ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION

So you've had or observed a spill, now what?

CYNTHIA KIRKHAM ALEUTIANS, WESTERN ALASKA, BRISTOL BAY UNIT SPILL PREVENTION & RESPONSE (SPAR) PREVENTION, PREPAREDNESS, AND RESPONSE PROGRAM (PPR)



### Outline

- Reporting requirements
  - Notifications
  - Forms
  - NRC Notification
- Cleanup process
  - Spill Response Containers
  - Geographic Response Strategies
  - Response Techniques
- Home Heating Oil Tanks
- Scenarios
- Class 2 Facilities



# So you've had or observed a spill. Now what?

- State Notification Requirements
  - AS 46.03.755 and 18 AAC 75.300
  - http://dec.alaska.gov/spar/ppr/spill-information/reporting
- ADEC Spill Forms
  - Spill Reporting Form
  - Monthly Oil Spill Reporting Log
  - Oil and Hazardous Materials Incident Final Report
  - Transport, Treatment & Disposal Approval Form for Contaminated Media
- National Response Center (NRC)

Who can report a spill? Anyone. When do you report a spill? It depends on the size and the receiving environment. How do you report a spill ? It also <u>depends</u> on the amount spilled and the receiving environment.



#### IT'S THE LAW! AS 46.03.755, 18 AAC 75.300, 75.325 and 18 AAC 78.200

### REPORT OIL AND HAZARDOUS SUBSTANCE SPILLS

#### **During Normal Business Hours**

call the nearest response team office:

Central Alaska:	<b>(907) 269-3063</b>
Anchorage	Fax: (907) 269-7648
Northern Alaska:	<b>(907) 451-2121</b>
Fairbanks	Fax: (907) 451-2362
Southeast Alaska:	<b>(907) 465-5340</b>
Juneau	Fax: (907) 465-5245
Alaska Pipeline:	<b>(907) 451-2121</b>
Fairbanks	Fax: (907) 451-2362

#### **Outside Normal Business Hours**

 

 Toll Free
 1-800-478-9300

 International
 1-907-269-0667

 Morthern
 Alaska

 Central
 Alaska

 Central
 Southeast

 Alaska
 Southeast

 Division of Spill Prevention and Response

 Www.decalaska.gov/spor/ppr/spillinversed

#### **Hazardous Substance**

Any hazardous substance spill, other than oil, must be reported immediately.

#### **Oil - Petroleum Products**

#### To Water

 Any amount spilled to water must be reported immediately.

#### To Land

- Spills in excess of 55 gallons must be reported immediately.
- Spills in excess of 10 gallons, but 55 gallons or less, must be reported within 48 hours after the person has knowledge of the spill.
- Spills of 1 to 10 gallons must be recorded in a spill reporting log submitted to ADEC each month.

#### To Impermeable Secondary Containment Areas

 Any spills in excess of 55 gallons must be reported within 48 hours.

#### Additional Requirements for Underground Storage Tank Spill Reporting

Regulated Underground Storage Tank (UST) systems are defined at 18 AAC 78.005. Releases at heating oil tanks must be reported. You must report a suspected belowground release from a UST system, in any amount, <u>within 24 hours</u> (18 AAC 78.220(c)).

You must report if your release detection system indicates two consecutive months of invalid or inconclusive results. If you observe unusual operating conditions, sudden loss, erratic dispensing (slow flow/no flow) or discharge to soil or water, **report it to the UST Unit**:

907-269-3055 or 269-7679

rev. July/2018

### http://dec.alaska.gov /spar/ppr/spillinformation/reporting

# Who do you report to?

#### During Normal Business Hours

 Northern & Trans Alaska Pipeline Phone: (907) 451-2121
 Fax: (907) 451-2362

#### Central

Phone:(907) 269-3063Fax:(907) 269-7648

#### Southeast

Phone:(907)451-2121Fax:(907)451-2362

- Outside Normal Business Hours
  - Toll Free: 1-800-478-9300
    International: 1-907-269-0667



#### **IT'S THE LAW!** AS 46.03.755. 18 AAC 75.300. 75.325 and 18 AAC 78.200

### REPORT **OIL AND HAZARDOUS** SUBSTANCE SPILLS

#### **During Normal Business Hours**

call the nearest response team office:

