



Quarterly Report of Oil and Hazardous Substance Response

October 1 - December 31, 1998

Volume 4 - Number 4

Significant Spills This Quarter

North Slope — Western Operation Area

Date: October 30, 1998
Quantity/Product: 250 gallons, crude

Cause: Fire and explosion (preliminary findings)



Manifold building on Z-pad, Western Operation Area on the North Slope.

A fire in a manifold building on Z-pad in the Western Operation Area resulted in a small release of crude oil. Production wells were immediately shut in remotely. Within a few hours a team of responders arrived. Using a water curtain as a shield, the team manually shut in the

wells. The team observed a leak from the annulus valve on well #1, which was closest to the manifold and electrical modules. It is unknown at this time whether this was contributory to the original problem or a result of it. Field environmental crews collected soil samples and confirmed that the area impacted was limited to the soils under and around the skids. Cleanup of the most highly impacted areas was completed. The area will be monitored during break-up next summer to ensure that all the material was removed. The official cause of the fire is under investigation.

Emmonak Yukon Delta Fish Co-op

Date: December 19, 1998
Quantity/Product: 1,700 gallons, diesel

Cause: Loose fitting in power generator building



Fuel tanks at the Emmonak Yukon Delta Fish Co-op power plant.

A loose fitting in a power generator building owned by the Yukon-Delta Fish Co-op caused a 1,700 gallon diesel spill in Bethel. The fuel pooled in a low-lying area adjacent to the power plant, approximately 15 feet from the edge of the Yukon River. Approximately 600 gallons were pumped into two 500 gallon tanks.

Contaminated snow was removed and stored in fish totes. Workers constructed a lined snow/ice berm adjacent to the river to prevent fuel from entering the river which serves as the city's drinking water. The responsible party hired local responders recently trained by the Department to assist in the cleanup.

White Pass & Yukon Oil Water Separator, Skagway

Date: October 30, 1998
Quantity/Product: 400 gallons, mixed diesels, lube oils, and solvents
Cause: Failure to close valve

A drain valve on a recently installed oil/water separator was left open, allowing an estimated 400 gallons of oil to discharge directly into the Skagway sewer system. Workers closed the valves and cleanup crews were called in to recover the oil in the Skagway wastewater treatment plant. The wastewater treatment plant outfall was monitored for signs of any oil being discharged. Crews used sorbent materials to collect the oil in the wet wells, the clarifiers, and from the weirs.

In a followup inspection by the Department and the U.S. Coast Guard, dark oil droplets and sheen were observed in the wastewater treatment plant. Sorbent pads and sorbent booms placed in the plant's clarifiers, were used to collect the thicker oil. A light, unrecoverable sheen was observed in the general area of the wastewater treatment plant outfall.

PMC Communications Wasilla

Date: December 30, 1998
Quantity/Product: 370 gallons, diesel
Cause: Break in fuel filter assembly to generator

The fuel filter assembly on a generator broke at a remote communications site, resulting in approximately 370 gallons of diesel spilled. Crews cleaned up 120 gallons inside the building. An estimated 250 gallons escaped the generator building, contaminating approximately 3 cubic yards of snow and ice. Removal will be completed in conjunction with a fuel delivery in early January. The site may be evaluated again after spring breakup.

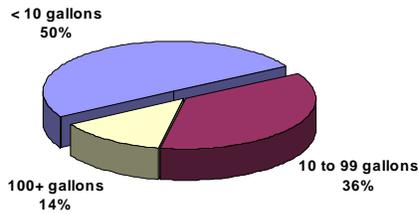
PETRO STAR REFINERY — Valdez

Date: December 24, 1998
Quantity/Product: 300 gallons, diesel
Cause: Overfill of cargo tank on semi-truck

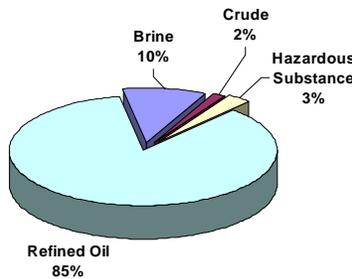
Approximately 300 gallons of diesel spilled while filling a cargo tank on a semi tanker truck at the Petro Star Refinery truck rack. Most of the fuel went into the secondary containment at the truck rack. About 75 gallons overflowed the secondary containment and contaminated snow, ice and soil. A Bobcat and front-end loader were used to remove contaminated snow and ice.

