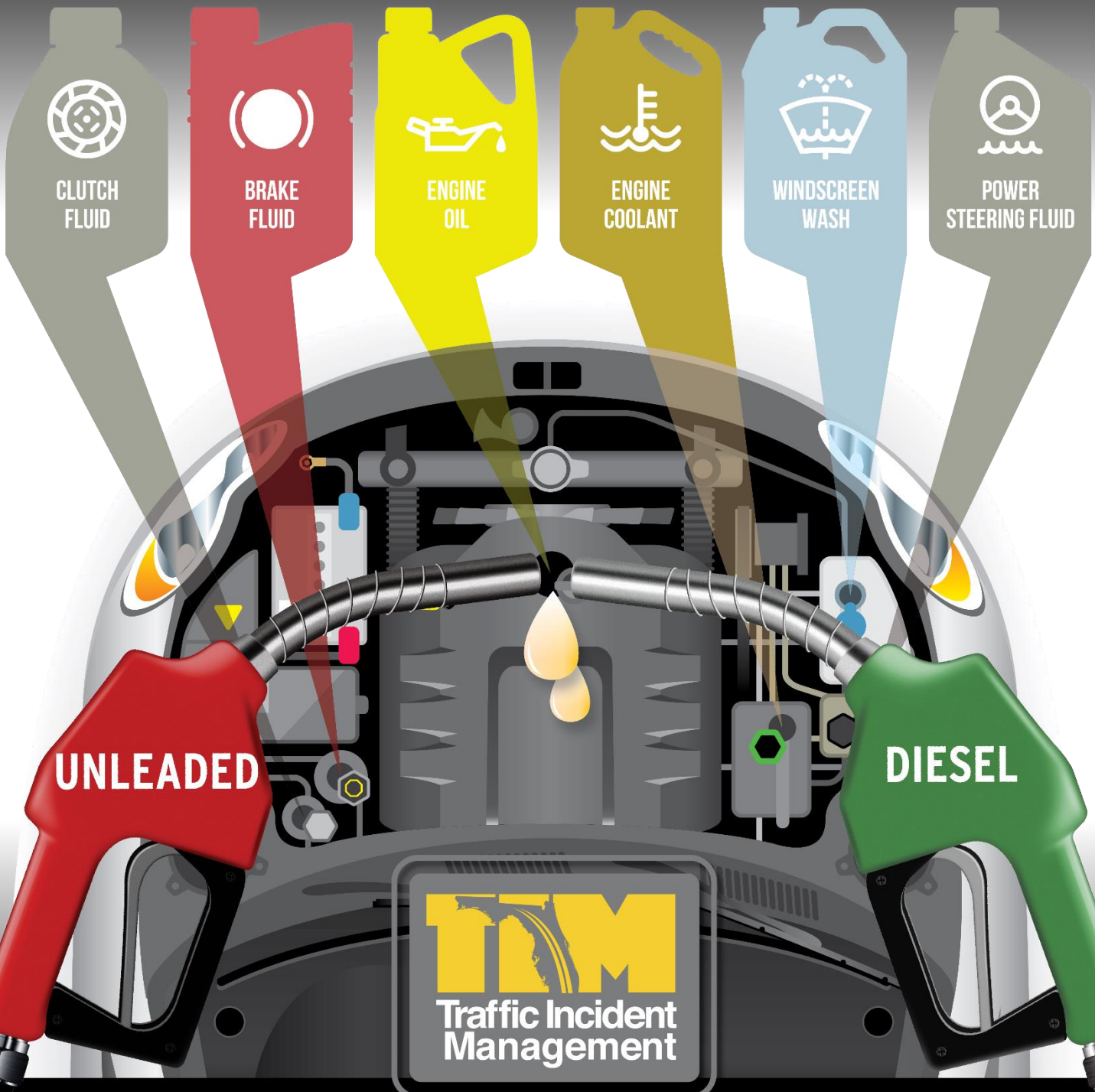
SPILL MITIGATION GUIDELINES

for the Mitigation of Accidental Discharges of Motor Vehicle Fluids (Non-Cargo)



Traffic Incident Management

MAY 2021

Purpose, Goal, and Objectives

The following guidelines were prepared to outline steps that can be taken by initial responders to motor vehicle crashes and other roadway incidents to reduce the confusion and subsequent delays in reopening roadways when spilled vehicle fluids are involved. Refer to the existing policies in place for dealing with hazardous material releases. The Florida Department of Transportation (FDOT), Florida Department of Environmental Protection (DEP), and Florida Division of Emergency Management (DEM) State Watch Office (SWO) as well as your agency will likely have policies for addressing these situations.