Central Alaska:	<b>(907) 269-3063</b>
Anchorage	Fax: (907) 269-7648
Northern Alaska:	<b>(907) 451-2121</b>
Fairbanks	Fax: (907) 451-2362
Southeast Alaska:	<b>(907) 465-5340</b>
Juneau	Fax: (907) 465-5245
Alaska Pipeline:	(907) 451-2121

#### **Outside Normal Business Hours**

**Toll Free** 1-800-478-9300 International 1-907-269-0667 Northern Alaska Central Alaska Southeast Alaska Alaska Department of **Environmental Conservation** Division of Spill Prevention and Response www.dec.alaska.gov/spar/ppr/spillrmation/reporting

#### **Hazardous Substance**

Any hazardous substance spill, other than oil, must be reported immediately.

#### **Oil – Petroleum Products**

#### To Water

Any amount spilled to water must be reported immediately.

#### To Land

-2362

- Spills in excess of 55 gallons must be reported immediately.
- Spills in excess of 10 gallons, but 55 gallons or less, must be reported within 48 hours after the person has knowledge of the spill.
- Spills of 1 to 10 aallons must be recorded in a spill reporting log submitted to ADEC each month.

#### **To Impermeable Secondary Containment** Areas

Any spills in excess of 55 gallons must be reported within 48 hours.

#### Additional Requirements for Underground Storage Tank Spill Reporting

Regulated Underground Storage Tank (UST) systems are defined at 18 AAC 78.005. Releases at heating oil tanks must be reported. You must report a *suspected* belowground release from a UST system, in any amount, within 24 hours (18 AAC 78.220(c))

You must report if your release detection system indicates two consecutive months of invalid or inconclusive results. If you observe unusual operating conditions, sudden loss, erratic dispensing (slow flow/no flow) or discharge to soil or water, report it to the UST Unit:

907-269-3055 or 269-7679

### http://dec.alaska.gov /spar/ppr/spillinformation/reporting

# State Notification Requirements

- Hazardous Substances Any hazardous substance spill, other than oil, must be reported as soon as the person has knowledge of the discharge.
- Oil Petroleum Products
  - Water Any amount of oil spilled to water must be reported immediately.
  - ► Land
    - More than 55 gallons must be reported immediately.
    - More than 10 gallons but less than 55 gallons, must be reported with in 48 hours.
    - Spills of 1 to 10 gallons must be recorded in a spill reporting log submitted to ADEC each month.
  - Impermeable Secondary Containment Areas Any spills in excess of 55 gallons must be reported within 48 hours

### REPORTING REQUIREMENTS: WHEN DO YOU REPORT THIS?



May 14, 2008: Truck Rollover in Sterling, AK

Urea: 2,000 lbs. to water Urea: 46,300 lbs. to ground Diesel: 1 gallon to water



#### ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION MONTHLY OIL SPILL REPORTING LOG

Only for spills less than 10 gallons, solely to land, not to creeks, sewers or storm drains. (see Discharge Reporting requirements, 18 AAC 75.300)

#### SPILLS GREATER THAN 55 GALLONS SOLELY TO LAND OUTSIDE SECONDARY CONTAINMENT, HAZARDOUS SUBSTANCE SPILLS OR SPILLS TO WATER MUST BE REPORTED IMMEDIATELY.

Call the nearest ADEC office for more information: Anchorage: 269-3063 Fairbanks: 451-2121 Juneau: 465-5340

Please submit the completed monthly spill reporting log to the nearest ADEC office: Anchorage: <u>dec.carspillreport@alaska.gov</u>

Fairbanks: dec.narspillreport@alaska.gov

Juneau: dec.spar.seregion.spills@alaska.gov

FACILITY NAME AND ADDRESS:				
	H/VEAD			
REPORTMONT	II/TEAK.			
REPORTED BY:	PHONE #:			
EMAIL:				