Data Summary

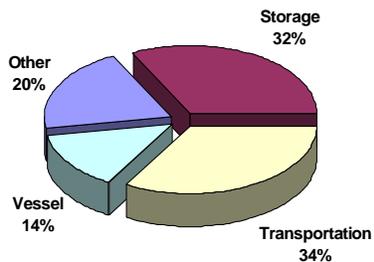
Oil and Hazardous Substance Spills October 1 - December 31, 1998



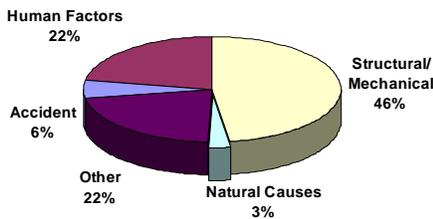
Number of Spills by Size Class



Number of Spills by Product



Number of Spills by Source



Number of Spills by Cause

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Fairbanks Hazmat Team Activated for the First Time. On October 5, 1998, the Fairbanks Hazardous Materials Team (FHMRT) was activated for the first time to respond to a leaking container of sodium sulfate at a local high school. The school was evacuated as a precaution. At the request of the University Fire Chief, the FHMRT responded with 6 members. Three team members in disposable Level B suits with breathing apparatus removed the container and aired out the school.

DEC Partners with State of Washington on Oil-Spill Burning Research. In mid-October the Alaska and Washington state environmental agencies tested guidelines for burning a simulated tanker spill involving 210,000 gallons of Alaska North Slope crude oil off the Washington coast. The test was arranged by the Washington State Department of Ecology as part of a two-day exercise in Port Angeles, Washington. Observers from British Columbia, Oregon and California also attended the exercise.

DEC contributed \$10,000 of oil spill research and development funds toward the joint effort to develop a manual on all aspects of the in-situ burning of oil. The manual will address communication and notification procedures, key environmental data-collection, air-quality, safety planning for field operations, and data-quality assurance. The draft manual will be updated to reflect lessons learned from the drill's "tabletop" and vessel deployment exercises.

Dispersant Application Drill in Cook Inlet. In early December the Department participated in a dispersant monitoring exercise in Cook Inlet conducted jointly by Cook Inlet Spill Prevention and Response, Inc. (CISPRI) and Alyeska Ship Escort Response Vessel System (SERVS). CISPRI is presently developing dispersant monitoring procedures that will ultimately be incorporated in the CISPRI Technical Manual for member company use. The goal of this exercise was to train personnel in dispersant effectiveness monitoring tactics, fine-tune procedures for Cook Inlet conditions, and collect baseline data in turbidity. A C-130 aircraft equipped with an airborne dispersant delivery system was used in the exercise. Spotters in a fixed wing aircraft visually observed the spray runs. Scientists on contract with CISPRI were aboard the organization's response vessel, Heritage Service, and used water-column monitoring instruments to ground-truth the visual observations.

Alaska Shares Oil Spill Prevention and Response Expertise with Central Asia Delegation. Department staff met with approximately 15 representatives from Kazakhstan and Turkmenistan on spill prevention and response issues. Both countries are entering into the early stages of oil and gas leasing and development and have virtually no programs in place. They were extremely

Spill News

interested in the prevention and response measures Alaska has developed since the Exxon Valdez. DEC staff emphasized the importance of implementing good regulations and ensuring that adequate funding is established to support a strong oversight program.

On-Scene Coordinator Work Group Meeting. The U.S. Coast Guard (USCG) District 17 hosted a meeting of State and Federal On-Scene Coordinators in Juneau in November. The group agreed to prepare a master list of resources identifying staff, contractors and other personnel who are qualified to fill Incident Command System positions. This will facilitate a statewide callout of Federal and State resources in a significant event. The joint tasking of contractors for this effort will be explored by the parties. The role of regional citizens advisory councils, the Regional Multiagency Coordination Committee, natural resource damage assessment, and geographic response planning were also discussed.