These guidelines were developed by the multi-agency Florida Statewide Traffic Incident Management (TIM) Program to clarify the goals, objectives, and processes for clearing the highway of spilled motor vehicle fluids resulting from crashes and other vehicle incidents. The guidelines were reviewed and endorsed by the FDOT, DEP, and the Florida Highway Patrol (FHP).

Spilled vehicle fluids are generally petroleum products, and are, most commonly, crankcase engine oil or diesel fuel, and gasoline but also include transmission, hydraulic, and other fluids. Typically, absorbed vehicle fluids rarely fail the Toxicity Characteristic Leaching Procedure (TCLP) and thus are usually not hazardous wastes.

The goal is to provide guidance to responders and assist them in clearing roadway incidents as quickly as possible to minimize the risk to responders and reduce secondary crashes.

The objectives of these guidelines are to:

- provide specific procedural guidance for spilled vehicle fluid cleanup
- provide a reference for the disposal of spill materials

Definitions

For the purposes of these guidelines, the following definitions apply:

- Absorbent materials are any materials, manufactured or natural, that may be used to absorb spilled fluid, and may include commercial absorbents, sawdust, floor sweep, peat moss, absorbent pads, clay, or even topsoil.
- Cargo means the commercial (or other) materials being transported by the motor vehicle. Materials that are an intrinsic part of the vehicle itself are “non-cargo”, even if the vehicle is a commercial vehicle.
- Commercial vehicle: A vehicle that carries a cargo of commercial materials for pay, and may include, but is not limited to, small, medium, and heavy trucks; panel trucks and vans; tractor-trailers; and commercial buses.
- Clean-up Operation (contractor): An operation where hazardous substances are removed, contained, incinerated, neutralized stabilized, cleared-up, or in any other manner processed or handled with the ultimate goal of making the site safer for people or the environment.
- First Responder Operations Level: First responders at the operations level are individuals who respond to releases or potential releases of hazardous substances as part of the initial response to the site for the purpose of protecting nearby persons, property, or the environment from the effects of the release. They are trained to respond in a defensive fashion without actually trying to stop the release. Their function is to

contain the release from a safe distance, keep it from spreading, and prevent exposures.

- Hazardous materials (HAZMAT): Any substance or material which has been determined by the secretary of the United States Department of Transportation to be capable of imposing an unreasonable risk to health, safety, and property.
- HAZMAT Team: An organized group of employees, designated by the employer, who are expected to perform work to handle and control actual or potential leaks or spills of hazardous substances requiring possible close approach to the substance.
- Hazardous materials technician: Hazardous materials technicians are individuals who respond to releases or potential releases for the purpose of stopping the release. They assume a more aggressive role than a first responder at the operations level in that they will approach the point of release in order to plug, patch, or otherwise stop the release of a hazardous substance.
- Private vehicle: Any vehicle used for the personal transportation of its occupants on a not-for-hire basis, and may include, but is not limited to, passenger cars and cycles, vans and SUVs, motor homes and recreational vehicles, and buses used for private purposes.
- Responders: May include law enforcement, Emergency Medical Services (EMS), fire, wrecker operators, Road Rangers, contractors (including HAZMAT Team), and the FDOT or local highway agencies.
- Responsible Party (RP): The entity having dominion over the product prior to the spill, not necessarily the party responsible for the accident.
- Spill: The expulsion of any vehicle fluids upon the roadway itself or the abutting areas that cause an immediate threat to traffic by hindering its normal operation in any way (covering surfaces causing slicks, dripping onto traffic below, etc.).
- Vehicle fluids: Often simply referred to as “fluids”, these are non-cargo liquid materials that are spilled from the vehicle, such as gasoline; diesel fuel; motor oil; coolants; and transmission, brake, and hydraulic fluids. These may originate from the engine, drive train, fuel tanks, wheel assemblies, compressors, air handlers, or any component of the vehicle, including tractor and trailer, as applicable.

