



Mackenzie Valley Land and Water Board

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December 3, 2004

File: MV2001L2-0003
MV2001C0023

Mr. David Harpley
Environmental Coordinator
Canadian Zinc Corporation
Suite 1202-700 West Pender Street
VANCOUVER, BC V6C 1G8

Fax: (604) 594-3855

Dear Mr. Harpley:

Board Approval - Fuel Spill Contingency Plan, Prairie Creek Mine Site

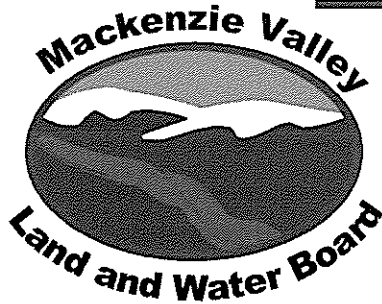
The Mackenzie Valley Land and Water Board has reviewed the aforementioned document and hereby approves the revised Fuel Spill Contingency Plan as received by this office on October 26, 2004. If you have any questions, contact Sarah Baines, Regulatory Officer, at (867) 766-7457 or email sbaines@mvlwb.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephen Nielsen".

Stephen Nielsen
Interim Chair, MVLWB

Copied to: Alan Taylor, Canadian Zinc Corporation (Fax: 604-688-2043)
Distribution List
Sarah Baines, Regulatory Officer, MVLWB



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STAFF REPORT

Company: Canadian Zinc Corporation (CFN)	
Location: Prairie Creek Mine site	Application: MV2001L2-0003
Date Prepared: November 6, 2004	Meeting Date: November 15, 2004
Subject: Fuel Spill Contingency Plan (FSCP)	

1. Purpose/Report Summary

The purpose of this report is to present to the Board for review and approval the Fuel Spill Contingency Plan (FSCP) submitted by Canadian Zinc Corporation (CZN).

Under Part F, Item 1 of Water License MV2001L2-0003, CZN is required to submit a FSCP.

2. Background

May 12, 2004: FSCP received.

June 30, 2004: FSCP distributed for review. Comments were due August 20, 2004. Review period was extended to September 13, 2004 at the request of Parks Canada.

September 14, 2004: All comments were sent to CZN and CZN was requested to submit a revised FSCP by October 22, 2004.

October 22, 2004: The revised FSCP received.

3. Discussion

Not applicable.

4. Comments

Not applicable.

5. Review Comments

Please see the attached comment summary table.

6. Security

Not applicable.

7. Conclusion

Canadian Zinc Corporation has incorporated all comments submitted by the reviewers in to the Fuel Spill Contingency Plan.

8. Recommendation

I recommend that the Fuel Spill Contingency Plan dated October 2004 be approved.

9. Attachments

- Comment Summary Table
- Revised Fuel Spill Contingency Plan, dated October 2004

Respectfully submitted,

**Sarah Baines
Regulatory Officer**

Comment Summary Table
Canadian Zinc Corporation – Fuel Spill Contingency Plan (FSCP)

Reviewing Agency, Date Comments Received	Comments	Mitigation Measure
Environmental Protection Branch, Environment Canada, July 23, 2004	<ol style="list-style-type: none"> 1. Under the Initial Actions section add the following points that relate to company personnel: <ul style="list-style-type: none"> • Company personnel should understand the hazards associated with the spilled product. • Escape routes should be identified for each work station. • Company personnel should be familiar with the locations and operation of all safety equipment. • Company personnel should wear appropriate personal protective clothing and equipment. 2. Under the Action Plan section the following points should be addressed: <ul style="list-style-type: none"> • Fuel or hazardous substance transfers – Secondary containment or a surface liner (drip pans, fold-a-tanks, etc) should be placed under all container or vehicle fuel tank inlet and outlet points, hose connections and hose ends during fuel or hazardous substance transfers. Appropriate spill response equipment and clean-up materials (absorbents, containment devices, etc) must be on hand during any transfer of fuel or hazardous substances and at vehicle-maintenance areas. • Transfer operations should be attended by trained personnel at all times. • Berm areas – Decanting of snow and water from the berm area should proceed only if the appropriate chemical analysis has determined the contents meet the requirements of Section 36.3 of the <i>Fisheries Act</i>. • Fuel Containers, including barrels, should be marked with the responsible party's name, product type, and year purchased or filled. 3. Under the Fuel Spills on Water section the following points should be addressed: 	<ol style="list-style-type: none"> 1. All points incorporated into the FSCP. 2. All points incorporated into the FSCP. 3. All points incorporated into the FSCP.

