

1. Introduction and Project Details

Under the Water Act (WA) and Section 5(2) (g) of the Waters Regulations (WR) all applicants where the undertaking involves the handling or storage of petroleum products or hazardous materials, must prepare a plan for the safe handling, storage and disposal thereof, and a contingency plan for their containment and for the clean-up thereof In the event of a spill.

1.1 General

This Spill Contingency Plan provides for the prompt and coordinated response of the Hamlet to spills located on Hamlet property and to assist any agency located within the Hamlet of Aklavik corporate boundaries.

Contact Information: Hamlet of Aklavik

P.O. Box 88

Aklavik, NT

XOE 0A0

Phone: 867-978-2351 or 2361

Fax: 867-978-2434

SAOAklavik@permafrost.com

Attention: Senior Administrative Officer

1.2 Effective Date:

The effective date of this Spill Contingency Plan is May 25, 2019.

1.3 Distribution List:

This plan and the most recent revisions have been distributed to:

Organization	Title/Contact Number
Environmental Protection, GNWT	Harvey Gaukel(867) 767-9236 Ext. 53184
Water Resource Officer, GNWT	Lloyd Gruben (867) 678-6676
MACA Regional Superintendent	Dana Moran (867) 777-7120
Gwich'in Land and Water Board (GLWB)	Leonard DeBastien , (867) 777-4954, ext. 2
Inuvialuit Water Board	Mardy Semmler (867) 678-8609

1.4 Purpose and Scope

The purpose of this plan is to outline response actions for potential spills. The plan identifies key response personnel and their roles and responsibilities in the event of a spill, as well as the equipment and other resources available to respond to a spill. It details spill response procedures that will minimize potential health and safety hazards, environmental damage, and clean-up requirements. The plan has been prepared to ensure quick access to all the information required in responding to a spill.

1.5 The Hamlet of Aklavik Environment Policy

Policy:

1. The Hamlet shall maintain and manage its Disposal Site in accordance with the Operation and Maintenance Plan of the Hamlet of Aklavik.
2. The Hamlet will provide collection of regular household and light commercial waste from all Hamlet residents and businesses within the boundaries of the Hamlet.
3. Recycling initiatives will be encouraged and a program will be implemented being modified as more and more products are being accepted by the GNWT Dept. of EN&R's recycling program.
4. A household Hazardous Special Waste collection program will be organized annually for use by our residents.
5. The Hamlet shall endeavour to educate all residents, visitors and property owners to the different programs and services offered within the Hamlet geared to waste collection, disposal and diversion.
6. The Hamlet shall attempt to participate in all funding programs offered through the Government of the NWT and various other sources for projects improving effectiveness and efficiency and increasing waste diversion.
7. The Hamlet will attempt to ensure all hazardous material is contained and safe from accidental spillage and educate the residents as to what must be done in the event of a hazardous material spill within the community boundaries.
8. To protect the environment and residents from harmful material that may be within the Municipal Boundaries

1.6 Sites Descriptions

The Hamlet of Aklavik is responsible for the operation and maintenance of their waste disposal facilities (Sewage Disposal Facilities and Solid Waste Disposal Facilities) and water supply facilities.

1.7 Identification of special areas that can potentially be impacted

Following is a list of special places that will receive additional consideration should a spill occur in this area:

- Bodies of water within the community; and
- Town infrastructure (i.e. community hall, school, youth center, etc.)

1.8 Hazardous materials stored on site

There is one hazardous materials storage area in the Hamlet of Aklavik. Table 1.2 presents a list of hazardous material on-site, the type of storage container, the average and maximum storage quantities, and storage locations.

Table 1.2: List of hazardous materials stored on-site, type of storage container, the normal and maximum storage quantities, and storage locations.

Material	Storage	Average on-site	Max on-site	Storage Location and use
batteries	pallet	10	20	Solid Waste Site
used oil	Tote	10 lts.	500lts.	Solid Waste Site
House hold				Solid Waste Site

Copies of the Spill Contingency Plan can be obtained by contacting the Senior Administrative Officer of the Hamlet of Aklavik a nominal fee will be charge for each copy requested.

