

**ESF 10 - Oil and Hazardous Materials Response
Annex, 2015**

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Coordinating Agency : PA Department of Environmental Protection

Primary Agency(ies) : PA Department of Environmental Protection

Support Agency(ies) : PA Department of Health
PA Turnpike Commission
American Red Cross
Pennsylvania Emergency Management Agency (PEMA)
PA State Police
PA Department of Agriculture
PA Department of Transportation
PA Department of Labor & Industry
PA Department of Conservation and Natural Resources
PA Department of Military & Veterans Affairs
PA Public Utility Commission
PA Fish & Boat Commission

I. Introduction

A. Purpose

1. To provide direction and control of all Department of Environmental Protection assets in responding to a potential or actual discharge and/or release, either accidental or intentional, of petroleum substances and/or hazardous materials/wastes, including radiological material.
2. DEP is the Primary State Agency under this Emergency Support Function and will coordinate all Commonwealth assets, in conjunction with PEMA. The term hazardous materials/wastes includes but is not limited to industrial chemicals, radiological or nuclear material, military weapons of mass destruction and/or commercial explosives on a scale beyond the capability and expertise of the local Authority Having Jurisdiction to manage.

B. Scope of Operations

1. When the assets of the Commonwealth and the federal government are brought to bear to assist in the management of the incident through its crisis and consequence phases, DEP as the primary state agency will be responsible to direct the response, coordinating that direction through PEMA.
2. DEP possesses the state level personnel who are uniquely qualified to assess the risks, recommend the best courses of action and determine the appropriate cleanup levels to mitigate the hazards from large releases of oil and hazardous materials/wastes.

II. Situation and Assumptions

A. Situation

1. Over 7,000 facilities in the Commonwealth report inventories of hazardous materials and wastes. There are over 27,000 different hazardous substances included in these inventories.
2. Over 3200 of these facilities have extremely hazardous substances.
3. Many of the facilities with hazardous substances are located in well-populated urban areas and also generate hazardous wastes.
4. The unique geography of the Commonwealth makes it the major thoroughfare between the Northeastern United States and the rest of the country. The extensive network of Interstate and U.S. highways through Pennsylvania result in the transportation of large but undetermined quantities of chemical, radiological and nuclear materials as well as commercial explosives into and across the Commonwealth on a daily basis. Much of the municipal, residual and hazardous wastes from the New York and New England also travel through Pennsylvania on a daily basis. These shipments are traveling close to many residential areas, crossing important and necessary waterways of the Commonwealth. All of these could potentially affect the health and welfare of entire communities or the Commonwealth at large.
5. Pipelines carrying natural gas and petroleum-based product deliver fuels to Commonwealth locations and carry that product to other states. Releases in populated areas may pose a public health and safety threat to large amounts of people.
6. Large railroad networks carrying large but undetermined quantities of chemical, radiological and nuclear materials as well as commercial explosives into and across the Commonwealth on a daily basis.
7. Several major waterways support barge and tanker transportation through, or near major population centers within the Commonwealth.
8. There are several large and medium size international airports within the Commonwealth that handle large amounts of commercial air traffic.
9. Five (5) nuclear power plants, Beaver Valley Power Station, Limerick Generating Station, Peach Bottom Atomic Power Station, Susquehanna Steam Electric Station and Three Mile Island Nuclear Station are located within the Commonwealth. Emergency procedures at these facilities are managed by the DEP Bureau of Radiation Protection and are contained in the "BRP Radiological Emergency Response Plan."

B. Assumptions

1. All facilities and transportation means are subject to accidents and/or sabotage.
2. All facilities and transportation means could be subject to, or be used as a means of delivering weapons of mass destruction by terrorists.
3. An incident at any of these facilities in the Commonwealth could cause a catastrophic release of a hazardous or toxic substance into the environment that would affect the citizens of the Commonwealth.
4. Any hazardous material incident, including a release from a pipeline or nuclear power plant, could require an emergency response which quickly overwhelms the capabilities of the local jurisdiction. The Department of Environmental Protection would respond regardless of the size, scope or complexity of the incident because a release to the environment is within the general purview of the Department.
5. Large-scale incidents would involve many DEP Programs because of the need for expertise in the control, containment, mitigation or remediation of wastes from the incident or the restoration of water and sewer services to the affected communities.

