



Via courier

May 28, 2008

Wanda Anderson  
Executive Director  
Mackenzie Valley Land and Water Board  
7<sup>th</sup> Floor-4910 50<sup>th</sup> Avenue,  
Yellowknife, NT  
X1A 2P6

Mackenzie Valley Land  
& Water Board

File \_\_\_\_\_

JUN 02 2008

Application # MV2008T0017

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**RE: Application for a Type "A" Land Use Permit**  
**Liard Transfer Facility**

**Dear Wanda:**

Please find attached the following documents in support of Canadian Zinc Corporation's (CZN's) application for a land use permit to operate the Liard Transfer Facility (LTF):

- An application for a Type "A" Land Use Permit (LUP);
- 40 paper copies and 20 digital copies of a Project Description Report (PDR) in support of the LUP application; and,
- a cheque in the amount of \$258.00 for the application and land use fees.

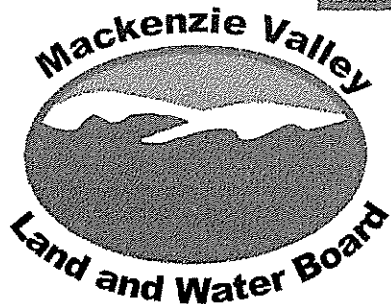
CZN holds LUP MV2003F0028 for the rehabilitation, maintenance and use of a winter road from the Prairie Creek Mine to the Liard Highway, a distance of approximately 180 km. This application is for a LUP to operate a transfer facility on the eastern end of the winter road near the Liard Highway. It is our understanding that it is acceptable to apply for, and obtain, separate LUP's for different activities related to a single project. By way of example, we refer to Echo Bay Mine's Lupin project which holds LUP MV2000F0053 to operate a winter road, and LUP MV2001X0049 for quarry sites and a road maintenance camp.

We trust the above is in order. If you have any questions or further requests, please contact us.

Yours truly,  
CANADIAN ZINC CORPORATION

Alan B. Taylor P. Geo.  
COO & VP Exploration

David P. Harpley, P. Geo.  
VP Environment and Permitting Affairs



Mackenzie Valley Land and Water Board  
 7th Floor - 4910 50th Avenue  
 P.O. Box 2130  
 YELLOWKNIFE NT X1A 2P6  
 Phone (867) 669-0506  
 FAX (867) 873-6610

Mackenzie Valley Land & Water Board

Application for: TYPE A

File

New Land Use Permit

Amendment

JUN 02 2008

Application # MV2008 70012

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1. Applicant's name and mailing address: Canadian Zinc Corporation 1710 - 650 W. Georgia St. Vancouver, BC, V6B 4N9	Fax number: 604-688-2043
2. Head office address: As above Field supervisor: To Be Determined Satellite telephone: 1-600-700-2454 Satellite fax: 1-600-700-9209 VOIP telephone: 604 357 3513	Telephone number: 604-688-2001     Fax number: As above     Telephone number: As above
3. Other personnel (subcontractor, contractors, company staff etc.)  Approximately 15 company staff on site, up to 21 truck drivers on staff, and up to 46 truck drivers on contract.	
4. Eligibility: (Refer to section 18 of the <i>Mackenzie Valley Land Use Regulations</i> )  a)(i) X    a)(ii)    a)(iii)    b)(i)    b)(ii)	
5. a) Summary of operation (Describe purpose, nature and location of all activities.)  **See Attached Project Description**  Operation of a transfer facility (the <b>Liard Transfer Facility</b> , or "LTF") near the junction of the existing Prairie Creek Mine winter road and the Liard Highway for up to 50,000 tonnes of mineral concentrates, 400,000 litres of fuel, and 15,000 tonnes of supplies. Concentrates to be stored in bags within two prefabricated structures, brought to the facility starting in early winter and completely removed over a period of approximately 3 months on average.  b) Please indicate if a camp is to be set up. (Please provide details on a separate page, if necessary.)  A small camp will support facility operation, including several trailers for staff accommodations, and a small power generator for light and heat.	

