

Department Overview

Alaska Department of Environmental Conservation
Division of Spill Prevention and Response



Kristin Ryan, Director
October 15, 2014

Alaska Department of Environmental Conservation's (DEC) Mission

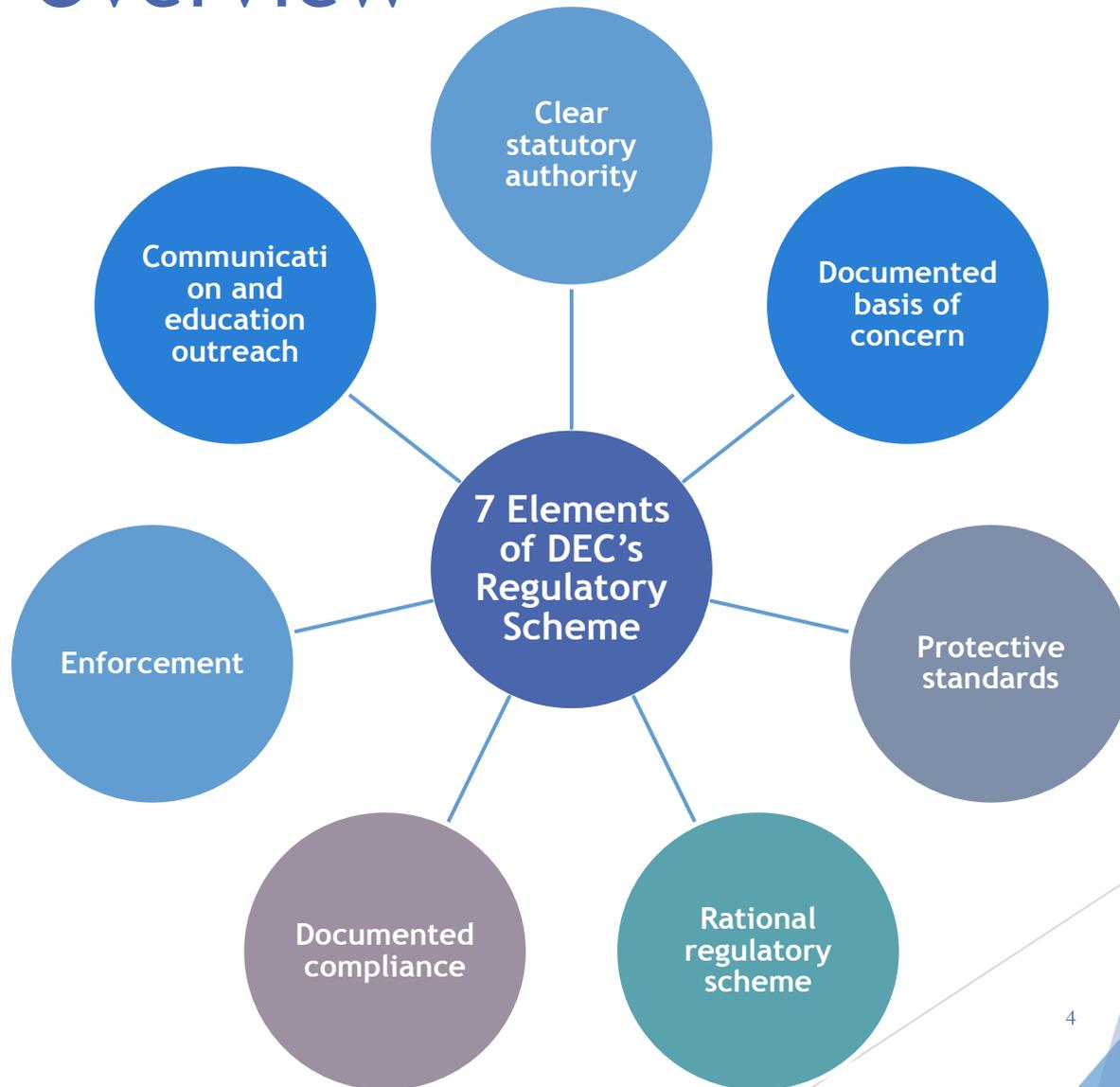
To conserve, improve, and protect Alaska's natural resources and environment and control water, land, and air pollution, in order to enhance the health, safety, and welfare of the people of the state and their overall economic and social well being.