III. Concept of Operations

A. General

1. Within the Commonwealth, local municipalities are the Authority Having Jurisdiction (AHJ) and as such have the legal responsibility for management of any incident located therein.
2. When the local emergency responders need additional assistance, nearby local emergency response units respond under mutual aid agreements. The next step up in the tiered response is any County assets which may be available followed closely by the Regional Task Force (RTF) assets which may be activated to assist in the management of the incident.
3. The Department's ER Program will be notified through existing DEP Emergency Response communication channels prior to the activation of ESF #10 and the DEP ERT(s) should be on scene prior to the activation of ESF #10 at the State EOC.
4. For incidents beyond the capabilities of the local jurisdiction with their mutual aid, the county and the RTF, the SEOC will be activated, providing state-level direction and support and the Director of PEMA or his/her designee will make the decision to activate ESF #10.
5. The DEP will be the Primary State Agency (PSA) coordinating all ESF #10 activities.

6. DEP will call upon the ESF #10 Support Agencies in the CEOP to assist with the response under ESF #10.
7. The Delaware River Basin Commission has developed the “Delaware Early Warning System” (DEWS) for spills of any kind into streams in the Delaware River drainage basin. This site requires a username and password.
8. The Susquehanna River Basin Commission has developed the Susquehanna Early Warning System (SEWS). This site requires a username and password.
9. The Susquehanna River Basin Commission has also developed a web-based time of travel tool for spills into the main stem of the Susquehanna River.
 - a. Click on “Real-Time Data and Maps (username and password required)”
 - b. Required inputs:
 - 1) General location from the drop-down menu
 - 2) Distance in miles that spill is from the intake

B. Organization

1. Local emergency response units from the AHJ can be expected to be on scene directing the operations.
2. Also on scene may be the county’s Certified Hazardous Materials Response Team and / or the Director of the County Emergency Management Agency.
3. The appropriate Regional Task Force may also be on scene in the form of Law Enforcement Strike Teams, Decon Companies, Urban Search and Rescue elements or an Incident Management Team.
4. The appropriate DEP ERT should be on scene working with the AHJ prior to activation of ESF #10 because of the in place notification process for each of the DEP Regions.
5. Regional DEP program personnel who are providing support (outside the hot zone) should work with their Regional Program Manager and ER Manager. The Regional managers will communicate with their counterparts in central office.
6. Coordination assistance will be provided by the State Emergency Operations Center, the DEP Director, Environmental Emergency Response and the Emergency Preparedness Liaison Officers of the Commonwealth agencies operating through PEMA at the activated SEOC. If federal assistance is taking place, the U.S. Department of Homeland

Security will appoint an official to coordinate that assistance, as required by the National Response Framework.

IV. Responsibilities

A. Coordinating Agency

1. Department of Environmental Protection (DEP)
 - a. Provide technical advice and assistance to the Incident Commander in the early assessment of health and environmental hazards. For radiological incidents, the DEP Bureau of Radiation Protection (DEP-BRP) will provide these services and, if needed, activate the Radiological Emergency Response Plan (separate document, for official use only). In the event that a single incident includes the release of both hazardous materials and radioactive materials, the DEP Emergency Response Team will work in conjunction with the DEP Bureau of Radiation Protection to develop an appropriate response strategy.
 - b. Conduct environmental monitoring of air, water and soil in the affected area and nearby environmentally sensitive areas for oil or hazardous material contamination. Report the results to the Incident Commander, DEP EPLO and other appropriate personnel.
 - c. Conduct environmental sampling of air, water and soil for oil and hazardous materials and transport the samples to the DEP laboratory for analysis.
 - d. Provide laboratory analysis of known or unknown hazardous materials and petroleum products to determine contaminant levels in air, water, and soil but especially to determine contaminant levels in drinking water.
 - e. Contact USEPA for coordination and assistance with hazardous material and petroleum incidents or US Department of Energy and the Nuclear Regulatory Commission for radiological incidents.
 - f. Provide technical advice and assistance to the Incident Commander and Incident Safety Officer for the purpose of:
 - 1) Determining the appropriate level of personal protection equipment required for responders at the scene.
 - 2) Protecting the health and safety of the citizens of the Commonwealth and for mitigating public health hazards.

