



U.S. Department of Transportation  
Research and Special Programs  
Administration

## HAZARDOUS MATERIALS INCIDENT REPORT

Form Approval OMB No. 2137-0039

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 2137-0039. The filling out of this information is mandatory and will take 96 minutes to complete.

INSTRUCTIONS: Submit this report to the Information Systems Manager, U.S. Department of Transportation, Research and Special Programs Administration, Office of Hazardous Materials Safety, DHM-63, Washington, D.C. 20590-0001. If space provided for any item is inadequate, use a separate sheet of paper, identifying the entry number being completed. Copies of this form and instructions can be obtained from the Office of Hazardous Materials Website at <http://hazmat.dot.gov>. If you have any questions, you can contact the Hazardous Materials Information Center at 1-800-HMR-4922 (1-800-467-4922) or online at <http://hazmat.dot.gov>.

### PART I - REPORT TYPE

1. This is to report: ☐ A) A hazardous material incident ☐ B) An undeclared shipment with no release  
☐ C) A specification cargo tank 1,000 gallons or greater containing any hazardous materials that (1) received structural damage to the lading retention system or damage that requires repair to a system intended to protect the lading retention system and (2) did not have a release
2. Indicate whether this is: ☐ An initial report ☐ A supplemental (follow-up) report ☐ Additional pages

### PART II - GENERAL INCIDENT INFORMATION

3. Date of Incident: \_\_\_\_\_ 4. Time of Incident (use 24-hour time): \_\_\_\_\_
5. Enter National Response Center Report Number (if applicable): \_\_\_\_\_
6. If you submitted a report to another Federal DOT agency, enter the agency and report number: \_\_\_\_\_
7. Location of Incident: City: \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_ ZIP Code (if known): \_\_\_\_\_  
 Street Address/Mile Marker/Yardname/Airport/Body of Water/River Mile \_\_\_\_\_
8. Mode of Transportation ☐ Air ☐ Highway ☐ Rail ☐ Water
9. Transportation Phase ☐ In Transit ☐ Loading ☐ Unloading ☐ In Transit Storage
10. Carrier/Reporter Name \_\_\_\_\_  
 Street \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ ZIP Code \_\_\_\_\_  
 Federal DOT ID Number \_\_\_\_\_ Hazmat Registration Number \_\_\_\_\_
11. Shipper/Officer Name \_\_\_\_\_  
 Street \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ ZIP Code \_\_\_\_\_  
 Waybill/Shipping Paper \_\_\_\_\_ Hazmat Registration Number \_\_\_\_\_
12. Origin (if different from shipper address) Street \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ ZIP Code \_\_\_\_\_
13. Destination Street \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ ZIP Code \_\_\_\_\_
14. Proper Shipping Name of Hazardous Material: \_\_\_\_\_
15. Technical/Trade Name: \_\_\_\_\_
16. Hazardous Class/ Division: \_\_\_\_\_ 17. Identification Number: \_\_\_\_\_ (E.g. UN2764, NA 2020) 18. Packing Group: \_\_\_\_\_ (if applicable) 19. Quantity Released: \_\_\_\_\_ (Include Measurement Units)
20. Was the material shipped as a hazardous waste? ☐ Yes ☐ No If yes, provide the EPA Manifest Number: \_\_\_\_\_
21. Is this a Toxic by Inhalation (TIH) material? ☐ Yes ☐ No If yes, provide the Hazard Zone: \_\_\_\_\_
22. Was the material shipped under an Exemption, Approval, or Competent Authority Certificate? ☐ Yes ☐ No  
 If yes, provide the Exemption, Approval, or CA number: \_\_\_\_\_
23. Was this an undeclared hazardous materials shipment? ☐ Yes ☐ No

### PART III - PACKAGING INFORMATION

24. Check Packaging Type (check only one – if more than one, list type of packaging, copy Part III, and complete for each type:

- |                                   |                              |  |                                      |
|-----------------------------------|------------------------------|--|--------------------------------------|
| <input type="checkbox"/> Non-bulk | <input type="checkbox"/> IBC | <input type="checkbox"/> Cargo Tank Motor Vehicle (CTMV) | <input type="checkbox"/> Tank Car    |
| <input type="checkbox"/> Cylinder | <input type="checkbox"/> RAM | <input type="checkbox"/> Portable Tank                   | <input type="checkbox"/> Other _____ |

25. See instructions and enter the appropriate failure codes found at the end of the instructions. Be sure to enter the codes from the list that corresponds to the particular packaging type checked above. Enter the number of codes as appropriate to describe the incident. Enter the most important failure point in line 1. If there are more than two failure points, provide in this format in Part VI.

- |                       |                   |                          |
|-----------------------|-------------------|--------------------------|
| 1. What Failed: _____ | How Failed: _____ | Causes of Failure: _____ |
| 2. What Failed: _____ | How Failed: _____ | Causes of Failure: _____ |

26a. Provide the packaging identification markings, if available.