6. Summary of potential environmental and resource impacts (describe the effects of the proposed land-use operation on land, water, flora & fauna and related socio-economic impacts). (Use separate page if necessary.)

The potential for environmental impacts will be negligible because of the winter operation and environmental controls. Mineral concentrates will remain in robust bags and will be frozen. Any spills will be immediately cleaned up. The facility will be primarily closed after the concentrate haul season (approximately 3 months), and is located in a well-drained area 600 m from a watercourse. The prefabricated structures will be located on lined gravel pads. The 400,000 litre fuel tank will be inside a lined, 440,000 litre capacity berm.

7. Proposed restoration plan (please use a separate page if necessary).

On closure of the Prairie Creek Mine, all LTF facilities will be removed. The gravel from the pads and roadways will be hauled off-site for appropriate disposal.

8. Other rights, licences or permits related to this permit application (mineral rights, timber permits, water licences, etc.)

Land Use Permit MV2003F0028 and Water Licence MV2007L8-0026.

Roads: Is this to be a pioneered road? N/A Has the route been laid out or ground truthed? N/A

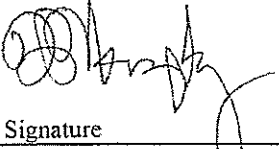

9. Proposed disposal methods.

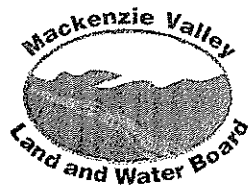
- a) Garbage:  
All garbage will be trucked off-site for disposal.
- b) Sewage (Sanitary & Grey Water):  
Sewage will be collected in a small tank which will periodically be pumped out, and the contents taken to a suitable disposal location. No sewage will be left in the tank on seasonal closure of the facility.
- c) Brush & trees:  
The thin vegetation will be cleared and windrowed at the periphery of the facility distant from the winter road.
- d) Overburden (Organic soils, waste material, etc.):  
There will be no overburden removal. A small amount of grading may occur before placement of liners for the pads of the prefabricated structures. Gravel will be placed on the pads and roadways without overburden removal.

10. Equipment (includes drills, pumps, etc.) (Please use separate page if necessary.)

This list is not intended to be exhaustive nor definitive, but rather an indication of the types of equipment necessary to support the proposed development.

Type & number	Size	Proposed use
D8 bulldozer		Site clearance
D6 bulldozer		Site clearance
Two 14G graders		Grading and levelling
14E grader		Grading and levelling
Front end loader (e.g. Cat 950)		Brush removal
Two fork-lifts		LTF operations
Sewage Truck		LTF operations
Two Snow Plow & Sand Trucks		LTF operations
Flat Bed Truck		LTF operations
Three Pick up Trucks		LTF operations
42 flat bed trucks		Concentrate delivery and supplies back-haul
20 B-train concentrate trucks		Concentrate delivery
2 B-train fuel trucks		Fuel delivery
3 flat bed trucks		Supplies delivery

11. Fuels	( )	Number of containers	Capacity of containers	Location
Diesel		1	400,000 litres	Bermed and lined enclosure
Gasoline				
Aviation fuel				
Propane				
Other				
<p>12. Containment fuel spill contingency plans. (Please attach separate contingency plan if necessary).</p> <p>An approved spill contingency plan is in place for activity in and around the Prairie Creek Mine. The Plan was submitted in support of previous applications (LUP MV2004C0030, MV2007L8-0026).</p>				
<p>13. Methods of fuel transfer (to other tanks, vehicles, etc.)</p> <p>A fuel transfer module capable of simultaneously unloading a fuel B-train into the 400,000 litre fuel storage tank, filling a 10,000-litre fuel transfer tank on a flat bed truck, and refuelling the associated tractor.</p>				
<p>14. Period of operation (includes time to cover all phases of project work applied for, including restoration)</p> <p>Winter, with seasonal closure up to approximately 1 month after ice bridge closure, and possible periodic access required during the remainder of the year to stage materials destined for the Prairie Creek Mine.</p>				
<p>15. Period of permit (up to five years, with maximum of two years of extension).</p> <p>Five years.</p>				
<p>16. Location of activities by map co-ordinates (attached maps and sketches)</p>				
Minimum latitude (degree, minute) 61°08'13"N			Maximum latitude (degree, minute) 61°08'20"N	
Minimum longitude (degree, minute) 122°48'03"W			Maximum longitude (degree, minute) 122°48'17"W	
Map Sheet no. 1:50,000 NTS Sheet 95 G/2				
<p>17. Applicant Canadian Zinc Corporation</p> <p>Print name in full David Harpley</p>				
				