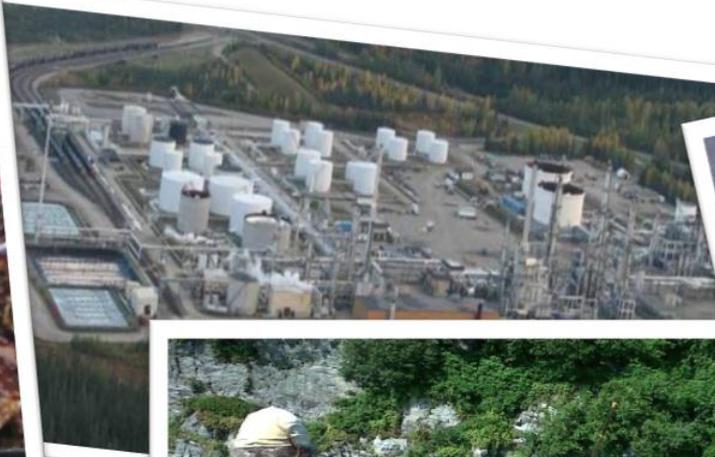
DEC Overview

- ▶ **Commissioner's Office** - provides policy direction and spokesperson for Governor on environmental matters
- ▶ **Divisions**
 - ▶ **Air** - point sources, non-point sources (primary statutory authority - AS 46.03, AS 46.14, AS 46.45, Federal Clean Air Act)
 - ▶ **Water Quality** - discharge permits, wastewater, anti-degradation, 404 permits (primary statutory authority - AS 46.03, AS 46.04, AS 44.19, AS 46.40, AS 44.62, Federal Clean Water Act, Federal Water Pollution Control Act)
 - ▶ **Environmental Health** - food safety, drinking water, state veterinarian, pesticides, landfills (primary statutory authority - AS 3.05, AS 3.45, AS 3.58, AS 17.05, AS 17.07, AS 18.35, AS 44.46, AS 46.03)
 - ▶ **Spill Prevention and Response** - prevention of oil and hazardous substance spills, response to spills, and long-term remediation of contaminated sites (primary statutory authority - AS 46.03, AS 46.04, AS 46.08, AS 46.09)

DEC Overview



Why are we here?



National Environmental Policy Act (NEPA) of 1969

- ▶ NEPA is a US environmental law establishing a national policy promoting enhancement of the environment and the President's Council on Environmental Quality
- ▶ Department of Environmental Conservation (DEC) regulation of Oil & Gas, seen through the lens of NEPA is best understood in terms of the roles our interdisciplinary teams play as they review projects for consistency with State of Alaska environmental standards.
- ▶ Typically DEC's roles involve solid waste disposal, wastewater discharge, air pollution, compliance with drinking water & food service standards for construction camps, and spill response .

DEC Environmental Health Division - Solid Waste

RCRA exempt oil and gas exploration and production waste - storage, disposal, & treatment

- ▶ Temporary Storage Approval
 - ▶ Short term (less than one year)
 - ▶ Waste stored in tanks or constructed cells
- ▶ Permitted Storage Facilities
 - ▶ Long term - used to hold waste prior to treatment disposal
 - ▶ Lined cells
 - ▶ &
- ▶ Permitted Waste Disposal
 - ▶ Permanent Disposal in lined cells
 - ▶ Waste capped in place with lined cover