Identification Markings: \_\_\_\_\_

(Examples: 1A1/Y1.4/150/92/USA/RB/93/RL, UN31H1/Y0493/USA/M9339/10800/1200, DOT - 105A - 100W (RAIL), DOT 406 (HIGHWAY), DOT 51, DOT 3-A)

26b. For Non-bulk, IBC, or non-specification packaging, if identification markings are incomplete or unavailable, see instructions and complete the following:

**Single Package or Outer Packaging:**

Packaging Type: \_\_\_\_\_

Material of Construction: \_\_\_\_\_

Head Type (Drums only): ☐ Removable ☐ Non-Removable

**Single Package or Inner Packaging (if any):**

Packaging Type: \_\_\_\_\_

Material of Construction: \_\_\_\_\_

27. Describe the package capacity and the quantity:

**Single Package or Outer Packaging:**

Package Capacity: \_\_\_\_\_

Amount in Package: \_\_\_\_\_

Number in Shipment: \_\_\_\_\_

Number Failed: \_\_\_\_\_

**Single Package or Inner Packaging (if any):**

Package Capacity: \_\_\_\_\_

Amount in Package: \_\_\_\_\_

Number in Shipment: \_\_\_\_\_

Number Failed: \_\_\_\_\_

28. Provide packaging construction and test information, as appropriate:

Manufacturer: \_\_\_\_\_

Manufacture Date: \_\_\_\_\_

Serial Number: \_\_\_\_\_

Last Test Date: \_\_\_\_\_

Material of Construction: \_\_\_\_\_ (if Tank Car, CTMV, Portable Tank, or Cylinder)

Design Pressure: \_\_\_\_\_ (if Tank Car, CTMV, Portable Tank)

Shell Thickness: \_\_\_\_\_ (if Tank Car, CTMV, Portable Tank)

Head Thickness: \_\_\_\_\_ (if Tank Car, CTMV)

Service Pressure: \_\_\_\_\_ (if Cylinder)

If valve or device failed:

Type: \_\_\_\_\_ Manufacturer: \_\_\_\_\_ Model: \_\_\_\_\_  
(if present and legible) (if present and legible)

29. If the packaging is for Radioactive Materials, complete the following:

Packaging Category: ☐ Type A ☐ Type B ☐ Type C ☐ Excepted ☐ Industrial

Packaging Certification: ☐ Self Certified ☐ U.S. Certification Certification Number \_\_\_\_\_

Nuclide(s) Present: \_\_\_\_\_ Transport Index: \_\_\_\_\_

Activity: \_\_\_\_\_ Critical Safety Index: \_\_\_\_\_

## PART IV - CONSEQUENCES

30. Result of Incident (check all that apply): ☐ Spillage ☐ Fire ☐ Explosion ☐ Material Entered Waterway/Storm Sewer  
☐ Vapor (Gas) Dispersion ☐ Environmental Damage ☐ No Release
31. Emergency Response: The following entities responded to the incident: (Check all that apply)  
☐ Fire/EMS Report # \_\_\_\_\_ ☐ Police Report # \_\_\_\_\_ ☐ In-house cleanup ☐ Other Cleanup
32. Damages: Was the total damage cost more than \$500? ☐ Yes ☐ No  
If yes, enter the following information: If no, go to question 33.  
Material Loss: \_\_\_\_\_ Carrier Damage: \_\_\_\_\_ Property Damage: \_\_\_\_\_ Response Cost: \_\_\_\_\_ Remediation/Cleanup Cost: \_\_\_\_\_  
\$ \_\_\_\_\_ \$ \_\_\_\_\_ \$ \_\_\_\_\_ \$ \_\_\_\_\_ \$ \_\_\_\_\_  
(See damage definitions in the instructions)
- 33a. Did the hazardous material cause or contribute to a human fatality? ☐ Yes ☐ No  
If yes, enter the number of fatalities resulting from the hazardous material:  
Fatalities: \_\_\_\_\_ Employees \_\_\_\_\_ Responders \_\_\_\_\_ General Public \_\_\_\_\_
- 33b. Were there human fatalities that did not result from the hazardous material? ☐ Yes ☐ No If yes, how many? \_\_\_\_\_
34. Did the hazardous material cause or contribute to personal injury? ☐ Yes ☐ No  
If yes, enter the number of injuries resulting from the hazardous material:  
Hospitalized (Admitted Only): \_\_\_\_\_ Employees \_\_\_\_\_ Responders \_\_\_\_\_ General Public \_\_\_\_\_  
Non-Hospitalized: \_\_\_\_\_ Employees \_\_\_\_\_ Responders \_\_\_\_\_ General Public \_\_\_\_\_  
(e.g.: On site first aid or Emergency Room observation and release)
35. Did the hazardous material cause or contribute to an evacuation? ☐ Yes ☐ No  
If yes, provide the following information:  
Total number of general public evacuated \_\_\_\_\_ Total number of employees evacuated \_\_\_\_\_ Total evacuated \_\_\_\_\_  
Duration of the evacuation \_\_\_\_\_ (hours)
36. Was a major transportation artery or facility closed? ☐ Yes ☐ No If yes, how many? \_\_\_\_\_ (hours)
37. Was the material involved in a crash or derailment? ☐ Yes ☐ No  
If yes, provide the following information: Estimated speed (mph): \_\_\_\_\_ Weather conditions: \_\_\_\_\_  
Vehicle overturn? ☐ Yes ☐ No  
Vehicle left roadway/track? ☐ Yes ☐ No