Signature		Date		
<p>18. Fees Type A - \$150.00 ** Type B - \$150.00 ** (**Application Fees are Non-Refundable**)</p> <p>Land use fee: <u>2.16</u> hectares @ \$50.00/hectare \$108.00__</p> <p>Assignment fee \$50.00 \$150.00__</p> <p>Total application and land use fees \$258.00__</p> <p><b>Please make all cheques payable to "Receiver General of Canada"</b></p>				



Mackenzie Valley Land and Water Board  
7th Floor - 4910 50th Avenue • P.O. Box 2130  
YELLOWKNIFE, NT X1A 2P6  
Phone (867) 669-0506 • FAX (867) 873-6610

June 12, 2008

File: MV2008T0012

Mr. David Harpley  
VP Environmental and Permitting Affairs  
Canadian Zinc Corporation  
Suite 1710 - 650 West Georgia Street  
Box 11644  
VANCOUVER BC V6B 4N9

Fax: (604) 688-2043

Dear Mr. Harpley;

**Incomplete Application –  
Staging Area - Liard Transfer Facility - Prairie Creek Mine Winter Road**

The aforementioned application has been reviewed in accordance with Section 22 (1)(a) of the Mackenzie Valley Land Use Regulations, and has been found to be lacking sufficient information to conduct a preliminary screening. In order for this application to be considered complete and forwarded for review, the following information must be submitted to our office:

1. Further description as to where the garbage and sewage will go once hauled off site.
2. Please supply a Spill Contingency Plan.
3. Describe the contents of the Spill Kits that will be on site.
4. Where will the Quarry Material come from? Will a Quarry Permit be required from INAC?
5. How much water will be need for the operation of the site?
6. Clarification is need in regards to the storage of Cyanide, as well as the transportation of Cyanide between transfer facilities?
7. Clarification is needed in regards to the leach potential of the concentrate on site.
8. Description of fuel storage and containment.
9. MSDS Sheets for reagents, fuels, other materials being stored on site.

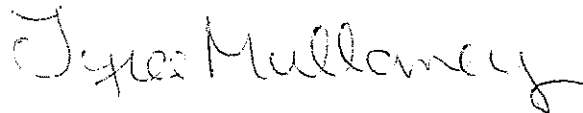
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Upon receipt of this information, the application will be processed and the review period will begin. If you require further guidance, please refer to the document "GUIDE FOR COMPLETING LAND USE PERMIT APPLICATIONS TO THE MACKENZIE VALLEY LAND AND WATER BOARD" which can be found on our Website [www.mvlwb.com](http://www.mvlwb.com).

If this supplementary information is not provided within 90 days, then it shall be assumed that you do not wish to continue with the processing of this application, and the application will be returned to you as per Section 25 of the Mackenzie Valley Land Use Regulations. Any land use fees that have been paid with submission of the application will be refunded to you by the Department of Indian Affairs and Northern Development.

Please contact me at (867) 669-0506 or email [permits@mvlwb.com](mailto:permits@mvlwb.com) if further clarification is required.

Yours sincerely,

A handwritten signature in black ink that reads "Tyree Mullaney". The signature is written in a cursive, flowing style.

