IAP Cover Sheet

Incident Name:	Operational Period to be covered by IAP:
DRIFT RIVER TERMINAL COORDINATION	Period 1 (4/1/2009 09:00 - 4/2/2009 09:00)

Approved by:

Joe LoSciuto* FOSC : CDR, USCG

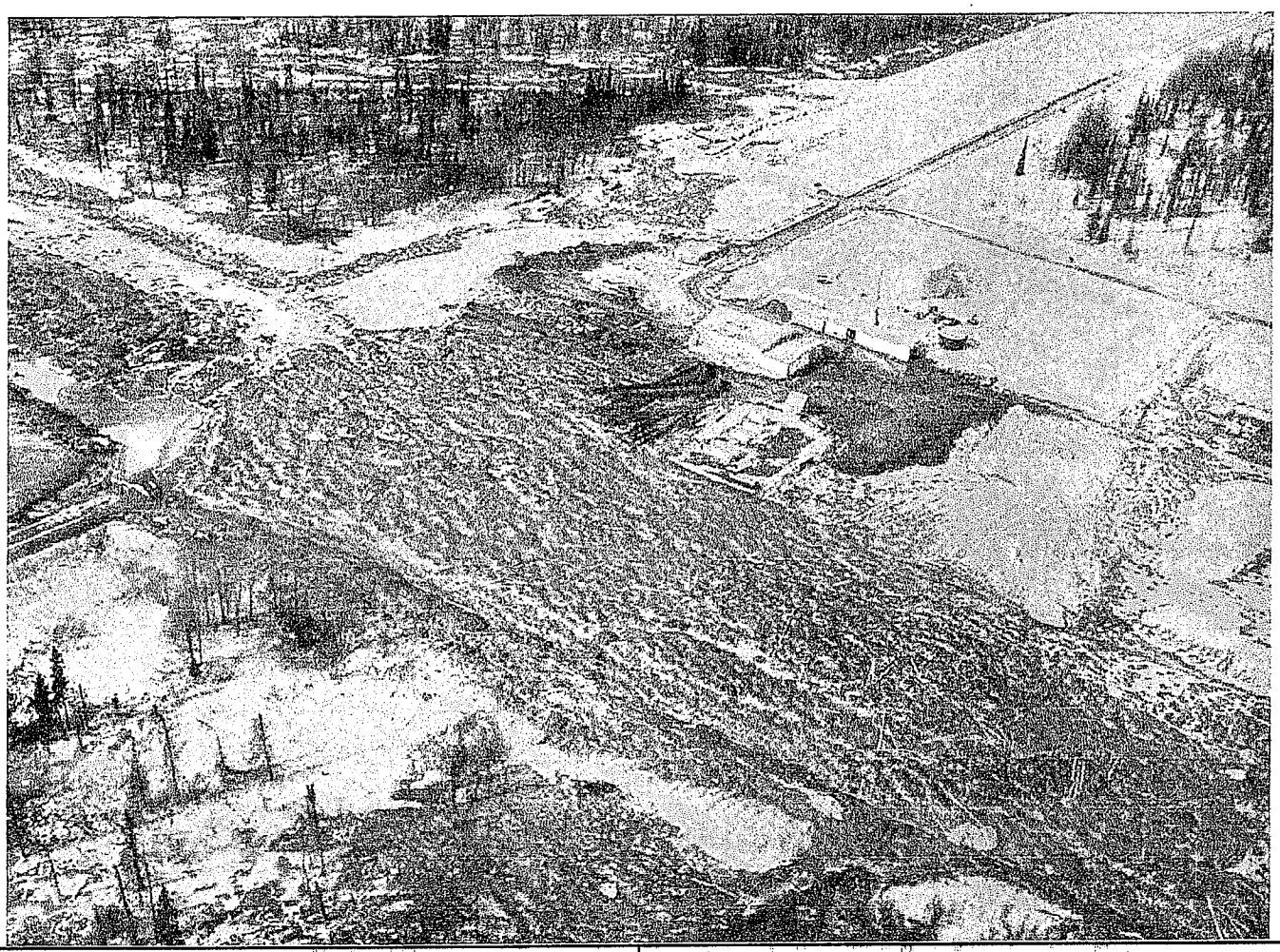
Gary Folley SOSC :

Rod Ficken RPIC :

Incident Action Plan

Mt. Reboubt erupted on March 22, 2009 and continues to erupt with associated lahars and ashfall. The Drift River Terminal is located near Mt. Redoubt. An Incident Command System Unified Command has been formed to coordinate efforts related to safety, protection of the environment, protection of the facility, providing information to the public, and continued oil production in Cook Inlet.

*Cdr. Joe LoScuito of the US Coast Guard (FOSC for the Terminal & Maritime)
Drift River Oil Terminal photo by ADEC, 3/28/09



Prepared By:	Prepared Date/Time: 3/31/2009 14:36	
IAP Cover Sheet	Printed: 3/31/2009 18:03	© 1997-2009 dbSoft, Inc.

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Weather Report

Incident:	DRIFT RIVER TERMINAL COORDINATION	**Prepared By:**	Kalyan, Mala	**at** 3/31/2009 15:34
Period:	Period 1 (4/1/2009 09:00 - 4/2/2009 09:00)	**Version Name:**	ADEC 3/31/09	

Present Conditions

Wind Speed:	15 mph	**Wave Height:**	
Wind Direction From The:	Southwest	**Wave Direction:**	
Air Temperature:	30s Fahrenheit	**Swell Height:**	
Barometric Pressure:		**Swell Interval:**	
Humidity:		**Current Speed:**	
Visibility:		**Current Direction Toward:**	
Ceiling:		**Water Temperature:**	
Next High Tide (Time):		**Next Low Tide (Time):**	
Next High Tide (Height):		**Next Low Tide (Height):**	
Sunrise:	06:00	**Sunset:**	19:00

Notes: Mostly sunny to partly cloudy. Highs in the 30s F with light winds.

24 Hour Forecast

Sunrise:	06:00	**Sunset:**	19:00
High Tide (Time):		**High Tide (Time):**	
High Tide (Height):		**High Tide (Height):**	
Low Tide (Time):		**Low Tide (Time):**	
Low Tide (Height):		**Low Tide (Height):**	

Forecast:

48 Hour Forecast

Sunrise:	06:00	**Sunset:**	19:00
High Tide (Time):		**High Tide (Time):**	
High Tide (Height):		**High Tide (Height):**	
Low Tide (Time):		**Low Tide (Time):**	
Low Tide (Height):		**Low Tide (Height):**	

Forecast:

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ICS 202 - General Response Objectives

Incident:	DRIFT RIVER TERMINAL COORDINATION	**Prepared By:**	Attaway, Margaret **at** 3/31/2009 17:33
Period:	Period 1 (4/1/2009 09:00 - 4/2/2009 09:00)	**Version Name:**	3/31/2009 11:44

Overall and Strategic Objectives

	Assigned To	Status
Ensure Safety of Citizens and Response Personnel		
Maximize the Protection of Environment		
• Identify possible spill scenarios in light of current conditions		
• Identify available spill response resources and capabilities		
Maximize the Protection of Drift River Facility Asset		
Manage a Coordinated Response through Unified Command		
Keep Stakeholders (Internal & External) and the Public Informed of Response Activities		
Ensure Safe Drawdown of Tank Capacity		
• Identify Repair Schedule		
• Ensure all Agency Permits and approvals are met		
• Coordinate Facility Staffing		
• Conduct sounding before each tanker arrival		
• Ensure pumps are operational		
Long-term plan for continued Cook Inlet Oil Production		
• Modify Transfer Plan based on tanker availability		
• Inventory management 204		

Approved By

: _____

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ICS 204 - Assignment List

Incident: DRIFT RIVER TERMINAL COORDINATION	**Prepared By:** Section, Operations **at** 3/31/2009 17:12
Period: Period 1 (4/1/2009 09:00 - 4/2/2009 09:00)	**Branch:** Facility Restart Group/Oil Movement
	Division/Group/Staging: Facility Restart Group/Oil Movement

Operations Personnel

Title	Name	Affiliation	Contact Number(s)
Agency Representative	Shannon DeWandel	ADEC	(907) 269-7541/632-0456 (ce
Agency Representative	Dennis Hinnah	USDOT/PHMSA	(907) 271-4937
Agency Representative	Allison Iverson	ADNR	(907) 269-8806
Agency Representative	Tom Johnson	USDOT/PHMSA	(907) 271-4934
Incident Command Representative	Troy Haugeberg	CIPL	(907) 263-7994/748-4078 (ce

Assignments

Identify all actions and regulatory requirements for a restart of facility operations. Should include Cook Inlet Pipeline, PHMSA, USCG, EPA and State of Alaska requirements prior to start-up commencing.

