

WPC Resources Incorporated

HOOD RIVER PROJECT:
(CO20: HOODRIVER-001 Mineral Exploration Agreement)

EMERGENCY RESPONSE PLAN

In the
Hood River (Ulu-Penthouse Lake) Area,
Nunavut.

(Valid for the period between June 01, 2014 and December 31, 2019.)

PREPARED FOR:

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DATE PREPARED:

May 25, 2014.

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**EMERGENCY RESPONSE PLAN
WPC Resources Incorporated.**

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PREAMBLE

WPC Resources Incorporated (“WPC”) is a Vancouver-based exploration company committed to exploration and development of precious and base metals resources within Canada. WPC Resources exploration activity will be focused on the Hood River Project that covers the southern section of the High Lake Greenstone Belt in the Slave Craton area of Nunavut, Canada.

WPC, through an agreement with Inukshuk Exploration Incorporated (“Inukshuk”), has proposed to undertake a 5 year mineral exploration program designed to identify gold, diamond and potential base metal mineral resources within the area designated by the HOODRIVER-001 Mineral Exploration Agreement (“MEA”) that is currently in force between Inukshuk and Nunavut Tunngavik Incorporated (“NTI”). This agreement covers a portion of the CO20 IOL area and lies within the Kitikmeot Land Claims Parcel CO20. The MEA, covers an area of 8015 hectares immediately north of the Hood River and immediately adjacent to the Ulu Deposit that is currently held by Elgin Mining Incorporated (“Elgin”). The HOODRIVER-001 MEA is owned 100% by Inukshuk Exploration Incorporated. No base camp will be required as the WPC exploration crews will be based out of the adjacent Ulu Minesite camp.

The exploration activities will include prospecting, geologic mapping, sampling, grid establishment and subsequent ground geophysical surveys, and diamond drilling.

The initial exploration program will begin in 2014 will be somewhat limited due to a late start. The program will begin with a brief mid-summer re-opening of the mothballed Ulu Camp. This camp, owned by Elgin, is currently established, is entirely operational, and is already entirely permitted. To save time and the expense of constructing, operating and permitting a new camp, WPC Resource has an arrangement to simply rent space at this existing site; the Ulu Camp will serve as base camp for the entire five year program as similar annual programs are anticipated to be undertaken using this camp arrangement over the next several years.

The WPC exploration program will be helicopter supported with a machine base onsite at the Ulu Camp.

It is anticipated that geological mapping, geophysical surveys and drilling will be undertaken during the summer field season of subsequent years at the HOODRIVER-001 MEA Area, contingent upon positive results from the previous season of exploration. At the moment, no winter drilling is planned; however, future results could change this schedule.

The Ulu Camp will be seasonally shut down at the end of each field season. As WPC is simply renting the facilities; Elgin will remain responsible for the final site remediation.

This WPC Resources Incorporated ***Emergency Response Plan*** shall be in effect from June 01, 2014 to December 31, 2019. The Emergency Response Plan applies to the Hood River Property, all ancillary facilities, and all activities associated with operation of the project.

This plan was originally prepared on May 25, 2014 and the latest revision was on May 25, 2014.

1.0 INTRODUCTION

1.1 Purpose And Scope Of The Emergency Response Plan

The purpose of the Hood River Property emergency response plan (ERP) is to set out procedures and processes to be followed in the event of an emergency at the site. It encompasses the activities of all WPC Resources Incorporated (“WPC”) and contractor employees as well as visitors to the site.

The main goals of the plan are:

- to provide education and training in emergency preparedness for all staff and contractors while onsite at the Hood River Property;
- to enable all onsite personnel to respond to an emergency in a coordinated manner minimizing injury and loss of property; and
- to allow the Hood River Property to maintain operations at a level as close as possible to normal and restore normal operations quickly and efficiently.

As the plan is a requirement under legislation as discussed in Section 1.3, a draft version will be circulated to government responsible authorities for comment as part of the NIRB screening process, prior to finalization.

1.2 WPC Emergency Response Planning Policy

WPC Resources Incorporated is committed to operating at the highest standards to protect the health and safety of our workers, the public, and the environment. Therefore, as part of an emergency preparedness program, the employees of WPC will maintain an emergency plan in compliance with applicable laws and industry standards to ensure a timely and appropriate response to emergencies.

1.3 Legislation

Regulatory requirements are outlined in this section. Regulations pertinent to emergency response are those governing Mine Health and Safety and spill response.

1.3.1 Site Safety

WPC Resources Incorporated will develop an emergency response plan (ERP) prior to site occupation, which will conform to requirements as set out in PEI Act, specifically Section 12(e) of the *Occupational Health and Safety Act 2004*, and will include at least the following:

- a list of the hazards;
- possible major consequences of each;
- required countermeasures;
- inventory of resources needed to carry out the planned actions; and
- make provision for establishment of the necessary emergency organization and procedures.

A Fuel Spill Contingency Plan has been developed and will be refined during occupation.

WPC Resources Incorporated will comply with provisions of the Act and Regulations in a proactive manner. Management and employees through the Health and Safety Committee will evaluate previous accidents and the potential for serious accidents and injuries in assigning inspection frequencies beyond those mandated in the Act.

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Bruce E. Goad, P. Geo., M. Sc. - **INUKSHUK** EXPLORATION INCORPORATED.

1.3.2 Spill and/or Emergency Response

Storage of hazardous substances, as defined by the *Transportation of Dangerous Goods Act*, requires preparation and filing of a Spill Prevention and Response Plan that meets the requirements of local *Regulation*. Requirements of the *Regulation* are similar to those of the *Environmental Protection and Enhancement Act*. The company has prepared and filed a Fuel Spill Contingency Plan.

1.4 Methods For Internal Evaluation of the ERP

The site Health and Safety Committee will be responsible for evaluation of the ERP with direction from the project manager and the camp manager. The continual improvement approach to evaluation will be followed. Suggestions will be solicited and welcomed from all employees. Emergency preparedness will be formally evaluated by the Health and Safety Committee who will provide verbal and written reports on the schedule detailed in Section 1.5.

All emergency incidents will be reviewed by site management and the Health and Safety Committee immediately following the incident. Emergency response will be reviewed for adequacy. Any deficiencies will be addressed as a priority and the emergency response plan modified as appropriate.

1.5 Update Schedule

The ERP will be formally evaluated annually by the Health and Safety Committee and site management. Updates will be issued to all registered holders of the plan. More frequent amendments may be required, depending on deficiencies noted, and these will be generated and issued as required.

2.0 PRE-EMERGENCY PLANNING

2.1 Hazard Identification

2.1.1 Toxicological and Physicochemical Properties of Available Chemicals Onsite

Toxicological properties of chemicals used at the Hood River Property are listed in Appendix IV and will be provided as pull-out sheets in the final Emergency Response Plan. Information is a subset of Material Safety Data Sheets (MSDS) to be provided in binders at all safety stations at the site. MSDS are appended to the company's Fuel Spill Contingency Plan.

2.1.2 Fire

Fire could occur at the Hood River Property at any number of locations including those listed in Table 1. All precautions possible will be taken to prevent fires at the site. There is an inherent difficulty in effectively fighting fires at this remote location, especially if at some point the camp is to be used during winter. Fire drills will be held on a periodic basis to check personnel preparedness. Locations of fire alarms and evacuation routes (if not obvious, e.g. only one door) will be posted in all work areas; fire extinguishers will be clearly marked in an approved manner.

<i>Location</i>	<i>Precautionary Equipment</i>
Camp Tents	Fire Extinguisher
Generator Shack	Chemical Fire Extinguisher, Fire Extinguisher
Fuel Cache	Precautionary Equipment
Helipad	Precautionary Equipment
Helicopter	Precautionary Equipment

TABLE 1. Possible fire locations at the Hood River Camp.

2.1.3 Uncontrolled Explosion

Controlled explosions (blasting) are part of the mining process and if planned, will be undertaken by qualified personnel only. Uncontrolled explosions from misuse of explosives, although extremely unlikely, are possible. As well, any flammable liquids or gases (diesel, gasoline, propane) at concentrations between the lower and upper explosives limits could potentially explode. From these considerations, there are a limited number of areas where uncontrolled explosions have any risk of occurrence. These include:

- fuel cache;
- generator housing;
- helicopter refueling; and
- exploration camp.

Risk of occurrence is assessed to be very low based on the frequency of occurrence of such accidents at other industrial locations. The consequences would be very high with possible loss of life and probable disruption of operations for an indeterminate length of time.

2.1.4 Medical Emergency

Medical emergencies can occur at any time and would be due to accidents or ill health.

Medical evacuations will be accomplished by means of fixed or rotary wing Medivac to Kugluktuk. First Aid Attendant(s) will be on staff full time at the site and will be able to provide first aid and to treat minor, less severe injuries. A satellite phone system will be installed at the Hood River Property (Ulu Camp) and will provide reliable telephone communications in the event of a medical emergency requiring consultation with outside medical help and/or requesting a plane for Medivac.

Table 2 provides a list of emergency contacts for outside resources available for assistance with any medical emergencies.

2.1.5 Extreme Weather

Weather extremes include blizzards in winter from snow storms and flooding in summer from rain storms. Extreme cold is a normal part of northern winters and the Hood River Project will be designed to operate in this environment; thus cold extremes are considered to have a very low risk of resulting in an emergency situation and will not be considered further.

Supervisory personnel will be experienced field hands and will be able to judge when conditions deteriorate to the extent that work should cease and crews should return to the camp. Radio contact will be available throughout the site and thus senior supervisory personnel can be advised at any time of deteriorating weather situations and the status of crews working outside.

2.2 Spill Reporting Quantities

Quantities that must be reported under the Spill Reporting Regulation are listed in Table 3. The company has prepared a separate Fuel Spill Contingency Plan.

The NWT/Nunavut Spill Report Line number is: 1-867-920-8130

EMERGENCY RESPONSE MEDIVAC PLAN
WPC Resources Incorporated
Hood River Property, Nunavut.

In the event of an **EMERGENCY** and for when instructed by the Project Manager or First Aid Attendant to:

CALL THE NURSING STATION

The closest and consequently PRIMARY Health Centre is located at:

KUGLUKTUK, Nunavut 1-868-982-4531

Or The first alternative and closest **MAJOR HOSPITAL** is the:

Stanton Hospital in YELLOWKNIFE, NWT. 1-867-669-4111

Or The third alternative, a NURSING STATION / HEALTH CENTRE is located at:

CAMBRIDGE BAY, Nunavut 1-867-983-0123

Upon contact, be prepared to provide the following information to the Nurse or Doctor:

1.) Your Name and Location:
You are at the **ULU Mine site** in the Hood River Area, Nunavut
Longitude/Latitude: UTM Coordinates:
66° 54' 02" North 501,350m East
110° 58' 30" West 7,421,100m North
(UTM NAD83 Zone 12)
Advise the nurse/doctor that you are at the **ULU CAMP**, located on the North side of the Hood River, 100 kilometres NNE of Jericho and 130 kilometres NNE of the Lepin Mine.

2.) Patient Location: (If not in Camp).

3.) The Number of Injured Persons:

4.) Patient Information: (will be requested for EACH Patient).

Patient's Condition:
Conscious / Unconscious
Nature of the Injury

Age / Sex of Patient:

History of Accident:
What Happened?
When did it Happen?

Obtain instructions from the Nurse, Doctor or First Aid Attendant as to the need for arranging a **Medivac Flight**.

If a **Medivac Flight** is required, and it is not to be carried out by the helicopter on site, the health centre **may** make arrangements. If they do not, and a Medivac is required, contact the following:

Air Tindi 1-867-669-8292
or **1-867-669-8293**

Once all arrangements have been made, report all information back to the First Aid Attendant.

EMERGENCY RESPONSE CONTACT TELEPHONE NUMBERS
WPC Resources Incorporated
Hood River Property, Nunavut.

EMERGENCY CONTACT NUMBERS

Hospital:
Stanton Hospital in Yellowknife, NWT. 1-867-669-4111

Nursing Stations:

Primary	Health Center - Kugluktuk	1-867-982-4531
Secondary	Health Center - Cambridge Bay	1-867-983-4500
Tertiary	Health Center - Wek Weeti	1-867-713-2904

24 Hour Medivac Air Service:

Air Tindi, Yellowknife, NWT.	1-867-669-8292	or: 1-867-669-8293
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RCMP Police:

Yellowknife	1-867-669-5200
Kugluktuk	1-867-982-0123
Cambridge Bay	1-867-983-0123
Wekweëti	1-867-713-1111

WSCC:

WSCC 24 Hour Hotline for SERIOUS ACCIDENTS:	1-800-661-0792
WSCC 24 Hour Hotline	1-867-873-7468
WSCC Main Line (Yellowknife)	1-867-920-3888
WSCC Main Line (Iqaluit)	1-877-404-4407

Emergency Contact Numbers:

Project Telephone Numbers:

Project Manager - Bruce Goad	Office: 1-604-533-2255	Cell: 1-604-866-2254
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Field Telephone Numbers:

Camp Main Line	To Be Determined
Camp Office Line	To Be Determined
Camp Public Line	To Be Determined
Camp Facsimile Line	To Be Determined

WPC Resources Vancouver Office Number:

Office	1-604-685-1144
Toll Free Line	1-877-685-1144

Satellite Phone Numbers:

Helicopter	To Be Determined
Fixed Wing	To Be Determined
Other	To Be Determined

TABLE 2 Medivac Response Plan: Emergency Procedures and Contact Numbers. This poster will be printed full size and posted onsite beside all telephones.

