Spill Contingency Plan

Arctic Flora Research Team, Canadian Museum of Nature

15 March 2012

Contents

1) Introduction and Project Details

This contingency plan is based on:
Water Resources Division, Indian and Northern Affairs Canada (2007) Guidelines for Spill Contingency Planning. 30 pp. http://www.aadnc-aandc.gc.ca/eng/1100100024236 [accessed 15 March 2012]

i) Company name, location and mailing address

Canadian Museum of Nature
PO Box 3443, Stn D
Ottawa, Ontario K1P 6P4, Canada

Project Leader: Jeffery M. Saarela, PhD
Email: jsaarela@mus-nature.ca
Phone: 1.613.364.4080
Fax: 1.613.364.4027

Research Site Name and Location:
18–25 July 2012 Head of Barrier Inlet, southern Baffin Island, Nunavut:
A remote camp and vicinity at the head of Barrier Inlet 60 km SE of Kimmirut (N62.60611, W68.841389).

ii) Effective date of spill contingency plan: 1 April 2012

iii) Last revision to spill contingency plan: n/a (the current plan is the first one)

iv) Distribution List

The latest version of the plan has been distributed to:

- Lynn Gillespie, Research Scientist, Canadian Museum of Nature & Member of CMN Arctic Flora Research Team
- Roger Bull, Co-Chair, Health and Safety Committee & Research Assistant, Canadian Museum of Nature & Member of CMN Arctic Flora Research Team
- Jennifer Doubt, Curator of National Herbarium of Canada, Canadian Museum of Nature & Member of CMN Arctic Flora Research Team
- Paul Sokoloff, Research Assistant, Canadian Museum of Nature & Member of CMN Arctic Flora Research Team
- Qikiqtani Inuit Association
- Nunavut Water Board
- Wildlife Management, Nunavut Department of Environment

v) Purpose and Scope:

The purpose of this plan is to outline response actions for potential fuel spills, of any size, including a worst case scenario for the Canadian Museum of Nature at their Barrier Inlet camp in July 2012. The plan identifies key response personnel and their roles and responsibilities should there be a spill. The plan also identifies the equipment and other resources available to respond to a spill. It details response procedures that aim to minimize all potential health and safety hazards, damage to the environment, and clean-up efforts. The plan has been prepared to ensure quick and effective access to all required information for responding to a spill.

vi) Company Environmental Policy

The mandate of the Canadian Museum of Nature (CMN) is to increase, throughout Canada and internationally, interest in, knowledge of and appreciation and respect for the natural world by establishing, maintaining and developing for research and posterity, a collection of natural history objects, with special but not exclusive reference to Canada, and by demonstrating the natural world, the knowledge derived from it and the understanding it represents.

As such, the Museum is committed to understanding and protecting the natural environment, recognizing that protecting the environment requires scientific knowledge of the environment so sound decisions can be made.

The Museum does not have an explicit environmental policy for field research conducted by its staff. However, environmental policy at the CMN is reflected in the Museums Value and Ethics Code:

CMN employees are guided in their work and their professional conduct by a balanced framework of core institutional values: *Honesty and Integrity, Respect for People and Nature, the Pursuit of Excellence,* and *Continuous Learning.*

Honesty and Integrity: *In all actions and relationships, both to the public and to each other.*

- CMN employees work within the laws of Canada and maintain the tradition of political non-partisanship of employees within federal institution.
- CMN employees support both individual and collective accountability and provide Parliament and Canadians with the results of their work.
- At the Canadian Museum of Nature, the manner in which ends are achieved is as important as the achievements themselves;
- CMN employees endeavour to ensure the proper, effective and efficient use of assets and resources.
- CMN employees act at all times in a manner that will bear the closest public scrutiny; an obligation that is not fully discharged by simply acting within the law.
- CMN employees perform their duties and arrange their private affairs so that public confidence in the integrity, objectivity and impartiality of a federal institution are conserved and enhanced.

Respect for People and Nature - *Demonstrating respect, fairness and courtesy in all dealings with the public and fellow CMN employees, as well as demonstrating a deep respect for the natural world.*

- Respect for human dignity and for the value of every person governs the exercise of authority and responsibility, and reinforces the wider range of CMN values.
- CMN business is conducted openly, with respect for diversity and for both official languages of Canada.
- The CMN promotes an attitude of environmental awareness and sensitivity that supports and expresses the principles of conservation and environmental stewardship.

The Pursuit of Excellence: *Striving to achieve exceptional performance and provide outstanding service.*

- CMN employees constantly renew their commitment to serve Canadians by providing quality of service, by adapting to changing needs through innovation, and by seeking to improve the efficiency and effectiveness of CMN programs and services wherever possible.
- CMN employees, in fulfilling their official duties and responsibilities, make decisions in the public interest and behave in accordance with codes of professional practice.
- CMN employees support teamwork, cooperation, collaboration and open communication.

