

# Industry Preparedness and Pipeline Program

Alaska Department of Environmental Conservation  
Division of Spill Prevention and Response



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## Major Accomplishments for 2000 and 2001

### Mission Statement

IPPP's mission statement is to protect public safety, public health and the environment by ensuring that producers, transporters and distributors of crude oil and refined oil products prevent oil spills, and are fully prepared both materially and financially to clean up oil spills.

### Services Provided

- ❖ Inspect regulated facilities and vessels for compliance with State oil spill prevention and Best Available Technology (BAT) requirements.
- ❖ Conduct and participate in unannounced and announced oil spill drills to verify that regulated operators are in compliance with State response planning requirements.
- ❖ Review and approve oil discharge prevention and contingency plans required under State Law.
- ❖ Review and approve applications for proof of financial responsibility to ensure that regulated operators have the financial resources to carry out oil spill response operations.
- ❖ Register oil spill primary response action contractors identified in oil discharge prevention and contingency plans.

### Goals and Strategies

- ❖ **Prevention:**
  - ❖ Prevent spills from oil terminals, pipelines, tank vessels and barges, railroads, refineries, non-tank vessels, and exploration and production facilities.
  - ❖ Ensure that best available technology requirements for spill prevention are being implemented through the review and approval of oil discharge prevention and contingency plans.
  - ❖ Ensure that best available technology requirements are being implemented through inspections and audits of marine vessels, facilities and pipelines.
- ❖ **Preparedness:**
  - ❖ Verify that facility and vessel operators have adequate resources to respond to oil spills through the review and approval of oil discharge prevention and contingency plans.
  - ❖ Verify that facility and vessels operators have adequate resources to respond to oil spills through inspections of response equipment inventories and spill response exercises and drills.
  - ❖ Certify that 100% of regulated operators have the financial capability to respond to spills through the review and approval of applications for financial responsibility.
  - ❖ Ensure the effectiveness of spill plans which rely on contractors through their registration as primary oil spill response action contractors.

## Executive Summary

This summary report highlights the outstanding work completed by a team of 32 dedicated environmental professionals, during the years 2000 and 2001. Due to the diligent efforts of the Industry Preparedness and Pipeline Program (IPPP) staff there have been many noteworthy improvements in the Alaska industry's oil spill prevention and response capability. The mission statement, services provided statement, and goals and strategies provided direction for the team. Consistent with the list of services provided, this summary identifies how each service was fulfilled during 2000 and 2001.

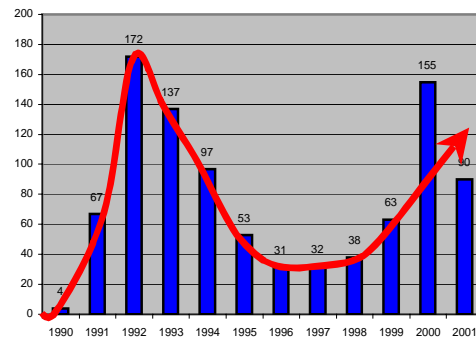
## Inspection Performance

The figure shown below represents the dramatic increase made by the IPPP team in the number of inspections that were conducted at regulated facilities and vessels during 2000 and 2001. The increased field presence identified serious compliance deficiencies, improved spill prevention, and signaled to industry that IPPP was serious about oversight of the facilities. IPPP's increased field presence also resulted in a measurable increase in industry self-audits and self-inspections, as industry sought to identify and correct problems prior to IPPP inspectors arriving on site. Increased state oversight and proactive company initiatives, both produced positive results for the environment. The number of inspections decreased in 2001 due to the need to assign staff resources to enforcement of numerous year 2000 inspection violations.

### 2000-2001 Inspection Performance

- ❖ Made a dramatic increase in field presence, with a budget and staffing level consistent with the previous four years.
- ❖ Tripled the number of remote port barge inspections.
- ❖ Inspected every Prince William Sound tanker.
- ❖ Inspected 50% of Cook Inlet tankers.
- ❖ Completed annual inspections or audits on 35% of tank and pipeline facilities.