TABLE 3.
SPILL REPORTING QUANTITIES

<i>Substance</i>	<i>TDGA Class</i>	<i>Reportable Amount</i>
Explosives	1	Any amount.
Compressed Gas (Flammable)	2.1	Any amount of gas from containers with a capacity of greater than 100 litres.
Compressed Gas (Non-corrosive, Non-Flammable)	2.2	Any amount of gas from containers with a capacity of greater than 100 litres.
Compressed Gas (Toxic)	2.3	Any amount.
Compressed Gas (Corrosive)	2.4	Any amount.
Flammable Liquid	3.1, 3.2, 3.3	100 litres.
Flammable Solid	4.1	25 kilograms.
Spontaneously Combustible Solids	4.2	25 kilograms.
Water Reactant Solids	4.3	25 kilograms.
Oxidizing Substances	5.1	50 litres or 50 kilograms.
Organic Peroxides	5.2	1 litre or 1 kilogram.
Poisonous Substances	6.1	5 litres or 5 kilograms.
Infectious Substances	6.2	Any amount.
Radioactive Substances	7	Any amount.
Corrosive Substances	8	5 litres or 5 kilograms.
Miscellaneous Products or Substances Excluding PCB Mixtures	9.1 (Part)	50 litres or 50 kilograms.
Environmentally Hazardous Substances	9.2	1 litre or 1 kilogram.
Dangerous Wastes	9.3	5 litres or 5 kilograms.
PCB Mixtures of 5 (or more) PPB	9.1 (Part)	0.5 litres or 0.5 kilograms.
Other Contaminants	None	100 litres or 100 kilograms.

TABLE 3 Spill quantities that must be reported under the spill reporting regulation.

3.0 RESPONSE ORGANIZATION

3.1 Emergency Response Organization

The Hood River Property response organization is shown in Appendix IV. The figure will be updated prior to site occupation. The figure provides the chain of command in the upper three boxes and agencies that may require contacting in case of an emergency in the lower boxes. Additional company contact numbers are listed on the Distribution List (Appendix I).

3.2 Emergency Assessment

In the process of assessing the situation, an attempt to confirm the answers to the following questions will be made by personnel attending the emergency:

- 1. What type of incident is it?**
 - Accident
 - Spill
 - Fire
 - Explosion
 - Weather Emergency
- 2. What type of container, if any?**
 - Bulk Container
 - Bags
 - Drums
 - Other
- 3. What types of chemicals are involved?**
 - Are they toxic
 - Are they flammable
 - Are other chemicals involved
 - Are they liquid, solid, solutions or gases
 - Class of chemical, i.e. TDG or WHMIS
- 4. Location of Incident?**
 - Inside a building (what building)
 - Outside a building (what location)
 - Entered water or has the potential to
 - Location
 - Accessibility
- 5. Personnel Injuries?**
 - Physical
 - Contamination with product
- 6. Who is in charge?**
 - Operator
 - Supervisor
 - Other
- 7. What is the physical situation?**

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- Physical description
- Weather (if spill is outside)
- Approximate temperature (if outside)

8. Is wildlife involved?

- If so, what species?
- How to secure, remediate?

3.3 Levels of Emergency

The level of emergency is defined by using the Assessment Matrix for Incident Classification in Tables 4, 5 and 6, Section 3.4.

- **Alert – Very Low Emergency**

An incident that can be handled on-site by WPC personnel through normal operating procedures and is deemed to be a very low risk to members of the public.

- **Level 1 – Low Emergency**

There is no danger outside the licensee’s property, there is no threat to the public, and there is minimal environmental impact. The situation can be handled entirely by WPC personnel. There will be immediate control of the hazard. There is little or no media interest.

- **Level 2 – Medium Emergency**

There is no immediate danger outside of the licensee’s property or the right of way, but there is the potential for the emergency to extend beyond the property. Outside agencies must be notified. Imminent control of the hazard is probable, but there is a moderate threat to the public and/or the environment. There may be local and regional media interest in the event.

- **Level 3 – High Level Emergency**

The safety of the public is in jeopardy from a major uncontrolled hazard. There are likely significant and ongoing environment impacts. Immediate multi-agency municipal and provincial/territorial/state government involvement is required.

3.4 Assessment Matrix For Incident Classification

TABLE 4.
CONSEQUENCE OF THE INCIDENT

RANK	CATEGORY	EXAMPLE OF CONSEQUENCE
1	Minor	No worker injuries. Nil or low media interest. Liquid release contained on Property. Gas release impact on Property only.
2	Moderate	First aid treatment required for worker(s) on Property. Local and possible regional media interest. Liquid release not contained within Property. Gas release impact could potentially extend beyond Property.
3	Major	Worker(s) require hospitalization. Regional and national media interest. Liquid release extends beyond Property and is not contained. Gas release impact extends beyond Property; public health/safety could be jeopardized.
4	Catastrophic	A fatality occurs. National and international media interest. Liquid release off Property is not contained; potential for or is impacting water or sensitive terrain. Gas release impact extends beyond Property; public health/safety is jeopardized.

TABLE 5.
LIKELIHOOD OF THE INCIDENT ESCALATING

RANK	DESCRIPTOR	DESCRIPTION
1	Unlikely	The incident is contained or controlled and is unlikely it will escalate. There is no chance of additional hazards. Ongoing monitoring is required.
2	Moderate	Control of the incident may have deteriorated, but imminent control of the hazard by the licensee is probable. It is unlikely that the incident will escalate further.
3	Likely	Imminent/intermittent control of the incident is possible. The licensee has the capability of using internal/external resources to manage and bring the hazard under control in the near term.
4	Almost certain or is currently occurring.	The incident is uncontrolled. There is little chance of the hazard will be brought under control in the near term. Assistance from outside parties is required to remedy the situation.

TABLE 6.
INCIDENT CLASSIFICATION

RISK LEVEL	ASSESSMENT RESULTS
Very Low (2 - 3)	Alert
Low (4 - 5)	Level 1 Emergency
Medium (6)	Level 2 Emergency
High (7 - 8)	Level 3 Emergency

TABLES 4 to 6. To use these tables, sum the assessed RANK values from Table 4 and Table 5 to obtain the assessed RISK LEVEL and the Incident Classification from Table 6.

4.0 EMERGENCY RECOGNITION, PREVENTION AND RESPONSE

4.1 Emergency Recognition and Prevention

Being aware of potential situations is the first step in emergency recognition and prevention. All employees will be made aware of potential emergencies at the Hood River Property in their initial orientation training. Periodic emergency preparedness update training will also be provided to all employees at the site and plant.

Most emergencies at industrial sites are due to worker injury caused by accidents. An effective safety and accident prevention program therefore is a key component of emergency prevention and will be established at the Hood River Property. An effective safety program is also a necessary component of an emergency preparedness plan. Standard operating procedures will be established for all work conducted at the Hood River Property and will incorporate safety as the number one consideration.

4.2 Emergency Response

Emergency response contact telephone numbers are listed in Table 2 and Schedule 1 (in Appendix II) provides a list (as of the date shown on the list) of Hood River Property personnel trained in emergency response. The numbers will be posted at telephones at the site. When an emergency is recognized the first step is to alert all potentially affected personnel by use of the air horn system, telephone and/or two-way radios as appropriate. The second step is to notify the project geologist or contact the camp manager who will assume charge of the emergency. It is the responsibility of all personnel to follow the instructions of the Project Manager.

All employees will record any information they receive as soon as they have an indication that an emergency may exist.

The following will be recorded:

1. Who is reporting, how can they be contacted

- a.) Date, time
- b.) Person calling, title
- c.) Telephone number (if applicable)

This information will always be taken before the details on the nature and extent of emergency, in case of interruption of call or the need to clarify the situation.

2. Nature of emergency

- a.) Location
- b.) Type of emergency
 - i. Spill of hazardous substance
 - ii. Fire
 - iii. Uncontrolled explosion
 - iv. Accident/medical emergency
 - v. Weather emergency
 - vi. Other
- c.) If an injury or death has occurred:
 - i. If yes, number, names

- d.) If hazardous substance spill has occurred:
 - i. Type of container (if applicable)
 - ii. Materials involved (if known)
 - iii. Leaking (if applicable)?
 - iv. How quickly (if applicable)?
 - v. Contamination of soil?
 - vi. Contamination of surface water body?
 - vii. Contamination of air?
- e.) Time of incident
- f.) Other materials involved (if applicable)?
- g.) Wildlife involved (if applicable)?

Many emergencies are often initially overstated or understated; one of the most difficult tasks is to get a true appraisal of the situation. To this end all available resources must be used to get knowledgeable persons to the scene as quickly as possible.

3. Who has been notified?

- a.) Refer to Hood River Property Emergency Response Organization Chart (Appendix IV).

4. Who is in charge of spill?

- a.) Name and phone number, if available (this will normally be the Project Manager).

Emergency-specific procedures for potential emergencies that could arise at the Hood River Property are attached in Appendix V. Summary procedure flow charts for spills are included as well in Appendix V and copies of these charts will be posted at appropriate work stations throughout the site.

4.3 Communications

For emergency situations it is imperative that people who are responsible for responding, or who will direct emergency operations, are notified as rapidly as possible. In addition there may be a requirement to notify people or organizations off the site.

4.3.1 Internal

For most emergency communications the site phone and two-way radio systems will be used. Immediate evacuation alarms will be incident-specific and are discussed briefly below.

24-hour emergency phone and/or radio contacts are posted throughout the site. All employees must familiarize themselves with the locations of these notices in their work areas.

4.3.2 External

External communications regarding Hood River Property emergencies will be principally of two types:

- those requesting aid or assistance; and
- those providing the outside world with information.

Requests for aid may be made by any employee, as appropriate, but should normally be channeled through the most senior on-project Manager. Unless otherwise authorized by the manager or first aid attendant, external communications providing information on Hood River Property emergencies will be handled by the manager or first aid attendant exclusively.

4.4 Personal Protection Equipment

A list of personal protection equipment available at the Hood River Property and location of equipment will be included in the Fuel Spill Contingency Plan update that will be updated prior to site occupation. Conceptually, the equipment could include that listed in Table 7.

EQUIPMENT	CORE SHACK	DRILLS	KITCHEN
Slickers / Coveralls		X	
Goggles	X	X	
Gloves	X	X	X
Respirators		X	
First Aid Kits	X	X	X
Fire Extinguisher	X	X	X

TABLE 7. Hood River Project, personal protective equipment list.

4.5 Decontamination Procedures

A decision as to whether the spill warrants decontamination procedures will be based on the following. If the answer is “YES” to one, or all of the following, decontamination procedures must be followed.

NOTE: AN “*IDON'T KNOW*” RESPONSE MUST BE TREATED AS A “YES”.

- Is the product at “Immediately Dangerous to Life and Health” (IDLH) concentration?
- Does the product constitute a Hazardous Waste? Potentially any substance covered under the *Transportation of Dangerous Goods Regulation* (e.g. diesel or gasoline), if spilled, could be considered a hazardous waste.
- Would spread of even a small amount of the product lead to health or environmental risks?

All exposed skin should be washed thoroughly with soap and water and subsequently rinsed thoroughly. Decontamination procedures are discussed further in the Hood River Property Fuel Spill Contingency Plan.

4.6 Accounting For Employees

It is the Project Manager’s responsibility to account for all personnel at the assembly points. If any are missing, the Project Manager must be notified immediately of the name and the employee’s last known location. The Manager will then arrange with the emergency response team to locate the missing personnel consistent with their own personal safety.

Employees must be told not to try to re-enter the area until the all-clear signal is given by the Project Manager.

4.7 Removal of Injured Employees

If injured employees are found, they should be carefully moved out of the area of concern only by the emergency response team who must be wearing proper Personal Protective Equipment (PPE). Depending on the injury it may be necessary to wait until ambulance Personnel arrive.

4.8 Assessment of Emergency

The Project Manager will determine whether assistance is required to make an assessment of the emergency situation.

4.9 Initial Calls To Outside Resources and Agencies

If immediate assistance is needed, reference should be made to the Emergency Response Organization Chart (Appendix IV). Communication is discussed in Section 4.3.

4.10 Shut Down of Certain Services and Utilities

During an emergency it may be necessary to shut down services. The Project Manager will make this decision with input from others, such as the catering department. Care must be taken to not shut down too much, as this may hamper resolution of the emergency.

4.11 Closing Meeting

The Project Manager or Shift Supervisor, management representatives, environmental/health/safety representatives, and agencies onsite/involved during the emergency will hold a meeting after the incident is over to discuss problems, assess responsiveness to the emergency, and suggest corrective measures to minimize future occurrence. Certain results of the meeting will be related to the affected employees to help relieve anxiety.

4.12 Plan Activation and Response Mobilization

As part of initial preparedness for emergency response, a spill response team will be designated. The Project Manager will be responsible for activation of the emergency response plan. These persons will be familiar with the resources available to mobilize in the case of a specific incident, as well as the appropriate response.

The emergency plan activation and response mobilization will depend on the nature of the emergency and its location.

4.13 Routine Inspections and Preparedness

A key part of preparedness for emergencies is to ensure that all preparations and emergency equipment are in place and functioning as intended. There are two aspects to this:

- routine site inspections; and
- training updates (discussed in Section 9.0).

A conceptual building inspection form for monthly (or more frequent) inspections is provided in Schedule 2 (Appendix II). Inspection forms for all aspects of the Hood River Property will be developed and will form an integral part of the Emergency Response Plan.

5.0 SAFE DISTANCES AND PLACES OF REFUGE

5.1 Safe Distances

Safe distances are entirely situation dependent. Safe distances for a site emergency will be determined by the Project Manager, or designate. If in doubt, ask your supervisor. The Project Manager will set up exclusion zones for the emergency or spill. All personnel, without exception, not directly involved in the emergency response are to remain outside the exclusion zone, unless authorized to enter by the Project Manager or his designate.

