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1.0  A Note from the Director

The Division of Spill Prevention and Response (SPAR) had a very busy year. So busy, we can’t share everything in this document. Major accomplishments for the Division may be found within the FY17 budget narrative at https://www.omb.alaska.gov/html/budget-report/fy2017-budget.html but most accomplishments are listed within the separate program sections of this annual report. I’d like to draw your attention to three important highlights from FY15:

- Reorganization
- Legislation and Funding
- Prevention Initiatives

Reorganization

Why did we choose to take on a substantial restructuring effort? Because we need to be more efficient with our resources and to provide better service to our customers.

Our main source of revenue – per barrel surcharge on oil - was declining as production waned. This fund source has sustained our efforts to prevent spills, respond when they occur, and address long term contamination for many years but was no longer adequate. The Division needed to find ways to reduce our use of limited revenue while still providing the services our customers need.

Restructuring allowed us to reduce costs by eliminating positions without reducing service delivery. The restructuring reduced our budget by $520 thousand. Simultaneously, we dramatically improved our accounting and billing procedures so that we are recovering response and oversight costs for spills and contaminated sites from responsible parties. We also took an additional cut of $208 thousand imposed by the legislature. Overall, we eliminated six positions and reduced our annual budget by $728 thousand.

We were also able to identify direct savings in other areas. In the preceding two fiscal years, we underspent our allocated spending authority, resulting in unspent revenue being returned to the Prevention Account to be available for future years. In FY14 we lapsed over $200 thousand and in FY15 it was $800 thousand. This was primarily accomplished by leaving positions vacant as we restructured. With the new combined program in place, we are filling vacant positions and do not expect this lapse to occur again. We will continue to look for ways to streamline our processes so that we rely on less revenue.

Restructuring was also necessary to improve the service we provide to the companies we regulate and the communities we help support. There was a significant disconnect between the planning group and the response team, one that manifested itself most profoundly during drills and exercises. The SPAR prevention team was requiring companies to prepare for spills in specific ways. Then, during drills or actual events, the SPAR response team would not utilize that planning and would instead use government plans to manage the response. We needed to accomplish greater consistency
between planning and response and reduce the burden on regulated entities. By combining the two programs so that just one team is undertaking both activities, we are achieving alignment.

It is hard to change organizational structures in government. We work within a complex personnel system which can make it difficult to quickly shift substantial workloads. Involving employees in the process was important. Every employee weighed in on our new structure with adjustments made throughout the process based on their input. We will continue to fine-tune our organization as improvements are identified.

Other restructuring changes were also implemented in the Division over the past year. This included combining the Response Fund Administration and the Director’s Office in a single unit, and restructuring the Contaminated Sites Program to reclassify some vacant positions and more evenly distribute project work on all sites (brownfield, federal, state, local government and privately) to maximize available staff capacity, as well as expand and diversify the knowledge base of individual staff.

**Legislation and Funding**

Since it is clear the Division provides important services, legislation was introduced that provides more revenue to support our work. A surcharge on refined fuel was proposed because the majority of spills and contaminated sites in Alaska are related to fuel usage. This new funding stream is deposited in the Prevention Account of the Oil and Hazardous Substance Prevention and Response Mitigation Fund. To sustain the life of this new revenue source, the Division was asked to work on several things:

- **Make drills and exercises more efficient.** Drills and exercises are an important part of the regulatory paradigm and allow the Department to verify a company’s ability to adequately respond to a spill. They are also expensive for the company and the State, and occur on a frequent basis. The Department is in the process of considering improvements to this process to make drills and exercises more efficient while still achieving that important verification step.

  Improvements to the drill process are dependent upon changes to community preparedness planning, or “government planning.” The Department is working to develop an annual drill schedule for regions of the state that would incorporate multiple companies within the area. Tying government “regional” plans and individual company response plans more closely together will reduce duplicative contingency planning work for industry while improving response preparedness. We also believe this will not reduce environmental protection. Therefore, shifting how government planning is done is a necessary first step so drill and exercise schedules can reside in regional government plans.

  The Department is working closely with the U.S. Coast Guard and EPA (our federal partners in government preparedness planning) to make these adjustments. A formal proposal that describes all the steps the Department will be taking to reduce the costs of drills and exercises will be available by February 1, 2016 at [http://dec.alaska.gov/spar/ppt/](http://dec.alaska.gov/spar/ppt/).
• **Recover as much costs as possible.** Action is ongoing to increase cost recovery in the Division. The Department has taken steps to increase recovery wherever possible. New regulations have been drafted describing how cost recovery will occur, and are working their way through the process now. Statutory language requesting these regulations has existed for 10 years, but has not been implemented until now.

Several improvements to the billing process have been implemented as well, including: automated billing so bills are generated monthly rather than on an ad-hoc basis; development of procedures that remove discretion from staff who previously had autonomy deciding when bills would be issued - which allowed significant variability; established a legal process for determining if a responsible party can pay without undue hardship; and updates to the staff time tracking system. These changes have reduced human errors, result in timelier billing, and provide better customer service. In the two years since we have implemented changes to our cost recovery efforts, we have increased the amount recovered dramatically, an estimated 48%.

We are committed to recovering response costs when possible. But actual response is only a part of what we do on a daily basis. We will never recover 100% of our costs for several reasons: Many of the activities we perform are not cost recoverable. For example, ALL our prevention work (contingency plan review and approval, drills and exercises) are not billable services. That accounts for about 30% of our budget. Additionally, government planning efforts to help communities prepare (the unified plan and sub-area plans) are not billable. We also spend a significant amount of effort determining who responsible parties are and characterizing contamination. And sometimes, responsible parties do not have the resources to pay us back.

• **Prevent more spills from occurring.**

**Prevention Initiatives**
The following SPAR initiatives are examples of prevention efforts currently being developed for consideration:

**Medium Sized Tank Spill Prevention Initiative**
Medium sized fuel storage facilities, 1,300 gallons to 420,000 gallons, are a significant source of spills in Alaska. SPAR currently regulates facilities that are 420,000 gallons or larger by requiring prevention and response capacity which has been extremely effective in preventing spills. Our regulatory paradigm for large facilities is significant and understandably extensive considering the potential risk. But we have no standards for medium sized facilities or smaller tanks such as those commonly used for homes and small businesses. Spills are frequent with medium sized facilities, and usually cannot be cleaned up quickly and closed with initial response. Rather, they become contaminated sites and require extensive cleanup to mitigate the effects of the spill. The entities that own these tanks typically do not have the resources to clean up the contamination, which quickly becomes costly running into many
thousands of dollars. It would be much more cost effective to prevent these spills from occurring. Most of these facilities are in small villages and communities where compliance with standard regulatory burdens are often ineffective. Therefore, SPAR is working with stakeholders to determine how we can add value by reducing the number of spills at these facilities. This winter we will host a stakeholder meeting to discuss the topic. We recognize the problem and want to address it, but know this isn’t something we can do on our own.

**Reciprocal Port Prevention Agreement proposed**

One of the greatest risks to Alaska from a SPAR perspective is vessels, including oil tankers transiting near our coast in innocent passage. To mitigate some of this risk, SPAR has proposed the U.S. Coast Guard, Canadian Coast Guard, and Canadian Department of Transportation develop a reciprocal port prevention agreement that requires vessels leaving either countries’ ports to comply with some basic prevention requirements.

This is similar to Alternative Planning Criteria (APC), but different in one important way: It would cover vessels leaving Canadian ports as well which is critical because traffic to and from Canada is increasing substantially. Canada’s crude is finding its way to western ports and is expected to quadruple in coming years. Container ship traffic is also dramatically increasing from Canadian ports.

A reciprocal port prevention agreement would include common sense prevention measures such as vessel routing, early notification when problems arise, and the use of a vessel tracking service. These services would need to be supported by a new fee but would provide protection against a threat with high risk and high potential.

**Management of State-owned and State-lead Contaminated Sites**

The Division is no longer able to rely on Capital Improvement Program (CIP) funds to address contaminated state property or orphan sites where the responsible party cannot be located. A 1997 Memorandum of Agreement between the department and the majority of other state agencies called for SPAR to annually request a CIP appropriation to fund the investigation and cleanup of these sites. Both regulatory oversight and contract management of this important work was provided by SPAR, placing the department in conflicting roles as both site manager and regulator. Since CIP funding has been substantially reduced, SPAR is developing a new approach to address this issue. A successful solution will involve all impacted state agencies. Working to reduce this liability is also important for state bond ratings.

The Division of SPAR is committed to improving the services we provide Alaska. We welcome feedback and suggestions as we head down the path of continual improvement.

Kristin Ryan, Director
2.0 Report Overview

About this report:
This report is intended to be a public resource describing the work performed by the Division of Spill Prevention and Response within the Alaska Department of Environmental Conservation. It is also an internal working document used by division staff to evaluate alignment and progress on priorities. It represents significant and important work performed by SPAR.

The mission of the Division is to prevent spills of oil and hazardous substance, prepare for when a spill occurs and respond rapidly to protect human health and the environment, while managing the long term cleanup of contaminated soil and groundwater in Alaska. This report details how we fulfill our mission. Its contents are not privileged or limited to industry or government subject matter experts. While our work is highly technical and scientific, readers should easily be able to digest the information in this report to gain a general and basic knowledge of the work we perform. The report is a tool for measuring accomplishments, reporting projects and activities, planning future work, and ensuring alignment between programs. We constantly strive to work smarter, more efficiently, and cost-effectively. We are very proud of the work we do and we want others to have easy access to information about our division.

Please review our website http://dec.alaska.gov/spar/index.htm for additional information and let us know if we may assist you with topics of interest or concern.

We hope the FY15 SPAR Annual Report is valuable not only to division staff but also to legislators and the general public.

Goals of this report include:

- Explain the complexity and importance of the work we do;
- Be transparent about how we are accomplishing our tasks;
- Share trends we are observing; and
- Establish goals and measure our effectiveness in achieving them.

The report pertains to the 2015 fiscal year from July 1, 2014 through June 30, 2015. It is a compilation of information gathered from three separate programs: Contaminated Sites (CS) Program, Prevention, Preparedness and Response (PPR) Program, and Response Fund Administration (RFA) Program – which represents the entire Division.

The report details the following for each of the three programs in SPAR: 1) regional efforts 2) program highlights – data analysis, accomplishments, and 3) priorities.

There are several electronic hyperlinks within the report or contained in the appendices that refer you to additional information. This allows the reader to delve deeper into subjects of interest (i.e. performance measures, the budget, various charts or graphs), while keeping our report to a
manageable volume of pages and refraining from duplication of information contained in other reports.

A note to the reader: The Acronyms and Abbreviations section is comprehensive and not all terms contained in this section are referenced in the report narrative. This section is intended as an aid to help you decipher terms we use frequently. Photos contained in the report are available for reuse if you provide proper photo credit.
3.0 Division Structure (Functional Org Chart)
4.0 Major Matters by Region

4.1 Northern Area

4.1.1 PPR Major Matters - Northern Area

Wiseman Corner Rollover
On December 14, 2014 a Big State Logistics, Inc. (BSL) tractor-trailer hauling fuel from Fairbanks to Deadhorse departed the highway at Mile Post 189 of the Dalton Highway. During the rollover, a rock ruptured the front and rear storage compartment of the trailer, causing a release of approximately 1,200 gallons of ultra-low sulfur diesel (ULSD). After transferring fuel into the empty tanker, the damaged tractor and trailer caught fire. Remains of the burned vehicle were recovered on December 16, 2014, but further assessment and cleanup operations came to a halt soon thereafter due to fire and ignitable product still remaining subsurface. In April 2015, BSL conducted removal of affected soils and collected confirmation samples from excavation. Unfortunately, groundwater began infiltrating the excavation at approximately seven feet below ground surface, which led to additional site characterization requirements before the Bureau of Land Management (BLM - landowner) will approve backfill and rehabilitation activities of the affected area.

Colville Dalton Highway MP 86 Tanker Rollover
On February 25, 2015, a northbound fuel tanker, owned by Colville, Inc., loaded with 9,852 gallons of Ultra Low Sulfur Diesel (ULSD), departed the Dalton Highway at Mile Post 86, releasing approximately 2,802 gallons of product onto an upland snow-covered boreal. The driver walked away without injury, the truck remaining on its top, the trailer attached. Southbound empty tanker operators assisted with lightering product. The cargo was owned by a North Slope producer and hauled by a tanker-truck fleet owner. Letters of Interest were sent to the potentially responsible parties, but the trucking company assumed the duties of responsible party.
Corrective actions for response were coordinated through DEC with permits and coordination from Alaska Dept. of Transportation & Public Facilities (ADOT&PF) and BLM. The response contractor mechanically removed contaminated snow, surface vegetation and soil. Two hundred eighty-four truck loads moved 6,069 tons of contaminated material from the site hauling it to Organic Incineration Technology, Inc. in Moose Creek. The last load of contaminated soil was hauled on March 29, 2015. The analytical confirmation samples, aqueous and solid matrix, obtained after the excavation tactics were completed demonstrated a satisfactory cleanup. BLM approved the restoration plan, backfill material source and the plant community; and ADOT&PF approved the activities in the Dalton Highway right-of-way.

**Milne Point Tract 14 Production Line Release**

On February 28, 2015 a produced water leak from a pipeline outside of Hilcorp Milne Point Tract 14 module was reported to DEC. The produced water was 66% water and 34% hydrocarbon, and impacted 40,000 square feet, which included both gravel pad and tundra. Hilcorp responded along with their contractors. Contaminated snow was removed from the site and placed in a temporary containment area for snow melting operations. Following the removal of snow, the tundra cleanup efforts began by dividing the site into grids with ice berms. The individual sections of tundra were then flushed using warm water. Waste water was recovered using direct suction from a vacuum truck. The most heavily impacted areas of tundra were addressed with hand tools for chipping away the frozen produced water and a bobcat with trimmer attachment. In some cases the trimmer attachment was used to extend into the mineral soil layer. The trimming tactic was also used to address the contamination on the gravel pad and hand tools were used to address locations near infrastructure. In total, 8,960 barrels of contaminated snow were melted and disposed of downhole and 449 cubic yards of contaminated solids was disposed of at the Grind and Inject Facility in Greater Prudhoe Bay. Cleanup was guided through visual observations and field screening by a photo-ionization detector and conductivity analysis. At the conclusion of response activities, confirmation sampling found five sample locations to be above cleanup levels. Water sampling occurred during the summer of 2015 and results are now being reviewed by DEC to determine the effectiveness of the cleanup.
Pogo Mine Paste Backfill
On May 7, 2015 Sumitomo Metal Mining Pogo, LLC. (Pogo) discovered a “paste backfill” release within the mine site of their Pogo Gold Mine, located approximately 100 miles southwest of Fairbanks. The release occurred from two different locations: the primary release point was an eight-inch line used to inject the paste backfill underground, while the second release occurred from a valve inside one of the pump houses. “Paste backfill,” which contains between 1-3 parts-per-million weak acid dissociable (WAD) Cyanide (CAS # 57-12-5) and has a pH of 10-12, is used to backfill the underground tunnels for disposal and support, after the extraction of gold-containing ore has occurred. Pogo estimated a loss of somewhere between 80,000 and 135,000 gallons, with 56,000 to 94,500 gallons released outside impermeable secondary containment. Due to the high viscosity of the paste, as well as its automatic solidifying mechanism, the released product remained on gravel pad; soil and water sample results confirmed that off-pad migration through naturally occurring processes had not occurred. After the solidifying process was completed, Pogo personnel removed the released product using various response tactics and by using resources such as heavy equipment, hand tools, and high pressure washers. Confirmation samples from the affected area were collected by a third party qualified individual, and all results were below 18 AAC 75.341 established cleanup levels.

Shishmaref Native Store Mystery Sheen
On June 4, 2015 it was reported to the United States Coast Guard (USCG) and DEC that there was a sheen on the melting sea ice located by the community of Shishmaref. The USCG, DEC and a response contractor responded to this location on June 7, 2014, June 24, 2014, December 15, 2014 and June 4, 2015. The cause for responding each time was a report of a sheen on the sea ice/ocean water adjacent to the community. During the December 15, 2014 response, product was found to be bubbling to the surface from beneath a frozen rock that lay directly below the marine header system. Samples collected from the water at this location determined the product to be fresh gasoline with small traces of a heavier petroleum fraction. The June 4, 2015 response found there to be a swath of gravel and sand along the beach saturated in gasoline. Strong wave action at the time prevented cleanup of the sheen. The marine header and piping system (the
believed source) that runs from the header to the tank farm were also inspected during this response. Heavily contaminated soil was found around the marine header. The Shishmaref Native Store was identified as the primary responsible party. The USCG placed a Captain of the Port Order requiring a hydrostatic test of the marine header and pipe system. The test discovered that the header was not completely connected to the gasoline line, and was repaired. DEC and the USCG will work with the responsible party to develop a plan for addressing the gross contamination that remains in place. No sheen or petroleum odor has been reported since the June 4, 2015 response.