	<ul style="list-style-type: none"> • In the event of a spill into moving water the proponent needs to pre-identify control points along the water course which allow deployment of oil spill containment and recovery equipment downstream of the spill. Control point selection is critical to an effective oils spill response and should be regularly reevaluated for changes in river conditions. They should also be evaluated in different seasons. • Spill contingency plans should include locations of disposal sites approved to accept wastes and means of storage prior to disposal. <p>4. Under the Training section address the following points:</p> <ul style="list-style-type: none"> • To ensure that the Spill Response Team is prepared to respond to a spill situation in a reasonable manner, hands-on training and familiarization with equipment used for spill containment and recovery is critical. It provides the response crews with an understanding of the limitations or potential problems that may be encountered in the use of the various equipment pieces. • Personnel should be aware of the properties of the products that they handle and have access to material safety data sheets and other sources of information. 	<p>Government Inspectors will also provide direction as to how material is handled and stored prior to disposal.</p> <p>4. All points incorporated into the FSCP.</p>
<p>Water Resources Division, INAC, August 20, 2004</p>	<p>1. No concerns were noted but the company should be made aware of the new INAC Spill Reporting Protocol for Mining Operations in the Northwest Territories and Nunavut Regulated by the Department of Indian Affairs and Northern Development, effective August 1, 2004.</p>	<p>1. Comments provided to proponent.</p>
<p>RWED, August 19, 2004</p>	<p>1. The FSCP demonstrates a commitment by the company to handle spills properly and communicate effectively with the appropriate regulatory agencies.</p> <p>2. A description of the location, size and fuel storage capacity of each of the fuel storage areas and a description of the type and amount of contaminants stored at each location should be included in the plan.</p> <p>3. Site map of the area should be included in the plan.</p>	<p>1. Comments provided to proponent.</p> <p>2. Incorporated into the FSCP.</p> <p>3. Incorporated into the</p>

		FSCP.
CPAWS, September 10, 2004	<ol style="list-style-type: none"> 1. The Spill Response Team should be identified. 2. Contractors should be required to obtain training/briefing in spill response and reporting. 3. A map of the site should be included in the plan that shows the locations of spill kits and the location of water monitoring sites. 4. The proponent should provide information to personnel and contractors on what is considered a violation under the <i>Fisheries Act</i> and how it is related to potential spills. 	<ol style="list-style-type: none"> 1. Incorporated into the FSCP. 2. Incorporated into the FSCP. 3. Incorporated into the FSCP (A combination of map and Table 6.1 in the FSCP). 4. Comments provided to proponent.
Parks Canada, September 10, 2004	<ol style="list-style-type: none"> 1. Under the Initial Actions section incorporate the following points: <ul style="list-style-type: none"> • Isolate or remove any potential ignition sources if safe and possible. • Rather than writing "stop the flow" write "stop the leak" when safe to do so. • Add a point that stated "Block off drains or access to drains". • Add a point that states "Access amount of fuel spilled, the size, extent and conditions of the spill". • Clarify the roles of the company personnel and the on-site coordinator. 2. Under the Action Plan section add the following statements: "Ensuring employees receive proper training and clear and concise operating procedures" and "Ensuring an operator is in attendance during all fuel handling activities". 3. Under the Fuel Spills on Land section add the following statements: "Identify the source of the leak or spill and stop the leak or spill" and "Ensure drains or access to drains in bermed areas are blocked off". 4. Under the Fuel Spills on Snow section the following statement should be added: "Contact the government authority identified by the 24 Hour Spill Reporting Line for approval before undertaking disposal". 5. Under the Fuel Spills on Water section the following statement 	<ol style="list-style-type: none"> 1. All points incorporated into the FSCP. 2. A Training section has been added to the FSCP. 3. Incorporated into the FSCP. 4. Incorporated into the FSCP. 5. Incorporated into the

