

## Draft (1/9/06)

# Chronology of Prevention and Response Tugs in Prince William Sound

### Overview

PWSRCAC developed this chronology of the evolution of the tanker escort system in Prince William Sound and the associated prevention and response tugs for the purpose of informing discussions about the future of the system. The history of the Ship Escort Response Vessel System (SERVS) escort system is inextricably linked to a complex series of actions that include passage of state and federal laws, promulgation of regulations regarding oil spill prevention and response, and approval of oil spill prevention and response plans for Prince William Sound. These are presented in a straightforward timeline below. Where possible, references for the actions are provided. This paper has been developed with **the recognition that it is an “evergreen” document that will be updated at times in the future.**

### Pre-Exxon Valdez Oil Spill

**August 1, 1977.** The first tanker to carry crude oil from the Trans Alaska Pipeline System (TAPS), the *Arco Juneau*, set sail from the Valdez Marine Terminal. A conventional tug followed the tanker at a distance and turned back after Valdez Narrows pursuant to the operating protocols of Alyeska Pipeline Service Company (Alyeska) in place at the time ([www.alyeska-pipe.com](http://www.alyeska-pipe.com)).

The cost of the that early tug escort system was included in the operating costs factored into the TAPS pipeline tariff. The pipeline tariff is the charge the pipeline owners apply to each barrel of oil shipped through the pipeline, a charge that must be paid by North Slope oil producers in order to ship oil in the pipeline. Oil producers then subtract their tariff payments from the wellhead price of a barrel of oil before calculating their severance tax and royalty payments to the state. Oil producers who are also pipeline owners pay the tariff to themselves. The cost of the Ship Escort Response Vessel System (SERVS) is included in the operating costs that are factored into the present TAPS tariff ([www.finebergresearch.com/451.431.050602.ansprofitrpt.pdf](http://www.finebergresearch.com/451.431.050602.ansprofitrpt.pdf)).

**1977-1989.** Many private citizens and organizations, such as Cordova District Fishermen United, attempted to provide input into TAPS operations, including recommendations for escort vessels; however, there was no formal avenue for such input other than occasional calls for public comments on proposed regulations and their recommendations were never adopted.

**March 24, 1989.** The *Exxon Valdez* ran aground on Bligh Reef, disgorging eleven million gallons of crude oil into the pristine waters of Prince William Sound with one initial regulatory action being the closing of Port Valdez to shipping. ([707.410.900101.aoscspillrpt.pdf](http://707.410.900101.aoscspillrpt.pdf)/[707.410.900101.aoscspillpt2.pdf](http://707.410.900101.aoscspillpt2.pdf)).

**March 28, 1989.** At 1400, the Captain of the Port/Federal On Scene Coordinator reopened Port Valdez to oil shipments. Each tanker was required to do only daylight transits accompanied by two tugs to or from Bligh Reef and to stay 500 yards from cleanup operations. ([Exxon Valdez Oil Spill Federal On-Scene Coordinator's Report, Appendix A. Chronology – page 10, and Appendix B – page 403.](#))

**April 7, 1989.** Alaska's Commissioner of Environmental Conservation issued an emergency order mandating that Alyeska undertake immediate actions to significantly increase its oil spill prevention and response capability for tankers transiting Prince William Sound. Stipulation #6 of the order specified that, "Alyeska must ensure that two tugs accompany all outgoing tankers to Hinchinbrook Entrance southeast of Seal Rocks" ([801.110.890407.ADECemerOrd.pdf](#)). The emergency order was modified **May 3, 1989**, but the stipulation requiring tug escorts to Hinchinbrook Entrance remained unchanged in the modified order ([801.110.890503.adecemerordr.pdf](#)).

**May 9, 1989.** In the closing hours of its 1989 session, the Alaska Legislature passed the last of a package of bills that strengthened the state's oil spill prevention and response laws. Included in the package were amendments to state statutes regarding minimum requirements for oil discharge prevention and contingency plans for any tank vessel traveling in state waters, including the waters of Prince William Sound ([270.110.900627akanact.pdf](#)).

The revised statutes now forbid the operation of tank vessels in state waters without a discharge prevention and contingency plan (C-plan) approved by the Alaska Department of Environmental Conservation (ADEC). Approved C-plans must include the use of the "best available technology" (BAT) for oil spill prevention and response strategies in existence at the time of plan submittal (AS 46.04.030). The statutes give ADEC the authority to determine what constitutes BAT, and they grant the agency the authority to reduce the requirements for spill response capability specified in the law if it determines proposed prevention measures, such as double hulls and the use of tanker escorts, reduce the risk of an oil spill.

**July 1989.** A ad hoc group first met to begin the process of forming a citizens' advisory council to oversee operations at the Valdez Marine Terminal and the oil tankers served by the terminal. The core membership of the new organization was comprised of representatives of municipalities, boroughs, Native villages and interest groups in the Exxon Valdez oil spill impact region, including commercial fishing interests, tourism businesses, environmental groups and the Alaska State Chamber of Commerce. The council decided to call itself the Prince William Sound Regional Citizens' Advisory Council (PWSRCAC) ([PWSRCAC brochure](#)).

PWSRCAC was modeled on the Shetland Oil Terminal Environmental Advisory Group (SOTEAG), a citizens' group formed to oversee operations of the major North Sea oil terminal at Sullom Voe in the Shetland Isles of Scotland. Over the following months, representatives of SOTEAG and PWSRCAC exchanged information and visited each other. During a visit to the North Sea oil terminal in the Shetlands in April 1990, PWSRCAC representatives observed the loading and movement of tankers in and out of the terminal, and saw the degree to which the terminal's tanker escort system served as an effective spill prevention strategy. Among other requirements of the system, all laden tankers had to be tethered to powerful tractor tugs as they passed out of Sullom Voe, the narrow bay on which the terminal is located. This and other lessons learned at Sullom Voe helped to shape the goals and legislative agenda of PWSRCAC, including a commitment to seeing an effective tanker escort system established in Prince William Sound that incorporated the use of tractor tugs ([500.431.000705.willssullomv.doc](#)).