>Develop a comprehensive safety plan - CIPL
>Continue mud and debris removal - CIPL, ADNR
>Conduct integrity check. Identify any damage and repairs needed to:
- Tertiary dike and secondary containment - COE, CIPL, USCG
- Pipelines to loading berth - USCG, CIPL
- Crude oil transmission pipeline - PHMSA
- Pumping System - USCG
- Tanks - PHMSA
- Support infrastructure, safe haven, roads, airstrip, helicopter pad, hangar, other buildings - CIPL, OSHA

>Identify a repair schedule, if needed - CIPL initiated
>Ensure that all agency permits and approvals have been met - ADF&G, ADNR?, EPA?
>Coordinate schedule with facility restaffing, port operations and tanker schedules - CIPL, PHMSA, ADEC, ADNR, USCG
> Work with Cook Inlet Pipeline, USCG, ADNR, PHMSA, and AOGCC to determine oil inventory at the Drift River Terminal Facility, which includes all tanks and pipelines - shippers, incl. Tesoro, Exxon, PERL, Chevron
> Determine operational alternatives and corresponding tank inventory levels until threat is eliminated (including alternative storage possibilities, potential for reverse flow to up-stream storage, water-ballasting oil tanks versus using oil to stabilize tanks) - shippers, ADNR, CIPL, AOGCC, PHMSA
> Assess potential up-stream effects to production wells in the event that oil platforms are shut-in, including - USCG, ADNR, AOGCC, shippers
- What increased risks are there for spills from these platforms?
- What are the potential effects to the oil reservoirs and recovery?
- What are the risks for partial or permanent loss of production?

Reviewed By Signatures - (PSC): **(OSC):**

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ICS 204 - Assignment List

Incident: DRIFT RIVER TERMINAL COORDINATION	**Prepared By:** Section, Operations **at** 3/31/2009 17:36
Period: Period 1 (4/1/2009 09:00 - 4/2/2009 09:00)	**Branch:** Spill Response Group
	Division/Group/Staging: Spill Response Group

Operations Personnel

Title	Name	Affiliation	Contact Number(s)
Operations Section - State Chief	Neil Huddleston	ADEC	(907) 269-7542/
Operations Section - Federal Chief		USCG	(907) 271-6700
Facility & Pipeline Mngt/Responsibl		CIPL	
Oil Spill Response Cooperative	Doug Lentsch	CISPRI	(907) 776-5129
Pipeline / Regulator	Matt Carr	EPA	(907) 271-3616
Federal- Navy Spill Response Equi	Dave Simmerman	Navy SUPSALV	

Assignments

Continue to:
> > Identify likely spill scenarios in light of current conditions.
> Identify spill response resources available at CISPRI, Cook Inlet Pipeline, Chevron, Navy SUPSALV.
- Determine status
- Deployment times, and locations

> Identify Geographic Response Strategies that can be activated to protect sensitive areas that may be impacted by a crude oil release from the terminal area.
> Identify response tactics and resources that would be used to contain and recover oil in the event of a crude oil release.
> Identify non-mechanical response tactics and resources that could be used in the event of a crude oil release.
> Recommand whether pre-staging of response assets should be done.
> Identify potential safety-related issues to personnel and response equipment in the event of ash fallout.

Reviewed By Signatures - (PSC): **(OSC):**

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ICS 204 - Assignment List

Incident: DRIFT RIVER TERMINAL COORDINATION	**Prepared By:** Larry Iwamoto	**at** 3/31/2009 17:27
Period: Period 1 (4/1/2009 09:00 - 4/2/2009 09:00)	**Branch:** Lahar and Flood	
	Division/Group/Staging: Lahar and Flood	

Operations Personnel

Title	Name	Affiliation	Contact Number(s)
Operations Section Chief	Johnny Santiago		
Director - Lahar and Flood	Bob Swenson	DNR, Director DGGS	451-5001/748-8905
	Merv Mullins	U.S. Army COE	753-2513
	Chris Nye	DNR-AVO	590-3111
	Chris Waythomas	USGS	786-7458
	Scott Linsey	NWS River Fld Forecast	271-3507
	Tina Neal	USGS	786-7458

Assignments

Assess the threat of lahars and flooding to the DROT and associated pipelines. Specific areas of focus are as follows:

1. Lahar and flood predictions
2. Laha and flood warning system
3. Floodplain risk assessment
4. Geologic hazards
5. Lahar and/or flood impacts on terminal facility
6. Tertiary containment integrity

Special Instructions for Division / Group

Conduct overflights of the area specifically to determine the extent of lahars and flooding. Compile the reports and forecasts from other groups, including operational overflight photos, DNR-AVO data, NWS weather and river flood forecasts, Army Corps of Engineers risk assessments, and USGS hydrological information.

Tactical Objective

Finalize plan for:
- Collecting high resolution elevation information (LIDAR) and process.
- Initiate fluvial geometry changes and erosion hazard
- Inspect and report an containment berm status COE
- NWS - No flood forecast possible with current data: They see risk as from volcanic lahar only
- Determine if additional monitoring equipment is warranted/wanted for safety
- There have been changes to NW corner berm system from photos -compare with COE report

Reviewed By Signatures - (PSC): **(OSC):**

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ICS 204 - Assignment List

Incident: DRIFT RIVER TERMINAL COORDINATION	**Prepared By:** McAdara, Joe **at** 3/31/2009 17:26
Period: Period 1 (4/1/2009 09:00 - 4/2/2009 09:00)	**Branch:** Debris Removal & Terminal Repair TF
	Division/Group/Staging: Debris Removal & Terminal Repair TF

Operations Personnel

Title	Name	Affiliation	Contact Number(s)
Operations Section Chief	Johnny Santiago		
Director - Debris Removal & Termin	Troy Haugeberg	CIPL	(907) 263-7994/748-4078 (ce
Division/Group Supervisor/STAM			

Tactical Objective

Site Assessment Task Force:
- Continue mud and debris removal
- Conduct integrity check. identify any damae and repairs needed to:
  - Tertiary dike and secondary containment
  - Pipelines to loading berth
  - Crude oil transmission pipeline
  - Pumping system
  - Tanks
  - Support infrastructure, safe haven, roads, airstrip, helicopter pad, hangar, other buildings
- Identify a repair schedule, if needed
- Ensure that all agency permits and approvals have been met

Location of Work

Drift River Terminal

Special Site-Specific Safety Considerations

Review facility safety plan. Conduct JSAs for unusual tasks.
Ensure comms are functional.
Ensure three points of contact; avoid slips, trips and falls.
Report any spills or sheen. Exposure monitoring has not identified inhalation hazard.

