



**Alaska's Department of
Environmental Conservation
Agency Overview
with a Focus on the Contaminated Sites
Program**

Alaska Tribal Conference
on Environmental Management
Anchorage, Alaska – November 6, 2012

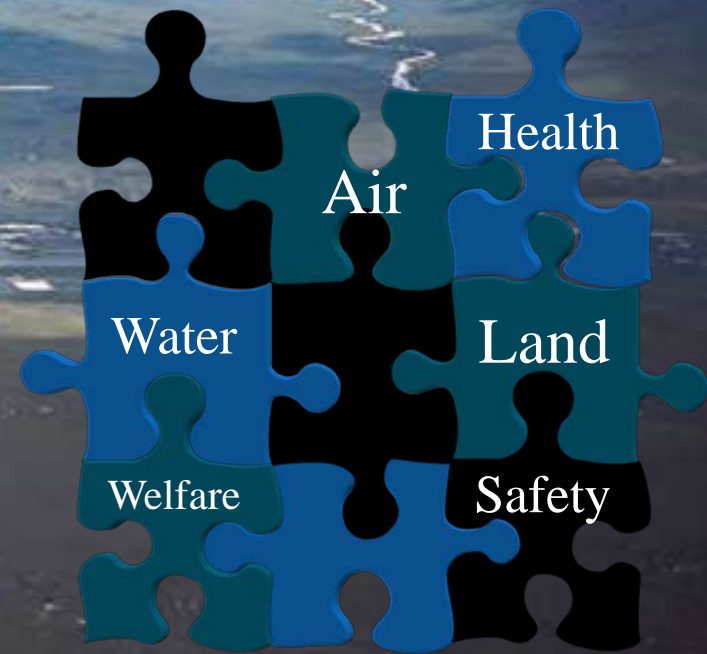
What We'll Cover

- Overview of the Alaska Department of Environmental Conservation (DEC)
- Introduction to the Division of Spill Prevention and Response and the Contaminated Sites Program
- Contaminated Sites and the Cleanup Process