Wales Kingkinkgin Rd. Leaking AST
A phone report was made to DEC on June 4, 2015 notifying the State of a large abandoned above-ground storage tank (AST) leaking diesel and an adjacent tank that was severely corroded with the potential to leak. The AST’s belong to the City of Wales and are located on City of Wales land. The tanks are located next to the beach surrounded by a sand dune and raised concern for further impacts. Immediate initial response was performed by the Wales Native Corporation. DEC responded on June 5, 2015, along with local responders, applying a temporary patch after locating the source of the leak. An unknown quantity of diesel was released to the adjacent sand environment. Both the leaking AST and the adjacent tank were de-inventoried by cutting a hole into the tank and pumping the product out into a separate tank. Both diesel and water were recovered. The volume of recovered diesel and water from the AST’s was estimated to be 350 gallons. No removal of contaminated sand has occurred as removal of the sand could cause the sand dune to fail, risking impact to the community from strong coastal storm surges.

2015 Interior Alaska Building Association Home Show
PPR staff participated in the Interior Alaska Building Association Home Show in Fairbanks during the weekend of March 20 - 22, 2015. The focus of the DEC booth was to educate the public on how to inspect and maintain their home heating oil tanks. Pamphlets and materials on tank inspection, installation, maintenance, and information for home-buyers were distributed.

4.1.2 CS Major Matters - Northern Area

Eielson Air Force Base (AFB)
CS continued its regulatory oversight and partnership with the U.S. Air Force to support their day-to-day management of the base’s contaminated sites. A major unexpected development at Eielson Air Force Base was the discovery of widespread contamination in soil, groundwater, and surface water by perfluorinated compounds (PFCs). PFCs were a once component of fire-fighting foams used to suppress aviation-related fires at Eielson AFB. While no longer in use due to possible adverse human health effects, PFCs are an emerging new contaminant of concern requiring further research to determine their specific impact. Meanwhile, initial sampling of four suspected PFC source areas in July 2014 revealed considerable contamination on base at Eielson. Concern over the initial results prompted the Air Force to sample the base’s main drinking water supply wells. Several
wells had to be taken off-line when sampling revealed PFCs exceeding EPA Provisional Health Advisory (PHA) levels. Concern that PFCs could be moving through ground water off base led the Air Force to sample residential drinking water wells in the nearby Moose Creek subdivision, resulting in the discovery of widespread PFC contamination. To date, 131 of 150 wells in Moose Creek have tested above the EPA PHA level. CS is working closely with the Air Force to carefully manage the site with the Air Force providing bottled drinking water to affected residents. The Air Force is also installing drinking water treatment systems at residences. The plume (or plumes) of contamination in the groundwater span more than six miles. Further delineation of PFC contamination on and off base is ongoing, and CS staff continues to monitor this rapidly-evolving situation.

Galena Former AFS

CS approved and is overseeing a Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, also known as Superfund Act) Time Critical Removal Action of an old disposal area at the former Galena Air Force Station (AFS). Remedial investigations at the disposal site west of the dike (Site DSWD) found the area contained large numbers of buried drums including waste oil filled drums, transformers, polychlorinated biphenyl (PCB) contaminated soil, and a large volume of metal debris. The removal
action expects to remove approximately 5,000 cubic yards of contaminated soil and debris to mitigate the threats to the public health, welfare and the environment. The Air Force has issued a performance based contract for the cleanup and remediation of 33 contaminated sites at the former Galena AFS.

**BP RCRA Administrative Order on Consent for North Slope Sites**

In 2007, British Petroleum (BP) entered into an Administrative Order by Consent with the EPA under the Resource Conservation and Recovery Act. The Order defines requirements that must be met by BP as operator of the Prudhoe Bay Unit (PBU) facility. Regulatory management of BP’s operations require continuous oversight by CS and EPA to ensure work is accomplished correctly and in accordance with supporting documentation, including some documents that are still under development such as the Site-Wide Conceptual Site Model and Screening Levels portion of the Site-Wide Project Work Plan. Finalizing documents such as these requires extensive coordination by the CS with EPA and BP, BP partners, BP consultants, as well as DEC’s Solid Waste Program (SWP).

In FY15, CS met regularly with EPA, DEC SWP as well as BP and their representatives to revise project documents, discuss comments, and prioritize and plan future work at sites in the PBU including the following:

**Tuboscope** - The AMF Tuboscope Company conducted operations from 1978 until February 1982 when a fire caused a release of solvents used during pipe cleaning. A preliminary 1982 investigation showed evidence of tetrachloroethane contamination in the surface water surrounding the pad, as well as lead contamination in soil. Further investigations performed by BPXA from 1983 to 1986, discovered diesel contamination. Numerous investigations have been conducted at the former Tuboscope site since the 1982 facility fire and a treatment system has been used as an interim measure.

**Pad 13** - Pad 13 was used for storage and staging of equipment, components of drilling mud, and debris from approximately 1971 until 1978. During this time material was burned and buried, including plastic and aluminum-containing items. The site was cleared in 1982, and since then has not been used except a portion which was incorporated into Drill Site 4.

**Sand Dunes Landfill** - Sand Dunes is a 5.8 acre landfill that was operated from 1969 to 1980, and closed in 1985. During its operation scrap metals, drilling muds, sewage, ash, and up to 80,000 crushed barrels were buried there.
Kotzebue IHS/BIA Pipeline Release

Ten acres of land in the vicinity of the former Indian Health Service (IHS) hospital and Bureau of Indian Affairs (BIA) School is contaminated with diesel heating fuel that was released from the 1950s until 1980 by a ruptured fuel distribution line. Following initial fuel recovery, cleanup and limited site investigations between the late 1980s and 2009, CS was successful in 2012 at coordinating and overseeing the resumption of site investigative field work, finally resulting in a more definitive site characterization completed during August 2014. The site is comprised of the former IHS hospital site, industrial/administrative office areas, utility rights of way and the present-day Kotzebue Elementary, Middle and High Schools. The results of the August 2014 site work reinforced findings from previous investigations, in terms of both contaminant locations and levels, that while no free product was encountered, there remain hot spots of soil and groundwater petroleum contamination that will require remedial action. So the focus of future site work will be to devise the best means by which the area can be made safe to human health and the environment, likely through a combination of specific soil removal actions and implementation of site institutional controls.

*Site Characterization Work, Kotzebue Elementary School, August 2014 (Photo/DEC)*
Road Projects administered/funded by ADOT&PF, City of Fairbanks, and FMATS
CS has participated in numerous road construction and Right-of-Way utility upgrade projects in Fairbanks, by planning and coordinating with the Alaska Department of Transportation and Public Facilities (ADOT&PF), the City of Fairbanks, the Fairbanks Metropolitan Area Transportation System (FMATS), and various contractors and consultants. CS provided guidance on locations of former dry cleaners (sources of the hazardous chemical, perchloroethylene, a common dry cleaning chemical), as well as other known or suspected contaminated sites; reviewed contaminated soil sampling and management plans; and facilitated coordination with EPA for disposal of soil contaminated with hazardous chemicals. Specific projects during FY15 have include the College Road Pavement Rehabilitation & College Road/Antoinette Avenue/Margaret Avenue Intersection Reconstruction Projects; Cushman Street Complete Project; Noble Street Upgrade; and the Wendell Avenue Bridge Replacement Project.

North Pole Refinery
Groundwater contamination resulting from a release of sulfolane at the Former North Pole Refinery remains one of the largest contaminated sites in the State. The presence of sulfolane in groundwater outside of the refinery’s property was first observed in 2009. The contaminated groundwater plume, which is approximately 3.5 miles long by 2 miles wide, has impacted approximately 500-600 homes and continues to expand.

In FY15, the Contaminated Sites Program approved an Onsite Cleanup Plan for the former refinery that provided for the excavation and disposal of sulfolane contaminated soil and the continued operation of the groundwater remediation and product recovery systems. Contaminated soils were removed from Lagoon B, the Fire Training Area, and the Southwest Former Wash Area. The existing groundwater recovery and treatment system was expanded by adding two new pumping wells and a second treatment system to capture all groundwater containing sulfolane above 15 µg/L. The Alternative Water Solutions Management Plan was also finalized and ensures that clean water is offered to each property affected by the sulfolane contamination. Flint Hills agreed to continue to
provide alternative water to properties with detectable concentrations of sulfolane until a cleanup level for sulfolane is set. In September 2014, SPAR commissioned Toxicology Excellence for Risk Assessment (TERA) to convene a panel of experts to review the available toxicology information for sulfolane. The TERA panel report noted the lack of chronic toxicity data for sulfolane. The National Toxicology Program began a two-year study in May 2015, to evaluate the effects of chronic exposure to sulfolane. The results from these studies can be used to help guide the development of an appropriate cleanup level.

A long-term solution to the sulfolane issue may include the construction of a piped water system. A study funded by Flint Hills Resources, Williams, and the State of Alaska in FY15 is intended to provide cost and technical specifications for a water system expansion from the north by Fairbanks Sewer and Water. The City of North Pole is also evaluating the expansion of their public water system.

Aerial view of Flint Hills Resources’ North Pole refinery from the south. (Photo/Flint Hills Resources)

Legacy Wells

In coordination with the DEC’s Contaminated Sites Program, significant progress was made toward the cleanup and closure of Legacy Wells in the National Petroleum Reserve – Alaska (NPR-A). The NPR-A was created in 1923 by President Warren G. Harding during a time when the United States was converting the Navy to run on oil rather than coal. Between 1944 and 1981, the federal government drilled 137 exploratory wells in the reserve to obtain estimates and locations of reservoirs. Upon completion, little was done to remove the historical footprint left as a result of abandonment of drilling activities. Development interest in the region led to the first private exploratory leases in 1999, and in 2013 BLM was prompted to create a new management plan for the entire reserve that included proper assessment, plugging and reclamation for a majority of the historical
‘Legacy Wells.’ CS has been directly engaged with BLM staff in designing their assessment and cleanup strategy, and presented with BLM during the ‘Industry Days’ event announcing BLM’s request for proposals to address the Legacy Well cleanup. In the interim, BLM facilitated an interagency agreement with the Army Corps of Engineers to expedite assessment and cleanup at three Legacy Wells located on Cape Simpson. CS staff guided the preparation of assessment and sampling plans and provided direction on necessary activities to ensure a successful investigation. CS also reviewed and closed out the East Teshekpuk Well site, and is evaluating the adequacy of closure activities for 10 Legacy Wells at the former Umiat Station, some of which were recently plugged. Contracted field work to address assessments on more than 20 priority wells is slated for 2016.

Suspected Former Rocket Range, Campion Air Station (CAS)
During the past year, the Air Force, US Army Corps of Engineers and contractors completed a Time Critical Removal Action at the Suspected Former Rocket Range. In 2006 the Air Force began the Comprehensive Site Evaluation (CSE) process to determine if sites with Munitions and Explosives of Concern (MEC) may be present at the former CAS. During this evaluation they identified documentation of a historic munition incident at Galena/Campion. In 1954 children from Galena picked up a 2.36-inch rocket at CAS and brought it back to town. While playing with the rocket it exploded sending three children to the hospital. Later that year the Air Force sent several airmen to the site to “clean” it up. Upon their return to Galena they dropped a second 2.36-inch
rocket in the back of the truck and it exploded leading to one fatality and additional hospitalizations. During the CSE one of the individuals involved with the 1954 incident was interviewed to determine the location of the incident. Reconnaissance performed in the area, during the CSE process, did not identify any evidence indicating the use of MEC at the site. CS has worked closely with the Air Force and their contractor to provide effective regulatory oversight of the safe site investigation and cleanup of the site to include munitions management expertise. In 2012 CS performed historical aerial photo interpretation that identified features (firing line, shooting lanes, etc.) at the site in the 1950s that were consistent with use of the site as a 2.36 inch rocket range. Based on this evaluation a Remedial Investigation was performed in 2014. Two live 2.36 rockets as well as Munitions Debris (MD) associated with 2.36-inch rockets were identified and disposed during the 2014 effort. In 2015 the contractor returned to the site to complete the removal, however no additional MECs were found.

USACE and contractor (Bay West LLC) performing anomaly clearance verification with EM-61 Mk2. Time Critical Removal Action at the Suspected Former Rocket Range, August 24, 2015, Campion Air Station, AK. (Photo/DEC-Guy Warren)
4.2 Central Area
4.2.1 PPR Major Matters - Central Area

Flint Hills Jet-A Release
During a routine maintenance inspection in July 2014 of the Flint Hills tank farm, at the Port of Anchorage, a significant amount of petroleum product was discovered seeping from the sidewall into an unlined containment for an adjacent abandoned asphalt tank. After extensive excavation, and investigation the source was discovered to be a corroded dead-legged line. An estimated 3,500 gallons of jet fuel seeped from the corroded pipe into the soil under the facility, eventually daylighting into the asphalt tank’s containment area. DEC responders worked with the Port and Flint Hills in collection of free product and contaminated soils, and the characterization of remaining soil impacts at the facility. The site is still actively managed by the Contaminated Sites Program.

Alaska Petroleum Tanker Rollover at Milepost 48 of the Richardson Highway
The Environmental Protection Agency (EPA) federalized the response of a tanker-truck fuel spill at milepost 48 of the Richardson Highway in early December 2014. The tanker truck, owned by Alaska Petroleum of Fairbanks, lost control during winter driving conditions causing the second trailer to rollover into the ditch. The upset ruptured the rear trailer and resulted in the loss of 4,400 gallons of diesel fuel into a dry ephemeral stream bed, a tributary of the Teikell and Copper Rivers. The remote spill location and inclement weather conditions resulted in challenging and expensive logistical issues that exceeded Alaska Petroleum’s limited financial capabilities. Just prior to the holidays, the EPA decided that a federal takeover of the response was necessary to complete cleanup prior to spring break-up to protect salmon fry and other species in the Copper River watershed. The response was completed prior to spring with extensive habitat restoration to the area. Site visits conducted during spring break-up and subsequent months show a positive restoration with no evidence of petroleum contamination threat.

Aleutian Island Sub-Area Exercise
In September 2014, an Aleutian Island Sub-Area exercise was jointly conducted by the USCG, DEC, and North Pacific Fuels of Dutch Harbor. The exercise brought together approximately 60 area responders to address a scenario of a catastrophic tank failure due to landslides caused by heavy rain. The response team developed an Incident Action Plan to address short term public safety issues and
long term environmental and area fuel supply issues. Participants from the USCG, DEC, North Pacific Fuels, AK Chadux, the City of Dutch Harbor, local seafood processors and commercial fishers played an active role in the success of the two-day exercise.

Thor’s Hammer
During a transit from Seward to Bristol Bay in May 2015, the landing craft Thor’s Hammer lost control of its cargo, a tanker trailer, on the vessel in heavy seas in the Gore Point area of the Gulf of Alaska. The tank was punctured in several places, and an estimated 4,000 gallon of diesel fuel was lost. The vessel transited to lower Cook Inlet and requested assistance from the USCG and DEC. A response was conducted using resources and personnel from the communities of Port Graham, Seldovia and Homer. Once the vessel was secured and inspected, it was allowed to transit to Seldovia where it was met by responders from the Seldovia Oil Spill (SOS) group, Alaska Chadux Corporation, and the City of Seldovia. The remaining cargo was safely offloaded and after inspection the vessel was allowed to proceed to Bristol Bay.

AAC Kodiak Launch Facility Rocket Failure
At the Alaska Aerospace Corporation Kodiak Launch Facility on August 25, 2014, the launch of a new Army hypersonic glider rocket failed 4 seconds into the flight and resulted in the detonation of the rocket. As a result of the detonation, debris was spread over 120 acres across several plateaus and two intermittent stream valleys which drain towards the ocean. All three stages of the rocket exploded or were partially consumed in the launch activities. Collection of debris was completed in August 2015. The residual contamination field investigation work plan is completed and sampling is scheduled to begin during the winter of 2015.

Prince William Sound Subarea Plan Update
Preparedness Section staff worked with USCG to develop Change 3 for the Prince William Sound Subarea Plan. Major changes to the plan include additions or updates to the Geographic Response Strategies (GRS) and Potential Places of Refuge sections. The final plan was published in October 2014.

Office Closures
The DEC Bethel office closed on December 31, 2014. The responder position from Bethel is now located in Anchorage. As of January 1, 2015, PERP no longer has staff stationed at the DEC Wasilla office and the one position in Wasilla has been moved to Anchorage.

4.2.2 CS Major Matters - Central Area

2014 Site Investigation at the Former Port Clarence USCG LORAN C Facility
The State of Alaska Legislature appropriated $500,000 in 2014 to conduct a contaminated sites investigation at the former U.S. Coast Guard Port Clarence LORAN (long range navigation) Facility which is located approximately 75 miles northwest of Nome, on Point Spencer. CS was tasked with
developing and overseeing the primary investigation delineating the current extent of contamination at numerous sites, including multiple disposal areas, for the purpose of evaluating potential impacts the residual contamination could have on the prospective future development of Port Clarence as an Arctic deep water port. CS staff provided regulatory oversight on the development of the work plan and also conducted onsite oversight of the implementation of the 2014 investigation activities. The investigation report was finalized in June, 2015. The results of the investigation will contribute to the decision process regarding the suitability of Port Clarence as a deep water port.

