

**WCSS
OIL SPILL CO-OPERATIVE
TRAINING EXERCISE REPORT**

Oil Spill Co-Operative: **Y**

Oil Spill Co-Op Chairman: Teddy Bowers (Enbridge Pipelines Athabasca Inc.)

Exercise Date: Thursday – March 26, 2009

Type of Exercise: Winter Ice Exercise

Location of Exercise: Morning – Royal Canadian Legion , Fort McMurray, AB
Afternoon – Clearwater River – Sir Alexander Park, Fort McMurray, AB

LSD/Sec/Twp/Rge/Mer: Clearwater River 11-89-09W4M

Host Company: InterPipeline Fund (Corridor) Inc.

Incident Commander: Allan McCutcheon (IPL)

EXERCISE OBJECTIVES

The objectives of the exercise were to: (check applicable ones)

	Objectives Met	
	Yes	No
1 Supply theoretical training (classroom)	x	
2 Evaluate deployment methods (hands-on training)	x	
3 Evaluate safety procedures	x	
4 Evaluate boat handling and operations	x	
5 Evaluate response capabilities		
6 Evaluate communications	x	
7 Evaluate Control Point		
8 Evaluate Co-op equipment - Dryland exercise		
9 Evaluate WCSS equipment	x	
10 Evaluate new equipment		
11 Other (please specify)		

Petroleum Industry's Commitment to Spill Preparedness and Environmental Protection

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EXERCISE REPORT - CHRONOLOGICAL

Time	Event and Description	Problems
March 25		
13:00	<p>Arrival of Area Y ISRT.</p> <p>Following equipment arrived in the morning and was staged: Interpipeline 40' trailer, WCSS winter response trailer, WCSS airboat, WCSS ditchwitch Honda 18 HP, 1820- in trailer, 3200 rubber tired track hoe.</p> <p>Equipment unloaded from response trailer.</p>	
13:20	<p>Trever Miller does equipment review and action plan for ISRT.</p> <p>Rescue and assessment crews are chosen. Trever conducts a rescue and safety review with each crew. Ice rescue crew's only job is rescue. Rescue crew gear up.</p>	
13:35	<p>Assessment crew conduct 1st slot cut in order to determine equipment bearing capacity.</p> <p>Current velocity .57 – 1.0 kms/hour</p>	
13:50	<p>Ice assessment test holes conducted 6-8 metres from shoreline.</p> <p>#1 Ice Thickness 28" Water Depth 12' Total Depth 14'3"</p>	
13:57	<p>#2 Ice Thickness 26" Water Depth 14' Total Depth 16'3"</p>	
14:00	<p>#3 Ice Thickness 32" Water Depth 7'4" Total Depth 10"</p>	Broken auger pin
14:15	<p>Use of ice saw to cut ice block.</p>	
14:30	<p>Ice block pulled – good clean ice 24"</p>	
14:50	<p>Trever reviews ditchwitch usage with crew.</p> <p>Trackhoe puts on clean-up bucket.</p> <p>Enclosed chainsaw /ditchwitch taken to assessment site.</p> <p>Test slots are conducted with chainsaw and ditchwitch.</p>	
15:10	<p>Hoe cleans off snow from shoreline, preparation for 2nd set of test holes.</p>	
15:15	<p>Ice assessment test holes conducted 3-5 metres from shoreline.</p> <p>#4 Ice Thickness 29" Water Depth 0 Total Depth 2'5"</p>	
15:20	<p>#5 Ice Thickness 26" Water Depth 6" Total Depth 2'8"</p>	
15:25	<p>#6 Ice Thickness 24" Water Depth 6' Total Depth 8' Inc.H2O</p>	

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- 15:40 Hoe now clears off slot site for tomorrow's demo.
Creates a pad to come back out on. Water starting to come up due to hoe weight.
- 16:05 Hoe out on shore.
Decision to put equipment away. ISRT will meet in the morning to do additional slotting if required.
- 16:45 Completion of cleanup and debriefing. Security on site overnight.
Slot area is snowfenced off . Area barricaded and signed.