All public and media inquires can be directed to the Mayor or the Senior Administrative Officer. Typically, all inquires will first go to the Mayor and then handed to the SAO if appropriate. The phone numbers for all inquiries is 867-978-2351 or 2361.

Through the Hamlet Operations we have HF radios with LADD 1&2 installed in all vehicles, we also have 4 handheld radios with the same channels for mobile situations where needed. All contractors also have these radios and channels installed in their trucks.

If there was to be a public notification for a spill that may impact the residents, we have a very large siren that we can use to get everyone's attention as well as our local radio station and of

course now there is social media. All three systems work well as we have tested the system on various occasions each year.

Currently, when staff take any type of training and achieve a certificate, the certificate will be included in their personnel file. Currently some staff need to take Whimis, First Aid and Transport of Dangerous Goods. These, however are out of date so they need to be redone.

4.2 Off-Site Resources

Hamlet of Aklavik	SAO	867-978-2351	
Hamlet of Aklavik	Foreman	867-978-2351	
Aklavik Health Centre		867-978-2516/2361	
Inuvialuit Land Administration	Main Office	867-977-7100	
NWT 24 hour Spill Line		867-920-8130	
NWT Emergency Services - MACA	Manager	867-873-7554	
RCMP Aklavik		867-978-1111	
Environmental Health Officer		867-777-7250/7220	
Tele-Care Health Line		888-255-1010	
Volunteer Fire Dept. Aklavik	J D Storr	867-978-2222	
Dept. of Lands GNWT	Dan Carmichael	867-777-8901	
Dept. of Lands GNWT	Don Arey	867-777-8906	
Environment and Natural Resources Aklavik	Ian McLeod	867-978-2248	
Environmental Impact	Michelle Lindsey	867-777-2828	
IWB	Mardy Semmler	867-678-8609	

MATERIAL SAFETY DATA SHEET

FOR LEAD- ACID BATTERIES, WET, FILLED WITH ACID – UN 2794

CHEMTREC CODE: C677

SECTION I: GENERAL INFORMATION

Manufacturers Name: Crown Battery Mfg. Company
Street Address: 1445 Majestic Drive
City, State, Zip: Fremont, Ohio 43420
Phone Number: 419 334-7181
Revision Date: 12/01/09

For Chemical Emergency
Spill Leak Fire Exposure or Accident
Call CHEMTREC Day or Night
DOMESTIC NORTH AMERICA 800-424-9300
INTERNATIONAL, CALL 703-527-3887
(collect calls accepted)

SECTION II: MATERIAL IDENTIFICATION AND INFORMATION

COMPONENTS	PERCENT	OSHA PEL	ACGIH TLV	OTHER LIMITS	CAS NUMBER
Hazardous Components 1% or greater					
Carcinogens 0.01 % or greater					
METALLIC METAL ALLOY	25.5%	0.05mg/m3	.05 mg/m3	NONE	7439-92-1
LEAD SULFATES	18.2%	0.05mg/m3	.05 mg/m3	NONE	7439-92-1
LEAD OXIDES	22.0%	0.05mg/m3	.05 mg/m3	NONE	7439-92-1
POLYPROPYLENE CASE MTL	6.4%				
SEPARATORS	3.5%				
SULFURIC ACID (H2SO4)	5.2%	1.0 mg/m3	1.0 mg/m3	NONE	7664-93-9
WATER	19.2%				

SECTION III: PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point	Approximately 203F	Vapor Density:	Greater than 1
Vapor Pressure	14 PSI @ 37% @ 80 F mercury	Melting Point:	-35 F to +10.6 F
Solubility in Water	100%	Water Reactive	Yes, Produces Heat
Specific Gravity	1.245 - 1.295 Battery Electrolyte		
Appearance & Odor:	Clear Liquid with Sharp Pungent Odor		

SECTION IV: FIRE AND EXPLOSION HAZARD DATA:

Flash Point: Not Combustible
Auto Ignition Temperature N/A
Extinguishing Media: Dry Chemical Carbon Dioxide, Water Fog, Water
Special Fire Fighting Procedures: Sulfuric Acid Fumes, Sulfur Dioxide Gas or Carbon Monoxide may be released when acid decomposes. Wear NIOSH approved self contained breathing apparatus, if needed.

