



PENNSYLVANIA EMERGENCY
MANAGEMENT AGENCY
2605 Interstate Drive
Harrisburg, Pennsylvania 17110-9364

**EMERGENCY MANAGEMENT
GUIDANCE & INFORMATION
CIRCULAR NO. C93-1**

**SUBJECT: GUIDANCE FOR APPROPRIATE EMERGENCY
RESPONSE TO SPILLS OR LEAKS FROM VEHICLE FUEL
TANKS OR HEATING SYSTEM FUEL SUPPLY TANKS OR
LINES**

DATE: 1/29/93

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

II. SCOPE

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 a heating system for a home or business.

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 and those matters can not be compromised by the officer in charge. Therefore, case by case application of this guidance is required.

III. EMERGENCY SERVICE RESPONSE

A fire, police, or emergency medical services (EMS) department response to a vehicle accident, fire or fuel spill, or 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.

In some cases it will be appropriate and sufficient to dispatch fire department personnel, equipment and apparatus to mitigate a fuel spill or leak, using defensive tactics in accordance with 29, Code of Federal Regulations, Part 1910.120 (29 CFR 1910.120), Hazardous Waste Operations and Emergency Response and 40, Code of Federal Regulations, 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 certified hazmat team.

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, ~ certified hazmat team. As noted in the law, a certified hazmat team must respond to a hazardous material incident as a unit and must be officially dispatched to the incident by a legally constituted authority (e.g. county emergency management coordinator, county EOC staff personnel, 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 or leak shall be trained to at least the "Operations Level" in accordance with 29 CFR 1910.120.

V. PERSONAL PROTECTIVE EQUIPMENT

It is strongly recommended that all personnel involved in a fuel spill or leak response use full protective clothing and protective 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 Standard 1500, Fire Department Occupational Safety and Health Program. Petroleum resistant splash gear may be worn over turnout gear for added protection.

VI. SPILL/LEAK MATERIALS

Every fire department should have the capability to handle a response to a fuel spill or leak as defined under Section I.A., Purposes. The type and quantities of spill and leak control/contain materials a fire department carries should be determined by the frequency and magnitude of its responses.

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 or adsorbents, diking materials, vapor suppressants, etc. as necessary to contain or control the spilled or leaking fuel(s). Purposely washing any hazardous material 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, a sewer system or ditch unless specifically authorized by the Pennsylvania Department of Environmental Resources (DER) or the U. S. Environmental Protection Agency.

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 the Department of Environmental Resources' 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 DER delegation of authority to monitor/manage their own systems (Philadelphia, Pittsburgh, et al) because of the capabilities of their equipment and technical staff. However, they must follow DER guidance as to allowable quantity and type of material to be processed/filtered. Fire departments in these areas should notify sewer operations officials prior to a "wash down" to ensure that 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

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).

The Department of Environmental Resources enforces regulations governing the transportation and disposal of waste materials in Pennsylvania. DER 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). DER 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 under 2200 pounds, does not require record keeping, and can be disposed of in most landfills.

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 DER Regional office should be contacted for packaging and disposal information.

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 2200 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 the Department of Environmental Resources 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 (see Emergency Management Directive D92-3, Pennsylvania Emergency Incident Reporting System). Emergency reports about a fuel spill incident that may be required in addition to the DER 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.

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 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 on 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. CERTIFIED HAZMAT TEAM RESPONSE TO FUEL SPILLS OR LEAKS

Dispatch of a certified hazmat team to the incident site to provide appropriate equipment and technical expertise should be considered when any of the following incident characteristics are present:

- A. The spill 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.
- B. 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.
- C. The imminent potential danger of significant uncontained fire or explosion exists at the site of the

incident.

- D. The potential exists for 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.
- E. Visible smoke or 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.
- F. Identification markings on the vehicle, cargo, or adjacent stored materials indicate the presence of reactive products which may leak and react violently with leaking or spilled fuel(s), air (oxygen etc.) and/or suppressants (water, foam).
- G. The potential exists for the fuel spill or leak to directly enter a waterway and diking or diverting the fuel spill or leak is beyond the capability of the first responders at the scene.
- H. The potential exists for the contamination of drinking water supplies.
- I. The safety of the first response personnel is jeopardized because of insufficient training, equipment, personal protective equipment or supplies needed under a typical "Emergency Service Response".
- J. Uncontrolled radiological, biological or toxicological materials are present and may be released or are unstable.

The circumstances of an incident, as described in this section concerning hazmat team response, must be evaluated by the officer in charge to determine if the incident is beyond the "fire department response" and necessitates response by a certified hazmat team.

X. SUPERSESSION

None

Hazardous Material Emergency Planning and Response Act (35 P.S. § 6002.101 et seq.)

Emergency Management Services Code (35 Pa.C.S. § **7171** et.seq.)

Joseph L. LaFleur
Director, Pennsylvania
Emergency Management Agency

DISTRIBUTION

All County Emergency Management Agencies
All Certified Hazmat Team Leaders as of date of issue
All Certified Hazmat Team Administrators as of date of issue
All State Certified 911 Centers as of date of issue
All Pennsylvania Fire Departments
All Pennsylvania EMS Departments
All Pennsylvania Police Departments
All Pennsylvania State and Regional Airport Firefighting Facilities
All Pennsylvania Local Government Units
All Pennsylvania Municipal Sewerage Treatment Facilities
All Pennsylvania Fire Service Publications
State Emergency Preparedness Liaison Officers (3)

- Department of Community Affairs
- Department of Environmental Resources
- Department of Health
- Department of Transportation
- Pennsylvania State Police
- Fish and Boat Commission
- Public Utility Commission
- Turnpike Commission Pennsylvania Emergency Management Agency
- All Bureau Directors
- Western Area Office.
- Central Area Office
- Eastern Area Office
- State Fire Academy