vii) Project Description

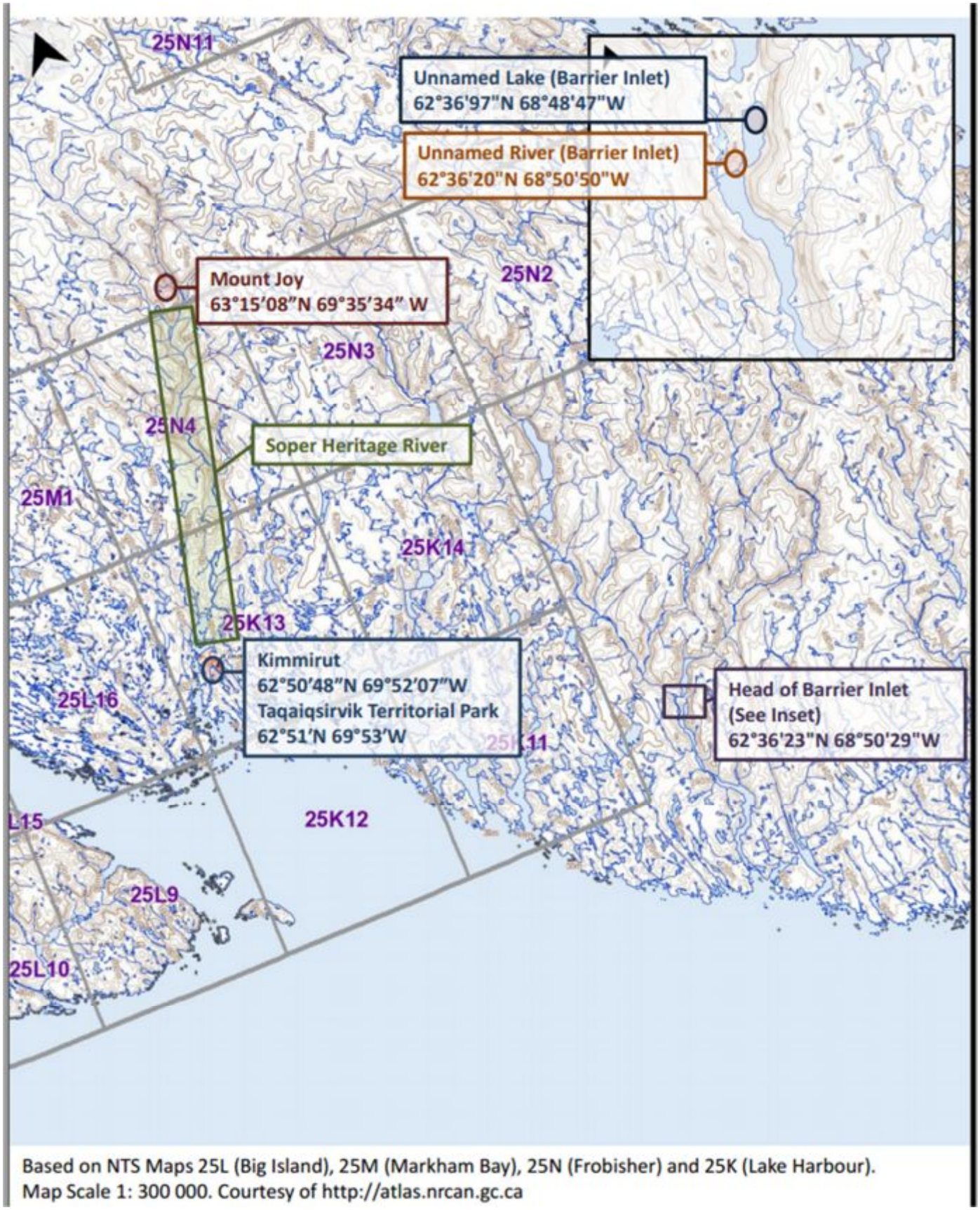
The head of Barrier Inlet will be used as a temporary camp for seven days. The Museum research team will stay at this camp, and explore the plant diversity of the region in and around the camp by foot (within a radius of 5-10 km from the camp, i.e., walking distance). Permit applications have or will be submitted to the following agencies, for approval to conduct botanical studies in this region:

- Qikitani Inuit Association
- Nunavut Water Board
- Wildlife Management, Department of Environment, Nunavut

viii) Site Description

The camp is located ca. 60 km southeast of Kimmirut. It is in a remote area, with no inhabitants. Kimmirut is the closest community, and Iqaluit is the next closest (ca. 125 km to the north). The map on the next page shows the location of Barrier Inlet camp, including an inset that shows the local region in more detail.

The temporary camp will comprise six or seven small tents, and will be set up in a flat area close (ca. 100 m) to water sources (the unnamed river and lake in the inset on the map below). We will not set up any permanent structures, and will leave the site as we find it when our work is finished. Fuel storage will be adjacent to our camp, in a flat area away from water sources that is suitable for a helicopter to land.



Based on NTS Maps 25L (Big Island), 25M (Markham Bay), 25N (Frobisher) and 25K (Lake Harbour).
Map Scale 1: 300 000. Courtesy of http://atlas.nrcan.gc.ca

ix) List of Hazardous Materials on Site

There will be two fuel storage areas on site. One will be in an area suitable for a helicopter to land; this is where drums of Jet B Fuel will be located. The second fuel storage area will be around a tent designated as our kitchen tent. Here we will store camp fuel (white gas) to fuel our small camp stoves. The exact locations for these two fuel storage areas are not known in advance. They will be established when we arrive at the site to set up the temporary camp. Table 1 lists the hazardous materials that will be stored on site, type of storage container, the normal and maximum storage quantities, and storage locations. Material safety data sheets (MSDS) for these fuels are included in Appendix 1.

Table 1: List of hazardous materials stored on site, type of storage container, the normal and maximum storage quantities, and storage locations.

Material	Storage Container	Normally On-site	Maximum On-site	Storage Location and Uses
Jet B Fuel	205 L drums	405 L (2 drums) or less	6 drums (1030 L) or less	Stored near helicopter landing area, used to power helicopter.
White gas (naphtha) [Coleman camp fuel]	3.8 L (1 can)	7.4 L (2 cans)	11.2 L(3 cans)	Near kitchen tent, used to fuel camp stoves for cooking

x) Existing preventative measures

Planning for an emergency situation is of utmost importance due to the nature of the hazardous materials stored on site, and the remoteness of the site (some 60 km from civilization).

All Jet B Fuel will be delivered by helicopter, and not more than 2 barrels of Jet B Fuel will be present in the camp at any one time. Helicopter fuel will be unloaded by helicopter pilots, with the assistance of the Museum research team only if specifically requested. When Museum employees assist with moving fuel barrels, they will follow all directions and instructions given to them by the helicopter pilots. Storage areas for the fuel barrels will be decided by the helicopter pilots, who have the knowledge and experience to determine the best and safest location for them. Helicopter staff are expected to follow their employers regulations and other standards as appropriate when transporting fuel barrels (i.e., wearing safety glasses, flame retardant clothing, etc.). Helicopters will be refuelled only by helicopter pilots, who will use fuel transfer hoses that meet their safety regulations. Storage areas for Jet B fuel will be lined with impermeable liners and bermed with 110% containment.

White gas (naphtha) will be stored in the containers it comes in, and in fuel bottles for camp stoves.

The project leader, camp manager, and helicopter pilots will monitor fuel storage daily to check for leaks and other damage to the fuel containers. They will also check for discoloured or stained soils around the fuel and in the area where the helicopter lands. Checks of helicopter machinery will be the responsibility of helicopter pilots.

Grey water from cooking (this will be minimal) will be dumped at least 100 m from all water sources.

xi) Additional copies

Hard copies of this spill contingency plan will be kept on-site, in a binder that contains hard copies of research permits and licences. In the field, digital copies will also be kept on laptop computers and tablet devices. A hardcopy will be held at the Canadian Museum of Nature in Ottawa. Copies can be obtained by contacting Jeff Saarela (contact details above).

xii) Process for staff response to media and public inquiries

We do not expect there to be any media interest should a spill occur at our site (the volume of hazardous materials is extremely low), but should media interest arise, all inquiries will be directed to Mr. Dan Smythe, Senior Media Relations Officer, Communications Services, Canadian Museum of Nature, Ottawa. The project leader and/or camp manager will keep the media relations officer informed of any news of potential interest to the media relating to spills.

2) Response Organization

Response personnel:
Project Leader: Jeff Saarela
Project Co-Leader: Lynn Gillespie
Camp Manager: Roger Bull
Helicopter Pilot(s) (when present on site)

All members of the research team will be working together at the camp.