March 26

- 07:30 Set up at Royal Canadian Legion/Registration.
- 09:00 Introductions/Opening Remarks (Al McCutcheon – Area Y
Alt.Chairman)
- 09:15 WCSS Overview (Mike Locke – WCSS)
- 09:30 Coffee Break
- 09:45 Containment and Recovery in Winter Conditions (Mike Locke).
ISRT leave for site.
- 10:45 Films – Ice Recovery in Winter Conditions.
- 11:30 Lunch – provided at Legion.
Attendees travel to equipment deployment site – Clearwater River.
- 12:30 Attendees all arrive on site.
Captain's/Crew Meeting review of Action Plan (Al McCutcheon – IC/Trever Miller – WCSS).
Temp 4C Work Area - Ice Depth 23" Water Depth 10'
Safety Briefing for ISRT (Tom Jahelka – Safety Officer).
- 12:50 Safety Briefing for all attendees/note warm up trailer/safety call (Tom Jahelka).
IC (Al McCutcheon) explains Action Plan for attendees.
Airboat safety briefing – captain/crew.
Radios distributed to captains.
Safety and review briefing for assessment and rescue crew.
Attendees move to observation area. Trever demos ice rescue sled and reviews Recovery operations.
- 13:10 Air boat startup. Air boat site assessment conducted – demo of drilling test holes from boat.
- 13:15 Site assessment team come on land and gear up.
Rescue team gears up.
Demo of drilling 3 auger test holes.
Trever reviews with assessment crew – demo of ice saw cut.
- 13:25 Ice block cut and pulled – solid blue ice 24"

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- 13:35 Ditchwitch crew moved onto ice and ice cut demo conducted.
- 13:45 Backhoe moves onto ice, while waiting for positioning, saw crew demo's ice cut again.
- 13:55 Enclosed chainsaw moved onto ice and demo conducted.
- 14:10 Slot completed. Backhoe used to take out ice block. 1m x 1m 29" of ice, 14" of white ice. Ditchwitch/crew and enclosed chainsaw/crew move off ice.
- 14:20 Trackhoe slotting demo conducted.
- 14:24 Slot completed. Safety standpoint – ice block is put back into hole. Slot area is fenced off and will remain so until completely frozen over.
- 14:35 Trackhoe moves off site/equipment cleanup.
- 14:50 Debriefing/Doorprize Draw/Exercise Attendance Cards distributed.
- 15:00 Exercise completed.

CLASSROOM SESSION

- List Topics Introduction/Area Y Overview (Al McCutcheon)
- WCSS Overview/Containment & Recovery in Winter Conditions (Mike Locke)

SAFETY

WCSS Oil Spill Cooperative Exercise Hazard Assessment

1. Equipment

Task/Activity

- | | | |
|---|--|---|
| <input checked="" type="checkbox"/> Parking | <input checked="" type="checkbox"/> Equipment Spotting | <input checked="" type="checkbox"/> Loading/Unloading |
| <input checked="" type="checkbox"/> Staging | <input type="checkbox"/> Dryland Equipment Deployment | <input type="checkbox"/> Helicopter Use |
| <input type="checkbox"/> Other _____ | | |

Hazard (high)

- | | | |
|---|---------------------------------------|---|
| <input type="checkbox"/> Personnel Injuries | <input type="checkbox"/> Health Issue | <input type="checkbox"/> Equipment Damage |
| <input type="checkbox"/> Other _____ | | |