Alpine CD-2 – short term



CC2A – Long term



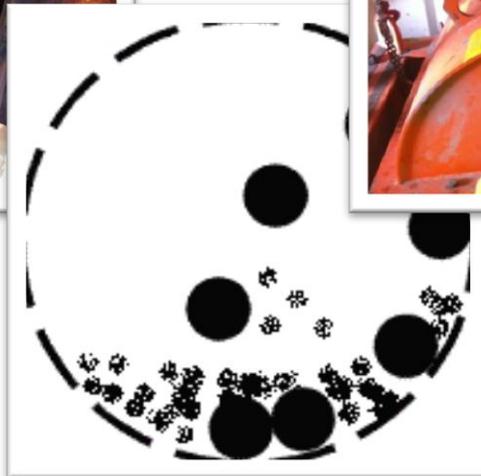
Closure of Beluga Cell 5

DEC Environmental Health Division

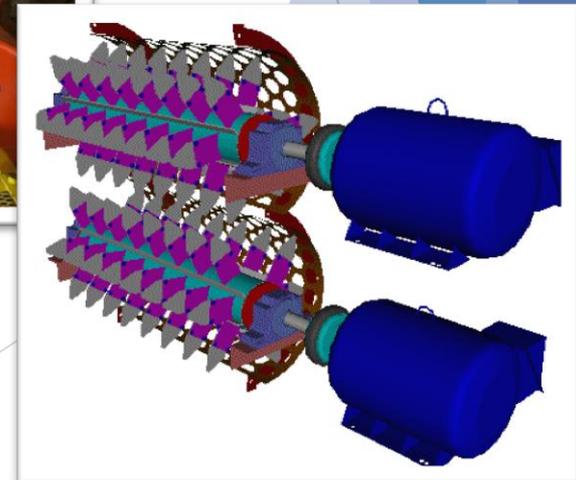
- ▶ Waste Treatment Facility Permits
 - ▶ Waste grinders - reduce waste to create a slurry for underground injection



DS-4 Ball Mill



ENI Hammer Mill



DEC Environmental Health Division - Solid Waste

- ▶ Reserve Pit Closure Program - Close historic unlined reserve pits used for disposal of drilling waste
 - ▶ Old exploration Sites - removal and backfill or capping of waste
 - ▶ Current Production Sites - removal of waste
 - ▶ 564 of 600 known reserve pits have been closed under 18 AAC 603440



DEC Environmental Health Division Programs other than Solid Waste

- ▶ Public Drinking Water
- ▶ Food Safety
- ▶ State Veterinarian
- ▶ Laboratory Services



DEC Division of Water

- ▶ Alaska Pollutant Discharge Elimination System (APDES) program
- ▶ History
 - ▶ Study - since early '90's and before
 - ▶ Legislation - Multiple trips to the legislature
 - ▶ Application - 3 large binders
 - ▶ Received literally hundreds of comments from EPA



DEC Division of Water Wastewater Discharge Permitting

- ▶ Alaska Pollutant Discharge Elimination System (APDES)
 - ▶ Delegated from EPA
 - ▶ Phased in between 2008 and 2012
 - ▶ Full primacy at this time
 - ▶ EPA retains oversight
 - ▶ State wastewater discharge permits for cruise ships