The Project Manager will decide when it is safe to enter the exclusion zone, i.e., when it may be removed. All employees on site will be notified when the emergency exclusion zone is once again safe to enter.

As a rough guide in the absence of instruction, the distances in Table 8 provide minimum safe distances.

TABLE 8.
Minimum Distance Guide for Non-Emergency Response Personnel

<i>Emergency</i>	<i>Nature of Hazard</i>	<i>Airborne</i>	<i>Minimum Distance</i>
Hazardous substance spill	Liquid Spill; no danger of fire.	None	Outside the spill area.
	Liquid Spill; no danger of fire.	Visible of probable (see MSDS).	Outside the confined space or upwind if outside.
	Liquid Spill; flammable	None	Outside the spill area if no immediate danger of combustion; combustion greater than 25 metres; explosion greater than 500 metres.
Fire	Flammable substance; no danger of explosion	Visible of probable	Outside of confined space or upwind at least 50 metres if outside.
	Flammable substance; danger of explosion		Evacuate a minimum area of 500 metres.
	Building		Evacuate the building and maintain a minimum distance of the building height plus 10 metres.
Explosion	No danger of further explosions or collapse of structures		Beyond the impact area.
	No danger of further explosions but structures could collapse.		Beyond the periphery of where collapse could impact
	Danger of further explosions		Evacuate a minimum distance of 500 metres.
Medical Emergency			Not Applicable
Weather Emergency			Not Applicable
Dam Break			Evacuate any area downslope of the affected dam.

TABLE 8. Minimum distance guide for all non-emergency response personnel.

6.0 SITE SECURITY AND CONTROL

During an emergency, proper security measures will be established to limit the movement into the incident site of unauthorized personnel not involved in the response. The Project Manager will be primarily responsible for establishing a security zone. The Project Manager is authorized to employ whatever resources are deemed necessary to establish and police the zone. The nature of the zone and methods of exclusion will depend on the emergency and will be at the discretion of the Project Manager. All employees will be informed of the situation through their supervisors in order to facilitate understanding and compliance with the emergency security measures.

It is the sole discretion of the Project Manager as to when security may be relaxed or removed. The primary consideration will be safety of personnel, limiting to the greatest extent possible any negative environmental impacts, and effective control and elimination of the emergency conditions as quickly as possible.

In the case of a police investigation, these decisions will be made by the investigating police officer in charge. All personnel will be expected to extend full co-operation to police in their investigation.

Exclusion zones will normally be established at the safe distance line from the emergency (see Section 5.0). Where appropriate, and always in the case of spills of hazardous substances, the emergency site will be divided into three areas:

- exclusion zone;
- contamination reduction zone; and
- support zone.

Only necessary rescue and response personnel will be allowed into the exclusion zone. A check point or check points will be established through which all personnel entering or exiting the emergency site must pass. Check point information will include:

- name (position at the Hood River Property or affiliation);
- time of entry/exit;
- zone(s) or areas to be entered;
- tasks to be performed; and
- protective equipment worn

7.0 EVACUATION ROUTES AND PROCEDURES

There are a several levels of evacuation that may be required at the Hood River Property, depending on the emergency. These would be:

- building evacuation;
- area evacuation;
- site evacuation;

Building evacuation may be required in the case of fire or spill of a hazardous substance. Emergency exit doors will be clearly marked with an “Exit” sign on all buildings. Employees working in buildings will be made aware of building exits as part of job training; as well, periodic evacuation drills will be conducted to test emergency preparedness. Response will be recorded and the Health and Safety Committee will evaluate with respect to adequacy of drills and improvement required.

If outside areas of the site become unsafe due to ground instability, flooding, or other natural cause, or if a hazardous substance spill occurs, evacuation from the affected area may be required. This determination will be made by the Project Manager, but if any employee feels a work area is unsafe they may refuse to work in the area without penalty and report the unsafe condition to the Health and Safety Committee and/or the Project Manager. Evacuation from outside areas will normally be by existing access routes (shown on the Site Map). In the event evacuation by that route is cut off, personnel may be required to walk to an alternate exit route or await rescue.

If the immediate area of the site become unsafe, it may be necessary to evacuate personnel to refuge sites, e.g., the survival huts, until normal conditions can be restored. Should this condition occur, all personnel will be notified as quickly as possible and transported to Yellowknife. Site contractor and WPC Resources Incorporated head offices must be notified.

Under exceptional circumstances it may be necessary to evacuate the entire Hood River Property area of all personnel. This evacuation would be coordinated by the Project Manager, or their designate, and would require aircraft support from Kugluktuk or Yellowknife where air charter companies are headquartered. Site contractor and WPC Resources Incorporated head offices would be notified.

8.0 PREPAREDNESS AND TRAINING

Two levels of training will be given to Hood River Property employees, depending on their role in emergency response:

- emergency responder training; and
- emergency awareness and preparedness training for all employees.

Emergency responder training will be provided for all first-aid personnel and for the site rescue team. The training for the site rescue team will be the responsibility of WPC Resources Incorporated who will retain the ultimate responsibility to ensure effective training is provided.

Training for all employees will include:

- evacuation procedures and routes;
- alarm systems;
- when to attempt immediate response to an emergency and when to call for help;
- reporting procedures for personnel;
- shutdown procedures for equipment and electrical systems;
- types of potential emergencies;
- procedures for handling flammable liquids;
- importance of good housekeeping;
- importance of safe work habits;
- procedures for control and cleanup of leaks and spills; and
- procedures for disposal of waste materials.

Training programs will be provided on the following schedule:

- for all new employees;
- annually as a refresher;
- when new equipment, materials or processes are introduced;
- when procedures have been updated or revised; and
- when analysis of drill responses by the Health and Safety Committee results in a recommendation for refresher training in any or all areas.

Emergency responder training will be specific to their area of responsibility: core splitting, geophysical surveys, etc. Industrial first aid certification will be a requisite. Emergency responders will obtain hands on training in use of fire suppression equipment (fire extinguishers, etc.), correct procedures for safe handling and cleanup of hazardous chemicals used in their work area, and familiarity with MSDS. Site safety rescue teams will meet the requirements of the Mine Health and Safety Regulations as a minimum. Emergency responder training will be conducted as required by legislation or, at a minimum, annually. Drills for emergency response teams will also be conducted as required by legislation or, at a minimum, semi-annually.

Training will be provided by a combination of trained, qualified WPC staff and potentially, any outside training service organizations, as appropriate. Training manuals will be developed as appropriate.

9.0 RESOURCE INVENTORY

9.1 Emergency Equipment Locations

WPC's emergency response resource inventory is listed in Table 9 and is based on the proposed program and site configuration. The table will be updated prior to site occupation to provide a complete picture of site resources. Fire extinguishers will be located in clearly marked locations in accommodations, fuelling stations, helicopter pad, and other areas where flammable substances are stored and/or handled. Spill kits will be located at the fuel cache, fuelling stations, airstrip, helicopter pad, and other locations where spills of fuel or gasoline could occur.

TABLE 9.

HOOD RIVER PROPERTY EMERGENCY RESPONSE RESOURCE INVENTORY	
<i>24 HOUR RESPONSE EQUIPMENT:</i>	
	NUMBER
Snowmobile	
Helicopter	
Satellite Telephone	
<i>SPILL EQUIPMENT:</i>	
	AVAILABILITY
Sorbent Booms	
Sorbent Pillows	
Sorbent Material	
Portable Pumps and Hoses	
Shop Vac	
Ice Auger	
Tiger Torch	
Chain Saw	
Hand Tools (Shovels, Rakes, etc.)	
<i>FIRE FIGHTING EQUIPMENT:</i>	
	AVAILABILITY
Fire Extinguishers in every building	
Hand Tools	
Smoke alarms in every building	

TABLE 9. Suggested emergency response resource inventory available at the Hood River Project.

9.2 Aid Agreements

No aid agreements are in place at present. Any such agreements that are put in place would be developed as appropriate.

10.0 MISSING OR OVERDUE AIRCRAFT

Most of the supply and re-supply are by flights into the site carrying personnel and small cargo. Helicopter exploration flights will also use the site as a base. Every aircraft transportation company generally has procedures for tracking overdue and lost aircraft. When an air charter company does not have established procedures WPC will initiate the following procedures.

10.1 Helicopters

Resulting from limited fuel load capacity, and operating without fuel caches, the WPC helicopter will be working within approximately 2 hours of the site. For all helicopters using the Ulu Camp as a base, the pilot will file a flight plan with the Camp Manager.

- If there is no contact from the pilot at the predetermined time then the Camp Manager will attempt to contact the helicopter on the active frequency. Radio contact will be attempted every few minutes until 30 minutes has passed.
- If, after 30 minutes has passed, no contact has been established then the site person will call the helicopter company base to inform them and to ascertain whether they have heard from the pilot on another frequency. If other air aircraft are in the area they can be asked to attempt to contact the missing aircraft. If the pilot or crew is carrying a satellite phone then this should be used to attempt contact.
- When all attempts at contact are negative and the helicopter has been over due for 30 minutes the Camp Manager will inform the Project Manager and the helicopter company that a search should be initiated.
- The aircraft company will then use its standard operating procedures for overdue aircraft with the full cooperation and resources of WPC Ulu Base Camp. During this procedure the Ulu Base Camp will continue to attempt contact with the aircraft.

10.2 Fixed Wing Aircraft

For the most part the fixed wing aircraft coming to the Ulu Campsite are carrying people or supplies. These flights are on prescribed schedule and will have a defined flight plan filed with the originating airport. The Camp Manager will always know when an aircraft is scheduled to land to ensure that the landing area is free of debris and animals. The following procedure is to be used for overdue regular and extra ordinary fixed wing flights:

- Thirty (30) minutes after the scheduled arrival time, having received no contact from the aircraft and with no information available, the Camp Manager will contact the aircraft company and the originating airport to advise them that the aircraft is overdue.
- If the helicopter based on site has the correct frequencies it will attempt to contact the overdue aircraft and will continue until the aircraft company initiates their search procedure or the authorities take over the communications and the search.
- If there are other aircraft available on site (i.e. the base helicopter), these machines are made available immediately to the organized search.
- Site personnel are made available to the aircraft company as necessary for the search.
- The Camp Manager will inform the Project Manager as soon as the aircraft is deemed to be overdue.

11.0 CAMP LOCATION

CAMP INFORMATION					
CAMP	STATUS	LATITUDE	LONGITUDE	TELEPHONE	CAMP MANAGER
ULU Base	Open June 15 until October, Seasonally.	66° 54' 02" N 7,421,100m North	110° 58' 30" W 501,350m East	To be Determined	To be Determined
UTM NAD83 Zone 12					

TABLE 10. Hood River Project Camp location coordinates.

OTHER IMPORTANT CONTACT TELEPHONE NUMBERS	
WPC Resources Incorporated Hood River Property, Nunavut.	
<u>NON-EMERGENCY CONTACT NUMBERS</u>	
WPC Resources Vancouver Office Number:	
Office	1-604-685-1144
Toll Free Line	1-877-685-1144
Nunavut Spill Report Line:	1-867-920-8130
Public Health Office, Yellowknife:	1-867-920-8646
Poison Control Centre:	1-800-332-1414
G&G Expediting, Yellowknife:	1-867-669-9705
Discovery Mining Services, Yellowknife:	1-867-873-8332
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

TABLE 11. Hood River Project Additional Important Telephone Contact Numbers.

Appendix I

Distribution List.

This manual is to be distributed to the following WPC personnel:

WPC Resources Incorporated,

Company Chief Executive Officer:

W. K. Crichy Clarke,
(Vancouver)

Crichy@wpcresources.com

Suite 202, 750 West Pender Street,
Vancouver, British Columbia.
CANADA V6C 2T7

Telephone: 604-685-1144
Toll Free: 1-877-685-1144

Directors:

W. K. Crichy Clarke, C.E.O.
Allan Fabbro, President,
Richard Jordens, Director,
Bruce Hamilton, Director,
and
Glen Macdonald, Director.

Crichy@wpcresources.com

afabbro@wpcresources.ca or afabbro@imining.com

Geologic Contact / Consulting Geologist:

Bruce Goad, P. Geo., M. Sc.
INUKSHUK EXPLORATION INC.
(Langley, British Columbia)

InukshukExploration@Shaw.ca

Geologists:

Yet to be hired.
Yet to be hired.
Yet to be hired.
Yet to be hired.

Camp Manager:

Yet to be hired.

All Camp Staff

Yet to be hired.
Yet to be hired.
Yet to be hired.

All Field Staff:

Yet to be hired.
Yet to be hired.
Yet to be hired.
Yet to be hired.

Safety Officer

Yet to be nominated.