Reviewed By Signatures - (PSC): **(OSC):**

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ICS 205 - Communications Plan

Incident:	DRIFT RIVER TERMINAL COORDINATION	**Prepared By:**	McAdara, Joe at 3/31/2009 17:33
Period:	Period 1 (4/1/2009 09:00 - 4/2/2009 09:00)	**Version Name:**	3/31/2009 12:10

Phone Listing

Title	Name	Phone	Fax	Other Number - Desc.	Radio?
Incident Commander	Ficken, Rod	907-263-7993		- Cell	☐
Deputy Incident Commander	Myers, Chris	907-263-7654		- Cell	☐
Safety Officer	Miles, Rick	907-263-7370		- Cell	☐
Operations Section Chief	Santiago, Johnny	907-283-5515		- Cell	☐
Planning Section Administrative Assistant	Born, Lois	907-263-7360		- Cell	☐
Planning Section Deputy	Britt, Bill			- Office	☐
Logistics Section Chief	McAdara	907-263-7303		- Cell	☐
Logistics Section Deputy	Schneider, Paul	907-263-7309		- Cell	☐
Public Information Officer	Gonzales, Sanatana	713-432-3883		- Cell	☐
Documentation Unit Leader	Margaret Attaway	907-263-7990		- CELL	☐
USCG SITUATION UNIT	ANNE BESSER	271-6700		- OFFICE	☐
Deputy SOSC	John BROWN	269-7688		- OFFICE	☐
FoSC INLAND	Matt Carr	271-3616		- office	☐
Environmental Unit	Clark Cox	269-8565		- OFFICE	☐
Documentation Unit Leader	Patty Cunningham	269-7328		- Office	☐
SoSC	Gary Folley	262-5210		ext 234 - Office	☐
USCG Sector Anc	Allison Ferko	271-6700		- Office	☐
SARA Francis	PIO-JIC	271-6700		- Office	☐
Mike Franklin	USCGMSD Kenai	283-3292		- Office	☐
Dale Gardner	Liaison	269-7682		- Office	☐
Young Ha	IAP/Environmental Unit	269-3064		- Office	☐
Geoff Harben	Logistics Section Chief	465-5234		- Office	☐
Terry Hasenauer	USCG	271-6700		- Office	☐
Tim Hoffman	PIO-JIC	269-0598		- Office	☐
Rob Hollinger	Planning Section Lead	271-6700		- Office	☐
Neil Huddleston	Operations	269-7542		- Office	☐
Larry Iwamoto	State Planning Section Chief	269-7683		- Office	☐

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ICS 205 - Communications Plan

Incident:	DRIFT RIVER TERMINAL COORDINATION	**Prepared By:**	McAdara, Joe	**at**	3/31/2009 17:33
Period:	Period 1 (4/1/2009 09:00 - 4/2/2009 09:00)	**Version Name:**	3/31/2009 12:10		

Phone Listing

Title	Name	Phone	Fax	Other Number - Desc.	Radio?
Mala Kalyan	IAP/Environmental Unit Leader	269-7435		- Office	☐
Doug Lentsch	Technical Support	776-5129		- Office	☐
Joe LoSciuto	FoSO	271-6700		- Office	☐
Gayle Martin	Environmental Unit	267-2541		- Office	☐
Jan McElwain	Finance Section	465-5290		- Office	☐
Dave McMahan	Environmental Unit	269-8723		- Office	☐
Shannon Miller	Environmental Unit	269-8555		- Office	☐
David Morse	USCG Sector Anc	271-6700		- Office	☐
Colleen Parker	USCG Sector ANC	271-6700		- Office	☐
Stephen Pearson	USCG Sector ANC	271-6700		- Office	☐
Bob Petit	Situation Unit	262-9210		- Office	☐
Jim Robertson	Deputy FOSC	209-7830		- Office	☐
Jennifer Russell	USCG Sector	271-6700		- Office	☐
Steve Rusell	Operations Section Chief	262-9210		x222 - Office	☐
Secc	Support Branch	428-7100		- Office	☐
Bryan Shay	USCG Sector ANC	271-6700		- Office	☐
Dave Simonds	USCGLiaison	271-6700		- Office	☐
Camille Stephens	JIC Website	465-5242		- Office	☐
Jim Stevenson	Logistics	344-7380		- Office	☐
Richard Vanderhoek	Environment Unit	269-8782		- Office	☐
John Whitney	Scientificd Support Coordinator	271-3139		- Office	☐
Frank Wesser	Situation Unit Leader	269-3062		- Office	☐
Alan Wien	Dpty Planning Section Chief/Liaison	376-1865		- Office	☐
Technical Specialists				-	☐
Roger Burleigh	Tech Specialist Engineering	269-7538		- Office	☐
Shannon DeWandel	Tech Specialist C-Plan	269-7541		- Office	☐
Dennis Hinnah	Tech Specialist-Federal C-Plans	271-4937		- Office	☐

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ICS 205 - Communications Plan

Incident:	DRIFT RIVER TERMINAL COORDINATION	**Prepared By:**	McAdara, Joe	**at**	3/31/2009 17:33
Period:	Period 1 (4/1/2009 09:00 - 4/2/2009 09:00)	**Version Name:**	3/31/2009 12:10		

Phone Listing

Title	Name	Phone	Fax	Other Number - Desc.	Radio?
Allison Iversen	Tech Specialist	269-8806		- Office	☐
Tom Johnson	Primary Contact	271-4934		- Office	☐
Chris Nye	Div of Geological and Geophysical Surveys	474-7430		- Office	☐
StateCMT				-	☐
Larry Dietrick	CMT Lead	465-5255		- Office	☐
Cathy Foerster	Agency Representative	793-1221		- Office	☐
Bob Mattson	DecCMT Response Advisor	465-5349		- Office	☐
Kevin Banks	Director, Div of Oil and Gas	269-8781		- Office	☐
Ira Rosen	Alaska Risk Assessment	465-6219		- Office	☐
Betty Schorr	DecCMT C-Plan Advisor	269-7566		- Office	☐
Bob Swenson	Director, Div of Geological and Geophysical Survey	451-5001		- Office	☐

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ICS 206 - Medical Plan

Incident:	DRIFT RIVER TERMINAL COORDINATION	**Prepared By:**	McAdara, Joe **at** 3/31/2009 11:36
Period:	Period 1 (4/1/2009 09:00 - 4/2/2009 09:00)	**Version Name:**	Drift River

Medical Aid Stations

Name	Location	Paramedics (On-Site)	Phone	Radio
Central Peninsual Hospital	Soldotna, AK	Yes	262-2266	No
AK National Guard	Anchorage, AK	Yes	907-428-7230	No
Fairweather Inc.	Anchorage, AK	Yes	907-258-3446	No
Dr. Marcus Deede	Soldotna, AK	Yes	262-6622	No
Nikiski Fire Department	Nikiski, AK	Yes	283-2451	No

Transportation (Ground and/or Air Ambulances Services)

Name	Location	Paramedics	Phone	Radio
Nikiski Emergency Response	Nikiski, AK	Yes	911	No
Providence Life Flight	Anchorage, AK	Yes	907-243-5433	No
Security Aviation	Anchorage, AK	No	(907) 248-2677	No
ERA Aviation (speak to Shane)	Nikiski Heliport	No	776-6748	No

Hospitals

Name	Location	Helipad	Burn Center	Phone	Radio
Central Peninsula General Hospital	Soldotna, AK	Yes	No	(907) 262-4404 24 h	No
Alaska Regional Hospital	Anchorage, AK	Yes	No	(907) 276-1130/175	No
Providence Alaska Medical Center	Anchorage, AK	Yes	No	(907) 562-2211	No
South Peninsula Hospital	Homer, AK			(907) 235-8101	No
Peninsula Medical Center	Kenai, AK			(907) 262-9341	No
Alaska Native Medical Hospital	Anchorage, AK	Yes		(907) 563-2662	No

Special Medical Emergency Procedures

Emergency medical helicopter service through ERA (Initial); Lifeflight from Providence Hospital and U.S. Coast Guard. Nikiski Paramedics (Central Peninsula Emergency Services) will respond and escort to Central Peninsula Hospital. In the Kenai Borough (911) can be used for contacting and mobilization of local police, Alaska State Troopers, and Ambulance

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Drift River Terminal Coordination
ICS 207 Organization Chart (as of March 31, 2009)

