



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

**Guidelines for the Mitigation of Motor Vehicles Fluid Spills (Non-Cargo)**

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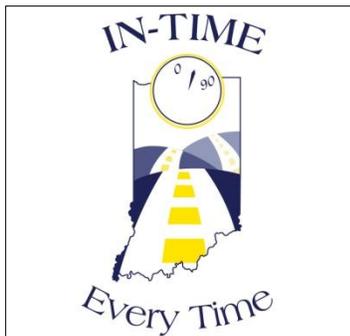
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**Background and Purpose of the Guidance:**

The Indiana Department of Environmental Management (IDEM) is providing this guidance on what actions to take in the initial moments of a traffic incident response to help reduce the duration of a response, the resulting traffic congestion, and the likelihood of secondary incidents.



The IN-TIME logo

IDEM is a member of the Indiana Traffic Incident Management Effort (IN-TIME), a group of public and private sector stakeholders that develop and recommend policy and operational protocols for the safe and efficient mitigation of traffic incidents. The Indiana State Police provides general information about IN-TIME on its website at [www.IN.gov/isp/2816.htm](http://www.IN.gov/isp/2816.htm).

IN-TIME strives to improve roadway safety and traffic incident resolution through thoughtful Traffic Incident Management (TIM) practices. Secondary incidents account for a significant portion of all crashes, and the chance of secondary incidents increases until travel lanes are cleared.

After safety, the stated goal of TIM is to clear travel lanes after an incident within 2 hours of the arrival of the first responder. This goal may not be attainable for more complex incidents. However, for the average vehicle incident resulting in little or no injuries where vehicle fluids are spilled, this goal should be achievable. These guidelines are intended to be consistent with the IN-TIME Open Roads Philosophy and the National Unified Goal for Traffic Incident Management.

### **Definitions:**

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

- Absorbent materials are any materials used to absorb spilled vehicle fluids. Absorbent materials are applied, allowed to act, and removed for proper disposal. Absorbents can be commercial products like booms or pads as well as natural materials like dried sawdust, floor sweep, peat moss, clay, or topsoil. Sand is sometimes used to slow down movement of liquids that are *directly* threatening drains or surface waters. However, sand is not an effective absorbent, and in some cases applying sand to stationary spills may cause additional delays in cleanup efforts. See also Traction Aid.
- Cargo means the materials being transported by the motor vehicle. Cargo does not include materials or fluids that are integral in the operation of a motor vehicle. See also Vehicle Fluids.
- Defensive Actions are actions taken to confine already-spilled materials to as small of an area as practical. See also Offensive Actions.
- Offensive Actions are actions taken to patch, plug or otherwise contain leaks in their original container. Note that higher standards of worker safety apply to Offensive Actions.
- Responders may include law enforcement, fire, rescue, towing/recovery, hazmat, road service patrols, contractors, or other agencies that respond to traffic incidents. Employer-provided training, equipment, and health monitoring may apply to cleanup activities based on the level of participation of the individual responder. See OSHA's HAZWOPER for information.
- Responsible Party, also referred to as the RP, is any person who operates, controls or maintains the vehicle from which a spill occurs. The RP is the entity having dominion over the vehicle fluids prior to the spill, *not necessarily the party responsible for the accident*.
- Spill means any unexpected, unintended, abnormal or unapproved dumping, leakage, drainage, seepage, leakage, discharge or other loss of petroleum, hazardous substance, extremely hazardous substance, or objectionable substance. Refer to the Indiana Spill Rule, **327 IAC 2-6.1**, in the Indiana Administrative Code.
- Traction Aids are any material applied to the highway to improve traction conditions. Traction aids are sometimes applied *after* spilled materials and absorbents have

been removed. Sand is probably the most common traction aid. IDEM does not determine when traction aids are necessary and defers to incident commanders, law enforcement or transportation officials.

- **Vehicle Fluids**, or integral operating fluids of a motor vehicle, are non-cargo 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 a vehicle's engine, drive train, fuel tank, wheel assembly, compressor, air handler or other vehicle component. See also Cargo.

### **Scope of the Guidelines:**

These guidelines are primarily intended to guide responders in managing the common spill of motor vehicle fluids. *The guidance is not intended to be used for cargo, especially placarded hazmat spills, where more sophisticated operating practices may be appropriate.* Still, training, protective equipment and other requirements will apply. It is the responsibility of employers to determine and provide levels of training, personal protective equipment and ensure requirements are being met for their employees. Incident Commanders are responsible for overall site safety during an incident response.

### **Responsibilities:**

- **Spill Reporting and a Reporting Exemption for Transportation**—*Immediately report spills that will damage waters to the IDEM 24-Hour Toll Free Spill Line at 1-888-233-7745.* Facilities have reporting requirements, as well, and must report certain spills to the IDEM Spill Line.