The research team will have two satellite telephones in camp for communicating externally. These phones are rented from the Polar Continental Shelf Program (PSCP), Natural Resources Canada, thus we will not know their phone numbers until we receive them. When received, the numbers will be written into this guide:

Satellite Phone 1 Number: _____

Satellite Phone 2 Number: _____

3) Action Plan

i) Potential spill sizes and sources for each hazardous material on site

A list of potential spill events and associated discharge volumes in presented in Table 2. The most likely discharge volume is indicated. The spill clean-up procedures focus on the quantity of the most likely discharge. Discharge rates are not given; these could vary depending on the source of the leak or puncture (e.g., a small puncture could discharge over days, whereas a larger puncture could discharge in minutes to hours).

Material (sources)	Potential Discharge Event	Discharge Volume (worst case)	Direction of Potential Discharge
Jet B Fuel (helicopter)	1) Overfilling of aircraft. 2) Leak from drum or hose while filling aircraft. 3) Minor leaking fuel drum in/out side fuel storage area. 4) Large puncture, fast leaking drum in/outside fuel storage area. 5) All drums punctured and leaking at once (very unlikely).	Likely under 205 L/1 drum (max 1030 L/6 drums)	Fuel will be stored on flat ground, and discharge would be localized to the fuel storage area. There may be potential for long distance underground dispersal into adjacent water sources.
White gas / naphtha (cooking stoves)	1) Leak while connected to camp stoves. 2) Minor leaking can in or outside fuel storage area. 3) Large puncture, fast leaking can in/outside fuel storage area. 4) All cans punctured and leaking at once (very unlikely).	Likely under 3.8 L / 1 can (max 11.2 L / 3 cans)	Fuel will be stored on flat ground, and discharge would be localized to the fuel storage area. There may be potential for long distance underground dispersal into adjacent water sources.

ii) Potential environmental impacts

Jet B Fuel

Environmental impacts: Jet B fuel may be harmful to wildlife and aquatic life. It is not readily biodegradable and has the potential for bioaccumulation in the environment. Jet B fuel volatizes relatively quickly. Runoff into water bodies must be avoided.

Worst case scenario: All fuel drums were punctured or open simultaneously and contents seeped into surrounding soil and water bodies. This could cause illness or death to aquatic life, wildlife such as plants and soil organisms in the immediate area where the spill occurs, and indirectly affect wildlife feeding from the land and water.

White gas / naphtha

Environmental impacts: White gas may be harmful to wildlife and the surrounding environment. It is not readily biodegradable. White gas is volatile and flammable.

Worst case scenario: All cylinders were punctured or failed simultaneously and contents leaked into the surrounding environment and ignited leading to an explosion. This could cause serious environmental impacts in the immediate surroundings.

iii) Procedures

A. Procedures for initial actions

- Ensure safety of all personnel.
- Assess spill hazards and risks.
- Remove all sources of ignition.
- Stop the spill if safely possible e.g. shut of pump, replace cap, tip drum upward, patch leaking hole.
- Use the contents of the nearest spill kit to aid in stopping the spill if it is safe to do so. Tyvek suits and chemical master gloves are located in the spill kit and should be worn immediately if there is any risk of being in contact with fuel. No matter what the volume is, notify camp manager immediately.
- Contain the spill – use contents of spill kits to place sorbent materials on the spill, or use shovel to dig dike to contain spill. Methods will vary depending on the nature of the spill. See Section C for more details.

B. Spill reporting procedures

Report spill to project leader and/or camp manager. They will determine if the spill is to be reported to the spill report line.

Fill out a copy of the NWT Spill Report Form (see Appendix 2 for the form). Submit the completed form to the staff at the 24 Hour spill line ASAP.

Nunavut / NWT 24-hour Spill Report Line:
Phone: (867) 920 – 8130
Fax (867) 873 – 6924
Email: spills@gov.nt.ca

C. Procedures for containing and controlling the spill on land

- Initiate spill containment by first determining what will be affected by the spill.
- Assess speed and direction of spill and cause of movement (water, wind and slope).
- Determine best location for containing spill, avoiding any water bodies.
- Have a contingency plan ready in case spill worsens beyond control or if the weather or topography impedes containment.

Specific spill containment methods for land, water, ice and snow are outlined below.

1) Containment of Spills on Land

Spills on land include spills on rock, gravel, soil and/or vegetation. Soil is a natural sorbent, thus spills on soil are generally less serious than spills on water, as contaminated soil can be more easily recovered. Generally spills on land occur during the late spring, summer or fall when snow cover is at a minimum. It is important that all measures be undertaken to avoid spills reaching open water bodies.

Dykes

Dykes can be created using soil surrounding a spill on land. These dykes are constructed around the perimeter or down slope of the spilled fuel. A dyke needs to be built up to a size that will ensure containment of the maximum quantity of fuel that may reach it. A plastic tarp can be placed on and at the base of the dyke such that fuel can pool up and subsequently be removed with sorbent materials or by pump into barrels or bags. If the spill is migrating very slowly a dyke may not be necessary and sorbents can be used to soak up fuels before they migrate away from the source of the spill.

Trenches

Trenches can be dug out to contain spills as long as the top layer of soil is thawed. Shovels, pick axes or plant collecting knives/diggers, etc. can be used, depending on the size of trench required. It is recommended that the trench be dug to the bedrock or permafrost, which will then provide containment layer for the spilled fuel. Fuel can then be recovered using a pump or sorbent materials.

2) Containment of Spills on Water

Spills on water such as rivers, streams or lakes are the most serious types of spills as they can negatively impact water quality and aquatic life. All measures need to be undertaken to contain spills on open water.

Booms

Booms are commonly used to recover fuel floating on the surface of lakes or slow moving streams. They are released from the shore of a water body to create a circle around the spill. If the spill is away from the shoreline a boat will need to be used to reach the spill, then the boom can be set out. More than one boom may be used at once. Booms may also be used in streams and should be set out at an angle to the current. Booms are designed to float and have sorbent materials built into them to absorb fuels at the edge of the boom. Fuel contained within the circle of the boom will need to be recovered using sorbent materials or pumps and placed into barrels or bags for disposal.

Weirs

Weirs can be used to contain spills in streams and to prevent further migration downstream. Plywood or other materials found on site can be placed into and across the width of the stream, such that water can still flow under the weir. Spilled fuel will float on the water surface and be contained at the foot of the weir. It can then be removed using sorbents, booms or pumps and placed into barrels or plastic bags.

Barriers

In some situations barriers made of netting or fence material can be installed across a stream, and sorbent materials placed at the base to absorb spilled fuel. Sorbents will need to be replaced as soon as they are saturated. Water will be allowed to flow through. This is very similar to the weir option discussed above. Note that in some cases, it may be appropriate to burn fuel or to let volatile fuels such as gasoline evaporate after containment on the water surface. This should only be undertaken in consultation with, and after approval from the Aboriginal Affairs and Northern Development Canada (AANDC) or lead agency Inspector.

