. These spills will be contained when possible with berms of snow. When the entire spill is absorbed with snow, the snow will be deposited within a containment area. Cold temperatures will inhibit the flow of most liquids, but de-icing fluids and most jet fuels will resist freezing. Spills in or on ice covered streams and ponds require special techniques depending on weather on whether the spill materials sinks, floats or dissolves.

### **5.1.3 Initial Incident Reporting**

All spills are immediately reported to the Emergency Response Team.

Major spills are reported by message using a Significant Incident Report. All hazmat spills that require a Significant Incident Report have an Air Command Hazardous Material Incident Report completed and forwarded to Command within 14 days. (Refer to <https://www.canada.ca/en/department-national-defence/corporate/policies-standards/defence-administrative-orders-directives/2000-series/2008/2008-3-issue-crisis-management.html> for more information on SIRs).

### **5.1.4 Decontamination Action**

1. Ensure the spill has been stopped and contained.
2. Remove all contaminants to designated areas.
3. If the spill happens in the winter mark the extent of the contamination to provide a guide for the Inspector in the summer months.
4. During the summer season 8 Wing Environmental Management, will take soil samples as necessary and submit them for appropriate analysis to determine the course of remediation action, if any.

### **5.1.5 Site Inspection**

During summer months, a qualified inspector will complete a site inspection, take soil samples and submit them for appropriate analysis where necessary. The site inspector in conjunction with the 8 Wing Environmental Officer will develop a remediation plan, where required.

### **5.1.6 Reporting Action**

In the event of a spill:

1. The Spill Contingency Plan will be employed by all station personnel.
2. The Hazmat Coordinator or Site Manager (Contractors) will complete the CFS Alert Spill Report for all spills regardless of size, and submit the Spill Report to 8 Wing Trenton Environmental Management within 24 hours by fax/e-mail.
3. 8 Wing Trenton Environmental Management is responsible for reporting to required legislative authorities to prevent any potential financial or disciplinary penalties. CFS Alert does not report to outside departments/agencies, such as 8 Wing will:
  - Report the spill to the Northwest Territories-Nunavut (NT\_NU) 24 Hour spill line (867-920-8130), that exceed the guidelines in Table 4 (below).
  - Complete and submit the Northwest Territories-Nunavut (NT-NU) Spill Response Form to the spill line as soon as possible, with revisions if any.
  - Inform the Crown Indigenous Relations and Northern Affairs Canada Water (CIRNAC Iqaluit) Resource Officer (Inspector) (867-975-4295 or 1787)
    - i. Joseph Monteith, CIRNCAC - Water Resource Officer  
Joesph.Monteith@canada.ca  
1-867-975-1787  
Iqaluit, Nunavut
  - Include CIRNAC as a recipient for all CFS Alert Spill Reports.
  - Inform the Environment and Climate Change Canada (ECCC Iqaluit) Enforcement Officer (Inspector) (867-975-4644)
  - Enter the 1 Canadian Air Division (1CAD) Hazardous Materials Incident Report Spreadsheet for SpillNet (refer to Appendix F for spill report spreadsheet).
  - Complete and submit a detailed spill report to the Inspector and Enforcement Officer within 30 days after the initial reporting event (as per the Water Licence).
4. The site manager will ensure the Spill Report is signed by the Commanding Officer (CO) or delegated authority.

5. Spills must be reported to ensure that the appropriate site clean-up is initiated. Should any remediation for a spill be undertaken on site a qualified site inspector shall fill out a daily process report.

Table 4. 8 Wing guideline for reporting spills to NT-NU Spill Line.

Classification	Hazard	Reportable Quantity
1	Explosives	All
2.1	Compressed Gas (flammable)	100 L
2.2	Compressed Gas	100 L
2.3	Compressed Gas (toxic)	All
2.4	Compressed Gas (corrosive)	All
3	Flammable Liquids	50 L
4	Flammable Solids	1 kg
5.1 PG I & II	Oxidizer	1 kg or 1 L
PG III	Oxidizer	50 kg or 50 L
5.2	Organic Peroxide	1 kg or 1 L
6.1 PG I	Acute Toxic	1 kg or 1 L
PG 11 & III	Acute Toxic	5 kg or 5 L
6.2	Infectious	All
7	Radioactive	Any discharge or radiation level exceeding 10 mSv/h at the package surface and 200 uSv/h at 1 m from the package surface
8	Corrosive	5 kg or 5 L
9.1	Miscellaneous (except PCB mixtures)	50 kg
9.1	PCB Mixtures	500 g
9.2	Aquatic Toxic	1 kg or 1 L
9.3	Wastes (chronic toxic)	5 kg or 5 L

NOTE: All spills regardless of quantity released to a waterbody (Ocean, Creek, River, Lake) shall be reported to the NWT/NU 24-Hour Spill Reporting Line.

## 5.2 SPILL RESPONSE TRAINING

Training is to be conducted annually. All DND personnel at CFS Alert will be trained and made available to assist the Emergency Response Team. Personnel will be trained in the following:

1. Spill awareness & prevention
2. Methods of detection
3. Types of spills and seasonal conditions
4. Report procedures and Initial responses
5. Spill response kit
6. Clean-up and site remediation
7. Occupational health & safety, protective equipment & selection
8. Safe operation of machinery & tools
9. Construction of a containment berm using snow or soil & plastic liner



### 5.3 SPILL KITS

Spill kits and absorbent materials are kept and maintained at several specified locations at CFS Alert at all times. Refer to Appendix A, Figure 2 illustrating the spill kit locations at CFS Alert. Spill kits and locations include.

Table 5. Spill Kit Locations.

Location	Spill Kits
Airfield Fuel Tank Farm (B112)	<ul style="list-style-type: none"><li>• Full-size Tri-wall spill kits (i.e., 10 kits total).</li></ul>
HazMat Team Trailers (B12) – adjacent to Day Fuel Tank Farm	
Building 65 (B65)	
Vehicle Maintenance Building (B17)	<ul style="list-style-type: none"><li>• Three large spill kits</li><li>• Spill pads and approximately 80 bags of absorbent for oils</li><li>• Four medium-sized spill kits</li></ul>
CHIMO Furnace Room (B115)	<ul style="list-style-type: none"><li>• Spill kit</li></ul>
Ladner Furnace Room (B116)	<ul style="list-style-type: none"><li>• Spill kit</li></ul>
Whitehorse Furnace Room (B117)	<ul style="list-style-type: none"><li>• Spill kit</li></ul>

Spill kits\* should contain at a minimum the following contents:

- 12 Fuel absorbent pads/pillows
- 2 Gloves
- 3 Bags absorbal
- 1 Drain cover
- 1 Non-sparking shovel
- 10 Garbage bags
- 2 Goggles
- 1 Water prove package containing the Emergency Response Plan

### 5.4 EXTERNAL EMERGENCY CONTACTS

NT-NU 24 hour Spill Report Line (867) 920-8130

CIRNAC Water Resource Officer (Inspector) (867) 975-4295 or 1787

Joseph Monteith, CIRNCAC - Water Resource Officer

[Joeph.Monteith@canada.ca](mailto:Joeph.Monteith@canada.ca)