	<p>should be added: "Contact the government authority identified by the 24 Hour Spill Reporting Line for approval before undertaking disposal of recovered product, absorbent pads and other clean up materials".</p> <p>6. Employees need to be thoroughly familiar with their roles as identified in the plan of action such as being able to employ booms. Northern spill response companies should be identified and on site personnel must be aware of their existence.</p> <p>7. Under the Fuel Spills on Ice section the following statement should be added: "Contact the government authority identified by the 24 Hour Spill Reporting Line for approval before undertaking disposal. Permission may be given from the government to burn off pools of fuel (contact the NWT 24 Hour Spill Line). Remaining contaminated snow can be placed in a drum or a lined berm. Contact the government authority for approval before undertaking disposal of this material".</p> <p>8. The contact information for Shell's Mobile Environmental Response Unit should be included to aid in the response to fuel spills on water.</p>	<p>FSCP.</p> <p>6. Spill training exercises will be carried out. Northern agencies are identified and contact information for Shell Bulk Petroleum in Ft. Nelson, BC has been included. The Prairie Creek Mine site is just as easily accessed from Ft. Nelson as it is from Ft. Simpson or Yellowknife.</p> <p>7. Incorporated into the FSCP.</p> <p>8. Incorporated into the FSCP.</p>
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Prairie Creek Project

2004/2005

FUEL SPILL

CONTINGENCY PLAN

Mackenzie Valley Land
& Water Board

File _____

OCT 26 2004

Application # MV2001L2-0003

Copied To PMU/SB/BW/file

October 2004



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FUEL SPILL CONTINGENCY PLAN

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 the pre-identified spill control points (see Section 5.1).
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 January 1, 2004 to December 31, 2005 and applies to all projects and operations of Canadian Zinc Corporation at the Prairie Creek Property and access corridor.

The following formal distribution has been made of this plan:

Mackenzie Valley Land and Water Board

Canadian Zinc Corporation - Prairie Creek Site Office

Canadian Zinc Corporation - Vancouver Office

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

Canadian Zinc Corporation
Suite 1202-700 West Pender Street,
Vancouver, British Columbia
V6C 1G8
Phone: 604-688-2001
Fax: 604-688-2043
Email: alan@canadianzinc.com

Prairie Creek Minesite 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

FUEL SPILL CONTINGENCY PLAN

1.0 Introduction and Plan Purpose

The purpose of Canadian Zinc Corporation's Fuel Spill Contingency Plan is to provide a plan of action for every foreseeable fuel spill event at the Prairie Creek Property and the fuel storage and transfer facilities related to the planned property access road.

It is the policy of Canadian Zinc Corporation to initiate clean up activity when, in the opinion of its management, the company is clearly associated, or likely associated with a spilled product. 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, and their designations, are listed below:

On-Site:

On-scene Coordinator: Mr. David Hart, Site Manager
Canadian Zinc Corporation

On-scene Coordinator: Assistant Site Manager (Individual to be determined)
(Alternate) Canadian Zinc Corporation

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

Off-Site:

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

Environmental Advisor: Mr. David Harpley, Environmental Coordinator
Canadian Zinc Corporation

Environmental/Safety Advisor: Mr. Richard Hoos, Principal Consultant
EBA Engineering Consultants Ltd.

Additional Information or Assistance

Additional resources and assistance are available from the following sources:

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

Mr. Bill Streeper / Rick Baldrige
(250) 774-7247
(250) 774-7250

Government of NWT
Pollution Control Division
Phone (Yellowknife):

(867) 873-7654

Dept. of Indian Affairs &
Management Officers
Northern Development (Ft. Simpson):
Phone:
Fax:

Daniel Quevillon/Shane Hayes Resource
(867) 694-2626
(867) 695-2615

Indian & Northern Affairs Canada
Contaminants Phone Hot Line:

☎ 1-800-661-0827

RCMP Phone (Yellowknife):

☎ (867) 920-8311

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

For advice on contaminated material management, the environmental consulting resources and INAC contacts listed can also 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: David Hart, Site Manager
Phone: (Prairie Creek Camp): 1-600-700-2454
Fax: 1-600-700-9209

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

On-Scene Coordinator (Alternate)

Contact Person: Alternate Site Manager

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 monthly 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 disposal off-site 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;
- 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 the main fuel storage and transfer locations.
- Fuel containers, should be marked with the responsible party's name, product type and year purchased or filled.