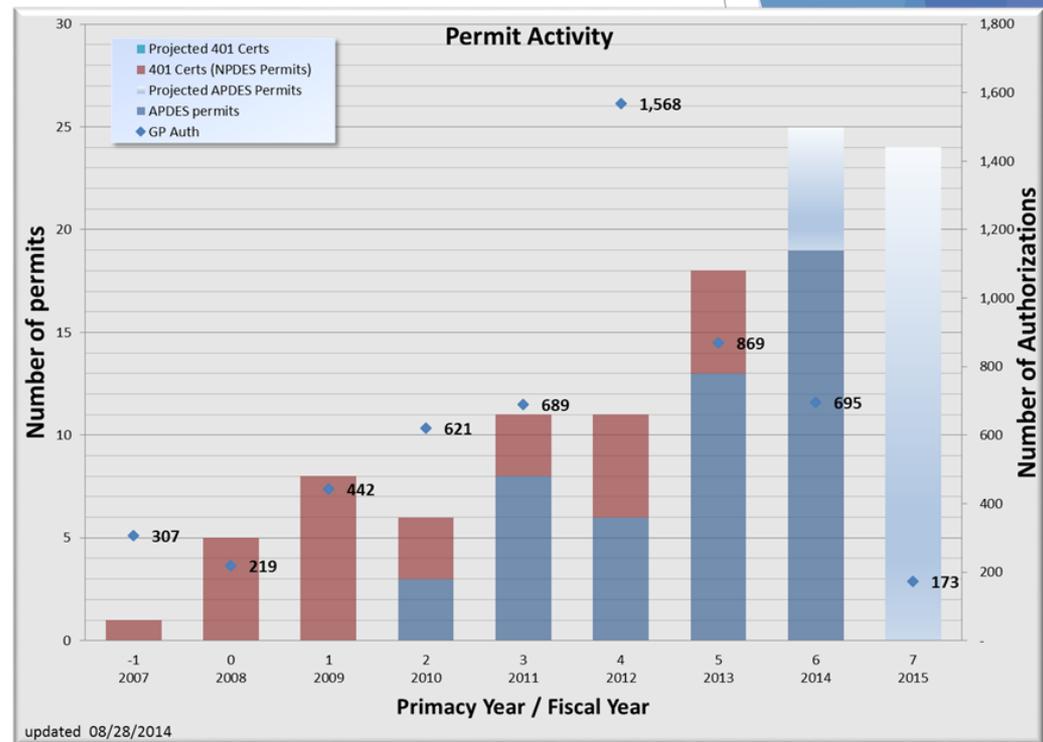
DEC Division of Water

- ▶ Appeals
 - ▶ Subject to State review process
 - ▶ No automatic stay of permits
 - ▶ No APDES permit appeals to date have prevailed in court
- ▶ Other differences between NPDES and APDES
 - ▶ NEPA - Corps is typically now lead agency, not EPA
- ▶ EPA retains enforcement authority
 - ▶ Coordinate with state



DEC Division of Water APDES Permitting

- ▶ 19 individual and general permits issued in State fiscal year (FY) 2014
- ▶ 695 general permit authorizations
- ▶ Project 24 permits to be issued in FY 2015
 - ▶ This is “steady state” number
 - ▶ Most permits will be current in 3-4 years



DEC Division of Water Oil and Gas Permitting

▶ Permits Issued In 2014

- ▶ AK0053686 - Furie Operating Alaska, LLC, Kitchen Lights Unit #1 Gas Production Platform A
- ▶ AK0031429 - USCG Kodiak Support Center, Bulk Fuel Storage Facility
- ▶ AK0029441 - Petro Star Inc., Kodiak Terminal
- ▶ AK0029459 - Petro Marine Services, Wrangell Bulk Fuel Facility
- ▶ AK0036994 - Shoreside Petroleum Inc., Cordova Bulk Fuel Facility

▶ Permits To Be Issued 2015

- ▶ AKG315100 - Mobile Oil and Gas Exploration in State Waters in Cook Inlet
- ▶ AK3283200 - Geotechnical Surveys in State Waters of the Beaufort and Chukchi Seas
- ▶ AK0053690 - Tesoro, Trans-Foreland Pipeline Project
- ▶ AK0000841 - Tesoro, Kenai Refinery
- ▶ AK0001155 - ConocoPhillips Alaska Inc., Kenai LNG Plant
- ▶ AK0000370 - Crowley Petroleum Distribution Inc., Anchorage Bulk Fuel Terminal

DEC Division of Water Oil and Gas Permitting

- ▶ Fully staffed Oil and Gas section
- ▶ Working on challenging permits
 - ▶ For example, Cook Inlet Production General Permit
- ▶ Have sufficient resources that we can issue Individual Permit when necessary, until General Permit is issued

DEC Division of Water

404 Assumption

- ▶ **Clean Water Act Section 404**
 - ▶ Alaskan Assumption?
- ▶ **Senate Bill 27, 2013 session**
 - ▶ Directed DEC, DNR to analyze assumption
 - ▶ Provided authority to submit application
 - ▶ Provided resources for analysis and application effort
 - ▶ And, resources for general permit work with Corps

DEC Division of Water

404 Assumption

- ▶ **2014 Legislative Session**
 - ▶ Funding stripped
 - ▶ Legislation remains
- ▶ **What we have done**
 - ▶ Worked with Corps and EPA on placer mining general permit
 - ▶ State can administer general permits even without assumption
 - ▶ Began analysis of “assumable waters”
 - ▶ Began cost/benefit analysis

DEC Division of Water

404 Assumption

- ▶ Significantly reduced pace
- ▶ Mitigation
 - ▶ Exploring mitigation options for Alaska
- ▶ Wetlands Program Plan
 - ▶ Grant from EPA
 - ▶ Alaskan plan for managing wetlands
- ▶ Continuing work on general permits
 - ▶ Placer mining
 - ▶ Transportation
 - ▶ Oil and Gas - Pipeline?
- ▶ Assumable waters question - work with Corps
 - ▶ Work with other states to simplify

DEC Division of Water Anti-degradation Regulations

- ▶ State has policy existing in regulations
- ▶ Implementation procedures also required, and draft regulations were public noticed in 2014
- ▶ Expect issuance in 2015
- ▶ Common theme in comments and appeals; expect regulations to help defensibility of State's anti-degradation analyses