1-867-975-1787

Iqaluit, Nunavut

Government Nunavut Department of Environment, Iqaluit (867) 979-7800

Environment and Climate Change Canada Enforcement Officer (867) 975-4644

Kitikmeot Inuit Association (KIA) (867) 983 2458

## **APPENDIX A: Figures**

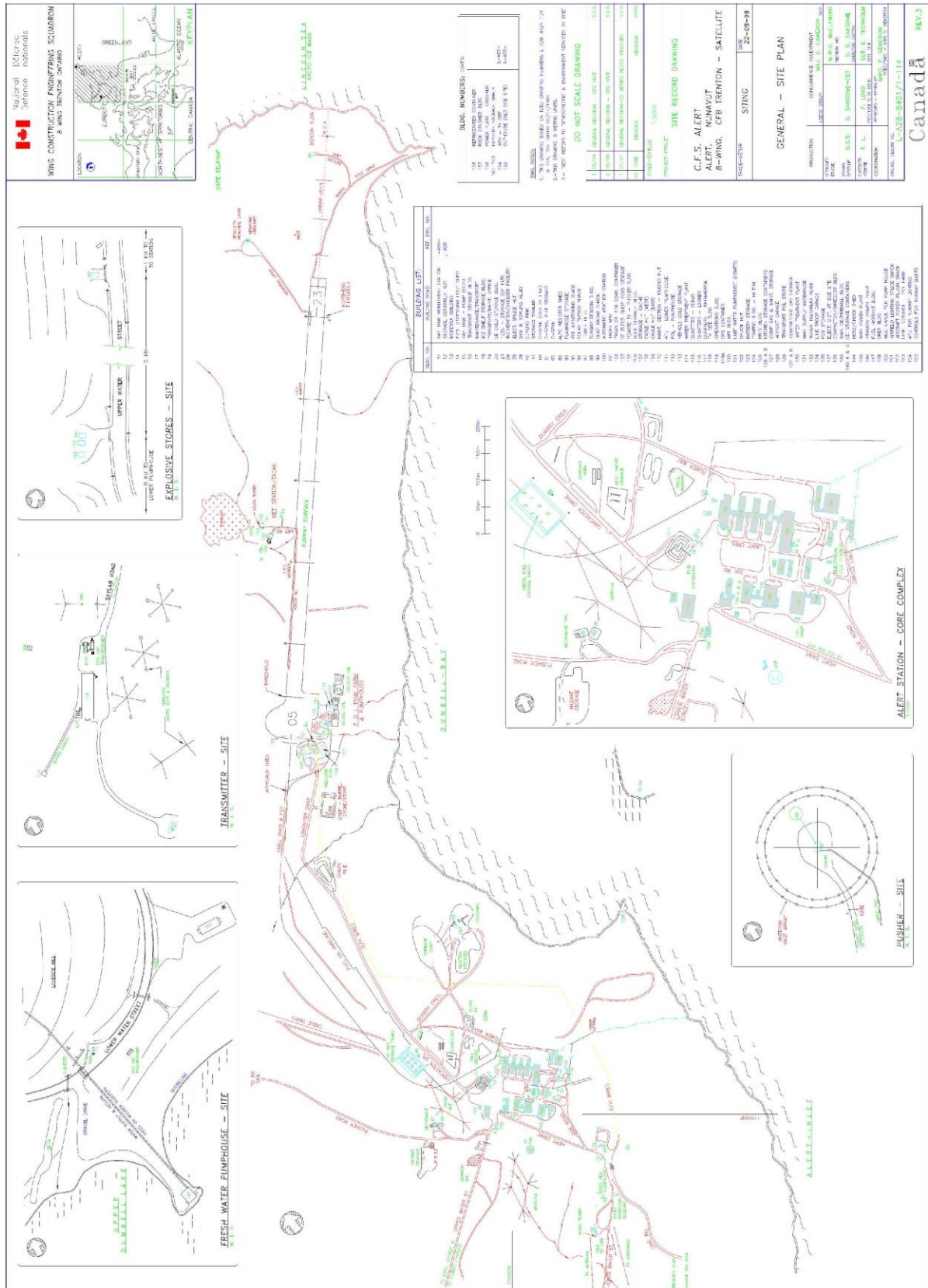


Figure 1. Map of CFS Alert.

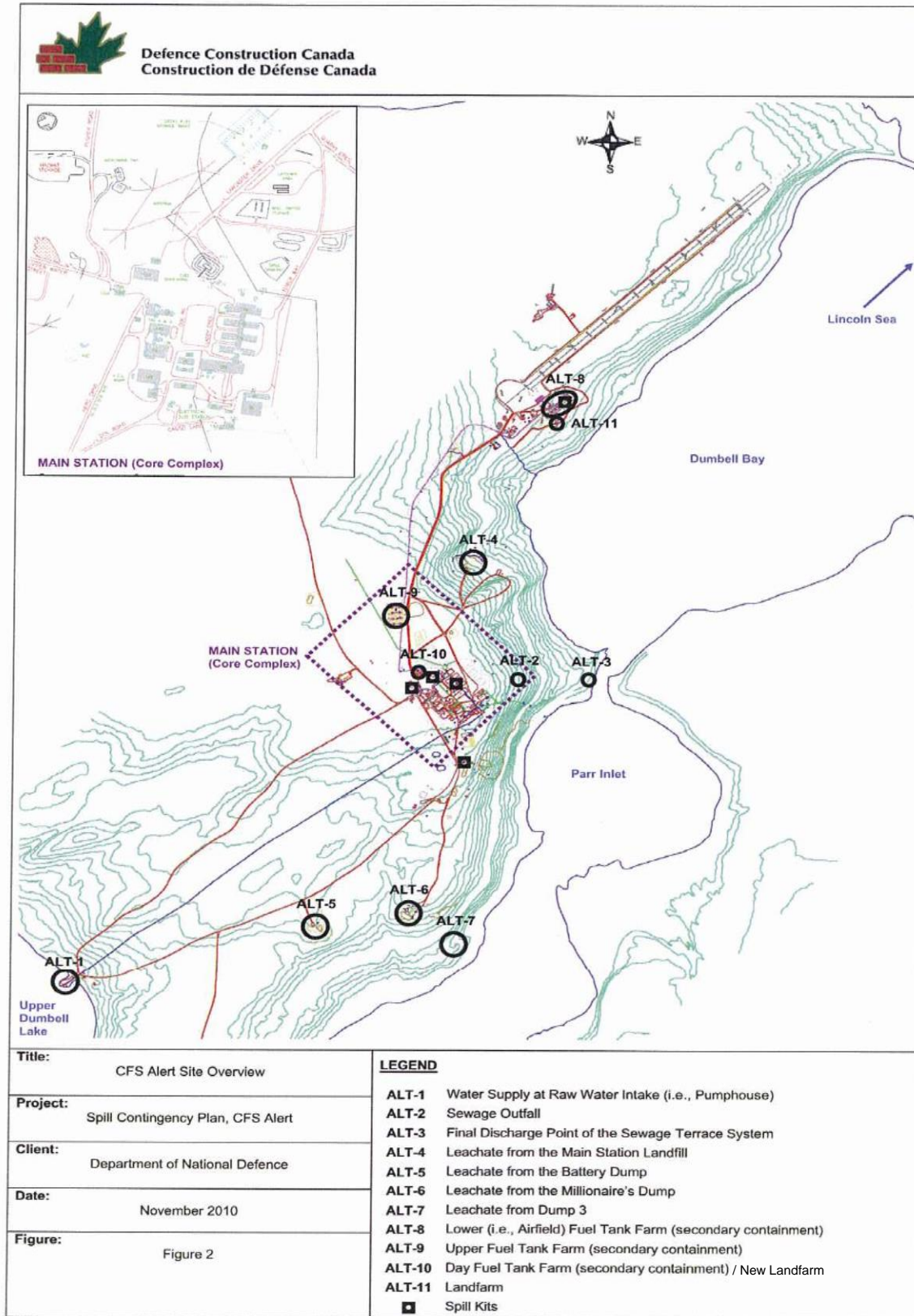


Figure 2. Water Licence Monitoring Stations, revised January 2014.