**Red Devil Mine**

The 10-acre historic abandoned mine was the location of a variety of cinnabar mining operations on land managed by the Bureau of Land Management (BLM) since 1933. All operations ceased at the site in the early 1970s and the primary contaminants of concern include mercury, arsenic and antimony. In August 2014, the CS went to the Red Devil Mine site with staff and managers from BLM, Environmental Protection Agency (EPA), Alaska Department of Health and Social Services (HSS), Alaska Department of Natural Resources (DNR), and the Alaska Department of Fish and Game (DF&G) to inspect the recently completed BLM early actions. The main site work included re-grading the tailings and pulling them back from the creek to reduce erosion and migration to the Kuskokwim River. CS staff reviewed and provided comments to BLM on their draft Feasibility Study (the document which evaluates different remedial action alternatives). For the rest of FY15, CS and other reviewing agencies negotiated with BLM to find acceptable resolutions to the technical issues of concern. CS also reviewed and approved BLM’s work plan for determining the potential risk of metals in the Kuskokwim River sediments to fish or other aquatic receptors.
Coordination Highlight- Cook Inlet Housing Authority

Cook Inlet Housing Authority (CIHA) was created by the Alaska Legislature in 1974 to ensure that residents of the Cook Inlet Region have access to quality, affordable housing. CS coordinated with CIHA in FY15 on a number of significant development projects in the Anchorage area, addressing contamination at these project locations including the following:

Ridgeline Terrace This residential development in the Mountain View neighborhood will offer 70 units of mixed-income and senior housing. The site was a former machine shop that reportedly discharged chlorinated solvents into the subsurface resulting in contaminated soil and groundwater. CS met with CIHA and their investors and developed an agreement that addressed the investigation of the extent of potential risk from contamination to future occupants, as well as investor liability concerns.

Fairview Redevelopment Area
Cook Inlet Housing Authority was granted DEC Brownfield Assessment and Cleanup services for the Fairview redevelopment area in Anchorage. Services included an area-wide overview of the known environmental conditions of multiple properties in the redevelopment area, as well as fact sheets for use by property developers that explain the process of coordinating with CS on contaminated sites issues that arise during property development.

Spenard Area Revitalization The Spenard neighborhood revitalization project involves a commercial/residential development proposed for an area near the intersection of Spenard Road and 36th Avenue in Anchorage. The site is the location of a former gas station and automotive shop that released petroleum and other contaminants, resulting in soil and groundwater contamination that affected several properties. CS entered into an agreement with CIHA to provide for investigation and cleanup of contamination and also address CIHA’s liability for the contamination as the development progresses.
Coordination Highlight- Port of Anchorage
The Port of Anchorage began operations in 1961 and is the gateway for 90% of the goods and merchandise for 85% of the population of the State of Alaska. Materials that move through the Port on a regular basis include gasoline, diesel, heating oil, cement, business supplies, and consumer commodities. The Port is one of 19 ports in the U.S. designated as a Department of Defense Strategic Seaport. Petroleum contamination in soil and groundwater is present at several areas of the Port resulting from the storage, transmission, and handling of petroleum products, as well as legacy contamination resulting from large spills that occurred during the 1964 earthquake. The CS coordinated with various private parties as well as the Municipality of Anchorage, which owns the Port on numerous projects in 2015 including the following:

Storm System 3 Improvements Storm System 3 collects storm water from various areas of the Port and discharges that water into Cook Inlet. Water samples collected from Storm System 3 indicated that petroleum contaminated groundwater from a nearby fuel terminal was infiltrating the storm drain causing an exceedance of Alaska Water Quality Standards. CS coordinated with Tesoro Alaska Inc., Port staff and engineers and consultants on the design and implementation of upgrades to Storm System 3 intended to stem the migration of contaminated groundwater into the storm drain.

Delta Western Methanol Terminal Delta Western broke ground on a new methanol terminal at the Port that will receive methanol via bulk tanker for use in the North Slope Oilfields. CS coordinated with Delta Western and their consultants after petroleum contamination was discovered in the footprint of the new terminal and along utility corridors.

Delta Western and Port Officials break ground for the new methanol terminal (Photo/DEC)
Former Adak Naval Complex, Operable Unit B-2 (OUB-2)

In FY15, CS provided regulatory oversight as the Navy and their contractors completed their third year of what will eventually be a 5-year Non-Time Critical Removal Action (NTCRA) at Operable Unit B-2 of the former Adak Naval Complex. The Navy, EPA, and CS have been working since 2000 to characterize and determine an appropriate remedy for Munitions and Explosives of Concern (MEC) contamination remaining on the northern end of Adak Island from WWII Training Ranges and more recent Cold War use of the facility. In 2013 the Navy began implementing the NTCRA at five Remedial Action Areas (RAAs) where MEC was determined to be present from these activities. By the end of 2014 three of the RAA’s have been completed. The remaining areas are the most heavily contaminated areas that were historically used for Open Burning and Open Detonation of retrograde military munitions. Between 2013 and 2015 over 5,500 explosive items were removed from the 5 RAA’s. Work in 2016 will include remote operated heavy equipment to excavate the remaining disposal areas and ensure no MEC remains at the sites. Follow-up work may be required in 2017 to ensure that all areas within the RAA’s have been properly cleared of any remaining MEC.
4.3 **Southeast Area**

4.3.1 **PPR Major Matters - Southeast Area**

**Kake Tribal Fuel Tank Farm Gasoline Spill**
On December 7, 2014, a local resident reported a strong gasoline odor coming from the Kake Tribal Fuel Tank Farm to Tribal Fuel staff. The resulting inspection identified a thumb-sized hole in an 8,000 gallon tank which released approximately 900 gallons of gasoline to the facility’s secondary containment area. Small quantities of sheen and gasoline were found outside the secondary containment in a ditch downgradient from the facility, suggesting one or more failures in the containment system. Free-standing gasoline in the secondary containment was recovered in drums and with absorbents for offsite disposal. The case was transferred to the Contaminated Sites Program for management of the contaminated soil outside the secondary containment area.

![View of tank #6 in the Kake Tribal Fuel tank farm. December 9, 2014 (Photo/DEC-Cheyenne Sanchez)](image)

**F/V Eyak Sinking**
The F/V Eyak, a small power scow grounded and sank near Calligan Island in southern Sitka Sound, approximately 15 miles SSW from Sitka early on the morning of January 19, 2015. At the time of the grounding the Eyak was carrying approximately 700 gallons of diesel fuel and gasoline, and an unknown quantity of hydraulic oil onboard. Bad weather immediately following the vessel grounding, and at intervals throughout the incident, hampered response and salvage operations. The vessel owner and its insurance companies hired Southeast Alaska Petroleum Response Organization (SEAPRO) to respond to the pollution threat and Southeast Alaska Lighterage (SEAL) as Salvage Master. On January 29, 2015, the vessel was righted, floated, and dewatered. The emergency response was completed on January 30, 2015, when DEC and USCG personnel conducted a

![F/V Eyak salvage operations near Calligan Island in Sitka Sound](image)
final assessment survey of about 5 and one half miles of shoreline, and observed no oil sheens or evidence of impacts.

**Southeast Area Exercise**

During the week of April 20, 2015, PERP staff participated with federal agencies and Harley Marine in the Southeast Area Exercise. This exercise was part of the National Preparedness for Response Exercise Program, which tests area contingency plans on a triennial basis. The exercise focused on how industry along with federal and state agencies would respond to an oil spill in Sitka Sound, and how local agencies, tribes and the community of Sitka would participate. A full Incident Management Team containing over 75 individuals from industry, state and federal agencies, including eight DEC personnel, stood up for this exercise. A field deployment, as part of this exercise, tested two local Geographic Response Strategies, including the delivery of boom to remote locations via USCG helicopter. Lessons learned from this exercise will help improve the Southeast Area Contingency Plan.

**4.3.2 CS Major Matters - Southeast Area**

**Wrangell Junkyard, Wrangell**

This former salvage yard site, located near Zimovia Strait in Wrangell, Alaska, has been documented with contamination from a variety of hazardous substances due to historical salvage and recycling activities without environmental controls and proper waste management practices. Over the past several years, the CS has worked closely with the City and Borough of Wrangell (CBW), which received title to the property through foreclosure in 2009, to address the contamination at the site. This has included facilitation of a Targeted Brownfield Assessment by EPA in 2014, on behalf of the City. Resulting data from that effort identified widespread and extremely high lead levels in surface soil, subsurface soil, groundwater, surface water, sediment, and clam tissue. As a result of this information, DEC will, in fall of 2015, undertake a response action cleanup funded by the emergency account of the Oil and Hazardous Substances Response Fund. An estimated 4,000 cubic yards of lead contaminated soil will need to be removed in order to return the site to levels suitable for residential development.
Salt Chuck Mine, Thorne Bay
CS is overseeing the Superfund investigation and cleanup being performed by EPA at the Salt Chuck Mine on Prince of Wales Island. Historic operations at this mine caused significant contamination of intertidal sediments from heavy metals. During 2014, CS completed a review and comments to EPA on its draft Remedial Investigation and Risk Assessment Report, with EPA’s response still pending at the close of FY15. That response will help CS and EPA to determine future site investigation and cleanup requirements.

Skagway Harbor Dredge Project, Skagway
Impacts of historical ore loading and shipping operations at the Skagway Ore Terminal (SOT) during the 1970s through the late 1980s contributed to heavy metals contamination in submerged sediments throughout the Ore Terminal area. Through ongoing coordination efforts between CS, Army Corps of Engineers, the Municipality of Skagway (MOS), EPA and the DEC Division of Water, this area is now being addressed along with other contaminated sediments in the Skagway Harbor, by the MOS. In 2015, MOS proposed a dredging plan to address this legacy contamination. The volume of contaminated sediments above the cleanup standard is estimated at 24,000 cubic yards.
Sitka Tank Farm, Sitka
Cleanup was completed at the Sitka Tank Farm/former Unocal bulk fuel terminal that was in service from 1937 to 1991. The CS and Chevron Environmental Management Company were able to excavate petroleum contaminated soil and thermally treat it onsite for use as backfill. CS conducted a site visit while the excavation work was underway, in May of 2015, and pending a final closure document. CS anticipates a closure complete with institutional controls determination. Chevron plans on selling the residential properties at some point in the future.

Kake Former Elementary School, Kake
The Kake former elementary school is a collapsed building located in downtown Kake, and is both an environmental and a physical hazard to the community. In July of 2014, the City applied for and was awarded DEC Brownfield services to prepare the building for demolition in hopes of placing a community center in its place. Work completed to date includes the excavation and removal of an underground heating oil tank and a hazardous building material survey. The building material survey indicated there was both asbestos and lead-based paint in the building, and the building was not structurally sound enough for abatement. CS is working with the City of Kake and Kake Tribal Corporation to find a feasible solution. As part of this work, the City of Kake was provided estimates for demolition and disposal both on- and off-island, and CS held a public meeting to discuss these options. The City, Corporation, and public agreed that off-island disposal of the demolition debris is cost prohibitive. Through DEC brownfield services, CS plans to assist the City of Kake to obtain an asbestos monofill permit for on-island disposal of the demolition debris on Kake Tribal Corporation lands.
Duncan Canal Radio Relay Station, Petersburg

Beginning in July 2014, under the oversight of CS, the U.S. Air Force began a remedial action to excavate contaminated soil at the former Duncan Canal Radio Relay Station. Petroleum-contaminated soil and petroleum/lead-contaminated soil was excavated from five separate source areas and sent for disposal in Oregon. In June 2015, the Air Force returned to the Duncan Canal site and completed the cleanup at the five source areas, placed an engineered cap on a building debris landfill, and gathered additional information at a debris disposal area to help guide that removal in 2016. The Air Force excavated a total of 2,800 tons of contaminated soil and debris. CS visited the site several times during the cleanup and assisted the Air Force with resolution of technical issues that arose during the field work.
5.0 Program Highlights

5.1 Prevention, Preparedness and Response

During FY15 the Industry Preparedness Program (IPP) and the Prevention and Emergency Response Program (PERP) began reorganizing into the new Prevention, Preparedness and Response (PPR) Program within the Division of Spill Prevention and Response. The formal transition to the PPR structure occurred July 1, 2015, the first day of FY16. This report details work performed in FY15 under the former PERP and IPP programs while FY16 priorities and other forward looking sections will reflect the new PPR structure.

Under the previous structure, regulated industry interacted with the Industry Preparedness Program for contingency planning and financial responsibility and worked with the Prevention and Emergency Response Program during drills, exercises, and actual events to implement those plans. As a result of the merger, industry will work with one program for all aspects of spill prevention, preparedness and response.

5.1.1 PPR Data Review

Performance Measures
To review the PPR program performance measures please visit the Office of Management and Budget website: https://www.omb.alaska.gov/html/performance/details.html?p=245

<table>
<thead>
<tr>
<th>SPILL RESPONSE</th>
<th>Southeast</th>
<th>Central</th>
<th>Northern</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ledger Code Request</td>
<td>56</td>
<td>24</td>
<td>66</td>
<td>146</td>
</tr>
<tr>
<td>Response Fund Request</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Formal Attorney General or Environmental Crimes Unit Referrals</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Settlements</td>
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<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Notice of Violation</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Spills Reported</td>
<td>311</td>
<td>585</td>
<td>880</td>
<td>1,776</td>
</tr>
<tr>
<td>Spills with Sitreps Generated</td>
<td>3</td>
<td>4</td>
<td>9</td>
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<tr>
<td>Total Sitreps Generated</td>
<td>7</td>
<td>9</td>
<td>18</td>
<td>34</td>
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<table>
<thead>
<tr>
<th>SPILL RESPONSE SUMMARY</th>
<th>Southeast</th>
<th>Northern</th>
<th>Central</th>
<th>TOTAL</th>
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<tbody>
<tr>
<td>Field Visits</td>
<td>59</td>
<td>164</td>
<td>76</td>
<td>299</td>
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<tr>
<td>Phone Follow-up</td>
<td>103</td>
<td>193</td>
<td>320</td>
<td>616</td>
</tr>
<tr>
<td>Took Report</td>
<td>149</td>
<td>523</td>
<td>189</td>
<td>861</td>
</tr>
<tr>
<td>Total Number of Spills</td>
<td>311</td>
<td>880</td>
<td>585</td>
<td>1,776</td>
</tr>
</tbody>
</table>
### SPILL CASELOAD SUMMARY

<table>
<thead>
<tr>
<th></th>
<th>Southeast</th>
<th>Northern</th>
<th>Central</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases Carried Over from FY14</td>
<td>87</td>
<td>230</td>
<td>303</td>
<td>620</td>
</tr>
<tr>
<td>FY15 Spills</td>
<td>311</td>
<td>880</td>
<td>585</td>
<td>1,776</td>
</tr>
<tr>
<td>Total Case Load</td>
<td>398</td>
<td>1,110</td>
<td>888</td>
<td>2,396</td>
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<tr>
<td>Cases Closed*</td>
<td>334</td>
<td>907</td>
<td>659</td>
<td>1,900</td>
</tr>
</tbody>
</table>

*Includes pre-FY15 cases closed during FY15; does not include cases transferred to the Contaminated Sites Program (CS).

### 10 Largest Releases

<table>
<thead>
<tr>
<th>Map Key</th>
<th>Spill Date</th>
<th>Spill Name</th>
<th>Product</th>
<th>Gallons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>05/07/15</td>
<td>Pogo Mine 135,000Gal Process Paste</td>
<td>Mill Slurry</td>
<td>135,000</td>
</tr>
<tr>
<td>2</td>
<td>06/13/15</td>
<td>VMT East Fire Foam Bldg Seawater</td>
<td>Seawater</td>
<td>35,000</td>
</tr>
<tr>
<td>3</td>
<td>08/29/14</td>
<td>Flint Hills Oil Water Waste Water</td>
<td>Process Water</td>
<td>24,414</td>
</tr>
<tr>
<td>4</td>
<td>05/15/15</td>
<td>BP WOA F Pad Well 36 35bbl Drilling Mud</td>
<td>Drilling Muds</td>
<td>12,600</td>
</tr>
<tr>
<td>5</td>
<td>08/20/14</td>
<td>Red Dog Zinc Concentrate Trailer Release</td>
<td>Zinc Concentrate</td>
<td>10,000</td>
</tr>
<tr>
<td>6</td>
<td>02/28/15</td>
<td>Milne Point Track 14 Production Line Release</td>
<td>Produced Water</td>
<td>9,298</td>
</tr>
<tr>
<td>7</td>
<td>10/30/14</td>
<td>Tesoro Oily Water Sewer Line</td>
<td>Process Water</td>
<td>8,400</td>
</tr>
<tr>
<td>8</td>
<td>06/10/15</td>
<td>F/V Kupreanof, Sinking</td>
<td>Diesel</td>
<td>7,200</td>
</tr>
<tr>
<td>9</td>
<td>06/17/15</td>
<td>EAFB JP8 Fuel Jettison</td>
<td>Aviation Fuel</td>
<td>6,718</td>
</tr>
<tr>
<td>10</td>
<td>05/23/15</td>
<td>M/V Thors Hammer</td>
<td>Diesel</td>
<td>6,000</td>
</tr>
</tbody>
</table>
Number of Spills Reported: 1,925
Total Gallons: 360,644

<table>
<thead>
<tr>
<th>Subarea</th>
<th>Gallons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interior Alaska</td>
<td>184,565</td>
</tr>
<tr>
<td>North Slope</td>
<td>50,842</td>
</tr>
<tr>
<td>Prince William Sound</td>
<td>40,792</td>
</tr>
<tr>
<td>Cook Inlet</td>
<td>36,826</td>
</tr>
<tr>
<td>Northwest Arctic</td>
<td>17,436</td>
</tr>
<tr>
<td>Southeast Alaska</td>
<td>14,182</td>
</tr>
<tr>
<td>Aleutian</td>
<td>8,124</td>
</tr>
<tr>
<td>Kodiak Island</td>
<td>6,110</td>
</tr>
<tr>
<td>Western Alaska</td>
<td>999</td>
</tr>
<tr>
<td>Bristol Bay</td>
<td>770</td>
</tr>
</tbody>
</table>
**All Products**
Number of Spills Reported: 1,925*
Total Gallons: 360,644

**Volume Released by Facility Type**

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Volume Released</th>
</tr>
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<tbody>
<tr>
<td>Mining Operation</td>
<td>43%</td>
</tr>
<tr>
<td>Other</td>
<td>13%</td>
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<tr>
<td>Oil Production</td>
<td>11%</td>
</tr>
<tr>
<td>Crude Oil Terminal</td>
<td>10%</td>
</tr>
<tr>
<td>Refinery Operation</td>
<td>9%</td>
</tr>
<tr>
<td>Vessel</td>
<td>6%</td>
</tr>
<tr>
<td>Vehicle</td>
<td>4%</td>
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<tr>
<td>Oil Exploration</td>
<td>4%</td>
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</tbody>
</table>

*‘Other’ includes facility categories comprising 3% or less of the total.