DEC Air Quality Division

- ▶ Air is a natural resource
- ▶ Clean air, or “Air Quality” protected under Federal Law
- ▶ Direct responsibility for air quality is function of government
- ▶ The process is time consuming and highly technical

DEC Air Quality Division Authority for Air Quality Programs

- ▶ Air Quality is regulated under the Clean Air Act (CAA); a federal law
- ▶ EPA is empowered to protect air quality
- ▶ Division of Air acts as the agent of EPA and directly manages air quality by operating programs:
 - ▶ Issuing permits to Point Sources, or “sources”
 - ▶ Ensuring a transportation plan will not hinder air quality standards
 - ▶ Monitoring sites to track the levels of pollutants

DEC Air Quality Division

Air Quality Permits

- ▶ Pre-Construction Permits (Title I) - Required before project can begin construction
 - ▶ Minor Permit
 - ▶ Major Permits- Prevention of Significant Deterioration (PSD)
- ▶ Operating Permit (Title V)
 - ▶ Requirements:
 - ▶ Facility compliance inspections
 - ▶ Facility compliance reports
 - ▶ Annual compliance certifications
 - ▶ Certifications/notification signed by key officials
 - ▶ Enhanced monitoring, alternative methods to measure

DEC Air Quality Division Pre-Construction (Title I) Minor Permits

- ▶ Required for “construction, modification, or relocation” of certain new sources
- ▶ Required for construction of a new source that has emissions over specific thresholds
 - ▶ 15 tons per year (tpy) of PM-10;
 - ▶ 40 tpy of NOX;
 - ▶ 0.6 tpy of Pb; or
 - ▶ 10 tpy of PM2.5
 - ▶ 40 tpy of SOx



DEC Air Quality Division

Pre-Construction (Title I)

Major Permits - PSD Permits

- ▶ Prevention of Significant Deterioration (PSD) permits are required for new major sources or major modifications to existing sources
- ▶ Requirements
 - ▶ Pre-construction monitoring data
 - ▶ Meteorological Data (Met Data)
 - ▶ Air Quality Modeling
- ▶ Ambient impact analysis
 - ▶ Assessment of impact on soil, vegetation, visibility
- ▶ Federal Land Manager agreement near federal lands
- ▶ BACT (Best Available Control Technology)
 - ▶ Assessment of Control technology
 - ▶ Cost Consideration

DEC Air Quality Division Title V Major Source Operating Permits

- ▶ ADEC Division of Air Quality issues operating permits to sources after the source has begun to operate
 - ▶ Major industrial sources may be required to obtain a permit - depending on potential emissions - that consolidates all of the applicable state and federal air permit requirements for the facility into one document