**July 10, 1989.** Alyeska established SERVS as part of its efforts to meet the mandates of the May 1989 Emergency Order. The initial SERVS fleet included conventional tugs and Escort Response Vessels, with two accompanying each laden tanker to Hinchinbrook Entrance ([www.anwr.org/archives/servs](http://www.anwr.org/archives/servs)).

**September 18, 1989.** Prince William Sound provisions written in great part by the ad hoc group that was meeting to form what became PWSRCAC were added to oil spill prevention and response legislation (HR 3027) pending in the U.S. House of Representatives. The provisions included language that required an escort vessel for all tankers transiting Prince William Sound. These amendments were added to HR 3027 in the House Merchant Marine and Fisheries Committee ([www.pwsrcac.org/documents/other/opa90.pdf](http://www.pwsrcac.org/documents/other/opa90.pdf)).

During floor debate on the bill, the escort requirement was increased to two vessels, and a requirement for escort vessels in Puget Sound and Rosario Strait was added. In addition, the liability provisions in Title I of the bill were amended to include language that denied limits on liability for spill damage to any vessel traveling in Prince William Sound or Puget Sound without an escort at the time a spill occurred. The bill passed out of the House and was referred to a House/Senate Conference Committee. The companion oil spill legislation that passed out of the Senate (S 686) did not contain provisions for escort vessels nor the denial of liability limits to unescorted tankers, but did contain provisions for requiring the conversion of the U.S. tanker fleet to double hulls. It also contained provisions mandating the establishment of regional citizens' advisory councils to oversee oil industry operations in Prince William Sound and Cook Inlet, provisions that, again, were written in great part by PWSRCAC.

**November 11, 1989.** ADEC and Alyeska entered into a compliance order by consent in which Alyeska agreed to “initiate, perform and complete all actions needed for response to and containment and clean up of all discharges or threatened discharges within Prince William Sound from tank vessels calling on the Valdez Marine Terminal ... Alyeska agrees to implement response, containment, and clean up activities in accordance with the provisions of Alyeska’s 1987 Oil Spill Contingency Plan, as modified by the Emergency Order of May 1989”, including the order’s provision mandating two tug escorts for outbound tankers to Hinchinbrook Entrance. [Note: is there a citation for this?]

**February 8, 1990.** Members of PWSRCAC, Alyeska and TAPS owner companies signed a contract that guaranteed \$2 million (with an annual inflation adjustment) in annual funding for the citizens’ council as long as oil flows through the pipeline. The contract also provided for the council’s complete autonomy and independence from Alyeska and its owner companies ([100.110.900201.thecontract.pdf](http://100.110.900201.thecontract.pdf)).

**August 1, 1990.** The House/Senate Conference Committee delivered a bill to the full House and Senate that required all single-hulled tankers greater than 5,000 DWT transporting crude oil to be escorted by “at least two towing vessels or other vessels considered appropriate by the Secretary [of Transportation]” while transiting Prince William Sound and Puget Sound, and it included a schedule for the phase-in of a requirement that all tankers calling at U.S. ports be equipped with double hulls. (This and many other requirements in the bill represented a fundamental shift in the philosophy behind international maritime law by setting standards for all tankers calling at U.S.

ports regardless of country of origin. In other words, it represented a shift of regulatory power from flag state to port state, and as such, had a tremendous impact on international maritime law.) Titled the “Oil Pollution Act of 1990” (OPA 90), the bill passed both houses of Congress and was signed into law **August 18, 1990** ([www.pwsrcac.org/documents/other/opa90.pdf](http://www.pwsrcac.org/documents/other/opa90.pdf)).

The final bill that became law did not retain the restriction on liability limits for unescorted tankers that was in the House bill, but it did retain language making clear that states’ rights to impose additional liability requirements relating to “the discharge or threat of a discharge of oil” were not pre-empted by the new law despite an intense effort by the oil industry to get this non pre-emption language removed.

The final bill also retained the provisions mandating the establishment of advisory committees for Prince William Sound and Cook Inlet. After the bill was signed into law, the U.S. Coast Guard (USCG) authorized PWSRCAC to operate as the advisory committee called for in Prince William Sound.

**October 1990.** Alyeska submitted a revised C-plan to ADEC pursuant to the November 1989 compliance order by consent that included a description of the operating protocols of SERV S. ADEC approved the plan, thereby vacating the November 1989 compliance order.

**July 7, 1992.** The USCG issued a Notice of Proposed Rulemaking (NPRM) for regulations regarding tanker escort vessels for Prince William Sound pursuant to Section 4116(c) of OPA 90 ([801.108.930429.uscgreganprm.pdf](http://801.108.930429.uscgreganprm.pdf)).

**September 1, 1992.** PWSRCAC submitted comments to the USCG on the proposed rule, arguing that all tankers over 5,000 GT, not just single-hulled tankers, should be required to have two escort vessels accompany them from the Valdez Marine Terminal to Hinchinbrook Entrance, and calling for the escort vessels to be tractor tugs. PWSRCAC also recommended that, when the Automated Dependent Surveillance System (ADSS) is incorporated into the VTS Valdez and functioning properly, at the discretion of the Captain of the Port (COTP), escorts could not be required between 60°49’ North latitude and 60°25’ North latitude if at least one escort response vessel or tractor tug was on standby at Naked Island ([651.105.920730.rcaccmtsvrps.pdf](http://651.105.920730.rcaccmtsvrps.pdf)). In an unusual move recognizing the intense interest of the public in Alaska, the USCG held public hearings in Seattle, Valdez and Anchorage in July, 1993, to receive input on the proposed rule. The Alaska hearings were teleconferenced to the communities in the Exxon Valdez impact area using the Alaska Legislature’s bridge network.