NFPA WARNING: 1
Flammability Limits in Air % by Volume: N/A

Unusual Hazards: Water applied to sulfuric acid generates heat and causes acid to spatter. Wear full-cover acid resistant clothing. Sulfuric acid reacts violently with metals, nitrates, chlorates, carbides, fulminates, picrates and other organic materials. Reacts with most metals to yield explosive/flammable hydrogen gas. This reaction is intensified when sulfuric acid is diluted with water to form battery electrolyte.

**MATERIAL SAFETY DATA SHEET – PAGE TWO
FOR LEAD- ACID BATTERIES, WET, FILLED WITH ACID – UN 2794**

SECTION V: REACTIVITY DATA

Stability: STABLE

NFPA WARNING: 0

CONDITIONS TO AVOID: Charging and over-charging without proper ventilation.

Incompatibility: AVOID COMBUSTIBLES, ORGANIC MATERIALS, AND STRONG REDUCING AGENTS.

Hazardous Decomposition Products:

SULFUR TRIOXIDE, CARBON MONOXIDE, SULFURIC ACID FUMES AND SULFUR DIOXIDE. Hydrogen, Arsine, Stibene with over charging.

Hazardous Polymerization: Should not occur

SECTION VI – HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY: Inhalation - Yes
Skin Yes
Ingestion Yes

NFPA WARNING: 3

HEALTH HAZARDS - Acute: Eyes, Skin, Respiratory System & Digestive System
Chronic: Eyes, Skin, Respiratory System & Digestive System

Exposure to Lead Compounds can occur only when product is heated, oxidized or other-wised processed or damaged to create dust vapor or fume. Lead is a systemic poison.

Carcinogenicity - NTP: No

Carcinogenicity - IARC: Yes (Group 2 B *94-4*

Carcinogenicity -OSHA: No

Signs and Symptoms of Exposure: Irritation of Exposed Area, Burns, and Respiratory Problems
No possibility of over exposure of lead will occur unless battery is destroyed.

MEDICAL CONDITIONS GENERALLY:

Aggravated by Exposure: Exposure to acid mist may cause lung damage & aggravate pulmonary conditions.

EMERGENCY FIRST AID PROCEDURES

Seek medical assistance for further treatment, observation and support if necessary.

Eye Contact: Wash with copious quantities of cool water for at least 15 minutes.

Skin Contact: Flush area with large amounts of cool water for at least 15 minutes.

Inhalation: Remove to fresh air, if breathing is difficult – give oxygen.

Ingestion: Give milk to drink. DO NOT INDUCE VOMITING, CALL PHYSICIAN.

MATERIAL SAFETY DATA SHEET – PAGE THREE FOR LEAD- ACID BATTERIES, WET, FILLED WITH ACID – UN 2794

SECTION VII: SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

STEPS TO TAKE IF MATERIALS RELEASED:

Wash area with water, neutralize with lime, caustic soda or sodium bicarbonate. If released on soils: work neutralizing materials into top three inches of soils.

Neutralizing Agent: Lime, Caustic Soda, or Sodium Bicarbonate.

Waste Disposal Method: Neutralize and dispose of residue in accordance with federal, state and local regulation for chemical and toxic metals disposal.

Lead and Sulfuric Acid is packed into a container to form the lead-acid battery. Since all containers are subject to leakage and breakage, employees who work in operations where they handle batteries in containers are potentially exposed to hazardous chemicals, and, therefore, need access to information as well as training.

SECTION VI II– SPECIAL PROTECTION INFORMATION/CONTROL MEASURES

Respiratory Protection: If, and/or when needed, wear Sulfuric Acid Mist-Mask with filter approved for acid mist.

Ventilation: Local exhaust: Room air change four times per hour.

Protective Gloves: Rubber

Eye Protection: Goggles, Face Shield

Other Protective Equipment: Rubber Apron, Acid Resistant Clothing Recommended

Work Hygienic Practices: Wash thoroughly after handling

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

COMPONENTS

METALLIC METAL ALLOY	25.5%
LEAD SULFATES	18.2%
LEAD OXIDES	22.0%
POLYPROPYLENE CASE MTL	6.4%
SEPARATORS	3.5%
SULFURIC ACID (H ₂ SO ₄)	5.2%
WATER	19.2%

**MATERIAL SAFETY DATA SHEET – PAGE FOUR
FOR LEAD- ACID BATTERIES, WET, FILLED WITH ACID – UN 2794**

SECTION X – STABILITY AND REACTIVITY

Stability: STABLE

CONDITIONS TO AVOID: Charging and over-charging without proper ventilation.