SCHEDULE 2: BUILDING INSPECTION CHECKLIST

Assigned Area:

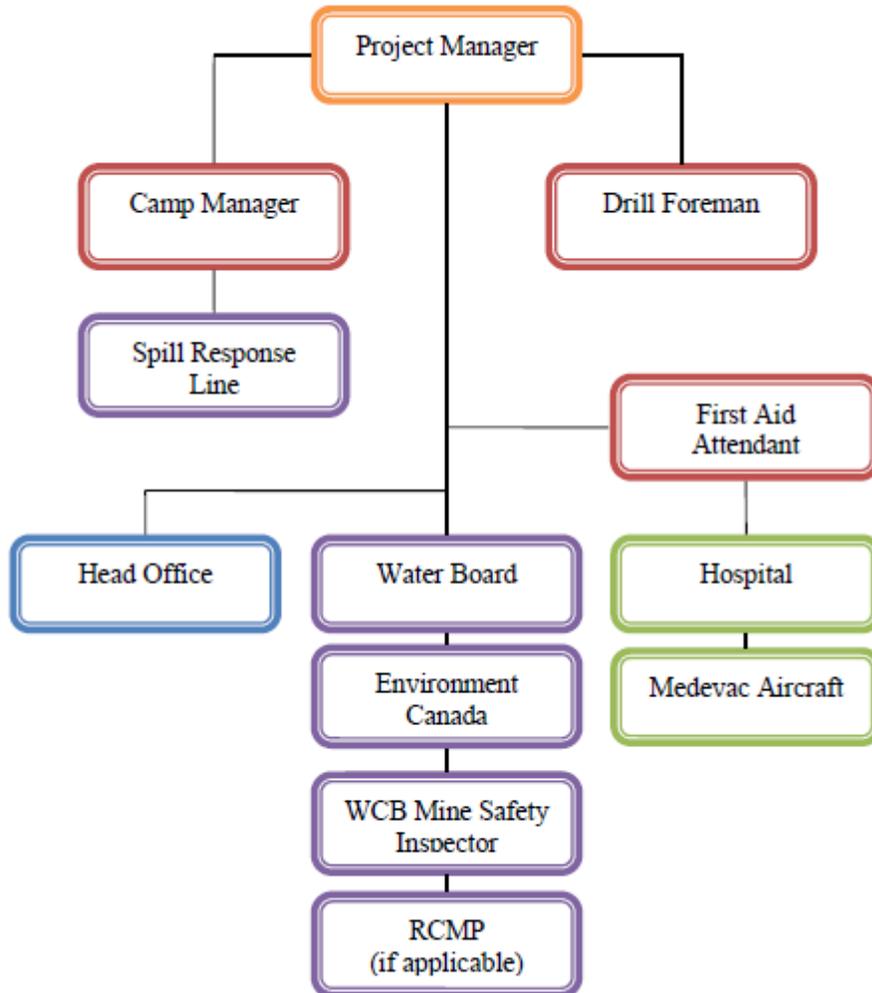
Assigned Supervisor:

Inspection Date:

X	Item	Comments/Deficiencies
	Are all worksites clean and orderly?	
	Are all exits kept free of obstructions?	
	Are all exits marked with an exit sign and illuminated by a reliable light source?	
	Are aisles kept clear to allow unhindered passage?	
	Are combustible scrap, debris, and waste materials stored in covered metal receptacles and removed from the worksite promptly?	
	Are all flammable liquids kept in closed containers when not in use?	
	Are all extinguishers free from obstructions or blockage?	
	Are all extinguishers charged? Note date and time tested and initial on extinguisher tag.	
	Are "No Smoking" rules followed in areas involving storage and use of flammable materials?	
	Are all spilled materials or liquids cleaned up immediately?	
	Are all work areas adequately illuminated?	
	Are emergency telephone numbers posted where they can be readily found in case of emergency?	
	Are all fire doors in good condition?	
	Is there anything to hinder the door from completely closing?	
	Is the fire alarm system in good working order? Note date and time tested & initial .	

Appendix III

Emergency Response Organization



Appendix IV

ATTACHMENTS

TOXICOLOGICAL PROPERTIES OF CHEMICALS HANDLED/POTENTIALLY HANDLED AT THE HOOD RIVER PROPERTY.

Major Chemicals:

- *Diesel (Fuel Oil)*
- *Jet Fuel*
- *Gasoline*

Minor Chemicals:

- *Varsol*
- *Hydraulic/Motor Oil*
- *Sulphuric Acid*
- *Ethylene Glycol*
- *Hydrofluoric Acid*
- *Hydrochloric Acid*
- *Acetone*

EMERGENCY SPECIFIC PROCEDURES

- *Acetone Spill Response*
- *Battery Acid Spill Response*
- *Diesel Spill Response*
- *Gasoline Spill Response*
- *Hydraulic Oil Spill Response*
- *Hydrofluoric Acid Spill Response*
- *Jet Fuel Spill Response*
- *Motor Oil Spill Response*
- *Varsol Spill Response*
- *Acetone Spill Response*

**TOXICOLOGICAL AND PHYSICOCHEMICAL PROPERTIES OF MINOR
CHEMICALS POTENTIALLY HANDLED ON THE HOOD RIVER PROPERTY.**

- *Diesel (Fuel Oil)*
- *Jet Fuel*
- *Gasoline*

Diesel (Fuel Oil)

Physicochemical Properties

Appearance And Odor:	Clear to yellow, typical hydrocarbon odor.
Boiling Point:	360-572F
Melting Point:	NA
Vapor Pressure (MM Hg/70 F):	0.1
Vapor Density (Air=1):	NA
Specific Gravity:	0.81-0.86
Decomposition Temperature:	NA
Evaporation Rate And Ref:	NA
Solubility In Water:	Trace
Percent Volatiles By Volume:	100
pH:	NA
Corrosion Rate (IPY):	NA
Flash Point:	100F,38C
Flash Point Method:	PMCC
Lower Explosive Limit:	1 %
Upper Explosive Limit:	5 %
Stability:	Yes
Conditions To Avoid (Stability):	Under normal conditions, the material is stable.
Materials To Avoid:	Strong oxidants such as liquid chlorine, concentrated oxygen, sodium hypochlorite or calcium hypochlorite.
Hazardous Decomposition Products:	Fumes, smoke, carbon monoxide, aldehydes and other decomposition products.
Hazardous Poly Occur:	No
Conditions To Avoid (Poly):	Material is not known to polymerize.

Toxicological Properties

LD50-LC50 Mixture:	Oral LD50 (rat) is = 5-15 g/kg
Route Of Entry - Inhalation:	Yes
Route Of Entry - Skin:	Yes
Route Of Entry - Ingestion:	Yes
Health Hazard Acute And Chronic:	Acute: Central nervous system depression with extreme exposure; effects may include anaesthesia, coma, respiratory arrest, and irregular heart rate. Oxygen deprivation is possible if working in a confined area.
Chronic:	No known major cumulative or latent effects have been reported.
Carcinogenicity - NTP:	No
Carcinogenicity -IARC:	No
Carcinogenicity - OSHA:	No
Explanation Carcinogenicity:	Not carcinogenic.
Signs/Symptoms Of Overexposure:	Inhalation-irritation of the upper respiratory tract, depression, dizziness, headache, un-coordination, anaesthesia, coma & respiratory arrest. Skin-defatting, irritation & burning sensation & swelling of lids. Eye-severe burning sensation. Ingestion: irritation of throat, esophagus & stomach, vomiting.

Medical Condition Aggravated By Exposure

None specified by manufacturer.

Jet Fuel

Physicochemical Properties

Appearance And Odor:	Colorless liquid, fuel oil odor
Boiling Point:	250-549f
Melting Point:	Not given
Vapor Pressure (MM Hg/70 F):	2-3 PSI
Vapor Density (Air=1):	Not given
Specific Gravity:	0.75 -0.8
Decomposition Temperature:	Unknown
Evaporation Rate And Ref:	Not given
Solubility In Water:	Negligible
Corrosion Rate (IPY):	Unknown
Auto-ignition Temperature:	468F
Flash Point:	-10F,-23C
Flash Point Method:	CC
Lower Explosive Limit:	1.3 %
Upper Explosive Limit:	8 %
Extinguishing Media:	Agents approved for class B hazards (dry chemical, carbon dioxide, halogenated agents, foam, steam) and water fog.
Special Fire Fighting Procedures:	Fire fighters should use NIOSH approved SCBA & full protective equipment when fighting chemical fire. Use water spray to cool nearby containers exposed to fire.
Unusual Fire And Explosive Hazards:	Do not use direct stream of water on fire. Toxic gases are released during combustion. Vapor may explode if ignited in enclosed area.
Stability:	Yes
Conditions To Avoid (Stability):	Heat, open flame, sparks
Materials To Avoid:	Strong oxidizing agents
Hazardous Decomposition Products:	Carbon monoxide, carbon dioxide, unidentified organic compounds.
Hazardous Poly Occur:	No
Conditions To Avoid (Poly):	None. Will not occur.
LD50-LC50 Mixture:	Not given for product as a whole
Route Of Entry - Inhalation:	Yes
Route Of Entry - Skin:	Yes
Route Of Entry - Ingestion:	No
Health Hazard Acute And Chronic:	May be mildly irritating to the eyes. Prolonged or repeated contact may cause dermatitis. Vapors may irritate the nose, throat and upper respiratory tract and cause central nervous system depression. Aspiration hazard.
Carcinogenicity - NTP:	Yes
Carcinogenicity - IARC:	Yes
Carcinogenicity - OSHA:	Yes
Explanation Carcinogenicity:	Contains Benzene [71-43-2] which is listed by NTP and IARC and regulated by OSHA as a carcinogen.
Signs/Symptoms Of Overexposure:	Eye irritation, skin irritation, dermatitis, upper respiratory tract irritation, nausea, vomiting, diarrhea, headaches, dizziness, drowsiness.
Medical Condition Aggravated By Exposure:	Pre-existing skin and/or respiratory disorders may be aggravated by exposure to this product.

Gasoline

Physicochemical Properties

Appearance And Odor:	Clear liquid with gasoline odor.
Boiling Point:	>70F,>21C
Melting Point:	-36F,-38C
Vapor Pressure (MM Hg/70 F):	400
Vapor Density (Air=1):	5
Specific Gravity:	0.74
Decomposition Temperature:	Unknown
Evaporation Rate And Ref:	10.5(N-Butyl Acetate=1)
Solubility In Water:	Negligible
Percent Volatiles By Volume:	100
Viscosity:	Unknown
pH:	7
Corrosion Rate (IPY):	Unknown
Flash Point:	-36F,-38C
Flash Point Method:	TCC
Lower Explosive Limit:	1.4 %
Upper Explosive Limit:	7.6 %
Extinguishing Media:	Use water fog, carbon dioxide, foam, or dry chemical.
Special Fire Fighting Procedures:	Water may be ineffective on flames, but should be used to keep fire-exposed containers cool. Large fires, such as tank fires, should be fought with caution.
Unusual Fire And Explosive Hazards:	Highly volatile material. Flowing gasoline can be ignited by self-generated static electricity. Vapors may travel along the ground to a remote ignition source.
Stability:	Yes
Conditions To Avoid (Stability):	High heat, open flames and other sources of ignition.
Materials To Avoid:	Strong oxidizing agents
Hazardous Decomposition Products:	Burning or excessive heating may produce carbon monoxide and other harmful gases/vapors.
Hazardous Poly Occur:	No
Conditions To Avoid (Poly):	Not applicable

Toxicological Properties

LD50-LC50 Mixture:	Oral LD50 (Rat) is >5G/KG
Route Of Entry - Inhalation:	Yes
Route Of Entry - Skin:	Yes
Route Of Entry - Ingestion:	No
Health Hazard Acute And Chronic:	Inhalation: moderate risk of vapor de-fatting with drying and cracking can lead to dermatitis and secondary infection. Eye: irritant. Ingestion: burning of mouth and upper GI tract, vomiting and diarrhea. Prolonged or repeated contact: dermatitis.
Carcinogenicity - NTP:	Yes
Carcinogenicity - IARC:	Yes
Carcinogenicity - OSHA:	Yes
Explanation Carcinogenicity:	Contains Benzene [71-43-2] which is listed by NTP and IARC and regulated by OSHA as a carcinogen.
Signs/Symptoms Of Overexposure:	Inhalation may cause euphoria, lung irritation and edema, headache, dizziness, drowsiness, convulsions, coma, cyanosis, generalized depression. Ingestion may cause general depression, sedation, respiratory depression, coma.
Medical Conditions Aggravated By Exposure:	May aggravate pre-existing dermatitis, respiratory illness, or other conditions which have the same symptoms or effects as stated above.

**TOXICOLOGICAL AND PHYSICOCHEMICAL PROPERTIES OF MINOR
CHEMICALS POTENTIALLY HANDLED ON THE HOOD RIVER PROPERTY.**

- *Varsol*
- *Hydraulic/Motor Oil*
- *Sulphuric Acid*
- *Ethylene Glycol*
- *Hydrofluoric Acid*
- *Hydrochloric Acid*
- *Acetone*

Varsol

Physicochemical Properties

Appearance And Odor:	Clear, colorless liquid - hydrocarbon odor
Boiling Point:	315F - 397F
Melting Point:	-4F,-20C
Vapor Pressure (MM Hg/70 F):	6 @ 68F
Vapor Density (Air=1):	3.90
Specific Gravity:	0.79
Decomposition Temperature:	Unknown
Evaporation Rate And Ref:	<0.1 (n-butyl acetate=1)
Solubility In Water:	<0.01% @ 77F
Viscosity:	Unknown
Radioactivity:	Not relevant
Corrosion Rate (IPY):	Unknown
Auto-ignition Temperature:	490F
Flash Point:	104F,40C
Flash Point Method:	TCC
Lower Explosive Limit:	2.3
Upper Explosive Limit:	14.4
Stability:	Yes
Conditions To Avoid (Stability):	Heat, open flames
Materials To Avoid:	Strong oxidizing agents, molten sulphur, halogens.
Hazardous Decomposition Products:	Carbon monoxide, carbon dioxide may be formed.
Hazardous Poly Occur:	No
Conditions To Avoid (Poly):	Not relevant

Toxicological Properties

LD50-LC50 Mixture:	TLV 100 PPM for stoddard solvent
Route Of Entry - Inhalation:	Yes
Route Of Entry - Skin:	No
Route Of Entry - Ingestion:	No
Health Hazard Acute And Chronic:	Target organs: eye, skin, Central Nervous System (CNS), respiratory & gi tracts. Acute-eye: may cause mild irritation. Skin: repeated/prolonged contact may cause drying. Inhale: irritation, CNS effects. Oral: minimal toxicity, but aspiration hazard during ingestion or vomiting. Chronic- unknown
Carcinogenicity - NTP:	No
Carcinogenicity - IARC:	No
Carcinogenicity - OSHA:	No
Explanation Carcinogenicity:	None
Signs/Symptoms Of Overexposure:	Irritation, tearing, redness, drying and cracking of skin, nausea, vomiting, coughing, headache, dizziness, drowsiness, weakness, fatigue, unconsciousness
Medical Conditions Aggravated By Exposure:	Persons with pre-existing skin disorders, eye problems, or impaired CNS or respiratory function may be more susceptible to the effects of this product.