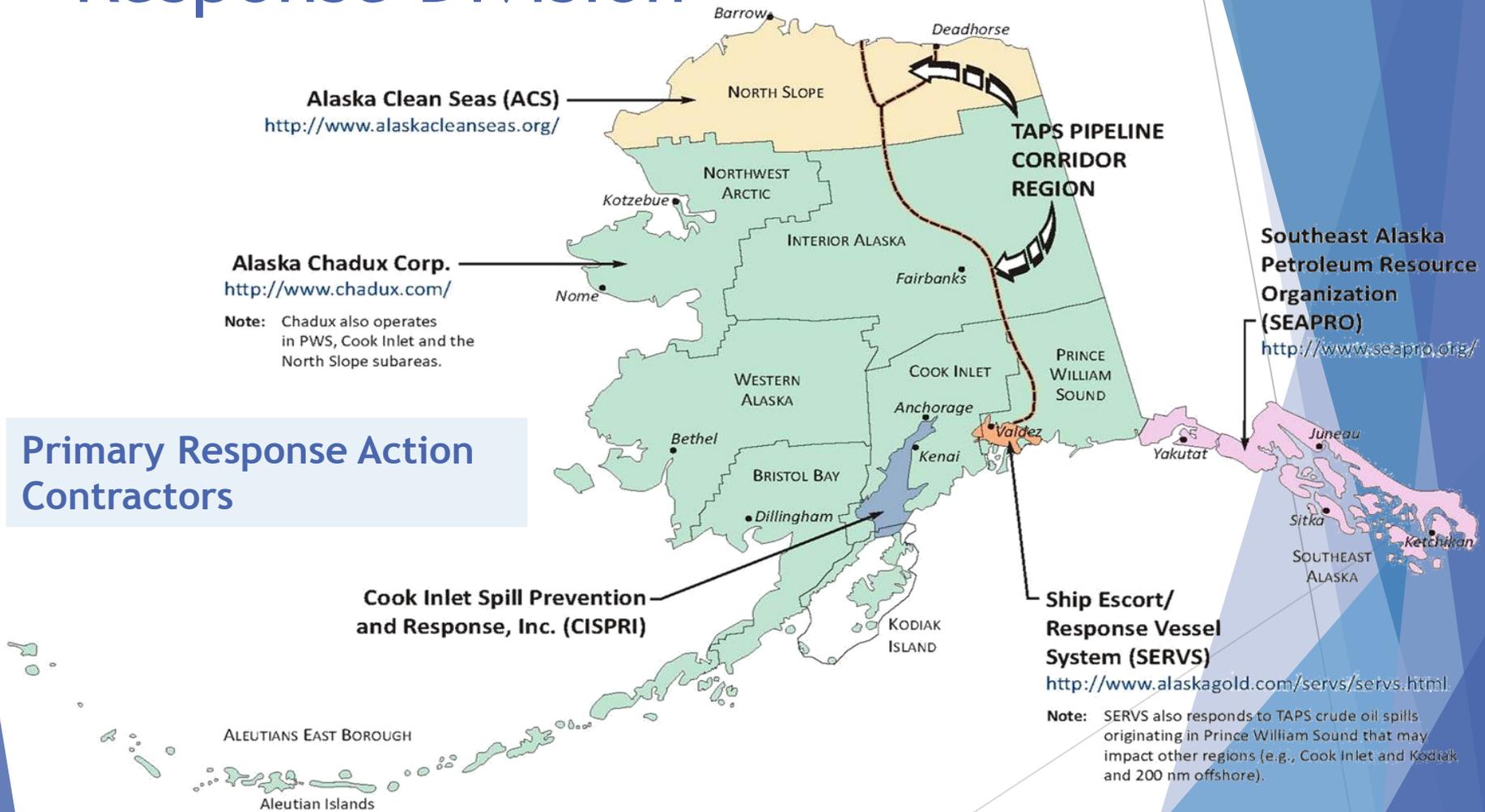
DEC Spill Prevention and Response Division

Protect public health and the environment by ensuring that producers, transporters and distributors of oil prevent spills and are prepared materially and financially to respond and clean up.

- ▶ Prevention & Preparedness Responsibilities
 - ▶ Oil spill contingency plans
 - ▶ Drills and Inspections
 - ▶ Financial Responsibility
 - ▶ Best Available Technology
 - ▶ Primary Response Action Contractors