STATE CRISIS MANAGEMENT TEAM

Larry Dietrick – DEC
Bob Swenson – DNR
Kevin Banks – DNR
Bob Mattson – DEC
Betty Schorr – DEC
Ira Rosen – DEC
Cathy Foerster - AOGCC

CMT Liaison
Larry Iwamoto

UNIFIED COMMAND

FOSC – Joe LoSciuto (USCG)
SOSC – Gary Folley (DEC)
IC – Rod Ficken (CIPL)

DFOSC – Jim Robertson (USCG)
DSOSC - John Brown (DEC)
DIC- Chris Myers (CIPL)

COMMAND STAFF

Liaison Officer – Dale Gardner (DEC)
Alan Wien (DEC)
Legal Officer – Rob McMillian
Safety Officer – Rick Miles (CIPL)
Information Officer – Sara Francis (USCG)
Tim Hoffman (DEC)
Camille Stephens (DEC)
Santana Gonzales (CIPL)

Operations

Johnny Santiago (CIPL)
Jim Rosenberg (USCG)
Steve Russell (DEC)

Planning

Lois Born (CIPL)
Bill Britt, Deputy (CIPL)
Alan Wien (DEC)
Rob Hollinger (USCG)
Terry Hasenauer (USCG)

Logistics

Joe McAdara (CIPL)
Geoff Harben (DEC)
Paul Schneider (CIPL)
Gordy Nisler (CIPL)

Support Branch
DMVA/SECC – 428-7100

Finance/Admin

Susan Ellenbecker (CIPL)

Facility Restart Group/Oil Movement Group

CIPL
ADEC
DNR
PHMSA
PHMSA
USCG

Troy Haugeberg
Shannon DeWandel
Dennis Hinnah
Allison Iverson
Tom Johnson
Angela Hollis

Situation Unit
Frank Wesser (DEC)
USCG Sector Anchorage

Documentation Unit
Margaret Attaway (CIPL)
Juanita Lovett (CIPL)
Megan Reider (TRG)
Patty Cunningham

Spill Response Group
Doug Lentsch (CISPRI)
Mark Wagner (DRAT)
Matt Odum (DRAT)
Karl Breedlove (PST)
Bianca Witkowski (USCG)
John Whitney (NOAA)

Lahar and Flood
Forecasting Group
DNR-Lahar (Bob Swenson)
ON CALL
Jim Aldrich-CIPL
Merlin Mullen-COE
Chris Nye-AVO
Tina Neal-USGS
Scott Linsey-NWS

IAP/Environmental Unit
Chris Holden (CIPL)
Mala Kalyan (DEC)
Young Ha (DEC)
Sue Saupe (CIRCAC)
ON CALL
Clark Cox (DNR)
Shannon Miller (DNR)
Gayle Martin (ADF&G)
Dave McMahan (DNR-SHPO)
Richard Vanderhoek (DNR-SHPO)

Tech Specialists
Roger Burleigh (DEC)
Shannon DeWandel (DEC)
Allison Iverson (DNR)
Chris Nye (AVO-DNR)
John Whitney (NOAA-SSC)
Tom Johnson (PHMSA)
Dennis Hinnah (PHMSA)

ICS 208 - Site Safety Plan

Incident:	DRIFT RIVER TERMINAL COORDINATION	**Prepared By:**	Miles, Rick	**at** 3/31/2009 18:01
Period:	Period 1 (4/1/2009 09:00 - 4/2/2009 09:00)	**Version Name:**	Draft CIPL 3/31/09	

Applies To Site: Drift River Terminal

Products: Volcanic Ash, Crude Oil (Attach MSDS)

SITE CHARACTERIZATION

Water:	Cook Inlet		
Wave Height:	5 feet	**Wave Direction:**	Southwest
Current Speed:		**Current Direction:**	
Land:	Brushland	**Use:**	Industrial
Weather:	Snowy	**Temp:**	Mid 30s Fahrenheit
Wind Speed:	knots	**Wind Direction:**	Northeast

Pathways for Dispersion: Air

Site Hazards

- [x] Boat safety
- [x] Chemical hazards
- [x] Cold Stress
- [ ] Confined Spaces
- [ ] Drum handling
- [x] Equipment operations
- [x] Electrical operations
- [ ] Fatigue
- [x] Other
  Volcanic ash
- [x] Fire, explosion, in-situ burning
- [ ] Heat stress
- [x] Helicopter operations
- [ ] Lifting
- [x] Motor vehicles
- [x] Noise
- [ ] Overhead/buried utilities
- [ ] Plants/wildlife
- [ ] Other
- [ ] Pump hose
- [x] Slips, trips, and falls
- [ ] Steam and hot water
- [ ] Trenching/Excavation
- [ ] UV Radiation
- [ ] Visibility
- [x] Weather
- [x] Work near water
- [x] Other

Air Monitoring

%O2: 20.9 **%LEL:** 0 **ppm Benzene:** NA

ppm H2S: 0.0 [x] **Other (Specify):** Volcanic ash particles (lab)

CONTROL MEASURES

Engineering Controls

- [ ] Source of release secured
- [x] Site secured
- [x] Valve(s) closed
- [x] Facility shut down
- [x] Energy sources locked/tagged out
- [ ] Other

Personal Protective Equipment

- [ ] Impervious suit
- [ ] Inner gloves
- [x] Outer gloves
- [x] Flame resistance clothing
- [x] Hard hats
- [x] Respirators
- [x] Eye protection
- [x] Personal floatation
- [x] Boots
- [ ] Other

Additional Control Measures

- [ ] Decontamination stations established
- [ ] Sanitation facilities provided
- [ ] Illumination provided
- [ ] Medical surveillance provided

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ICS 208 - Site Safety Plan

Incident:	DRIFT RIVER TERMINAL COORDINATION	**Prepared By:**	Miles, Rick	**at** 3/31/2009 18:01
Period:	Period 1 (4/1/2009 09:00 - 4/2/2009 09:00)	**Version Name:**	Draft CIPL 3/31/09	

WORK PLAN

- [ ] Booming
- [ ] Skimming
- [ ] Vac trucks
- [ ] Pumping
- [ ] Excavation
- [x] Heavy equipment
- [ ] Sorbent pads
- [ ] Patching
- [ ] Hot work
- [ ] Appropriate permits used
- [x] Other Assessment

TRAINING

- [x] Verified site workers trained per regulations

ORGANIZATION

Title	Name	Telephone/Radio
Incident Commander:	Rod Ficken	907 351-2521
Deputy Incident Commander:	Chris Myers	907 398-9955
Safety Officer:	Rick Miles	907 382-4522
Public Affairs Officer:	Sara Francis	907 301-2074
Other:		

EMERGENCY PLAN

- [x] Alarm system
- [x] Evacuation plan
- [x] First aid location

Notified

[ ] Hospital	Phone:
[ ] Ambulance	Phone:
[ ] Air ambulance	Phone:
[ ] Fire	Phone:
[ ] Law enforcement	Phone:
[ ] Emergency response/rescue	Phone:

PRE-ENTRY BRIEFING

- [x] Initial briefing prepared for each site

Attachments / Appendices

- Aircraft Travel
- Exposure Monitoring Data
- Site Hazards
- Safe Work Practice for working in Volcanic Ash
- Respirator Use Guidelines
- Monitoring Program
- Safe Work Practices for Boats
- Monitoring Program

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ATTACHMENT: MONITORING PROGRAM

Monitoring will be performed on an ongoing basis for airborne hydrocarbons. Direct reading instruments are being used. Personal exposure monitoring may be conducted at the recommendation of the Site Safety Officer or Industrial Hygienist. Laboratory analysis is required for some monitoring samples. Results will be made available to comany and contractor employees. See **Site Characterization and Analysis Form Attachment** and **Exposure Monitoring Form Attachment** for current data. These forms must be filled out completely, and updates to the information faxed or otherwise submitted to the Safety Officer for attachment or amendment to the Site Safety and Health Plan. All updates must be retained and attached to the Site Safety and Health Plan.