Hydraulic/Motor Oil

Physicochemical Properties

Appearance And Odor:	Dark oily with siteral oil odor
Specific Gravity:	0.890
Decomposition Temperature:	Unknown
Solubility In Water:	Negligible,<0.1%
Corrosion Rate (IPY):	Unknown
Flash Point:	>90F,>32C
Flash Point Method:	COC
Stability:	Yes
Conditions To Avoid (Stability):	Open flames
Materials To Avoid:	Strong oxidizers such as hydrogen peroxide, brosite, and chromic acid.
Hazardous Decomposition Products:	Carbon monoxide, carbon dioxide, oxides of phosphorous, sulphur, and possibly hydrogen sulphide.
Hazardous Poly Occur:	No
Conditions To Avoid (Poly):	Not applicable.

Toxicological Properties

LD50-LC50 Mixture:	Unknown
Route Of Entry - Inhalation:	No
Route Of Entry - Skin:	Yes
Route Of Entry - Ingestion:	No
Health Hazard Acute And Chronic:	Acute: Inhalation of mist may cause irritation. Ingestion no ill effects expected. Minute amounts aspirated into lungs may cause pulmonary injury. Eye: irritation. Skin: not normally expected to cause ill effects. Chronic: Prolonged/repeated skin contact may cause irritation.
Carcinogenicity - NTP:	No
Carcinogenicity - IARC:	No
Carcinogenicity - OSHA:	No
Explanation Carcinogenicity:	none of the compounds in this product is listed by IARC, NTP, or OSHA as a carcinogen.
Signs/Symptoms Of Overexposure:	Skin and eye irritation.
Medical Condition Aggravated By Exposure:	None specified by manufacturer.

Sulphuric Acid

Physicochemical Properties

Appearance And Odor:	Colorless, odorless liquid.
Boiling Point:	230F, 110C
Specific Gravity:	1.24 @ 80F
Solubility In Water:	100%
Lower Explosive Limit:	None
Upper Explosive Limit:	None
Extinguishing Media:	Water, carbon dioxide, dry chemical. Sulphuric acid not combustible.
Special Fire Fighting Procedures:	Sulphuric acid not combustible. Use water, carbon dioxide, or dry chemical on fires.
Unusual Fire And Explosive Hazards:	None specified by manufacturer.
Stability:	Yes
Conditions To Avoid (Stability):	Avoid shorting. Use only approved charging methods. Do not puncture battery case.
Materials To Avoid:	None specified by manufacturer.
Hazardous Decomposition Products:	None specified by manufacturer.
Conditions To Avoid (Poly):	Not applicable

Toxicological Properties

LD50-LC50 Mixture:	Unknown
Route Of Entry - Inhalation:	No
Route Of Entry - Skin:	No
Route Of Entry - Ingestion:	No
Health Hazard Acute And Chronic:	Not applicable for finished product used in normal conditions. When battery case broken/leaking electrolyte severe burns to all tissue may occur.
Carcinogenicity - NTP:	No
Carcinogenicity - IARC:	No
Carcinogenicity - OSHA:	No
Signs/Symptoms Of Overexposure:	Severe burns to all tissues from sulphuric acid.
Medical Conditions Aggravated By Exposure:	None specified by manufacturer.

Ethylene Glycol

Physicochemical Properties

Appearance:	Clear oily liquid.
Odor:	Odorless.
Solubility:	Miscible in water.
Specific Gravity:	1.1
pH @20C/4C:	No information found.
% Volatiles by volume @ 21C (70F):	100
Boiling Point:	197.6C (388F)
Melting Point:	-13C (9F)
Vapor Density (Air=1):	2.14
Vapor Pressure (mm Hg):	0.06 @ 20C (68F)
Evaporation Rate (BuAc=1):	No information found.
Stability:	Stable under ordinary conditions of use and storage.
Hazardous Decomposition Products:	Carbon dioxide and carbon monoxide may form when heated to decomposition. May produce acrid smoke and irritating fumes when heated to decomposition.
Hazardous Polymerization:	Will not occur.
Incompatibilities:	Strong oxidizing agents. Reacts violently with chlorosulfonic acid, oleum, sulfuric acid, perchloric acid. Causes ignition at room temperature with chromium trioxide, potassium permanganate and sodium peroxide; causes ignition at 212F(100C) with ammonium dichromate, silver chlorate, sodium chloride and uranyl nitrate.
Conditions to Avoid:	Heat, flames, ignition sources, water (absorbs readily) and incompatibles.

Toxicological Properties

Oral rat LD50: 4700 mg/kg; skin rabbit LD50: 9530 mg/kg.
 Irritation - skin rabbit: 555mg(open), mild; eye rabbit: 500mg/24H, mild.
 Investigated as a tumorigen, mutagen, reproductive effector.

Reproductive Toxicity: Has shown teratogenic effects in laboratory animals.

Ingredient	NTP Carcinogen		
	Known	Anticipated	IARC Category
Ethylene Glycol (107-21-1)	No	No	None

Hydrofluoric Acid

Physicochemical Properties

Appearance:	Colorless, fuming liquid.
Odor:	Acrid odor. Do not breathe fumes.
Solubility:	Infinitely soluble.
Specific Gravity:	1.15 -1.18
pH:	1.0 (0.1M solution)
% Volatiles by volume @ 21C (70F):	100 (as water and acid)
Boiling Point:	108C (226F)
Melting Point:	< -36C (< -33F)
Vapor Density (Air=1):	1.97
Vapor Pressure (mm Hg):	25 @ 20C (68F)
Evaporation Rate (BuAc=1):	No information found.
Stability:	Stable at room temperature (68F) when stored and used under proper conditions.
Hazardous Decomposition Products:	On contact with metals, liberates hydrogen gas. On heating to decomposition, could yield toxic fumes of fluorides. Attacks glass and other silicon containing compounds. Reacts with silica to produce silicon tetrafluoride, a hazardous colorless gas.
Hazardous Polymerization:	Will not occur.
Incompatibilities:	Hydrofluoric acid is incompatible with arsenic trioxide, phosphorus pentoxide, ammonia, calcium oxide, sodium hydroxide, sulphuric acid, vinyl acetate, ethylenediasite, acetic anhydride, alkalis, organic materials, most common metals, rubber, leather, water, strong bases, carbonates, sulphides, cyanides, oxides of silicon, especially glass, concrete, silica, fluorine. Will also react with steam or water to produce toxic fumes.
Conditions to Avoid:	Moisture and incompatibles.

Toxicological Properties

Hydrofluoric acid: Inhalation rat LC50: 1276 ppm/1H; Investigated as a mutagen, reproductive effector.

Ingredient	NTP Carcinogen		
	Known	Anticipated	IARC Category
Hydrogen fluoride (7664-39-3)	No	No	None
Water (7732-18-5)	No	No	None

Hydrochloric Acid

Physicochemical Properties

Appearance:	Colorless, fuming liquid.
Odor:	Pungent odor of hydrogen chloride.
Solubility:	Infinite in water with slight evolution of heat.
Density:	1.18
pH:	For HCL solutions: 0.1 (1.0 N), 1.1 (0.1 N), 2.02 (0.01 N)
% Volatiles by volume @ 21C (70F):	100
Boiling Point:	53C (127F) Azeotrope (20.2%) boils at 109C (228F)
Melting Point:	-74C (-101F)
Vapor Density (Air=1):	No information found.
Vapor Pressure (mm Hg):	190 @ 25C (77F)
Evaporation Rate (BuAc=1):	No information found.
Stability:	Stable under ordinary conditions of use and storage. Containers may burst when heated.
Hazardous Decomposition Products:	When heated to decomposition, emits toxic hydrogen chloride fumes and will react with water or steam to produce heat and toxic and corrosive fumes. Thermal oxidative decomposition produces toxic chlorine fumes and explosive hydrogen gas.
Hazardous Polymerization:	Will not occur.
Incompatibilities:	A strong siteral acid, concentrated hydrochloric acid is incompatible with many substances and highly reactive with strong bases, metals, metal oxides, hydroxides, asites, carbonates and other alkaline materials. Incompatible with materials such as cyanides, sulphides, sulphites, and formaldehyde.
Conditions to Avoid:	Heat, direct sunlight.

Toxicological Properties

Inhalation rat LC50: 3124 ppm/1H; oral rabbit LD50: 900 mg/kg (Hydrochloric acid concentrated); investigated as a tumorigen, mutagen, reproductive effector.

Ingredient	NTP Carcinogen		
	Known	Anticipated	IARC Category
Hydrogen chloride (7647-01-0)	No	No	3
Water (7732-18-5)	No	No	None

Acetone

Physicochemical Properties

Appearance:	Clear, colorless, volatile liquid.
Odor:	Fragrant, mint-like
Solubility:	Miscible in all proportions in water.
Specific Gravity:	0.79 @ 20C/4C
pH:	No information found.
% Volatiles by volume @ 21C (70F):	100
Boiling Point:	56.5C (133F) @ 760 mm Hg
Melting Point:	-95C (-139F)
Vapor Density (Air=1):	2.0
Vapor Pressure (mm Hg):	400 @ 39.5C (104F)
Evaporation Rate (BuAc=1):	ca. 7.7
Stability:	Stable under ordinary conditions of use and storage.
Hazardous Decomposition Products:	Carbon dioxide and carbon monoxide may form when heated to decomposition.
Hazardous Polymerization:	Will not occur.
Incompatibilities:	Concentrated nitric and sulphuric acid mixtures, oxidizing materials, chloroform, alkalis, chlorine compounds, acids, potassium t-butoxide.
Conditions to Avoid:	Heat, flames, ignition sources and incompatibles.

Toxicological Properties

Oral rat LD50: 5800 mg/kg; Inhalation rat LC50: 50,100mg/m³; Irritation eye rabbit, Standard Draize, 20 mg severe; investigated as a tumorigen, mutagen, reproductive effector.

Ingredient	NTP Carcinogen		
	Known	Anticipated	IARC Category
Acetone (67-64-1)	No	No	None

EMERGENCY-SPECIFIC PROCEDURES

- *Acetone Spill Response*
- *Battery Acid Spill Response*
- *Diesel Spill Response*
- *Gasoline Spill Response*
- *Hydraulic Oil Spill Response*
- *Hydrofluoric Acid Spill Response*
- *Jet Fuel Spill Response*
- *Motor Oil Spill Response*
- *Varsol Spill Response*

ACETONE SPILL RESPONSE

PROCEDURE NO.: 01

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Emergency Procedures

1.0 PERSONAL PROTECTION INFORMATION

Ventilation System	A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred.
Personal Respirators (NIOSH-Approved)	For emergencies or instances where the exposure levels are not known, use a full-face piece positive -pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.
Skin Protection	Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.
Eye Protection	Use chemical safety goggles and/or a full face shield where splashing is possible.

2.0 HEALTH HAZARD DATA

Airborne Exposure Limits	OSHA PEL 1000 ppm (TWA); ACGIH TLV 500 ppm (TWA), 750 ppm (STEL)
Acute Effects of Overexposure	Eye: Vapours are irritating to the eyes. Splashes may cause severe irritation, with stinging, tearing, redness and pain.
	Skin: Irritating due to de-fatting action on skin. Causes redness, pain, drying and cracking of the skin.
	Inhalation: Inhalation of vapours irritates the respiratory tract. May cause coughing, dizziness, dullness, and headache. Higher concentrations can produce central nervous system depression, narcosis, and unconsciousness.
	Ingestion: Swallowing small amounts is not likely to produce harmful effects. Ingestion of larger amounts may produce abdominal pain, nausea and vomiting. Aspiration into lungs can produce severe lung damage and is a medical emergency.

ACETONE SPILL RESPONSE

PROCEDURE NO.: 01

Page 2 of 2.

Emergency Procedures

3.0 FIRST AID AND EMERGENCY PROCEDURES

Inhalation	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion	Aspiration hazard. If swallowed, vomiting may occur spontaneously, but DO NOT INDUCE. If vomiting occurs, keep head below hips to prevent aspiration into lungs. Never give anything by mouth to an unconscious person. Call a physician immediately.
Skin Contact	Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.
Eye Contact	Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention.

4.0 FIRE AND EXPLOSION DATA

Flash Point (Method Used)	-4F, -20C (CC)
Flammable Limits	LEL: 2.5%; UEL: 12.8%. Extremely flammable liquid and vapour. Vapour may cause flash fire.
Explosion	Above flash point, vapour -air mixtures are explosive within flammable limits noted above. Vapours can flow along surfaces to distant ignition source and flash back. Contact with strong oxidizers may cause fire. Sealed containers may rupture when heated. This material may produce a floating fire hazard. Sensitive to static discharge.
Fire Extinguishing Media	Dry chemical, alcohol foam or carbon dioxide. Water may be ineffective. Water spray may be used to keep fire exposed containers cool, dilute spills to nonflammable mixtures, protect personnel attempting to stop leak and disperse vapours.
Special Information	In the event of a fire, wear full protective clothing and NIOSH-approved SCBA with full-face piece operated in the pressure demand or other positive pressure mode.

