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](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 depends 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:  (907) 269-3063
Anchorage
Fax: (907) 269-7648

Northern Alaska:  (907) 451-2121
Fairbanks
Fax: (907) 451-2362

Southeast Alaska:  (907) 465-5340
Juneau
Fax: (907) 465-5245

Alaska Pipeline:  (907) 451-2121
Fairbanks
Fax: (907) 451-2362

Outside Normal Business Hours

Toll Free  1-800-478-9300
1-907-269-0667

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 tanks (UST) systems are defined at
18 AAC 78.003. 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 78.200(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,
erosive dispersing (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/spill-information/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) 269-3063
    - Fax: (907) 269-7648
  - **Southeast**
    - Phone: (907) 451-2121
    - Fax: (907) 451-2362

- **Outside Normal Business Hours**
  - Toll Free: 1-800-478-9300
  - International: 1-907-269-0667
IT'S THE LAW!
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REPORT
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call the nearest response team office:

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(907) 269-3063
Fax: (907) 268-7668

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Fax: (907) 451-2362

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Fax: (907) 465-5245

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

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To Water
♦ Any amount spilled to water must be reported immediately.

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♦ 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 underground release from a UST system, in any amount, within 24 hours (18 AAC 78.20(a)).
♦ You must report if your release detection system indicates two consecutive months of invalid or inductive 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/spill-information/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 within 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 76.300)

**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**: dec.carspillreport@alaska.gov
- **Fairbanks**: dec.naspillreport@alaska.gov
- **Juneau**: dec.spar.seregion.spills@alaska.gov

<table>
<thead>
<tr>
<th>DATE/TIME OF SPILL</th>
<th>LOCATION</th>
<th>PRODUCT SPILLED</th>
<th>QTY SPILLED (GALLONS)</th>
<th>CAUSE OF SPILL &amp; AREA Affected</th>
<th>WHO RESPONDED</th>
<th>CLEANUP &amp; METHOD / PLACE OF DISPOSAL</th>
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REPORT
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To Impermeable Secondary Containment Areas
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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(d)).
- You must report if your release detection system indicates two consecutive months of invalid or inductive readings.
- 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/spill-information/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?
National Response Center Spill Reporting Information

The National Response Center is the SOLE national point of contact for reporting Oil, Chemical, Radiological and Biological discharges.

Report Spills to the NRC at:

1 800 424-8802
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: NRC@uscg.mil
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
- Notice of Violation
- Civil and Criminal Penalties
- Fines
- Attorney’s fees
- 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.

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) [http://www.alaskacleanseas.org/documents/](http://www.alaskacleanseas.org/documents/)
- Spill Tactics for Alaska Responders (STAR) [https://dec.alaska.gov/spar/ppr/response-resources/star-manual/](https://dec.alaska.gov/spar/ppr/response-resources/star-manual/)
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
Facility Accepting the Contaminated Media

<table>
<thead>
<tr>
<th>NAME OF THE FACILITY</th>
<th>PHYSICAL ADDRESS/PHONE NUMBER</th>
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Responsible Party and Contractor Information

<table>
<thead>
<tr>
<th>BUSINESS/NAME</th>
<th>ADDRESS/PHONE NUMBER</th>
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Name of the Person Requesting Approval (printed)  Title Association

Signature  Date  Phone Number

DEC USE ONLY

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 00.015.

DEC Project Manager Name (printed)  Project Manager Title

Signature  Date  Phone Number

Rev. 12/2014
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:

4. 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

5. Type and amount of each oil or hazardous substance discharged:

6. Cause of the discharge:

7. Description of any environmental damage caused by the discharge or containment, to the extent the damage can be identified:

8. Description of cleanup actions taken:

9. Estimated amount of:
   (A) oil or hazardous substance cleaned up
   (B) oily or hazardous waste generated

10. Date, location, and method of ultimate disposal of the oil, hazardous substance and any contaminated materials, including cleanup materials:

11. Description of actions being taken to prevent recurrence of the discharge:

12. Other information the department requires to fully assess the causes and impact of the discharge (receipts for disposal if available):

Signature
Printed name
Date
Title

MAIL OR FAX TO the Closest A.D.E.C. Office below

Anchorage
Phone: 269-3093
Fax: 269-7167
355 Cordova Street
Anchorage, AK 99501

Fairbanks
Phone: 451-2521
Fax: 451-2562
650 University Ave
Fairbanks, AK 99709-3843

Juneau
Phone: 465-5260 Fax: 465-5240
P.O. Box 151800
Juneau, AK 99801-1800

DEC USE ONLY

ADEC Project Manager: 
ADEC Spill #: 

Revised August 31, 2018
Success Stories!

2015

2017
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

<table>
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<tr>
<th>RATE OF LEAK</th>
<th>Gallons Per Year Lost</th>
<th>Dollar Per Year Lost*</th>
<th>Tons of Contaminated Soil**</th>
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<tbody>
<tr>
<td>Drop Every 10 Seconds</td>
<td>40</td>
<td>$160</td>
<td>150</td>
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<tr>
<td>Drop Every 5 Seconds</td>
<td>80</td>
<td>$320</td>
<td>300</td>
</tr>
<tr>
<td>Drop Every Second</td>
<td>410</td>
<td>$1,640</td>
<td>1,500</td>
</tr>
<tr>
<td>Three Drops Every Second</td>
<td>1,200</td>
<td>$4,800</td>
<td>4,500</td>
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<tr>
<td>Stream that breaks into Drops</td>
<td>8,600</td>
<td>$34,400</td>
<td>32,000</td>
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</table>

(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**

- This tank has an enclosure that will protect it from overhead damage like falling ice & snow.
- This tank has been painted to prevent exterior corrosion.
- This stand is in good condition and has a stable foundation.
- These lines are coiled to help absorb shock of falling debris.
- This line is protected by a liquid-tight conduit.

**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 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?
  - \( \geq 1,000 \) and \(< 420,000\) gallons
  - Minimum \( \geq 1000\) gallon containers
  - Onshore
  - Noncrude
  - Not residential properties

- 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