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;
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:

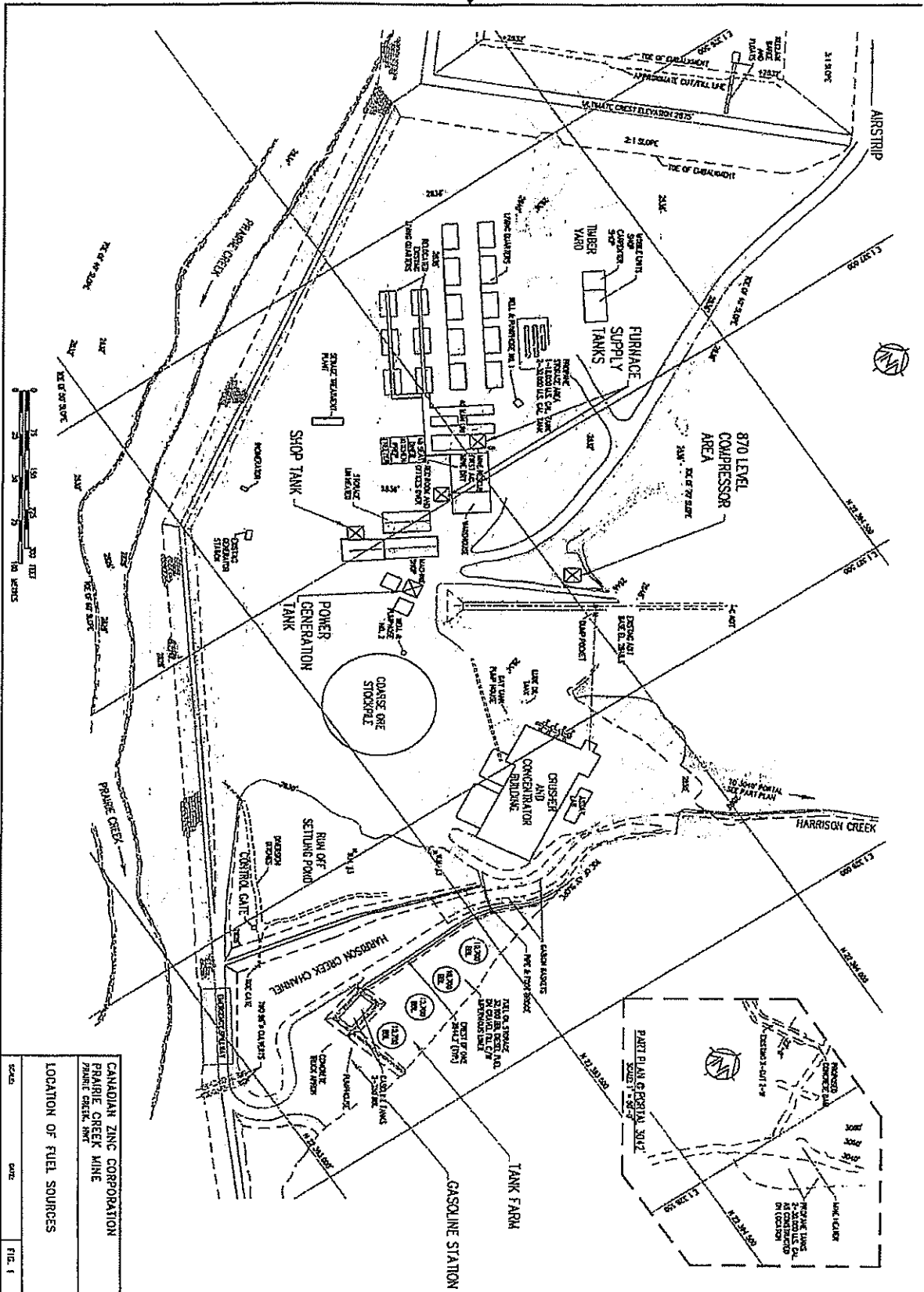
- Deploy boom (s) to contain the spill area. The effectiveness of this action can be limited by winds, currents (in the case of moving water) and other factors;
- Absorbent pads and similar materials can be used to capture small spills on water. Absorbent booms can be drawn in slowly to encircle spilled 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.
- 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.

