

## **BACKGROUND: PART THREE – AREA SPILL HISTORY**

The following spill history was obtained from the Alaska Department of Environmental Conservation and U.S. Coast Guard records. This partial listing includes only the more significant spills or hazardous material releases. This abbreviated spill history is provided to give an overall view of the vast array of facility and transportation-related accidents that can occur. Prince William Sound supports a wide variety of marine vessel traffic including everything from the smallest pleasure craft to the crude oil supertankers calling on the Alyeska Marine Terminal in Port Valdez.

The cities of Valdez, Cordova, Glennallen, Mentasta and many other small villages are not immune to oil discharges or hazardous material releases. The number of fuel transfers that take place in these towns is staggering, thus the opportunity for a spill is greatly increased.

The most notable spill in Prince William Sound was the Exxon Valdez incident. This led to the passing of the Oil Pollution Act of 1990 which greatly improved oil spill response capabilities in the United States.

**A. NAVIGABLE WATERS (SPILLS GREATER THAN OR EQUAL TO 1,000 GALLONS)**

<b>Date</b>	<b>Incident</b>	<b>Volume and Substance</b>
01/03/89	T/V Thompson Pass, Berth 4, Valdez	60,000 to 75,000 gallons - North Slope Crude
01/16/89	T/V Cove Leader, Berth 3, Valdez	2,500 to 3,000 gallons - North Slope Crude
03/24/89	T/V Exxon Valdez, Bligh Reef	10,800,000 gallons - North Slope Crude
03/04/90	PWS Aquaculture, Cannery Creek Hatchery	2,200 gallons - Diesel
06/01/91	F/V Kristine, Montague Island	1,800 gallons - Diesel
02/29/92	F/V Granny Rosa, Galena Bay	1,500 gallons - Diesel
02/94	Tesoro Fuel Dock	1,000 gallons - Diesel
05/21/94	T/V Eastern Lion	8,400 gallons - North Slope Crude
08/95	M/V Crane (Cordova)	2,100 gallons - Diesel/Oil
03/96	F/V SS Viking (Montague Island)	2,000 gallons - Diesel
1/26/97	Valdez Petro Star Refinery	4,200 gallons - Crude
7/21/97	49er Barge Vessel Incident Between Kodiak and Cordova	2,604 gallons - Diesel (hull failure)
2/9/99	Vessel Incident (Near Naked Island)	1,000 gallons - Diesel (punctured fuel tank)
2/17/99	Valdez Marine Terminal	8,400 gallons - Diesel (overflow)
7/13/99	Valdez Marine Terminal	1,100 gallons - Diesel (Gauge/Site Glass Failure)
7/14/99	Valdez Marine Terminal	1,100 gallons - Diesel (overflow)

Date	Incident	Volume and Substance
7/26/01	M/V Vanguard (North of Glacier Island)	2,000 gallons – Diesel (Vessel Sank)
8/4/01	F/V Windy Bay (Olsen Island)	35,000 gallons – Diesel (Vessel Sank)
2/13/02	Valdez Marine Terminal	3,065 gallons - Diesel (Crack in pipe, line)
5/15/02	Valdez Marine Terminal	1,050 gallons – Non-Crude Oil, other (Line Failure)
9/9/02	Valdez Marine Terminal (Fire Suppression System)	5,500 gallons - Unknown (Human Error)
12/12/02	Valdez Marine Terminal (Ballast Water Treatment Tank)	1,050 gallons – Ballast Water (Leak in pipe, line)