DEC's Mission

We were created 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.*



State and Federal Environmental Agencies in Alaska

Alaska's Governor,
Legislature

Alaska Department of
Environmental Conservation

Division of
Environmental Health

Solid Waste
Program

Division of Spill
Prevention & Response

Contaminated
Sites Program

U.S. President,
Congress

U.S. Environmental
Protection Agency

EPA Region 10

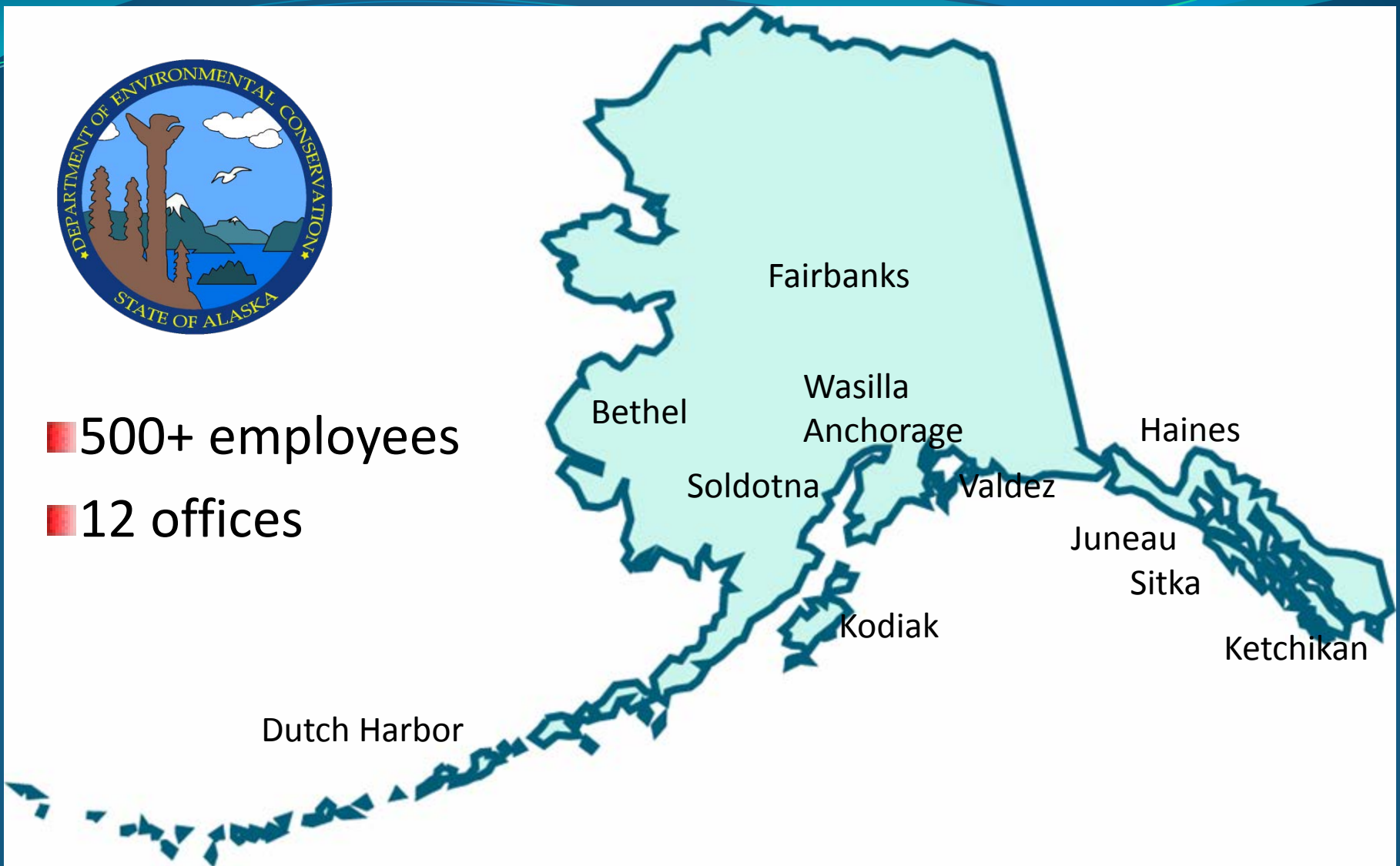
IGAP

Brownfields



■ 500+ employees

■ 12 offices



DEC – How We Fulfill Our Mission

**Commissioner's Office
Larry Hartig**

Divisions

**Spill Prevention
& Response**

Air Quality

**Information and
Administrative
Services**

**Contaminated
Sites Program**

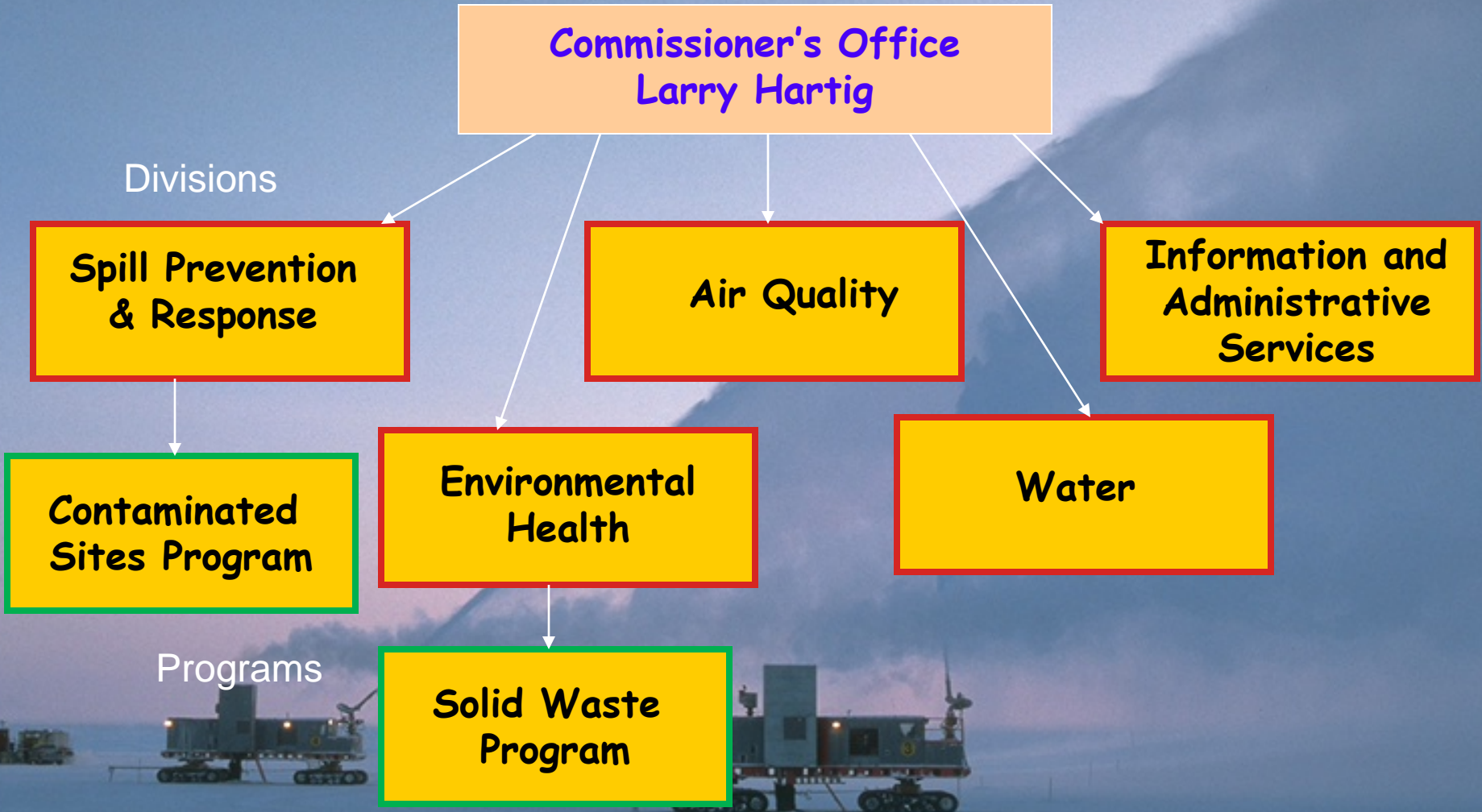
**Environmental
Health**

Water

Programs

**Solid Waste
Program**

Offshore Ice Island Construction



Overview of DEC's Environmental Programs



Environmental Health Division





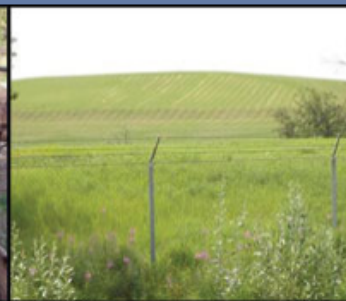
[EH HOME](#)

[DRINKING WATER](#)

[FOOD SAFETY & SANITATION](#)

[LABORATORY](#)

[PESTICIDES](#)



State of Alaska > DEC > EH

WELCOME



Director: Kristin Ryan

