



Quarterly Report of Oil and Hazardous Substance Response

January 1 - March 31, 1999

Volume 5 - Number 1

Significant Responses This Quarter

Kenai Peninsula -- Swanson River Field

Spill Date: *Discovered January 6, 1999*
Product/Quantity: *19,000 gallons of crude oil and
115,000 gallons of production water*
Cause: *Corrosion*

An estimated 19,000 gallons of crude oil mixed with 115,000 gallons of water leaked from a 3/8" hole caused by corrosion in an underground gathering line. Contaminated material was excavated and transported to Unocal's lined and permitted Swanson River solid waste facility. A trench was



Workers discharging recovered oil from super-sucker to solid waste cell. (photo by DEC)

constructed to reduce the surface water flow through the spill area. The extent of any remaining oil contamination and the need for additional cleanup will be evaluated following spring breakup. Unocal is coordinating with federal and state agencies in planning for site rehabilitation. Issues of concern include the removal of spill containment structures and the

restoration of natural drainage patterns and ground cover.

Cook Inlet -- Chesapeake Trader

Spill Date: *February 6*
Product/Quantity: *Approximately 420 gallons of crude oil*
Cause: *Hull damage*

Due to ice conditions, the vessel master of the Chesapeake Trader decided to cease transfer operations and pull away from the dock at Nikiski. While headed south in Cook Inlet, vessel crew observed a sheen trailing from the tanker. A crack was discovered in the #1 starboard wing tank near the water line. Damage to the hull was likely caused by collision with a heavy ice floe. The oil in the damaged tank was transferred to other undamaged tanks on the vessel. No shoreline or wildlife impacts from the leaked oil have been observed. As a result of this incident, Tesoro Maritime Company, Mormac, Attranco Ship Management Company and the Southwest Pilots developed guidelines to assist vessel Masters when prolonged periods of sub-zero temperatures increase the amount of ice coverage and the hardness of the ice. The Guidelines were approved by ADEC and the U. S. Coast Guard.

Dutch Harbor -- M/V Hekifu

Spill Date: *February 19*
Product/Quantity: *No spill was observed as a result of this incident*
Cause: *Vessel grounding*

The M/V Hekifu, a refrigerated freighter, was temporarily anchored near the entrance of Dutch Harbor. Due to wind conditions, the vessel called for a pilot to move to safer anchorage. As the vessel was weighing anchor, the winds suddenly increased to 110 knots, blowing the ship aground. Tugs freed the vessel and held it until it was refloated on high tide the following day. The vessel sustained a large dent and the Number 2 center fuel tank containing about 54,000 gallons of Bunker C fuel oil sustained a large crack. No fuel was released. Total spill potential for the vessel was 129,360 gallons of bunker C fuel oil, 20,454 gallons of diesel and 5,220 gallons of lubricating oil. Refrigerated vessels are not regulated under State law and are not required to carry an oil spill contingency plan or to demonstrate the financial ability to clean up a spill.

Valdez Petroleum Terminal

Spill Date: *February 19*
Product/Quantity: *Jet "A" Fuel; 8,400 gallons to tank farm containment*
Cause: *Overfill of Tank*

Approximately 8,400 gallons of jet fuel spilled from the tank vent when a tank was overfilled. All of the fuel was contained in the tank farm's lined secondary containment area and the liner prevented the fuel from contaminating soil. Pneumatic pumps were used to recover and load the free product into a tank truck. Contaminated snow was transported to Petro Star Refinery where it was melted and separated by an oil-water separator. A malfunction of the tank farm computer management system may have caused the tank overfill.

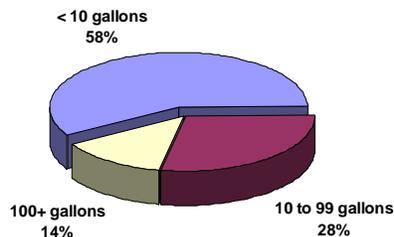
Tuluksak Traditional Council Power Plant

Spill Date: *February 25*
Product/Quantity: *Diesel, 1,900 gallons*
Cause: *Suspected vandalism/theft*

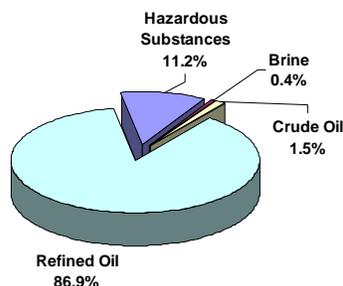
Fuel was discovered in an area 25 yards by 100 yards under and adjacent to the power plant in Tuluksak. Two power plant workers attempted to cleanup the spill by cutting trenches into the ice and bucketing out fuel. A Department responder traveled to Tuluksak to assess the situation and provide assistance, including additional emergency spill response equipment from Inland Spill Response Container Van located in Bethel.