**B. INLAND SPILL HISTORY (SPILLS GREATER THAN OR EQUAL TO 1,000 GALLONS)**

Date	Incident
09/26/88	Service Oil Co., Mile 30 Richardson Highway 1,000 gallons - Diesel
02/15/89	ADOT/PF, Thompson Pass 7,000 gallons - Diesel
05/16/89	Columbus Distributor, Mile 166 Glenn Highway 1,400 gallons - Gasoline
6/05/89	Stratton Oil Co., Mile 116 Glenn Highway 10,000 gallons - Gasoline
12/15/89	U.S. Army, Mile 139 Richardson Highway 5,000 gallons - Diesel
04/25/90	ADOT/PF, Cordova 5,000 gallons - Fuel Oil
04/30/90	ADOT/PF, Thompson Pass 1,200 gallons - Diesel
4/26/91	USCG, Potato Point, Port Valdez 3,500 gallons - Diesel
04/26/92	USCG, Potato Point, Port Valdez 5,000 gallons - Diesel
11/07/95	TransAlaska Pipeline System (Pump Station 10) 5,800 pounds - Halon
1/08/95	TransAlaska Pipeline System (Pump Station 10) 5,800 pounds - Halon

Date	Incident
04/20/96	TransAlaska Pipeline System (Check Valve 92) 34,073 gallons - North Slope Crude Oil
08/26/96	TransAlaska Pipeline System (Pump Station 10) 2,300 pounds - Halon
10/09/96	Gakona Junction Village Roadhouse 7,000 gallons - Diesel
01/26/97	Petro Star Refinery (Valdez) 4,200 gallons - Crude Oil
02/17/99	Valdez Petroleum Terminal Tank #18 8,400 gallons – Diesel
8/16/99	TransAlaska Pipeline System (Pump Station 10) 4,400 pounds – Halon
10/19/99	Cordova - Eyak Lake - Waste Oil Release 1,000 gallons – Waste Oil (containment overflow)
7/28/00	Richardson Highway South – Mile 19 Gravel Pit 2,000 gallons – Asphalt (Cause unknown)
8/3/01	Cordova - Orca Power Generation Plant 1,500 gallons – Diesel (Tank Overfill)
12/31/01	Chitina Electric Power Plant 1,000 gallons – Diesel (Valve failure)

**C. HAZMAT RELEASE HISTORY**

Listed below is a brief synopsis of significant releases of hazardous substances in the region. This information was collected from the ADEC spill database; a complete list is available through ADEC.

Date	Incident
10/1/96	DOTPF Yard (Tok) 5 gallons - Toluene 2,4-Diisocyanate (Cargo Not Secured)
5/3/97	Valdez Marine Terminal-Land Power Vapor Area 1 gallon – Sulfuric Acid (Cause Unknown)
10/18/98	Valdez – Nautilus Seafoods 5 pounds – Anhydrous Ammonia (Valve Failure)
6/7/99	Valdez Small Boat Harbor – F/V Taku 1 pound – Anhydrous Ammonia (Equipment Failure)
6/9/99	Valdez – Nautilus Seafoods 20 pounds – Anhydrous Ammonia (Human Error)
3/24/00	Valdez – Nautilus Seafoods 1 gallon – Anhydrous Ammonia (Line Failure)
5/12/01	Valdez Marine Terminal 1 gallon – Hydrogen Peroxide (Equipment Failure)
9/26/02	Valdez – Nautilus Seafoods 2 gallons – Anhydrous Ammonia (Human Error)
8/5/03	Valdez – Nautilus Seafoods (MP 1.5 at Crooked Creek Salmon Overlook) 2 gallons – Sulfuric Acid (Cargo not secured)
7/23/03	Valdez Marine Terminal 1 gallon – Hydrochloric Acid (Leak)
7/23/03	Valdez Marine Terminal 1 gallon – Hydrochloric Acid (Line Failure)
9/20/02	Valdez Small Boat Harbor – F/V Taku 1 pound – Anhydrous Ammonia (Seal Failure)
8/8/04	Valdez – Nautilus Seafoods 1 pound – Anhydrous Ammonia (Human Error)

## **D. CLOSER LOOK AT SOME NOTEWORTHY SPILLS**

### **January 3, 1989 T/V Thompson Pass**

Location: Berth 4, Valdez Marine Terminal

Product: 60,000 to 75,000 gallons of ANS crude oil

An oily sheen was initially observed in while the vessel was offloading at a southern port. During on-loading operations at the Valdez Marine Terminal, crude oil was released through a crack in the hull.