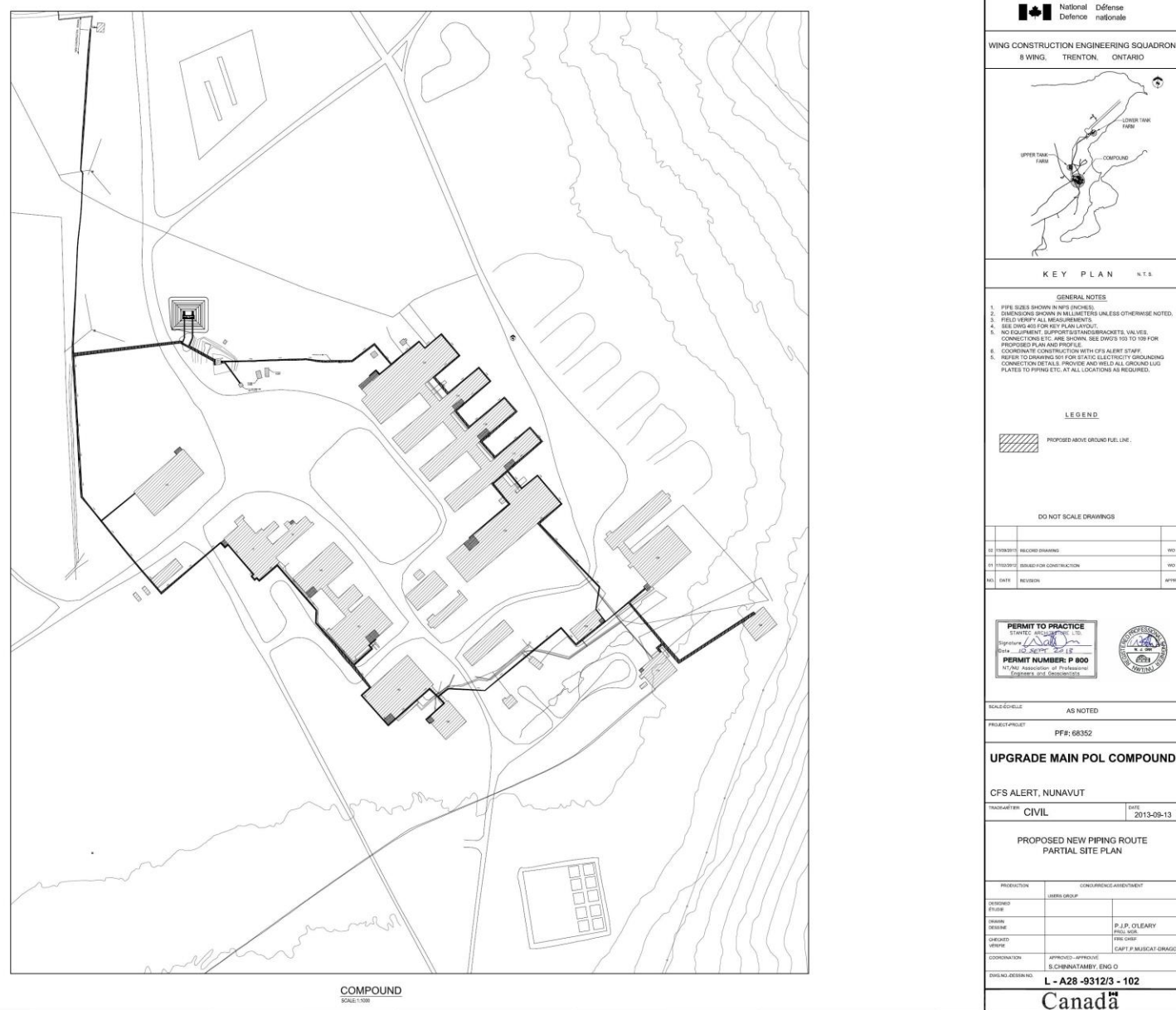


Figure 3. New aboveground POL pipeline at CFS Alert (Sept 2013).

## **APPENDIX B: SDS Sheets**

## SAFETY DATA SHEET

### JET A/A-1 AVIATION TURBINE FUEL



000003001081

Version 2.0

Revision Date 2016/07/20

Print Date 2016/07/20

#### SECTION 1. IDENTIFICATION

Product name : JET A/A-1 AVIATION TURBINE FUEL

Synonyms : Jet A-1; Jet A-1-DI; Aviation Turbine Kerosene (ATK); JP-8; NATO F-34; Jet F-34; Aviation Turbine Fuel, Kerosene Type (CAN/CGSB 3.23 & CAN/CGSB 3.24)

Product code : 101851, 100123

Manufacturer or supplier's details  
Petro-Canada  
P.O. Box 2844, 150 - 6th Avenue South-West  
Calgary Alberta T2P 3E3  
Canada

Emergency telephone number  
Suncor Energy: +1 403-296-3000;  
Poison Control Centre: Consult local telephone directory for emergency number(s).

#### Recommended use of the chemical and restrictions on use

Recommended use : Used as aviation turbine fuel. May contain a fuel system icing inhibitor. In the arctic, Jet A-1 may also be used as diesel fuel (if it contains a lubricity additive) and heating oil.

Prepared by : Product Safety: +1 905-804-4752

#### SECTION 2. HAZARDS IDENTIFICATION

##### Emergency Overview

Appearance	Clear liquid.
Colour	Clear and colourless
Odour	Kerosene-like.

##### GHS Classification

Flammable liquids : Category 3

Skin irritation : Category 2

Reproductive toxicity : Category 2

Specific target organ toxicity - single exposure : Category 3 (Central nervous system)

Aspiration hazard : Category 1

## SAFETY DATA SHEET

### JET A/A-1 AVIATION TURBINE FUEL

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#### GHS label elements

Hazard pictograms



Signal word

: Danger

Hazard statements

: Flammable liquid and vapour.  
May be fatal if swallowed and enters airways.  
Causes skin irritation.  
May cause drowsiness or dizziness.  
Suspected of damaging fertility or the unborn child.

Precautionary statements

: **Prevention:**  
Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
Keep container tightly closed.  
Ground/bond container and receiving equipment.  
Use explosion-proof electrical/ ventilating/ lighting/ equipment.  
Use only non-sparking tools.  
Take precautionary measures against static discharge.  
Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
Wash skin thoroughly after handling.  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves/ eye protection/ face protection.  
Use personal protective equipment as required.  
**Response:**  
IF SWALLOWED: Immediately call a POISON CENTER/doctor.  
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.  
IF exposed or concerned: Get medical advice/ attention.  
Do NOT induce vomiting.  
If skin irritation occurs: Get medical advice/ attention.  
Take off contaminated clothing and wash before reuse.  
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.  
**Storage:**  
Store in a well-ventilated place. Keep container tightly closed.  
Store in a well-ventilated place. Keep cool.  
Store locked up.  
**Disposal:**  
Dispose of contents/ container to an approved waste disposal plant.

#### Potential Health Effects

Primary Routes of Entry

: Eye contact  
Ingestion  
Inhalation



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### JET A/A-1 AVIATION TURBINE FUEL

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#### Skin contact

Inhalation : Inhalation may cause central nervous system effects. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Skin : May irritate skin.

Eyes : May irritate eyes.

Ingestion : Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. Aspiration hazard if swallowed - can enter lungs and cause damage.

Aggravated Medical Condition : None known.

#### Other hazards

None known.

#### IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

#### NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

#### Hazardous components

Chemical name	CAS-No.	Concentration
kerosine (petroleum)	8008-20-6	90 - 100 %
2-(2-methoxyethoxy)ethanol	111-77-3	0 - 0.2 %

## SECTION 4. FIRST AID MEASURES

If inhaled : Move to fresh air. Artificial respiration and/or oxygen may be necessary. Seek medical advice.

In case of skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing

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### JET A/A-1 AVIATION TURBINE FUEL

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	and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Wash clothing before reuse. Seek medical advice.
In case of eye contact	: Remove contact lenses. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
If swallowed	: Rinse mouth with water. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Seek medical advice.
Most important symptoms and effects, both acute and delayed	: First aider needs to protect himself.