Incompatibility: AVOID COMBUSTIBLES, ORGANIC MATERIALS, AND STRONG REDUCING AGENTS.

SECTION XI: TOXICOLOGICAL INFORMATION

HEALTH HAZARDS - Acute: Eyes, Skin, Respiratory System & Digestive System
Chronic: Eyes, Skin, Respiratory System & Digestive System

Signs and Symptoms of Exposure: Irritation of Exposed Area, Burns, and Respiratory Problems
No possibility of over exposure of lead will occur unless battery is destroyed.

MEDICAL CONDITIONS GENERALLY:

Aggravated by Exposure: Exposure to mist may cause lung damage & aggravate pulmonary conditions.

SECTION XII – ECOLOGICAL INFORMATION

All care should be taken to protect the environment from any adverse impact by lead-acid batteries or from the batteries ingredients.

SECTION XIII – DISPOSAL CONSIDERATION

Lead-Acid Batteries are restricted land disposal objects. All spent lead-acid batteries should be properly Recycled to a permitted Secondary Lead Smelter.

All battery parts should be properly recycled.

No whole spent lead-acid battery should be land-filled or placed in house hold garbage.

**MATERIAL SAFETY DATA SHEET – PAGE FIVE
FOR LEAD- ACID BATTERIES, WET, FILLED WITH ACID – UN 2794**

SECTION XIII – TRANSPORT INFORMATION

Electric storage batteries containing electrolyte acid or alkaline corrosive battery fluid must be completely protected so that short circuits will be prevented.

DOT SHIPPING NAME: LEAD-ACID BATTERIES, WET, FILLED WITH ACID
DOT CLASS: 8
DOT ID NUMBER: UN2794
DOT PACKING GROUP: III
DOT LABEL REQUIREMENTS: CORROSIVE

SECTION XV – REGULATION INFORMATION

REGULATORY INFORMATION: Those ingredients in lead-acid batteries listed above are not subject to the reporting requirements of 313 of Title III of the Superfund Amendments and Re-authorization Act, if the lead acid batteries are in storage and have no potential to leak, spill or break during normal storage prior to use.

DOT REGULATIONS: 49 CFR 173.159

EPA REGULATIONS: 40 CFR 266.80

OSHA REGULATIONS: 29 CFR 1910.1200

Material Safety Data Sheet

According to the Controlled Product Regulations

1. MATERIAL AND COMPANY IDENTIFICATION

Material Name : Shell Melina S 30
Uses : Engine oil.
Product Code : 001A0327

Manufacturer/Supplier : Shell Canada Products
400 - 4th Avenue S.W
Calgary AB T2P 0J4
Canada

Telephone : (+1) 8006611600
Fax : (+1) 4033848345

Emergency Telephone Number

: CHEMTREC (24 hr): (+1) 800-424-9300
CANUTEC (24 hr): (+1) 613-996-6666

2. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture Description : Highly refined mineral oils and additives.

The highly refined mineral oil contains <3% (w/w) DMSO-extract, according to IP346.

Refer to Chapter 8 for Occupational Exposure Guidelines.

3. HAZARDS IDENTIFICATION

WHMIS Class/Description : THIS PRODUCT IS NOT A WHMIS CONTROLLED SUBSTANCE.

Routes of Exposure : Skin and eye contact are the primary routes of exposure although exposure may occur following accidental ingestion.

Health Hazards : Not expected to be a health hazard when used under normal conditions. Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis. Used oil may contain harmful impurities.

Signs and Symptoms : Oil acne/folliculitis signs and symptoms may include formation of black pustules and spots on the skin of exposed areas. Ingestion may result in nausea, vomiting and/or diarrhoea.

Safety Hazards : Not classified as flammable but will burn.

Environmental Hazards : Not classified as dangerous for the environment.

4. FIRST AID MEASURES

General Information : Not expected to be a health hazard when used under normal conditions.