### Inspections

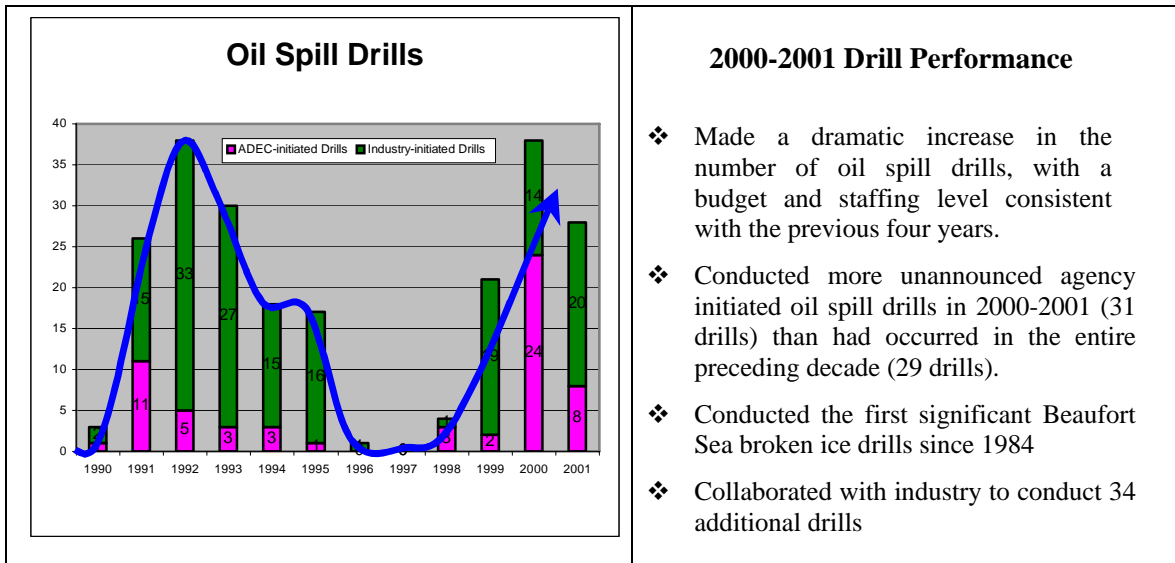


### Highlights of Key Inspection Findings:

- ❖ Missing oil spill response equipment in Cook Inlet, North Slope, Dillingham, Dutch Harbor, St. George.
- ❖ Overfill alarms not functioning at Cook Inlet, North Slope, and St. George Facilities.
- ❖ Tank inspection audits revealed inspection and repair deficiencies at tanks and transfer pipelines in the Port of Anchorage, Cook Inlet, Cordova, Dillingham, Haines, Juneau, Kotezbue, the North Slope, Seward, and St. George.
- ❖ Pipeline leak detection systems were not operating at required accuracy at some major North Slope Facilities.
- ❖ Immediate action was taken to eliminate imminent and potential threats to the environment and public health posed by facilities found to be non-compliant as a result of state inspections or public complaints.

## Oil Spill Drill Performance

The figures shown below represent the dramatic increase made by the IPPP team in the number of drills that were conducted at regulated facilities and vessels during 2000 and 2001. The increased presence in the field identified serious compliance deficiencies, improved response readiness and signaled to industry that IPPP was serious about oversight of the facilities. IPPP's augmented field presence also resulted in a measurable increase in industry conducted self-initiated drills, as industry sought to identify and correct problems prior to IPPP staff arriving on site. Increased state oversight, and proactive company and oil spill cooperative initiatives, both produced measurable improvements in response readiness.