---

#### SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Dry chemical Carbon dioxide (CO <sub>2</sub> ) Water fog. Foam
Unsuitable extinguishing media	: Do NOT use water jet.
Specific hazards during fire-fighting	: Cool closed containers exposed to fire with water spray.
Hazardous combustion products	: Carbon oxides (CO, CO <sub>2</sub> ), nitrogen oxides (NO <sub>x</sub> ), sulphur oxides (SO <sub>x</sub> ), smoke and irritating vapours as products of incomplete combustion.
Further information	: Prevent fire extinguishing water from contaminating surface water or the ground water system.
Special protective equipment for firefighters	: Wear self-contained breathing apparatus for firefighting if necessary.

---

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe areas. Material can create slippery conditions.
Environmental precautions	: If the product contaminates rivers and lakes or drains inform respective authorities.

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### JET A/A-1 AVIATION TURBINE FUEL

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Methods and materials for containment and cleaning up : Prevent further leakage or spillage if safe to do so.  
Remove all sources of ignition.  
Soak up with inert absorbent material.  
Non-sparking tools should be used.  
Ensure adequate ventilation.  
Contact the proper local authorities.

#### SECTION 7. HANDLING AND STORAGE

Advice on safe handling : For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Use only with adequate ventilation.  
In case of insufficient ventilation, wear suitable respiratory equipment.  
Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity.  
Avoid contact with skin, eyes and clothing.  
Do not ingest.  
Keep away from heat and sources of ignition.  
Keep container closed when not in use.

Conditions for safe storage : Store in original container.  
Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
Keep in a dry, cool and well-ventilated place.  
Keep in properly labelled containers.  
To maintain product quality, do not store in heat or direct sunlight.

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

##### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
kerosine (petroleum)	8008-20-6	TWA	100 mg/m3	NIOSH REL
		TWA	500 ppm 2,000 mg/m3	OSHA Z-1
		TWA	200 mg/m3 (total hydrocarbon vapor)	ACGIH
		TWA	400 ppm 1,600 mg/m3	OSHA P0

Engineering measures : Use only in well-ventilated areas.  
Ensure that eyewash station and safety shower are proximal to the work-station location.

##### Personal protective equipment



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### JET A/A-1 AVIATION TURBINE FUEL

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Respiratory protection	: Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Filter type	: A NIOSH-approved air-purifying respirator with an organic vapour cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air-purifying respirators is limited. Use a positive-pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstances where air-purifying respirators may not provide adequate protection.
Hand protection Material	: polyvinyl alcohol (PVA), Viton(R). Consult your PPE provider for breakthrough times and the specific glove that is best for you based on your use patterns. It should be realized that eventually any material regardless of their imperviousness, will get permeated by chemicals. Therefore, protective gloves should be regularly checked for wear and tear. At the first signs of hardening and cracks, they should be changed.
Remarks	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Eye protection	: Wear face-shield and protective suit for abnormal processing problems.
Skin and body protection	: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.
Protective measures	: Wash contaminated clothing before re-use.
Hygiene measures	: Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash face, hands and any exposed skin thoroughly after handling.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Clear liquid.
Colour	: Clear and colourless
Odour	: Kerosene-like.
Odour Threshold	: No data available

## SAFETY DATA SHEET

### JET A/A-1 AVIATION TURBINE FUEL

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pH	: No data available
Pour point	: -51 °C (-60 °F) No data available
Boiling point/boiling range	: 140 - 300 °C (284 - 572 °F)
Flash point	: > 38 °C (100 °F) Method: Tagliabue
Auto-ignition Temperature	: 210 °C (410 °F)
Evaporation rate	: No data available
Flammability	: Flammable in presence of open flames, sparks and heat. Vapours are heavier than air and may travel considerable distance to sources of ignition and flash back. This product can accumulate static charge and ignite. May accumulate in confined spaces.
Upper explosion limit	: 5 %(V)
Lower explosion limit	: 0.7 %(V)
Vapour pressure	: 5.25 mmHg (20 °C / 68 °F)
Relative vapour density	: 4.5
Relative density	: 0.775 - 0.84 (15 °C / 59 °F)
Solubility(ies)	
Water solubility	: No data available
Partition coefficient: n-octanol/water	: No data available
Viscosity	
Viscosity, kinematic	: 1.0 - 1.9 cSt (40 °C / 104 °F)
Explosive properties	: Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Containers may explode in heat of fire.

#### SECTION 10. STABILITY AND REACTIVITY

Possibility of hazardous reactions	: Hazardous polymerisation does not occur. Stable under normal conditions.
Conditions to avoid	: Extremes of temperature and direct sunlight.

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### JET A/A-1 AVIATION TURBINE FUEL



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Incompatible materials : Reactive with oxidising agents, acids and alkalis.

Hazardous decomposition products : May release CO<sub>x</sub>, NO<sub>x</sub>, SO<sub>x</sub>, aldehydes, acids, ketones, smoke and irritating vapours when heated to decomposition.

#### SECTION 11. TOXICOLOGICAL INFORMATION

##### Information on likely routes of exposure

Eye contact  
Ingestion  
Inhalation  
Skin contact

##### Acute toxicity

###### Product:

Acute oral toxicity : Remarks: No data available

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

###### Components:

###### **kerosine (petroleum):**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg,

Acute inhalation toxicity : LC50 (Rat): > 5 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg,

##### Skin corrosion/irritation

###### Product:

Remarks: No data available

##### Serious eye damage/eye irritation

###### Product:

Remarks: No data available

##### Respiratory or skin sensitisation

No data available

##### Germ cell mutagenicity

No data available

##### Carcinogenicity

No data available

## SAFETY DATA SHEET

### JET A/A-1 AVIATION TURBINE FUEL

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#### Reproductive toxicity

No data available

#### STOT - single exposure

No data available

#### STOT - repeated exposure

No data available

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## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Product:

Toxicity to fish :  
Remarks: No data available

Toxicity to daphnia and other :  
aquatic invertebrates Remarks: No data available

Toxicity to algae :  
Remarks: No data available

Toxicity to bacteria : Remarks: No data available

### Persistence and degradability

#### Product:

Biodegradability : Remarks: No data available

### Bioaccumulative potential

No data available

### Mobility in soil

No data available

### Other adverse effects

No data available

---

## SECTION 13. DISPOSAL CONSIDERATIONS

### Disposal methods

Waste from residues : The product should not be allowed to enter drains, water courses or the soil.  
Offer surplus and non-recyclable solutions to a licensed disposal company.  
Waste must be classified and labelled prior to recycling or disposal.  
Send to a licensed waste management company.  
Dispose of product residue in accordance with the instructions of the person responsible for waste disposal.

## SAFETY DATA SHEET

### JET A/A-1 AVIATION TURBINE FUEL

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Contaminated packaging : Do not re-use empty containers.

#### SECTION 14. TRANSPORT INFORMATION

##### International Regulations

###### IATA-DGR

UN/ID No. : UN 1863  
Proper shipping name : Fuel, aviation, turbine engine  
Class : 3  
Packing group : III  
Labels : Class 3 - Flammable Liquid  
Packing instruction (cargo aircraft) : 366

###### IMDG-Code

UN number : UN 1863  
Proper shipping name : FUEL, AVIATION, TURBINE ENGINE  
  
Class : 3  
Packing group : III  
Labels : 3  
EmS Code : F-E, S-E  
Marine pollutant : no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

##### National Regulations

###### 49 CFR

UN/ID/NA number : UN 1863  
Proper shipping name : Fuel, aviation, turbine engine  
  
Class : 3  
Packing group : III  
Labels : Class 3 - Flammable Liquid  
ERG Code : 128  
Marine pollutant : no

#### SECTION 15. REGULATORY INFORMATION

The components of this product are reported in the following inventories:

##### DSL

##### TSCA

On the inventory, or in compliance with the inventory  
All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

##### EINECS

On the inventory, or in compliance with the inventory



## SAFETY DATA SHEET

### JET A/A-1 AVIATION TURBINE FUEL

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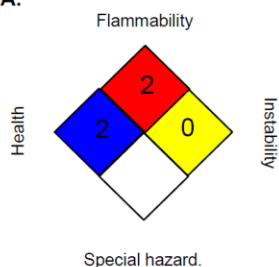
Print Date 2016/07/20