**October 1992.** PWSRCAC, in partnership with tanker owners and the USCG, commissioned a study to assess the capability of escort tugs to control disabled tankers in Prince William Sound. The study was designed to review current equipment, personnel and procedures on board tankers and escort vessels operating in the Sound, as well as assess the capability of the existing escort fleet to control tankers in a variety of possible incidents under a variety of possible conditions ([801.300.920514.arcoretugrfp.pdf](http://801.300.920514.arcoretugrfp.pdf)).

**March 1994.** An oil spill prevention and response plan for Prince William Sound (PWS C-Plan) and oil spill contingency plans for TAPS-trade tankers (tanker C-Plans) were submitted by TAPS

owners and shippers to ADEC pursuant to state law passed in the wake of the *Exxon Valdez* spill which requires C-plans to be submitted every three years for review. The plans included provisions for a ship escort and response vessel system. ADEC requested additional information from shippers before it declared the plans complete for substantive review. After shippers provided the requested information, ADEC released the plans for public review and comment in **March 1995** ([651.300.950329.adecdfnd.pdf](#)).

**July 1994.** The Disabled Tanker Towing Study was completed. Part I of the study report contained a review of the existing tanker escort system, and Part II was comprised of a modeling study that examined the capabilities of the existing escort system to respond to a variety of worst-case scenarios. The study found a number of inadequacies in the current escort system, particularly in adverse weather conditions ([802.410.930801.tgadtspart1/802.410.940801.tgadtspart2](#)).

**August 19, 1994.** USCG issued its final rule for escort vessels, 33 CFR 168. The regulations require escorts only for single-hulled tankers, and define an escort vessel as any vessel dedicated to escorting laden oil tankers that is fendered and outfitted with towing gear as needed to assist a disabled tanker. The regulations also set minimum operational and performance requirements for escort vessels ([801.400.940819.uscgescvesfr.pdf](#)).

**March 1995.** PWS tanker owners, PWSRCAC, ADEC and USCG entered into a formal agreement to undertake a risk assessment study for tanker transit in Prince William Sound ([803.590.950719.rascontract.pdf](#)). Alyeska SERVS also joined the study group. The study, which was funded by PWSRCAC and the shippers, was undertaken in an effort to determine what priorities should be set for improving the ship escort system in Prince William Sound. While the disabled tanker towing study examined the capability of the existing escort system to respond to worst-case scenarios, it did not predict the likelihood of the occurrence of these and other scenarios, and, therefore, did not provide sufficient guidance for improving the existing system.

**August 14, 1995.** ADEC issued a findings document for the PWS tanker C-Plans ([651.410.950814.decfinalnd.pdf](#)) in which the agency concluded that “there are sufficient issues to preclude a finding that BAT is presently being used in the tanker escort system, especially with respect to VLCCs.” The agency requested plan holders submit an escort vessel system improvement proposal within 30 days, but described the requested proposal as an interim action pending the completion of the tanker transit Risk Assessment Study.

**October 2, 1995.** ADEC gave conditional approval to the PWS C-Plan and tanker C-Plans submitted to the agency March 1994 ([651.300.951003.decplnappvl.pdf](#)). Among the conditions that needed to be met was a requirement that shippers submit a plan for improving the vessel escort system which incorporated best available technology based on the results of the tanker transit risk assessment study. ADEC indicated that at a minimum the system should provide at least one tug escort and one Escort Response Vessel (ERV) for all laden tankers from the terminal to Hinchinbrook Entrance, as well as escort assistance to inbound tankers.

**November 1995.** Cordova District Fishermen United (a PWSRCAC member organization), United Fishermen of Alaska, and commercial fishermen Tom Copeland and Kristin Stahl-Johnson (both PWSRCAC board members at the time) filed an administrative challenge to ADEC's approval of the tanker C-plans "with conditions," arguing, among other issues, that the agency could not approve the plans with conditions, the scope of which were not fully known at the time of approval, including what may constitute BAT for escort vessels, which the agency had indicated would be determined from a review of the tanker transit Risk Assessment Study. The challengers argued that the agency could not legally acknowledge the current escort system did not represent BAT, but nonetheless approve the tanker C-plans and allow tankers to continue operating with the existing escort system.

**November 29, 1995.** Congress passed a bill that was signed into law granting the President the authority to lift the export ban on North Slope crude oil. In the months that followed passage of the bill, the Department of Energy held a series of public hearings to determine the effects of lifting the export ban, including environmental effects. Several Alaska communities, PWSRCAC, and PWSRCAC members presented testimony. Among the most significant concerns raised were the additional oil spill risk presented by laden tankers bound for Asia to communities outside Prince William Sound and the potential for introduction of exotic species into the Sound's waters by tankers de-ballasting segregated ballast taken on at foreign ports. Included in PWSRCAC's recommendations was a requirement to station a tug capable of open ocean rescue at Hinchinbrook Entrance as part of the SERVS fleet. Communities outside Prince William Sound, including Kodiak, called for stationing tugs at Kodiak and Dutch Harbor, and positioning additional response equipment on Kodiak ([440.105.960126.rcacreexpban.pdf](#) and [440.105.960219.rcacreexpban.pdf](#)).