5.0 *Inventory of Fuel Sources and Response Equipment*

5.1 *Fuel Sources and Spill Control Points*

The main fuel source locations at the site are as follows (see Figure 1 for locations):

- The Tank Farm consists of four 10,000 barrel capacity tanks for diesel (presently partly full), two 350 barrel capacity tanks for gasoline (presently empty), and waste oil stored in two 5,000 gallon (20,000 litre) tanks and a number of 45 gallon (200 litre) drums (a small number of these drums may contain used varsol or antifreeze). The control point for spills in the farm is the main containment berm for the tanks. Beyond this, the secondary control point would be the culverts where Harrison Creek discharges to Prairie Creek, and for spills to the south-east of the farm, the toe of the Prairie Creek containment berm;
- The Gasoline Station is located at the south end of the tank farm facility. At this time, the station contains 6 – 45 gallon drums of gasoline. The quantity of drums varies depending on site activity. Drums are located on a concrete berm with sump facilities.
- The two camp power generators are fed by a fully bermed 1000 gallon diesel tank mounted on a steel cradle. The secondary control point for a spill is the main site drainage channel which flows into the Catchment Pond (the outlet of the Catchment Pond is also a control point with a gate weir);
- Two 5000 gallon tanks on the south-west corner of the rear Machine Shop stores 10W& 40W oil for use in vehicles, these tanks are fully contained in a cement berm. The secondary control point for a spill is the main site drainage channel;
- A 1000 gallon tank on the north-west corner, and a 200 gallon tank on the south-east corner, which are both fully bermed, of the Administration Building (which currently houses the kitchen, Mine Rescue, First Aid and Mine Dry), provide diesel for heating furnaces. The secondary control point for a spill is the main site drainage channel;
- A 500 gallon diesel tank at the 870 level underground staging area provides diesel supply to the compressor and generator for mine ventilation and electrical supply. This tank is fully bermed and the secondary control point for a spill is the main site drainage channel;
- A limited number of 45 gallon (200 litre) drums containing aviation gas or Jet B are stored at the airstrip. The drums are located on a clay liner. The control point for a spill beyond the containment is the toe of the Prairie Creek containment berm.



CANADIAN ZINC CORPORATION		
PRAIRIE CREEK MINE		
PRAIRIE CREEK, MONT.		
LOCATION OF FUEL SOURCES		
SCALE	DATE	FILE #

5.2 General Equipment

Canadian Zinc Corporation 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 site as part of the exploration activities, and are accessible in the event of a spill.

5.3 Personal Protective Equipment

Personal protective equipment (PPE) is maintained on-site 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 Administration Building.

5.4 Spill Kits

Spill kits (Table 6-1) are maintained on site at the main fuel farm facility, mechanical shop, gasoline station, fuel truck and at each diamond drill when operating.

**Table 6-1
Items Contained in the Spill Kit**

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

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 and contractors at the Prairie Creek property will be familiarized with the location of the Fuel Spill Contingency Plan on site and encouraged to read it. All personnel and contractors will be introduced to the salient aspects of initial response actions to a spill as part of site orientation on arrival.

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*

Canadian Zinc Corporation 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.