5.0 SPILL, LEAK AND DISPOSAL PROCEDURES

See Fuel Spill Contingency Plan for general procedures.

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e.g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials such as saw dust. Do not flush to sewer. If a leak or spill has not ignited, use water spray to disperse the vapors, to protect personnel attempting to stop leak, and to flush spills away from exposures.

BATTERY ACID SPILL RESPONSE

PROCEDURE NO.: 02

Page 1 of 2.

Emergency Procedures

1.0 PERSONAL PROTECTION INFORMATION

Ventilation System	Not applicable for finished product.
Personal Respirators (NIOSH-Approved)	Not applicable for finished product.
Skin Protection	Wear acid-resistant gloves
Eye Protection	Wear Safety glasses

HEALTH HAZARD DATA

Airborne Exposure Limit	Not available.
Acute Effects of Overexposure	Eyes: Corrosive. May cause permanent eye damage.
	Skin: Corrosive. May cause severe burns.
	Inhalation: Corrosive. May cause irritation of respiratory tract.
	Ingestion: Corrosive. May cause burns to gastrointestinal tract.

FIRST AID AND EMERGENCY PROCEDURES

Inhalation	Remove to fresh air. Get medical attention for any breathing difficulty
Ingestion	If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.
Skin Contact	Remove any contaminated clothing. Wash skin with soap and water for at least 15 minutes. Get medical attention if irritation develops or persists.
Eye Contact	Wash thoroughly with running water. Get medical advice if irritation develops.

BATTERY ACID SPILL RESPONSE

PROCEDURE NO.: 02

Page 2 of 2.

Emergency Procedures

4.0 FIRE AND EXPLOSION DATA

Flash Point (Method Used)	Not give.
Flammable Limits	None.
Explosion	Not explosive.
Fire Extinguishing Media	Product is not combustible. Use water, carbon dioxide, or dry chemical on fires.
Special Fire Fighting Procedures	None specified by manufacturer.

5.0 SPILL, LEAK AND DISPOSAL PROCEDURES

See Hood River Fuel Spill Contingency Plan for general procedures.

Wear safety glasses, acid-resistant gloves and full coverage acid resistant clothing. Use soda ash to neutralize. Flush with large amounts of water.

Place in acid resistant containers. Dispose of in accordance with federal and territorial regulations. Do not incinerate.

DIESEL SPILL RESPONSE

PROCEDURE NO.: 03

Page 1 of 3.

Emergency Procedures

1.0 PERSONAL PROTECTION INFORMATION

Ventilation	Use adequate ventilation
Respiratory Protection	Not generally required unless needed to prevent respiratory irritation. In case of spill or leak resulting in unknown concentration, use NIOSH/MSHA approved supplied air respirator.
Eye Protection	For splash protection, use chemical goggles and face shield.
Skin Protection	Use gloves resistant to the material being used, i.e., neoprene or Nitrile rubber. Use protective garments to prevent excessive skin contact.

HEALTH HAZARD DATA

Recommended Exposure Limits	Not established
Acute Effects of Overexposure	Eye: May cause mild irritation, with stinging and redness of eyes
	Skin: May cause severe irritation. Repeated or prolonged contact may cause de-fatting of the skin, resulting in dermatitis. Dermal LD50 for diesel fuel is >5 ml/kg (rabbit)
	Inhalation: May cause irritation to nose, throat or lungs. Headache, nausea, dizziness, unconsciousness may occur
	Ingestion: May cause irritation to intestines. May cause headache, nausea, unconsciousness. If swallowed, may be aspirated resulting in inflammation and possible fluid accumulation in the lungs. Oral LD50 for diesel fuel is 9 ml/kg (rat)

FIRST AID AND EMERGENCY PROCEDURES

Eye	Flush eyes with running water for at least 15 minutes. If irritation or adverse symptoms develop, seek medical attention
Skin	Immediately wash skin with soap and water for at least fifteen minutes. If irritation or adverse symptoms develop, seek medical attention
Inhalation	Remove from exposure. If breathing is difficult, give oxygen. If breathing ceases, administer artificial respiration followed by oxygen. Seek immediate medical attention.
Ingestion	Do not induce vomiting. Seek immediate medical attention.

DIESEL SPILL RESPONSE

PROCEDURE NO.: 03

Page 2 of 3.

Emergency Procedures

4.0 FIRE AND EXPLOSION DATA

Flash Point (Method Used)	>130F (>54C) (Estimated)
Flammable Limits (% by Volume in Air)	LEL: Not Established UEL: Not Established
Fire Extinguishing Media	Dry chemical, foam or carbon dioxide
Special Fire Fighting Procedures	Evacuate area of all unnecessary personnel. Shut off source, if possible. Use NIOSH/MSHA approved self-contained breathing apparatus and other protective equipment and/or garments described in Section 1.0 if conditions warrant. Water fog or spray may be used to cool exposed containers and equipment. Do not spray water directly on fire – product will float and could be reignited on surface of water.
Fire and Explosion Hazards	Carbon and sulphur oxides and various hydrocarbons formed when burned.

5.0 SPILL, LEAK AND DISPOSAL PROCEDURES

See the Hood River Fuel Spill Contingency Plan for general procedures.

Evacuate the area of all unnecessary personnel. Wear protective equipment and/or garments described in Section 1.0 if exposure conditions warrant. Shut off source, if possible and contain the spill. Protect from ignition. Keep out of water sources and sewers. Absorb in dry, inert material (sand, clay, etc.). Transfer to disposal drums using non-sparking equipment.

Waste disposal: Incinerate or place in land farm for soil remediation. Check with your supervisor.

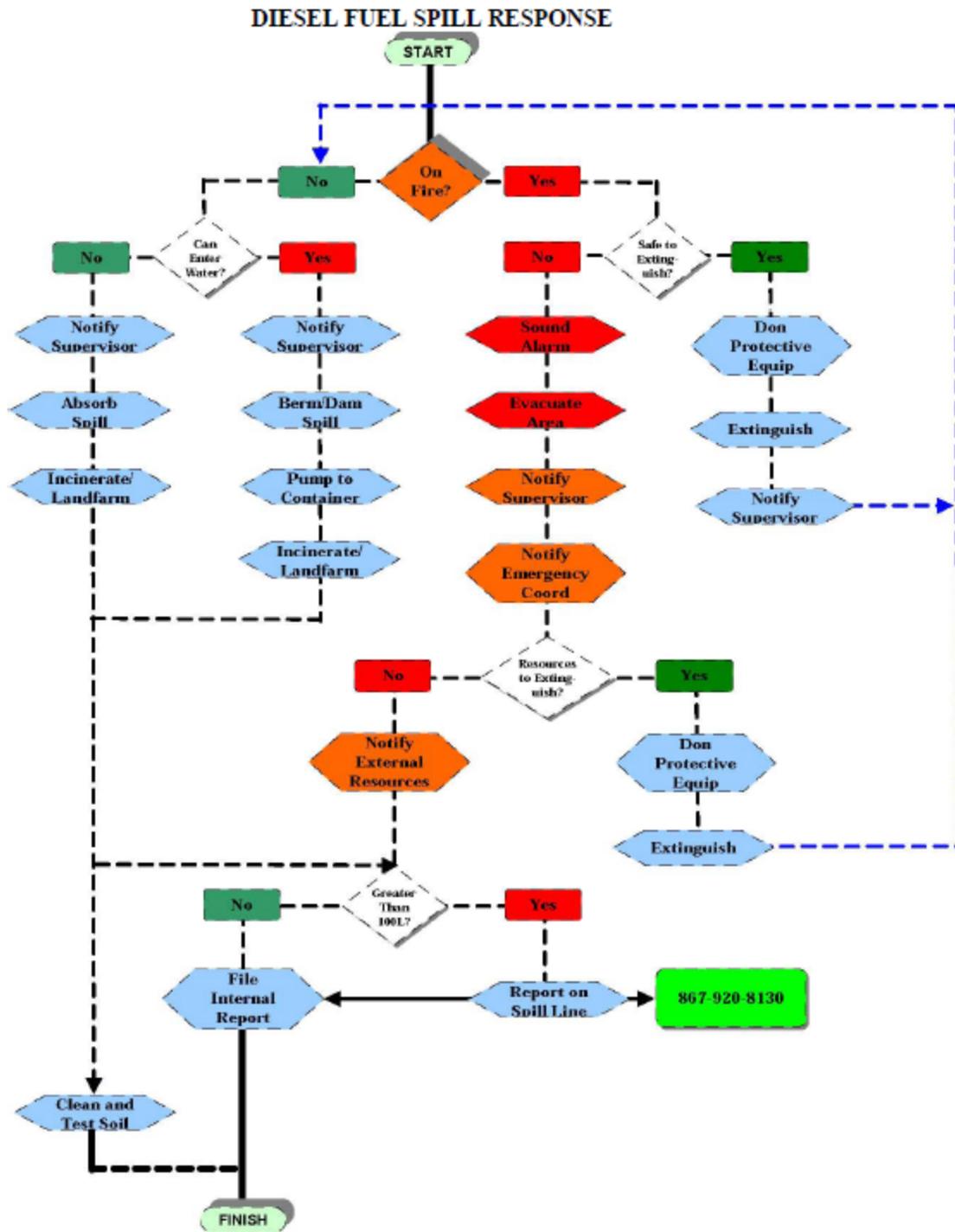


FIGURE 1. Flow Chart – Diesel Fuel Spill Response.

GASOLINE SPILL RESPONSE

PROCEDURE NO.: 04

Page 1 of 1.

Emergency Procedures

SEE JET FUEL SPILL RESPONSE

PROCEDURE NUMBER 07

(on Page 54)

HYDRAULIC OIL SPILL RESPONSE

PROCEDURE NO.: 05

Page 1 of 2.

Emergency Procedures

1.0 PERSONAL PROTECTION INFORMATION

Ventilation	None
Respiratory Protection	None required under normal use. If mist is being generated or vapours are being produced at high temperatures, use NIOSH approved organic vapour mask.
Skin Protection	None
Eye Protection	Safety goggles with optional face shield

2.0 HEALTH HAZARD DATA

Symptoms of Overexposure	Skin and eye irritation
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3.0 FIRST AID AND EMERGENCY PROCEDURES

Inhalation	Inhalation of mist may cause irritation.
Ingestion	No ill effects expected. Minute amounts aspirated into lungs may cause pulmonary injury.
Skin Contact	Not normally expected to cause ill effects. Chronic-prolonged/repeated skin contact may cause irritation.
Eye Contact	Irritation.

4.0 FIRE AND EXPLOSION DATA

Flash Point (Method Used)	>90F, >32C (COC)
Flammable Limits	Not given
Explosion	Not given
Fire Extinguishing Media	Use water fog, carbon dioxide, foam, dry chemical, earth or sand.
Special Fire Fighting Procedures	Wear fire fighting protective equipment and full faced self contained breathing apparatus. Cool fire exposed containers with water spray. Contain runoff.
Unusual Fire Hazards	Dense smoke.

5.0 SPILL, LEAK AND DISPOSAL PROCEDURES

See Hood River Fuel Spill Contingency Plan for general procedures.

Recover bulk of mixture into another container. Absorb residue with an inert material such as earth, sand, or vermiculite. Sweep up and dispose as solid waste.

Disposal should be made in accordance with all applicable federal and territorial laws and regulations.

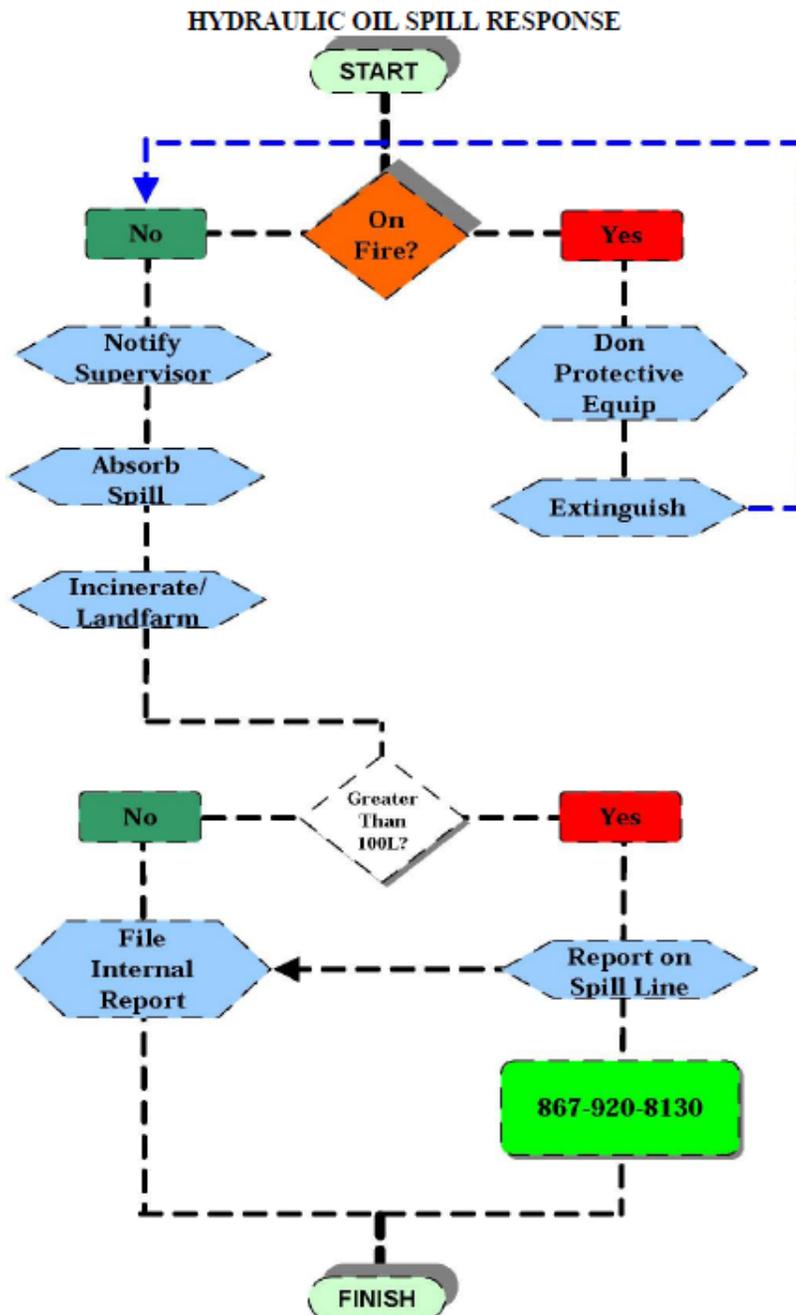


FIGURE 2. Flow Chart – Hydraulic Oil Spill Response.