Material Safety Data Sheet

According to the Controlled Product Regulations

Inhalation	:	No treatment necessary under normal conditions of use. If symptoms persist, obtain medical advice.
Skin Contact	:	Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention.
Eye Contact	:	Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.
Ingestion	:	In general no treatment is necessary unless large quantities are swallowed, however, get medical advice.
Advice to Physician	:	Treat symptomatically.

5. FIRE FIGHTING MEASURES

Clear fire area of all non-emergency personnel.

Flash point	:	Typical 227 °C / 441 °F (COC)
Upper / lower Flammability or Explosion limits	:	Typical 1 - 10 %(V)(based on mineral oil)
Auto ignition temperature	:	> 320 °C / 608 °F
Hazardous Combustion Products and Specific Hazards	:	Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds.
Suitable Extinguishing Media	:	Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
Unsuitable Extinguishing Media	:	Do not use water in a jet.
Protective Equipment for Firefighters	:	Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.

6. ACCIDENTAL RELEASE MEASURES

Protective Measures	:	Avoid contact with skin and eyes. Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers.
Clean Up Methods	:	Slippery when spilled. Avoid accidents, clean up immediately. Prevent from spreading by making a barrier with sand, earth or other containment material. Reclaim liquid directly or in an absorbent. Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly.
Additional Advice	:	Local authorities should be advised if significant spillages cannot be contained.

7. HANDLING AND STORAGE

General Precautions	:	Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires. Use the information in this data sheet as input to a risk
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Material Safety Data Sheet

According to the Controlled Product Regulations

- assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.
- Handling** : Avoid prolonged or repeated contact with skin. Avoid inhaling vapour and/or mists. When handling product in drums, safety footwear should be worn and proper handling equipment should be used.
 - Storage** : Keep container tightly closed and in a cool, well-ventilated place. Use properly labelled and closeable containers. Store at ambient temperature.
 - Recommended Materials** : For containers or container linings, use mild steel or high density polyethylene.
 - Unsuitable Materials** : PVC.
 - Additional Information** : Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

If the American Conference of Governmental Industrial Hygienists (ACGIH) value is provided on this document, it is provided for information only.

Occupational Exposure Limits

Material	Source	Type	ppm	mg/m3	Notation
Oil mist, mineral	ACGIH	TWA(Inhalable fraction.)		5 mg/m3	

Consult local authorities for acceptable exposure limits within their jurisdiction.

- Exposure Controls** : The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include: Adequate ventilation to control airborne concentrations. Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.
- Personal Protective Equipment** : Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.
- Respiratory Protection** : No respiratory protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material. If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate

Material Safety Data Sheet

According to the Controlled Product Regulations

	combination of mask and filter. Select a filter suitable for combined particulate/organic gases and vapours [boiling point >65°C(149 °F)].
Hand Protection	: Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.
Eye Protection	: Wear safety glasses or full face shield if splashes are likely to occur.
Protective Clothing	: Skin protection not ordinarily required beyond standard issue work clothes.
Monitoring Methods	: Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate.
Environmental Exposure Controls	: Minimise release to the environment. An environmental assessment must be made to ensure compliance with local environmental legislation.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Amber. Liquid at room temperature.
Odour	: Slight hydrocarbon.
Odour threshold	: Data not available
pH	: Not applicable.
Initial Boiling Point and Boiling Range	: > 280 °C / 536 °F estimated value(s)
Pour point	: Typical -18 °C / 0 °F
Vapour pressure	: < 0.5 Pa at 20 °C / 68 °F (estimated value(s))
Specific gravity	: Typical 0.888 at 15 °C / 59 °F
Density	: Typical 888 kg/m ³ at 15 °C / 59 °F
Water solubility	: Negligible.
n-octanol/water partition coefficient (log Pow)	: > 6 (based on information on similar products)
Kinematic viscosity	: Typical 104 mm ² /s at 40 °C / 104 °F
Vapour density (air=1)	: > 1 (estimated value(s))
Evaporation rate (nBuAc=1)	: Data not available