Mitigation/Safety Controls

- | | | |
|--|---|--|
| <input type="checkbox"/> Health Screening | <input type="checkbox"/> Health Restrictions | <input checked="" type="checkbox"/> Equipment Orientation |
| <input checked="" type="checkbox"/> Safety Meeting | <input checked="" type="checkbox"/> PPE | <input checked="" type="checkbox"/> Crew Member Assignment |
| <input checked="" type="checkbox"/> Track Attendees | <input checked="" type="checkbox"/> Warning Signs | <input checked="" type="checkbox"/> Barriers |
| <input checked="" type="checkbox"/> Identify Restricted Areas | <input checked="" type="checkbox"/> Identify Work Zones | <input checked="" type="checkbox"/> Buddy System |
| <input checked="" type="checkbox"/> Emergency Signal | <input checked="" type="checkbox"/> Muster Station | <input checked="" type="checkbox"/> First Aid |
| <input checked="" type="checkbox"/> EMS | <input checked="" type="checkbox"/> Communications Plan | <input checked="" type="checkbox"/> Weather Tracking |
| <input type="checkbox"/> Weather Restrictions | <input checked="" type="checkbox"/> Warming Tent/Facility | <input checked="" type="checkbox"/> Sanitation |
| <input checked="" type="checkbox"/> Water/Food | <input type="checkbox"/> Wildlife Identification | <input type="checkbox"/> Wildlife Strategy |
| <input checked="" type="checkbox"/> Identify Equipment Deployment Strategy | | |
| <input type="checkbox"/> Other _____ | | |

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2. Working Along Shoreline

Task/Activity

- | | | |
|---|---|---|
| <input checked="" type="checkbox"/> Transporting Equipment Hazard (medium/high) | <input checked="" type="checkbox"/> Loading Boats | <input checked="" type="checkbox"/> Deploying Equipment |
| <input type="checkbox"/> Personnel Injuries | <input type="checkbox"/> Equipment Damage | <input type="checkbox"/> Utilities Hit |
| <input type="checkbox"/> Other _____ | | |

Mitigation/Safety Controls

- | | | |
|--|---|--|
| <input type="checkbox"/> Health Screening | <input type="checkbox"/> Health Restrictions | <input checked="" type="checkbox"/> Equipment Orientation |
| <input checked="" type="checkbox"/> Safety Meeting | <input checked="" type="checkbox"/> PPE | <input checked="" type="checkbox"/> Crew Member Assignment |
| <input checked="" type="checkbox"/> Track Attendees | <input checked="" type="checkbox"/> Warning Signs | <input checked="" type="checkbox"/> Barriers |
| <input checked="" type="checkbox"/> Identify Restricted Areas | <input checked="" type="checkbox"/> Identify Work Zones | <input checked="" type="checkbox"/> Buddy System |
| <input checked="" type="checkbox"/> Emergency Signal | <input checked="" type="checkbox"/> Muster Station | <input checked="" type="checkbox"/> First Aid |
| <input checked="" type="checkbox"/> EMS | <input checked="" type="checkbox"/> Communications Plan | <input checked="" type="checkbox"/> Weather Tracking |
| <input type="checkbox"/> Weather Restrictions | <input checked="" type="checkbox"/> Warming Tent/Facility | <input checked="" type="checkbox"/> Sanitation |
| <input checked="" type="checkbox"/> Water/Food | <input type="checkbox"/> Wildlife Identification | <input type="checkbox"/> Wildlife Strategy |
| <input checked="" type="checkbox"/> Safety Boat | <input checked="" type="checkbox"/> Shoreline Safety Station | <input checked="" type="checkbox"/> Crew Briefing |
| <input checked="" type="checkbox"/> Identify Equipment Deployment Strategy | <input checked="" type="checkbox"/> Identify Underground Facilities | |
| <input type="checkbox"/> Waist Belt on Chest Waders | <input type="checkbox"/> Other _____ | |

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3. Boat Operation

Task/Activity

- | | | |
|---|---|---|
| <input checked="" type="checkbox"/> Equipment Loading | <input checked="" type="checkbox"/> Launching | <input checked="" type="checkbox"/> Operating |
| <input type="checkbox"/> Private Vessels | <input type="checkbox"/> Other _____ | |

Hazard (high)

- | | | |
|---|--|---|
| <input type="checkbox"/> Personnel Injuries | <input type="checkbox"/> Public Injuries | <input type="checkbox"/> Equipment Damage |
|---|--|---|