#### SECTION 16. OTHER INFORMATION

##### Further information

##### NFPA:



##### HMIS III:

HEALTH	2*
FLAMMABILITY	2
PHYSICAL HAZARD	0
PERSONAL PROTECTION	H

0 = not significant, 1 = Slight,  
2 = Moderate, 3 = High  
4 = Extreme, \* = Chronic

For Copy of (M)SDS

: Internet: [www.petro-canada.ca/msds](http://www.petro-canada.ca/msds)  
Canada-wide: telephone: 1-800-668-0220; fax: 1-800-837-1228  
For Product Safety Information: 1 905-804-4752

Prepared by

: Product Safety: +1 905-804-4752

Revision Date

: 2016/07/20

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

## SAFETY DATA SHEET

### DIESEL FUEL

000003000395

Version 5.1

Revision Date 2019/11/05

Print Date 2019/11/20



#### SECTION 1. IDENTIFICATION

Product name : DIESEL FUEL

Synonyms : Seasonal Diesel, #2 Diesel, #1 Diesel, #2 Heating Oil, #1 Heating Oil, OSX, D50, Arctic Diesel, Farm Diesel, Marine Diesel, Low Sulphur Diesel, LSD, Ultra Low Sulphur Diesel, ULSD, Mining Diesel, Naval Distillate, Dyed Diesel, Marked Diesel, Coloured Diesel, Furnace special, Biodiesel blend, B1, B2, B5, Diesel Low Cloud (LC), Marine Gas Oil, Marine Gas Oil Dyed.

Product code : 102907, 102762, 102763, 102755, 102302, 102744, 101801, 100678, 100677, 101802, 100107, 100668, 100658, 100911, 100663, 100652, 100460, 100065, 101796, 101793, 101795, 101792, 101794, 101791, 100768, 100643, 100642, 100103, 101798, 101800, 101797, 101788, 101789, 101787, 102531, 100734, 100733, 100640, 100997, 100995, 100732, 100731, 100994

Manufacturer or supplier's details  
Petro-Canada  
P.O. Box 2844, 150 - 6th Avenue South-West  
Calgary Alberta T2P 3E3  
Canada

Emergency telephone number  
Suncor Energy: +1 403-296-3000;  
Canutec Transportation: 1-888-226-8832 (toll-free) or 613-996-6666;  
Poison Control Centre: Consult local telephone directory for emergency number(s).

#### Recommended use of the chemical and restrictions on use

Recommended use : Diesel fuels are distillate fuels suitable for use in high and medium speed internal combustion engines of the compression ignition type. Mining diesels, marine diesels, MDO and naval distillates may have a higher flash point requirement.

Prepared by : Product Safety: +1 905-804-4752

#### SECTION 2. HAZARDS IDENTIFICATION

##### Emergency Overview

Appearance	Bright oily liquid.
Colour	Clear to yellow (This product may be dyed red for taxation purposes)
Odour	Mild petroleum oil like.

## SAFETY DATA SHEET

### DIESEL FUEL

000003000395



Version 5.1

Revision Date 2019/11/05

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#### GHS Classification

Flammable liquids	: Category 3
Acute toxicity (Inhalation)	: Category 4
Skin irritation	: Category 2
Carcinogenicity	: Category 2
Specific target organ toxicity - single exposure	: Category 3 (Central nervous system)
Specific target organ toxicity - repeated exposure	: Category 2 (Liver, thymus, Bone)
Aspiration hazard	: Category 1

#### GHS label elements

Hazard pictograms



Signal word : Danger

Hazard statements : Flammable liquid and vapour.  
May be fatal if swallowed and enters airways.  
Causes skin irritation.  
Harmful if inhaled.  
May cause drowsiness or dizziness.  
Suspected of causing cancer.  
May cause damage to organs (Liver, thymus, Bone) through prolonged or repeated exposure.

Precautionary statements : **Prevention:**  
Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Keep container tightly closed.  
Ground and bond container and receiving equipment.  
Use explosion-proof electrical/ ventilating/ lighting equipment.  
Use non-sparking tools.  
Take action to prevent static discharges.  
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
Wash skin thoroughly after handling.  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves/ protective clothing/ eye protection/ face protection.  
**Response:**  
IF SWALLOWED: Immediately call a POISON CENTER/doctor.  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

## SAFETY DATA SHEET

### DIESEL FUEL

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IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.  
IF exposed or concerned: Get medical advice/ attention.  
Do NOT induce vomiting.  
If skin irritation occurs: Get medical advice/ attention.  
Take off contaminated clothing and wash it before reuse.  
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

**Storage:**

Store in a well-ventilated place. Keep container tightly closed.  
Store in a well-ventilated place. Keep cool.  
Store locked up.

**Disposal:**

Dispose of contents/ container to an approved waste disposal plant.

**Potential Health Effects**

Primary Routes of Entry : Eye contact  
Ingestion  
Inhalation  
Skin contact

Aggravated Medical Condition : None known.

**Other hazards**

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

**Hazardous components**

Chemical name	CAS-No.	Concentration
Kerosine (petroleum), hydrodesulfurized; Kerosine -unspecified	64742-81-0	70 - 100 %
Kerosine (petroleum); Straight run kerosine	8008-20-6	
Fuels, diesel; Gasoil -unspecified	68334-30-5	
Alkanes, C10-20-branched and linear	928771-01-1	0 - 30 %
Fatty acids, C16-18 and C18-unsatd., Me esters	67762-38-3	0 - 20 %

All above concentrations are in percent by weight.

## SECTION 4. FIRST AID MEASURES

If inhaled : Move to fresh air.  
Artificial respiration and/or oxygen may be necessary.  
Seek medical advice.

In case of skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

## SAFETY DATA SHEET

### DIESEL FUEL

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Print Date 2019/11/20

	Wash skin thoroughly with soap and water or use recognized skin cleanser. Wash clothing before reuse. Seek medical advice.
In case of eye contact	: Remove contact lenses. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
If swallowed	: Rinse mouth with water. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Seek medical advice.
Most important symptoms and effects, both acute and delayed	: Harmful if inhaled. Respiratory, skin and eye irritation; nausea; cancer.
Notes to physician	: Treat symptomatically. For specialist advice physicians should contact the Poisons Information Service.

#### SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Dry chemical Carbon dioxide (CO <sub>2</sub> ) Water fog. Foam
Unsuitable extinguishing media	: Do NOT use water jet.
Specific hazards during fire-fighting	: Cool closed containers exposed to fire with water spray.
Hazardous combustion products	: Carbon oxides (CO, CO <sub>2</sub> ), nitrogen oxides (NO <sub>x</sub> ), sulphur oxides (SO <sub>x</sub> ), smoke and irritating vapours as products of incomplete combustion.
Further information	: Prevent fire extinguishing water from contaminating surface water or the ground water system.
Special protective equipment for firefighters	: Wear self-contained breathing apparatus for firefighting if necessary.

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: For personal protection see section 8. Ensure adequate ventilation. Evacuate personnel to safe areas. Material can create slippery conditions.
---	---



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- Environmental precautions : If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Prevent further leakage or spillage if safe to do so.  
Remove all sources of ignition.  
Soak up with inert absorbent material.  
Non-sparking tools should be used.  
Ensure adequate ventilation.  
Contact the proper local authorities.

## SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Use only with adequate ventilation.  
In case of insufficient ventilation, wear suitable respiratory equipment.  
Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity.  
Avoid contact with skin, eyes and clothing.  
Do not ingest.  
Keep away from heat and sources of ignition.  
Keep container closed when not in use.
- Conditions for safe storage : Store in original container.  
Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
Keep in a dry, cool and well-ventilated place.  
Keep in properly labelled containers.  
To maintain product quality, do not store in heat or direct sunlight.  
Ensure the storage containers are grounded/bonded.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Kerosine (petroleum), hydrodesulfurized; Kerosine - unspecified	64742-81-0	TWA	200 mg/m <sup>3</sup> (As total hydrocarbon vapour)	ACGIH
		TWA	200 mg/m <sup>3</sup> (total hydrocarbon vapor)	CA AB OEL
		TWA	525 mg/m <sup>3</sup>	CA ON OEL
		TWA	200 mg/m <sup>3</sup> (As total hydrocarbon vapour)	ACGIH

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		TWA	200 mg/m3 (total hydrocarbon vapor)	ACGIH
Kerosine (petroleum); Straight run kerosine	8008-20-6	TWA	200 mg/m3 (total hydrocarbon vapor)	CA BC OEL
		TWA	200 mg/m3 (total hydrocarbon vapor)	CA AB OEL
		TWA	200 mg/m3 (total hydrocarbon vapor)	ACGIH
Fuels, diesel; Gasoil - unspecified	68334-30-5	TWA	100 mg/m3 (total hydrocar- bons)	CA AB OEL
		TWA (Va- pour and inhalable aerosols)	100 mg/m3 (total hydrocar- bons)	CA BC OEL
		TWA (Inhal- able fraction and vapor)	100 mg/m3 (total hydrocar- bons)	ACGIH

**Engineering measures** : Adequate ventilation to ensure that Occupational Exposure Limits are not exceeded.  
Use only in well-ventilated areas.  
Ensure that eyewash station and safety shower are proximal to the work-station location.

#### Personal protective equipment

**Respiratory protection** : Concentration in air determines protection needed.  
Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**Filter type** : organic vapour cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air-purifying respirators is limited. Use a positive-pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstances where air-purifying respirators may not provide adequate protection.

**Hand protection**  
**Material**

: neoprene, nitrile, polyvinyl alcohol (PVA), Viton(R). Consult your PPE provider for breakthrough times and the specific glove that is best for you based on your use patterns. It should be realized that eventually any material regardless of their imperviousness, will get permeated by chemicals. Therefore, protective gloves should be regularly checked for wear and tear. At the first signs of hardening and cracks, they

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should be changed.

Remarks	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Eye protection	: Wear face-shield and protective suit for abnormal processing problems.
Skin and body protection	: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.
Protective measures	: Wash contaminated clothing before re-use.
Hygiene measures	: Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash face, hands and any exposed skin thoroughly after handling.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Bright oily liquid.
Colour	: Clear to yellow (This product may be dyed red for taxation purposes)
Odour	: Mild petroleum oil like.
Odour Threshold	: No data available
pH	: No data available
Melting point	: No data available
Boiling point/boiling range	: 150 - 371 °C (302 - 700 °F)
Decomposition temperature	No data available
Flash point	: > 40 °C (104 °F) Method: closed cup
Auto-Ignition Temperature	: 225 °C (437 °F)
Evaporation rate	: No data available
Flammability	: Flammable in presence of open flames, sparks and heat. Vapours are heavier than air and may travel considerable distance to sources of ignition and flash back. This product can accumulate static charge and ignite.
Upper explosion limit	: 6 %(V)
Lower explosion limit	: 0.7 %(V)



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Vapour pressure	: 7.5 mmHg (20 °C / 68 °F)
Relative vapour density	: 4.5
Relative density	: 0.8 - 0.88
Solubility(ies)	
Water solubility	: insoluble
Partition coefficient: n-octanol/water	: No data available
Viscosity	
Viscosity, kinematic	: 1.3 - 4.1 cSt (40 °C / 104 °F)

---

#### SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable at normal ambient temperature and pressure.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Hazardous polymerisation does not occur.
Conditions to avoid	: Extremes of temperature and direct sunlight.
Incompatible materials	: Reactive with oxidising agents and acids.
Hazardous decomposition products	: May release COx, NOx, SOx, smoke and irritating vapours when heated to decomposition.

---

#### SECTION 11. TOXICOLOGICAL INFORMATION

##### Information on likely routes of exposure

Eye contact  
Ingestion  
Inhalation  
Skin contact

##### Acute toxicity

##### Product:

Acute oral toxicity	: Remarks: No data available
Acute inhalation toxicity	: Acute toxicity estimate: 1.2 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: Calculation method

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Acute dermal toxicity : Remarks: No data available

#### Components:

##### **Kerosine (petroleum), hydrodesulfurized; Kerosine -unspecified:**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg,

Acute inhalation toxicity : LC50 (Rat): > 5.2 mg/l  
Exposure time: 4 hrs  
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg,

##### **Kerosine (petroleum); Straight run kerosine:**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg,

Acute inhalation toxicity : LC50 (Rat): > 5 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg,

##### **Fuels, diesel; Gasoil -unspecified:**

Acute oral toxicity : LD50 (Rat): 7,500 mg/kg,

Acute inhalation toxicity : LC50 (Rat): 4.1 mg/l  
Exposure time: 4 h  
Test atmosphere: vapour

Acute dermal toxicity : LD50 (Mouse): 24,500 mg/kg,

#### **Skin corrosion/irritation**

##### Product:

Remarks: Causes skin irritation.

#### **Serious eye damage/eye irritation**

##### Product:

Remarks: No data available

#### **Respiratory or skin sensitisation**

##### Product:

Remarks: Based on available data, the classification criteria are not met.

#### **Germ cell mutagenicity**

##### Product:

Genotoxicity in vitro : Remarks: No data available

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Genotoxicity in vivo

Remarks: No data available

#### Carcinogenicity

##### Product:

Carcinogenicity - Assessment

Suspected of causing cancer.

#### Reproductive toxicity

##### Product:

Effects on fertility

Remarks: Based on available data, the classification criteria are not met.

#### STOT - single exposure

##### Product:

Remarks: May cause drowsiness or dizziness.

#### STOT - repeated exposure

##### Product:

Remarks: May cause damage to organs through prolonged or repeated exposure.

No data available

#### Aspiration toxicity

##### Product:

May be fatal if swallowed and enters airways.

---

## SECTION 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

##### Product:

Toxicity to fish

: Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates

: Remarks: No data available

Toxicity to algae

: Remarks: No data available

Toxicity to bacteria

: Remarks: No data available

#### Persistence and degradability

##### Product:

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Biodegradability : Remarks: No data available

#### Bioaccumulative potential

No data available

#### Mobility in soil

No data available

#### Other adverse effects

No data available

## SECTION 13. DISPOSAL CONSIDERATIONS

#### Disposal methods

Waste from residues : The product should not be allowed to enter drains, water courses or the soil.  
Offer surplus and non-recyclable solutions to a licensed disposal company.  
Waste must be classified and labelled prior to recycling or disposal.  
Send to a licensed waste management company.  
Dispose of as hazardous waste in compliance with local and national regulations.  
Dispose of product residue in accordance with the instructions of the person responsible for waste disposal.

## SECTION 14. TRANSPORT INFORMATION

#### International Regulations

##### IATA-DGR

UN/ID No. : UN 1202  
Proper shipping name : Diesel fuel  
Class : 3  
Packing group : III  
Labels : Class 3 - Flammable Liquid  
Packing instruction (cargo aircraft) : 366

##### IMDG-Code

UN number : UN 1202  
Proper shipping name : DIESEL FUEL

Class : 3  
Packing group : III  
Labels : 3  
EmS Code : F-E, S-E  
Marine pollutant : no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

#### National Regulations

##### TDG

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UN number	: UN 1202
Proper shipping name	: DIESEL FUEL
Class	: 3
Packing group	: III
Labels	: 3
ERG Code	: 128
Marine pollutant	: no

---

#### SECTION 15. REGULATORY INFORMATION

This product has been classified according to the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all of the information required by the HPR.