## PART V - AIR INCIDENT INFORMATION (please refer to §175.31 to report a discrepancy for air shipments)

38. Was the shipment on a passenger aircraft? ☐ Yes ☐ No  
If yes, was it tendered as cargo, or as passenger baggage?  
☐ Cargo ☐ Passenger baggage
39. Where did the incident occur (if unknown, check the appropriate box for the location where the incident was discovered)?  
☐ Air carrier cargo facility ☐ Sort center ☐ Baggage area  
☐ By surface to/from airport ☐ During flight ☐ During loading/unloading of aircraft
40. What phase(s) had the shipment already undergone prior to the incident? (Check all that apply)  
☐ Shipment had not been transported ☐ Transported by air (first flight) ☐ Transport by air (subsequent flights)  
☐ Initial transport by highway to cargo facility ☐ Transfer at sort center/cargo facility

## PART VI - DESCRIPTION OF EVENTS & PACKAGE FAILURE

Describe the sequence of events that led to the incident and the actions taken at the time it was discovered. Describe the package failure, including the size and location of holes, cracks, etc. Photographs and diagrams should be submitted if needed for clarification. Estimate the duration of the release, if possible. Describe what was done to mitigate the effects of the release. Continue on additional sheets if necessary.

## PART VII - RECOMMENDATIONS/ACTIONS TAKEN TO PREVENT RECURRENCE

Where you are able to do so, suggest or describe changes (such as additional training, use of better packaging, or improved operating procedures) to help prevent recurrence. Provide recommendations for improvement to hazardous materials transportation beyond the control of your individual company. Continue on additional sheets if necessary.

## PART VIII - CONTACT INFORMATION

Contact's Name (Type or Print): \_\_\_\_\_

Contact's Title: \_\_\_\_\_

Business Name and Address: \_\_\_\_\_

E-mail Address: \_\_\_\_\_

Preparer is: ☐ Carrier ☐ Shipper ☐ Other \_\_\_\_\_

Telephone Number: (\_\_\_\_) \_\_\_\_\_

Fax Number: (\_\_\_\_) \_\_\_\_\_

Hazmat Registration Number (if not already provided): \_\_\_\_\_

Date: \_\_\_\_\_

☐ Facility Owner/Operator

# Guide for Preparing Hazardous Materials Incidents Reports

## Overview

### Hazardous Materials Incident Report Department of Transportation Form F 5800.1

#### What Federal Regulation Requires Me To Submit the Report?

The Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) require that certain types of incidents be reported to the Research and Special Programs Administration (RSPA). Section 171.15 of the HMR requires an immediate telephonic report (within 12 hours) of certain types of hazardous materials incidents and a follow-up written report. Section 171.16 requires a written report for certain types of hazardous materials incidents within 30 days. Each type of report is explained below. (The full text of these sections is at the end of the instructions.)

#### What Is the Purpose of the Report?

The information you are providing in this report is fundamental to hazardous material transportation risk analysis and risk management by government and industry. It allows us to better understand the causes and consequences of hazardous material transportation incidents. The data is used to identify trends and provide basic program performance measures. It helps to demonstrate the effectiveness of existing regulations and to identify areas where changes should be considered. It also assists all parties, including industry segments and individual companies, in understanding the types and frequencies of incidents, what can go wrong, and possible measures that would prevent their recurrence. Your accurate and complete description of incidents can make a significant contribution to continual safety improvement through better regulations, cooperative partnerships, and individual efforts.

#### Who Must Complete the Report?

Any person in possession of a hazardous material during transportation, including loading, unloading and storage incidental to transportation, must report to the Department of Transportation (DOT) if certain conditions are met. This means that when the conditions apply for completing the report, the entity having physical control of the shipment is responsible for filling out and filing Form DOT F 5800.1.

For example, if a shipper is carrying hazardous material, the consignee is unloading the material and there is an incident involving this material, the consignee is responsible for filling out and filing the form. However, if the consignee is unloading the hazardous material and causes a hazardous materials incident involving a consignment intended for someone else, the shipper is responsible for filling out and filing the form.