Tyree Mullaney  
Regulatory Officer

Copied to: Darnell McCurdy, South Mackenzie District, INAC



June 18, 2008

Tyree Mullaney, Regulatory Officer  
Mackenzie Valley Land and Water Board  
7<sup>th</sup> Floor-4910 50<sup>th</sup> Avenue,  
Yellowknife, NT  
X1A 2P6

Dear Ms. Mullaney

**RE: MV2008T0012, Class A Land Use Permit Application**  
**Liard Transfer Facility, Prairie Creek Project**

We refer to your letter dated June 12, 2008 on the above noted subject. This letter is provided in response to the items listed. Responses are given to correlate with the numbered items in your letter.

**1. Garbage and Sewage**

The Liard Transfer Facility (LTF) is located a few hundred metres from the Liard Highway. Garbage and sewage from the site will be taken to the nearest suitable and permissible location for disposal. Any necessary municipal or other authorizations will be obtained before hand. Please note that the quantities will be relatively small and seasonal during the operating period of the transfer facility.

**2. Spill Contingency Plan**

An existing, approved Spill Contingency Plan is currently in use at the Prairie Creek site for Land Use Permit MV2004C0030. A revised version is provided in an attached document for this application.

**3. Spill Kits**

The contents of a spill kit are given in the Spill Contingency Plan.

**4. Quarry Material and Permit**

Gravel will be purchased from a local commercial operator and delivered to the LTF site. An application to Indian and Northern Affairs Canada (INAC) for a Quarry Permit will not be necessary.

**5. Water Use**

Very little water will be needed to service the temporary accommodation trailers on site, considerably less than 100 m<sup>3</sup>/day, which is the trigger for a Class B Water Licence requirement. Potable water will be provided from a suitable, local source (there are residences nearby).

**6. Storage and Transport of Cyanide**

When Canadian Zinc (CZN) removes the store of sodium cyanide at the Prairie Creek site to a suitable disposal location, the removal process will not include temporary storage at the LTF site. Transportation along the winter road is covered by LUP MV2003F0028.

**7. Leach Potential of Concentrate**

The document "Geochemical Characterization Report for the Prairie Creek Project, April 2008" by MESH Environmental Inc. was submitted along with the Project Description Report in support of the recent Water Licence and LUP applications for operation of the Prairie Creek Mine. Geochemical data for the concentrates are provided in the MESH report and define leaching potentials. MSDS's for typical lead and zinc concentrates were also submitted with our June 18, 2008 response to your June 12, 2008 letter regarding our application for Water Licence MV2008L2-0002.

**8. Fuel Storage and Containment**

Item 11 of the LUP application lists a 400,000 litre container in a bermed and lined enclosure for diesel storage. The 400,000 litre container is described as a tank on pages 1, 12, 13 and 14 of the report accompanying the application. The storage tank will almost certainly be made of steel, and will conform to all applicable regulatory codes.

**9. MSDS Sheets**

Reagents and diesel fuel will temporarily be stored at the LTF during the seasonal operating period. The requested MSDS sheets are provided in our June 18, 2008 response to your June 12, 2008 letter regarding our application for Water Licence MV2008L2-0002.

We trust the above is in order. If you have any questions or further requests, please contact us.

Yours truly,  
CANADIAN ZINC CORPORATION



David P. Harpley, P. Geo.  
Vice-President, Environment and Permitting Affairs





## **Prairie Creek Project**

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### **FUEL SPILL CONTINGENCY PLAN**

### **TETCELA AND LIARD TRANSFER FACILITIES**

**LAND USE PERMIT MV2008T0012  
LAND USE PERMIT MV2008T0013**

June 17, 2008

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## **FUEL SPILL CONTINGENCY PLAN**

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### **INITIAL RESPONSE ACTIONS**

In the event of a spill or potential spill incident, the following steps should be taken by personnel at the spill site:

1. Be alert, ensure your safety and the safety of others first.
2. Isolate, remove or extinguish all ignition sources
3. Assess the hazard to persons and the environment in the vicinity of the spill or leak, identify escape routes, block spill drainage paths and implement measures at pre-identified spill control points
4. Before undertaking a response action proximal to the spill, ensure personnel have and don the appropriate personal protective equipment (PPE) (see Section 5.3 for details)
5. If possible without further assistance, control danger to human life and the environment.
6. Assess whether the spill, leak or system failure can be readily stopped or brought under control.
7. When safe to do so, stop the leak and/or flow of the spilled material.
8. Gather information on the event and the status of the situation, including the nature, extent and approximate amount of the liquid spilled.
9. Report the spill, leak or system failure without delay to the On-Scene Coordinator. Determine if the spill is a reportable event or quantity (refer to Section 3), and if so, report the spill to the **24 hour NWT/Nunavut Spill Line at (867) 920-8130.**
10. Resume any safe, effective action to contain, clean up, or stop the flow of the spilled product.

## Preamble

This *Fuel Spill Contingency Plan* is effective from June 17, 2008 and applies to Canadian Zinc Corporation's proposed operations at the Tetcela and Liard Transfer Facilities which are intended to support the Prairie Creek Mine Project.

The following formal distribution has been made of this plan:

Mackenzie Valley Land and Water Board

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Canadian Zinc Corporation - Prairie Creek Site Office

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Canadian Zinc Corporation - Vancouver Office

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Additional copies and updates of this Plan may be obtained by writing to:

Canadian Zinc Corporation  
Suite 1710-650 West Georgia Street,  
Vancouver, British Columbia  
V6B 4N9  
Phone: 604-688-2001  
Fax: 604-688-2043  
Email: alan@canadianzinc.com

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### **Prairie Creek Mine Site Address:**

Canadian Zinc Corporation  
Prairie Creek Minesite  
C/O Villers Air Service,  
P.O. Box 328,  
Fort Nelson,  
British Columbia  
V0C 1R0  
Satellite phone: 1-600-700-2454  
Satellite fax: 1-600-700-9209  
VoIP phone: 604-357-3513

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## **FUEL SPILL CONTINGENCY PLAN**

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### **1.0 Introduction and Plan Purpose**

Canadian Zinc Corporation (CZN) recognizes the ecological importance and sensitivity of the area traversed by its winter road from the Prairie Creek Mine to the Liard Highway. The Tetcela and Liard Transfer facilities are located adjacent to the road approximately mid-way and near the Liard Highway, respectively. The purpose of this Fuel Spill Contingency Plan is to provide a plan of action for every foreseeable fuel spill event at the transfer facilities.

It is the policy of Canadian Zinc Corporation (CZN) to initiate clean up activity when, in the opinion of its management, the company is clearly associated, or likely associated, with a spill. It is also the policy of the company to comply with existing regulations, ensure protection of the environment, and to keep employees, government officials, and the public, informed.

### **2.0 Response Team**

The members of the fuel spill response team at the mine site, and their designations, are listed below:

#### **On-Site:**

On-scene Coordinator:                    Mr. Rick Lofstrom, Site Manager  
Canadian Zinc Corporation

On-scene Coordinator:                    Mr. Ted Boychuk & Mr. Chris Hercun, Asst. Site Managers  
(Alternates)                                Canadian Zinc Corporation

On-scene Resource:                        Mr. Alan Taylor, COO  
(When on site)                              Canadian Zinc Corporation

When the transfer facilities are in operation, additional staff located at the facilities will have designated fuel spill coordination and response roles.