**Volume Released by Product**

<table>
<thead>
<tr>
<th>Product</th>
<th>Volume Released</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seawater</td>
<td>11%</td>
</tr>
<tr>
<td>Diesel</td>
<td>13%</td>
</tr>
<tr>
<td>Process Water</td>
<td>10%</td>
</tr>
<tr>
<td>Produced Water</td>
<td>6%</td>
</tr>
<tr>
<td>Drilling Muds</td>
<td>5%</td>
</tr>
<tr>
<td>Aviation Fuel</td>
<td>4%</td>
</tr>
<tr>
<td>Mill Slurry</td>
<td>37%</td>
</tr>
<tr>
<td>Other</td>
<td>14%</td>
</tr>
</tbody>
</table>

*‘Other’ includes product categories comprising 3% or less of the total volume released.

**Volume Released by Cause**

<table>
<thead>
<tr>
<th>Cause</th>
<th>Volume Released</th>
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</thead>
<tbody>
<tr>
<td>Line Failure</td>
<td>38%</td>
</tr>
<tr>
<td>Valves</td>
<td>7%</td>
</tr>
<tr>
<td>Human Error</td>
<td>14%</td>
</tr>
<tr>
<td>Oil Exploration</td>
<td>7%</td>
</tr>
<tr>
<td>Equipment Failure</td>
<td>7%</td>
</tr>
<tr>
<td>Leak</td>
<td>7%</td>
</tr>
<tr>
<td>Leaks</td>
<td>7%</td>
</tr>
<tr>
<td>Corrosion</td>
<td>7%</td>
</tr>
<tr>
<td>Other</td>
<td>13%</td>
</tr>
</tbody>
</table>

*‘Other’ includes cause categories comprising 3% or less.

**Volume Released by Size Class**

<table>
<thead>
<tr>
<th>Size Class</th>
<th>Volume Released</th>
</tr>
</thead>
<tbody>
<tr>
<td>100+ gal</td>
<td>95%</td>
</tr>
<tr>
<td>10 to 99 gal</td>
<td>4%</td>
</tr>
<tr>
<td>&lt;10 gal</td>
<td>1%</td>
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**Number of Spills by Fiscal Year**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>1,000</td>
</tr>
<tr>
<td>1998</td>
<td>1,500</td>
</tr>
<tr>
<td>2000</td>
<td>2,000</td>
</tr>
<tr>
<td>2002</td>
<td>2,500</td>
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<tr>
<td>2004</td>
<td>3,000</td>
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<tr>
<td>2006</td>
<td>3,500</td>
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<tr>
<td>2008</td>
<td>4,000</td>
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<tr>
<td>2010</td>
<td>4,500</td>
</tr>
<tr>
<td>2012</td>
<td>5,000</td>
</tr>
<tr>
<td>2014</td>
<td>5,500</td>
</tr>
</tbody>
</table>

**Total Volume by Fiscal Year**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Gallons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>1,000,000</td>
</tr>
<tr>
<td>1998</td>
<td>2,000,000</td>
</tr>
<tr>
<td>2000</td>
<td>3,000,000</td>
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<tr>
<td>2002</td>
<td>4,000,000</td>
</tr>
<tr>
<td>2004</td>
<td>5,000,000</td>
</tr>
<tr>
<td>2006</td>
<td>6,000,000</td>
</tr>
<tr>
<td>2008</td>
<td>7,000,000</td>
</tr>
<tr>
<td>2010</td>
<td>8,000,000</td>
</tr>
<tr>
<td>2012</td>
<td>9,000,000</td>
</tr>
<tr>
<td>2014</td>
<td>10,000,000</td>
</tr>
</tbody>
</table>

*Notes: 1/25/1997 (FY97) - a barge capsized and lost 25,000,000 lbs of Urea (Solid).
3/17/1997 (FY97) - 995,400 gal of Seawater released at ARCO DS-14 in Prudhoe Bay.
Some spill incidents involve releases of multiple substances. In FY15, there were 1,776 spill incidents, resulting in 1,925 oil and hazardous substance releases.
Crude Oil
Number of Spills Reported: 45
Total Gallons: 6,557

Volume Released by Facility Type

![Graph showing oil production and other categories.]

*Other* includes facility categories comprising 4% or less of the total volume released.

Volume Released by Cause

![Graph showing causes of releases.]

*Other* includes cause categories comprising 3% or less of the total volume released.

Volume Released by Size Class

![Graph showing size classes of releases.]

Number of Spills by Fiscal Year

![Graph showing number of spills over fiscal years.]

Total Volume by Fiscal Year*

![Graph showing total volume over fiscal years.]

*Notes: 10/4/2001 (FY02) - TAPS Bullet Hole Release; 285,600 gal Crude
3/2/2006 (FY06) - BP GC-2 Oil Transit Line Release; 212,252 gal Crude
Non-Crude Oil

Number of Spills Reported: 1,441
Total Gallons: 79,780

<table>
<thead>
<tr>
<th>Volume Released by Facility Type</th>
<th>Volume Released by Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Facility Type Chart]</td>
<td>![Product Chart]</td>
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<tr>
<td></td>
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</tr>
</tbody>
</table>

- 'Other' includes facility categories comprising 4% or less
- 'Other' includes product categories comprising 2% or less

<table>
<thead>
<tr>
<th>Volume Released by Cause</th>
<th>Volume Released by Size Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Cause Chart]</td>
<td>![Size Class Chart]</td>
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<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- 'Other' includes cause categories comprising 3% or less
- 100+ gal: 82%
- <10 gal: 3%

<table>
<thead>
<tr>
<th>Number of Spills by Fiscal Year</th>
<th>Total Volume by Fiscal Year*</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Spills by Fiscal Year Chart]</td>
<td>![Volume by Fiscal Year Chart]</td>
</tr>
<tr>
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<td></td>
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</tbody>
</table>

*Notes: 12/8/2004 (FY05) - the M/V Selendang Ayu broke apart, releasing 321,052 gal of IFO 380 and 14,680 gal of Diesel*
Hazardous Substances
Number of Spills Reported: 370
Total Gallons: 178,038

<table>
<thead>
<tr>
<th>Volume Released by Facility Type</th>
<th>Volume Released by Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining Operation 84%</td>
<td>Mill Slurry 76%</td>
</tr>
<tr>
<td>Oil Exploration 7%</td>
<td>Other 6%</td>
</tr>
<tr>
<td>Other 4%</td>
<td>Oil Production 5%</td>
</tr>
</tbody>
</table>

*Other* includes facility categories comprising 4% or less

<table>
<thead>
<tr>
<th>Volume Released by Cause</th>
<th>Volume Released by Size Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line Failure 76%</td>
<td>100+ gal 98.5%</td>
</tr>
<tr>
<td>Equipment Failure 9%</td>
<td>10 to 99 gal 1.3%</td>
</tr>
<tr>
<td>Rollover/Capsize 6%</td>
<td>&lt;10 gal / 0.3%</td>
</tr>
<tr>
<td>Leak 4%</td>
<td>Other 5%</td>
</tr>
</tbody>
</table>

*Other* includes cause categories comprising 3% or less

<table>
<thead>
<tr>
<th>Number of Spills by Fiscal Year</th>
<th>Total Volume by Fiscal Year*</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-YR Average</td>
<td>20-YR Average</td>
</tr>
</tbody>
</table>

*Notes: 1/25/1997 (FY97) - a barge capsized and lost 25,000,000 lbs of Urea (Solid).
Process Water
Number of Spills Reported: 69
Total Gallons: 96,268

<table>
<thead>
<tr>
<th>Volume Released by Facility Type</th>
<th>Volume Released by Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crude Oil Terminal 36%</td>
<td>Seawater 41%</td>
</tr>
<tr>
<td>Mining Operation 2%</td>
<td>Produced Water 21%</td>
</tr>
<tr>
<td>Oil Production 23%</td>
<td>Process Water 38%</td>
</tr>
<tr>
<td>Refinery Operation 35%</td>
<td></td>
</tr>
</tbody>
</table>

'Other' includes facility categories comprising 2% or less

<table>
<thead>
<tr>
<th>Volume Released by Cause</th>
<th>Volume Released by Size Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Error 41%</td>
<td>100+ gal 99.3%</td>
</tr>
<tr>
<td>Valve Failure 26%</td>
<td>10 to 99 gal 0.0%</td>
</tr>
<tr>
<td>Corrosion 14%</td>
<td>&lt;10 gal 0.1%</td>
</tr>
<tr>
<td>Leak 10%</td>
<td></td>
</tr>
</tbody>
</table>

'Other' includes cause categories comprising 3% or less

<table>
<thead>
<tr>
<th>Number of Spills by Fiscal Year</th>
<th>Total Volume by Fiscal Year*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Notes: 3/17/1997 (FY97) - 995,400 gal of Seawater released at ARCO DS-14 in Prudhoe Bay

Disclaimer: The data presented and summarized in these charts is provisional due to ongoing quality assurance/quality control on the part of data entry staff and primary users. Additional on-going reviews will further refine the accuracy of the data.
Notes:
Some spill incidents involve releases of multiple substances. In FY15, there were 1,776 spill incidents, resulting in 1,925 oil and hazardous substance releases.

Some releases (such as gases and solids) are reported in pounds rather than gallons. For graphing purposes, spill quantities reported in pounds were converted to gallons using a conversion factor of 8 pounds per gallon.

5.1.2 PPR Accomplishments

5.1.2.1 Industry Preparedness Program
The IPP mission was to protect public safety, public health, and the environment by ensuring producers, transporters, and distributors of crude oil and refined oil products prevent oil spills, and are fully prepared materially and financially to clean up spills. IPP consisted of 5 different sections that ensured our mission was accomplished on a daily basis. These sections were:

- Exploration, Production & Refineries Section
- Marine Vessels Section
- Terminals & Tank Farms Section
- Joint Pipeline Office/ Financial Responsibility/ Prevention Initiatives Section
- Pipeline & Tank Integrity Section

Each section had its own area of focus and expertise, jurisdiction for each section was statewide. Accomplishments of the program are described by a variety of means, including but not limited to:

- Oil Discharge Prevention and Contingency Plans reviewed:
  - New and renewal applications – 17
  - New and renewal Non-tank Vessel applications – 136

- Enforcement actions taken as well as those resolved:
  - Notices of Violation issued – 7
  - Notices of Violation resolved – 6
  - Compliance Order by Consent issued – 1
  - Compliance Order by Consent resolved – 1

- Oil discharge exercises evaluated:
  - Spill response exercises - 46
• Facility inspections:
  o Regulated facility inspections – 100
  o Flowline Inspections - 64
  o Underground Storage Tank inspections – 70

Terminals & Tanks Farms Section

What We Do
The Terminals & Tank Farms (TTF) Section protected public safety, public health, the environment, and state resources by ensuring bulk fuel terminals and tank farms were fully prepared to clean up oil spills and were employing reasonable, prudent measures to prevent spills. Due to Alaska’s vast size, arctic climate, and remote population centers, large oil storage facilities are necessary in communities to provide basic fuel needs for the residents of Alaska. Large oil storage facilities are also located at each of Alaska’s ports to service vessels, aircrafts, and as part of the distribution system to remote communities. The TTF Section regulated facilities with a total capacity of 420,000 gallons or more of non-crude oil. In FY15 the TTF Section accomplished the following tasks:

Evaluated and approved plans submitted to the department by operators of more than 78 oil storage terminals totaling nearly 750 aboveground tanks throughout Alaska.
Inspected 26 regulated facilities to determine compliance with approved plans. Inspection items included evaluating the condition and maintenance of the tanks, overfill protection systems, piping, cathodic protection systems, secondary containment areas, and recordkeeping.

Conducted 22 discharge exercises to assure that the plan holders had the resources and skills they have committed to in the approved plan.
Provided technical assistance to plan holders so that State-adopted relevant industry standards are appropriately applied to their facilities.

Assisted plan holders by identifying noncompliance issues and detailing the steps necessary to bring plan holders back into compliance; assisted other State offices as necessary to pursue criminal investigations and civil penalties due to plan holder noncompliance.

**Underground Storage Tank Group**

The Underground Storage Tank (UST) group’s mission is protecting groundwater by preventing releases from USTs and the associated piping. The group is responsible for regulating over 1,080 USTs located at 482 facilities in Alaska.

One significant challenge faced by the UST group this year was working with small business owners of USTs who have limited resources and knowledge of regulations.

Under the authority of Alaska UST regulations, the UST group:

- Regulates the design and operation of UST systems, ensuring that requirements are met for release detection, spill prevention, overfill prevention, corrosion prevention, and financial responsibility;
- Performs audits of UST inspections performed by third-party inspectors to insure quality inspections and to insure facilities are maintaining required UST systems between inspections (During FY15 the UST division reviewed third-party inspection reports for 435 tanks at 192 facilities);
- Provides technical assistance to the Department of Commerce and Economic Development with certification of UST workers;
- Regulates the work of certified UST workers performing installations, repairs, reconfigurations, closures, cathodic protection tests, tank tightness tests, and inspections;
- Ensures that tanks receive third-party inspections, and that failed inspections result in corrective actions;
• Coordinates with the Contaminated Sites Program on closure of USTs to ensure that sites contaminated by Leaking Underground Storage Tanks are identified;
• Provides technical assistance to the public regarding UST issues.

In FY16 the PPR Program will begin revising regulations to bring Alaska into alignment with new Environmental Protection Agency (EPA) regulatory requirements introduced by the federal Underground Storage Tank Compliance Act of 2005. The UST Coordinator meets with EPA and UST staff from other Region 10 states twice a year to discuss common issues, solutions to common problems and emerging issues.

AST/UST Enforcement FY15

• CPD Alaska Inc. St Mary’s was issued a Notice Of Violation (NOV) on January 26, 2015, for operating in violation of the approved oil discharge prevention and contingency plan. CPD Alaska placed a 30,000 gallon above ground storage tank (AST) into service prior to submitting the required amendment. CPD Alaska breeched the secondary containment area in violation of 18 AAC 75.075 without notifying the department and obtaining the required waiver under 18 AAC 75.015.

• Petro Star, North Pacific Fuel Dutch Harbor was issued a NOV on October 23, 2014 for operating in violation of the approved oil discharge prevention and contingency plan. During an inspection of the facilities it was noted the high level alarms were not functioning at the Westward Seafoods facility and that the fuel level gauges at the Ballyhoo facility were inoperative. Both were repeat discrepancies.

• Petro Marine Services Juneau Bulk Plant was issued a NOV on October 23, 2014 for operating in violation of the approved oil discharge prevention and contingency plan. The high level alarms on all tanks were inoperative. Facility personnel violated transfer procedures resulting in a 500 gallon discharge into secondary containment. The discharge was not reported to the department as required. Petro Marine Services paid a civil assessment of $14,810.09 for violations of the approved oil discharge prevention and contingency plan and spill reporting violations.

• Peters Creek Chevron was issued a NOV on September 3, 2014 for failure to obtain financial responsibility coverage for underground storage tanks and for failure to complete a
site assessment and evaluation for a known release of product for the tanks. A prohibition to operate the tanks was issued and is still in effect.

- US Army Garrison Ft. Wainwright was issued a NOV in July 2013 for failure to permanently close and remove substandard USTs, and refusal to perform the required site assessment and evaluation of a release from the USTs. These violations have been referred to the Department of Law for resolution.

- Aleut Enterprises, LCC received a Notice of Violation for violation of their oil discharge prevention and contingency plan that resulted in a release of diesel on January 11, 2010. The case was referred to the Department of Law for further enforcement action. The case was resolved on January 5, 2015 with a compliance order by consent that resulted in the payment of $500 thousand in civil fines to the State of Alaska, plus $200 thousand in enhanced compliance measures to include annual inspection for five years.

**Joint Pipeline Office, Financial Responsibility & Prevention Initiatives Section**

**What We Do**

The Joint Pipeline Office, Financial Responsibility and Prevention Initiatives (JPO/FR/PI) Section had two units that contributed to the overall oversight and response readiness of regulated petroleum operators in Alaska.