During the course of the hearings, as well as a series of public meetings in Alaska organized by the Governor's Office, the TAPS shippers agreed to follow an open-ocean sea route to Asia away from Kodiak Island and the Aleutian Chain, to exchange segregated ballast in the open ocean on return from Asian ports before entering the Gulf of Alaska, and to station a tug at Hinchinbrook Entrance capable of open ocean rescue in the Gulf of Alaska (assuring Kodiak that the tug would be capable of providing them the same level of coverage they had hoped to achieve with a tug stationed at Kodiak.) On **April 26, 1996**, the President authorized the lifting of the export ban, and ordered the Secretary of Commerce to promulgate a rule implementing his directive. The final rule, which went into effect on **November 1, 1996**, required all shipments of oil from the terminal regardless of destination to be made in U.S.-flagged ships, mandated deep water exchange of segregated ballast, and directed all Asia-bound TAPS tankers to travel straight south beyond Hinchinbrook Entrance for 300 miles before turning west to Asia, and to remain outside the U.S. Exclusive Economic Zone for the remainder of their voyage. The rule did not contain any requirements for positioning of tugs capable of open ocean rescue ([440.400.960531.oilexpfinrul.pdf](#)).

**December 16, 1996.** The Prince William Sound tanker escort Risk Assessment Study was completed ([803.431.961215.gwuriskstyp.pdf](#)). One of the study's significant conclusions was that "the single most effective risk reduction measure to date has been the current escort system which effectively reduces potential outflow due to groundings." The study concluded the current escort system could be improved by additional provisions in system protocols to reduce the risk

of drift groundings by inbound and outbound tankers and potential collisions with SERVS vessels, improved ice navigation procedures, and improved use of appropriate equipment and procedures to be able to save an outbound tanker at Hinchinbrook Entrance in marginal weather. The study was referred to the National Research Council for an independent peer review.

**January-March 1997.** ADEC negotiated with shippers over needed improvements in SERVS in order to meet BAT requirements for a tanker escort system. A number of the meetings were between shippers, ADEC's Commissioner and the Governor. These were not announced and not open to the public. It was later revealed that, during the negotiations, the Governor and ADEC insisted the shippers commit to building tractor tugs capable of assisting the largest class of TAPS tankers in adverse weather conditions in Prince William Sound ([270.300.980212.govrenewtugs.pdf](http://270.300.980212.govrenewtugs.pdf)).

**March 31, 1997.** The shippers submitted a plan to ADEC for enhancing SERVS in which they committed to issuing a Request for Proposals (RFP) for the construction of two enhanced tractor tugs that could effectively assist the largest TAPS tanker in the worst weather conditions under which tankers are permitted to sail in Prince William Sound. The shippers also proposed to abide by a series of interim conditions under which they would operate until the new tugs were delivered for service, including reduced tanker speeds during critical points in transit, tethered tugs through the Narrows and the Arm, matched tug power to tanker size, a 30-knot wind closure for tankers over 150,000 DWT, additional escorts when wind speed exceeded 20 knots, and the stationing of the *Gulf Service* at Hinchinbrook Entrance. The shippers noted that they had done an analysis of the Protector class tug and concluded it did not provide any additional capability, but they committed to conducting a series of sea trials to determine additional improvements and modifications in the escort system ([651.300.970331.bpcplanmple.pdf](http://651.300.970331.bpcplanmple.pdf)).

PWSRCAC responded to the shippers' plan by asking ADEC to withhold approval of the plan until the tractor tug RFP was completed and the organization had time to review it. PWSRCAC also asked ADEC to require more training on rescue operations, more effective protocols for operation of tethered tugs, minimum standards in the RFP for firefighting capability and sufficient response capacity, and testing trials for the tractor tugs once built before delivery was accepted ([651.105.970331.cond2bcmts.pdf](http://651.105.970331.cond2bcmts.pdf)).

**April 3, 1997.** The RFP for construction of two enhanced tractor tugs was issued ([651.502.970403.apsctugrfp.pdf](http://651.502.970403.apsctugrfp.pdf)).

**April 9, 1997.** ADEC approved the shippers' March 31 plan for enhancing SERVS, including the use of the *Gulf Service* at Hinchinbrook Entrance, as meeting BAT for tanker escort systems. The approval letter noted that anyone who disagreed with the decision had the option of filing a request with the ADEC Commissioner for an adjudicatory hearing ([661.300.970409.batcplancon2.pdf](http://661.300.970409.batcplancon2.pdf)).

**June 6, 1997.** CDFU, et al. submitted a request for an adjudicatory hearing, challenging ADEC's April 9 decision, arguing that the decision was made without public review, violating the state's Administrative Procedures Act, Public Records Act, Alaska Coastal Management Program regulations, and the Department's own regulations and procedures. In particular, the

complainants challenged the fact that the decision was based in part on documents to which the public did not have access, including one later released with a May 2, 1997 date. And they argued that in making its decision, ADEC ignored calls for additional interim measures, including daylight-only sailing restrictions, one-way traffic zones in the Arm and Hinchinbrook Entrance and more stringent closure conditions. They also challenged the legality of the meetings between the shippers, ADEC's Commissioner and the Governor regarding tractor tugs to which the public was not privy ([651.300.970606.adectkrcon2b.pdf](#)).

**June 9, 1997.** ADEC's Commissioner granted CDFU, et al.'s request for a hearing, but indicated the hearing would address not just the challenges to ADEC's April 9 decision regarding BAT for tanker escorts, but would consider all other issues raised in the December 1995 challenge the complainants filed against the Department's October 1995 conditional approval of the tanker C-plans as well. Shippers threatened to hold up the tractor tug RFP process until the hearing was held and a decision was issued by the hearing officer. CDFU representatives, as well as PWSRCAC board members and staff, talked to the shippers and presented compelling arguments for moving forward with the RFP. The shippers issued the RFP ([651.300.970609.adectkrcon2b.pdf](#)).