SITE:
DATE:

A. MONITORING PLAN:

1. Air monitoring at the spill site and surrounding areas will be done to ensure site worker and community safety.
2. Air monitoring will be done during work shift site characterization, and on each work shift during cleanup activities until results indicate no further monitoring is required.
3. All monitoring done at the cleanup site will be documented and the data maintained by qualified personnel on site.
4. Monitoring will be done in accordance with OSHA 29 CFR 1910.120. Monitoring to be done:

- during initial site entry and characterization;
- if a new potential inhalation hazard is introduced into the work area;
- during cleanup activities, on each work shift;
- if a new task is begun which may involve potential inhalation exposure.

B. INITIAL SITE MONITORING

1. Monitoring will be done during initial site entry. The monitoring will include checking for:
   - oxygen (O2) deficiency using a direct reading oxygen meter;
   - flammable atmospheres (%LEL) using a combustible gas indicator;
   - benzene, hydrogen sulfide, hydrocarbons, and combustion by-products (SO_2, CO), as needed, using direct-reading instruments, colorimetric indicator tubes, and/or other valid methods.
2. Instruments will be calibrated prior to and following use.
3. All monitoring will be documented. (See attached form for example.)

C. POST-EMERGENCY MONITORING (ON-GOING)

1. Monitoring for benzene, hydrogen sulfide, hydrocarbons and combustion by-products will be done during each work shift on an on-going basis, as needed. Repeat initial site monitoring if any significant changes occur (i.e., temperature increases, more material released, wind direction changes, etc.)
2. Checks for oxygen deficiency and flammable atmospheres will be made if confined spaces are encountered, or as required.
3. Exposure monitoring shall be done as necessary. Personnel samples will be collected under the direction of the industrial hygiene personnel. Samples will be analyzed by a laboratory accredited by the American Industrial Hygiene Association.
4. Results of site monitoring will be made available to site workers' supervision for informing all affected employees. Results will be available to the Command Center for review by regulatory

agencies.

SITE MONITORING DATA (EXAMPLE)

DATE/TIME	LOCATION	%LEL	$\%O_2$	BENZENE (PPM)	H_2S (PPM)	OTHER SPECIFY (PPM)	COLLECTED BY

Guidelines for Respirator Use

Oxygen-Deficient Atmosphere

NIOSH defines an oxygen-deficient atmosphere as any atmosphere containing oxygen at a concentration below 19.5% at sea level. NIOSH certification of supplied-air or air-purifying respirators is limited to those respirators used in atmospheres containing at least 19.5% oxygen, except for those supplied-air respirators equipped with auxiliary self-contained breathing apparatus (SCBA).

The minimum requirement of 19.5% oxygen at sea level provides an adequate amount of oxygen for most work assignments and includes a safety factor. The safety factor is needed because oxygen-deficient atmospheres offer little warning of the danger, and the continuous measurement of an oxygen-deficient atmosphere is difficult.

At oxygen concentrations below 16% at sea level, decreased mental effectiveness, visual acuity, and muscular coordination occur. At oxygen concentrations below 10%, loss of consciousness may occur, and below 6% oxygen, death will result. Often only mild subjective changes are noted by individuals exposed to low concentrations of oxygen, and collapse can occur without warning.

Since oxygen-deficient atmospheres are life-threatening, only the most reliable respirators are recommended; the most reliable respirators are the self-contained breathing apparatus or the supplied-air respirators with auxiliary self-contained units. Because a high protection factor is not necessary to ensure an adequate supply of oxygen even in an atmosphere containing no oxygen, any certified self-contained unit is adequate. All aspects of a respiratory protection program must be instituted for these recommendations to be valid.

Exposure Limits

The legal, enforceable exposure limit is the permissible exposure limit (PEL) set by OSHA. NIOSH develops recommended exposure limits (RELs) for hazardous substances. To formulate these recommendations, NIOSH evaluates all known available medical, biological and engineering, chemical trade, and other information relevant to the hazard. Other exposure limits that can be considered in making respirator selections include State-OSHA exposure limits (e.g., California), ACGIH TLVs, AIHA WEELs, corporate exposure limits, etc. The effectiveness of this RSL is limited to the adequacy of the selected exposure limits in protecting the health of workers. Exposure limits based on a thorough evaluation of more recent or extensive data should be given priority.

For all chemicals that cause irritation or systemic effects but do not cause carcinogenic effects, it is currently believed that a threshold exposure concentration exists such that virtually all persons in the working population (with the possible exception of hypersensitive individuals) would experience no adverse health effects.

Other variables such as the specific situation, worker, or job may influence the selection of the appropriate exposure limit for a given contaminant. For example, the effects of some hazardous substances may be increased due to exposure to other contaminants present in the workplace or the general environment or to medications or personal habits of the worker. Such factors, which would affect the toxicity of a contaminant, would not have been considered in the determination of the specific exposure limit. Also, some substances are absorbed by direct contact with the skin and mucous membranes, thus potentially increasing the total exposure.

Immediately Dangerous to Life or Health (IDLH)

An IDLH exposure condition is one that poses a threat of exposure to airborne contaminants when that exposure is likely to cause death or immediate or delayed permanent adverse health effects or prevent escape from such an environment. The purpose of establishing an IDLH exposure level is to ensure that the worker can escape from a given contaminated environment in the event of failure of the respiratory protection equipment. The IDLH is considered a maximum level above which only a highly reliable breathing apparatus providing maximum worker protection is permitted. Any appropriate approved respirator may be used to its maximum use concentration up to the IDLH concentration.
In establishing the IDLH concentration, the following conditions must be assured:

a. The ability to escape without loss of life or immediate or delayed irreversible health effects. (Thirty minutes is considered the maximum time for escape so as to provide some margin of safety in calculating the IDLH.)

b. The prevention of severe eye or respiratory irritation or other reactions that would hinder escape.

Sources of information for determining whether the exposure limit for a contaminant represents an IDLH condition are as follows:

a. Specific IDLH guidelines provided in the literature such as the NIOSH Pocket Guide for Hazardous Chemical Substances (http://www.cdc.gov/niosh/npg/npg.html) and the American Industrial Hygiene Association (AIHA) Hygienic Guides.

b. Human exposure and effects data, and/or

c. Animal exposure and effects data, and/or

d. Where such data specific to the contaminant are lacking, toxicologic data from analogous substances and chronic animal exposure data may be considered.

Eye Irritation

Eye protection in the form of respirators with full facepieces, helmets, or hoods is required for routine exposures to airborne contaminants that cause any irritation to the mucous membranes of the conjunctivae or the cornea or cause any reflex tearing. Eye protection is required for contaminants that cause minor subjective effects as well as for those that cause any damage, including disintegration and sloughing of conjunctival or corneal epithelium, edema, or ulceration. NIOSH is not aware of any standards for gas-tight goggles that would permit NIOSH to recommend such goggles as providing adequate eye protection.

For escape, some eye irritation is permissible if the severity of irritation does not inhibit the escape and if no irreversible scarring or ulceration of the eyes or conjunctivae is likely.

When data on threshold levels for eye irritation are insufficient, quarter or half-mask respirators can be used, provided that the worker experiences no eye discomfort and no pathologic eye effects develop. Workers should be told that if any eye discomfort is experienced, they will be provided with respirators that have full facepieces, helmets, or hoods and that provide protection equivalent to the quarter- or half-mask respirators.

Safe Work Practices for Working in Volcanic Ash

Task	Hazard	Mitigation
Routine Facility Activities	Slips, Trips, Falls	Use 3 points of contact when exiting vehicles. Wear traction devices. Follow CIPL Safety Plan.
Working in Ashfall	Inhalation of silica particulate	Remain indoors during heavy ashfall. Wear air-purifying particulate respirator outdoors

ATTACHMENT: SITE HAZARDS

BOAT SAFETY.