Data Summary

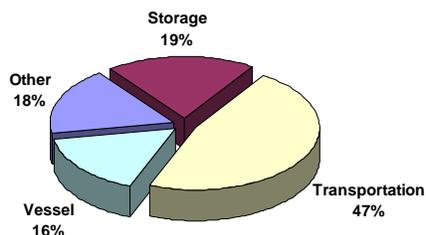
Oil and Hazardous Substance Spills January 1 - March 31, 1999



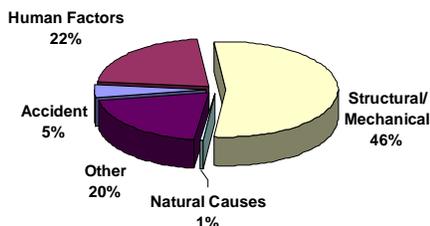
Number of Spills by Size Class



Number of Spills by Product



Number of Spills by Source



Number of Spills by Cause

Spill News

COST RECOVERY

Cook Inlet Harbors of Refuge. On February 24 ADEC and U.S. Coast Guard staff attended a meeting in Homer to discuss acceptable harbors of refuge for stricken vessels in Cook Inlet to be included in the Cook Inlet Sub Area Contingency Plan. The Cook Inlet Subarea Plan Operations Workgroup reviewed available information and identified potential locations to moor or anchor a vessel for repair or lightering. Kachemak Bay offers the most protected waters and shoreside resources in lower Cook Inlet, but is an environmentally sensitive area.

LOCAL PREPAREDNESS

Statewide Hazardous Materials Response Project. Memoranda of Agreement between the Department and the Municipality of Anchorage (MOA) and the Fairbanks North Star Borough (FNSB) were signed by the Acting SPAR Director and forwarded for completion. The agreement with MOA will provide \$160,500.00 and the agreement with FNSB will provide \$100,000.00 in capital funds for response team equipment and training to support HAZMAT response activities within and outside of the teams' respective areas of jurisdiction.

DRILLS

North Slope Mutual Aid Drill (MAD) 99. The Department met with drill planners from Alyeska Pipeline Service Company, EPA, Alaska Clean Seas, BP, ARCO, and the Joint Pipeline Office to prepare for the MAD 99 drill scheduled for August 13. The scenario will simulate a 200,000 gallon crude oil spill from storage tank #110 into the containment area at Pump Station #1. A slow leak in a dike valve will cause product to enter the Putulikgayuk (Put) River. A field deployment will take place along the river. The size of this response activity is contingent upon on-going development of industry's new pump station scenario for the contingency plan.

PREVENTION

Small Oil Spill Workshop. The Department participated in a Small Oil Spill Workshop in Cordova sponsored by the Oil Spill Recovery Institute and presented by Cordova District Fisherman United. Attendees included harbormasters from Kodiak, Wrangell, Juneau, Seward, and Cordova. The main topics of discussion were related to best management practices for marinas and vessels, spill prevention, and spill reporting requirements. The work group agreed on the need to better educate the public to stop the small petroleum and sewage spills that plague Alaska's small boat harbors.

Spill News

RESPONSE

Petersburg Defensive HAZMAT Pilot Project. The Department funded an anhydrous ammonia and chlorine defensive response training session held in Petersburg on March 9-12. The training, which focused on both prevention and response, is intended to improve defensive hazmat response capability in remote communities with extremely hazardous substances (EHS). The prevention element provided technical assistance to facilities with large amounts of anhydrous ammonia or chlorine, and included a walk-through check of each facility by an industry expert with the owner/operators to educate them in ways to improve the system and lessen the chance of accidental releases. The response element consisted of classroom training in the properties, hazards, safe handling and emergency defensive response measures for ammonia and chlorine releases until a full hazmat team can arrive, and a table-top response drill. The training is being evaluated for use in remote communities statewide.