DATE / TIME OF SPILL	LOCATION	PRODUCT SPILLED	QTY SPILLED (GALLONS)	CAUSE OF SPILL & AREA AFFECTED	WHO RESPONDED	CLEANUP & METHOD / PLACE OF DISPOSAL



#### IT'S THE LAW! AS 46.03.755, 18 AAC 75.300, 75.325 and 18 AAC 78.200

### REPORT OIL AND HAZARDOUS SUBSTANCE SPILLS

#### **During Normal Business Hours**

call the nearest response team office:

entral Alaska:	<b>(907) 269-3063</b>
nchorage	Fax: (907) 269-7648
orthern Alaska:	<b>(907) 451-2121</b>
airbanks	Fax: (907) 451-2362
outheast Alaska:	<b>(907) 465-5340</b>
Jneav	Fax: (907) 465-5245
laska Pipeline: hirbanks	(907) 451-2121

#### **Outside Normal Business Hours**

 Toll Free
 1-800-478-9300

 International
 1-907-269-0667

 Morthern
 Alaska

 Central
 Southeast

 Alaska
 Southeast

 Division of Spill Prevention and Response

 www.dec.alaska.gov/spar.prg.psill.information/reporting

#### **Hazardous Substance**

Any hazardous substance spill, other than oil, must be reported immediately.

#### **Oil - Petroleum Products**

#### To Water

 Any amount spilled to water must be reported immediately.

#### To Land

- Spills in excess of 55 gallons must be reported immediately.
- Spills in excess of 10 gallons, but 55 gallons or less, must be reported within 48 hours after the person has knowledge of the spill.
- Spills of 1 to 10 gallons must be recorded in a spill reporting log submitted to ADEC each month.

#### To Impermeable Secondary Containment Areas

Any spills in excess of 55 gallons must be reported within 48 hours

#### Additional Requirements for Underground Storage Tank Spill Reporting

Regulated Underground Storage Tank (UST) systems are defined at 18 AAC 78.005. Releases at heating oil tanks must be reported. You must report a suspected belowground release from a UST system, in any amount, <u>within 24 hours</u> (18 AAC 78.220(c)).

You must report if your release detection system indicates two consecutive months of invalid or inconclusive results. f you observe unusual operating conditions, sudden loss, erratic dispensing (slow flow/no flow) or discharge to soil or water, **report it to the UST Unit**:

907-269-3055 or 269-7679

rev. July/2018

### http://dec.alaska.gov /spar/ppr/spillinformation/reporting

# Additional Requirements for Underground Storage Tank (UST) Spill Reporting

- You must report a suspected below ground release from a UST system, in any amount, within 24 hours (18 AAC 78.220(c)).
- ▶ When to report to the UST Unit:
  - If your release detection system indicates a leak may have occurred, including two months of invalid or inconclusive results
  - If you observe unusual operation conditions, sudden loss, erratic dispensing (slow flow/no flow) or discharge to soil or water
- ▶ UST Unit: 907-269-3055 or 907-269-7679.
- Releases at heating oil tanks must be reported.

# Preliminary Spill Information

- Date/Time of Spill
- Date/Time Discovered
- Location of Spill
- What was spilled?
- How much was spilled?
- Who is the responsible party, and how can they be contacted?
- Spill Source
- What caused the spill?
- What clean up actions have happened?
- How were contaminated materials disposed of?
- What surface type was the spilled to?