D. Procedures for transferring, storing, and managing spill related wastes

In most cases, spill clean-ups are initiated at the far end of the spill and contained moving toward the centre of the spill. Sorbent socks and pads are generally used for small spill clean-up. A pump with attached fuel transfer hose can suction spills from leaking containers or large accumulations on land or ice, and direct these larger quantities into empty drums. Hand tools such as cans, shovels, and rakes are also very effective for small spills or hard to reach areas. Heavy equipment can be used if deemed necessary, and given space and time constraints.

Used sorbent materials are to be placed in plastic bags for future disposal. All materials mentioned in this section are available in the spill kits located at the research camp. Following clean up, any tools or equipment used will be properly washed and decontaminated, or replaced if this is not possible. For most of the containment procedures outlined in Section C, spilled petroleum products and materials used for containment will be placed into empty waste oil containers and sealed for proper disposal at an approved disposal facility.

E. Procedures for restoring affected areas

Once a spill of reportable size has been contained, the Museum research team will consult with the AANDC or lead agency Inspector assigned to the file to determine the level of clean-up required. The Inspector may require a site specific study to ensure appropriate clean up levels are met. Criteria that may be considered include natural biodegradation of oil, replacement of soil and re-vegetation

4) Resource Inventory

i) On-site resources

We expect to be issued a standard spill kit from the Polar Continental Shelf Program (PCSP). The spill kit will be located beside the fuel containers.

ii) Off-site resources / Emergency Contact Numbers

Nunavut / NWT 24-hour Spill Report Line	Phone: (867) 920 – 8130 Fax (867) 873 – 6924 Email: spills@gov.nt.ca
PCSP Ottawa	613-947-1650
PCSP Resolute Office	867-252-3872

Aboriginal Affairs and Northern Development Canada Inspector	(867) 669-2761
Environment Canada (Emergency) Yellowknife	(867) 669-4725
Nunavut Department of Environment Conservation Office (Iqaluit)	(867) 979-7800
RCMP (Yellowknife)	(867) 669-1111
RCMP (Iqaluit)	(867) 979-0123
RCMP (Kimmirut)	(867) 939-0123
Lory Beaudoin, Canadian Museum of Nature Research Office	(613) 364-4033
Other:	
Other:	
Other:	
Other:	
Other:	
Other:	

5) Training Program

The following training/orientation is delivered by the project leader and/or camp manager to all members of a research team staying in a camp where hazardous material is present. All members of the research team read this spill kit contingency plan before heading into the field.

All members of the research team participate in an orientation session in the field. During this session, the location of the spill kit and fuel storage areas are shown to the team. An overview of the spill action is reviewed when the camp is set up. All Museum personnel are required to have up-to-date first aid training before they can go in the field.

Appendix 1 – Material Safety Data Sheets

Appendix 2 – NU NT Spill Report Form

(forms also available at http://env.gov.nu.ca/node/66 [accessed 15 March 2012])

Material Safety Data Sheet

Lantern Fuel (Coleman)

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Calumet Lubricants Company
2780 Waterfront Pkwy E. Suite 200
Indianapolis, IN 46214

COMPANY CONTACT: Jennifer Hall
TELEPHONE NUMBER: (318)949-2421

EMERGENCY TELEPHONE NUMBERS
Darwin Parker @ Calumet Lubricant (318)832-4236 8am - 4pm cst M-F.
Chemtrec (800)424-9300 After Business Hrs.

PRODUCT NAME: Calumet Lantern Fuel (Coleman)
PRODUCT CODE: 0170-00
CHEMICAL NAME: Light Hydrotreated Distillate
CAS NUMBER: 68410-97-9
CHEMICAL FAMILY: Petroleum Hydrocarbon Naphtha
CHEMICAL FORMULA: C5-C9

2. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	EXPOSURE LIMITS	CONCENTRATION PERCENT BY VOLUME
Light Hydrotreated Distillate CAS NUMBER: 68410-97-9	Petroleum Distillate (Naphtha) TWA-400ppm	100.0

3. HAZARDS IDENTIFICATION

********** **EMERGENCY OVERVIEW** **********
* **WARNING: Flammable Liquid and Vapor. Harmful if inhaled and may cause delayed lung injury. Can cause nervous system depression. Aspiration hazard if swallowed - can enter lungs and cause damage. Keep away from heat, sparks, and flame. Avoid breathing vapor. Use ventilation adequate to keep vapor below recommended exposure limits. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.** *

POTENTIAL HEALTH EFFECTS

PRIMARY ROUTE(S) OF ENTRY
Skin.

EYES
Tests on similar materials suggest acute irritation.

SKIN
Tests on similar materials indicate acute irritation upon short-term exposure and chronic dermatitis on prolonged contact.

INGESTION
Acute aspiration hazard. Tests on similar materials indicate possibility of the following symptoms: headache, nausea, drowsiness, fatigue, pneumonitis, pulmonary adema, central nervous system depression, convulsions, and loss of consciousness.

INHALATION
Acute irritation. Tests on similar materials indicate the possibility of the **following symptoms:** headache, nasal and respiratory irritation, nausea, drowsiness, breathlessness, fatigue, central nervous system depression, convulsions, and loss of consciousness.

CHRONIC (CANCER INFORMATION)
Prolonged and/or repeated contact with this material may produce skin and eye irritation.
Carcinogen listed by : National Toxicology Program (NO)

3. HAZARDS IDENTIFICATION - Continued

CHRONIC (CANCER INFORMATION) - Continued

I. A. R. C. (NO)
OSHA (NO)
ACGIH (NO)

This product does not require a cancer hazard warning in accordance with the OSHA Hazard Communication Standard.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Personnel with pre-existing skin disorders should avoid contact with this product.

4. FIRST AID MEASURES

EYES

Flush eyes immediately with water a minimum of 15 minutes occasionally lifting lower and upper lids. Get medical attention promptly.

SKIN

Wash skin thoroughly with soap and water. Immediately remove contaminated clothing and launder before reuse. If irritation or rash develops, obtain medical assistance.

INGESTION

Call a physician immediately. Do not induce vomiting except at the instruction of a physician. Never give anything by mouth to an unconscious person.

INHALATION

Remove patient to fresh air and consult a physician. If breathing is difficult, give oxygen. If not breathing give artificial respiration.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT: <0°F <-18°C Tag Closed Cup
AUTOIGNITION: n/av.°F n/av.°C
FLAMMABILITY CLASS: IB
LOWER EXPLOSIVE LIMIT (%): n/av. % (estimated)
UPPER EXPLOSIVE LIMIT (%): n/av. % (estimated)

FIRE AND EXPLOSION HAZARDS

Can form flammable mixtures with air and flash at room temperature. Explosion hazard in fire situation. Vapor heavier than air and may travel considerable distance to a source of ignition and flash back.