#### **Off-Site:**

Response Manager:                        Mr. Alan Taylor, COO  
Canadian Zinc Corporation

Environmental Advisor:                    Mr. David Harpley,  
Vice-President, Environment and Permitting Affairs  
Canadian Zinc Corporation

**Additional Information or Assistance**

Additional resources and assistance are available from the following sources:

Shell Bulk Petroleum  
Phone (Ft. Nelson):  
Fax:

Mr. Bill Streeper  
(250) 774-7247

Environmental Protection Section,  
Environment Division, Government of NWT  
Phone (Yellowknife):

(867) 873-7654

Dept. of Indian & Northern  
Affairs (Fort Simpson)

Randy Lang/Laurie Ozmun  
Resource Management Officers  
Ph: (867) 695-2626  
Fax: (867) 695-2615

Indian & Northern Affairs Canada  
Contaminants Phone Hot Line:

Ph: 1-800-661-0827

RCMP Phone (Yellowknife):

Ph: (867) 920-8311

For large or complicated spills, Shell Bulk Petroleum can be contacted who have a spill response team available for deployment. This could be facilitated by aircraft normally operated into the site by Villiers Air Service.

For advice on contaminated material management, the environmental consulting resources and INAC contacts listed can be consulted.

### **3.0 Reporting Procedures**

The Fuel Spill Response Team must be notified immediately about the occurrence of any spill. The following chain of command must be followed in the reporting process.

#### **Immediately Contact:**

##### On-Scene Coordinator

Contact Person:	Rick Lofstrom, Site Manager
Phone: (Prairie Creek Camp):	1-600-700-2454
Fax:	1-600-700-9209
VoIP:	604-357-3513

Or if the On-Scene Coordinator cannot be immediately contacted:

##### On-Scene Coordinator (Alternates)

Contact Person:	Ted Boychuk & Chris Hercun, Asst. Site Managers
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The on-scene coordinator is responsible for determining if the spill is reportable, based on the INAC Spill Reporting Protocol for Mining Operations dated July 27, 2004 (see Appendix A), reporting the spill if it is reportable, and for notifying CZN management. In addition, the on-scene coordinator is responsible for recording all spills on the Canadian Zinc Spill Report Form (see the end of this document), and the INAC Monthly Spill Reporting Form (attached to the INAC Protocol in Appendix A). The on-scene coordinator is also responsible for submitting the latter form to the INAC District Inspector if spills have occurred.

Spills of flammable liquids, such as diesel and gasoline, are reportable if the spilled quantity exceeds 100 litres. Spills of drilling fluid, used or waste oil, vehicle fluids and wastewater are reportable if the spilled quantity exceeds 100 litres or 100 kg. Spills are also reportable if they are near or into a water body, irrespective of quantity. For more details, consult the INAC protocol.

#### *24 Hour NWT/Nunavut Spill Reporting Line*

Phone:	(867) 920-8130
Fax	(867) 873-6924

Note: A spill report should be filled out on the Spill Reporting Form as completely as possible prior to calling the 24 Hour Spill Reporting Line.

#### ***4.0 Fuel Spill Response Planning and Response Actions***

Spills that could potentially occur during fuel handling, transfer or storage operations, and their associated impacts, will be kept to a minimum by:

- utilizing fuel transfer hoses with double locking mechanisms;
- utilizing lined and self-bermed fuel storage areas with 110% capacity of the largest tank;
- ensuring all valves on storage tanks are secured and locked when not in use;
- conducting fuel transfers over secondary containment or a surface liner (e.g. drip pans, fold-a-tanks) placed under all container or vehicle fuel tank inlet and outlet points, hose connections and hose ends;
- maintaining a supply of spill response equipment (absorbent pads, booms) at all fuel transfer and vehicle maintenance locations;
- storing all contaminated equipment and related waste in sealed drums for later remediation and/or disposal with the appropriate authorizations;
- careful manual measurement of fuel content in the tanks when transferring fuel;
- regular inspections of fuel storage tanks and hoses for evidence of leaks;
- regular inspections of vehicles operating near surface water for evidence of leaks and hydrocarbon stains;
- training in proper fuel handling procedures and transfers conducted by trained personnel;
- spill response training for personnel associated with fuel handling;
- immediate cleanup of minor spills; and,
- identifying relevant control points down-gradient of fuel storage and transfer locations.