										ADEC USE ONLY
ADEC SPILL #:			ADEC FIL	E #:				ADEC LC:		
PERSON REPORTING	B:		PHONE N	UMBER:				REPORTED	HOW	? (ADEC USE ONLY)
DATE TIME OF ODU			DATE (TI)		50			Phor	ie 🗌	Fax PERS E-mail
DATE/TIME OF SPILI	L:		DATE/TW	AE DISCOVERI	ED:			DATE/TIME	REPU	RIED TO ADEC
				DATUM:	□ NA	D27 🗌 NAD83		PRODUCT	SPILLE	ED:
				WGS84	4 🗌 Oth	ler				
				LAT.				]		
				LONG.						
QUANTITY SPILLED:	_	QUANTITY CC	NTAINED:	_		QUANTITY RECC	VERED:	_	QU	ANTITY DISPOSED:
	gallons			∐ gallo	ns 1-			∐ gallons		gallons
		ISIDI E DADTV		□poun	OTHER	DRD IE ANIV-		∐ pounds		
Name/Rusiness:	POTENTIAENEDPOI	NOIDEL PARTI.				спери личт.				VESSEE NAME.
Mailing Address:										VESSEL NUMBER:
Ū										
Contact Name:										> 400 GROSS TON VESSEL:
Contact Number:										□ Yes □ No
SOURCE OF SPILL:										CAUSE CLASSIFICATION:
										Accident
CAUSE OF SPILL:							🗌 Under	Investigation	1	Human Factors
										Structural/Mechanical
										Other
CLEANUP ACTIONS:										
DISPOSAL METHOD	S AND LOCATION:									
AFFECTED AREA SIZ	ZE: SURFAC	E TYPE: (grav	el, asphalt,	name of river e	tc.)	RESOURCES AFF	ECTED/TH	IREATENED:		(Water sources, wildlife, wells, etc.)
COMMENTS										
Commercial										
				ADEC	USE C	NLY				
SPILL NAME:						NAME OF DEC	ST AFF RE	sponding:		C-PLAN MGR NOTIFIED?
										□ Yes □ No
DEC RESDONSE-			CASELO							
Phone follow-up	🗌 Field visit 🗌 To	ok Report	□ First	and Final 🔲	Open/No	LC 🗌 LC Assig	ned	NFA 1	Monito	oring 🔲 Transferred to CS or STP
COMMENTS:		tus of Casa			Close	d D4	TECA		<u>р</u> .	
		itus of case			Close	u DA	ILE CA	SE CLOSE	υ.	
REPORT PREPARED	BY:							DATE:		



National Response Center Spill Reporting Information



United States Coast Guard

### **National Response Center**

The NRC is the federal government's national communications center.

- It is staffed 24 hours a day by U.S. Coast Guard officers and marine science technicians.
- It is the sole federal point of contact for reporting all hazardous substances releases and oil spills.
- It receives all reports of releases involving hazardous substances and oil that trigger federal notification requirements.

Phone: 1 (800) 424-8802 NRC Watch Email: <u>NRC@uscg.mil</u>



### What happens after you report a spill to the NRC?





### What Happens When You Report a Spill?



- Become compliant with the law,
- Receive technical assistance,
- ▶ Receive guidance,
- ► Minimize impacts,
- Most importantly you are protecting your communities health and resources.



# What can happen if a spill is Not reported?

- Greater environmental impact
- Longer term health effects
- Cost of cleanup rises significantly > Attorney's fees
- Notice of Violation

Civil and Criminal Penalties
Fines

Jail Time

### What happens next?

- ADEC Personnel may request additional information from the original reporting person, or other local resources.
- ADEC, EPA or U.S. Coast Guard Personnel may mobilize to the site.
  - Provide Direction for Resource Protection
    - ► Coordination with ADF&G, ADNR, and local experts
  - Provide the State On-Scene Coordinator and Manage the Response for the State
  - Oversee response, cleanup and recovery actions to determine adequacy by the Responsible Party
  - Augment the Responsible Party's Efforts
  - ► Takeover the response if inadequate

### Spill Resources



# Spill Response Containers

- The state maintains 50+ caches of response equipment located throughout the state.
  - https://dec.alaska.gov/spar/ppr/response-resources/local-response/inventories/







# Geographic Response Strategies



## Key Roles for Local Responders

- Local On-Scene Coordinator
- Regional Stakeholder Committee
- Local Knowledge
  - ► PRICELESS
- Augment the Response with Trained Workers



Local-Hire Worker – Selendang Ayu Spill (April 2005)



North Slope Borough Village Response Team – GC-2 Spill (March 2006)



### Response Techniques

Containment ▶ Booming ► Damming ▶ Trenching ► Recovery ► Excavation ► Absorbents ► Deluge ► Skimming