EXTINGUISHING MEDIA

Dry Chemical, carbon dioxide, and foam. CAUTION: Water stream may spread fire.

FIRE FIGHTING INSTRUCTIONS

Use water spray only to cool containers exposed to flames. Do not enter enclosed or a confined work space without proper protective equipment. Fire fighting personnel should wear respiratory protection (positive pressure if available). If leak or spill has not ignited, use water spray to disperse the vapors.

Products of combustion include fumes, smoke and carbon monoxide.

6. ACCIDENTAL RELEASE MEASURES

Notify emergency response personnel. Evacuate area and remove ignition sources. Build dike to contain flow. Remove free liquid. Shut off ignition source. Contain spill and keep from entering waterways or sewers. Use personal protective equipment. Advise EPA; state agency if required. Absorb

6. ACCIDENTAL RELEASE MEASURES - Continued

on inert material. Shovel, sweep or vacuum spill and place in closed container for disposal.

7. HANDLING AND STORAGE

HANDLING AND STORAGE PRECAUTIONS
Store as OSHA Class IB flammable liquid. Keep away from flames, sparks or hot surfaces. Never use a torch to cut or weld on or near container. Empty oil containers can contain explosive vapors. Wash thoroughly after handling. Do not store with strong oxidizers. Lab samples should be stored and handled in a lab hood. Use explosion proof ventilation equipment.

STORAGE PRECAUTIONS
Empty containers retain product residue (liquid and vapor) and can be dangerous. Do not pressurize.
Storage Temperature: ambient or less
Storage Pressure: atmospheric

WORK/HYGIENIC PRACTICES
Wash hands with soap and water before eating, drinking, smoking or use of toilet facilities. Take a shower after work if general contact occurs. Remove oil-soaked clothing and launder before reuse. Launder or discard contaminated shoes and leather gloves.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS
Use adequate ventilation to keep oil mists of this material below applicable standard(s). See Section on occupational exposure limits.

EYE/FACE PROTECTION
Safety glasses, splash goggles, or face shield as appropriate. Have suitable eye water wash available.

SKIN PROTECTION
Avoid prolonged and/or repeated skin contact. If prolonged contact cannot be avoided, wear protective impervious gloves and clothing. Acceptable materials for gloves are neoprene; nitrile; viton.

RESPIRATORY PROTECTION
Up to 500 ppm hexane / 4000 ppm naphtha, half mask organic vapor respirator. Up to 2500 ppm hexane / 20,000 ppm naphtha, full face organic vapor respirator or full face supplied air respirator. Greater than 2500 ppm hexane / 20,000 ppm naphtha, fire fighting, or unknown concentration, self contained breathing apparatus with positive pressure.

OTHER/GENERAL PROTECTION
If there is a likelihood of splashing, an oil resistant clothing should be worn. Never wear oil soaked clothing. Launder or dry clean before wearing. Discard oil soaked shoes. Affix warning labels on containers in accordance with 29 CFR 1910.1200 (Hazard Communication Standard).

Maintain local or dilution ventilation to keep air concentration below 50 ppm hexane / 400 ppm naphtha. Loading, unloading, tank gauging, etc., remain upwind. Request assistance of safety and industrial hygiene personnel to determine air concentrations.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE
Clear liquid.

ODOR
Petroleum Naphtha.

9. PHYSICAL AND CHEMICAL PROPERTIES - Continued

ODOR THRESHOLD
N.D.

BASIC PHYSICAL PROPERTIES
PHYSICAL STATE: Liquid
BOILING POINT: IBP >100°F IBP >38°C
MELTING POINT: N/A°F N/A°C
VAPOR PRESSURE: 518 mm @ 68°F
VAPOR DENSITY (AIR=1): 3
SPECIFIC GRAVITY: 0.69 Water = 1
PACKING DENSITY: N/A
SOLUBILITY (H2O): negligible
PERCENT VOLATILES: 100
VOLATILE ORGANIC COMPOUNDS (VOC) CONTENT: 100.0 %
EVAPORATION RATE: n/av.
pH: essentially neutral
VISCOSITY: n/av.

Physical data may vary slightly to meet specifications.

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions

CONDITIONS TO AVOID (STABILITY)
Sources of ignition.

INCOMPATIBLE MATERIALS
Strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS
Incomplete combustion may produce fumes, smoke, carbon monoxide and other asphyxiants.

HAZARDOUS POLYMERIZATION: will not occur

11. TOXICOLOGICAL INFORMATION

ACUTE STUDIES

EYE EFFECTS
Irritation on contact.

SKIN EFFECTS
May cause irritation or dermatitis with prolonged and repeated contact.

ACUTE ORAL EFFECTS
Tests on similar materials indicate an order of acute oral toxicity.

ACUTE INHALATION EFFECTS
Acute toxicity expected on inhalation.

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE
Dermatitis and Sensitive skin.

This product is not listed as carcinogenic or a potential carcinogen by the National Toxicology Program, by the I.A.R.C. monographs or by OSHA. Nevertheless, good industrial hygienic practices are recommended.

12. ECOLOGICAL INFORMATION

No specific ecological data are available for this product. Please refer to Section 6 for information regarding accidental releases and Section 15 for regulatory reporting information.

13. DISPOSAL CONSIDERATIONS

Follow federal, state and local regulations. If "used", RCRA criteria must be determined. Do not flush to drain/storm sewer. Contract to authorized disposal service. If permitted incineration may be practical. Recommend recycling.

14. TRANSPORT INFORMATION

PROPER SHIPPING NAME: Petroleum Distillates, nos, Class 3, UN 1268, PG II

HAZARD CLASS: Class 3 Flammable Liquid
DOT IDENTIFICATION NUMBER: UN1268
DOT SHIPPING LABEL: DOT Hazardous Material

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATORY INFORMATION
SARA 302 Threshold Planning Quantity: not applicable
SARA 304 Reportable Quantity : not applicable
SARA 311 Categories: Immediate (Acute) Health Effects -- N
Delayed (Chronic) Health Effects -- Y
Fire Hazard -- Y
Sudden Release of Pressure Hazard-- N
Reactivity Hazard -- N

EPA/TSCA Inventory: The components of this product are listed on the EPA/TSCA inventory of chemicals.
EPA Hazard Classification Code: NOT APPLICABLE

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA): No chemicals in this product are subject to the reporting requirements of CERCLA Section 101(14)(F). When this product is used in a mixture, or as an ingredient in another product, or in a manufacturing operation, the petroleum exclusion may terminate and an accidental spill may require reporting to the National Response Center.