The Division of Environmental Health (EH) deals with the basics: safe drinking water, food, and sanitary practices. Our goal is to provide businesses with clear standards so they can protect our environment and provide safe food and drinking water to Alaskans.

DIVISION INFORMATION

[Forms, Permit Applications, & Stickers](#)

[Who is Approved?](#)

[Training Resources](#)

[How to Comment on Proposed Regulations](#)

[Appeal a DEC Decision](#)

[Online Payment Center](#)

[Contact Us](#)

CONTAMINANTS IN ALASKA

[Marine Debris from Japanese Disaster](#)

PROGRAMS

[Drinking Water](#)

[Food Safety and Sanitation](#)

★ [Food Recalls for 2011](#)

★ [Food Worker Cards](#)

★ [Dungeness Crab Processing Guidelines and Restricted Harvesting Areas](#)

[Laboratory](#)

[Pesticides](#)

[Recreational Shellfish](#)

[Solid Waste](#)

[State Veterinarian](#)

★ [Workshops for Proposed Animal Care Standards](#)

Programs

- Drinking Water
- Solid Waste
- Food Safety and Sanitation
- State Veterinarian
- Pesticides

Services

- Public water systems plan review & compliance
- Solid waste permitting and compliance assistance
- Food worker training, restaurant inspections
- Bed & breakfasts, tattoo parlors, pools & spas
- Seafood, milk producers
- Laboratory services
- Fish monitoring
- Animal import permit
- Pesticide registration, permits