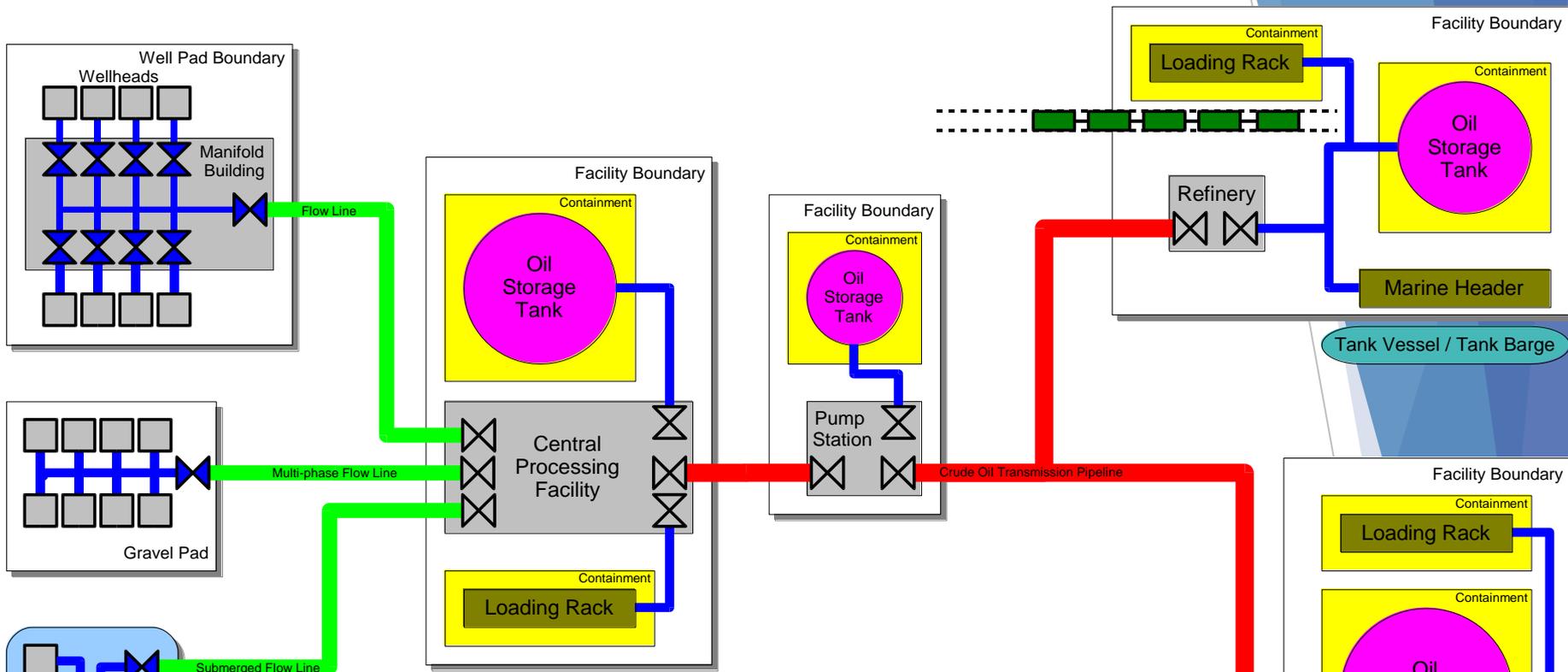
DEC Spill Prevention and Response Division



Note:

1. SERVS also responds to TAPS releases.
2. Website not available for CISPRI.
3. SERVS is a division of Alyeska Pipeline Service Company.

18 AAC 75 Article 1 Regulatory Boundary Examples



- Not regulated by ADEC under 18 AAC 75 Article 1
- Regulated Transfer Operation (18 AAC 75.025)
- Regulated Vessel Operation (18 AAC 75.027 / .037)
- Regulated Marine Structure Used for Oil Production (18 AAC 75.045)
- Regulated Flow line (18 AAC 75.047)
- Regulated Crude Oil Transmission Pipeline (18 AAC 75.055)
- Regulated Aboveground Oil Storage Tank (18 AAC 75.065 / .066)
- Regulated Secondary Containment (18 AAC 75.075)
- Regulated Facility Piping (18 AAC 75.080)
- Regulated Railroad Tank Car (18 AAC 75.085)

Refer to the appropriate regulations for specific boundaries

DEC Spill Prevention and Response Division



DEC Spill Prevention and Response Division

- ▶ 13 approved Oil Discharge Prevention and Contingency Plans.
- ▶ 4 Production plans, 7 Exploration plans, and 2 Crude Oil terminal Facilities.
- ▶ Since 2011, 4 offshore exploration wells have been drilled. 3 by Furie, and 1 by Buccaneer.
- ▶ Currently 14 of 16 platforms in Cook Inlet are active.



CISPRI Broken Ice Demonstration



Endeavor Jack-up Rig on the Cosmo #1 well

DEC Spill Prevention and Response Division

North Slope Overview

- ▶ 21 Approved Contingency plans; 10 exploration, 8 production, and 3 development.
- ▶ Exploration in remote areas is conducted in the winter via ice roads due to access restrictions in the summer season.
- ▶ Production facilities range in age from 1970's era construction to state of the art technology.
- ▶ All companies are dependent on the services of a third party oil spill clean-up contractor.



DEC Spill Prevention and Response Division

Aging Infrastructure, Inspection and Replacement



DEC Spill Prevention and Response Division-Contaminated Sites Program

- ▶ The DEC Contaminated Sites Program (CSP) provides regulatory oversight for the investigation and cleanup of contaminated sites on the North Slope
- ▶ CSP works with oil companies and contractors on a regular basis to insure compliance with 18 AAC 75 at:
 - Active installations
 - Exploration sites
 - Contractor operations in Deadhorse