The following spills are not required to be reported to the IDEM Spill Line but still *must be cleaned up to the satisfaction of IDEM:*

- integral operating fluids in the use of a motor vehicle,
  - when the total volume of which is less than or equal to fifty-five (55) gallons, and
  - which do not damage waters of the state.
- **Waste Disposal**—Wastes consisting of absorbed vehicle fluids, including gasoline, rarely become regulated as “hazardous wastes.” Spilled vehicle fluids are generally petroleum products. Wastes containing gasoline would have the most potential to be categorized as hazardous because of the benzene content and flammability characteristics, but as long as vehicle fluids, and especially gasoline, are adequately absorbed where no free liquids are present and flammable vapors are not readily evident, absorbed vehicle fluids would not likely become regulated as hazardous waste.

Quantities of gasoline containing absorbent or soil under 220 pounds may generally be containerized and disposed of as solid waste. Any solid waste dumpster service or municipal landfill should be able to accept properly absorbed vehicle fluids. Landfills may have site specific restrictions on when and how materials may enter

their facility. Contact respective disposal services or landfills for their specific restrictions.

Spills of cargo from tanker or commercial transports generating larger quantities of gasoline should be considered hazardous waste.

- **Cleanup and Public Safety**—The Responsible Party is responsible for completing a cleanup; however, the Incident Commander is responsible for public safety during a traffic incident. Unfortunately, many drivers are not aware, able or willing to react to spill incidents on a timeline protective of public safety. But fortunately, responders commonly accomplish adequate cleanups of smaller vehicle fluid spills and restore roadways to safe travel. Qualified responders are encouraged to continue containing spills and clearing roadways in order to maximize highway safety in their communities. This is true even when a Responsible Party hires a private spill contractor, as it may take several hours before a contractor is hired, mobilizes, and arrives on scene. In many cases, spill contractors will replace absorbent materials that were supplied by responder agencies to initiate a spill cleanup.

Responders should be aware of these laws and advise drivers of their obligations, where necessary:

Indiana's Move It Law (Indiana Code 9-26-1-2) requires the driver of a vehicle involved in an accident that does not result in injury, death of a person, entrapment of a person or does not involve the transportation of hazardous materials, shall immediately stop the vehicle at the scene of the accident or as close to the accident as possible in a manner that does not obstruct traffic more than necessary. The driver shall, as soon as safely possible, *move the vehicle off the roadway* to a location as close to the accident as possible in a manner that does not obstruct traffic more than is necessary.

Indiana Quick Clearance/Hold Harmless Law (Indiana Code 9-22-1-32) allows public agencies, towing services and other parties to remove (or move) vehicles or parts *without liability for damages* to the vehicle or cargo. See **Indiana Code 9-22-1-32** for information. Responders can drive, push or pull vehicles as necessary so as to not obstruct traffic more than is necessary and not be liable for damages to the vehicle, parts or cargo. Additional or incidental material spilled during the relocation of the vehicle out of travel lanes can be cleaned up and moved to the roadside with the other absorbents used at the scene. *The Responsible Party remains accountable!*

- **Financial Responsibility**—Responsible Parties, including those who are hesitant to take responsibility for cleanup activities, should be encouraged to hire their own private contractor rather than relying on IDEM to potentially clean up their spill. If IDEM must hire a contractor to mitigate emergency conditions, the Responsible Party may be sued for:
  - Agency costs,

- Civil Penalties up to \$25,000/day per violation, and
- Up to three times the cost of contracted services (based on type of material spilled).

Responders cannot expect to be reimbursed for costs by IDEM but should seek reimbursement directly from Responsible Parties in accordance with statutes listed above.

Contractors may not be hired on behalf of IDEM. Contractors will not be paid by IDEM unless hired and managed by an IDEM On-Scene Coordinator.

Following are additional resources for responders:

Local reimbursement state statutes - Fire Departments and other emergency response agencies may be eligible for Reimbursement for Hazardous Materials Emergency Actions under **Indiana Code 13-25-6** or **Indiana Code 36-8-12.2**.

Federal reimbursement - After seeking reimbursement from a Responsible Party's, or RP's, insurance company, local governments may also apply for reimbursement of certain materials from the US Environmental Protection Agency under the Local Government Reimbursement program. A maximum dollar amount per incident and other restrictions apply. Search online for U.S. EPA Local Government Reimbursement (LGR) for more information.

Emergency assistance—IDEM - If a discharge or threat of a discharge of any contaminant in the environment threatens imminent and substantial danger to human health or the environment, and a Responsible Party cannot be found or is otherwise unable or unwilling to mitigate emergency conditions, then IDEM Emergency Response may be capable of providing goods or services to mitigate emergency conditions. Requests for assistance must be made to IDEM at the 24 hour emergency line at **1(888) 233-7745**. An IDEM Emergency Response On-Scene Coordinator will receive the request and act accordingly.

### **Basic Steps to Follow During an Incident:**

When vehicle fluids are spilled, the primary goal is to safely contain spilled materials from surface waters and drains. Next, restrictions on travel lanes should be returned to normal as soon as conditions allow for the safety of responders and the motoring public. Following these basic steps should help minimize the duration of the incident and decrease the chance for secondary incidents to occur.