Spill Prevention and Response Division



Programs

- Prevention and Emergency Response
- Industry Preparedness
- Contaminated Sites
- Response Fund Administration

Services

- Spill reporting
- Emergency response
- Financial responsibility, prevention & contingency plans, inspections
- Practice drills for oil industry
- Fuel storage tanks
- Oversight of cleanup at historical contaminated sites, including federal and private sites
- Clean up of state-owned sites
- Recovery of state's response cost from spillers

Water Division



Noyes Slough at low flow,
Fairbanks, Alaska

Programs


- Water Quality Standards
- Alaska Clean Water Actions
- Wastewater Discharge
- Cruise Ships

- Non-Point-Source Water Pollution Control
- Municipal Grants and Loans, Village Safe Water Program

Services

- Water regulations
- Water-body protection and restoration
- Septic systems, on-site sewage disposal
- Industry wastewater discharge permits
- Cruise ships: water complaints, Ocean Rangers
- Storm-water pollution control
- Municipal water & wastewater systems

Alaska Pollution Discharge Elimination System (APDES)



We are in the process of assuming primacy for the Clean Water Act wastewater discharge permitting (NPDES) program previously run in Alaska by the EPA.

**Greens Creek Mine
Admiralty Island, Southeast Alaska**



State of Alaska > DEC > Division of Water > Alaska Pollutant Discharge Elimination System > Information for Tribes

APDES INFORMATION FOR TRIBES

HIGHLIGHTS

- ★ [Permit Issuance Plan 2012-2013](#)
- ★ [APDES Guidance for Local and Tribal Governments](#)
- ★ [DEC and Yukon-Koyukuk Tribal Communication Protocol](#)
- ★ [DEC-YK Tribal Communication Protocol Project Summary](#)

How Do I...

- ★ [Participate in the APDES Permitting Process](#)
- ★ [Find Wastewater Permits in Alaska](#)
- ★ [Find Enforcement & Compliance History Online](#)

QUICK LINKS

- ★ [APDES Postcard for Tribes](#)
- ★ [APDES Brochure for Tribes](#)
- ★ [APDES Frequently Asked Questions](#)
- ★ [Sign up for APDES permit and program email updates](#)
- ★ [APDES Contacts](#)

CONTACT

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(907) 465-5272
miriah.twitchell@alaska.gov

Air Quality Division



Programs

- Air Non-Point and Mobile Sources
- Air Permits
- Air Monitoring

Services

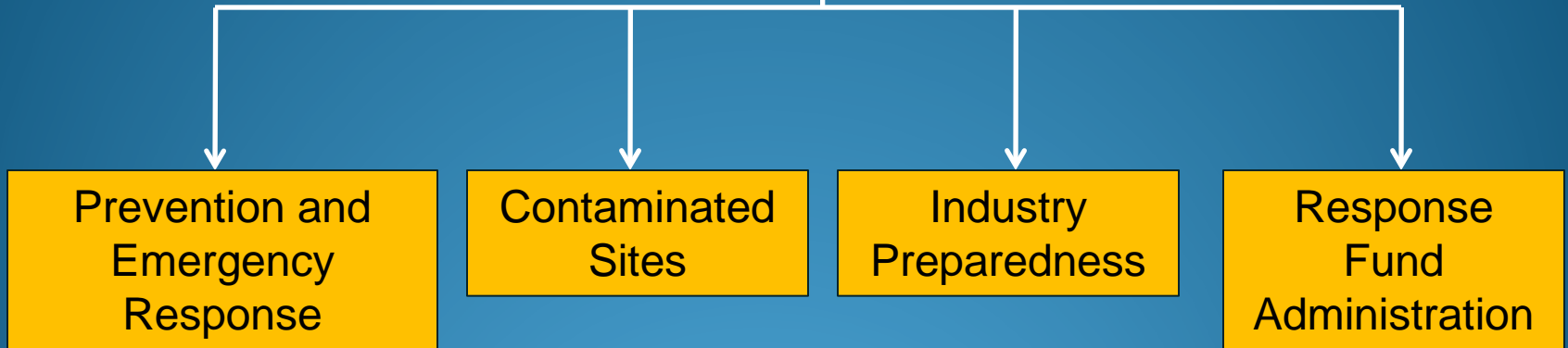
- Vehicle-related complaints
- Diesel fuel switch to ultra-low sulfur
- Permits to operate
- Open burning permits
- Air advisories, wildfires
- Cruise ship, industry smoke complaints



Division of Spill Prevention and
Response
and the
Contaminated Sites Program

Division of Spill Prevention and Response

Programs



Prevention and Emergency Response Program

- State regulations lay out the requirements for spill reporting.
- If the initial response action can't clean up all the contamination, the site is transferred from PERP to CS.