ONGOING CLEANUPS

Sagwon Bluffs. The Department met with BP, ARCO, the Department of Natural Resources, the Department of Fish and Game and the Bureau of Land Management regarding Sagwon Bluffs. Alyeska has agreed to build an ice road to the site. Overpacked liquids and boxed drilling muds will be removed from the site in March. Additional excavation of drilling muds and petroleum-contaminated soils will take place during the 1999 field season. BP is consulting with the U.S. Fish and Wildlife Service to determine work windows based on peregrine falcon nesting.

RESEARCH AND DEVELOPMENT

Tundra Treatment Manual. The Department is working with a consultant to develop a Tundra Treatment Manual. The project will include the review of published and unpublished literature regarding previous cleanups and restoration of petroleum and hazardous materials spills on tundra. A treatment manual outlining the best procedures for tundra treatment and restoration will then be prepared.

PLEASE NOTE. . . . This report is based on provisional spill data. Readers should be aware that minor discrepancies in the data may exist.

Spill Digest

HAZARDOUS SUBSTANCES (excluding brine)

Total Count: 66

Total Gallons: 150,528

Top 5 Substances

(does not include releases reported in pounds)

	Product	Count	Gallons
1	Ethylene Glycol (Antifreeze)	27	391
2	Propylene Glycol	5	382
3	Hydrogen Peroxide	1	350
4	Sodium Hydroxide	1	100
5	Methyl Alcohol (Methanol)	7	51

Top 5 Causes

	Cause	Count	Gallons
1	Line Ruptured	12	21,858
2	Tank Leak	2	660
3	Connection Faulty	4	528
4	Valve Faulty	5	283
5	Seal Failure	4	238

Top 5 Sources

	Source	Count	Gallons
1	Oil Term Fac/Tnk Frm	5	25,100
2	Industrial Vehicle	21	748
3	Home/Office/Business	7	747
4	Tank Farm	1	560
5	Cannery	1	500

CRUDE AND REFINED OIL

Total Count: 385

Total Gallons: 31,528

Top 5 Substances

	Product	Count	Gallons
1	Diesel	205	25,460
2	Crude	10	3,477
3	Hydraulic Oil	56	572
4	Gasoline	34	479
5	Drilling Muds	4	317

Top 5 Causes

	Cause	Count	Gallons
1	Tank Overfill	42	11,751
2	Line Ruptured	63	3,006
3	Corrosion	5	2,848
4	Valve Left Open	14	2,789
5	Puncture	2	2,200

Top 5 Sources

	Source	Count	Gallons
1	Tank Farm	7	10,416
2	Home Heating Tank	22	3,004
3	Refinery	5	2,832
4	Truck	17	2,807
5	Power Facilities	5	2,640

1999 Calendar

MEETINGS

April 14	SERC Meeting, Anchorage
June 9	Spill Co-op Manager's Meeting, Cordova
June 10	Alaska Regional Response Team, Cordova
July 21	SERC Meeting, Anchorage

DRILLS

March 22-24	Cruise Ship Drill, Ketchikan
April 7-9	Tesoro Drill, Cook Inlet
May 7	Weapons of Mass Destruction Exercise, Anchorage
May 7	HAZMAT drill, Whittier
June 4	Airport/Mass Casualty/ Hazmat Exercise, Fairbanks
June 15-16	PWS Tanker Drill, Valdez
August 13	Mutual Aid Drill, North Slope

SEND COMMENTS AND SUBSCRIPTION REQUESTS TO:

Camille Stephens, 410 Willoughby Ave., Juneau, AK 99801, or
email: cstephen@envircon.state.ak.us

At a glance.....

January 1 - March 31, 1998

Spill Summary

Total Spills Reported (includes 11 Brine releases):	460
Total Gallons Released (oil):	31,528
Total Gallons Released (hazardous substances):	150,528

Oil Releases

Total Spills Reported:	385
Most Common Substance (205 spills)	Diesel
Most Common Cause: (63 spills)	Line Ruptured
Most Common Source (74 spills):	Industrial Vehicle
Largest Release (gallons) (Diesel):	8,400

Hazardous Substance Releases (excluding brine)

Total Spills Reported:	75
Most Common Substance* (27 spills):	Ethylene Glycol
Most Common Cause* (12 spills):	Line Ruptured
Most Common Source* (21 spills):	Industrial Vehicle
Largest Release* (gallons) (Hydrogen Peroxide)	350

*excludes "Other" or "Unknown"



Prevention and Emergency Response Program
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<http://www.state.ak.us/dec/dspar/perp/perphome.htm>
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mail label

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