**The components of this product are reported in the following inventories:**

**DSL** On the inventory, or in compliance with the inventory

---

#### SECTION 16. OTHER INFORMATION

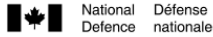
For Copy of SDS : Internet: [www.petro-canada.ca/msds](http://www.petro-canada.ca/msds)  
Canada-wide: telephone: 1-800-668-0220; fax: 1-800-837-1228  
For Product Safety Information: 1 905-804-4752

Prepared by : Product Safety: +1 905-804-4752

Revision Date : 2019/11/05

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

## **APPENDIX C: Manifest Tracking System Form-CARF & Movement Document**



<b>CONSIGNMENT AUTHORIZATION AND RECEIPT FORM (CARF)</b> <b>FORMULAIRE D'AUTORISATION ET REÇU D'EXPÉDITION (FARE)</b>										1. TCN – NCT <table border="1" style="width:100%; height: 40px;"> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>																													
<b>SECTION 1 – CONSIGNOR / DELIVERY – L'EXPÉDITEUR / LIVRAISON</b> 2. PACKED BY – EMBALLÉ PAR <div style="display: flex; justify-content: space-between;"> <div>SIGNATURE _____</div> <div>DATE _____</div> </div>										3. MPC – CPM		4. RDD – DLD (JULIAN – JULIEN) _____		5. CARF CONTINUATION SHEETS ATTACHED / FEUILLES DE FARE PROLONGATION ATTACHÉES TOTAL NUMBER – NOMBRE TOTAL _____																									
6A. UIC / SAC / PRI / SN – CIU / SAC / CIDP / NM					6B. SHIP / POSTAL – LIVRAISON / POSTE (S/P)					7A. UIC / SAC / PRI / SN – CIU / SAC / CIDP / NM					7B. SHIP / POSTAL – LIVRAISON / POSTE (S/P)																								
6C. FROM / CONSIGNOR – DE / L'EXPÉDITEUR										7C. TO / CONSIGNEE – À / DESTINATAIRE																													
8. DTA – ATD					9. ASSOCIATED TA NAME – NOM D'AT ASSOCIÉ					10A. <input type="checkbox"/> CFSS ISSUE / DISTRIBUTION DU SAFC <input type="checkbox"/> NEW PROCUREMENT / NOUVEAU MATERIEL <input type="checkbox"/> REPAIR & OVERHAUL / RÉPARATION ET RÉVISION <input type="checkbox"/> MISC. DIVERS																													
10B. <input type="checkbox"/> CUSTOMS ACTION / DOUANES <input type="checkbox"/> CGR MCR <input type="checkbox"/> IEM EIM <input type="checkbox"/> SL PS										10C. <input type="checkbox"/> SPECIAL HANDLING / MANUTENTION SPÉCIALE <input type="checkbox"/> OUTSIZE DIM. SUPER. <input type="checkbox"/> UAB BNA																													
11. SPECIAL INSTRUCTIONS – INSTRUCTIONS SPÉCIALES										<b>12. DANGEROUS GOODS / MARCHANDISES DANGEREUSES</b> <div style="display: flex; justify-content: space-around; align-items: center;"> <span><input type="checkbox"/> AMMUNITION / MUNITION</span> <span><input type="checkbox"/> OTHERS / AUTRES</span> <span><input type="checkbox"/> NO / NON</span> </div>																													
13. PIECES ARTICLES (PID) (IDA)		14. TYPE GENRE (CODE)		15. DESCRIPTION				16A. WEIGHT IN LBS / POIDS EN LB IMPERIAL – IMPÉRIAL		16B. CUBE IN F3 / PIED CUBIQUE IMPERIAL – IMPÉRIAL		16C. WEIGHT IN KG / POIDS EN KG METRIC – MÉTRIQUE		16D. CUBE IN M3 / MÈTRE CUBIQUE METRIC – MÉTRIQUE		17. DOCUMENT COUNT / NOMBRE DE DOCUMENTS																							
TOTAL								TOTAL		TOTAL		TOTAL		TOTAL		TOTAL																							
<b>SECTION 2 – ORIGIN TRANSPORTATION AGENT – AGENT DE TRANSPORT AU LIEU D'ORIGINE</b>																																							
18. CODING BLOCK – BLOC DE CODAGE																																							
FUND RES / RES DE FONDS			FUND RESERVATION LINE / LIGNE RÉSERVATION DE FONDS			WBS ELEMENT / ÉLÉMENT WBS			FUNDS CENTRE / CENTRE DE FONDS			COST CENTRE / CENTRE DE COÛTS			FUNDS FONDS			GENERAL LEDGER / GRAND LIVRE GÉNÉRAL			INTERNAL ORDER / ORDRE INTERNE																		
19. ACCEPTED FOR SHIPMENT – ACCEPTÉ POUR EXPÉDITION SIGNATURE _____ DATE _____									20. TPC – CPT									21. WSBL NO. – N° FEUILLE DE FECS																					
<b>SECTION 3 – DESTINATION TRANSPORTATION AGENT – AGENT DE TRANSPORT À DESTINATION</b>																																							
22. DATE REC'D – DATE REÇU						23. CARRIER / CARRIER SERVICE – TRANSPORTEUR / SERVICE DU TRANSPORTEUR						24. DESCRIPTION OF LOSS / DAMAGE / DESCRIPTION DE LA PERTE / DOMMAGE																											
25. INCOMING OFF CONTRACT – RÉCEPTION DU CONTRAT CONTRACTOR / CONTRACTEUR NAME – NOM ADDRESS / ADRESSE						26. FCA POINT – FRANCO POINT																																	
						27. ISN # (DEPOT ONLY) / ISN # (DEPOT SEULEMENT)																																	
<b>SECTION 4 – DELIVERY / CONSIGNEE – LIVRAISON / DESTINATAIRE</b>																																							
28. DELIVERY SERVICE – LIVRAISON SIGNATURE _____ DATE _____									30. COMMENTS – COMMENTAIRES																														
29. CONSIGNEE – DESTINATAIRE SIGNATURE _____ DATE _____																																							
DND 690 (04-2009) 7530-21-903-1515																																							
CODING BLOCK FOR 12 – BLOC DE CODAGE 12																																							
TYPE / GENRE	BALE / BAL	BUNDLE / BALLOT	CARTON / CAISSE	CASE / BOÎTE	CONTAINER / RÉCIPENT	CRATE-CAISSE / CLAIR-VOIE	ENVELOPE / ENVELOPPE	PALLET / PALLETTE	TRI-WALL / CAISSE / CARTON TRIPLE	OTHER / AUTRE																													
CODE	BAL	BUN	CTN	CSE	CTR	CRT	ENV	PAL	TW	OTH																													

Design: Forms Management 013-993-4050  
Conception : Gestion des formulaires 013-993-4062  
**Consignee / Destinataire 1**

Example of DND Form 690 - Consignment Authorization and Receipt Form (CARF).



MOE 04-1917 (07/07)

Instructions for completion and distribution on reverse / Instructions pour compléter et distribuer au verso

Copy / Copie 1 (white / blanche)



## **APPENDIX D: Responder Roles and Responsibilities**

## QUALIFIED RESPONDERS

	RESPONSIBILITIES
<b>8 Wing Environment Management (WEnv) - 8 Wing Environmental Officer</b>	Report <u>spills</u> and <u>changes</u> to Environment Canada and AANDC Inspector, or required legislative authorities.
	Keep tank Environmental Emergency Plan (E2P) up to date
	Submit any changes of E2P to Fire hall
	Establish a schedule for replacing and upgrading tanks as required by regulations
	Respond to Emergencies as required
<b>Fire Chief (Smokey)</b>	First line response to HAZMAT related issues i.e. spill response
<b>Deputy Fire Chief (Bandit)</b>	Augment Fire Chief in providing a HAZMAT Response capability
<b>HAZMAT/Environmental Technician/ Coordinator</b>	Fill out CFS Alert Spill Report for all spills, regardless of quantity, and forward to Site Manager for review
	Augment Fire Chief in providing a HAZMAT Response capability
<b>Zippo, B Furn O</b>	Follows an established preventative maintenance schedule for regular tank inspections
<b>All qualified personnel, as required</b>	Spill Containment, Clean-up
<b>Supervisor (Site Manager)</b>	Contractor to maintain tank inspection and maintenance records; Keep tank inspection records for life of tank.
	<u>Request changes</u> required to tank, tank system, contents of tank or tank maintenance to Boss Beaver.
	Review CFS Alert Spill Report; Ensure spill reports signed by the CO or delegated authority
	Report any spills to WEnv within 24 hours
<b>Daily Inspector (Zippo, B Furn O)</b>	Report repair and maintenance issues to supervisor
	Have any combustible debris cleared away from around tank
	Maintain spill equipment
	Daily inspections every day tank is in use
	In case of spill, implement spill response procedures
	Initiate Emergency Response Plan on discovery of a spill

Excerpt from the Environmental Emergency Plan (E2P) for fuel tank systems registered under Environment Canada.