TAPS Bullet Hole Release, October 2001



SPAR PROGRAMS

Contaminated Sites

Industry Preparedness

Prevention and Emergency Response

Response Fund Administration

INFORMATION

Report a Spill

About Us

Recent Spill Responses

Approvals and Permits

Guidance and Forms

OF INTEREST

What's New?

Statutes & Regulations

Frequently Asked Questions

Glossary/Acronyms

Links

REPORT A SPILL

[Where to Report a Spill](#)

[Forms](#)

[Notification Requirements](#)

- [Hazardous Substances](#)
- [Oil/Petroleum Releases](#)

[Special Requirements for Underground Tanks](#)

[More Information](#)

Alaska state law requires all oil and hazardous substance releases to be reported to the Department of Environmental Conservation. For federal reporting requirements see the [National Response Center website](#).

WHERE TO REPORT

During normal business hours call the nearest DEC Area Response Team Office or fax a completed spill report form to the nearest DEC Area Response Team Office.

Outside normal business hours call: 1-800-478-9300 (International: 1-907-428-7200)



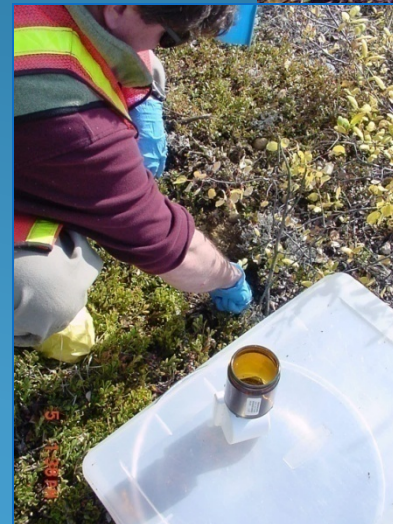
Area	Phone	FAX
Central (Anchorage)	269-3063	269-7648
Northern (Fairbanks)	451-2121	451-2362
Southeast (Juneau)	465-5340	465-2237

NOTIFICATION REQUIREMENTS

Hazardous Substance Releases

What is the Contaminated Sites Program?