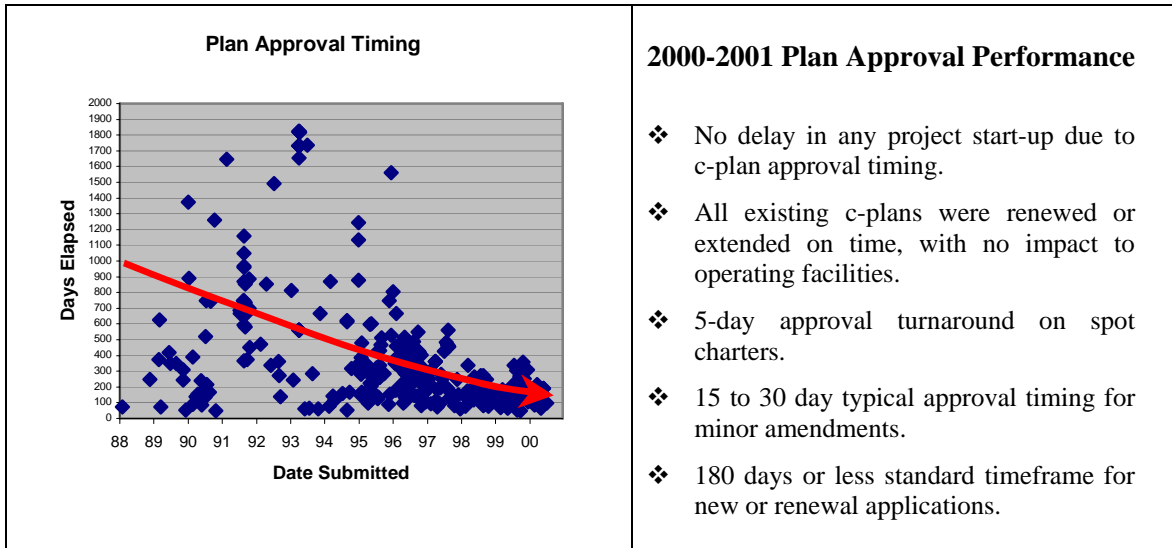


### Highlights of Key Drill Findings:

- ❖ Major equipment deployment drills were conducted in the Aleutians, South East, Prince William Sound, Beaufort Sea, Cook Inlet, Port of Anchorage, and along the TAPS corridor.
- ❖ Missing or non-functional oil spill response equipment was found in Cook Inlet, Dillingham, Dutch Harbor, St. George, and on the North Slope.
- ❖ Many new oil spill response tactics and strategies were developed, such as on land tactics for the Valdez Marine Terminal, tanker towing strategies, and tactics to improve broken ice response.
- ❖ Realistic operating limitations of response equipment in broken ice were identified.
- ❖ New and replacement equipment was identified.
- ❖ Tug escort sea trials were conducted in Prince William Sound to determine Best Available Technology for the escort system.
- ❖ Tanker towing exercises were conducted with Cook Inlet tankers.

## Permit Approval Performance

- ❖ The IPPP Team handled the technical analysis, administration, and public notice requirements of over 90 new, renewal or amended Oil Discharge Prevention and Contingency Plans (c-plans) per year.
- ❖ As the figure below represents, the timing for plan approval continues to improve from year to year.



- ❖ As required, c-plans were submitted six months prior to approval or renewal. The staff did an excellent job completing an in-depth technical analysis, and coordinating a full public review within required timeframes on the vast majority of c-plans.
- ❖ Review timeframes for c-plans in excess of the standard six-month application period were typically the result of incomplete or late applications, serious compliance deficiencies that needed to be addressed via compliance order prior to plan approval, the need to address public concerns regarding inadequate planning prior to approval, and/or resource constraints.
- ❖ While some challenging permit actions took additional time to complete a legal review, no actual project or facility was adversely impacted by a permitting delay. As the top priority, all new permits were issued in a timely manner to ensure that there was no delay in start-up timing. All renewal permits were processed as fast as possible, and were on occasion extended for short periods of time to allow for completion of the legal review process, with no adverse impact to the actual operations.
- ❖ In collaboration with the Attorney General's Office, IPPP provided technical analysis and assistance on six significant appeals and two significant adjudications with the AG's office.
- ❖ In 2000, IPPP approved approximately 120 financial responsibility applications (oil spill insurance program).
- ❖ In 2001, IPPP added over 1000 vessels to the financial responsibility requirements and increased its processing capability to handle this 8-fold increase in the number of applicants.
- ❖ A PRAC Registration has been maintained, with a complete web based approval listing issued on a monthly basis.