## **APPENDIX E: General Spill Procedures for CFS Alert**

## General Spill Procedures

**Immediately contact Smokey at ext. 3300 or Bandit at ext. 3301, if spill technical assistance is required or the spill has occurred off the hard surface, or the spill has entered a waterway.**

1. Ensure personnel safety and that of others by keeping unnecessary personnel away from the spill site;
2. Ensure that there is an appropriate fire extinguisher in the immediate area;
3. Ventilate area if release is indoors and remove all sources of ignition;
4. Stop the source of the release *only if safe to do so*. Stop leak by plugging hole or using, if available, a tank or pipe shut-off valve;
5. Control the further spread of the product to prevent the product from escaping the transfer or secondary containment area if possible, by use of spill kit. Ensure that proper PPE is worn when assessing, containing, and cleaning up a release. Ensure that the product does not enter streams or waterways by using absorbent booms, pads, mats, earth, dykes, trenches, and other available materials;
6. Any spills must be reported immediately to the Fire Chief(Smokey), Site Manager, Zippo, HAZMAT Coordinator; and,
7. 8 Wing Environmental Management staff are to be notified as soon as possible.

## For Releases

1. Residues should be soaked up with appropriate absorbent material (do not flush away residues with water);
2. Clean up the spill, *only if safe to do so*;
3. Transfer absorbent material with non-sparking tools into a labelled, sealable container;
4. Excavate any impacted soil or snow to be stored in a sealed container for analysis and disposal;
5. Return all clean-up material and hazardous waste to the HAZMAT Coordinator for disposal;



**Do not mix contaminated soil with existing soil in the BIOPILE**

6. Return the completed *Hazardous Material Incident Report* to the 8 WEnv O by fax or E-Mail within 24 hours; and,
7. Replenish spill kit items.

## **APPENDIX F: Spill Report Forms**

## 8 Wing/CFB Trenton Hazardous Material Spill Response and Reporting Form

<b>1. Spill reported by:</b>	<b>Name &amp; Initials:</b>	<b>Phone #:</b>	<b>Unit:</b>
<b>2. Spill Occurrence - Date:</b>		<b>Spill Start Time:</b>	<b>Spill Stop Time:</b>
<b>3. Source of Spill:</b>		<b>Location of spill: (reference to a geographical location)</b>	
<b>4. a. Hazardous Material Spilled:</b>		<b>b. Quantity Spilled (Litres/Kg):</b>	
		<b>Quantity Recovered:</b>	
<b>c. Weather conditions</b> (snow -rain – dry)		<b>d. Spill clean up completion time:</b>	
		<b>Spill cleaned up by:</b>	
<b>5. Cause of Spill (be brief):</b>			
<b>6. Effect(s) of Spill (be brief):</b>			
<b>7. Distance (in meters) from point of release to nearest:</b>			
<b>a. Water Well:</b>		<b>c. Catch Basin or Drain:</b>	
<b>b. Property Boundary:</b>		<b>d. Surface water course (i.e. creek, Bay, etc):</b>	
<b>8. Details of action, taken or proposed, to mitigate effects of spill:</b>			
<b>8. Internal/External agencies notified.</b>			
<b>10. Off -Base agencies that responded to spill:</b>			
<b>11. Aircraft Fuel Jettisons</b>			
<b>a. Tail # and Call Sign:</b>			
<b>b. Type of fuel</b>		<b>c. Quantity jettisoned (lbs):</b>	
<b>d. Altitude of jettisoning (m):</b>		<b>e. Ground temperature during jettisoning (°C):</b>	
<b>f. Duration of fuel jettison (min):</b>		<b>g. Aircraft velocity during jettisoning (Kt/hr):</b>	
<b>h. average wind speed between ground level and jettisoning altitude (kt/hr):</b>		<b>i. Wind orientation (relative to aircraft) during jettisoning (parallel/not parallel):</b>	
<p><b>NOTE: Forward this report to Wing Environment Officer (WEnvO) within 24 hours of spill, fax # 613-965-3368. Contact WEnvO if questions regarding completing the report, ext 3930 or 613-965-3930.</b></p>			

Example of the DND 8 Wing Spill Report Form.



# NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE

TEL: (867) 920-8130

FAX: (867) 873-6924

EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

<b>A</b>	REPORT DATE: MONTH – DAY – YEAR		REPORT TIME		<input type="checkbox"/> ORIGINAL SPILL REPORT, OR <input type="checkbox"/> UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER _____
	OCCURRENCE DATE: MONTH – DAY – YEAR		OCCURRENCE TIME			
<b>C</b>	LAND USE PERMIT NUMBER (IF APPLICABLE)			WATER LICENCE NUMBER (IF APPLICABLE)		
<b>D</b>	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION				REGION <input type="checkbox"/> NWT <input type="checkbox"/> NUNAVUT <input type="checkbox"/> ADJACENT JURISDICTION OR OCEAN	
<b>E</b>	LATITUDE DEGREES   MINUTES   SECONDS			LONGITUDE DEGREES   MINUTES   SECONDS		
<b>F</b>	RESPONSIBLE PARTY OR VESSEL NAME		RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION			
<b>G</b>	ANY CONTRACTOR INVOLVED		CONTRACTOR ADDRESS OR OFFICE LOCATION			
<b>H</b>	PRODUCT SPILLED		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES		U.N. NUMBER	
	SECOND PRODUCT SPILLED (IF APPLICABLE)		QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES		U.N. NUMBER	
<b>I</b>	SPILL SOURCE		SPILL CAUSE		AREA OF CONTAMINATION IN SQUARE METRES	
<b>J</b>	FACTORS AFFECTING SPILL OR RECOVERY		DESCRIBE ANY ASSISTANCE REQUIRED		HAZARDS TO PERSONS, PROPERTY OR ENVIRONMENT	
<b>K</b>	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS					
<b>L</b>	REPORTED TO SPILL LINE BY	POSITION	EMPLOYER	LOCATION CALLING FROM	TELEPHONE	
<b>M</b>	ANY ALTERNATE CONTACT	POSITION	EMPLOYER	ALTERNATE CONTACT LOCATION	ALTERNATE TELEPHONE	
<b>REPORT LINE USE ONLY</b>						
<b>N</b>	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130	
LEAD AGENCY <input type="checkbox"/> EC <input type="checkbox"/> CCG <input type="checkbox"/> GNWT <input type="checkbox"/> GN <input type="checkbox"/> ILA <input type="checkbox"/> INAC <input type="checkbox"/> NEB <input type="checkbox"/> TC			SIGNIFICANCE <input type="checkbox"/> MINOR <input type="checkbox"/> MAJOR <input type="checkbox"/> UNKNOWN		FILE STATUS <input type="checkbox"/> OPEN <input type="checkbox"/> CLOSED	
AGENCY		CONTACT NAME		CONTACT TIME		REMARKS
LEAD AGENCY						
FIRST SUPPORT AGENCY						
SECOND SUPPORT AGENCY						
THIRD SUPPORT AGENCY						

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Example of the NT-NU Spill Report Form.