Scope

These guidelines only apply to spilled motor vehicle fluids from private and commercial vehicles used for the operation of the vehicle. They do not apply to any hazardous material cargo spill.

Spilled fluids from motor vehicle crashes that are 25 gallons or less, onto a pervious surface (i.e., soil), are exempt from reporting requirements, but still must be cleaned up to the satisfaction of DEP by the Responsible Party (RP). Spills involving state waterways of any amount are required to be reported.

Training

All traffic incident responders in Florida should be trained in hazardous materials according to the requirements of 29 CFR 1910.120. Additionally, responders should have received the National Traffic Incident Management (TIM) Responder Training, authorized by the Federal Highway Administration (FHWA). Incident responders are reminded to always use appropriate personal protective equipment (PPE) and limit their activities to only those in which they are trained and equipped to handle.

Vehicle Fluid Spill Guidelines

According to the Federal Highway Administration (FHWA), National Traffic Incident Management (TIM) Responder Training Program, the following guidance is offered for any trained responder to a roadway incident involving a vehicle fluid spill:

Spill Response for Vehicle Fluids

1. Stop leaking material at the source
2. Contain and limit the spill from spreading
3. Apply available absorbents
4. Remove material from travel lanes
5. Gradually restore traffic flow

All responder actions should be based on responder's level of training, use of the appropriate personal protective equipment (PPE), and following relevant traffic control procedures.

Clearance Procedure

Prompt intervention is encouraged to limit the congestion impact and prevent the high probability of secondary incidents as a result of extended traffic blockage. It is imperative that every effort be made to limit the amount of time the spilled fluids are in contact with asphalt pavement.

Responders should be aware that it often takes several hours for a clean-up contractor to arrive on scene. Therefore, priority should be given to re-opening the travel lanes. In many cases, lanes can be re-opened with minimal effort using available absorbents applied by trained on-scene personnel. During this time, it is also extremely important that situational updates are provided on a recurring basis to the local Traffic Management Center (TMC). The TMC can coordinate advanced messaging to travelers and first responders during the event.

In situations involving spilled vehicle fluids on a roadway from commercial vehicles and private vehicles, the preferred clean-up method is to soak up as much fluid as possible using absorbent materials. Also, move the absorbent materials out of the travel lanes by containerizing to prevent migration onto uncontaminated areas and store the waste outside of the clear zone. If storing temporarily at the scene, efforts should be made to minimize contamination risk to soil and water. Note that the trained FDOT and other crash-scene responders may apply absorbents and sweep off travel lanes regardless of the quantity. It is not necessary to await a clean-up contractor.

Clean up normally involves the use of granular absorbents or vermiculite, floor sweep, peat moss, pads and booms, clay, or topsoil. In limited situations, sand can also be used but it is better suited for increasing friction. If immediately available, an alternative method for dealing with the thin film that may remain after absorbents are used is to apply a light dusting with Portland cement.

Defensive actions can include adsorbing, diverting, containment, diking, or soil berm construction. Offensive actions can include stopping the leak at the source. These efforts

not only limit the size of the release but also can help **prevent the spilled fluid from entering storm drains and from impacting soils along the shoulder**.

Before any actions are taken, the leaking materials should be properly identified. Using the Emergency Response Guidebook or other reference guide and, where possible, the type of fluid should be found by name and the appropriate guide followed for that material. The responder should estimate the amount of the spill and amount remaining in the tank, as well as whether or not the leak is still active. Appropriate PPE and equipment should be used. Actions to be taken depend on the responders' level of training and expertise. The first priority is to protect human life, including the life and safety of the responder.

The Responsible Party (RP) is accountable for vehicle fluid spills, including the final removal and proper disposal of absorbents and if needed, the subsequent site remediation. If the RP does not or cannot handle this responsibility in a timely manner, the governing authority (State, county, city, etc.) will initiate disposal and the responsible party will be billed. Clean-up actions taken by initial responders do not affect or limit this responsibility.