SARA TITLE III NOTIFICATIONS AND INFORMATION

SARA TITLE III - HAZARD CLASSES: Chronic Health Hazard
Fire Hazard

SARA TITLE III - SECTION 313 SUPPLIER NOTIFICATION
The following chemicals are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and reauthorization Act of 1986 and 40 CFR Part 372:

Cyclohexane	CAS # 110-82-7	Up to 15wt %
N-Hexane	CAS # 110-54-3	Up to 25wt %

16. OTHER INFORMATION

NFPA HAZARD RATING - HEALTH: 1 Slight
- FIRE: 4 Extreme
- REACTIVITY: 0 Negligible

PREPARED BY: Jennifer Hall **PHONE:** (318)949-2421
SUPERCEDES MSDS DATED: 04/01/96
Revised:

16. OTHER INFORMATION - Continued

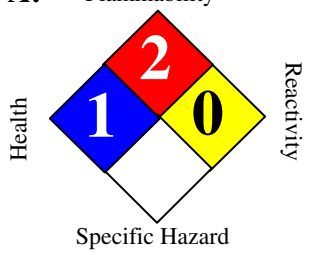
9. Physical Properties
15. SARA Title III
12. Ecological Information
2. Composition

DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES

The information contained herein is based upon data believed to be reliable and reflects our best professional judgement. Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained therein and assume no responsibility regarding the suitability of this information for the user's intended purpose or for the consequence of its use. Each individual should make a determination as to the suitability of the information for his/her particular purpose(s).

Material Safety Data Sheet
Jet Fuel

NFPA:



HMIS III:

HEALTH	1
FLAMMABILITY	2
PHYSICAL	0

0 = Insignificant, 1 = Slight, 2 = Moderate, 3 = High, 4 = Extreme

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Jet Fuel

Synonyms : Jet Fuel - A, B, A-I, A-50, High Sulfur, Military, Jet A & B Aviation Turbine Fuel, Jet A-I, Jet A; Avjet For Blending; Jet Q Turbine Fuel, Aviation Fuel; Turbine Fuel; JP-4; JP-5; JP-8, Av-Jet, 888100004452

MSDS Number : 888100004452 **Version** : 2.12

Product Use Description : Fuel

Company : For: Tesoro Refining & Marketing Co.
19100 Ridgewood Parkway, San Antonio, TX 78259

Tesoro Call Center : (877) 783-7676 **Chemtrec (Emergency Contact)** : (800) 424-9300

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Regulatory status : This material is considered hazardous by the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200).

Signal Word : WARNING

Hazard Summary : Harmful or fatal if swallowed. Harmful by inhalation. Irritating to eyes, respiratory system and skin. Affects central nervous system. Flammable.

Potential Health Effects

Eyes : Severe eye irritant. Contact may cause stinging, watering, redness, swelling, and eye damage.

Skin : Prolonged or repeated skin contact with liquid may cause defatting resulting in drying, redness and possible blistering. Practically non-toxic if absorbed following acute (single) exposure. Liquid may be absorbed through the skin in toxic amounts if large areas of skin are repeatedly exposed.

Ingestion : Ingestion may cause gastrointestinal disturbances, including irritation, nausea, vomiting and diarrhea, and central nervous (brain) effects similar to alcohol intoxication. In severe cases, tremors, convulsions, loss of consciousness, coma, respiratory arrest and death may occur.

Inhalation : Inhalation of fumes or mist may result in respiratory tract irritation and central

nervous system (brain) effects may include headache, dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure, and death. WARNING: the burning of any hydrocarbon as a fuel in an area without adequate ventilation may result in hazardous levels of combustion products, including carbon monoxide, and inadequate oxygen levels, which may cause unconsciousness, suffocation, and death.

Chronic Exposure : Similar products produced skin cancer and systemic toxicity in laboratory animals following repeated applications. The significance of these results to human exposures has not been determined - see Section 11 Toxicological Information.

Target Organs : Eyes, Skin, Respiratory system, Irritation from skin exposure may aggravate existing open wounds, skin disorders, and dermatitis (rash)

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Weight %
Kerosene (petroleum)	8008-20-6	100%
Naphthalene	91-20-3	0 to 3%
Ethyl Benzene	100-41-4	0 to 1%
Trimethy Benzene	95-63-6	0 to 1%
Ethyl Benzene	100-41-4	0 to 1%
Diethylene Glycol Monomethyl Ether	111-77-3	0 to 0.15%
Alkyl Dithiothiadiazole	N/A	0 to 15%

SECTION 4. FIRST AID MEASURES

Inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately.

Skin contact : Take off all contaminated clothing immediately. Wash off immediately with soap and plenty of water. Wash contaminated clothing before re-use. If skin irritation persists, seek medical attention.

Eye contact : In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek medical attention immediately.

Ingestion : Do NOT induce vomiting. Do not give liquids. Seek medical attention immediately. If vomiting does occur naturally, keep head below the hips to reduce the risks of aspiration. Monitor for breathing difficulties. Small amounts of material which enter the mouth should be rinsed out until the taste is dissipated.

Notes to physician : Symptoms: Aspiration may cause pulmonary edema and pneumonitis. Treatment: Do not induce vomiting, use gastric lavage only. Remove from further exposure and treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Form	:	Liquid
Flash point	:	38 °C (100 °F) minimum
Auto Ignition temperature	:	210 °C (410 °F)
Lower explosive limit	:	0.7 %(V)
Upper explosive limit	:	5.0 %(V)
Suitable extinguishing media	:	Carbon dioxide (CO2), Water spray, Dry chemical, Foam, Keep containers and surroundings cool with water spray., Do not use a solid water stream as it may scatter and spread fire., Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers.
Specific hazards during fire fighting	:	Fire Hazard. Do not use a solid water stream as it may scatter and spread fire. Cool closed containers exposed to fire with water spray. Sealed containers may rupture when heated. Above the flash point, explosive vapor-air mixtures may be formed. Vapors can flow along surfaces to distant ignition source and flash back.
Special protective equipment for fire-fighters	:	Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH/MSHA- approved pressure-demand self-contained breathing apparatus with full facepiece and full protective clothing.
Further information	:	Exposure to decomposition products may be a hazard to health. Standard procedure for chemical fires.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions	:	ACTIVATE FACILITY'S SPILL CONTINGENCY OR EMERGENCY RESPONSE PLAN if applicable. Evacuate nonessential personnel and remove or secure all ignition sources. Consider wind direction; stay upwind and uphill, if possible. Evaluate the direction of product travel, diking, sewers, etc. to contain spill areas. Spills may infiltrate subsurface soil and groundwater; professional assistance may be necessary to determine the extent of subsurface impact.
Environmental precautions	:	Carefully contain and stop the source of the spill, if safe to do so. Protect bodies of water by diking, absorbents, or absorbent boom, if possible. Do not flush down sewer or drainage systems, unless system is designed and permitted to handle such material. The use of fire fighting foam may be useful in certain situations to reduce vapors. The proper use of water spray may effectively disperse product vapors or the liquid itself, preventing contact with ignition sources or areas/equipment that require protection.
Methods for cleaning up	:	Take up with sand or oil absorbing materials. Carefully shovel, scoop or sweep up into a waste container for reclamation or disposal - caution, flammable vapors may accumulate in closed containers. Response and clean-up crews must be properly trained and must utilize proper protective equipment (see Section 8).