### Response Resources

- Alaska Clean Seas (ACS) <u>http://www.alaskacleanseas.org/documents/</u>
- Spill Tactics for Alaska Responders (STAR) <u>https://dec.alaska.gov/spar/ppr/response-resources/star-manual/</u>
- Tundra Treatment Manual <u>https://dec.alaska.gov/media/12128/tundra-treatment-guidelines-3rd-ed-2010.pdf</u>
- Geographic Response Strategies (GRS) <u>http://dec.alaska.gov/spar/ppr/response-resources/grs/</u>
- Cook Inlet Spill Prevention & Response, Inc. (CISPRI) <u>https://cispri.org/wp-content/uploads/2017/09/CISPRI-Technical-Manual-June-2017-High.pdf</u>
- Southeast Alaska Petroleum Response Organization (SEAPRO) <u>http://www.seapro.org/TechnicalManual/SEAPRO\_TechManHome.htm</u>

State Emergency Operations Center, Emergency Response Guide for Small Communities <u>https://ready.alaska.gov/SEOC/Documents/Alaska%20Disaster%20Han</u> <u>dbook%20v2%20update%203%202017%20Full%20Page.pdf</u>

# Clean up

- Qualified Environmental Professional
- Workplan
  - Site Assessment
    - ► Site Use
    - Risk Factors
      - Sensitive Receptors
      - Anadromous Streams
      - Ground water or drinking water wells
  - Delineation
    - Contamination Limits
  - Analysis
  - Nature and degree of contamination
  - Confirmation samples
- Final Report or Interim Report







ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION DIVISION OF SPILL PREVENTION AND RESPONSE Contaminated Sites and Prevention and Emergency Response Programs

Transport, Treatment, & Disposal Approval Form for Contaminated Media

DEC HAZARD/SPILL ID #	NAME OF SPIL	L OR CONTAM	INATED SIT	E
SITE OR SPILL LOCATION				
CURRENT LOCATION AND	TYPE OF		SOURCE O	F THE CONTAMINATION
CONTAMINATED MEDIA				
COMPOUNDS OF CONCERN	N	ESTIMATED V	VOLUME	DATE(S) GENERATED
POST TREATMENT ANALY	SIS REQUIRED (A	such as GRO, DRO	), RRO, BTEX,	, and/or Chlorinated Solvents)
COMMENTS				

Facility Accepting the Contaminated Media

NAME OF THE FACILITY	PHYSICAL ADDRESS/PHONE NUMBER

#### **Responsible Party and Contractor Information**

BUSINESS/NAME	ADDRESS/PHONE NUMBER

Name of the Person Requesting Approval (printed)

Title/Association

Signature

--DEC USE ONLY------

Date

Based on the information provided, ADEC approves transport of the above-described media for treatment in accordance with the approved facility operations plan. The Responsible Party or their consultant must submit to the DEC Project Manager a copy of weight/volume receipts of the loads transported to the facility and a post treatment analytical report. If the media is contaminated soil, it shall be transported as a covered load in compliance with 18 AAC 60.015.

DEC Project Manager Name (printed)

Project Manager Title

Signature

Date

Phone Number

Phone Number

Clear Form Print Form

☞ DEPARTMENT OF ENVIRONMENTAL CONSERVATION

State of Alaska

#### OIL & HAZARDOUS MATERIALS INCIDENT FINAL REPORT

The following written report is required by State regulations 18 AAC 75.300(e), following departmental notification of a discharge of oil and hazardous materials. The report is due within 15 days after the cleanup is completed, or if no cleanup occurs, within 15 days after the discharge. Forward the report to the nearest DEC office of the department. The report must contain, as applicable:

1. Date and time of the discharge:		
2. Location of the discharge:		
3. Name of the site, facility or operation:		
Name, mailing address, and telephone number of:     A. Person or persons causing or responsible for the discharge:	B. Owner and operator of the site, facility or operation:	
		-
. Type and amount of each oil or hazardous substance discharged	1:	
6. Cause of the discharge:		_
J		
7. Description of any environmental damage caused by the discharge	ge or containment, to the extent the damage can be identified:	
	_	