## Oil Spill Prevention Improvements

- ❖ Over 1000 additional non-tank vessels and the railroad are now legally required to carry oil spill insurance, due to IPPP's legislative efforts.
- ❖ The railroad is now legally required to prepare a c-plan, which will result in a number of oil spill prevention improvements being implemented along the railroad corridor.
- ❖ Additional oil spill prevention measures or operating restrictions in cases of imminent oil spill risk were instituted (e.g. orders to empty, inspect and repair faulty tanks; orders to increase personnel surveillance until automated monitor equipment was installed; winter ice operating restrictions in Cook Inlet to improve the safety of navigation).
- ❖ In order to eliminate the oil spill risks posed during broken ice conditions when a response is not feasible, ADEC's Seasonal Drilling Policy was enforced at North Slope exploration projects and facilities which have the potential to spill oil in the offshore environment as a result of a blowout.
- ❖ A record audit was completed on all major tank farm facilities to ensure compliance with the Article I Spill Prevention requirements (such as secondary containment, leak detection systems, and inspection programs). Operators were either determined to be in compliance or enforcement action was commenced to bring the facility under a compliance order.
- ❖ Compliance orders were put into place to enforce inspection, repair and replacement standards for pipelines and tanks in the Port of Anchorage, Cook Inlet, Cordova, Dillingham, Haines, Juneau, Kotezbue, the North Slope, St. George, and for TAPS.
- ❖ Responsive engineering support was provided to the pipeline and tank farm industry to assist in identifying, preventing, and correcting structural integrity problems on regulated tanks and pipelines.
- ❖ Developed a strategic plan for assessing the pipeline risk from aging pipeline infrastructure in Cook Inlet.
- ❖ Completed a thorough evaluation of the North Slope operator's non-common carrier pipeline corrosion program and identified areas for improvement.
- ❖ The Prince William Sound Escort System was fully upgraded with state of the art prevention and Response Tractor Tugs.
- ❖ Developed a strategic plan for assessing Best Available Technology via a Statewide Conference.
- ❖ All tanks farms and terminals across the state were fully upgraded with secondary containment and leak detection systems, with the exception of a few North Slope and Cook Inlet facilities.
- ❖ Obtained key environmental commitments from BP and Phillips via the North Slope Charter Agreement in 2000. Implemented North Slope Charter Agreement (Environmental Provisions) in 2001, including a third-party engineering firm corrosion audit.
- ❖ Completed a Tank and Pipeline Leak Detection Study and published a summary document for industry and regulatory use.
- ❖ Conducted an audit of the BP Prudhoe Bay Pipeline and Badami Pipeline leak detection systems. Ongoing compliance action is in progress to resolve deficiencies and upgrade system to BAT standards.
- ❖ Enforced secondary containment requirements around portable tanks, which has been a key source of transfer-related spills.

## **Oil Spill Response Improvements**

- ❖ Implemented response equipment hubs in Bristol Bay and Dutch Harbor under the Agreement for Final Compliance for Tank Barge transport of Non-persistent oil in Alaska.
- ❖ Completed extensive field work and conducted preparedness drills on the North Slope consisting of industry, state, federal and local representatives working towards resolving contingency plan response planning issues for open water and broken ice conditions in the Beaufort Sea. Completed 38 drills days, involving over 105 staff days.
- ❖ Worked with public stakeholders and industry to expand the development of sensitive area site specific response strategies in Prince William Sound, outer coast of the Kenai Peninsula and Katchemak Bay.
- ❖ Over 1000 non-tank vessels are now required to carry oil spill insurance and will be required to join an oil spill cooperative or have access to an oil spill response equipment by year 2003. These vessels were spilling 93 times more frequently and 50 times more volume than the regulated industry combined.
- ❖ The railroad was required to train for, prepare, and conduct its first major oil spill response exercise which was in part designed and evaluated by IPPP staff.
- ❖ Technically evaluated and recommended use of well capping equipment to expedite control of an open orifice well blowout.
- ❖ The railroad is required to carry oil spill insurance and will be required to join an oil spill cooperative or have access to enhanced oil spill response equipment by year 2003.
- ❖ Much progress was made on a Best Available Technology (BAT) assessment of North Slope Response Equipment. Preliminary findings identified the need for significant improvements in the North Slope spill response systems (such as: additional shallow marine independent skimming systems, improved storage and lightering systems, additional oil spill response equipment to protect environmentally sensitive areas, and improved well capping and safe response strategies for well blowouts, etc.)

## **Programmatic Efficiency**

- ❖ Completed development of a compliance tracking database system for both c-plans and financial responsibility.
- ❖ Implemented a Monthly Work Plan and Accomplishment Tracking System to efficiently prioritize limited fiscal and staff resources.
- ❖ Prepared Oil Spill Drill and Inspection Guidelines to ensure consistency in staff implementation.
- ❖ Obtained API 570 Pipeline Certification for (2) staff, API 653 Tank Inspector Certification for (4) additional staff, a Professional Engineering License for (1) staff.
- ❖ Fully remedied Performance Review Backlog.
- ❖ Training program developed, documented and fully implemented.
- ❖ Developed and implemented the IPPP safety training program and procured all required equipment.
- ❖ Prepared and submitted FY03 budget requesting funding for five new North Slope spill prevention staff and two new Cook Inlet Staff to address increased permitting requirements and compliance deficiencies.

