U.S. Environmental Protection Agency
Emergency Response Program
In a Nutshell

U.S. EPA – Region 2
EPA’s mission is:

- ... to protect human health and the environment.
- The Emergency Response program supports this goal by
  - protecting the public and the environment from immediate threats posed by emergencies involving hazardous substances and oil.
Emergency Response Objectives

- The primary objectives are:
  - Take reasonable steps to prevent emergencies;
  - Prepare emergency response personnel at the federal, state, and local levels for emergencies;
  - Respond quickly and decisively to emergencies.

- The top priority is to eliminate any danger to the public and the environment posed by hazardous substance releases and oil spills.
About Superfund...

- Enacted by Congress on December 11, 1980.

- CERCLA:
  - established prohibitions and requirements concerning closed and abandoned hazardous waste sites;
  - provided for liability of persons responsible for releases of hazardous waste at these sites; and
  - established a trust fund to provide for cleanup when no responsible party could be identified.
Kinds of Response Actions

- Short-term removals, where actions may be taken to address releases or threatened releases requiring prompt response.
- Long-term remedial response actions, to address the dangers associated with releases or threats of releases of hazardous substances that are serious, but not immediately life threatening. These actions can be conducted only at sites listed on EPA's National Priorities List (NPL).
Oil Pollution Control Act

- Signed into law in August 1990
- Largely in response to concerns following the Exxon Valdez incident.
- Improves ability to respond to oil spills.
- Provides a fund for the responses (Oil Spill Liability Trust Fund).
- Provides liability to responsible party.
Types of Removal Actions

- **Classic Emergencies**: release requires that on-site activities be initiated within minutes or hours.
- **Time-Critical Actions**: Based on an evaluation of the site, EPA determines that less than six months is available before site activities must be initiated.
- **Non-Time-Critical Actions**: Those actions where, based on an evaluation of the site, EPA determines that more than six months is available before on-site activities must begin.
The Reportable Quantities...

- Person or organization responsible for a release must notify when the amount reaches a federally-determined limit or Reportable Quantity.
- National Response Center: 1-800-424-8802
  - National communications center; staffed 24 hours a day.
  - Receives all reports of releases involving hazardous substances and oil that trigger the federal notification requirements.
  - Activate the National Contingency Plan and the federal government's response capabilities.
  - Notifies the on-scene coordinator (OSC) to collect available information on the size and nature of the release.
National Response System
Understanding the Threat

- Evaluate exposure pathway and situation:
  - Size,
  - Nature, and location of the release
  - Type of substances involved.
- Each hazardous substances have their own properties and behaviors
- Potential for exposure and the nature of the effects vary widely.
- A key to the success of the Superfund Emergency Response program has been an understanding of the one element common to every response--time. Prompt action is crucial.
Response

- Close cooperation with a network of federal, state, and local government agencies.
- Performs a variety of Response Actions, beginning with Investigating Sites.
- Because each release incident and site-specific conditions are different, emergency response program activities vary widely in terms of the method of response.
Example of Response Activities

- Sampling and/or monitoring
- Removal
- Treatment
- Using chemicals to stop the spread of the hazardous substance release
- Encasing hazardous substances in place
- Providing a safe supply of drinking water
- Relocation of residents while cleanup activities take place
- Prevent direct contact with hazardous substances (e.g., installation of fences)
EPA’s Role - Community Involvement

- Official spokesperson is appointed
- Objectives:
  - Provide information to the community on the health and environmental effects of the release and the response actions under consideration;
  - To encourage citizens to provide information about the site and its surrounding areas and to express any concerns about the actions being undertaken; and
  - To include citizen comments and concerns in the decision-making process at an emergency response site.
CAPECO Explosion and Fire
Bayamon, Puerto Rico
Incident

- October 23, 2009 at 0023 hours
- Unknown cause for explosion and fire
- 2.8 earthquake caused by explosion
- Unknown amount of petroleum product released, burning
- Massive smoke plume over residential communities
- Shattered windows and damage to businesses and residents
- Closure of Highway 22
- No deaths
Notifications / Activations

- Calls from National Response Center, EPA San Juan, and USCG Sector San Juan to After Hours Phone Duty Officer at ~0100 hours
- Contact After-Hours Responder at ~0130
- Activation of Emergency Personnel (out of San Juan, PR and the Regional Emergency Operations Center (Edison, NJ)
Operations

- Support Fire Suppression
- Provide air monitoring
- Conduct evacuations where necessary
- Stop spread of additional material
- Ensure Health and Safety of Responders
- Secure, investigate potential crime scene(s)
- Containment and collection of material
- Storage of recovered material
- Sampling activities – surface water, sediment, product, discharge parameters
Operations (Cont’d.)

- Recon missions throughout wetlands
- Facility infrastructure rehabilitation
- Road construction, access, and security
- Removing of source material from tanks, piping, etc
- Removal of threatened and spent animals
- Protection from secondary hazards for health and safety – electrical, mechanical, fire, explosion, hazardous waste storage areas, aquatic, asbestos, weather, security, respiratory, insects,
- Currently conducting removal actions of contaminated soils, water and product from damage infrastructure
Plume / Air monitoring
Wetland Assessment / Damage
Underflow Dams
Secondary Containment
Examples of Responses In Puerto Rico
Aquakem, Ponce
Examples of Responses In Puerto Rico
Rio Piedras, CDT
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