HYDROFLUORIC ACID SPILL RESPONSE

PROCEDURE NO.: 06

Page 1 of 4.

Emergency Procedures

1.0 PERSONAL PROTECTION INFORMATION

Ventilation System	Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.
Personal Respirators (NIOSH-approved)	For emergencies or instances where the exposure levels are not known, use a full-face piece positive -pressure, air-supplied respirator. WARNING: Air purifying respirators do not protect workers in oxygen-deficient atmospheres.
Skin Protection	Wear protective clothing, including boots or safety shoes with polyvinyl chloride (PVC) or neoprene. Use chemical goggles and/or a full face shield. Wear coveralls with long sleeves, gauntlets and gloves of PVC or neoprene.
Eye Protection	Use chemical safety goggles and/or full-face shield where splashing is possible.

2.0 HEALTH HAZARD DATA

Airborne Exposure Limits	IDLH: 30 ppm; OSHA PEL 3 ppm (TWA); ACGIH TLV 3 ppm Ceiling as F.
Acute Effects of Overexposure	Eye: Corrosive to the eyes. Symptoms of redness, pain, blurred vision, and permanent eye damage may occur.
	Skin: Corrosive to skin. Skin contact causes serious skin burns which may not be immediately apparent or painful. Symptoms may be delayed 8 hours or longer. The fluoride ion readily penetrates the skin causing destruction of deep tissue layers and even bone.
	Inhalation: Severely corrosive to respiratory tract. May cause sore throat, coughing, laboured breathing and lung congestion/ inflammation.
	Ingestion: Corrosive. May cause sore throat, abdominal pain, diarrhea, vomiting, severe burns of the digestive tract, and kidney dysfunction.

HYDROFLUORIC ACID SPILL RESPONSE

PROCEDURE NO.: 06

Page 2 of 4.

Emergency Procedures

3.0 FIRST AID AND EMERGENCY PROCEDURES

Inhalation	Get medical help immediately. If patient is unconscious, give artificial respiration or use inhalator. Keep patient warm and resting, and send to hospital after first aid is complete.
Ingestion	If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.
Skin Contact	Remove the victim from the contaminated area and immediately place him under a safety shower or wash him with a water hose, whichever is available. Remove all contaminated clothing. Keep washing with large amounts of water for a minimum of 15 to 20 minutes. Have someone make arrangements for medical attention while you continue flushing the affected area with water. SEE MSDS FOR FURTHER FIRST AID INFORMATION.
Eye Contact	Irrigate eyes for at least 30 minutes with copious quantities of water, keeping the eyelids apart and away from eyeballs during irrigation. Get competent medical attention immediately, preferably an eye specialist. If a physician is not immediately available, apply one or two drops of 0.5% Pontocaine Hydrochloride solution. Do not use oily drops or ointment. Place ice pack on eyes until reaching emergency room

4.0 FIRE AND EXPLOSION DATA

Flash Point (Method Used)	Not applicable
Flammable Limits	Not flammable
Explosion	Violent exothermic reaction occurs with water. Sufficient heat may be produced to ignite combustible materials. Reacts with metals forming flammable hydrogen gas.
Fire Extinguishing Media	Keep upwind of fire. Use water or carbon dioxide on fires in which hydrofluoric acid is involved. Halon or foam may also be used. In case of fire, the sealed containers can be kept cool by spraying with water.
Special Fire Fighting Procedures	In the event of a fire, wear full protective clothing and a NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Avoid getting water in tanks or drums; water can cause generation of heat and spattering. In contact with air, the acid gives off corrosive fumes which are heavier than air.

HYDROFLUORIC ACID SPILL RESPONSE

PROCEDURE NO.: 06

Page 3 of 4.

Emergency Procedures

5.0 SPILL, LEAK AND DISPOSAL PROCEDURES

See Hood River Fuel Spill Contingency Plan for general procedures.

Provide adequate ventilation and remove ignition sources since hydrogen may be generated by reactions with metals. Wear appropriate personal protective equipment. Evacuate the danger area. Apply magnesium sulphate (dry) to the spill area. Follow up with inert absorbent and add soda ash or magnesium oxide and lime. Collect in appropriate plastic containers and save for disposal. Wash spill site with soda ash solution. NOTE: Porous materials (concrete, wood, plastic, etc.) will absorb HF and become a hazard for an indefinite time. Such spills should be cleaned and neutralized immediately.

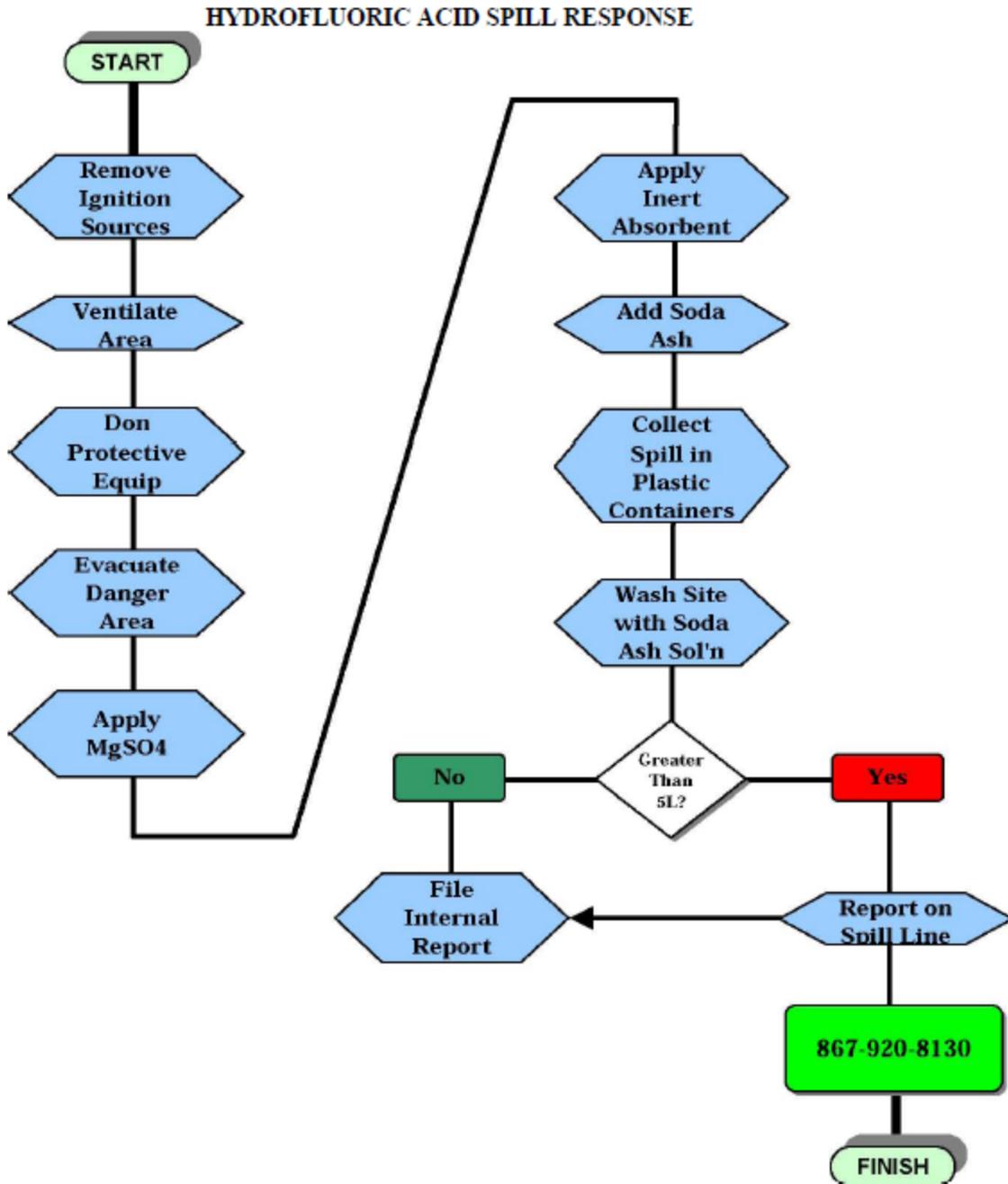


FIGURE 3. Flow Chart – Hydrofluoric Acid Spill Response.

JET FUEL SPILL RESPONSE

PROCEDURE NO.: 07

Page 1 of 3.

Emergency Procedures

1.0 PERSONAL PROTECTION INFORMATION

Ventilation	Local exhaust and mechanical (general) ventilation to maintain exposure levels.
Respiratory Protection	Avoid breathing vapour and/or mist. Use with adequate ventilation. If ventilation is inadequate, use NIOSH/MSHA certified respirator which will protect against organic vapour/mist.
Skin Protection	Impervious protective gloves
Eye Protection	Safety glasses or goggles
Other Protective Equipment	Protective clothing as required to avoid skin contact. An emergency eye wash station and shower should be available.
Work Hygienic Practices	Wash with soap and water after handling product and before eating, drinking or smoking

2.0 HEALTH HAZARD DATA

Acute Effects of Overexposure	May be mildly irritating to eyes. Prolonged or repeated contact may cause dermatitis. Vapors may irritate the nose, throat and upper respiratory tract and cause central nervous system depression. Aspiration Hazard.
Signs / Symptoms Of Overexposure	Eye Irritation, skin irritation, dermatitis, upper respiratory tract irritation, nausea, vomiting, diarrhea, headaches, dizziness, drowsiness.

3.0 FIRST AID AND EMERGENCY PROCEDURES

Inhalation	Remove to fresh air. Restore breathing. Get medical attention.
Ingestion	Do not induce vomiting. Get medical attention.
Skin Contact	Remove contaminated clothing. Wash with soap and water. If irritation persists, get medical attention.
Eye Contact	Flush with water for 15 minutes while holding eyelids open. Get medical attention.

JET FUEL SPILL RESPONSE

PROCEDURE NO.: 07

Page 2 of 3.

Emergency Procedures

4.0 FIRE AND EXPLOSION DATA

Flash Point (Method)	-10F, -23C (CC)
Explosion	LEL: 1.3% UEL: 8%
Fire Extinguishing Media	Agents approved for Class B hazards (dry chemical, carbon dioxide, halogenated agents, foam, steam) and water fog.
Special Fire Fighting Procedures	Fire fighters should use NIOSH approved SCBA and full protective equipment when fighting chemical fire. Use water spray to cool nearby containers exposed to fire.
Unusual Fire and Explosion Hazards	Do not use direct stream of water on fire. Toxic gases are released during combustion. Vapour may explode if ignited in enclosed area.

5.0 SPILL, LEAK AND DISPOSAL PROCEDURES

See Hood River Fuel Spill Contingency Plan for general procedures.

If material released/spilled, eliminate sources of ignition. Evacuate area. Wear proper personal protective equipment. Contain spill. Stop leak. If can be done without risk, absorb liquid with suitable absorbent material. Collect for disposal.

Discard any product, residue, disposal container or liner in accordance with all federal and territorial regulations.