#### ***4.1 Response Actions for Fuel Spills on Land***

1. Identify the source of the leak or spill, and if safe to do so and readily possible, stop the leak or spill;

2. Contain the spill and the source if possible, and block drainage paths down-gradient, especially at the pre-determined control points;
3. Leaks from a tank can be stopped by:
  - ceasing filling operations;
  - turning off valves;
  - utilizing patching kits to seal leaks;

In the event of a rupture to a tank, the self-bermed design is intended to capture the full capacity of the largest fuel tank within its walls. The captured fuel can be pumped into a reserve fuel storage tank.

4. Spills (on gravel, rock, soil, vegetation) can be contained by placing a soil berm down slope of the running or seeping fuel. Plastic tarps can be placed over the berm and at the foot of it, to permit the fuel to pool on the tarp for easy capture. Absorbent pads can be used for this purpose, and the pads can be squeezed into empty drums and re-used. Larger pools can be pumped back into drums, empty storage tanks, or "TIDY" tanks. It is especially important to prevent the fuel from entering a body of water where it will have greater environmental impact. Even if a spill is contained, it is important to collect free product as soon as possible because seepage into a permeable ground surface can occur;
5. Stains on rock can be soaked up with absorbent sheeting. The sheeting should be placed in drums for disposal;
6. Contaminated soil and vegetation may have to be removed and disposed of in an environmentally acceptable manner. Contact the government authority identified by the 24 Hour Spill Reporting Line for approval before undertaking this.

#### 4.2 *Response Actions for Fuel Spills on Snow*

- The presence of snow can assist in containing spilled fuel and functions as a natural absorbent to facilitate the collection of spilled fuel;
- Berms can be constructed from compacted snow with a plastic tarp placed over this;
- The snow-fuel mixture can be scraped up and stored in a lined area or in drums for future disposal following the appropriate authorization.

#### 4.3 *Response Actions for Fuel Spills on Water*

It is important to immediately control the release of spilled fuel into water and to contain it to the immediate spill area if possible. Assuming that fuel has entered water, actions to be taken can include:



- Deploy boom (s) to contain the spill area. The effectiveness of this action can be limited by winds, currents (in the case of moving water) and other factors;
- Absorbent pads and similar materials can be used to capture small spills on water. Absorbent booms can be drawn in slowly to encircle spilled fuel and absorb it. These materials are hydrophobic (absorb hydrocarbons and repel water). Absorbent booms are often relied on to recover any hydrocarbons that escape containment booms. Contaminated material must be subsequently placed in drums for later approved disposal;
- In the event of a larger spill on water, it will be necessary to limit the extent of the spill, using booms, and immediately seek the assistance of the Shell Bulk Petroleum response team. Keep the 24 Hour Spill Reporting Line informed of the situation and developments.
- A skimmer may be deployed once a boom has been secured to capture the spilled product. The skimmer utilizes a mechanism to draw hydrocarbons (and a percentage of water). It is then pumped through hoses to empty fuel drums;
- Culverts can permit water flow while capturing and collecting fuel by using a board to control the water level. It can be staked and surrounded with absorbent material to capture the fuel on the water surface.

#### 4.4 *Response Actions for Fuel Spills on Ice*

- Where a spill occurs on ice, snow should be compacted around the edge of the spill to serve as a berm (and lined with plastic sheeting). The ice will limit seepage of fuel into the water, but the contaminated snow/ice must be immediately scraped up. Permission may be given from the government to burn off pools of fuel (contact the 24 Hour NWT/Nunavut Spill Reporting Line). Remaining contaminated snow can be placed in drums or in a lined berm (on land) for later approved disposal
- Fuel that escapes under the ice through breaks or cracks is extremely difficult to collect. Expertise should be sought immediately. Shell Bulk Petroleum's response team can be made available in a matter of hours.

#### 4.5 *Disposal of Waste from Response Actions*

Used absorbent materials from response actions will be incinerated in CZN's on-site incinerator at Prairie Creek. Camp waste is presently incinerated daily using waste oil as an ignition source. Absorbent materials containing hydrocarbon residues will assist with incinerator ignition and reduce the quantity of waste oil required. Plastics are not incinerated, and are taken off-site for disposal.

