



<b>Number:</b>	<b>C2010-08</b>
<b>Effective Date:</b>	December 29, 2010
<b>Termination Date:</b>	December 28, 2011
<b>Rescinds Circular Number:</b>	

## PEMA Circular

**Subject:**  
Emergency Response to Fuel Spills or Leaks from Vehicles or Heating Systems

**Scope:**  
Fire and Hazardous Material Teams

**Distribution:**

- State-Certified Hazardous Material Teams
- County Emergency Management Coordinators
- Local Emergency Planning Council
- [www.pema.state.pa.us](http://www.pema.state.pa.us)

**By Direction of:**

Robert P. French  
Director, PA Emergency Management Agency  
and Pennsylvania Homeland Security Advisor

### I. PURPOSE

- A. To provide guidance to all first response organizations, particularly fire departments, regarding their appropriate role when dispatched to:
1. Fuel spills and/or leaks (gasoline, diesel fuel, propane, and/or natural gas) that result from vehicle fuel tanks, including those that result from vehicle accidents.
  2. Fuel spills and/or leaks (home heating oil, propane, and/or natural gas) that result from heating system fuel storage tanks or fuel supply lines.
- B. To maintain the proper operational use of state-certified Hazardous Material Response Teams (HMRTs), in accordance with the provisions of the Hazardous Material Emergency Planning and Response Act (Act 1990-165, as amended); thereby reducing unnecessary responses of HMRTs to routine spill incidents. This circular provides additional guidance for the use of HMRTs when required by the circumstances of the incident. In Pennsylvania, state-certified HMRTs are created by Act 1990-165 and are certified in accordance with requirements of the Pennsylvania Emergency Management Agency (PEMA) Directive D2010-02, *Hazardous Material Response Team State Certification/Recertification Criteria*.
- C. To provide guidance for written standard operating procedures to communications staff officials in dispatch centers and state-approved 911 centers.

**Comments and Questions Regarding this Circular Should be Directed to:**  
Mr. Les Gordon, Division of Technological Hazards Planning, 717-651-2158

## **II. SCOPE**

- A. This circular pertains to petroleum or gas product spills or leaks from any type of fuel tank, cylinder, or supply line used to supply fuel to either a motor vehicle or heating system for a home or business.
- B. Although specific guidance is given in this circular, each incident requires situation-specific personal judgment as to the safety of personnel, citizens, and the environment. Those matters cannot be compromised by the officer in charge. Therefore, case-by-case application of this guidance is required.

## **III. EMERGENCY SERVICE RESPONSE**

- A. A fire, police, and/or emergency medical services' (EMS) department response to a vehicle accident, fire, or fuel spill or to a leak in a heating system fuel storage tank or fuel supply line should initially be considered a routine, ordinary response and usually should not be designated or dispatched as a "hazardous materials response". Fire protection, medical assistance, rescue, and diking or other mitigation operations normally performed by fire departments and EMS units are usually the primary objectives of the initial response.
- B. In some cases, it is appropriate and sufficient to dispatch fire department personnel, equipment, and apparatus to mitigate a fuel spill or leak, using defensive tactics in accordance with the Code of Federal Regulations, 29 CFR 1910.120, *Hazardous Waste Operations and Emergency Response*, and 40 CFR Part 311, *Worker Protection Standards for Hazardous Waste Operations and Emergency Response*. However, leaking cargo tanks or containers may also require the immediate response of a state-certified HMRT.

NOTE: A fire department's routine response activities will not qualify for response cost reimbursement under Section 207 (b)(1) of Act 165 unless those response activities were conducted in support of, or when acting as part of, a state-certified HMRT. As noted in the law, a state-certified HMRT must respond to a hazardous materials (hazmat) incident as a unit and must be officially dispatched to the incident by a legally constituted authority (e.g. county emergency management coordinator, county Emergency Operations Center [EOC] staff personnel, and county 911 dispatch center personnel).