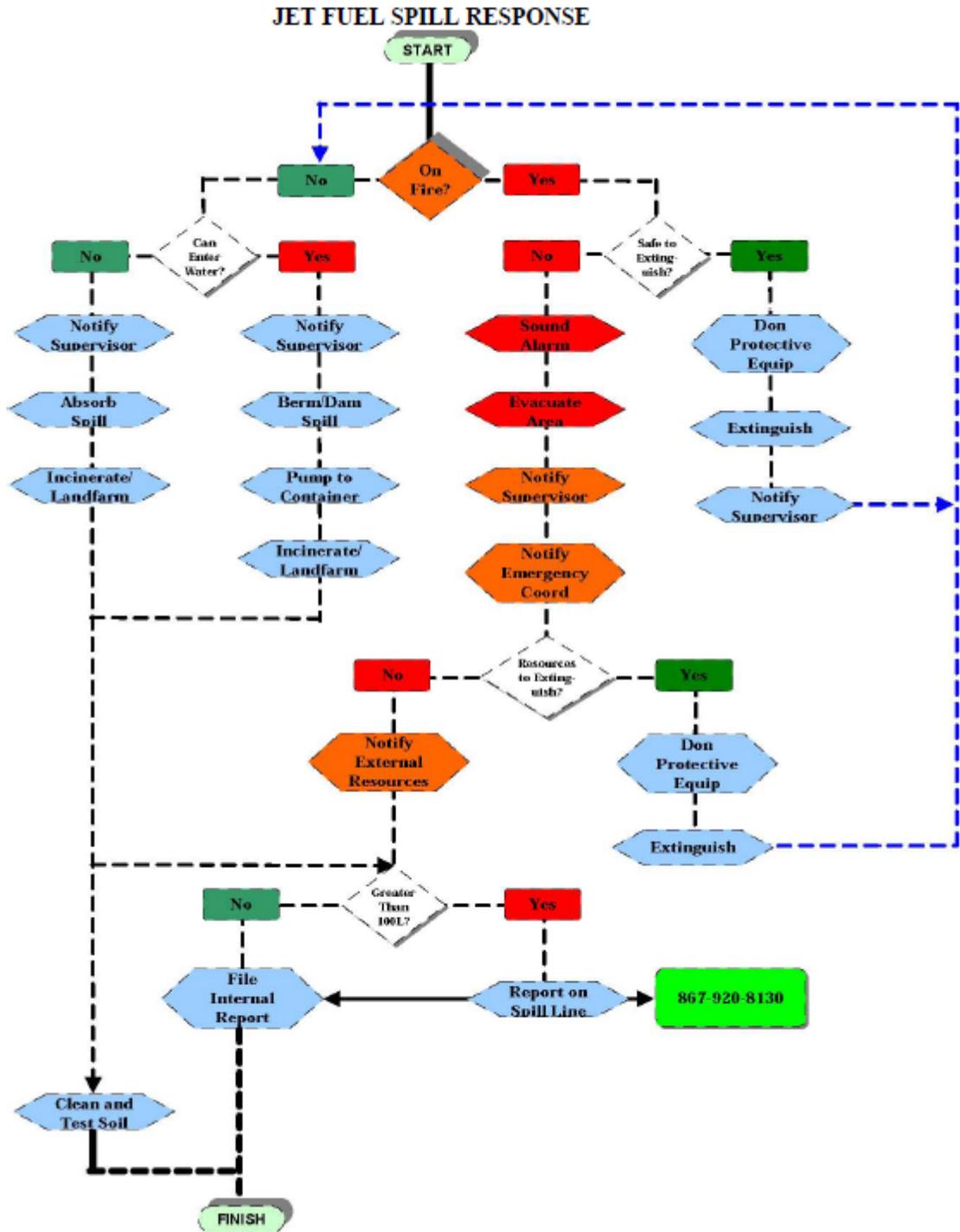


FIGURE 4. Flow Chart – Jet Fuel Spill Response.

MOTOR OIL SPILL RESPONSE

PROCEDURE NO.: 08

Page 1 of 3.

Emergency Procedures

1.0 PERSONAL PROTECTION INFORMATION

Ventilation	None
Respiratory Protection	None required; however use of adequate ventilation is good industrial practice.
Skin Protection	Impervious gloves
Eye Protection	Chemical workers goggles (FP D)
Other Protective Equipment	Protective clothing

2.0 HEALTH HAZARD DATA

Eyes/Inhalation/Ingestion	No significant health hazards identified.
Skin	None expected for single short-term exposures. Prolonged/repeated contact may produce some irritation.

3.0 FIRST AID AND EMERGENCY PROCEDURES

Inhalation	If adverse effects occur, remove to uncontaminated area.
Ingestion	If large amount swallowed, induce vomiting; get medical attention.
Skin Contact	None required for unused motor oil. Contact with used motor oil, wash area thoroughly with soap and water or use waterless hand cleaners. Do not use gasoline, thinners or solvents.
Eye Contact	Flush with plenty of water for at least 15 minutes.

4.0 FIRE AND EXPLOSION DATA

Flash Point (Method Used)	401F, 205C (COC)
Flammable Limits	Not given
Explosion	Not given
Fire Extinguishing Media	Agents approved for Class B hazards (e.g. dry chemical, carbon dioxide, halogenated agents, foam, steam) or water fog.
Special Fire Fighting Procedures	Wear NIOSH/MSHA approved SCBA and full protective equipment.

MOTOR OIL SPILL RESPONSE

PROCEDURE NO.: 08

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Emergency Procedures

5.0 SPILL, LEAK AND DISPOSAL PROCEDURES

See Hood River Fuel Spill Contingency Plan for general procedures.

Contain on absorbent material (e.g. sand, sawdust, dirt, clay). Keep out of sewers and waterways.

Disposal must be in accordance with applicable federal and territorial regulations. Enclosed-controlled incineration is recommended unless prohibited by law.

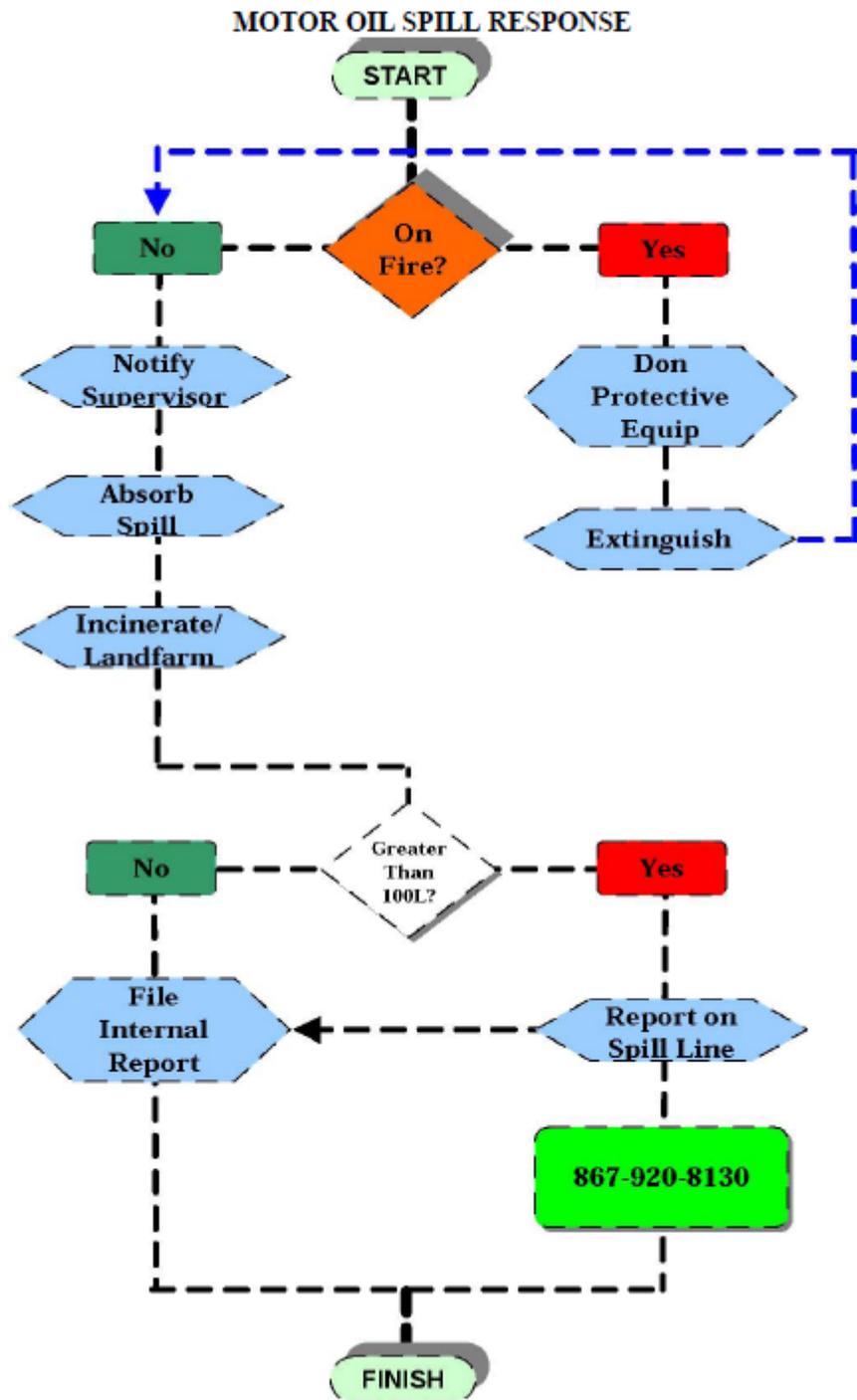


FIGURE 5. Flow Chart – Motor Oil Spill Response.

VAR SOL SPILL RESPONSE

PROCEDURE NO.: 09

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Emergency Procedures

1.0 PERSONAL PROTECTION INFORMATION

Ventilation System	Mechanical (general and/or local exhaust, explosion-proof)
Respiratory Protection	If engineering controls are inadequate, a NIOSH -approved air-supplied respirator should be worn
Skin Protection	Rubber gloves
Eye Protection	Safety glasses with side shield/goggles

2.0 HEALTH HAZARD DATA

Acute Effects of Overexposure	Eyes: Irritation, tearing, redness.
	Skin: Drying and cracking of skin.
	Ingestion: Nausea, vomiting, coughing, headache, dizziness, drowsiness, weakness, fatigue, unconsciousness.

3.0 FIRST AID AND EMERGENCY PROCEDURES

Inhalation	Move to fresh air, provide CPR if needed.
Ingestion	Do not induce vomiting. If person is drowsy/unconscious, place on left side with head down. Get medical attention. If possible, do not leave individual unattended.
Skin Contact	Wash with soap and water.
Eye Contact	Flush with water for 15 minutes. Hold eyelids open.

4.0 FIRE AND EXPLOSION DATA

Flash Point (Method Used)	104F, 40C (TCC)
Flammable Limits	LEL: 2.3%; UEL: 14.4%
Explosion	.Not given.
Fire Extinguishing Media	Use CO ₂ , sand, water spray, foam/dry chemical. Water spray may be used to keep fire exposed containers cool.
Special Fire Fighting Procedures	Wear protective clothing and NIOSH -approved self-contained breathing apparatus with full facepiece operated in positive pressure mode.
Unusual Fire and Explosion Hazards	Vapour is heavier than air and can travel considerable distance to a source of ignition and flash back. Containers may rupture due to vapour pressure buildup.

VAR SOL SPILL RESPONSE

PROCEDURE NO.: 09

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Emergency Procedures

5.0 SPILL, LEAK AND DISPOSAL PROCEDURES

See Hood River Fuel Spill Contingency Plan for general procedures.

Remove ignition sources. Ventilate area. Absorb spill with non-flammable material such as vermiculite or sand. Place in a container for chemical waste. Clean surface thoroughly to remove residual contamination.

Do not flush to sewers or waterways. Discharge, treatment or disposal is subject to federal and territorial regulations. Reusing or incineration is recommended.

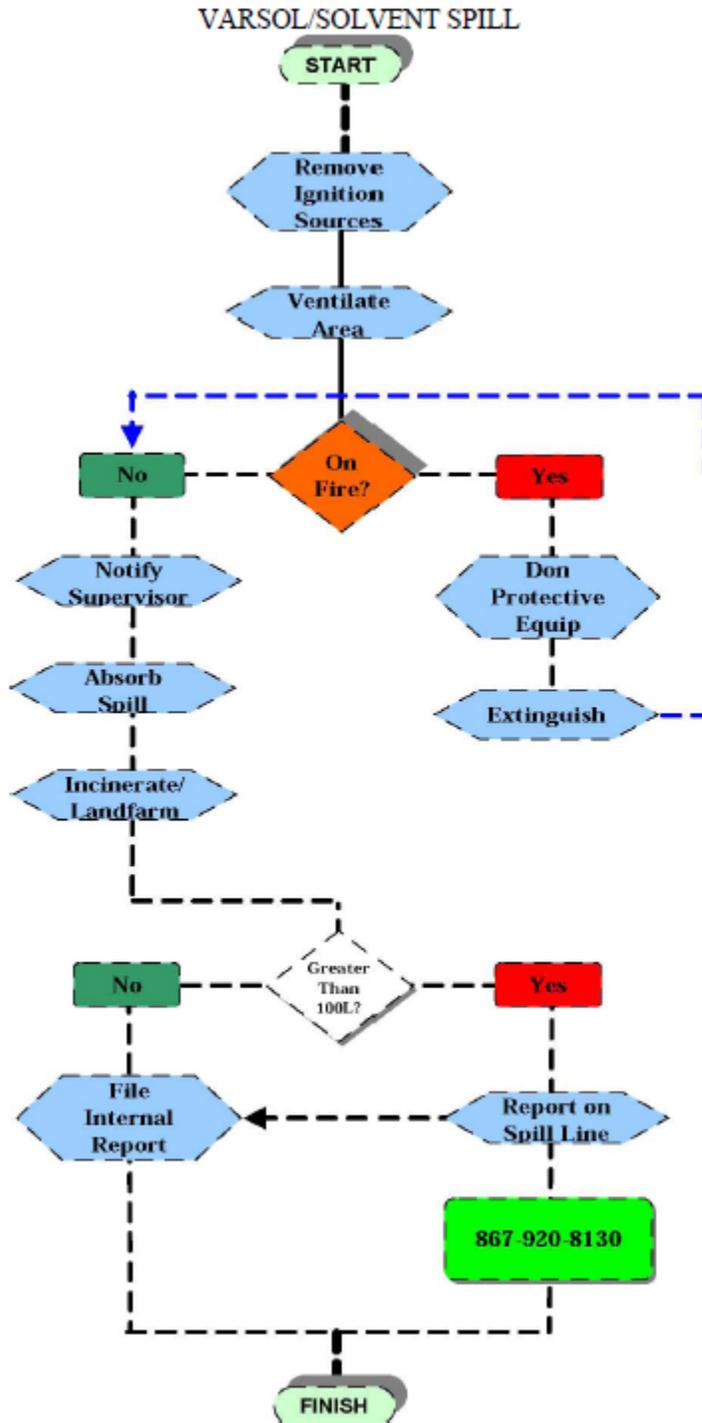


FIGURE 6. Flow Chart – Varsol Spill Response.