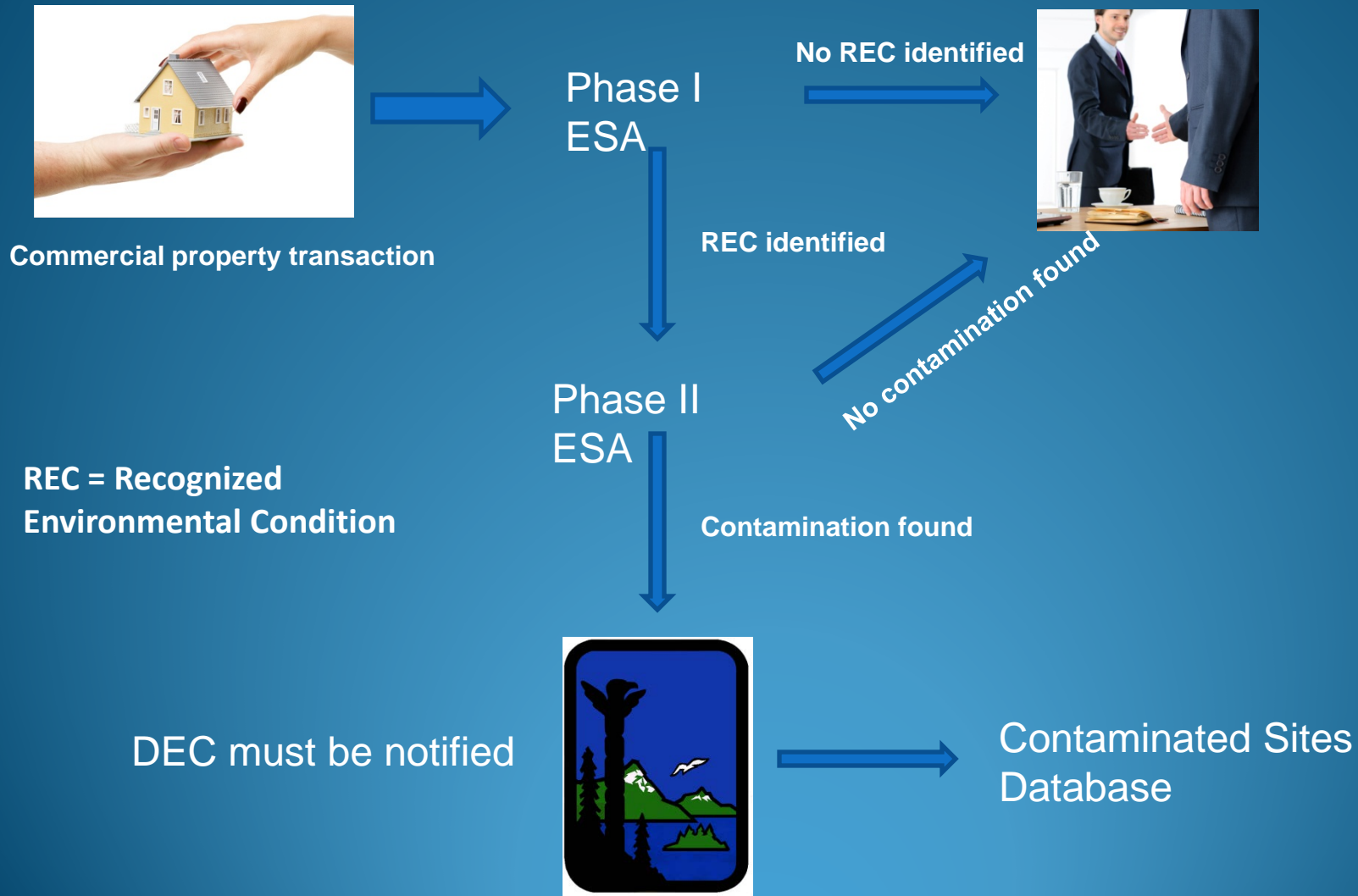
- CS does not respond to new spills
- CS oversees cleanup of contamination on land or in water from oil or hazardous chemicals



Contaminated Sites Program, continued

- The types of contaminants are related to the activities that took place on a site.
- Many contaminated sites are the result of poor handling and disposal practices.
- About a third of the contaminated sites in Alaska are the result of military activities.
- Other types of sites include fuel storage tank farms, abandoned mines, old canneries/fish processing sites, logging camps, and former industrial sites.

When does DEC get involved?



What sites does the Contaminated Sites Program work on?

Spills from PERP that were not cleaned up completely



Former Fuel facilities



Contaminated Sites Program

Former Mine sites

Former Military activities



Contaminated Sites and the Cleanup Process

The Cleanup Process

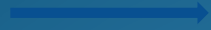
Overseen by DEC

1. Understand it:
 - Who, what, where, how much
2. Clean it up
3. Closure



DEC's cleanup process

Site listed on
Contaminated
Sites
Database



Site
Characterization

Conceptual Site Model
Workplan
Field Effort
Sampling
Report submittal with
recommendations for
cleanup
Cleanup levels proposed



Cleanup

Confirmation sampling
Contaminated soil
treatment/disposal
Data Quality
Assessment
Exposure Pathway
Analysis
Final Report Submittal



Cleanup
Complete with
Institutional
Controls



Cleanup
Complete

Step 1: Understand It

- Site Characterization:
 - Historical information review
 - Site visit
 - Interviews with people knowledgeable about the site
 - Collection and analysis of soil, water, and sediment samples
 - Evaluation of exposure pathways and receptors
 - Written report with conclusions and recommendations
 - Coordination with DEC to determine what is next



Phase I Environmental Site Assessments (ESA)

- Report prepared for a **commercial** property transaction which identifies potential or existing environmental contamination liabilities.
- Because a buyer of a piece of property can be held responsible for the remediation of contamination, a Phase I ESA is conducted on the property prior to purchase. The courts recognize the Phase I ESA and creates a safe harbor from CERCLA liability known as the 'Innocent Landowner Defense' for new purchaser of the property.