Material Safety Data Sheet

According to the Controlled Product Regulations

10. STABILITY AND REACTIVITY

Stability	: Stable.
Conditions to Avoid	: Extremes of temperature and direct sunlight.
Materials to Avoid	: Strong oxidising agents.
Hazardous Decomposition Products	: Hazardous decomposition products are not expected to form during normal storage.
Hazardous Polymerisation	: No
Sensitivity to Mechanical Impact	: No
Sensitivity to Static Discharge	: No

11. TOXICOLOGICAL INFORMATION

Basis for Assessment	: Information given is based on data on the components and the toxicology of similar products.
Routes of Exposure	: Skin and eye contact are the primary routes of exposure although exposure may occur following accidental ingestion.
Acute Oral Toxicity	: Expected to be of low toxicity: LD50 > 5000 mg/kg , Rat.
Acute Dermal Toxicity	: Expected to be of low toxicity: LD50 > 5000 mg/kg , Rabbit.
Acute Inhalation Toxicity	: Not considered to be an inhalation hazard under normal conditions of use.
Skin Irritation	: Expected to be slightly irritating. Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.
Eye Irritation	: Expected to be slightly irritating.
Respiratory Irritation	: Inhalation of vapours or mists may cause irritation.
Sensitisation	: Not expected to be a skin sensitiser.
Repeated Dose Toxicity	: Not expected to be a hazard.
Mutagenicity	: Not considered a mutagenic hazard.
Carcinogenicity	: Product contains mineral oils of types shown to be non-carcinogenic in animal skin-painting studies. Highly refined mineral oils are not classified as carcinogenic by the International Agency for Research on Cancer (IARC). Other components are not known to be associated with carcinogenic effects.
Reproductive and Developmental Toxicity	: Not expected to be a hazard.
Additional Information	: Used oils may contain harmful impurities that have accumulated during use. The concentration of such impurities will depend on use and they may present risks to health and the environment on disposal. ALL used oil should be handled with caution and skin contact avoided as far as possible. Continuous contact with used engine oils has caused skin cancer in animal tests.

Material Safety Data Sheet

According to the Controlled Product Regulations

12. ECOLOGICAL INFORMATION

Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the ecotoxicology of similar products.

- Acute Toxicity** : Poorly soluble mixture. May cause physical fouling of aquatic organisms. Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l (to aquatic organisms) (LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract). Mineral oil is not expected to cause any chronic effects to aquatic organisms at concentrations less than 1 mg/l.
- Mobility** : Liquid under most environmental conditions. Floats on water. If it enters soil, it will adsorb to soil particles and will not be mobile.
- Persistence/degradability** : Expected to be not readily biodegradable. Major constituents are expected to be inherently biodegradable, but the product contains components that may persist in the environment.
- Bioaccumulation** : Contains components with the potential to bioaccumulate.
- Other Adverse Effects** : Product is a mixture of non-volatile components, which are not expected to be released to air in any significant quantities. Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.

13. DISPOSAL CONSIDERATIONS

- Material Disposal** : Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment, in drains or in water courses.
- Container Disposal** : Dispose in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand.
- Local Legislation** : Disposal should be in accordance with applicable regional, national, and local laws and regulations.

14. TRANSPORT INFORMATION**Canadian Road and Rail Shipping Classification**

This product is not regulated under the Canadian Transportation of Dangerous Goods Regulations for transport by road and rail.

Material Safety Data Sheet

According to the Controlled Product Regulations

15. REGULATORY INFORMATION

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Class/Description : THIS PRODUCT IS NOT A WHMIS CONTROLLED SUBSTANCE.

Inventory Status

EINECS : All components listed or polymer exempt.
TSCA : All components listed.
DSL : All components listed.

16. OTHER INFORMATION

MSDS Version Number : 1.1
MSDS Effective Date : 2011-12-14
MSDS Revisions : A vertical bar (|) in the left margin indicates an amendment from the previous version.
MSDS Regulation : The content and format of this (M)SDS is in accordance with the Controlled Product Regulations.
MSDS Prepared By : Shell Product Stewardship; 1-800-661-1600
MSDS Distribution : The information in this document should be made available to all who may handle the product.
Disclaimer : The information contained herein is based on our current knowledge of the underlying data and is intended to describe the product for the purpose of health, safety and environmental requirements only. No warranty or guarantee is expressed or implied regarding the accuracy of these data or the results to be obtained from the use of the product.