- 3) Implementing safe and effective decontamination of persons, equipment, and the environment exposed to hazardous substances, radioactive materials, infectious waste, and other toxic or harmful substances.
- g. For incidents involving hazardous materials and/or petroleum materials, general responsibilities for all types of HAZMAT and petroleum incidents include:
- 1) Determining the locations and types of hazardous materials or petroleum products involved
 - 2) Investigating the hazard levels of spilled or released materials
 - 3) Determining the levels of flammability ignitability, corrosivity and reactivity of hazardous materials and petroleum products spilled or released
 - 4) Establishing hot zones in coordination with local authorities
 - 5) Establishing contaminant action levels for emergency responders and the public
 - 6) Recommending tactical action cleanup plans
 - 7) Supervising cleanup, repacking and removal of hazardous materials and petroleum products
 - 8) Directing cleanup operations at incidents to ensure proper disposal of waste material or spill residue
- h. For incidents involving radioactive materials, please refer to the Bureau of Radiation Protection Radiological Emergency Response Plan (separate plan). General responsibilities for all types of radiation incidents includes:
- 1) Determining the locations and types of radioactive materials involved
 - 2) Investigating radiation levels
 - 3) Establishing hot zones; (i.e. 1 mR/h line, 2 mR/h line, etc.)
 - 4) Establishing radiation dose action levels for emergency responders
 - 5) Recommending tactical action cleanup plans
 - 6) Directing cleanup operations at incidents to ensure proper disposal of radioactive waste material or spill residue
 - 7) Supervising the cleanup, repacking and removal of radioactive materials

- 8) Providing additional assistance for radiological incidents to, or in coordination with, DOH ESF #8 – Public Health and Medical Services activities
- 9) Providing advice in the identification of the source of a radioactive release, the extent of contamination, and the removal and disposal of radioactive material contamination
 - i. Establish appropriate reentry criteria into areas contaminated by hazardous substances.
 - j. Establish appropriate use criteria for drinking water and decontamination criteria for people, buildings, vehicles and personal items.
 - k. Represent the Commonwealth at meetings or on conference calls.
 - l. Provide technical input and information on environmental protection issues, during petroleum spills, hazardous materials incidents and other events under ESF #10.

B. Support Agencies

1. Pennsylvania Emergency Management Agency (PEMA)
 - a. Provide support and coordination under ESF #5 using communications and procedures from within the State Emergency Operations Center (SEOC) when activated.
 - b. Establish communications with and maintain direct support of the county or counties affected by the incident. The county in which the incident occurs will be in direct contact with the Incident Manager.
 - c. Establish communications with all agencies which may be called upon to assist in the incident; federal, commonwealth, adjacent states, and subordinate.
 - d. Notify/Coordinate the arrival and support of federal agencies, including the needs assessment, location of support units, and their assigned mission.
 - e. Process and expedite the handling of requests of the counties or RTFs for additional assets to meet unmet needs.
 - f. Coordinate county/RTF requests for resources with supporting state agencies. Conduct follow-up to verify that resource needs are met.
 - g. Facilitate the resolution of conflicting demands for resources.

- h. Receive process and disseminate situation reports and damage assessments to all other state agencies.
 - i. Maintain situation awareness and provide, in conjunction with DEP's EPLO analysis and briefings to the Governor, as required.
 - j. Serve as the sole resource for information and advice to the general public under ESF #15.
 - k. Serve as the sole source of press releases until relieved by the Governor's office under ESF #15.
 - l. When the situation is stabilized, turn over responsibilities for consequence management to the appropriate Commonwealth agencies.
 - m. Have available the names, addresses, points of contact, phone number, and type and quantity of extremely hazardous substances, for each SARA planning facility in the Commonwealth.
2. Pennsylvania State Police (PSP)
- a. In coordination with the Incident Commander, provide security, warning, and traffic control at the site of the incident and contiguous areas.
 - b. Preserve the site as a crime scene if applicable.
3. Department of Agriculture (AG)
- a. Provide advice, technical assistance and laboratory analysis for incidents involving pesticides or other agricultural chemicals
 - b. Assists in developing protective measures and damage assessments for agricultural commodities and livestock
 - c. In coordination with DEP, provide field personnel for the sampling of agriculture, dairy and food products in the area affected by a hazardous material release
 - d. Works in cooperation with DEP, DOH, US FDA and USDA to coordinate the collection and ensure the proper disposal of contaminated food or animal feed according to guidelines issued by the U.S. Food and Drug Administration.
 - e. Supply technical advice and assistance in the inspection and decontamination of household goods
 - f. Provides technical assistance in the disposition of livestock and poultry contaminated with hazardous materials. [ESF #11 – Agriculture and Natural Resources maintains

the lead for disposition of disease-contaminated livestock and poultry (e.g., avian flu, naturally occurring anthrax, foot-and-mouth disease).]

4. Department of Conservation and Natural Resources (DCNR)

- a. Measures, evaluates, and monitors the impact of the emergency incident on natural resources under DCNR's jurisdiction, primarily the state parks and state forests.