Additional or incidental material spilled during the relocation of the vehicle out of the travel lanes of the roadway shall be cleaned up and moved to the roadside with the other absorbents used at the scene. *The responsible party remains accountable.*

Absorbent material moved out of travel lanes may be bagged in heavy-duty trash bags, wrapped or "diapered" in plastic sheeting, or containerized in pails, barrels, or drums. The material should be well off the travel portion of the roadway, outside of the clear zone, so that it does not impede vehicle, bicycle or pedestrian traffic and can remain there for a reasonable time to allow for the disposal by the responsible party or a contractor (paid by the RP). The TMC should create a notification for the District maintenance managers to make sure that the material is removed from the side of the roadway. The small amounts of material may be placed in a container and placed in the damaged vehicle(s) and removed by the towing company for proper disposal, following DEP and DOT regulations, guidelines and permitting requirements.

The containers used to hold the material should be tagged and clearly marked to indicate the type of absorbent used and the material that was spilled. It is also desirable to indicate the responsible party. Care should be taken not to overload the containers used to store the absorbents. If trash bags are used, double bag and limit each bag to about 15 pounds.

Traffic cones or other readily identifiable methods should be used at the site to mark the location of the material for later retrieval.

Spill cleanup by a fire department, highway agency, wrecker operator, roadway contractor, or the responsible party should be limited to spills of a magnitude within their capabilities. However, *no qualified responder is restricted from taking prompt action to stop the spill at its source or to contain and limit the size of the spill, to limit the damage to the pavement surface, and to prevent any flammable material from catching fire*.

Vehicle fluid spills, which have soaked into the soil, will require cleanup but may be completed at a later date by the responsible party in accordance with FAC Chapter 62-780. Care must be taken to locate any underground utilities prior to the excavation of contaminated soil. Coordination with the roadway authority must occur before remediation begins.

Transportation of non-hazardous fuels, oils, and other vehicle fluids should only be performed by appropriately authorized and licensed individuals. Disposal facilities should also be appropriately authorized and licensed for the materials that are delivered.

Vehicle fluid spills that enter any wetland area, pond, or roadway drainage system must be addressed immediately by the responsible party. If the RP does not or cannot handle this responsibility in a timely manner, the governing authority (State, county, city, etc.) will initiate disposal and the responsible party will be billed. Clean-up actions taken by initial responders do not affect or limit this responsibility.

Reporting

The Florida Department of Environmental Protection, Office of Emergency Response (OER), responds to environmental pollution threats in every form. Responding to incidents involving petroleum spills caused by vehicle crashes is one example of the type of events they monitor. OER provides technical and on-site assistance to ensure threats to the environment and human safety are quickly and effectively addressed. Reporting spill incidents to OER will ensure that the RP properly mitigates spill sites since remedial activities will be enforced by DEP.

The Florida Department of Emergency Management, State Watch Office operates 24/7, 365 days a year as a daily extension of the Florida State Emergency Operations Center. The State Watch Office monitors local, state, and national media as well as communicates with Florida's counties and state agencies to ensure that the State Emergency Response Team is aware of any ongoing or developing situations.

NOTIFICATION and REPORTABLE QUANTITIES

Florida DEP has adopted the US Environmental Protection Agency's **Reportable Quantities (RQ)** for hazardous substances, and an **RQ** of 25 gallons for petroleum products spilled onto a pervious surface (soil), or any amount on state waterways shall be called in. If in doubt about the amount, it is recommended the incident be reported by calling the State Watch Office, who will contact DEP"s Office of Emergency Response (OER).

STATE WATCH OFFICE* (800) 320-0519, 24 hours, 7 days
When calling, be prepared to give the location, type of fluid spilled, estimated amount of the discharge, size & characteristics of area affected as well as the RP name, address, and phone number.

NATIONAL RESPONSE CENTER* (800) 424-8802, 24 hours, 7 days
Report hazardous substances (RQ) releases and petroleum releases entering (causing a sheen) or threatening to enter navigable waterways.

*Note: The National Response Center (NRC) will automatically notify the State Watch Office (SWO) but the SWO will *not* notify the NRC.

Because traffic incident response varies greatly, responding agencies are jointly responsible for notifying the State Watch Office when a reportable incident occurs on Florida roadways. For traffic crashes, the investigating law enforcement agency is usually responsible for

notification. For other types of roadway incidents, any responding agency (police, fire, towing, or transportation) should make the notification.

Chapter 252.351, Florida Statutes (effective July 1, 2020) specifies mandatory reporting of certain incidents by political subdivisions as soon as practicable following its initial response to an incident. “Political Subdivision” means any county or municipality created pursuant to law.

