Environmental Health Response to Chemical Emergencies

Environmental Health and Hazmat: Delineating the Roles

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OBJECTIVES

• Understand the process of hazardous materials emergency response
• Understand the role of public health professionals at hazmat incidents
• Understand the implementation and use of the incident management system at hazmat incidents
• Understand the importance and elements of reconnaissance and air monitoring
• Understand the importance of research

EQ Resource Recovery Plant

• Industrial process waste remediation
  – Fuel blending for fuel: kilns, etc.
  – Distillation of waste for reuse
• Waste sources
  – Small and large generators
  – Paint waste from big 3-automakers
  – Ethylene glycol from Detroit Metro Airport
Public Health Mission

• Assist in bringing the fire and associated events of an abnormal situation back into an acceptable and non-threatening situation

Public Health Concerns

• Air Monitoring
  – VOCs both on-site and off-site based upon the chemical fire
  – Off-site VOC levels would help determine the extent and duration of the evacuation

Public Health Concerns

• Fallout (Soot and Debris)
  – PAHs (polycyclic aromatic hydrocarbons) a result of incomplete combustion
  – PCBs may or may not have been on-site at the time of the fire
  – metals which are in paints and paint waste
  – metallic-looking debris found in various areas of the evacuated area
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Fallout

Fallout

Fallout
Environmental Health Response to Chemical Emergencies

**Expectations of Public Health (external)**
- Be knowledgeable and responsive to the ICS
- Assist any agency responding to the incident
- Be a resource regarding public health implications
- Participate in conference calls/meetings to review data as it became available and be a part of the decision making process

**Expectations of Public Health (external)**
- Advise “next steps” relating to public health concerns
- Participate in press conferences and answer questions from the public
- Develop a health tips document for distribution to the public

**Expectations of Public Health (internal)**
- Keep the Health Officer and PIO informed regarding the situation and the “what’s next”
- Keep Environmental Health Division informed of actions and needs
- Work with the media in presenting the facts as known
- Represent the health department in a professional manner
Expectations of Public Health (internal)

- Document the event and what I was doing
- Don’t speculate, stick to the facts
- Don’t be fearful of new situations - have confidence in the skills and knowledge one has developed

- AND DON’T FORGET THAT THIS IS ACCREDITATION REVIEW WEEK