Phase I ESAs continued

- Phase I includes:
 - Researching records including DEC Contaminated Sites Database; historical aerial photos; EPA Databases on spills and contamination, etc.
 - Conducting a site reconnaissance.
 - Interviewing knowledgeable individuals regarding the site.
 - Reporting any 'recognized environmental conditions' (RECs).

Phase II ESA's

- If recognized environmental conditions (RECs) are identified during the Phase I ESA, then a Phase II ESA with sampling is conducted.
- Purpose of the Phase II ESA:
 - Satisfy the appropriate inquiry element of CERCLA's innocent purchaser defense where a Phase I ESA identified recognized environmental conditions.
 - Gather reliable information about the property's environmental conditions to guide the user's business decisions. This is not considered a full characterization of the site's environmental condition.

Site Characterization (or Assessment)

What

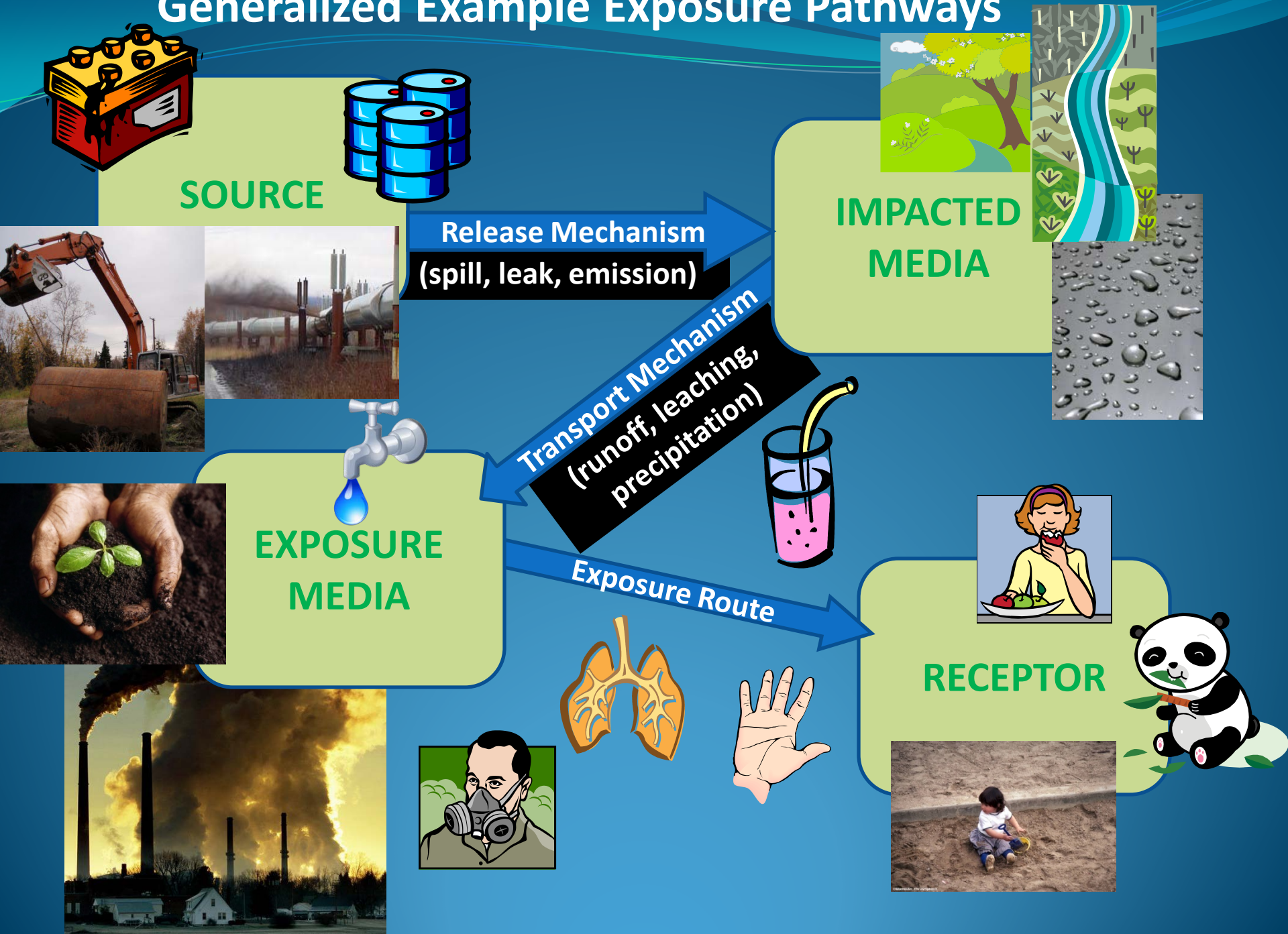
- Gasoline, diesel, aviation fuel, petroleum products
- Chlorinated solvents
- Heavy metals
- Polychlorinated biphenyls (PCBs)