When in doubt, notify. It is better to have two notifications than none.

OFFICE OF EMERGENCY RESPONSE DISTRICT MAP

PENSACOLA-NW
160 W Government Street
Pensacola, Florida 32502-5794
Phone: (850) 595-8300
Fax: (850) 595-8637

TALLAHASSEE-HQ
3917 Commonwealth Blvd., MS 659
Tallahassee, Florida 32399-3000
Phone: (850) 245-2010
Fax: (850) 245-2882

JACKSONVILLE-NE
8800 Baymeadows Way, Ste. 100
Jacksonville, Florida 32256-7577
Jacksonville Phone: (904) 256-1700
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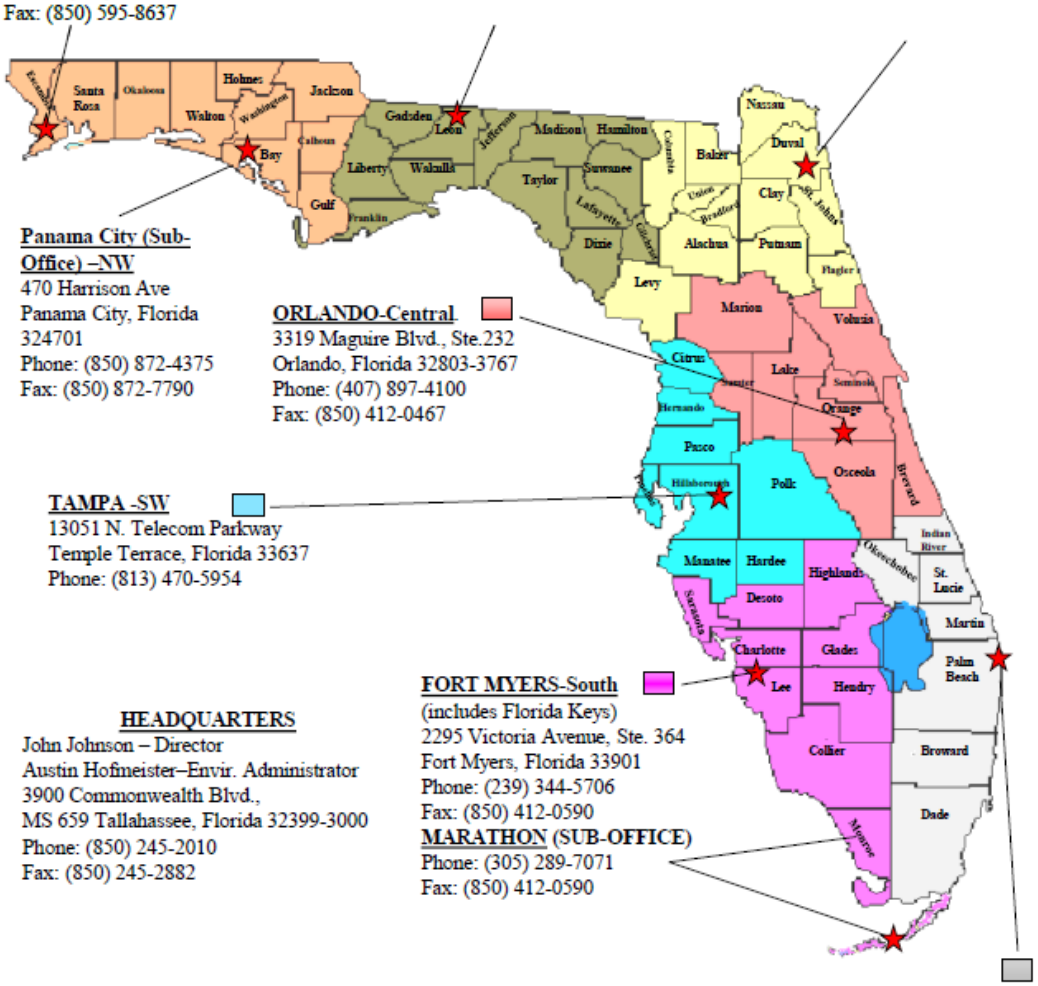

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MARATHON (SUB-OFFICE)
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STATE WATCH OFFICE
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★ **Stars indicate office location.**

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