**Financial Responsibility & Prevention Initiatives Unit**

During the fiscal year, the unit reviewed applications and issued Certificates of Proof of Financial Responsibility: 248 to oil discharge prevention and contingency plan holders; 490 to nontank vessel operators; and 437 to UST owners and operators. In addition, the unit provided oversight of the implementation of regulations in October 2014, increasing the amounts required for proof of financial responsibility. In order to respond to needs of vessel owners and changes in the financial instruments industry, the unit developed a structured process to review applications for new Protection & Indemnity (P&I) Clubs seeking approval to provide financial proof of responsibility for non-tank vessels. The unit also processed renewal registration applications for 6 Primary Response Action Contractors (PRACs).

The Prevention Initiatives section of the unit created a “housekeeping” regulatory package that allowed submission of documents by email, repealed regulations that were past their transition dates, and improved consistency by aligning the wording between related regulations. A significant regulatory package modifying 18 AAC, Title 75, Article 4 plan application and review procedures went out for public review, and the Unit hosted public workshops in Kenai, Fairbanks, and Anchorage in June 2015. The project is expected to be completed in FY16.

**Joint Pipeline Office Unit**

The JPO Unit provided oversight for the Trans-Alaska Pipeline System (TAPS) operations for the Pipeline and the Valdez Marine Terminal (VMT). Personnel completed 1 plan renewal review, 10 amendment application reviews, and 4 plan waiver reviews; conducted and evaluated oil discharge
exercises; conducted facility prevention and response readiness inspections; and worked with Alyeska Pipeline Service Company (Alyeska) to verify compliance with State statutes and regulations, and their plans. Unit staff also worked closely with many public stakeholders along the TAPS route and in the Prince William Sound area that have an interest in the safe operation of the two facilities.

**DEC/JPO Liaison**
In addition, one of the JPO unit staff filled the role of DEC/JPO Liaison to coordinate with the State Pipeline Coordinator’s Office (SPCO.) The State Lease of Right-of-Way and the federal Grant of Right-of-Way for TAPS have multiple environmental and public health stipulations for which the department’s Air Quality, Water, and Environmental Health Divisions have jurisdictional oversight. In order to minimize duplication of oversight and assist the SPCO and JPO in determining Alyeska’s compliance with Lease and Grant stipulations, the DEC/JPO Liaison provides a link between Department permit staff and JPO staff for non-oil spill prevention and response programs.

**Enforcement Actions FY15**

- On August 28, 2014, DEC and Alyeska Pipeline Service Co., Inc. entered into a Compliance Order by Consent (COBC) for a multi-year project to repair and replace crude oil secondary containment piping at the East Tank Farm in the VMT. Alyeska successfully completed the first year “proof of concept” work in FY15. The Schedule of Actions agreed to requires the entire project to be completed by December 31, 2017.

- Financial Responsibility staff worked with CS staff and UST unit staff to prepare for and testify at a hearing regarding failure to secure proof of financial responsibility and existing fuel contamination at the Peter’s Creek Chevron, owned by K&SC Corporation. DEC issued a delivery prohibition to the facility. The fuel delivery prohibition remains in place.

- NOV was issued to the vessel Chelsea K, for failure to maintain proof of financial responsibility.

**Pipeline & Tank Integrity Section**

**What We Do**
The Pipeline & Tank Integrity (PTI) section provided engineering support during assessments of regulated facilities for the State's oil spill prevention initiatives by applying knowledge of corrosion, metallurgical, hydraulic, structural, and arctic engineering. Many unique and state-of-the-art engineering practices are used in preventing spills to the State’s land and waters. Facilities are often located in remote areas subjected to harsh northern climatic conditions. The PTI section engineers applied knowledge of these practices and conditions in determining effective prevention methods and to assure informed and balanced decisions regarding the adequacy of structural integrity,
Program Highlights

**Pipeline and Tank Integrity (PTI) Section**

Inspection, maintenance, repair, and safety of high-volume, high-pressure pipelines, piping, and storage tanks used at regulated facilities throughout the State.

Within the framework of 18 AAC 75, Article 1 (Oil Pollution Prevention Requirements), the PTI section provided engineering support to 121 internal service requests for review of prevention requirements. PTI continued to provide engineering support to plan reviewers for facility inspections, follow-up request for information, and compliance actions. PTI staff participated in 18 inspection trips mostly in the North Slope and South Central regions. The PTI section also provided engineering services for oil spill investigations and other special projects as requested.

Pipeline and Tank Integrity (PTI) section completed compliance audits of off shore flow line corrosion control and spill prevention programs for ENI Petroleum, Cook Inlet Energy (CIE), and Hilcorp Alaska. Line specific prevention record reviews and field inspections were completed on 54 North Slope and 10 Cook Inlet (including subsea) flow lines, and 8 Cook Inlet production platforms. In total, approximately 180 miles of flow lines were inspected in FY15. Construction inspections of 4 North Slope flow lines were also completed.

Having completed initial compliance reviews on all of the North Slope flow lines, PTI section created the well lines prevention program audits and field inspections initiative. PTI also initiated the statewide cathodic protection systems review project. While contributing to the overall effort of the merging of PERP and IPP programs, PTI section continued to serve as a continuity bridge for prevention requirements. PTI also provided technical support for OPDCP review processes, most notably was the renewal and subsequent appeal of the ASPC-VMT ODPCP regarding the Best Available Technology (BAT) requirements.

**Marine Vessels Section**

**What We Do**

The Marine Vessels (MV) Section is composed of several groups that regulate marine vessels used to transport crude oil or petroleum products in bulk on Alaskan waters. The non-tank group provided regulatory oversight of non-tank vessels (NTV) 400 gross tons or greater. There are approximately 700 NTVs with approved plans. These include cruise ships, yachts, cargo ships, tugs, fishing vessels, and processors, and hail from diverse regions of the world. Additionally, the section provided regulatory oversight of the Alaska Railroad Corporation (ARC) fuel trains.
**Marine Vessels Enforcement**

A NOV was issued to Delta Western, Inc. for not being in compliance with the approved oil discharge prevention and contingency plan for tankers.

**Marine Vessels Section Discharge Exercises and Inspections**

During FY15, the MV section participated in the November 2014 SeaRiver/SERVS exercise in Valdez. The exercise was an Incident Management Team (IMT) table top exercise (TTX) to test the PWS response system. The exercise focused on using out-of-region resources and spill response after bad weather.

During FY15 the MV section conducted 12 crude tank vessel inspections and 11 non-crude oil tank vessel and barge inspections to verify vessels were in compliance with all applicable state, federal, and international laws and regulations described in the plan. Inspections included verifying classification documents, oil transfer procedures, vessel records for crew training, watch keeping, security measures, and pollution prevention measures. Inspection of tow equipment, spill clean-up equipment storage and pre-deployment, firefighting apparatus, steering gear, and machinery spaces are regularly conducted on oil carriers.

Towing vessels for tank barges must also meet certain requirements as described in the approved plan. These requirements are inspected and verified, including towing wire inspections and maintenance, onboard spill response equipment storage, response skiff, pumps, hoses, oil containment boom, and training records for the tug crew.

Twelve NTV inspections were conducted in FY15 to verify that vessels are in compliance with applicable State and federal laws and regulations. A regulated NTV vessel must have an Alaska-approved plan prior to operating in Alaska state waters. Inspections include verifying plan approval documents are readily available on board the vessel and the person in charge of the vessel has a clear understanding of spill notification procedures and implementation of the plan. Inspection of response resources associated with registered NTV clean up contractors and review of company record keeping systems are conducted to ensure NTV clean up contractors are able to meet regulatory requirements to respond on behalf of a plan holder.
Exploration, Production, and Refineries Section

What We Do
The Exploration, Production, and Refineries (EPR) Section was responsible for regulatory oversight of crude oil exploration, development, and production facilities and refineries across the state. This oversight included evaluation of oil discharge prevention and plans for compliance with oil discharge prevention and response preparedness requirements. In FY15 EPR approved 3 contingency plans with an additional 6 plans submitted in FY15 which remained under review into FY16. EPR inspected onshore and offshore facilities, pipelines, and refineries and also conducted announced and unannounced oil discharge exercises.

Alaska’s production facilities, currently located on the North Slope and in Cook Inlet, consist of both onshore pads and offshore islands or platforms. Production facilities range in size from less than 10 wells to nearly 1,000 wells on dozens of gravel pads. Alaska’s refineries also vary in size and are located in interior and southcentral Alaska. Most oil exploration occurs on the North Slope and in Cook Inlet, with some activity in other parts of Alaska.

EPR facilities also range in age, from the Swanson River oil field developed in the 1950’s to state-of-the-art production facilities on the North Slope. Plan holders can be long-time operators in Alaska or brand new to the state, and range from small independent operators to multinational companies, including the largest oil companies in the world.

Activity covered by EPR’s plans often raised a high level of public interest and involved intensive oversight on EPR’s part. In FY15, EPR oversaw 43 plans. Of note, in FY15 EPR reviewed and approved Hilcorp’s North Slope production plan, which includes the Endicott, Northstar, and Milne Point production facilities, previously covered under three separate BPXA plans. EPR initiated review of two new ExxonMobil plans, including one for Point Thomson Unit production and the other for the Point Thomson pipeline. EPR continued to oversee highly scrutinized offshore exploration plans in Cook Inlet, including exploration under Furie’s approved plan and review of BlueCrest’s plan application.

Although exploration drilling in the Outer Continental Shelf (OCS) does not require a state-approved contingency plan, EPR participated in the design team and Incident Management Team for Shell’s federal Chukchi Sea oil spill response plan (OSRP) exercises.

Charter for Development of the Alaskan North Slope
The Charter for Development of the Alaskan North Slope, signed December 2, 1999, is an agreement between the State of Alaska, BPXA, and ARCO (now ConocoPhillips) which led to State of Alaska support of a merger between BPXA and ARCO. The Charter contains 11 different environmental commitments which the department oversees. The environmental commitments in the Charter are ongoing for the life of the merger.

EPR organized and participated in a corrosion monitoring program conference held September 23, 2014 with BPXA and ConocoPhillips in Anchorage. EPR typically meets in the fall with BPXA and ConocoPhillips in an open forum to view and discuss presentations about their respective corrosion monitoring programs for North Slope facilities.

**Natural Gas Exemptions**

EPR staff continued to provide technical advice and oversight regarding transition of Furie’s KLU #3 well in Cook Inlet as a regulated exploration well to natural gas production.

Four natural gas exemptions were issued in FY15, as listed below.

- Usibelli Coal Mine shallow coal bed methane exploration well exemption issued August 20, 2014.
- NordAq Shadura #2 exemption issued September 29, 2014.
- Hilcorp Blossom #1 exemption issued December 3, 2014.
- Cook Inlet Energy, Kahiltna #2 exemption issued January 20, 2015.

**5.1.2.2 Prevention and Emergency Response**

**Drills and Exercise Program**

The PERP program participated in 20 Incident Management Team (IMT) or field deployment drills during FY15. A total of 85 PERP staff participated in drills, this counts each attendance uniquely though some staff attended more than one drill during the fiscal year. Moving forward, the PPR program is developing a plan to reduce the cost of drills and exercises for both the Department and for industry while maintaining the same readiness expectations. The proposal for redesigning the drill and exercise program will be available in early 2016 on the PPR program website: [http://dec.alaska.gov/spar/ppr/](http://dec.alaska.gov/spar/ppr/).

**Geographic Response Strategy (GRS) project**

During the fall and winter of 2014, DEC sponsored a series of meetings with internal DEC stakeholders, EPA, and USCG representatives to evaluate where the GRS initiative stands and to outline future priorities. It was agreed that overall, the GRS program has a fully functional process for producing new strategies, but it lacks a policy for revising existing strategies. New strategies will undoubtedly be made, but the program needs to place greater emphasis on evaluating and updating existing strategies. Greater emphasis also needs to be placed on providing GRS training to remote communities, where rapid response from distant responders may not be possible.

The Department organized and co-hosted the first interagency/public GRS workshop in 15 years on March 12, 2015. Other co-hosts included the EPA, USCG, Cook Inlet Regional Citizens’ Advisory
Council (RCAC), and Prince William Sound RCAC. Representatives from sponsor organizations were invited, as well as representatives from industry, OSROs, supporting Agencies, tribes, local governments, and the general public. The workshop featured an interactive format with discussions on: GRS background and history; the process for developing new strategies; integrating GRS evaluations, like drills and exercise deployments; community spill response agreements; forward-deployed State response equipment; community outreach and training; Endangered Species Act considerations; past and future funding; formatting and content preferences; incorporation into DEC's web map; criteria for evaluating sites/strategies; the process for updating existing strategies; program maintenance responsibilities; ensuring stakeholder inclusion during evaluations and revisions; adopting a systematic approach toward revisions; and seeking consensus from participants about the day’s discussions. Valuable input was received, and the workshop helped to form a policy to evaluate and revise existing strategies.

During FY16 DEC will use Coastal Impact Assistance Program and DEC Capital Improvement Project funds to conduct field visits; deploy, test, and evaluate existing strategies; and conduct community engagement to enhance oil spill awareness following these deployments. GRS testing will ensure proper tactics have been selected to match environmental conditions at each site. DEC has also revived the GRS workgroup with new participants to focus on evaluating and updating existing strategies. We are collaborating with spill response partners (USCG, EPA, NPS, RCACs, OSROs, industry, and others) to determine the best ways to optimize collaboration and outreach as we move forward, and we conducted our first DEC-led field deployment, evaluation, and outreach campaign near Nome on September 15, 2015.

Local Response Equipment Caches (conex)
DEC maintains 56 response equipment caches across the State to support rapid response to oil spills. Because of the state’s vast size and remoteness, local residents are frequently the first line of defense in responding to oil or hazardous substance releases. These caches provide trained local residents and partners with the equipment necessary for initial response. During FY15 local response equipment caches were accessed for 19 spills in 12 Alaskan communities.

DEC applied for an extension and amendment to the scope of work for an ADNR funded project in FY15 to allow for the refurbishment and relocation of a response conex from Ketchikan to Hydaburg to support the community and their newly constructed small boat harbor.

Alaska Oil Spill Technology Symposium
On March 31 and April 1, 2015, DEC, PWS Oil Spill Recovery Institute, UAF and USCG hosted the second annual Alaska Oil Spill Technology Symposium. Speakers from regulatory agencies, industry, and academia came together to share information on new technology, ongoing research and lessons learned. The goal of this symposium is to help close gaps among these different groups and foster collaboration to improve existing technology, initiatives and incident management. This year’s symposium included a webinar option for participants who could not attend in person. Feedback from attendees was very positive.

2015 Alaska Trucking Spill Management Workshop
DEC, ADOT&PF, EPA and USCG partnered to put together a spill management workshop for trucking companies that haul bulk fuel and chemicals. The first workshop was held in Anchorage on May 5, 2015; the second was held in Fairbanks on May 7. There were over fifty participants at each workshop with representatives from the trucking industry, regulating agencies, and environmental consulting firms. Presenters included: DEC, ADOT&PF, EPA, Commercial Vehicle Enforcement,
Alyeska, Alaska West Express, NANA Development Corporation, and Colville Inc./ERM. State and federal agencies presented information on what industry would likely encounter in the event of a spill along the roadway and how to best prepare for a release. Industry representatives presented lessons learned from recent spill responses and how their operations have changed due to their experiences. Open discussion allowed regulators to address industry questions and concerns. A website ([http://dec.alaska.gov/spar/ppr/trucks.htm](http://dec.alaska.gov/spar/ppr/trucks.htm)) has been established with links to reporting information, various permits, ICS training courses, and other helpful tools for those in the trucking industry. Both workshops generated positive feedback from attendees, who found the lessons learned from other trucking companies to be of particular interest.

**Disaster Responses**
The Preparedness Section coordinated DEC programs assistance to two disaster events in the state, including the 2015 Summer Fire in June and July 2015, and the Dalton Highway Flooding event in April and May 2015. These two events received state disaster declarations from the Governor. In addition, PERP continued work on the 2011 Birch Creek fire disaster contaminated soil land farming project. This project is anticipated to be completed by 2017.

**Statewide Hazmat Response Workgroup Activities**
The Preparedness Section staff coordinated and facilitated the Statewide Hazmat Response Workgroup meetings in Anchorage on October 15, 2014, February 17, 2015, and June 10, 2015. Topics included hazmat team updates and initiatives, training and exercises, budget, a variety of hazmat responses, white powder responses, and other items of interest. The notes for all meetings and general information on the Statewide Hazmat Response Team are posted on the program website: [http://dec.alaska.gov/spar/ppr/hazmat.htm](http://dec.alaska.gov/spar/ppr/hazmat.htm).

### 5.1.3 PPR FY16 Program Priorities

**Program Transition**
The restructuring of the Division and creation of the PPR Program was initiated in FY15 with the new structure officially in place at the start of FY16. It has been a major undertaking to change so many core functions at one time. Many staff are learning new jobs and working in a different capacity than before. Internal training will be critical in FY16 for success of our new program. We will continue to adapt and make adjustments to the program as we look for efficiencies and improvements in the services that PPR provides.