Where

- Gas stations
- Heating oil tanks
- Airports
- Power plants
- Dry cleaners
- Maintenance shops
- Print shops
- Mines
- Electrical power generation facilities (transformers)

Military sites and landfills can have any or all of these.

Generalized Example Exposure Pathways



Step 2: Cleanup

- Cleanup happens after the site has been characterized so that the nature and extent of contamination is understood.
- Some “interim” removal action may occur immediately upon discovering the release, if it is practical and people with appropriate training are on the scene.



Cleanup, continued

- Cleanup may involve removal and/or treatment of contaminated soil or groundwater.
- Cleanup generally is considered complete when DEC's "cleanup levels" have been achieved.
 - Cleanup levels are accepted as being protective of human health and the environment.
 - Cleanup levels are listed in DEC's contaminated sites regulations.

Step 3: Closure

- A site is considered “closed” when DEC determines no further work is needed.
- This determination can be made when levels of contamination are shown to be below cleanup levels.
- In some cases a site can be closed even if some contamination remains above cleanup levels by establishing site controls.



Information on Our Web Pages

- Guidance, regulations, and statutes
- Information on all contaminated sites, past and present
- Information on conditions placed upon closure
- Publications and fact sheets

<http://dec.alaska.gov/spar/csp/>



State of Alaska > DEC > SPAR > Contaminated Sites Program

SPAR PROGRAMS

[Contaminated Sites](#)

[Industry Preparedness](#)

[Prevention and Emergency Response](#)

[Response Fund Administration](#)

INFORMATION

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[Approvals and Permits](#)

[Guidance and Forms](#)

CONTAMINATED SITES PROGRAM



Program Manager: Steve Bainbridge
(907) 269-2021

The Contaminated Sites Program protects human health and the environment by managing the cleanup of contaminated soil and groundwater in Alaska.

ABOUT CS

- ▶ [Program Organization](#)
- ▶ [Program Annual Report](#)
 - ▶ [FY 2012](#)
 - ▶ [FY 2011](#)
 - ▶ [FY 2010](#)
- ▶ [Frequently Asked Questions](#)
- ▶ [Sign up for our Email List](#)
- ▶ [Contact Us](#)
- ▶ [Site Map](#)

TYPES OF SITES

- ▶ [State, Local and Private Sites](#)
- ▶ [Federal Facilities/Dept. of Defense](#)
- ▶ [Leaking Underground Tanks](#)
- ▶ [Brownfields](#)

SPECIAL PROJECTS AND TOPICS

- ▶ [Areawide Investigations](#)
- ▶ [North Pole Sulfolane](#)
- ▶ [Interstate Technology and Regulatory Council \(ITRC\)](#)

RESOURCES FOR SITE CLEANUP

- ▶ [The Cleanup Process](#)
- ▶ [Technical Guidance and Regulations](#)
- ▶ [Environmental Consultants](#)
- ▶ [Approved Labs](#)
- ▶ [Soil Treatment Facilities](#)
- ▶ [Method 3 & Cumulative Risk Calculator](#)
- ▶ [Vapor Intrusion](#)
- ▶ [Publications, Fact Sheets](#)



Alaska Department of Environmental Conservation

Sonja Benson

<http://dec.alaska.gov/>