See Attachment - Safe Work Practices for Boats.

CHEMICAL HAZARDS

See Attachment - Hazardous Substance Information Sheets

COLD STRESS.

See COLD STRESS

CONFINED SPACES.

See Attachment - Confined Space Entry Procedure

See Appendix - Confined Space Entry Checklist

DRUM HANDLING AND SPILL CONTAINMENT.

Drum handling at a spill site will primarily involve drums of waste and contaminated clothing. Several types of drums may be used, ranging from 5 to 55 gallons in size. All drums and containers must be properly labeled in accordance with OSHA and DOT regulations. Manual lifting and moving of drums should be kept to a minimum. Mechanical devices and dollies should be used for moving heavy drums.

EQUIPMENT OPERATIONS FOR CLEANUP/CONTAINMENT

Heavy Equipment:

Operation of heavy equipment, such as a front end loaders, bulldozers and cranes must be done in accordance with applicable OSHA regulations. The operators must be trained and qualified to operate powered industrial vehicles. The operator and helper must be familiar with proper signaling techniques. Buckets must not be used as a lift; hard-hats must be worn; and a fire extinguisher must be present on board equipment.

Cranes must be operated in accordance with the manufacturers' instructions and established construction practices. Outriggers must be fully extended to assure maximum stabilization of the equipment. Cranes must be operated only where the ground provides adequate support. Rigging components must be inspected daily. Only certified wire rope slings with manufactured sledges or manufactured web slings will be used. Certification documents must be received and filed for all slings. Each sling must be marked or tagged with its rated capacity and slings must not be used with loads in excess of their rated capacity. (29 CFR 1910.184) Personnel shall not be allowed under the boom or load except for the minimum time necessary to hook up or unhook the load. (29 CFR 1910.180)

Forklifts:

Only trained and authorized operators shall be allowed to operate forklifts. Horseplay is not permitted. Only stable or safely arranged loads that do not exceed the capacity of the truck shall be handled. Fuel tanks must not be filled while the engine is running. Operators shall perform daily or pre-use inspections of the forklift to be operated. A separate inspection will be made each shift during multi-shift operations. Records of inspections must be maintained. All inspection discrepancies must be corrected prior to operation of the forklift. If the discrepancy cannot be corrected immediately, the forklift must be tagged out of service. 29 CFR 1910.178

Hand/Power Tools:

Hand tools are non-powered. The greatest hazards posed by hand tools result from misuse and improper maintenance. Saw blades, knives or other tools should be directed away from other employees. Dull tools can be more hazardous than sharp tools. Personal protective equipment, such as wire mesh gloves, wrist guards, arm guards, aprons and belly guards may be appropriated. Spark resistant tools (brass, plastic, aluminum and wood) should be used around flammable substances.

Power tools are based on the power source used: electric, pneumatic, liquid fuel, hydraulic, and powder-actuated. The following general precautions should be observed: never carry power tools by the cord; never yank the cord to unplug the tool; keep cords and hoses away form heat, oil and sharp edges; disconnect tools when not in use and before servicing; keep observers a safe distance away; secure work with clamps or a vise freeing both hands to operate the tool; avoid accidental starting; maintain tools with care; keep them sharp and clean; safeguard hazardous moving parts of the tool; and, protect the operator from: point of operation, in-running nip points, rotating parts, and flying chips and sparks. Many tools including drills, tappers, fastener drivers, disc sanders, belt sanders and others must be equipped with momentary contact "on-off" control switch.

Employees using hand and power tools and exposed to the hazards of falling, flying, abrasive and splashing objects, or exposed to harmful dusts, fumes, mists, vapors or gases must be provided with the particular personal equipment necessary to protect them from the hazard. All hazards involved in the use of [hand] and power tools can be prevented by following five basic safety rules: Keep all tools in good condition with regular maintenance; use the right tool for the job; examine each tool for damage before use; operate according to the manufacturer's instructions; and provide and use the right protective equipment.

ELECTRICAL HAZARDS.

Electrical hazards shall be identified and marked with suitable placards, barricades, or warning tape as necessary.

FATIGUE.

Working long hours without rest may be required, especially during the early phase of response. This, coupled with the stress of the situation and wearing required PPE, can contribute to fatigue. Symptoms include loss of concentration, errors in judgment, irritability, sleepiness, soreness and stiffness in joints and muscles. Rest and sleep are the primary treatments for fatigue. Stress can be addressed by relaxation techniques, such as deep breathing, stretching, taking breaks, and other methods.

FIRE, EXPLOSION AND IN-SITU BURNING

Flammable and combustible materials may be encountered at the spill site. These may be fuels for vehicles and equipment or the spilled material itself. However, some cleanup chemicals such as solvents may also be used. Refer to the container label or proper MSDS for more information on these materials.

Precautions should be taken when working with either flammables or combustibles:

- No smoking
- Store in approved, labeled containers
- Ensure containers used to transfer materials are properly grounded
- Provide fire extinguishers in areas where these materials are used

In-situ burning presents health and safety hazards not only to the workers engaged in the burning activities, but also to individuals downwind of the burn site. Health and safety hazards include:

- Physical hazards: explosions, heat, loss of control of burning oil (e.g., flashback to the spill source, loss of containment).
- Inhalation of airborne burn products: These may include toxic and irritating substances such as: smoke particles, carbon monoxide, carbon dioxide, sulfur oxides, nitrogen dioxide, polycyclic aromatic hydrocarbons, acid aerosols, aldehydes, acrolein, polynuclear aromatic hydrocarbons, volatile organic hydrocarbons.

Safety factors to be considered include status of the spill (e.g., burning, being lightened, personnel being evacuated, etc.); weather and sea conditions; distance of intended burn location to the spill source; type and condition of the oil; proximity of ignitable vegetation, docks, and other facilities; and control measures.

A detailed Burn Plan should be prepared. This should include a summary of safety and control measures. Care must be taken to protect all personnel from any harmful exposure to heat and or combustion products.

HEAT STRESS

See Heat Stress

HELICOPTER OPERATIONS

Helicopters may be in use at the spill site for overflight surveillance; site characterization; personnel/equipment transport; and rescue/medical transport. Safe work practices for passengers and other personnel include:

1. Passengers must receive a safety briefing from the pilot before liftoff. The briefing should include: safety features and equipment and their location on the individual aircraft; helicopter underwater escape procedures when appropriate; and, emergency information.
2. Passengers and ground crew members approaching helicopters shall stay in a crouched position, and must be in clear view of the pilot while approaching or departing a helicopter.
3. Passengers and ground crew should approach/depart from the FRONT of the helicopter only when signaled by the pilot; and shall never walk under or around the tail, rotor or exhaust.
4. Loose fitting clothing, hats, hard hats, or other gear, which might be caught in rotor downwash, must be secured or

removed within 100 feet of operating helicopters.

5. Passengers shall maintain a distance of 50 feet from helicopters while rotors are turning. Ground crew should also maintain this distance, unless specific work practices are developed for closer work.
6. Passengers shall wear seat belts at all times and personal floatation devices when flying over bodies of water.
7. Passengers and ground crew shall wear hearing protection (which may include communication headsets or helmets) at all times around operating helicopters.
8. Passengers shall assist the pilot in watching for other traffic or ground obstacles, as directed by the pilot.
9. During emergency landing in water:
   a. Do not exit until instructed to do so by the pilot after rotor blades stop turning or pilot signals all clear.
   b. Do not inflate personal floatation devices until outside of the helicopter.

LIFTING

Use available machinery and lift-aiding equipment before lifting heavy loads. Use team work for heavy and numerous small loads. Do not rush work. Use of chemical protective clothing will restrict movement and visibility. Use extra care while lifting in protective gear.

