Alaska Department of Environmental Conservation

# **Then and Now**

### Prince William Sound Oil Spill Prevention and Response

Twenty years ago on March 24, 1989, the oil tanker Exxon Valdez ran aground in Alaska's Prince William Sound, spilling about 11 million gallons of North Slope crude oil. Much has changed in oil spill prevention and response since then.

#### Prevention

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**March 1989** 

#### March 2009

tanker escorts	Tug escort only through the Valdez Narrows.	The Ship Escort/Response Vessel System (SERVS) escorts tankers with five state-of-the-art tugs. All Trans Alaska Pipeline System shippers must use SERVS as their spill response contractor. SERVS is one of many response contractors which must be registered with DEC.
support vessels	No support vessels.	An ocean rescue tug stationed at the Hinchinbrook Entrance to Prince William Sound (PWS) since 1997 is one of five highly maneuverable prevention and response vessels to assist tankers.
tanker transport	No requirement for double hull tankers. (Background photo shows one such vessel, with extra space between inner and outer bot- tom and sides to prevent spills.)	Complete phase-in of double hull tankers required by 2015. All but one of the pipeline tankers operating in PWS are double-hulled; the majority have backup propulsion systems.
pilot training	No extra training required of tanker officers, tug officers, and marine pilots.	Advanced training for tanker officers, tug officers, and marine pilots; marine safety committee monitors and evaluates tanker operations.
ship tracking / protection	Ship tracking limited to near Bligh Reef.	U.S. Coast Guard-controlled ship tracking system throughout PWS and 60 miles into the Gulf of Alaska; high-tech information system required on ships; special operating procedures for approaching and transiting Valdez Narrows; ice radar warns ships of ice navigation hazards.
planning	Basic spill prevention and response plan developed by Alyeska was inadequate, and implementation during the spill was slow.	Detailed oil discharge prevention and contingency plans developed by individual shippers and Alyeska, and approved by DEC. Alyeska must lead the initial fast response in PWS.
		Contingency plans must meet response planning standards - set in statute - that describe the ability to clean up a large spill within 72 hours. Response must incorporate leading technology.
State oversight	Limited State oversight of Valdez marine terminal and tanker operations by three DEC generalists in Valdez.	Comprehensive State oversight of marine terminal and tanker operations — four DEC spill prevention and response regulators are located in Valdez.
Response		
equipment locations	No response equipment stockpiled outside of Valdez.	Equipment staged in Valdez, Tatitlek, Cordova, Chenega and Whittier.

## **Then and Now**

Response	March 1989	March 2009	
equipment on hand	Less than five miles of containment boom to corral oil in Prince William Sound.	Over 50 miles of different types of containment boom stationed in PWS.	
	No fire boom or systems to ignite and burn the contained oil.	3,600 feet of fire boom with helicopter-carried igniter systems.	
	2,475 gallons of dispersants to lessen the impact of oil on shorelines, but no application systems immediately available.	74,940 gallon dispersant stockpile, with fixed wing, helicopter and ship application systems.	
oil recovery	13 oil skimming systems with a combined recovery capacity of over 27,800 barrels of oil in 72 hours.	Over 120 skimming systems to pick up oil from within contain- ment boom and store it in barges and other vessels. This equipment can recover over 300,000 barrels of oil in 72 hours.	
	One barge with 12,000 barrels of storage capacity for recovered oil stationed in Valdez.	Eight barges strategically located throughout PWS with nearly 850,000 barrels of storage capacity for recovered oil and 54 smaller barges for near-shore work.	
trained responders	Limited number of trained spill responders.	Teams dedicated to spill response and Ship Escort/Response Vessel System (SERVS).	
hatchery protection	No salmon hatchery protection plans or staged spill response equipment at hatcheries.	Hatchery protection plans and stockpiled equipment for all five PWS hatcheries and Afognak Island's Kitoi Bay hatchery.	
citizen / community	No organized citizen involvement in plan development and oversight.	Prince William Sound and Cook Inlet regional citizen advisory councils created.	
invoivement		Regional Stakeholder Committee involved in annual major PWS drills to ensure local community needs are addressed.	
	No plan to involve local fishing vessels in a response to a spill.	A program to train fishing vessel personnel in Prince William Sound, lower Cook Inlet and Kodiak, and incorporate vessels into a response strategy.	
wildlife rescue	No established wildlife rescue programs.	Wildlife response plan with rescue and rehabilitation equipment in place.	
practice drills	No drills to practice response to a major spill.	Major spill drill conducted annually, with frequent smaller drills.	
managed response	No consistent management structure for spill response.	A Unified Command/Incident Command structure, patterned after responses to wildfires, adopted by DEC, Coast Guard, SERVS and shippers to lead spill cleanup.	
communications	Limited State radio communications for spill response command in PWS.	Advanced radio communications system with capability to cover PWS and Cook Inlet, with some reach into the Gulf of Alaska.	
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Detailed information and photos on advances in oil spill prevention and response at			
www.dec.state.ak.us/spar/			

Background photos Cover: A double-hulled tanker, unladen, heads out to sea. This page: An enchanced tractor tug tethered to a tanker while transiting Valdez narrows, followed by a prevention and response tug. – ADEC photos

March 2009