Mitigation/Safety Controls

- | | | |
|--|--|--|
| <input type="checkbox"/> Health Screening | <input type="checkbox"/> Health Restrictions | <input type="checkbox"/> Equipment Orientation |
| <input checked="" type="checkbox"/> Safety Meeting | <input checked="" type="checkbox"/> PPE | <input checked="" type="checkbox"/> Crew Member Assignment |
| <input checked="" type="checkbox"/> Track Attendees | <input checked="" type="checkbox"/> Warning Signs | <input checked="" type="checkbox"/> Barriers |
| <input checked="" type="checkbox"/> Identify Restricted Areas | <input checked="" type="checkbox"/> Identify Work Zones | <input checked="" type="checkbox"/> Buddy System |
| <input checked="" type="checkbox"/> Emergency Signal | <input checked="" type="checkbox"/> Muster Station | <input checked="" type="checkbox"/> First Aid |
| <input checked="" type="checkbox"/> EMS | <input checked="" type="checkbox"/> Communications Plan | <input checked="" type="checkbox"/> Weather Tracking |
| <input type="checkbox"/> Weather Restrictions | <input checked="" type="checkbox"/> Warming Tent/Facility | <input checked="" type="checkbox"/> Sanitation |
| <input checked="" type="checkbox"/> Water/Food | <input type="checkbox"/> Wildlife Identification | <input type="checkbox"/> Wildlife Strategy |
| <input checked="" type="checkbox"/> Operator Certification | <input checked="" type="checkbox"/> PFD | <input checked="" type="checkbox"/> Crew Briefings |
| <input checked="" type="checkbox"/> Equipment Service Checks | <input checked="" type="checkbox"/> Identify Roles | <input type="checkbox"/> Identify Traffic Patterns |
| <input checked="" type="checkbox"/> Set Distances for Operations | <input checked="" type="checkbox"/> Safety Boat | <input checked="" type="checkbox"/> Up & Downstream Bouys |
| <input type="checkbox"/> Up & Downstream Signage | <input checked="" type="checkbox"/> Identify Equipment Deployment Strategy | |
| <input type="checkbox"/> Other _____ | | |

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DEBRIEFING

Auxiliary Services:

Were auxiliary services such as parking, registration, meals, toilets, etc. sufficient? Yes **X**

Pre-Planning Organization:

Was pre-planning organization adequate? Yes **X**

Crew Organization:

Were manpower requirements sufficient for this exercise? Yes **X**

Were communications within the working groups efficient and effective? Yes **X**

Equipment:

Was the equipment effective for this type of deployment exercise? Adequate equipment available Yes **X**

Was the equipment deployment technique effective for this site? Yes **X**

Training Coordinator Evaluation:

Did the Training Coordinator do an adequate job? Yes **X**

Spill Medium:

Was Spill Medium used for the exercise? No **X**

Control Point Evaluation:

Could this be an effective control point? Yes **X**

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RECOMMENDATIONS - CO-OP EQUIPMENT:

Equipment Used: Signage
Area Y response unit not required

Equipment Deficiencies

ICS/Strategy Deployment boards required in unit	
Tbars – for snowfencing	

RECOMMENDATIONS - WCSS EQUIPMENT:

Equipment Used:
Acheson - Winter Reponse Unit
Wandering River - Airboat

Equipment Recommendations:

- Enclosed Chainsaw – crank handle is on wrong side due to pitch. Look at either pitch or handle.
- Ice auger blades need to be sharpened or changed out.
- Check ropes – some are missing quick release safety snaps.

Equipment Deficiencies

Barricades required in unit	Ice Depth Gauge required
Snow fence complete with posts or T-bars	Chain saw – look at shorter blades for smaller cuts
Signage – U/S and D/S notification	
ICS/Deployment Strategy Boards	

DEBRIEFING SUGGESTIONS:

Comment was made that due to the large amount of spectators perhaps there should be other stations going on in order for more attendees to be involved. The problem with this is a safety issue, too many people working on the ice at the same time. Workers are kept to a minimum in winter deployment conditions due to safety factor.

ATTENDANCE:	80	Participants representing:
	21	Member Companies
	88	% of Membership

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