5. Department of Health (DOH)

- a. Provide assistance to DEP on all matters related to the assessment of health hazards at an incident site and protection of response personnel and the public.
- b. In coordination with the DEP, provide technical advice and assistance regarding the alleviation of public health hazards associated with exposures of hazardous materials of all types at the incident site, and provide recommendations for actions to protect the public health.
- c. Determine whether illnesses, diseases, or complaints may be attributable to exposure to a hazardous material.
- d. In coordination with DEP, issue guidance relating to the health effects and protection of emergency responders and health care professionals involved in HAZMAT incidents/accidents of all types.
- e. Provide technical advice and assistance in emergency procedures associated with nuclear incidents, to include the supply and distribution of radiological protective drugs.
- f. Establish communications with hospitals to provide emergency health care and assist in the disposition of patients from overcrowded health care facilities.
- g. Establishes disease/exposure registries and conducts appropriate clinical testing.
- h. Develops, maintains, and provides information on the health effects of toxic substances.

6. Department of Labor and Industry (L&I)

- a. Upon request, provide information regarding chemical inventories and locations at specified facilities.
- b. Provide Material Safety Data Sheets (MSDS) on specific chemicals.
- c. In coordination with DOH, provide technical advice and assistance in alleviating public health hazards, inspecting and decontaminating household goods.

7. Department of Military and Veterans Affairs (DMVA)
 - a. Provide technical advice and assistance through the Civil Support Team (CST). Civil Support Team assets respond primarily when requested for assistance during domestic terrorist incidents. (With the exception of immediate lifesaving/life safety missions, the activation of DMVA assets in support of requests for assistance is subject to approval by the Governor of the Commonwealth under a declaration of emergency or disaster.
8. Department of Transportation (PENNDOT)
 - a. Provide status updates on road closure through the Road Closure Reporting System (RCRS).
 - b. Provide, as available and appropriate:
 - 1) Anti-skid material for state roadways
 - 2) Transportable variable message road signs
 - 3) Traffic barrels, cones, jersey barriers and other traffic control supplies
 - 4) Detour routing and signs
 - 5) Permits for overweight vehicles and oversized vehicles and other equipment needed at emergency sites
 - c. Assist in identifying transportation resources for mass evacuation
9. Public Utilities Commission (PUC)
 - a. Coordinate with public and private utilities for de-energizing, re-energizing, and full restoration of electric utility services.
 - b. Assist in identifying publicly owned transportation resources for mass evacuation.
10. Fish and Boat Commission (PA F&BC)
 - a. In conjunction with DEP assess the biological impact of the release of hazardous materials in Commonwealth waterways.
 - b. Assess the extent of fish kills and impacts to threatened and endangered species.
 - c. Provide waterway security personnel when closing river or streams sections to the public.

11. PA Turnpike Commission (PTC)

- a. Ensure access and throughway on the turnpike to emergency and support vehicles and convoys
- b. Provide Turnpike assets, as available to help alleviate the emergency

12. American Red Cross (ARC)

- a. Provide information on the needs of the public located in the area of the hazardous material incident
- b. Coordinate with local chapters in the provision of emergency shelter and food to those affected by the incident
- c. Provide other relief to the affected public within capabilities in coordination with PEMA and the Incident Manager

13. Other Commonwealth Departments and Agencies

- a. Be prepared to provide assistance within capabilities in both the crisis management and consequence management phases of a hazardous material incident

C. All Agency Responsibilities

1. Upon becoming fully operational and throughout the response period, the ESF #10 support agency representatives coordinate with their agencies to meet ESF #10 needs and carry out ESF #10 actions. ESF #10 actions may include:
 - (a) Receiving damage information from reconnaissance teams, other ESFs, and Federal, Regional, County, and local agencies
 - (b) Identifying ESF #10 support needs and establishing response priorities in coordination with Federal, Regional, County, and local agencies
 - (c) Validating priorities and identifying the resources required to meet the needs.
 - (d) Working with local governments, County Agencies, Regional Task Forces and Federal agencies, and the private sector to maximize use of available regional assets and identify resources required from outside the region.
 - (e) Initiating actions to locate and move resources into the incident area.
 - (f) Maintaining close coordination with the PEMA EOC to share information and ensure effective response to requests for assistance.

- (g) Coordinating on-scene response operations at the Incident Command Post(s) (ICP).
2. Because of the potential need for ESF #10 to respond to numerous simultaneous events, including terrorism incidents, DEP OSCs, as time permits, coordinate all significant actions with the DEP EPLO/ESF #10 lead. Significant actions are those that relate to competition for and commitment of resources not under the DEP OSC's control recommendations to State officials concerning protective actions, or actions which might affect or impact other regional or national response activities or priorities.