**Drill and Exercise Program**
In an effort to improve our service, we are redesigning our drill and exercise program. Drills and exercise represent an important part of our regulatory program by allowing us to verify a company’s ability to adequately respond to a spill. They are also expensive for the company and the State. The Division has been tasked with considering improvements to this tool so that we are being as efficient as possible and obtaining maximum benefits from these endeavors. Additionally, the Division works closely with our federal partners to develop government lead, community oriented response plans. These community plans need to be deeply imbedded in the industry plans. Gaining synergy between industry plans and government plans will improve response efforts and add substantial efficiencies.

**Spill Prevention Project for Currently Unregulated Refined Fuel Tanks**
The majority of spills the Division spends time addressing are from unregulated facilities. During the passage of recent legislation, the Division was asked to focus on spill prevention to reduce the need for response. Refined fuel spills are prevalent at facilities that store fuel, with the Division only regulating the larger facilities (420,000 gallons and greater are required to meet prevention standards and have response capacity). Facilities with storage capacity below 420,000 gallons have frequent spills and often an inability to adequately clean them up. The Division is exploring options to incentivize prevention at medium size tank farms (1,300 gallons to 420,000 gallons) and is meeting with stakeholders to discuss options. Additionally, small fuel tanks such as those at homes and small businesses are also the source of many spills. The Division is considering methods to reduce spills at these locations as well. Either approach will need the development of a funding mechanism to provide assistance to those who cannot afford to clean up contamination.

Training
With the creation of the new Program training has been revitalized to support staff taking on new responsibilities and job tasks. During FY15 a series of “101” training courses were developed for spill response, facility inspections and plan review. Creation and implementation of more transition related training will continue into FY16. A priority for FY16 includes developing a long-term master training framework for all PPR staff that addresses plan review, response, technical expertise and specific readiness to support State roles in long-term Incident Management Team roles for significant spill response events. The framework will include initial training for new staff and training necessary for long term employees to maintain and grow their knowledge and skills.

Geographic Response Strategies (GRS)
Many entities throughout the state deploy GRSs during drills or responses. Having a meaningful way to capture and compile lessons learned is critical for improvement of the strategies overtime. During FY16, PPR will complete the development of a State GRS assessment procedure including a comment process for capturing deficiencies identified during field deployments and a streamlined process for finalizing non-substantive changes. Verifying GRS during drills and exercises is important to keep the strategies current. Building GRS into subarea plans is also helpful so that individual companies do not have to maintain these regional approaches within their response plans.

Cathodic Protection Systems Review
Develop and initiate a statewide review of cathodic protection (CP) systems to ensure that consistent methodologies are used statewide to demonstrate adequate CP. This is an important evolutionary step in SPAR’s oversight of corrosion control requirements added in 2006. The 2006 revisions regarding CP surveys added specificities on industry standards and minimum competency levels of corrosion professionals performing surveys. The objective of the audit is to perform “peer-reviews” of CP survey findings to make sure that consistent methodologies are being applied to all regulated facilities. This audit is not intended to audit entire corrosion control programs, but it is rather focused on CP requirements as specified in 18 AAC 75.065(i)(3), 065(j)(3), and 18 AC 75.080(k)(1).
5.2 Contaminated Sites

5.2.1 CS Data Review

More than 7,400 contaminated properties in Alaska have been documented since program inception. Of the total number of sites placed on the contaminated sites database over approximately 35 years, about 70% have been closed.

As of June 30, 2015, there were 2,231 open sites listed on the contaminated sites database. Even though 1,705 sites have been added to the contaminated sites database over the last 10 years, the overall number of active sites in our inventory has decreased from 3,319 in 2004 by approximately 32%.

Chart 1 depicts the open and closed sites trend since 1990. The milestone year was 2005, when the number of closed sites initially exceeded the number of open sites. The gap has widened steadily since 2005, indicating measurable progress and improvement in methods for accomplishing risk reduction at the thousands of legacy contaminated properties in Alaska.

Chart 1: Cumulative Open and Closed Sites

![Chart 1: Cumulative Open and Closed Sites](chart.png)

By the close of FY15, the program came close to achieving its performance measure for total risk reduction (closed exposure pathways) and exceeded two other performance measures -- total site closures and total closures for leaking underground storage tanks (LUST) – a federal performance measure set annually at 10% of the total inventory of open LUST sites at the beginning of the fiscal year.

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1 Database Search: Action with Action Date where action = site added to database and date range = 7/1/14 – 6/30/15; export to Excel and subtract informational, non-qualifying, unconfirmed, site intake.
year. Beginning in FY16, the program will stop tracking total risk reduction and shift to a new performance measure that strives for demonstrated annual progress on 100% of high priority contaminated sites posing the greatest risk to human health and the environment.

<table>
<thead>
<tr>
<th>Performance Measure</th>
<th>Goal</th>
<th>Number Achieved in FY15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Site Closures</td>
<td>150</td>
<td>156</td>
</tr>
<tr>
<td>Exposure Pathways Closed</td>
<td>700</td>
<td>697</td>
</tr>
<tr>
<td>LUST Closures</td>
<td>36</td>
<td>40</td>
</tr>
</tbody>
</table>

About 45% of the closures were issued with institutional controls in FY15, up from 35% in FY14.² Although about 77% of the 5,096 total closed sites (as of June 30, 2015) are without any land use restrictions (no institutional controls),³ the use of institutional control tools to manage inaccessible or recalcitrant contamination at sites is expected to increase. Institutional controls allow properties to return to safe and beneficial reuse, as well as to be sold and transferred, provided that property owners agree to ensure these controls are maintained over the long term. This approach helps support development goals and the economic health in Alaska’s communities.

Chart 2 depicts the site closure trend over the past six years. A key contributor to the improved rate of closures, is the program’s ongoing effort to bring stalled sites back into the cleanup process. This initiative began in earnest in FY12 and has continued through this past fiscal year. Measures included assigning lower priority, languishing sites to new staff as a training opportunity; issuing liens; establishing compliance schedules; encouraging large property managers to enforce environmental conditions with leaseholders; increasing our field presence and face-to-face interactions with responsible parties; rewarding action with the promise of a cleanup complete determination; and identifying funding sources for sites without viable responsible parties.

**Chart 2:** Annual Count of Sites Restored

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² Run query for action with action date = “cleanup complete determination issued;” compute percentage of sites closed with ICs from total.

³ Run Closed Sites Report for all sites closed prior to end of the fiscal year and compute percentage of sites issued “Cleanup Complete” from the total.
Risk reduction is an important measure of progress because site closure may not occur for years. There are several reasons for this - the complexity of contaminant chemistry in soil, groundwater, surface water and/or sediments may involve cleanup processes that involve many steps or occur slowly, especially in an Arctic environment. Additionally, a site’s location and hydrogeology may present challenges gaining access to the contaminated media. Finally, there may well be fiscal constraints in terms of when and how many financial resources can be devoted to site investigation and cleanup. Risk reduction is measured using the program’s Exposure Tracking Model, designed to evaluate contaminant exposure across individual “exposure pathways.” Exposure pathways are how contaminants reach human or ecological receptors. A “closed” exposure pathway is a measure of risk reduction. Closing a pathway means response actions modified the relative risk of exposure – from current, high potential, low potential, or future exposure – to either de-minimis contamination or residual contamination managed through the use of institutional controls. A pathway may also be closed if it is determined to be “incomplete,” meaning there is no possibility of the receptor being exposed any longer as a result of response actions. One example is drinking contaminated groundwater; the groundwater ingestion pathway would be shown as incomplete if concentrations are below regulatory cleanup levels.

A total of 149 sites were added to the contaminated sites database in FY15, including 60 sites transferred from PERP. Of the 121 new sites, eight were closed during the fiscal year, and 36 were found to be either unconfirmed, non-qualifying (as defined by the CS database inclusion criteria), or informational. Of all new sites, 101 remained in active status as of June 30, 2015.

Chart 4 shows the age distribution of sites currently active in the CS inventory, by showing the timeframe during which the site was added.

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4 Database Search: Action with Action Date where action = site added to database and date range = 7/1/14 – 6/30/15; second search: Action with Action Date where action = site transferred from PERP and date range = same.

5 This chart was developed by querying the database for sites added during each of the five-year increments shown.
Chart 4: Age Distribution of Active Sites in Years

Chart 5 illustrates the age distribution of the sites that were closed during FY15. It is worth noting that about 46% of the sites closed during the fiscal year were added to the database between 14-24 years ago. This statistic is an indicator of both the time it takes to remediate some sites as well as the program’s concerted effort in recent years to address stalled and languishing sites. Nevertheless, much work remains. As shown in Chart 4, 550 sites added to the program inventory between 1991 and 1995 still remain open and active.6

Chart 5: Age Distribution of Sites Closed in FY15 in Years

Military installations, bulk fuel storage and gas stations, oil exploration and refining, aviation, and maintenance facilities, are the five most common types of open contaminated sites. Chart 3 shows active sites by type.7 Military installations are the largest category, comprising close to one-third of the 2231 open sites at the end of FY15.

Chart 3: Number of Active Sites by Category

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6 This chart was developed by querying the database for sites closed during each of the five-year increments shown.
7 Database Search: Site Type = (select from drop down menu) and Status = Active. Several oil production site types are combined, as are bulk fuel storage and crude and non-crude terminals.
Federal military and federal civilian agencies are responsible for over half the remaining open sites as of the end of FY15. About one-third of open sites are in private ownership, while state and local government combined are less than one-fifth. By area, slightly more than half the open sites are located in South Central Alaska; 40% in the Interior and North Slope; and less than 10% in Southeast.

**Figure 1**: Map of all active contaminated sites in the State of Alaska
Chart 6 displays the breakdown of active sites by the class of contaminant. The majority of active sites are from releases of petroleum products. Some of these sites have additional contaminants, including volatile and semi-volatile compounds and other contaminants.  

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8 Data generated by a SPAR-IT query that requested a list of all Active sites by Class of COC (Contaminant of Concern). Similar COC classes are consolidated for this visual (i.e. Metals and Inorganics were combined).
Chart 6: Active Sites by Contaminant Class

Chart 7 summarizes how active contaminated sites have been prioritized following the site’s assessment using the Exposure Tracking Model (ETM). The result provides an evaluation of primary human health and/or ecological pathways present, current human health exposure and the likelihood or potential for future exposure\(^1\).

Chart 7: Active Sites by Risk Priority
5.2.2 CS Accomplishments

Site Management Statistics

- Project work plans/reports reviewed: 661
- Onsite inspections: 156
- Sites where long-term monitoring completed: 2
- Compliance reviews verifying status of institutional controls at sites: 290
- Sites where institutional controls were removed: 31
- DEC Brownfield Cleanup and Assessments (DBACs) completed: 8
- Successful Targeted Brownfield Assessment applications: 4
- Approved FY16 DEC Brownfield Assessments and Cleanups (DABC): 5
- Continuation of work regarding legacy wells (BLM, AOGCC) in National Petroleum Reserve Alaska (NPRA).
- BIA responsibility for contaminated site cleanup at former school and hospital sites.

Cost Recovery

- Roll-out of formal/informal cost recovery procedures – trained CS staff regarding new cost recovery processes.

Intra-Divisional Coordination

The Division held its second CS-PERP (now PPR) Coordination Meeting on June 5, 2015, to discuss a variety of issues and areas where coordination between the response and cleanup programs can be improved and to join forces in dealing with challenging issues for both programs. Upshots from this meeting included the following:

- An intra-divisional work group was established with personnel in PPR, CS and the Director's Office to investigate long-term solutions for home heating oil tanks (HHOT) including insurance mechanisms, fuel-handler inspection programs, installation standards, and real estate measures.
- A second intra-divisional work group was formed to investigate short-term solutions for managing HHOT sites at the project manager level and to address burden on homeowners.
- CS rolled out a proposal to PPR managers to substantially revise and update Method One petroleum cleanup levels from a matrix table approach to a set of cleanup levels.
- CS and PPR formed a work group to strategize and coordinate on training needs to enable CS staff to participate in drills and incident responses.
Regulations

- Regulations governing qualified persons in 18 AAC 75 and 18 AAC 78 along with numerous other housekeeping changes were made effective June 17, 2015.
- Regulations governing how risk is calculated and risk assessments performed at contaminated sites were issued for public comment on June 10, 2015.

Training

- Staff attended training on the following:
  - Alaska Native Claims Settlement Act provided by Tantikul Unlimited and funded by the Brownfields grant
  - Hazardous Materials Sampling – sponsored by EPA and funded by the Core Grant
  - DEC Basic Inspector Course for inspection/enforcement credentials
  - CS Database and Exposure Tracking Model – provided by CS staff
  - Numerous brown-bag lunch training presentations covering phytoremediation, petroleum vapor intrusion and other topics
  - Internal staff regulations training sessions on individual sections of the Site Cleanup Rules (18 AAC 75)
  - Live eco-risk webinars
  - Monthly Statewide All Staff Meetings were initiated in FY15 and included training presentations on an array of topics including: brownfields project management, emerging contaminants, quality assurance, field sampling guidance, and regulations development

Computer Applications and Program Website

- Development of two online calculators for determining cleanup levels and cumulative risk. These tools were developed under the provisions of a Memorandum of Understanding between the University of Tennessee, Knoxville and CS, by Dr. Fred Dolislager and Leslie Galloway of Oak Ridge National Laboratory.
- Development of an application to store information on abandoned mine sites was developed for the CS’s Site Discovery Initiative.
- Completed overhaul the CS Database’s public search tool application. The new application has a completely new look and feel, incorporates attached documents, site chronology, is much clearer and easier to understand the results, and links directly to the site location on a CS Webmap.
• Completed a major overhaul of the CS guidance page by adding a rapid search tool, enabling users to quickly locate a specific guidance with a few keystrokes.

Organization, Initiatives, Policies and Guidance

• Brownfield policy and project management work, including Targeted Brownfield Assessments and DBACs, was redistributed and integrated across the program’s project management staff.

• Implemented personnel and organizational changes to integrate management of federal sites with state, local government and private sites among project management staff.

• A Site Discovery Initiative on abandoned mines, funded by an EPA’s Preliminary Assessment/Site Investigation grant was launched and included site inspections at seven abandoned mine sites.

• A major update to the department’s Risk Assessment Procedures Manual were completed.

• Substantial updates to finalize the Field Sampling Guidance were completed by an in-house work group.

• A Guidance on PRP Search Tools was developed by program staff.

• In anticipation of further EPA guidance, initiated research and the initial development of an internal technical memorandum on perfluorinated compounds.

• The Small Arms Range Characterization Guidance was updated.

• Policy, procedures and modifications to the CS Database were developed for a Suspended Sites strategy to address low priority sites where no forward progress can be achieved due to a variety of circumstances.

• Measures to address and improve the management and cleanup of approximately 116 State-owned sites were initiated including tailored agreements with state agencies, greater use of reimbursable services agreements (RSAs) for specific projects and increased CS support for state agencies in helping them prioritize, manage and report their contaminated sites.

5.2.3 CS FY16 Program Priorities

CS/PPR Spill Response Cross Training
A CS program priority is the CS and PPR staff evaluation of the type and scope of training needs to equip CS staff to assist with a large spill. This will include evaluating and noting any specialized skills or knowledge that CS staff may have such as chemist or risk assessor that would be important during a large spill event.
**Home Heating Tanks**

CS has joined PPR on several Home Heating Oil Tank (HHOT) initiatives aimed at addressing both short term and long term needs. Releases from HHOTs and the resulting contamination can be difficult for homeowners to address from a financial perspective. HHOT sites typically do not see the type of robust regulatory action that is needed to bring the sites to closure under DEC regulations.

In the short term, Division staff intend to develop guidelines for homeowners to conduct some limited response actions on their own and also consider a revised approach to HHOT response that may include using an DEC contractor (to conduct the response and cleanup activities at sites where the property owner does not have the ability to do so on their own at the time of the release).

In the longer term, staff from both programs (CS and PPR) are exploring the following solutions:

- Development of a HHOT Residential Insurance Policy mechanism with state Division of Insurance
- Investigate examples from other states for the development of a Fuel Handler’s Inspection/Cert Program
- Codify current SPAR HHOT tank guidelines into a written set of standards/criteria potentially as a stipulation in an insurance mechanism
- Investigate why tank system inspections are not one of the criteria in a building inspection and whether that can be changed
- Outreach with mortgage companies, lenders, realtors, appraisers and inspectors

**Regulation Packages**

Several updates to 18 AAC 75 Site Cleanup Rules and 18 AAC 78 Leaking Underground Storage Tanks (LUST) are in process or planned for FY16. The various updates and work planned include:

- Risk Assessment Amendments dealing with how risk is calculated and risk assessments are performed, including providing complete steps to adoption and filing.
- Cleanup Levels Amendments dealing with updated cleanup levels for soil and groundwater and how they are calculated for contaminated sites— including a 90-day public comment period; executing three public workshops, conducting review of impacts on closed sites, completing all steps to adoption and filing and implement the regulations, including formal rollout of the new risk-based cleanup levels calculator for Method 3 alternative cleanup levels.
- Petroleum Amendments related to developing and issuing a pre-rulemaking scoping notice to solicit input on a variety of issues related to how petroleum cleanup criteria under Methods 1, 2 and 3 could be amended.
• Repeal of the Laboratory Approval Program. The Division is looking at developing and issuing a scoping notice to solicit input on impacts including cost of repealing this program authorized under Article 8 of 18 AAC 78.