Safe lifting techniques:

1. Position feet properly. Feet should not be close together, but should be close to the load to help keep the body close to the center of gravity. One foot should be positioned in the direction the load will be moved to avoid twisting or turning of the back during the lift. Turn using your feet and not by twisting the back.
2. Before and during the lift keep the load close to you to keep the center of gravity over your feet.
3. Check your grip and test the weight of the load before lifting.
4. The back should be straight when starting the lift and the knees should be bent. This will help to ensure that much of the lifting is done with the legs. To help keep the back straight, the chin should be tucked in and head kept up.
5. Keep the stomach muscles tight while lifting. Keep your back straight during the lift and avoid twisting motions in particular.
6. Move slowly and deliberately.

MOTOR VEHICLES

All motor vehicles must be operated in accordance with all state and local motor vehicle regulations. Posted speed limits must be observed and seat belts worn by all occupants. Check the outside of the vehicle and familiarize yourself with the interior and make all adjustments before driving. Drive defensively. Employees involved in any accident must inform their supervisor as soon as possible. The driver is responsible for getting as much accident information as possible. 29 CFR 1910.178

Safe use of motor vehicles is essential at the spill site and in traveling to and from the site. Vehicles should be checked:

Tires inflated	Fuel	Spare tire	Lights	Windshield wipers
Brakes	Turn signals	Seat belts	Horn	

NOISE

Noise may be a significant hazard at a spill cleanup site. Noise may be generated by: pumps, generators, compressors, trucks, and, heavy equipment. At a spill site, high noise areas and equipment will be identified.

Areas requiring the use of hearing protection will be so posted. Hearing protection will be made available as required. As a general rule, hearing protection should be worn in areas where noise prevents hearing ordinary conversation. Since hearing loss caused by high noise exposure may not be noticed at first, it is important to wear the hearing protection in high noise areas.

OVERHEAD AND BURIED UTILITIES

If work has to be performed near overhead lines, the lines must be de-energized and grounded, or other protective measures must be provided before work is started. Arrangements must be made with the person or organization that operates or controls the electric circuits to de-energize and ground them. If protective measures such as guarding, isolating, or insulating are provided, these precautions shall prevent employees from contacting such lines directly with any part of their body or indirectly through conductive materials, tools, or equipment. Clearance from overhead power lines to persons or equipment must be at least 10 feet unless the voltage exceeds 50 kV. If a vehicle is in transit with its structure lowered, the clearance may be reduced to 4 feet. If voltage exceeds 50 kV, the clearance must be increased by 4 inches for each 10 kV. There are specific approach distances and insulation requirements given in the referenced OSHA standard. (29 CFR 1910.333)

The estimated location of buried utility installations, such as sewer, telephone, fuel, electric, water lines, or any other underground services should be determined before work begins. Utility companies or owners must be contacted, advised of the proposed work and informed of the urgency of the situation. OSHA states the aforementioned companies or owners have 24 hours to respond unless state or local laws allow more time. Excavation may proceed if the exact location of the installation cannot be determined or the utility company or owner does not respond in the time period required by law. When the excavation approaches the estimated location of the underground installations, the exact location must be determined by safe and acceptable means. While the excavation is open the installation must be protected, supported or removed as necessary to safeguard employees. (29 CFR 1926.651)

PLANTS/WILDLIFE

A variety of plants and wildlife will be encountered at most spill sites.

Plants

1. Avoid contact with all plants as much as possible. Poison ivy, poison oak and poison sumac are hard to identify and may be hidden by other plant growth.
2. Train all personnel to recognize poisonous plants and to wear appropriate protective clothing when handling.
3. Train personnel in basic first aid for plant contact.

Wildlife

1. Examples of wildlife possibly encountered at a spill site include: stray dogs; bears; moose; beaver; otters; snakes; birds; fish; skunks and other small animals; alligators; nutria; and, insects.
2. Avoid contact with all wildlife, particularly oiled, injured or dead wildlife. Report visual observation of such wildlife to supervisor.
3. Discuss wildlife hazards at the site during pre-entry briefings to ensure cleanup personnel are aware of preventive and first aid measures.
4. Identify personnel with allergies to wildlife and plants, particularly those allergic to insect stings and bites. Be prepared to provide immediate first aid to these individuals if needed.
5. Train all personnel to recognize wildlife, especially poisonous snakes and insects.
6. Proper response and rescue of wildlife will be made by personnel trained in handling wildlife.

7. Train personnel in basic first aid for bites and stings. First aid should be administered by trained first aid responders if possible.

See Appendix - First Aid for Bites, Stings and Poisonous Plants.

POOR VISIBILITY

Fixed or portable lighting shall be maintained for dark areas or work areas after sunset to ensure that sufficient illumination is provided. (See Table H-120.1 of 29 CFR 1910.120(m) for Minimum Illumination Intensities.)

PUMPS AND HOSES

Pumps and hoses may be used at the spill site to apply water, steam or chemicals for cleanup and/or decontamination. They may also be used for liquid waste collection. Caution should be used when working in areas where hoses are in use as they present a tripping hazard. Additionally, when using pumps and hoses, determine their last contents to avoid contamination or chemical reaction. Use the proper pump and hose for the job.

STEAM AND HOT WATER

Steam and hot water may be used during the spill cleanup. Use caution when working with these materials since they can cause severe burns. Wear gloves and eye/face protection when handling and be careful not to spray in the direction of other personnel.

UV RADIATION

Ultraviolet radiation from sunlight can be a significant hazard at a spill site. Cleanup will primarily be done outdoors; therefore, sunscreens with the appropriate protection factor and UV-tinted safety glasses may be needed. Other types of radiation, such as from welding and cutting, may also be a hazard. Avoid direct visual contact and use proper eye protection as needed.

SLIPS, TRIPS AND FALLS

Slips, trips and falls on oily surfaces are the major cause of injuries at an oil spill site. Many of these injuries occur in the first few

minutes of work before workers realize the conditions and begin to take precautionary measures. When entering a spill site, walk slowly and carefully in oil-coated areas. Be especially careful when walking on oil-covered rocks. Oil-resistant safety-toe boots with non-slip soles should be worn at all times in areas containing oil-covered rocks. This type of footwear can help to minimize the falling hazard, but will not prevent it. Open manholes, mud, pits, trenches, or similar hazards shall be identified and marked with suitable placards, barricades, or warning tape as necessary.

TRENCHING AND EXCAVATION

All surface encumbrances that may create a hazard to employees shall be removed or supported to safeguard employees. Consideration must be given to underground installations. Appropriate precautions must be taken with regard to soil type and conditions to avoid cave-in. Employees must be provided with an approved means of access and egress. Adequate precautions shall be taken to prevent employee exposure to hazardous atmospheres. Where hazardous atmospheres exist, emergency rescue equipment shall be readily available. Employees must be protected from cave-ins, falling loads, mobile equipment, water accumulation, loose rock and soil. A competent person must inspect the excavation, adjacent area, and protective systems prior to the start of work, as needed throughout the shift and after every rainstorm or hazard increasing occurrence. (29 CFR 1926.65 Subpart P)

WEATHER

Exposure Monitoring Data

This document must be filled out at intervals determined by the Site Safety and Health Officer. A new form will be used each time and faxed or otherwise submitted to the Safety Officer for attachment or amendment to the Site Safety and Health Plan. All updates to this information must be retained and attached to the Site Safety and Health Plan.

Date:3/31/09 **Time:**

Location:

Type Monitoring	Results	Comments
Oxygen	21%	Expected result
LEL	0%	Expected result
H_2S	0.0 ppm	Expected result
Carbon Monoxide	0.0 ppm	Expected result
Total Hydrocarbons	Awaiting laboratory results	
Benzene	None anticipated (no spills)	

Other: _____

Instrumentation used:

Last date of calibration:

Survey performed by:

Comments:

_____	_____	_____
Signature of Cognizant Authority	Title	Date & Time

ATTACHMENT: SAFE WORK PRACTICES FOR BOATS

ATTACHMENT: SAFE WORK PRACTICES FOR BOATS

Ensure that all boats and operators comply with the appropriate state and federal regulations. In addition to the items discussed below, certain types of vessels will require such items as USCG approved fire extinguishers, backfire flame control, powered ventilation, sound signaling devices (different from emergency signals), navigation lights/signals, pollution placards, and marine sanitation devices.