SECTION 7. HANDLING AND STORAGE

Handling	:	Keep away from fire, sparks and heated surfaces. No smoking near areas where material is stored or handled. The product should only be stored and handled in areas with intrinsically safe electrical classification.

Advice on protection against fire and explosion : Hydrocarbon liquids including this product can act as a non-conductive flammable liquid (or static accumulators), and may form ignitable vapor-air mixtures in storage tanks or other containers. Precautions to prevent static-initated fire or explosion during transfer, storage or handling, include but are not limited to these examples:

(1) Ground and bond containers during product transfers. Grounding and bonding may not be adequate protection to prevent ignition or explosion of hydrocarbon liquids and vapors that are static accumulators.

(2) Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil or diesel) is loaded into tanks previously containing low flash point products (such gasoline or naphtha).

(3) Storage tank level floats must be effectively bonded.

For more information on precautions to prevent static-initated fire or explosion, see NFPA 77, Recommended Practice on Static Electricity (2007), and API Recommended Practice 2003, Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents (2008).

Dust explosion class : Not applicable

Requirements for storage areas and containers : Keep away from flame, sparks, excessive temperatures and open flame. Use approved containers. Keep containers closed and clearly labeled. Empty or partially full product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose containers to sources of ignition. Store in a well-ventilated area. The storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks In Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning Petroleum Storage Tanks".

Advice on common storage : Keep away from food, drink and animal feed. Incompatible with oxidizing agents. Incompatible with acids.

Other data : Emergency eye wash capability should be available in the near proximity to operations presenting a potential splash exposure.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

List	Components	CAS-No.	Type:	Value
OSHA Z1	Naphthalene	91-20-3	PEL	10 ppm 50 mg/m3
	Ethyl Benzene	100-41-4	PEL	100 ppm 435 mg/m3
ACGIH	Naphthalene	91-20-3	TWA	10 ppm
		91-20-3	STEL	15 ppm
	Kerosene (petroleum)	8008-20-6	TWA	200 mg/m3
	Ethyl Benzene	100-41-4	TWA	100 ppm 434 mg/m3
			STEL	125 ppm 543 mg/m3

Protective measures : Keep out of reach of children.

Engineering measures : Use only intrinsically safe electrical equipment approved for use in classified areas. Emergency eye wash capability should be available in the vicinity of any potential splash exposure.

Eye protection	:	Goggles and face shield as needed to prevent eye and face contact.
Hand protection	:	Gloves constructed of nitrile, neoprene, or PVC are recommended.
Skin and body protection	:	Chemical protective clothing such as DuPont TyChem ®, Barricade or equivalent, recommended based on degree of exposure. Consult manufacturer specifications for further information.
Respiratory protection	:	NIOSH/MSHA approved positive-pressure self-contained breathing apparatus (SCBA) or Type C positive-pressure supplied air with escape bottle must be used for gas concentrations above occupational exposure limits, for potential of uncontrolled release, if exposure levels are not known, or in an oxygen-deficient atmosphere.
Work / Hygiene practices	:	Emergency eye wash capability should be available in the near proximity to operations presenting a potential splash exposure. Use good personal hygiene practices. Avoid repeated and/or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Do not use as a cleaning solvent on the skin. Do not use solvents or harsh abrasive skin cleaners for washing this product from exposed skin areas. Waterless hand cleaners are effective. Promptly remove contaminated clothing and launder before reuse. Use care when laundering to prevent the formation of flammable vapors which could ignite via washer or dryer. Consider the need to discard contaminated leather shoes and gloves.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	:	Liquid
Appearance	:	Light yellow to white
Odor	:	Characteristic Petroleum distillate
Flash point	:	38 °C (100 °F) minimum
Auto Ignition temperature	:	210 °C (410 °F)
Thermal decomposition	:	No decomposition if stored and applied as directed.
Lower explosive limit	:	0.7 %(V)
Upper explosive limit	:	5.0 %(V)
pH	:	Not applicable
Specific gravity	:	0.8 (H20=1)
Freezing point	:	-45°C to -62°C (-50°F to -80°F)
Boiling Range	:	160 - 300 °C(320 - 572 °F)
Vapor Pressure	:	6.9 hPa at 20 °C (68 °F)
Relative Vapor Density	:	4.5
Density	:	0.8 g/cm3
Water solubility	:	Insoluble
Viscosity, kinematic	:	1.6 mm2/s at 40 °C (104 °F)

Percent Volatiles	:	100 %
Conductivity (conductivity can be reduced by environmental factors such as a decrease in temperature)		Diesel Fuel Oils at terminal load rack: At least 25 pS/m Ultra Low Sulfur Diesel (ULSD) without conductivity additive: 0 pS/m to 5 pS/m ULSD at terminal load rack with conductivity additive: At least 50 pS/m but conductivity may decrease from environmental factors such as temperature drop. JP-8 at terminal load rack: 150 pS/m to 600 pS/m

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid	:	Avoid high temperatures, open flames, sparks, welding, smoking and other ignition sources. Keep away from strong oxidizers.
Materials to avoid	:	Keep away from strong oxidizers such as nitric and sulfuric acids.
Hazardous decomposition products	:	Risk of explosion. In case of fire hazardous decomposition products may be produced such as: Smoke. Hydrocarbons. Carbon Monoxide and Carbon Dioxide.
Thermal decomposition	:	No decomposition if stored and applied as directed.
Hazardous reactions	:	Stable under normal conditions of use; however, incompatible with strong acids and strong oxidizers.

SECTION 11. TOXICOLOGICAL INFORMATION

Carcinogenicity

NTP	:	Naphthalene (CAS-No.: 91-20-3)
IARC	:	Kerosene is not listed as carcinogenic by NTP, OSHA, and ACGIH. IARC has listed kerosene as a probable human carcinogen. naphthalene (CAS-No.: 91-20-3) Kerosene (petroleum) (CAS-No.: 8008-20-6)
CA Prop 65	:	WARNING! This product contains a chemical known to the State of California to cause cancer. Naphthalene (CAS-No.: 91-20-3)
Skin irritation	:	Irritating to skin.
Eye irritation	:	Irritating to eyes.
Further information	:	Kerosene does not have a measurable effect on human reproduction or development. Kerosene is not listed as carcinogenic by NTP, OSHA, and ACGIH. IARC has listed kerosene as a probable human carcinogen. Some petroleum distillates have been found to cause adverse reproductive effects in laboratory animals. Acute and chronic exposure to kerosene may result in CNS effects including irritability, restlessness, ataxia, drowsiness, convulsions, coma and death. The most common health effect associated with chronic kerosene exposure is dermatitis.