### **March 24, 1989 T/V Exxon Valdez**

Location: Near the mouth of the Valdez Arm, off Bligh I. in Prince William Sound

Product: Nearly 11 million gallons of ANS crude oil

Just after midnight, the supertanker Exxon Valdez, containing more than 53 million gallons of oil, ran aground on the charted rocks of Bligh Reef after exiting the prescribed tanker navigation lanes in an effort to avoid icebergs from nearby Columbia Glacier. The impact ruptured eight of the eleven cargo tanks. Oil spewed out of the tanker in such quantities that, for a while, the slick stood at over two feet thick in places. Within 36 hours after the grounding, and with the weather holding calm, air reconnaissance reported the oil slick to be 10 miles long and 3 to 7 mile wide. Despite calm weather for the first three days, spill response efforts were stymied by confusion, lack of equipment, and misunderstandings over proper response and control. A major storm, boasting winds up to 73mph, blasted through the Sound on Sunday night, March 26, spreading oil in all directions and coating the first of many miles of shoreline. Eventually, over 1200 miles of coastline would be impacted by oil, including the outer Kenai coast and islands, reaching the mouth of Kachemak Bay, and out to Kodiak Island and the Alaskan Peninsula. Exxon mounted a major shoreline cleanup effort during the summer of 1989, and similar but much reduced cleanup activities during the summers of 1990 and 1991. Recent studies report various parts of the coastal ecosystem still exhibiting negative effects from the oil spill.

### **April 20, 1996 TAPS Check Valve 92**

Location: Alyeska Pipeline MP 593.7, at check valve 92, about 7 miles south of Pump Station 10.

Product: 34,073 gallons of ANS Crude Oil

The leak was caused by a leak in the by-pass valve threadlet. Alyeska discovered crude oil in two metal culvert access pipes about 60 feet north of check valve 92. About 16 inches of crude (about 100 gallons) was pumped from the pipes. Oil seeped into the pipes at a rate of about 6 - 8 gallons per hour. Alyeska reduced the pipeline throughput from 1.5 million barrels per day to 700,000 barrels per day, and pumped crude oil from the storage tanks at PS 10 to make storage available in case the line needs to be evacuated for repairs. An Incident Management Team was activated and based at Pump Station 10. Four task forces were organized to address the spill. Task force 1 excavated in the area around check valve 92. Task force 2 excavated near the metal culvert pipes and located the leading edge of the spill. Task force 3 established a contaminated soil stockpile and Task Force 4 provided decon. DEC and Joint Pipeline Office staff responded and monitored initial and follow-on response actions and reviewed cleanup plans.

### **August 4, 2001 F/V Windy Bay**

Location: Olsen Rock, east of Olsen Island, northern Prince William Sound

Product: 35,000 gallons of diesel

The F/V Windy Bay ran aground at 10:45 am and sank at 1:56 pm in about 1000 feet of water. The vessel contained 35,000 gallons of diesel fuel at the time of sinking. The vessel also carried 100 gallons lube oil and 300-500 gallons hydraulic fluid. An on scene responder estimated the daily release rate at about 60 gallons fuel a day. Because of the great depth for the boom anchoring systems, oversized

anchors and buoys were mobilized. The Coast Guard, Dec, Alaska Chadux and SERVS responded to the incident. Containment boom was deployed to protect identified sensitive areas. The open-water recovery operations applied two Current Buster systems. Wildlife in the area included numerous seabirds, bald eagles, sea otters, sea lions, and humpback whales. Seven dead oiled birds were recovered (6 Marbled Murrelets and 1 Scoter). USF&WS otter specialists demobilized after observing that sixty otters in the area exhibited normal behavior and did not appear to have suffered any impacts. One SCAT team assessed shorelines for oil-impacts. Approximately 5.7 miles of shoreline were surveyed. Beach cleanup crews worked on Little Fairmont and Little Olsen Island. Natural flushing supplemented with low-pressure water spray was used on the oiled shoreline at these locations.

**E. PWS Risk Assessment Maps:** The maps on the following pages were prepared as part of the risk assessment process during the development of the potential places of refuge section (Section H) of this plan.