1. Boat operators must familiarize themselves and passengers with safety features and equipment on their boats.
2. Boats must be operated by qualified individuals.
3. Life jackets, work vests, cold water immersion suits, or other appropriate USCG approved Personal Floatation Devices (PFDs) must be worn by personnel in boats.
   a. Use of cold water immersion suits is particularly critical under conditions of cold stress.
   b. Types of PFDs:
      - Type I Off-shore life jacket provides the most buoyancy. It is effective for all waters and intended specifically for open, rough, or remote waters where rescue may be delayed.
      - Type II Near-shore buoyancy vests are intended for calm, inland water, or where there is a good chance of quick rescue.
      - Type III Floatation aids are good for calm, inland water, or where there is a good chance of quick rescue. Examples: float coats, fishing vests, and ski vests.
      - Type IV These are throwable devices, not intended to be worn or to replace those that are worn.
      - Type V Special Use. These are intended for specific activities (according to the conditions on the labels). Some examples: deck suits, cold water immersion suits, work vests, and hybrid PFDs below.
      - Type VI Hybrid Inflatables. These PFDs contain a small amount of inherent buoyancy and an inflatable chamber. Performance equals that of a Type I, II, or III PFD (as noted on the label) when inflated.
4. Boats should generally not be operated for oil recovery after sunset. If this is required or poses minimal risk, areas of operation should be carefully prescribed, and individual boat operators should maintain a communication schedule with a shore base. Each boat should be fully equipped with appropriate running lights and emergency signaling devices, and personnel onboard should be wearing emergency night signaling devices.
5. Distress signals (three or more for day and three or more for night) should be carried on board all vessels. These devices may be required by regulation. They may be stored on board or issued to individuals. If stored on board, they should be in a sealed, watertight, orange container marked "DISTRESS SIGNALS".
   a. USCG-approved pyrotechnic visual distress signals include red flares (hand-held or aerial), range smoke (hand-held or floating), and launchers (for aerial red meteors or parachute flares). Pyrotechnic devices should not be used near flammable product spills.
   b. Non-pyrotechnic distress signals are not approved individually, but must meet certain requirements. They should be in serviceable condition, readily accessible, and certified by the manufacturer as complying with USCG requirements. These devices include orange distress flags, and electric distress lights.
   c. Distress flags are day signals only. They must be at least 3x3 feet with a black square and ball on an orange background.
      i. Electric distress lights are for night use only. These devices automatically flash the international SOS code (...- - -...) so a flashlight IS NOT considered a distress signal. Under inland navigation rules, a high intensity strobe light is considered a distress signal.
      ii. It is illegal to display visual distress signals on the water, except when assistance is required.
6. Boat operators must keep their supervisors informed of their area of operations, especially when they change their work area (if plans call for a boat to move to another location during a shift, the operator should advise the supervisor of his actual time of departure).
7. Boat operators should never anchor their boats by the stern. This is typically the lowest point on the boat due to design and/or loading, and is often squared off, making it vulnerable to swamping.
8. Portable fuel tanks should be filled outside of the boat. All sources of ignition in the area of fueling (e.g., engines,

stoves, or heat-producing equipment, and electrical equipment) must be removed while fueling.

9. Strict adherence to the buddy system must be observed in boats; and all boats should be in direct visual or radio contact with the shore base at all times.
10. To avoid slipping on wet decks or falling in boats, personnel should remain seated while boat is underway. Horseplay and speeding are strictly prohibited. Personnel should keep their center of gravity as low as possible while working in boats.
11. Boat operators must also ensure that boats are not overloaded. The capacity should be marked on a label on the boat; if not, a general rule of thumb is: Length x Width / 15 = People (150 lbs). Since equipment adds to the weight, it should be considered as well. Weight should be distributed evenly.
12. Personnel working in or operating boats should wear appropriate shoes/boots designed to help maintain traction on wet surfaces.
13. Safety sunglasses or hearing protection should be worn by personnel working in, or operating,boats where appropriate.
14. Fixed ladders or other substantial access/egress should be provided at boat transfer locations from low water line to platform.
15. Depending on the specific nature of the operations (e.g., work in remote areas), other emergency equipment that should be considered includes: anchors, radios, bailers, first aid kits, and additional means of propulsion (e.g., paddles).
16. Workers should be cautioned about using their legs or arms to fend off during docking, or getting their hands, arms, or legs between vessels or between vessels and docks or fixed structures.

ICS 224 - Environmental Unit Summary

Incident:	DRIFT RIVER TERMINAL COORDINATION	**Prepared By:**	Kalyan, Mala	**at** 3/31/2009 16:29
Period:	Period 1 (4/1/2009 09:00 - 4/2/2009 09:00)	**Version Name:**	ADEC 3/31/09	

Area Environmental Data

See attachments from ADNR, ADF&G, DOI and NOAA

Priorities for Mitigating Environment and Cultural Impacts

See GRS for Little Jack Slough, Drift River, Big River, Kustatan River, and Swamp Creek at the State Website.

Wildlife Assessments and Rehabilitation

No impacts to wildlife have been observed to date.

Permits (Dispersants, Burning, and/or Other

No permits are required at this time.

Waste Management

No Waste Management Plan is required at this time.

Other Environmental Concerns

Logistical Support Needs

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ICS 230 - Daily Meeting Schedule

Incident:	DRIFT RIVER TERMINAL COORDINATION	**Prepared By:**	Attaway, Margaret	**at**	3/31/2009 18:00
Period:	Period 1 (4/1/2009 09:00 - 4/2/2009 09:00)	**Version Name:**	3/31/2009 11:22		

Meeting Name & Date/Time	Purpose	Attendees	Location
.			
Operations Briefing 4/1/2009 08:00	Present IAP and assignments to the supervisors/leaders for the next operational period.	IC/UC, Command & General Staff, Branch Directors, Division/Group Supervisors, Task Force/Strike Team Leaders	
Unified Command Objectives Meeting 4/1/2009 09:00	Review/Identify and prioritize objectives for the next operational period.	IC/UC members; SelectedCommand and General Staff, as appropriate; DOCL or Historian	
. 4/1/2009 09:01			
Command & General Staff Meeting 4/1/2009 10:00	IC/UC gives direction to Command & General staff including incident objecdtives and priorities	IC/UC, Command and General Staff	
. 4/1/2009 10:02			
AVO Briefing 4/1/2009 13:00			
. 4/1/2009 13:00			
Tactics Meeting 4/1/2009 13:00	Develop/Review primary and alternate Strategies to meet Incident Objectives for the next Operational Period	PSC, OSC, LSC, RESL, & SITL,	
. 4/1/2009 13:01			
PLANNING MEETING 4/1/2009 15:00	Reveiw status and finalize strategies and assignments to meet Incident Objectives for the next Operational Period	Determined by IC/UC.	
PLANNING MEETING 4/1/2009 15:00	Reveiw status and finalize strategies and assignments to meet Incident Objectives for the next Operational Period	Determined by IC/UC, Command, Command Staff, General Staff, RESL, SITL, ENVL, DOCL, Historian, COML, THSP, & ICS Specialist	Sheraton Hotel - Anchorage
. 4/1/2009 15:01			

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ICS 230 - Daily Meeting Schedule

Incident:	DRIFT RIVER TERMINAL COORDINATION	**Prepared By:**	Attaway, Margaret	**at**	3/31/2009 18:00
Period:	Period 1 (4/1/2009 09:00 - 4/2/2009 09:00)	**Version Name:**	3/31/2009 11:22		

Meeting Name & Date/Time	Purpose	Attendees	Location
IAP Delivery & Approval 4/1/2009 17:00			
. 4/1/2009 17:01			

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