**October 6, 1997.** The shippers submitted a proposal to ADEC for modifications to SERVS escort vessel operations pursuant to the conditions of ADEC's April 9, 1997 tanker C-plan approval ([801.300.971006.bpenhescsyst.pdf](#)). The proposal specified that 1) tanker escorts through the Narrows will be provided by two tugs, one of which will be a Protector class tug; 2) tanker escorts for Hinchinbrook Entrance will be provided by two tugs, one of which will be the sentinel tug *Gulf Service*; 3) escorts through the central Sound will consist of one close tug and one sentinel tug; 4) two Protector class tugs will replace one docking tug and two ERVs, reducing SERVS fleet to eleven vessels; and 5) response capability will be provided by response vessels and barges stationed in the Arm, in the Narrows, at Naked Island and at Hinchinbrook Entrance. ADEC released the proposal for public review November 13, 1997 ([801.300.971113.adecpropchan.pdf](#)).

**December 23, 1997.** PWSRCAC submitted comments on the SERVS modification proposal in which the organization opposed the removal of an ERV from service before the new enhanced tractor tugs entered service ([801.105.971223.intescmnts.pdf](#)). But the group indicated it would accept reducing the ERVs in the fleet to just two if one was stationed at Port Etches. As well, the group wanted it made clear that no changes relaxing speed limits or requirements for closure conditions were being considered.

**January 26, 1998.** ADEC issued another public review draft of the SERVS escort vessel operations modification proposal as discussions between ADEC, PWSRCAC and the shippers continued. PWSRCAC held firm on its position that if the number of ERVs in the fleet was going to be reduced before the new tractor tugs were delivered, one of them should be stationed at Port Etches with the remaining one stationed with the *Gulf Service* at Hinchinbrook ([801.108.980126.ervcpehinch.pdf](#)).

**February 2, 1998.** A settlement was reached in the CDFU et al. administrative appeal. CDFU, United Fishermen of Alaska and ADEC signed a settlement agreement in which ADEC agreed to

require a BAT review of tug performance at Hinchinbrook Entrance before completing its standard three-year review and renewal process for tanker C-plans in 1998. The agency further agreed that if the BAT review of the Hinchinbrook tug performance was not complete when the agency approved the 1998 tanker C-plans, it would conduct a separate public review of the BAT analysis allowing all interested members of the public access to documents on which its decision regarding the Hinchinbrook tug would be based ([651.410.980212.tkrclagreem.pdf](#)).

**April 10, 1998.** The National Research Council (NRC) completed its peer review of the Risk Assessment Study for tanker transit in Prince William Sound and released its findings ([803.410.980404.nrcfinalrisk.pdf](#)). The NRC determined the PWS risk assessment represented an important first step in attempting to evaluate the risks associated with tanker transit in the Sound and praised the study team for its efforts to involve important stakeholders in the assessment process, but it concluded the study failed to measure up to the NRC's standards for risk assessments. In particular, the weaknesses of the analytical methods employed by the study raised serious doubts about whether results represented a scientifically-based assessment of risk. The NRC found that the risk assessment relied too much on expert judgments and not enough on hard data. In addition, the NRC determined that the risk assessment model developed in the study could result in risks being underestimated and risk reduction strategies being overlooked, and concluded the model provided no guidelines to measure the effectiveness of specific risk reduction strategies.

**July 28, 1998.** Alyeska and the shippers submitted an updated PWS C-plan and tanker C-plans to ADEC for review and approval pursuant to state law that requires plans to be submitted every three years for review. The plans contained a description of SERVS operations that included a proposal to replace the ERVs in the fleet with newly built Prevention/Response Tugs (PRTs) ([651.300.980728.bprenewtnk.pdf](#)).

**August 14, 1998.** A final decision was issued in the CDFU, et al. administrative challenge. (As a result of the February settlement with CDFU and United Fishermen of Alaska, only Tom Copeland remained as a complainant at the time the decision was issued.) The hearing officer upheld ADEC's decision to approve the use of the *Gulf Service* as meeting BAT for the Hinchinbrook Entrance tug for the term of the 1995 tanker C-plans, and concluded that ADEC should have offered an opportunity for public review and comment on any documents submitted by plan holders subsequent to the agency's October 2, 1995 conditional approval of the tanker C-plans before it issued its final approval on April 9, 1997.

**September 14, 1998.** PWSRCAC board member Tom Copeland filed a lawsuit in state court challenging the hearing officer's decision to allow the continued use of the *Gulf Service* as the Hinchinbrook Entrance tug without a full analysis of the performance of the *Gulf Service* compared to other vessels available to the shippers.

**September 28, 1998.** ADEC issued short-term, interim approval of the continued use of the *Gulf Service* as meeting BAT requirements for a Hinchinbrook escort tug, but required the shippers to compare the performance of the *Gulf Service* with the performance of the enhanced tractor tugs under construction ([651.300.980928.adectkrrview.pdf](#)). The agency indicated that such an evaluation needed to be completed in order for it to determine if the *Gulf Service*

satisfied BAT as a sentinel escort at Hinchinbrook Entrance, given that the enhanced tractor tugs had been designed, were being built and would soon be in service. ADEC also required the shippers to conduct an evaluation of the proposal to replace the ERVs in the SERVS fleet with the new PRTs.

The shippers submitted a letter to ADEC complaining that the agency's decision to require them to evaluate the performance of a yet-to-be built vessel violated ADEC regulations regarding BAT ([651.300.980127bptkrexensi.pdf](#)). The shippers argued that such an evaluation involved the analysis of future technology, rather than existing technology, since the enhanced tugs under construction were being specially built and nothing like them was currently available. The shippers submitted their letter of protest without consulting PWSRCAC even though they had participated in a working group process with the council and ADEC during which all parties agreed that BAT could be interpreted to require the consideration of technology that constitutes the best in use in similar situations, an interpretation that would accommodate a requirement to compare the *Gulf Service* with the design specifications of the tugs under construction. PWSRCAC took the shippers to task for their breach of protocol, and the shippers agreed to further discussions regarding BAT for the Hinchinbrook tug.