## FUEL SPILL CONTINGENCY PLAN

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Contaminated soil and/or vegetation will be stored in steel drums inside the berm of the Tank Farm containment at Prairie Creek until suitable disposal can be arranged. CZN presently has an inventory of waste oil stored in this location. This inventory existed when CZN's predecessor San Andreas Resources acquired the site. The inventory is being used in incinerator ignition. If a large quantity of contaminated soil is derived from spill response, it will be temporarily stockpiled inside the Tank Farm berm with a bottom and top liner to prevent infiltration of precipitation and seepage. In this event, CZN will apply for and build an approved biocell to remediate the contaminated material. Alternatively, the material can be left in the temporary stockpile and taken off-site for disposal over the winter road when in operation. CZN will consult with government and all interested parties before a course of action is decided on.

**5.0 *Inventory of Response Equipment***

**5.1 *General Equipment***

CZN has rotary and fixed wing aircraft on call. Heavy earth moving equipment, hand tools and miscellaneous equipment (e.g. plastic sheeting) are available at the Prairie Creek Property, and are accessible in the event of a spill.

**5.2 *Personal Protective Equipment***

Personal protective equipment (PPE) is maintained at the Prairie Creek site and in spill kits for the management and handling of fuels, chemicals and reagents. PPE available includes splash protection goggles, nitrile rubber gloves, impervious (Tyvek) suits and half-face masks equipped with HEPA-filters. This equipment should be used by all personnel involved in spill response who will be proximal to the spill.

For specific first aid, toxicological and other health related data, and the relevant protection equipment, the Spill Response team should consult the Material Safety Data Sheet (MSDS) for the specific fuel that has been spilled. MSDS's are maintained in the Prairie Creek Administration Building.

**5.3 *Spill Kits***

A spill kit will be maintained at each transfer facility. Table 5-1 lists the items contained in the kit.

**Table 5-1: Items Contained in the Spill Kit**

<p>1-45 gal, 16-Gauge Open Top Drum, c/w Bolting Ring &amp; Gasket          1-48" x 48" x 1/16" Neoprene Pad (Drain Stop)          Plug N Dike Granular, 1-gal U.S. (3.8 litres)          Splash Protection Goggles          2-PVC Oil Resistant Gloves          1 Pkg. Polyethylene Disposable Bags (5 mil), 10 per Package          1 Shovel (Spark Proof)          1 Case T-12 3"x12' Mini Boom, 4 Booms/Case          1 Bale 11P 256 17" x 19" x 1/2" Pads, 100 Pads / Bail</p>
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## **6.0     *Training and Spill Exercises***

### **6.1     *Training***

All members of the Fuel Spill Response Team will be trained and familiarized with the spill response resources, including their location and access, the Fuel Spill Contingency Plan and appropriate spill response methodologies and reporting.

All personnel using the transfer facilities will be familiarized with the location of the Fuel Spill Contingency Plan on site and encouraged to read it. All personnel will be introduced to the salient aspects of initial response actions to a spill as part of site orientation.

Fuel handling crews will be trained in the safe operation of these facilities, spill prevention techniques and initial spill response actions.

### **6.2     *Spill Exercises***

CZN will conduct annual spill exercises to test the response of the Spill Response Team to fuel spills.

A report will be made by the On-Scene Coordinator noting the responses of personnel, and any problems or deficiencies encountered. This report will be used to evaluate the ability to respond to spills and determine areas necessary for improvement.

24 Hour spill report line: ph 867-920-8130  
fx: 867-873-6924

**CANADIAN ZINC FUEL SPILL REPORT FORM**

**Date and Time:**

**Person Reporting:**

**Date and Time of Spill:**

**Exact Location of Spill:**

**Cause of Fuel Spill:**

**Nature of Fuel and Amount Estimated:**

**Action Taken:**

**Follow-up:**