Component:

Kerosene (petroleum)	8008-20-6	Acute oral toxicity: LD50 rat Dose: 5 mg/kg Acute dermal toxicity: LD50 rabbit Dose: 2,001 mg/kg

		Acute inhalation toxicity: LC50 rat Dose: 5.28 mg/l Exposure time: 4 h Skin irritation: Classification: Irritating to skin. Result: Skin irritation
Naphthalene	91-20-3	Acute oral toxicity: LD50 rat Dose: 2,001 mg/kg Acute dermal toxicity: LD50 rat Dose: 2,501 mg/kg Acute inhalation toxicity: LC50 rat Dose: 101 mg/l Exposure time: 4 h Skin irritation: Classification: Irritating to skin. Result: Mild skin irritation Eye irritation: Classification: Irritating to eyes. Result: Mild eye irritation Carcinogenicity: N11.00422130

SECTION 12. ECOLOGICAL INFORMATION

Additional ecological information : Release of this product should be prevented from contaminating soil and water and from entering drainage and sewer systems. U.S.A. regulations require reporting spills of this material that could reach any surface waters. The toll free number for the U.S. Coast Guard National Response Center is (800) 424-8802. Naphthalene (91-20-3) one of the ingredients in this mixture is classified as a Marine Pollutant.

Component:

Naphthalene	91-20-3	Toxicity to algae: EC50 Species: Dose: 33 mg/l Exposure time: 24 h

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal : Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved waste facility.
Processing, use or contamination of this product may change the waste management options.
State and local disposal regulations may differ from federal disposal regulations.
Dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION 14. TRANSPORT INFORMATION

CFR

Proper shipping name	: Fuel, aviation, turbine engine
UN-No.	: 1863
Class	: 3
Packing group	: III

TDG

Proper shipping name	: Fuel, aviation, turbine engine
UN-No.	: UN1863
Class	: 3
Packing group	: III

IATA Cargo Transport

UN UN-No.	: UN1863
Description of the goods	: Fuel, aviation, turbine engine
Class	: 3
Packaging group	: III
ICAO-Labels	: 3
Packing instruction (cargo aircraft)	: 366
Packing instruction (cargo aircraft)	: Y344

IATA Passenger Transport

UN UN-No.	: UN1863
Description of the goods	: Fuel, aviation, turbine engine
Class	: 3
Packaging group	: III
ICAO-Labels	: 3
Packing instruction (passenger aircraft)	: 355
Packing instruction (passenger aircraft)	: Y344

IMDG-Code

UN-No.	: UN 1863
Description of the goods	: Fuel, aviation, turbine engine
Class	: 3
Packaging group	: III
IMDG-Labels	: 3
EmS Number	: F-E S-E
Marine pollutant	: Yes

SECTION 15. REGULATORY INFORMATION

OSHA Hazards	: Toxic by inhalation. Highly toxic by ingestion Moderate skin irritant Severe eye irritant Combustible
TSCA Status	: On TSCA Inventory
DSL Status	: All components of this product are on the Canadian DSL list.
SARA 311/312 Hazards	: Acute Health Hazard Chronic Health Hazard Fire Hazard

CERCLA SECTION 103 and SARA SECTION 304 (RELEASE TO THE ENVIROMENT)

The CERCLA definition of hazardous substances contains a "petroleum exclusion" clause which exempts crude oil. Fractions of crude oil, and products (both finished and intermediate) from the crude oil refining process and any indigenous components of such from the CERCLA Section 103 reporting requirements. However, other federal reporting requirements, including SARA Section 304, as well as the Clean Water Act may still apply**.**

California Prop. 65 : WARNING! This product contains a chemical known to the State of California to cause cancer.

Naphthalene 91-20-3

SECTION 16. OTHER INFORMATION

Further information

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 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.

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Revision Date : 01/27/2011

40, 41, 42, 43, 44, 45, 60, 113, 137, 138, 139, 140, 141, 142, 263, 285, 1048, 1117, 1137, 1138, 1546

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

A	REPORT DATE: MONTH – DAY – YEAR	REPORT TIME	☐ ORIGINAL SPILL REPORT, OR	REPORT NUMBER -
B	OCCURRENCE DATE: MONTH – DAY – YEAR	OCCURRENCE TIME	☐ UPDATE # TO THE ORIGINAL SPILL REPORT	

C	LAND USE PERMIT NUMBER (IF APPLICABLE)	WATER LICENCE NUMBER (IF APPLICABLE)
D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM THE NAMED LOCATION	REGION ☐ NWT ☐ NUNAVUT ☐ ADJACENT JURISDICTION OR
E	LATITUDE DEGREES MINUTES SECONDS	LONGITUDE DEGREES MINUTES SECONDS

F	RESPONSIBLE PARTY OR VESSEL NAME	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION	
G	ANY CONTRACTOR INVOLVED	CONTRACTOR ADDRESS OR OFFICE LOCATION	
H	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
I	SPILL SOURCE	SPILL CAUSE	AREA OF CONTAMINATION IN SQUARE METRES
J	FACTORS AFFECTING SPILL OR RECOVERY	DESCRIBE ANY ASSISTANCE REQUIRED	HAZARDS TO PERSONS, PROPERTY OR ENVIRONMENT
K	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS		

L	REPORTED TO SPILL LINE BY	POSITION	EMPLOYER	LOCATION CALLING FROM	TELEPHONE
M	ANY ALTERNATE CONTACT	POSITION	EMPLOYER	ALTERNATE CONTACT LOCATION	ALTERNATE TELEPHONE

REPORT LINE USE ONLY

N	RECEIVED AT SPILL LINE BY	POSITION **Station operator**	EMPLOYER	LOCATION CALLED **Yellowknife, NT**	REPORT LINE NUMBER **(867) 920-8130**

LEAD AGENCY ☐ EC ☐ CCG ☐ GNWT ☐ GN ☐ ILA ☐ INAC ☐ NEB ☐ TC	SIGNIFICANCE ☐ MINOR ☐ MAJOR ☐ UNKNOWN	FILE STATUS ☐ OPEN ☐ CLOSED

AGENCY	CONTACT NAME	CONTACT TIME	REMARKS
LEAD AGENCY			
FIRST SUPPORT AGENCY			
SECOND SUPPORT AGENCY			
THIRD SUPPORT AGENCY			