**October 28, 1998.** Alyeska requested the support of PWSRCAC to allow SERVS to pursue efficiencies of a 10-tug fleet if three conventional tugs are replaced with new PRTs (801.300.981028.APSCnewPRTs). PWSRCAC concurred with the proposal based on the information presented (801.105.981030upgrdTug.pdf).

**December 15, 1998.** The shippers submitted their analysis of the performance of the *Gulf Service* as compared to the performance of the enhanced tractor tugs under construction ([651.300.981215.tkrplancoa2.pdf](#)). ADEC responded by indicating that the shippers' submittal was incomplete and needed further analysis and consideration.

**January 5 – 6, 1999.** PWSRCAC hosted a Hinchinbrook Entrance (HE) Tug BAT Workshop ([801.003.990105HETugBatWksp.pdf](#)) with a goal of agreeing on what additional information, if any, would be required in a BAT analysis submittal of the HE tug, and to agree on the process by which that information is obtained. Objectives under the goal included:

- Clarify mission of the Hinchinbrook tug.
- Identify known and unknown system risks at Hinchinbrook Entrance, as well as conditions affecting those risks and remedies to those risks.
- Review 12/15/98 HE tug BAT Analysis submittal.

**January 8, 1999.** PWSRCAC asked ADEC to request additional information it believed was essential to inform the agency's decision regarding BAT for the Hinchinbrook tug, including a summary and analysis of actual casualty responses and drill reports for the *Gulf Service* and other tugs doing similar service in other parts of the world, simulations and modeling of performance of vessels with the capabilities of the *Gulf Service* in worst case scenarios, and schedules for additional field trials for the *Gulf Service* ([651.105.990108.decbatcmnts.pdf](#)).

**January 27, 1999.** ADEC conditionally approved the continued use of the *Gulf Service* at Hinchinbrook, requiring shippers to submit additional information regarding the performance of the vessel and a plan for modeling tug performance as well as additional sea trials ([651.300.990127.dectorpibat.pdf](#)). Shippers sent a letter to ADEC complaining about its decision to grant only conditional approval of the use of the *Gulf Service* and the requirements for additional analyses and sea trials ([651.300.990308.bphinchintug.pdf](#)). PWSRCAC weighed in, strongly supporting ADEC's decision, pointing to earlier statements the shippers issued after the release of the PWS Risk Assessment Study, in which shippers agreed that the *Gulf Service* represented only an interim measure for escort duties at Hinchinbrook Entrance while additional studies of what would constitute the most effective escort tug at Hinchinbrook were completed. PWSRCAC requested that ADEC withhold final approval of the 1998 tanker C-plans until the additional information requested from shippers was provided ([651.105.990317.hinchitugbat.pdf](#)).

**May 12, 1999.** ADEC approved the shippers' proposal to replace ERVs in the SERVS fleet with PRTs as meeting one of its conditions of approval of the 1998 tanker C-plans, determining that the PRTs met BAT requirements for escort response vessels in Prince William Sound.

**May 1999.** The first of the enhanced tractor tugs, the 153-foot *Nanuq*, was launched and joined the SERVS fleet, followed in short order by the second enhanced tractor tug, the *Tan'erliq* ([801.108.990201.nanuq+tanerl.pdf](#)).

**June 30, 1999.** The shippers submitted a proposal to ADEC to replace the *Gulf Service* with either one of the newly built PRTs or one of the new enhanced tractor tugs ([651.300.990630.bptkrplemts.pdf](#)). ADEC asked for more analysis and sea trials. Shippers agreed and undertook the sea trials and analyses over the next several months.

**November 2, 1999.** ADEC granted conditional approval of the 1998 tanker C-plans. In issuing its approval, ADEC found that the *Gulf Service* met BAT on an "interim basis," concluding that "further technical analysis is needed before the proposed changes in the escort system are approved and BAT is determined for Hinchinbrook Entrance." ([651.300.991102.apsccplntaps.pdf](#)).

**December 2, 1999.** Three of the shippers, Arco Marine, BP and Sea River, filed an administrative appeal of ADEC's November 2 decision on tanker C-plans, arguing that the conditional approval was "fundamentally contrary" to Alaska law. By setting conditions to be fulfilled and evaluated at a future time, the shippers argued, ADEC had "imported an improper level of uncertainty into the regulatory process." The shippers asked for ADEC's conditions to be either deleted from the approval or stayed until the appeal process was completed, including Condition #2 requiring sea trials for the Hinchinbrook tug. Whittier resident Tom Lakosh also appealed the escort vessel provisions of ADEC's November 2, 1999 conditional approval.

After the shippers' appeal was filed, on **December 17, 1999**, PWSRCAC submitted a notice of intent to intervene in the case on behalf of ADEC, and received a stern warning from Alyeska that to do so would violate the provisions of OPA 90 regarding litigation by advisory councils and the terms of its 1990 contract with Alyeska ([651.105.991217.adecplanapr.pdf](#)). PWSRCAC did not intervene in the case, but the City of Seldovia and the Kodiak Island Borough (both

PWSRCAC members) as well as PWSRCAC board member Tom Copeland (and other groups and individuals) filed motions to intervene.

**December 14, 1999.** ADEC and the shippers entered into a “Stand Still Agreement” in which they agreed to freeze all actions on the shippers’ appeal while they negotiated a settlement of the shippers’ complaints ([651.110.991214.bpkvmtstands.pdf](#)). They further agreed not to take any actions to implement the requirements set out in the November 2 C-plan approval while the negotiations proceeded. ADEC then entered into negotiations with the shippers, during which time the shippers submitted additional analyses of the performance of the *Gulf Service* and the PRTs and ADEC requested additional information.