Oil & Hazardous Materials Incident Final Report -- continued 8. Description of cleanup actions taken: 9. Estimated amount of: (A) oil or hazardous substance cleaned up: (B) oily or hazardous waste generated: Date, location, and method of ultimate disposal of the oil, hazardous substance and any contaminated materials, including cleanup materials: Description of actions being taken to prevent recurrence of the discharge: Other information the department requires to fully assess the cause and impact of the discharge (receipts for disposal if available): ature Printed name Title

 Juneau
 Juneau

 Anchorade
 Fairbanks
 Juneau

 Phone: 269-3063
 Phone: 451-2121
 Phone: 465-5340 Fax:

 Fax: 269-7687
 Fax: 451-2362
 465-5245

 555 Cordova Street
 610 University Ave.
 P.O. Box 111800

 Anchorage, AK 99501
 Fairbanks, AK 99709-3643
 Juneau, AK 99801-1800

DEC USE ONLY		
ADEC Project Manager:	ADEC Spill #:	

### Success Stories!





# Home Heating Oil Tanks

- Home Heating Oil Tanks are located in many communities in Alaska.
- Causes of Spills
  - ► Corrosion
  - Support failure
  - ► Overfill
  - Accidents
  - Vandalism/theft
  - Floods and earthquakes

### OIL SPILL COST BY DROPS

RATE OF LEAK	GALLONS PER YEAR LOST	DOLLAR PER YEAR LOST*	TONS OF CONTAMINATED SOIL**			
Drop Every 10 Seconds	40	\$160	150			
Drop Every 5 Seconds	80	\$320	300			
Drop Every Second	410	\$1,640	1,500			
Three Drops Every Second	1,200	\$4,800	4,500			
Stream that Breaks into Drops	8,600	\$34,400	32,000			
(Drops are approximately 11/64 inch in diameter.)						

\*At \$4.00 per gallon of heating oil

\*\* Average 1000 ppm total petroleum hydrocarbons

June 2017

### **BETTER Installation** Practices

### **BAD Installation** Practices

This tank has a number of problems: no stand, very rusty and a large wet spot.



These fuel lines are not protected and can easily be broken.





Pits are a sign of corrosion



and can lead to tank failure.



This stand is starting to fail & is close

to no longer being able to support the tank.





This tank has been painted to prevent exterior corrosion.



These lines are coiled to help absorb shock of falling debris.



This line is protected by a liquid-tight conduit.

foundation.

THE T

This tank is on a crumbling foundation.



# Inspecting Your Tank

- Location and foundation/support
- ► Fill pipe and vent
- Drain plugs
- Seams & body
- Supply and return lines
- ► Water check/ Internal Corrosion



More guidance:

http://dec.alaska.gov/spar/ppr/prevention-preparedness/hho-tanks/



# Scenario #1 Home Heating Oil Tank

- ▶ Wooden stand underneath the tank collapsed at 12:38 AM.
  - When the tank fell to the ground the piping broke and released the full contents of the tank ~250 gallons of #2 Diesel.





### Scenario #2 Tank Farm



# Class 2 Facilities

- What is a Class 2 Facility?
  - ▶ ≥1,000 and <420,000 gallons
  - ▶ Minimum  $\geq$  1000 gallon containers
  - Onshore
  - Noncrude
  - Not residential properties

- Schools
- Gas stations
- Hotels
- Businesses/commercial
- Community buildings
- Bulk fuel facilities
- Restaurants
- Hospitals

If you operate a Class 2 Facility you are required to register that facility under State regulation (18 AAC 75.835 - 18 AAC 75.849)

dec.spar.class2@alaska.gov 907-465-5237 https://dec.alaska.gov/spar/ppr/prevention-preparedness/class-2-facilities/

# Summary

- Always Practice Safety and take precautions to prevent spills
- ► If a spill occurs:
  - ► Stop the source.
  - Contain and control the release.
  - Report the spill to ADEC and other agencies as required.
  - Consult with ADEC for submission of cleanup work plans.
  - Proceed with cleanup as deemed necessary.
  - Submit a final report.





### Questions?

Cindy Kirkham 907-334-5940 Cynthia.Kirkham@Alaska.gov

### http://dec.alaska.gov/spar/ppr

Alaska Department of Environmental Conservation Spill Prevention and Response Prevention, Preparedness, & Response Program