### **Identifying time-critical issues and taking action**

- If surface waters are damaged or there is a threat of damage to nearby surface waters—notify IDEM immediately by calling the 24-hour Spill Line at **1 (888) 233-7745**.

- If lane closures will last over 2 hours—initiate traffic control according to DOT requirements using measures such as sign boards, tapered lane control, and blocking vehicles.
- If a medium or large scale cleanup will be needed—notify the Responsible Party(ies) as soon as possible so they can get a private spill contractor mobilized. Search vehicle DOT numbers online for contact info:  
[www.saferys.org/companysnapshot.aspx](http://www.saferys.org/companysnapshot.aspx)

### **Addressing spilled materials**

- Properly identify each spilled material and use appropriate personal protective equipment (*PPE*). Response actions should depend on the responder's level of training and expertise. For qualified responders, it is not necessary to wait for arrival of a private clean-up contractor prior to clearing the roadway. *Remember public safety is at risk!*
- Take offensive action: Shutting fuel valves or pinching soft fuel lines may stop ongoing spillage. Plug/patch kits may be used for breaches in tanks or other containers.
- Take defensive action: Pails, buckets or plastic pools can be used to capture spilling liquids. Spills should be blocked from surface drains and waters. Soils from highway shoulders can be effective for initial diking and berming.
- For spills that have reached waters, contain or mitigate spilled materials as best as possible with materials on hand:
  - Petroleum absorbent booms or pads are ideal.
  - Smaller containment dams can be constructed with dirt from road shoulders.
  - Larger containment dams may be formed by dumping a truckload of dirt or sand directly to the ditch down gradient of the spill area. These dams may only provide short term containment, but may last until spill contractors can arrive with additional resources.

### **Managing waste materials**

- Smaller spills may be absorbed and containerized or placed in the damaged vehicle(s) for removal by the towing company.
- Vehicle fluids captured in buckets can be poured or pumped into drums or other proper containers where available. Containers should be labeled for the materials they contain and moved well out of travel lanes for disposal at cost to the Responsible Party.
- Wastes should be swept from the travel lanes as soon as free liquids are absorbed. Many times this work can coincide with other incident actions like towing/recovery, fire crew cleanup, etc.
- Reducing the contact time of spilled materials on road surfaces also reduces the likelihood of chemical damage or erosion of the road surface. More severe damages may cause further impacts to your community through unrecovered repair costs and additional traffic congestion during repair activities.
- Free liquids should be absorbed as much as possible prior to soaking into roadside soils. Reducing the amount of contaminated soils will reduce later congestion

related to soil removal. Congestion introduces higher likelihood of secondary incidents.

- For larger spills, absorbent material may be bagged in heavy-duty trash bags, wrapped or “diapered” in plastic sheeting, or containerized in pails, barrels or lined dumpsters. It is helpful to label containers with the Responsible Party, or RP, name, or crash number, and type of absorbent used and the vehicle fluids they likely contain. If wastes are likely to stay beyond the same day, responders should make efforts to secure absorbents from exposure to rain or storm water runoff. Care should be taken not to overload waste containers. Trash bags should be less than 15 lbs.

### **Reopening the road**

- After absorbents are moved from the roadway, slippery spill areas may be dried up by leaving a film of Portland cement dust on the spill area. Portland cement also seems to help halt chemical degradation of pavement. Portland cement may not be practical in rain or snowy conditions. If Portland cement is not readily available, sand is commonly applied to increase traction.
- The Incident Commanders and responders will determine when the roadway is safe to reopen after absorbed materials are swept from the roadway and other conditions are right (vehicle is moved, emergency equipment is gone or relocated out of travel lanes, etc.).
- Law enforcement officers or other officials filling out INDOT “Pink Tags” should be sure to note damages to state property from spilled materials. Damages may include erosion of paved surfaces (diesel and hydraulic fluid sometimes dissolve asphalt), petroleum stained or saturated soils, or waste absorbents left on site needing disposal. This information establishes a chain or record of information that assists public officials in getting the Responsible Party’s insurance to cover these costs.

### **Working with Responsible Party(ies)**

- Incident Commanders should ensure Responsible Parties are notified when:
  - A spill occurred from their vehicle,
  - Wastes staged along the road require proper disposal at their expense,
  - Responder services provided are likely to be billed,
  - Further cleanup may be necessary, including contaminated soil removal and site restoration.
- The Responsible Party’s spill contractor(s) will coordinate with IDEM and INDOT, where necessary, for excavation permits, disposal of wastes, and site restoration. Even if contractors respond immediately to contain spilled materials, it may be up to several days before follow up work will occur. Prior to digging, underground utilities may need to be located, work permits from INDOT may need to be approved, and weather may need to be favorable.

### **Contacting IDEM with questions**

Contact IDEM for technical assistance during an incident response, 24 hours a day, at **1(888) 233-7745**. For general information, please call during normal business hours.