**February 28, 2000.** ADEC approved replacing the *Gulf Service* with a PRT stationed at Port Etches during the time period the *Gulf Service* would be in dry dock for maintenance and repairs, as long as the new PRT crews had completed their training and the PRT had been tested to SERVS’ standards ([801.300.000228.adecgulfserv.pdf](#)).

**March 3, 2000.** The shippers withdrew their appeal of ADEC’s November 2 C-plan approval, telling the hearing officer that the parties (that is, the shippers and ADEC) had met with each other and “reached a common understanding on the meaning and intent of the conditions which were imposed on plan approval” ([651.300.000303.noticewithrwl.pdf](#)). In accepting the shippers’ withdrawal, the hearing officer also dismissed all interventions in the case and dismissed the Lakosh appeal that had been filed when the shippers filed their appeal.

**March 6, 2000.** The U.S. Supreme Court issued a decision in *United States v. Locke*, a case brought in U.S. federal court by the International Tanker Owners Association (INTERTANKO), who were later joined by the federal government, challenging oil spill prevention laws passed by the State of Washington that had imposed requirements for tanker design, manning and operations on all tankers transiting state waters ([655.108.000306.aptkrfedrule.pdf](#)). The Supreme Court held that states could not enact laws that govern ship design, construction, alteration, repair, maintenance, operation, equipping, personnel qualifications and manning of tankers transiting state waters. The Court determined that doing so would have an extraterritorial effect, that is, would affect tankers beyond the waters of the state, constituting an illegal intrusion into the authority of the federal government to regulate interstate commerce as well as to carry out its obligation to enforce provisions of international maritime treaties to which the United States was a signatory. PWSRCAC had earlier filed an *amicus* brief in the case supporting the State of Washington’s position.

However, the court determined that states did have the power to regulate tanker transit in its ports and waters if the regulation was based on the “peculiarities of local waters that call for special precautionary measures” and as long as the regulation had limited extraterritorial effect and the Coast Guard had not adopted regulations on the subject or determined that such a regulation was unnecessary or inappropriate. The Court cited state rules requiring ships to take on local pilots or to travel with tug escorts in certain waters as examples of acceptable regulations, and it remanded specific questions on such regulations that were raised in this case to the 9<sup>th</sup> Circuit Court of Appeals for reconsideration. At that point, the state of Washington dropped the suit and made its remaining program voluntary in nature.

**March 22, 2000.** Shippers submitted the results of sea trials and modeling work they had done regarding the equivalency of the PRTs and enhanced tractor tugs as compared to the *Gulf Service* in Hinchinbrook Entrance ([651.3000.000322.bptkrvessequ.pdf](#)). ADEC approved replacing the *Gulf Service* with the PRT *Alert* ([651.300.000907.adectkrcond8.pdf](#)). As a result, the *Gulf Service* did not return to the SERVS fleet after its dry-docking.

**July 13, 2000.** Shippers submitted supplemental information on Hinchinbrook tug performance requested by ADEC as a condition of its November 9, 1999 tanker C-plan approval ([651.300.000713.adecbptraj.pdf](#)). PWSRCAC requested ADEC calling for more testing ([651.105.000802.tkrplancoa8.pdf](#)).

**September 1, 2000.** Shippers submitted a Hinchinbrook Entrance Escort Best Available Technology (BAT) Report to ADEC, asking for the placement of the *Alert* at Hinchinbrook to be accepted as part of approved operations for the escort system described in their 1998 C-plans submittal ([651.300.000901.pwstnkplanbp.pdf](#)). They indicated the USCG has already approved the change to SERVS and, therefore, it did not need to be treated as a formal C-plan amendment.

**October 4, 2000** Shippers provide additional information on the plan amendment for Part 4 BAT, and an excerpt from the shippers' Final BAT Report of September 1, 2000.

**November 17, 2000** ADEC released a letter that found the September 1, 2000 shippers' submittal lacking and asked the shippers to submit the information as a C-plan amendment, which would require public review ([651.300.001117.adectkrcoa8.pdf](#)).

**December 8, 2000.** Shippers reply to ADEC Nov. 2, 1999 approval letter and a similar November 17, 2000 letter on condition 8 and BAT stating that (1) The description of the escort system is not part of the BAT process; (2) The system is described accurately, but tables will be clarified; (3) Vessel specifications can be revised as routine amendments; (4) Table 2 revised to reflect the system as approved by the USCG, and (5) Information on PRTs and ETTS as equivalent is provided ([651.300.001208.TkrCoa8ATC.pdf](#)).

**December 8, 2000.** PWSRCAC passed a resolution opposing an Alyeska proposed reduction in the tanker escort fleet from ten to nine vessels. The resolution also recognized PWSRCAC prior action in October 28, 1998, when the fleet went from 14 to 10 tugs, of accepting the reduction because SERVS brought in the new BAT PRTs ([PWSRCAC Resolution 00-04](#)).

**December 21, 2000.** ADEC notified the shippers that it had reviewed their September 1, 2000 submittal and determined they didn't provide all the information the agency had requested for a full evaluation of their proposed changes to the escort system ([651.300.001221.adeccoa8.pdf](#)). The agency, therefore, decided to delay public review of the proposed changes to the system until the shippers submitted all needed information. ADEC acknowledged the PRTs and enhanced tractor tugs in the SERVS fleet constituted BAT for an escort system, but it questioned some of the methodology and assumptions the shippers had used in the simulations they

described in their September 1 analysis of the operations of these vessels. The agency asked the shippers to justify their assumptions and to conduct additional sea trials.