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

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:

Appendix A: INAC Spill Reporting Protocol (July 29, 2004)

Terms and Conditions For Implementing the Spill Reporting Protocol For Mining Operations

1. Applies to both exploratory and production mineral operations
2. Applies only to spills for which Indian and Northern Affairs Canada (INAC) would be designated as Lead Agency under the NWT/Nunavut Spills Working Agreement.
3. This Spill Reporting Protocol does not apply to spills for which the Government of the Northwest Territories (GNWT), Government of Nunavut (GN), Environment Canada Environmental Protection Branch (EPB), Canadian Coast Guard (CCG), National Energy Board (NEB), or Inuvialuit Land Administration (ILA) would be designated the Lead Agency under the Northwest Territories, Nunavut Spills Working Agreement.
4. Immediately reportable spills include releases as per Schedule 1, and releases of substances of lesser volumes that are likely to be imminent environmental or human health hazard or where an operator is uncertain if a release is reportable.
5. All spills requiring assistance by the Operator (i.e. not cleaned up immediately and assistance is required for cleanup) continuing spills, or situations where further spillage is possible are to be reported immediately.
6. An on-site record shall be kept of all minor spills and immediately reportable spills and be available to INAC Inspectors of officials upon request.
7. All minor spills shall be reported to the District INAC Inspector(s) either monthly in a condensed form attached, or at an interval acceptable to the Inspector.
8. Operator, i.e., the company or individual that holds an authorization for the project, must have all spill contingency plan approved by either INAC or a party acceptable to INAC.
9. Spill contingency plan must meet the appropriate regulatory requirements and/or spill contingency planning guidelines, including procedures to clean up minor spills and ensure environmental protection.
10. Appropriate field spill kits, as indicated in the spill contingency plan must accompany each crew and/or mobile equipment and/or vehicle.
11. Contractors and subcontractors for the Operator must abide by the Protocol and the spill contingency plan. All spills or releases, whether by operator, contractors or subcontractors, remain the liability of the Proponent and or Operator.
12. All spills, regardless of size (areal extent), amount and product, remain the liability of the Proponent and must be cleaned up immediately. All spills must be cleaned up to the satisfaction of the INAC Inspector.

Schedule 1 – Immediately Reportable Quantities

TDG Class	Substance	Immediately Reportable Quantities for NWT/NU 24-Hour Reports
1 2.3 2.4 6.2 7 None	Explosives Compressed gas (toxic) Compressed gas corrosive Infectious substances Radioactive Unknown substance	Any amount
2.1 2.2	Compressed gas (flammable) Compressed gas (non-corrosive, non-flammable)	Any amount of gas from containers with a capacity greater than 100 L
3.1 3.2 3.3	Flammable liquid	≥ 100 L
4.1 4.2 4.3	Flammable Solid Spontaneously combustible solids Water reactant	≥25 kg
5.1 9.1	Oxidizing substance Miscellaneous products or substances excluding PCB mixtures	≥50 L or 50 kg
5.2 9.2	Organic peroxides Environmentally hazardous	≥ 1 L or 1 kg
6.1 8 9.3	Poisonous substances Corrosive substances Dangerous wastes	≥ 5L or 5 kg
9.1	PCB mixtures of 5 or more parts per million	≥ 0.5 L or 0.5 kg
None	Other contaminants (e.g. crude oil, drilling fluid, produced water, waste or spent chemicals, used or waste oil, vehicle fluids, wastewater etc.)	≥ 100 L or 100 kg

As well, all releases of harmful substances, regardless of quantity, are immediately reportable to the 24-Hour Spill Line where the release:

- Is near or into a water body;
- Is near or into a designated sensitive environment or sensitive wildlife habitat;
- Poses an imminent threat to human health or safety; or
- Poses an imminent threat to listed species at risk or its critical habitat.

Example Scenarios

(assumes spills are under control)

Activity	Spill Location	Quantity and Product Spilled	Spill Reporting
Fuel tank refilling	Bermed storage tank are on crown land	100 L gasoline	Immediately reportable To NWT 24-Hour Spill Report Line
Truck refueling	Within licensed project area on Crown Land	2 L of diesel	On-site record of spill, clean-up, and included in minor spill reporting to INAC Inspector
Camp Operations	Camp on Crown Land	75 L of grey water overflows camp sump	On-site record of spill, clean-up, and included in minor spill reporting to INAC Inspector
Exploratory drilling	Within a creek on the project area	5 L hydraulic oil	Immediately reportable to the 24-Hour Spill Report Line