## **IV. TRAINING EMERGENCY RESPONSE PERSONNEL**

Emergency response personnel involved in an emergency response containment and control operation (potential for contact with the substance) dealing with a fuel spill and/or leak shall be trained to at least the "Operational Level" minimum, in accordance with 29 CFR 1910.120.

## **V. PERSONAL PROTECTIVE EQUIPMENT**

It is strongly recommended that all personnel involved in a fuel spill and/or leak response use full protective clothing and equipment including: helmet, coat, pants, boots, gloves, and, unless specifically deemed unnecessary by the officer in charge,

self-contained breathing apparatus in accordance with the current National Fire Protection Association (NFPA) Standard NFPA 1500, *Standard on Fire Department Occupational Safety and Health Program*. Petroleum-resistant splash gear may be worn over turnout gear for added protection.

## **VI. SPILL/LEAK MATERIALS**

- A. Every fire department should have the capability to handle a response to a fuel spill and/or leak as defined under Section I.A., *Purpose*, above. The type and quantities of spill and leak control/containment materials a fire department carries should be determined by the frequency and magnitude of its responses.
- B. Using defensive tactics in accordance with 29 CFR 1910.120, the fire department, with assistance from public works' agencies in some cases, will use absorbents, diking materials, vapor suppressants, etc. as necessary to contain or control the spilled and/or leaking fuel(s). Purposely washing any hazmat or other chemicals into the waters of the commonwealth is a violation of the Pennsylvania Clean Streams Law. No fuel shall be flushed or washed into the earth or a sewer or ditch unless specifically authorized by the Pennsylvania Department of Environmental Protection (DEP) or the U.S. Environmental Protection Agency (EPA).
- C. A local municipality may have the filtration capability to remove certain fuel substances from their sewer system effluent flow. Every fire department should know the capabilities of the local system. Every local sewer authority does not have DEP's authorization to filter out hydrocarbons and other spilled materials. Filtration systems can be fouled, expensive filtration equipment damaged and a community's water quality and public health jeopardized by an unauthorized "wash down". Some water filtration authorities have a DEP delegation of authority to monitor/manage their own systems (Philadelphia, Pittsburgh, et al.) due to the capabilities of their equipment and technical staff. However, they must follow DEP guidance as to the allowable quantity and type of material to be processed and/or filtered. Fire departments in these areas should notify sewer operations' officials prior to a "wash down" to ensure the situation is safe. All fire departments should be in contact with stormwater and sanitary sewer management personnel in their area to learn their system's design capability.

## **VII. DISPOSAL**

- A. Fire departments are not necessarily responsible for disposal of the spilled or leaked fuel products. It is the responsibility of the owner of the vehicle(s) or property involved in the incident to properly dispose of the spilled or leaked fuel(s).
- B. DEP enforces the regulations governing the transportation and disposal of waste materials in Pennsylvania. DEP considers local government entities, including fire departments, as "non-generators" for purposes of hazardous waste regulations when their activities are restricted to cleaning up and collecting hazardous waste rather than actually generating such waste (25 Pa. Code Chapter 287). DEP further considers fuel-contaminated cleanup products and fuel-contaminated soil as "residual waste" rather than hazardous waste (25 Pa. Code Chapter 299). Given these two definitions,

when properly packaged, such residual waste contained in quantities less than 2,200 pounds, does not require recordkeeping and can be disposed of in most landfills.

- C. While not responsible for cleanup and disposal, in the case of small spills/leaks of this type material, it may be to everyone's mutual advantage for the municipality or its agent to remove, store, and/or dispose of the residual waste. If questions arise, the appropriate DEP Regional Office should be contacted for packaging and disposal information.
- D. Local governments may consider billing the spiller or owner for cleanup and disposal costs. They should have in place ordinances which provide for such cost recovery by them and their agents. A fire department might agree to act as the municipality's agent for clean up and disposal of fuel-contaminated residual waste (under 2,200 pounds) in order to facilitate recovery of its own costs.