**March 1, 2001.** Alyeska and the shippers submitted an application for renewal of the PWS C-plan and tanker C-plans pursuant to state law that requires plans to be reviewed every three years ([651.300.010301.atcoilupdate.pdf](#)). The plans include a description of the escort vessels in Prince William Sound.

At this point in time, the SERVS fleet included 3 PRTS and 2 enhanced tractor tugs specially built to escort TAPS tankers, a Protector class vessel and 2 large conventional tugs, as well as two response vessels and barges. The plan specified that laden tankers would be escorted by two vessels at all times, in the following configuration: two escorts traveling in close proximity to each laden tanker (regardless of the tanker's hull configuration) through the northern Sound, with one of the tugs tethered to the tanker through the Narrows; one close escort and a sentinel vessel escorting the tanker in the central Sound; two close escorts accompanying the tanker through Hinchinbrook Entrance; and the Hinchinbrook tug on station in the Entrance until the tanker is 17 miles out to sea beyond the Sound.

**March 30, 2001.** ADEC indicated that it would move forward with its review of the 2001 tanker C-plans, except for the provisions regarding the tanker escort system. Review of these provisions of the plan would be delayed until the ongoing review of the shippers' Hinchinbrook Entrance Escort Best Available Technology (BAT) Analysis, and accompanying request to amend the 1999 C-plans, was completed ([651.300.010330.adeccoreplan.pdf](#)).

**August 15, 2001.** ADEC issued a final decision regarding the Hinchinbrook Entrance escort tug, approving the shippers' BAT analysis and finding that the stationing of the PRT *Alert* at Hinchinbrook Entrance constituted BAT for the Hinchinbrook tug ([651.300.010802.adecapprvcp.pdf](#)). This decision settled the final unresolved issue pending from the conditional approval of the 1999 tanker C-plans. However, ADEC also decided that while a PRT and an ETT are the preferred close escorts through Hinchinbrook Entrance, there may be occasions when, because of maintenance or repair, a Theriot class tug will replace either the ETT or PRT as the close escort ([651.410.010802.ADECtkrCOA8.pdf](#)).

**November 2001.** The state court dismissed the lawsuit brought by Tom Copeland on September 14, 1998 challenging the decision of ADEC's hearing officer to allow the continued use of the *Gulf Service* as the Hinchinbrook Entrance tug without a full analysis of the performance of the *Gulf Service* to other vessels available to the shippers. The court determined the issues raised in the case were moot, that is, they had all been resolved by subsequent agency actions.

**December 14, 2001.** Shippers submitted their Vessel Escort Response Plan (VERP) to the USCG for evaluation under the provisions of 33 CFR 168 ([801.450.011214.verp.doc](#)). The shippers indicated the vessel escort system described in the plan would be required for use by all tankers transiting Prince William Sound. (No mention was made of limiting the system to single-hulled tankers only.) The plan described specific procedures, vessel configurations, speed restriction and closure requirements, communications requirements, tethering procedures, and pre-escort conference procedures required by the system for all laden tankers transiting the

Sound. These were outlined in lesser detail in the shippers' 2001 tanker C-plans submitted to ADEC for approval. The VERP also detailed escort requirements for unladen tankers transiting the Sound.

**December 17, 2001.** USCG issued a statement concluding that the VERP meets or exceeds the requirements of 33 CFR 168 ([801.300.011217.uscgverpappr.pdf](#)).

**October 17, 2002.** ADEC issued a conditional approval of the 2001 tanker C-plans ([651.300.021017.adecfindings.pdf](#)). With regard to the tanker escort system, the agency asked shippers to integrate "current pertinent information" from the VERP approved in 2001 by the USCG. ADEC indicated that if the shippers did so, this would adequately address state regulations regarding escort vessels, implying that the requested action was all that was needed to secure approval of the tanker escort section of the C-plans.

**December 8, 2003.** The Response Planning Group (RPG) submitted a routine amendment of the tanker plan to reflect a vessel change in the SERVS fleet from a Protector Class tug to a Conventional Tug. The RPG said The Guard was utilized as a docking tug, a stand-by and ice scout vessel. Those same duties can be accomplished by a less expensive conventional tug ([651.300.031208.ATCTkrAmend2.pdf](#)). In a December 24, 2003, PWSRCAC submits a letter to ADEC explaining that the Protector Class tug is far more capable in spill response than the conventional tugs and represents Best Available Technology for maneuvering barges ([651.105.031224.decTkrAmd2.doc](#)). On January 2, 2004, ADEC accepted the change as a routine change ([651.300.040102.ADECTkrAmnd.pdf](#)).

**December 2004.** PWSRCAC passed a resolution supporting the continued operation of the PWS tanker escort program in the configuration described in the 2001 Vessel Escort and Response Plan ([801.106.041203.pwsescorts.pdf](#)). That configuration calls for two escorts traveling in close proximity to each laden tanker (regardless of the tanker's hull configuration) through the northern Sound, with one of the escorts being a tug tethered to the tanker through the Narrows; one close escort and a sentinel vessel escorting the tanker in the central Sound; two close escorts accompanying the tanker through Hinchinbrook Entrance; and a sentinel tug capable of open ocean rescue stationed in the Entrance until the laden tanker reaches a distance of 17 miles seaward of Cape Hinchinbrook.

**July 2005.** SERVS reveals to PWSRCAC that they will officially begin collecting data on an escort fleet configuration of just 8 tugs - two fewer tugs than the current tug fleet. SERVS earlier attempt to collect data on an eight tug fleet in May 2005 was stopped after just three days because of accumulating tug-hour delays. The purpose of the data-gathering project is to provide information in operating an optimum sized fleet ([600.410.050615.SERVStugdata.pdf](#)).