• Merging portions of Chapter 78 (Underground Storage Tanks) with other regulatory chapters including Chapter 75 (Site Cleanup Rules). The Division is investigating federal rule requirements and opportunities to consolidate articles and sections of Chapter 78 with others.

BIA Village School Historic Contamination Project
Evaluate known contaminated sites at village schools to determine responsible and liable parties required to clean up historic contamination. Request information from potentially responsible parties (PRPs), including the US Bureau of Indian Affairs (BIA), the state, local school districts, village entities, and other owners or operators. Work with PRPs to develop a plan for cleaning up each school site.

Develop outreach effort with Native Corporations
Undertake preliminary actions to increase outreach to Alaska regional and village Native Corporations to develop relationships, and increase knowledge of Brownfield funding opportunities on native lands. This will be accomplished by developing a list of contacts within these entities, developing outreach materials tailored to these entities, identifying land use priorities, and identifying steps to increase engagement.

Design and implement an outreach effort to real estate, banking, and mortgage companies
Work with the mortgage and real estate industry to increase awareness about the liability and risks related to property transfers involving contaminated or potentially contaminated sites. The critical first step in this process is to develop an effective contact list and then a new listserv. The listserv will be used to send out information on key topics such as: liability, prospective purchaser agreements, institutional controls, and other key information.

State owned site coordination
Build upon previous year’s work of establishing effective and reliable state sites funding and management system, by establishing systematic working relationships with other state agencies (to include rescinding the 1997 Memorandum of Agreement between DEC and other departments). Identify agency points of contact and devise tailored plans to help state agencies manage their contaminated sites and the associated liability and property impacts.

Emergency Response Efforts – Wrangell Junkyard
Execute contract for services in the fall of 2015 to develop a storm-water and site control plan, and begin cleanup at this site where extremely high concentrations of lead in soil pose a risk to human health and the environment. The program seeks to mitigate the bulk of the contamination by close of FY16, with additional work carrying over into the next fiscal year.
Superfund 101 Training
In an ongoing effort to broaden the knowledge base of program staff in the regulatory processes for different types of sites (federal, brownfield, state-owned, local government and private sites) A three-day, EPA-sponsored course in Comprehensive Environmental Response, Compensation and Liability Act will be given to nearly all program staff in November 2015.

Gaining Fluency in Brownfields
Continue the integration of brownfield policy and project management throughout the CS so all project managers are knowledgeable of funding opportunities and services, and are able to make brownfield site determinations. Further, the program seeks to increase the degree to which all program staff can coordinate and network with municipalities, tribes, and tribal response program (TRPs) personnel (to address the significant contamination challenges throughout Alaska’s villages and rural communities), and support re-use and re-development opportunities at contaminated sites.

Site Discovery
During FY14, CS launched a site discovery initiative funded through and EPA grant to investigate abandoned mine sites as a pilot effort. For FY15, CS staff is evaluating the need for a unit specialized in site discovery and Potential Responsible Party (PRP) research. There are instances where contamination is discovered through actions such as road construction or building projects, but there is not a known source of the release. In these situations, it is challenging to determine the origin of the release and track the possible PRPs. Program staff currently use EPA grant funds to conduct a small number of Preliminary Assessments/Site Inspections at abandoned mine sites throughout Alaska. In FY16, the CS staff in charge of these assessments will evaluate the potential need for and challenges to implementing a broader site discovery program. This evaluation will include identifying specific industry types or situations that may benefit from a robust site discovery type of program, potential funding sources, the type of staff training needed, and the amount of staff time this effort would require.

Potential Responsible Party (PRP) Research
In 2014, a new guidance on PRP search tools was drafted. Following on the heels of that effort, FY15 work will focus on evaluation by CS and Department of Law regarding improvements for PRP research to enhance efficiencies and effectiveness for both agencies. Research needs vary by site, with differing levels of research needed to identify current as well as past owners and operators. The goal is to develop a clear process for CS staff to follow, with identified triggers indicating when to turn the PRP search over to a specialized unit in CS or Law for more detailed research. CS and Law will evaluate the training needs and type of resources required to build a PRP research unit.

Project Manager Tools for FY15
CS is reviewing and evaluating the type of guidance and support tools that CS staff require to effectively do their work. Policies and guidance need to be evaluated to ensure they remain current.
and have not become stale and out of date. This is an ongoing effort that evolves based on program needs and technology. Examples of FY16 goals include:

- Conduct in-house staff training on the Site Cleanup Rules. CS staff are designing and producing CS cleanup regulation modules that will be archived on the CS project manager’s webpage, allowing staff to take the training at any time or go back and review sections as needed.

- Update the Field Sampling Manual, a major guidance, to reflect new information and meet the CS quality assurance/quality control requirements for field sampling for contaminants.

- Establish project manager performance goals to assist staff in understanding how their work performance will be evaluated. These goals will provide staff with a clear understanding of their work tasks, and help guide them in determining their training needs to improve skills or fill knowledge gaps. This will also help new employees to understand the benchmarks used to determine performance.

- Initiate research on how and what should be in CS site specific decision documents that establish cleanup levels and remedial actions. Depending on the size and complexity of the site a decision document this could be simple, or very detailed and complex. The program will begin evaluating if sites can be classified and fit into a specific format for a simple, more complex and highly complex site decision that can be attached to the site database description, and put into a permanent file.

- Implement the Suspended Sites Strategy for managing and tracking sites were forward progress is prevented on low priority sites due to a variety of specific circumstances. This strategy will allow staff to focus on sites where the risks and priority are highest, while insuring suspended sites are sufficiently tracked over time to alert the public and incorporate incentives for resuming progress.

5.3 **Response Fund Administration**

**Mission**

The mission of the Response Fund Administration (RFA) Program is to manage the Oil and Hazardous Substance Release Prevention and Response Fund (OHSRPRF or Response Fund) as a viable, long-term funding source for the state's core spill prevention and response programs.

The RFA program is the administrative arm of SPAR. The program manages the expenses and revenues in the Prevention and Response Accounts of the OHSRPRF by recovering state costs for responding to spills from responsible parties.
Services provided:

- Develop budget requests to limit annual funding requests to revenue available from the Prevention Account revenues.
- Develop a long-term strategies for maintaining core spill prevention and response program with available revenue.
- Manage CIP project expenditures for cleanup at state owned and state lead facilities.
- Track all state spill response expenditures and revenues, and initiate timely billings to responsible parties to ensure maximum recovery of state costs.
- Identify and pursue other cost recovery sources, such as the Federal Oil Spill Liability Trust Fund, and participate in the settlement of cost recovery claims with the Department of Law.
- Manage and maintain contracts with private firms engaged in cleanup and remediation work for the SPAR.
- Maintain all the SPAR program databases for the division and develop any improvements to those databases.
- Prepare an annual report on the Response Fund and RFA accomplishments.
- In the case of a major spill response, support the Finance Section within the Incident Command System.

5.3.1 RFA Data Review

The financial data compiled by the Response Fund Administration (RFA) is only FY15 data. There are two different sets of financial data. One set of financial data includes all cost recovery data, federal grants and Reimbursable Service Agreements (RSAs) where SPAR work is done at a particular site. The other is only the Cost Recovery data where responsible parties (RPs) have been billed for SPAR services at a particular site.

The industry types shown below reflect how SPAR programs categorize their work. The ‘Other industry’ category shown below includes firing ranges, logging operations/processing, lighthouses, and other smaller industry categories.
### SPAR Recovered Costs by Industry type from July 1, 2014 through June 30, 2015

**Response cost recovered thru Cost Recovery, Grants and RSA’s**

*Revenue collected during the fiscal year on the invoices issued in FY15*

<table>
<thead>
<tr>
<th>Industry type (site type or facility type)</th>
<th>Sum of Bill Amount *</th>
<th>Pct of Billed</th>
<th>Sum of Payment received (combined w Credits)</th>
<th>Pct of payments received</th>
<th>Sum of Pending Balance</th>
<th>Pct outstanding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air/Vehicle/Railroad</td>
<td>$269,364.02</td>
<td>3.41%</td>
<td>$208,562.14</td>
<td>3.82%</td>
<td>$60,801.88</td>
<td>2.49%</td>
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<tr>
<td>Commercial/Residence</td>
<td>$338,960.45</td>
<td>4.29%</td>
<td>$123,120.55</td>
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<td>$215,839.90</td>
<td>8.85%</td>
</tr>
<tr>
<td>Fuel/Oil/Transmission pipe</td>
<td>$593,648.00</td>
<td>7.51%</td>
<td>$454,177.12</td>
<td>8.32%</td>
<td>$139,470.88</td>
<td>5.72%</td>
</tr>
<tr>
<td>Gas Station</td>
<td>$100,849.38</td>
<td>1.28%</td>
<td>$55,513.99</td>
<td>1.02%</td>
<td>$45,335.39</td>
<td>1.86%</td>
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<tr>
<td>Laundry/Dry Cleaner</td>
<td>$162,055.57</td>
<td>2.05%</td>
<td>$6,242.18</td>
<td>0.11%</td>
<td>$155,813.39</td>
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<tr>
<td>Military Installation</td>
<td>$2,753,157.27</td>
<td>34.85%</td>
<td>$2,716,943.47</td>
<td>49.74%</td>
<td>$36,213.80</td>
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</tr>
<tr>
<td>Mining Operation</td>
<td>$161,454.94</td>
<td>2.04%</td>
<td>$103,887.07</td>
<td>1.90%</td>
<td>$57,567.87</td>
<td>2.36%</td>
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<tr>
<td>Other</td>
<td>$927,463.10</td>
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<td>$817,630.42</td>
<td>14.97%</td>
<td>$109,832.68</td>
<td>4.50%</td>
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<tr>
<td>Refinery Operation</td>
<td>$1,562,637.35</td>
<td>19.78%</td>
<td>$9,796.38</td>
<td>0.18%</td>
<td>$1,552,840.97</td>
<td>63.68%</td>
</tr>
<tr>
<td>Salvage/storage/dump</td>
<td>$91,338.33</td>
<td>1.16%</td>
<td>$61,594.68</td>
<td>1.13%</td>
<td>$29,743.65</td>
<td>1.22%</td>
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<tr>
<td>Vessel/seafood/water</td>
<td>$939,629.30</td>
<td>11.89%</td>
<td>$904,473.65</td>
<td>16.56%</td>
<td>$35,155.65</td>
<td>1.44%</td>
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<tr>
<td><strong>Grand Total</strong></td>
<td><strong>$7,900,557.70</strong></td>
<td><strong>100%</strong></td>
<td><strong>$5,461,941.64</strong></td>
<td><strong>100%</strong></td>
<td><strong>$2,438,616.06</strong></td>
<td><strong>100.00%</strong></td>
</tr>
</tbody>
</table>

* SPAR spent $17,190,037 in FY15. Unbilled expenditures cannot be broken out by industry and the amount totaled $9,289,480 or the difference between total expenditures and billed expenditures.
## Cost Recovery only

<table>
<thead>
<tr>
<th>Industry type (site type or facility type)</th>
<th>Sum of Bill Amount</th>
<th>Pct of Billed</th>
<th>Sum of Payment received (combined w Credits)</th>
<th>Pct of payments received</th>
<th>Sum of Pending Balance</th>
<th>Pct outstanding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air/vehicle/railroad</td>
<td>$160,995.89</td>
<td>4.87%</td>
<td>$100,194.01</td>
<td>11.5%</td>
<td>$60,801.88</td>
<td>2.49%</td>
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<tr>
<td>Commercial/Residence</td>
<td>$335,010.15</td>
<td>10.14%</td>
<td>$119,170.25</td>
<td>13.7%</td>
<td>$215,839.90</td>
<td>8.85%</td>
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<tr>
<td>Fuel/Oil/Transmission pipe</td>
<td>$432,560.07</td>
<td>13.99%</td>
<td>$293,089.19</td>
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<td>$139,470.88</td>
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<td>Gas Station</td>
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<td>3.05%</td>
<td>$55,513.99</td>
<td>6.41%</td>
<td>$45,335.39</td>
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<tr>
<td>Laundry/Dry Cleaner</td>
<td>$162,055.57</td>
<td>4.90%</td>
<td>$6,242.18</td>
<td>0.72%</td>
<td>$155,813.39</td>
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<td>Military Installation</td>
<td>$87,928.62</td>
<td>2.66%</td>
<td>$51,714.82</td>
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<td>$36,213.80</td>
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<tr>
<td>Mining Operation</td>
<td>$123,055.31</td>
<td>3.72%</td>
<td>$65,487.44</td>
<td>7.56%</td>
<td>$57,567.87</td>
<td>2.36%</td>
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<tr>
<td>Other</td>
<td>$195,105.13</td>
<td>5.90%</td>
<td>$85,272.45</td>
<td>9.85%</td>
<td>$109,832.68</td>
<td>4.50%</td>
</tr>
<tr>
<td>Refinery Operation</td>
<td>$1,562,637.35</td>
<td>47.29%</td>
<td>$9,796.38</td>
<td>1.13%</td>
<td>$1,552,840.97</td>
<td>63.68%</td>
</tr>
<tr>
<td>Salvage/storage/dump</td>
<td>$72,469.83</td>
<td>2.19%</td>
<td>$42,726.18</td>
<td>4.93%</td>
<td>$29,743.65</td>
<td>1.22%</td>
</tr>
<tr>
<td>Vessel/seafood/water</td>
<td>$71,975.94</td>
<td>2.18%</td>
<td>$36,820.29</td>
<td>4.25%</td>
<td>$35,155.65</td>
<td>1.44%</td>
</tr>
<tr>
<td>Grand Total</td>
<td>$3,304,643.24</td>
<td>100%</td>
<td>$866,027.18</td>
<td>100%</td>
<td>$2,438,616.06</td>
<td>100%</td>
</tr>
</tbody>
</table>
Response to Legislative Intent on Cost Recovery

As part of the FY16 budget process, the Alaska Legislature asked the department for additional information about cost recovery. The Division's response to that request is included here.

*It is the intent of the legislature that the Department of Environmental Conservation will develop a plan to increase cost recovery efforts for spill prevention and response, and will report findings to the Finance Committees by January 19, 2016.*

Significant action has been occurring in SPAR to increase cost recovery. The Division will never recover all of our costs because much of the work we do is not a billable activity. For example, we cannot bill for prevention work (contingency plans, technical assistance, inspections) or spill drills which are a substantial portion of our work. However, we have taken dramatic steps to increase cost recovery when it is plausible.

SPAR, with the assistance of the Department of Law (DOL), has drafted new cost recovery (CR) regulations describing how cost recovery will occur. Statutory language requesting these regulations has existed for ten years but never been implemented until now.

SPAR has successfully taken over the informal cost recovery billing process from DOL as of January 1, 2015 which reduced expenses by over $200 thousand annually, or 42% of the Division's annual legal costs. Existing staff within the Division are now performing this important work rather than DOL employees. For the first time, the Division will stay within our budget of $450 thousand for DOL services this year.

SPAR has made several changes to billing in FY15 to make collections easier. Improvements include:

- automating the billing rather than tallying bills by hand;
- switching to monthly billing rather than on an irregular basis;
- developing procedures to determine a responsible party’s inability to pay;
- changing the time tracking policy which allowed staff to decide when hourly thresholds had been reached and billing should occur;
- incorporating ‘Hazard ID’ and ‘Spill #’ into our Bill Quick billing system and continuing to incorporate codes on new sites. This enables SPAR to add financial amounts to reports generated from program databases;
- establishing umbrella Ledger Codes (LC’s) for companies with numerous small spills. This enables us to send a single invoice per month for numerous spills by one company which takes much less time than individual invoices for each event;
- establishing rules within our Bill Quick system to automate billing and remove non-billable time entries; and
• implementing a Responsible Party (RP) call log for quality assurance and timely response. We received 100 calls in FY15.

We also requested payment for the first time for over 200 sites that had not been previously billed. Only 6% of the sites that had never been billed remain to be evaluated. We do not bill sites where we cannot find a responsible party, Underground Storage Tank (LUST) grant recipients (federal requirement), and some federal sites that are under another payment system.

Overall, we have reduced errors, increased billing frequency, and provide better customer service. These changes have improved cost recovery efforts with a 48% increase in cost recovery revenue received in FY15 ($1, 446.5 thousand) compared to the previous year ($975.7 thousand). These numbers and percentages do not include settlement revenue, which can substantially vary from year to year.

5.3.2 RFA Accomplishments

There a number of sections within the RFA program:

- Director's office – Includes the SPAR director, Program Coordinator, and one support staff. The section provides policy direction to SPAR and coordinates division wide projects.

- Budget and Finance – Includes the Administrative Operations Manager and three support staff. The section prepares the operating and the capital budget for SPAR, monitors expenditures and tracks federal grants, Reimbursable Service Agreements (RSAs), and other funding for SPAR.

- Cost Recovery – Includes an Accountant and two support staff to issue invoices and track cost recovery funding for SPAR.

- Information Technology – Includes one Data Processing manager and four technical staff to support all the program databases that SPAR utilizes to provide meaningful data.

- Contract Management – Includes an Administrative Officer and one accounting staff position to prepare and track the numerous contracts SPAR issues to perform critical work.

- Administrative Support – Includes an Administrative Officer who is responsible for payroll, purchasing, accounting structures and other administrative duties for SPAR. The section also contains four clerical staff who support the entire Division in Anchorage.