Whittier HAZMAT Response Meeting. DEC, the Alaska Railroad, Crowley Marine, Foss Maritime, the City of Whittier, and the USCG met in Whittier to discuss hazardous materials spill response procedures and resources. DEC described its notification procedures, communications systems, local response agreements with Fairbanks and Anchorage, and available air monitoring equipment. Attendees agreed to conduct a hazardous-materials response drill in Whittier.

Seldovia Abandoned Cannery. The Department investigated complaints about an abandoned cannery on the waterfront in Seldovia. In addition to spills from leaking drums and unidentified sources, the potential for additional spills was also documented. A State-certified refrigeration engineer was hired by the cannery owner and confirmed the presence of approximately 600 pounds of ammonia in the cannery's refrigeration system. Two 100-pound chlorine cylinders and three freestanding freon units were also found on the property. DEC is working with the owner to clean up the spills and eliminate the threat of future releases.

Research And Development. The Department signed a Memorandum of Agreement with the National Oceanic and Atmospheric Administration to develop updated environmental sensitivity maps of Prince William Sound.

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: 59 **Total Gallons:** 1,701

Top 5 Substances

(does not include releases reported in pounds)

Product	Count	Gallons
1 Other	24	1,061
2 Solvent	2	255
3 Ethylene Glycol (Antifreeze)	13	190
4 Isopropyl Alcohol (Isopropanol)	1	80
5 Propylene Glycol	2	50
Ammonia (Anhydrous)	5	50

Top 5 Causes

Cause	Count	Gallons
1 Connection Faulty	1	150
2 Leak, Other	6	147
3 Intentional Release	1	50
4 Valve Faulty	4	40
5 Tank Leak	1	25

Top 5 Sources

Source	Count	Gallons
1 Pipeline	8	460
2 Drum/s	3	260
3 Oil Term Fac/Tnk Frm	2	150
4 Train/Engine/Car	1	80
5 Cannery	2	50

CRUDE AND REFINED OIL

Total Count: 400 **Total Gallons:** 24,164

Top 5 Substances

Product	Count	Gallons
1 Diesel	206	14,379
2 Drilling Muds	9	1,510
3 Kerosene	1	1,500
4 Aviation Fuel	18	1,224
5 Waste Oil (All Types)	12	1,091

Top 5 Causes

Cause	Count	Gallons
1 Tank Overfill	49	5,509
2 Valve Faulty	19	2,957
3 Connection Faulty	15	2,070
4 Crash	3	1,836
5 Line Ruptured	50	1,663

Top 5 Sources

Source	Count	Gallons
1 Home/Office/Business	41	4,608
2 Industrial Vehicle	50	3,318
3 Home Heating Tank	29	2,666
4 Pipeline	17	2,398
5 Military Facility	10	2,218

1999 Calendar

MEETINGS

January 12	LEPC Workshop, Anchorage
January 13	SERC Meeting, Anchorage
January 22	States/BC Task Force, San Diego
February 17	Alaska Regional Response Team, Juneau
March 21-22	Prevention Symposium, Valdez
March 24-27	EVOS Symposium, Anchorage
April 14	SERC Meeting, Juneau

DRILLS

March 22-24	Cruise Ship Drill, Ketchikan
April 7-9	Area Exercise (Tesoro), Cook Inlet

SEND COMMENTS AND SUBSCRIPTION REQUESTS TO:

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

At a glance.....

October 1 - December 31, 1998

Spill Summary

Total Spills Reported (includes 7 Brine releases):	466
Total Gallons Released (oil):	24,164
Total Gallons Released (hazardous substances):	1,701

Oil Releases

Total Spills Reported:	400
Most Common Substance* (206 spills):	Diesel
Most Common Cause* (185 spills):	Mechanical
Most Common Source* (41 spills):	Storage
Largest Release (gallons) (Diesel):	1,964 gallons

Hazardous Substance Releases (excluding brine)

Total Spills Reported:	59
Most Common Substance* (13 spills):	Ethylene Glycol
Most Common Cause* (30 spills):	Mechanical
Most Common Source* (20 spills):	Transportation
Largest Release (gallons) (Solvent):	250 gallons

*excludes "other"



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mail label

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