#### **VIII. REPORTING**

- A. Spill Reporting – It is the responsibility of the owner or operator of the vehicle or property from which the spill or leak occurred to report to DEP all petroleum product spills, leaks, or releases which enter, or have the potential to enter, the waters of the commonwealth (i.e. rivers, lakes, or streams, to include sewers, drains, and ditches).
- B. Emergency Notification – Pennsylvania uses the "one call" emergency notification system for reporting all types of emergency incidents (*Pennsylvania Emergency Incident Reporting System*). Emergency reports about a fuel spill incident that may be required in addition to the DEP spill notification should be directed to the county dispatch point and to PEMA at 1-800-HBG-PEMA or 1-800-424-7362. PEMA will notify other state agencies about reported emergencies involving fuel spills, when appropriate.
- C. Emergency response personnel should report emergency incidents involving fuel spills consistent with county and local procedures to the county 24-hour reporting point. Local reports will be reviewed by the county emergency management agency (EMA) staff or authorized representatives and forwarded to PEMA as soon as possible or within the time limits prescribed by state and federal laws or regulations. (Generally, this report is expected within one hour of the occurrence of the incident.) Which county official or agent makes the report to PEMA is dependent upon the development of the county's emergency operations plan and the level of emergency involved.

NOTE: County officials do not have to report petroleum product spills of less than 42 gallons (one U.S. barrel) to PEMA if the product does not leave the roadway or other impervious surface.

#### **IX. STATE-CERTIFIED HMRT RESPONSE TO FUEL SPILLS AND/OR LEAKS**

- A. Dispatch of a state-certified HMRT to the incident site to provide appropriate equipment and technical expertise should be considered when any of the following incident characteristics are present:

1. The spill and/or leak involves, or has the potential to involve, not only gasoline, fuel, oil, heating oil, propane, or natural gas from the fuel supply tanks or lines involved, but also hazardous chemicals or substances (products) that were being transported by the vehicle(s) or stored on site.
  2. Multiple vehicles and/or heating system fuel supplies are involved in the incident and are leaking different fuel(s), thereby creating a complex chemical environment that exceeds the training level or overwhelms the response capability of the fire department.
  3. The imminent, potential danger of a significant, uncontained fire or explosion exists at the site of the incident.
  4. The potential exists for the development of pockets of combustible/explosive vapors around the incident site due to the terrain and/or structures involved in, or adjacent to, the incident.
  5. Visible smoke or a vapor cloud is reported around the incident site at the time of the fire department's dispatch or arrival (indicating a possible fire and/or chemical reaction).
  6. Identification markings on the vehicle, cargo, or adjacent stored materials indicate the presence of a reactive product(s), which may leak and react violently with leaking or spilled fuel(s), air (oxygen, etc.) and/or suppressants (water, foam).
  7. The potential exists for the fuel spill or leak to directly enter a waterway and diking or diverting is beyond the capability of the first responders at the scene.
  8. The potential exists for the contamination of drinking water supplies.
  9. The safety of the first response personnel is jeopardized due to insufficient training, equipment, personal protective equipment, or supplies needed under a typical "Emergency Service Response".
  10. Uncontrolled radiological, biological, or toxicological materials are present and may be released or are unstable.
- B. The circumstances of an incident, as described in this section concerning HMRT response, must be evaluated by the officer-in-charge to determine if the incident is beyond the "fire department response" capability and necessitates response by a state-certified HMRT.

**X. AUTHORITY**

- A. Hazardous Material Emergency Planning and Response Act (35 P.S. § 6002.101 et seq.)
- B. Emergency Management Services Code (35 Pa. C.S. § 7171 et seq.)

**PEMA Circular: C2010-08**  
**Effective Date: December 29, 2010**  
**Page Number: 6**

Carbon Copy: Director  
State Fire Commissioner  
Deputy Director for Administration  
Deputy Director for Operations  
Deputy Director for Planning and Preparedness  
Chief Counsel  
Legislative Liaison  
Press Secretary  
Executive Assistant  
Bureau / Office Directors