**Director's office**

- Successfully integrated two programs (PERP and IPP) into PPR to:
  - align planning and actual response efforts
  - better utilize staff time so responders can work on planning when not responding and vice versa
  - provide better service to the regulated community and our partners by providing clarity and consistency about our expectations
• Reduced the division budget by $520 thousand in prevention funds primarily through reorganization efforts and reduced it by another $208.2 thousand in general funds as a result of the unallocated GF reduction. Resulted in elimination of 6 positions.

• In addition to the reductions, SPAR underspent its allocation for the last three years, allowing additional funds to lapse back into the Prevention Account and be available for future years.

• Assisted with the passage of HB158, sponsored by Representative Munoz, which created another funding source for the Division’s critical prevention and response work.

• Initiated effort to update several, long overdue regulatory packages.

• Spearheaded effort to revamp annual report so that it provides more useful information.

• Launched effort to prevent more spills from medium and small size fuel storage tanks.

• Proposed the Reciprocal Port Prevention Agreement to reduce risks posed by vessels in innocent passage.

Budget and Finance

• Managed $9.4 million in federal grants that covered multiple fiscal years and $4.4 million in Reimbursable Service Agreements (incoming and outgoing funding).

• Accomplished a significant increase in administrative work load. The PPR merger required the update of over 90 position descriptions along with significant personnel actions forms needing processing. In addition, all the financial coding needed to be changed to PPR.

• Merged the Director’s Office with RFA, implemented some minor changes in CS, and centralized administrative support in Anchorage required substantial administrative actions. These organizational changes impacted the financial coding, position descriptions, and organizational charts of most the Division.

• Created a financial coding system to manage budgets under a collapsed component. The FY16 operating budget collapsed the Division’s five components to the one called SPAR. During FY15, we needed to create the financial controls that needed to be in place by July 1, 2015, so budgets for CS, PPR and RFA could continue to be managed separately.

Managed a large workload of tasks associated with the new statewide accounting system. The old system, AKSAS, was retired on June 30, 2015, and a new accounting system called IRIS was started July 1, 2015. This caused a large administrative workload as we transitioned between the systems. Specifically, the SPAR operating and capital structures had to be rebuilt and new accounting procedures needed to be established. The financial processing at the end of fiscal year 2015 was particularly difficult with half the financial activity recorded in IRIS and the other in AKSAS. As this report is being written, SPAR is still dealing with changes to financial procedures, structures, and reporting as a result of this change.

Cost Recovery
See response to legislative intent language above.

**Information Technology (IT)**
The main IT accomplishment is the successful completion and roll-out of multi-year systems re-architecture and application redesign of Prevention, Preparedness and Response (PPR) database applications.

- The new SPILLS system allows the PPR program to better record key information about reported oil and hazardous substance releases. Data from the application is used by the department for program management, budgeting and performance measures, spill response planning and prevention, responding to public information requests, gauging the effectiveness of regulatory information, and identifying the need for new or strengthened prevention measures.

- The new IPP system allows the PPR program to better track and manage industry contingency plans and related data. DEC monitors sites throughout the state to identify risks to the environment and establishes a list of the environmentally sensitive areas. Companies (or individuals) that are plan holders must establish a plan that details their business, how they plan to mitigate risk, and how they will respond if a discharge occurs.

Another big accomplishment is a significant consolidation and re-architecture of SPAR’s Online Services. These services were upgraded to better serve members of the public, other state agencies and other public and private organizations. Enhancements include:

- Consolidation of SPAR Online Services, a “one-stop-shop” for publicly available SPAR data
  - See [http://dec.alaska.gov/Applications/SPAR/PublicMVC/](http://dec.alaska.gov/Applications/SPAR/PublicMVC/)

- Fast, user friendly, responsive design allowing quick searching and retrieval of documents and data

- Web application security enhancements

- GIS integration in the CS Database search

Other significant accomplishments of SPAR’s IT section:

- Overcame significant recruitment challenges to fully staff the IT section with well qualified, experienced developers.

- Decommissioned or upgraded legacy or aging database infrastructure.

- Restarted and made significant progress on two major, stalled software development efforts – Underground Storage Tank and Nontank Vessel applications.

**Contract Management**
• Reviewed and processed Notices to Proceed (NTPs) payments totaling over $3.3 million
• Closed & completed 30 NTP’s;
• Amended 13 term contracts;
  o 4 Contaminated Site Assessment & Cleanup
  o 2 Engineering
  o 3 Spill Response Cleanup
  o 4 Spill Response Technical Assistance
• Developed and established 2 new term contracts;
  o 1 Unexploded Ordnance
  o 1 Public Relations
• Managed 15 contracts valued at $34 million;
• Worked in conjunction with SPAR Program staff and Division of Administrative Services to develop technical scopes of work and RFPs, and initiate NTPs for 44 projects;
• Initiated effort to update database to provide effective reporting of contracts, NTPs, and pay request processing;
• Conducted audit of existing database and files to ensure accurate accounting of contracts and NTPs;

Administrative Support
• Established procedures that have increased functionality and effectiveness of the SPAR Division;
• Assisted in ongoing effort to accommodate staff office and equipment setup for workspaces and computer equipment following Division reorganization;
• Initiated review of file management systems;
• Archived 1,494 site files for the CS, which involved reviewing over 6,000 documents;
• Processed and finalized 2,571 letters for Division staff;
• Processed 362 purchases.
• Received and responded to 237 public record requests.

5.3.3 RFA FY16 Program Priorities
The Cost Recovery (CR) section seeks reimbursement of SPAR costs in accordance with Alaska Statutes (AS) 46.08.070, AS 46.04.010, AS 46.03.822 and AS 46.03.760. SPAR is required to recover costs from any person liable under AS 46.04.020, AS 46.09.020 AS 46.03.822 or AS 46.03.760. Costs
are defined as those expended by the Department related to cleaning up or containing a discharge. They may include direct activities, support costs of direct activities, and interest charges for delayed payments.

To meet these obligations, SPAR establishes a unique financial code to each incident or site for purposes of tracking all state costs incurred in the accounting system. These unique financial codes link to incidents or sites that are tracked separately.

During FY15, CR tightened the cost recovery guidelines by establishing a policy and procedure on billing numerous small spills that required limited response efforts. Historically, these small sites were not billed by SPAR RFA. In addition, contingency plan holders where enforcement actions required a significant amount of staff time were billed. CR also began drafting regulations that will guide the cost recovery process. Please see RFA Accomplishments section 5.3.2 for additional information on cost recovery efforts.

5.3.4 RFA Biennial Report Elements
Alaska Statute AS 46.08.060 requires the Department of Environmental Conservation (DEC), the division of Spill Prevention and Response (SPAR), to report on certain aspects of the Oil and Hazardous Substance Release Prevention and Response Fund (Response Fund). This report is due no later than the 10th day following the convening of each first regular session of the legislature. The report can be very large. In the interest of reducing paper, we are providing some of the report within this annual report, along with links to all the report tables which are posted on our SPAR website: http://dec.alaska.gov/spar/index.htm

History of the Response Fund
The Oil and Hazardous Substance Release Prevention and Response Fund (Response Fund) was created by the Legislature in 1986 to provide a readily available funding source to investigate, contain, clean up and take other necessary action to protect public health, welfare and the environment from the release or threatened release of oil or a hazardous substance. Alaska Statute 46.080.030 states: “It is the intent of the legislature and declared to be the public policy of the state that funds for the abatement of a release of oil or a hazardous substance will always be available.” (SLA 1986 Sec.1 Ch. 59).

The statutes governing the Response Fund were amended in 1989, 1990, 1991, 1994, 1999, 2006 and 2015. These amendments increased the scope that defines how the Response Fund can be used and it also increased the DEC’s reporting requirements. In addition, the 1994 amendment made major changes to the Response Fund structure by dividing the Response Fund into two separate accounts. The first account is the Response Account and the second account is the Prevention Account. The changes became effective on July 1, 1994.
The 1999 amendment changed the requirement for an annual fund status report to the legislature to a biennial status report. The 2006 amendment changed the surcharge levied on crude oil produced in the state. HB3001C amended Sec. 28 of AS 43.55.300 and imposed a Prevention Account surcharge of $.04 (formerly $.03) per barrel of oil produced from each lease or property in the state, less any oil the ownership or right to which is exempt from taxation. Sec. 26 of AS 43.55.201 was also amended to change the Response Account surcharge of $.02 to a $.01 per barrel of oil produced from each lease or property in the state.

Due to declining oil production and related revenues, the 2015 amendment (HB 158) added a new .0095 cent-per-gallon on refined fuel sold, transferred or used at the wholesale level. The tax includes gasoline and heating oil but not aviation fuel or fuel used on the Alaska Marine Highway system. The tax was effective July 1, 2015 and the generated revenue is deposited in the Prevention Account.

**Response Account**

The Response Account may be used to finance the state’s response to an oil or hazardous substance release disaster declared by the governor, or to address a release or threatened release that poses an imminent and substantial threat to the public health or welfare, or to the environment. If the Response Account is accessed for any incident other than a declared disaster, within 120 hours the Commissioner of DEC must provide the Governor and the Legislative Budget and Audit
Committee with a written report summarizing the release, the State's actions and associated costs, both taken and anticipated, and any other information deemed appropriate.

The Response Account receives funding from two different sources:

1. A surcharge of two cents per barrel that is levied on each taxable barrel of oil produced in the state, which is deposited to the response surcharge account until March 31, 2006. Effective April 1, 2006, House Bill 3001C changed the surcharge tax of two cents to a one cent per barrel.

2. Money that is recovered from parties financially responsible for the release of oil or hazardous substance which is deposited in the response mitigation account.

The one cent per barrel surcharge is suspended when the combined balances of the surcharge account, the response mitigation account and the unreserved and unobligated balance in the Response Account itself reaches or exceeds $50 million.

The Response Account balance reached $50 million for the first time during the quarter ending December 31, 1994. Therefore, beginning April 1, 1995, the surcharge collection was suspended.

Access to the fund for the response to the North Slope Pipeline spills occurred on November 20, 2006. This action lowered the balance of the account below $50 million. On April 1, 2007, the Department of Administration imposed the $.01 cent surcharge to restore the balance to $50 million. Spill responses reduced the balance again over the years and on July 1, 2013 the $.01 surcharge was reimposed to restore the balance to $50 million. The combined balance of the Response Account as of June 30, 2015 was $49.2 million. As a result, the $.01 cent surcharge has remained on through the Fiscal Year 2015.

**Prevention Account**

The Prevention Account may be used to investigate, evaluate, clean up, and take other necessary action to address oil and hazardous substance releases that have not been declared a disaster by the Governor, or do not pose an imminent and substantial threat to the public health or welfare of the environment. The Prevention Account may also be used to fund Alaska's oil and hazardous substance release prevention programs and to fund activities related to cost recovery.

The Prevention Account is financed with a $.04 per barrel surcharge and fines, settlements, penalties and interest. The Prevention Account receives funding from four sources:

1. a surcharge of four cents per barrel that is levied on each taxable barrel of oil produced in the state which is deposited in the prevention surcharge account;

2. fines, settlements, penalties, and costs recovered from parties financially responsible for the release of oil or a hazardous substance deposited into the prevention mitigation account;
3. interest earned on the balance of each of the following accounts deposited into the general fund and credited to the Prevention Account: (a) the prevention account; (b) the prevention mitigation account; (c) the response account; and (d) the response mitigation account; and

4. a surcharge of .0095 cent-per-gallon on refined fuel sold, transferred or used at the wholesale level in Alaska.

The legislature annually appropriates money from the prevention surcharge and prevention mitigation accounts into the Prevention Account to support the State's oil and hazardous substance spill clean-up efforts and spill prevention and preparedness planning activities (AS 46.08.040(a)(2)) which is part of the Spill Prevention and Response (SPAR) annual budget.

The Prevention Account balance based on the Department of Administration’s quarterly report on the Oil Surcharge account shows an unobligated balance of minus $1 million at the end of FY15. Due to the declining Prevention Account balance, HB158 passed the legislature in the spring of 2015. The majority of SPAR spills and resulting contaminated sites are associated with refined fuel so HB158 assessed a .0095 cent surcharge per gallon on most refined fuel. This legislation was anticipated to bring in appx. $7.5 million annually to fund SPAR’s important prevention and response activities. In addition, SPAR continues to focus on increasing collections from cost recovery which are deposited in the Prevention Account.

ALASKA STATUTES

The Alaska statute pertaining to the issuance of this report AS 46.08.0606 is available at http://www.legis.state.ak.us/basis/statutes.asp#46.08.060 and http://dec.alaska.gov/spar/docs/annual/2015/AS46-08-060.pdf

Tables Related Alaska Statutes

- AS 46.08.060(a)(1): Table A: Expenditures and Obligations
- AS 46.08.060(a)(2) A & B:
  - Table B: Prevention Mitigation & Response Mitigation Revenues
  - Table C: Revenue Source History
- AS 46.08.060(a)(3): Table K: Municipal Spill Responses
- AS 46.08.060(a)(4):
  - Table D: Contracts in Excess of $10,000.00
  - Table F: Project Expenditures
  - Table G: Personal Services Costs for Projects
- AS 46.08.060(a)(5): Table E: Appropriations To/From Prevention Account
6.0 Appendices

Spill Prevention and Response (SPAR) has a number of databases to track various oil and hazardous substance projects. SPAR also tracks the financial expenditures, obligations and revenues for each project. A number of financial and program tables are produced annually by SPAR and are formally transmitted to the Alaska State Legislature every other year in the Biennial report, which is required by AS 46.08.060.

The following financial and program tables are listed below with a brief description and a statutory reference. The actual financial and program tables are posted at the SPAR public website found here: [http://dec.alaska.gov/spar/rfa/](http://dec.alaska.gov/spar/rfa/)

**Table A: Expenditures and Obligations - AS 46.08.060(a)(1)**
Summarizes the expenditures and year-end obligations for appropriations funded by the Oil and Hazardous Substance Prevention and Response Fund in Fiscal Year (FY) 2015.
[http://dec.alaska.gov/spar/docs/annual/2015/Table_A.pdf](http://dec.alaska.gov/spar/docs/annual/2015/Table_A.pdf)

**Table B: Prevention Mitigation & Response Mitigation Revenues – AS 46.08.060(a)(2) A & B**
Summarizes by projects, deposits made in FY15 to the Prevention and Response mitigation accounts. All monies collected by the department as cost recovery, fines, penalties or settlement payments related to activity funded by the Oil and Hazardous Substance Release Prevention and Response Fund.
[http://dec.alaska.gov/spar/docs/annual/2015/Table_B.pdf](http://dec.alaska.gov/spar/docs/annual/2015/Table_B.pdf)

**Table C: Revenue Source History – AS 46.08.060(a)(2)**
Summarizes the various funding sources appropriated to the Oil and Hazardous Substance Release Prevention and Response Fund from FY02 through FY15. The table includes program receipts or revenues from an outside parties for specific program expenditures; mitigation revenue which includes interest earned on surcharge deposits, cost reimbursement, fines, penalties or settlement payments from parties financially responsible for incidents or sites for which the state expended monies; and oil surcharge revenue which includes collections in the prior year of the conservation surcharged (5 cents) imposed on oil produced in the state.
[http://dec.alaska.gov/spar/docs/annual/2015/Table_C.pdf](http://dec.alaska.gov/spar/docs/annual/2015/Table_C.pdf)
Table D: Contracts in Excess of $10,000.00 – AS 46.08.060(a)(4)
Lists all contracts in excess of $10,000 funded by Oil and Hazardous Substance Release Prevention and Response Fund in FY15. The list provides the contract obligations and related expenditures.
http://dec.alaska.gov/spar/docs/annual/2015/Table_D.pdf

Table E: Appropriations To/From Prevention Account – AS 46.08.060(a)(5)
Summarizes the operating, capital and other appropriations made from and to the Oil and Hazardous Substance Release Prevention and Response Fund in FY15.
http://dec.alaska.gov/spar/docs/annual/2015/Table_E.pdf

Table F: Project Expenditures - AS 46.08.060(a)(4)
Lists all projects for which expenditures occurred in the Oil and Hazardous Substance Release Prevention and Response Fund in FY15.
http://dec.alaska.gov/spar/docs/annual/2015/Table_F.pdf

Table G: Personal Services Costs for Projects - AS 46.08.060(a)(4) – Not produced for FY15
Lists all personal services expenditures for projects made from the Oil and Hazardous Substance Release Prevention & Response Fund.

Table H: Inventory of Active Contaminated Sites & Leaking Underground Storage Tank Sites
Sites ordered alphabetically by location and showing priority classifications.
http://dec.alaska.gov/spar/docs/annual/2015/Table_H.pdf

Table I: Inventory of Active Contaminated Sites & Leaking Underground Storage Tank Sites
Sites ordered alphabetically by location.
http://dec.alaska.gov/spar/docs/annual/2015/Table_I.pdf

Table J: Inventory of Closed Contaminated Sites & Leaking Underground Storage Tank Sites
Sites ordered alphabetically by location.
http://dec.alaska.gov/spar/docs/annual/2015/Table_J.pdf

7.0 Acronyms and Abbreviations

Frequently used acronyms and abbreviations are available at
http://dec.alaska.gov/spar/docs/Acronym_List.pdf