#### What Definitions Should I Know in Order To Complete the Report?

In order to accurately complete the report, you should be familiar with the following terms. A complete list of definitions is contained in §171.8.

**Bulk packaging** — a packaging, other than a vessel or a barge, including a transport vehicle or freight container, in which hazardous materials are loaded with no intermediate form of containment and which has:

- (1) A maximum capacity greater than 450 liters (119 gallons) as a receptacle for a liquid;
- (2) A maximum net mass greater than 400 kilograms (822 pounds) and a maximum capacity greater than 450 liters (119 gallons) as a receptacle for a solid; or
- (3) A water capacity greater than 454 kilograms (1000 pounds) as a receptacle for a gas as defined in §173.115.

**Cargo tank** — a bulk packaging which is:

- (1) A tank intended primarily for the carriage of liquids or gases and includes appurtenances, reinforcements, fittings, and closures;
- (2) Is permanently attached to or forms a part of a motor vehicle, or is not permanently attached to a motor vehicle but which, by reason of its size, construction, or attachment to a motor vehicle, is loaded or unloaded without being removed from the motor vehicle; and
- (3) Is not fabricated under a specification for cylinders, intermediate bulk containers, multi-unit tank car tanks, portable tanks, or tank cars.

**Hazardous material** — a substance or material that has been determined to be capable of posing an unreasonable risk to health, safety,

and property when transported in commerce, and that has been so designated. The term includes hazardous substances, hazardous wastes, marine pollutants, elevated temperature materials, materials designated as hazardous under the provisions of §172.101, the Hazardous Materials Table (HMT), and materials that meet the defining criteria for hazard classes and divisions in Part 173.

**Hazardous substance** — a material, including its mixtures and solutions, that —

- (1) Is listed in Appendix A to §172.101;
- (2) Is in a quantity, in one package, which equals or exceeds the reportable quantity (RQ) listed in Appendix A to §172.101; and
- (3) When in a mixture or solution —
  - (i) For radionuclides, conforms to paragraph 7 of Appendix A to §172.101.
  - (ii) For other than radionuclides, is in a concentration by weight which equals or exceeds the concentration corresponding to the RQ of the material, as shown in the following table:

Table 1 - Reportable Quantities

RQ pounds (kilograms)	Concentration by weight	
	Percent	PPM
5000 (2270)	10	100,000
1000 (454)	2	20,000
100 (45.4)	0.2	2,000
10 (4.54)	0.02	200
1 (0.454)	0.002	20

The term hazardous substance does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance in Appendix A to §172.101, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas useable for fuel (or mixtures of natural gas and such synthetic gas).

**Hazardous waste** — any material that is subject to the Hazardous Waste Manifest Requirements of the U.S. Environmental Protection Agency specified in 40 CFR Part 262.

**Marine pollutant** — a material that is listed in Appendix B to §172.101 (also see §171.4) and, when in a solution or mixture of one or more marine pollutants, is packaged in a concentration that equals or exceeds:

- (1) Ten percent by weight of the solution or mixture for materials listed in Appendix B; or
- (2) One percent by weight of the solution or mixture for materials that are identified as severe marine pollutants in Appendix B.

**Undeclared hazardous material** — means a hazardous material that is:

- (1) Subject to any of the hazard communication requirements in Subparts C (Shipping Papers), D (Marking), E (Labeling), and F (Placarding) of Part 172 of this subchapter, or an alternative marking requirement in Part 173 of this subchapter (such as §§173.4(a)(10) and 173.6(c)); and
- (2) Offered for transportation in commerce without any visible indication to the person accepting the hazardous material for transportation that a hazardous material is present, on either an accompanying shipping document, or the outside of a transport vehicle, freight container, or package.

**Unintentional release** — the escape of a hazardous material from a package on an occasion not anticipated or planned. This includes releases resulting from collision, package failures, human error, criminal activity, negligence, improper packing, or unusual conditions such as the operation of pressure relief devices as a result of over-pressurization, overfill, or fire exposure. It does not include releases, such as venting of packages, where allowed, and the operational discharge of contents from packages.

Additionally, for purposes of reporting on this form, the following definitions should be used:

**Lading retention system** — a lading retention system consists of those items or equipment that provide containment of hazardous materials at some point during transportation, including loading and unloading. The cargo tank shell, associated piping, and valves are an example of a lading retention system. Dents or damage to a tank requiring repair to an accident protection system guarding the tank are examples of incidents that must be reported. Paint chips and scratches to either the tank or the accident protection system are examples of incidents that do not require reporting.

**Major transportation artery** — a highway, main road or secondary road but not a side street or dirt road. In the case of rail, any rail line except a rail spur.



## When Must I Submit a Written Report (DOT Form F 5800.1)?

Under §171.16, you must submit a written report within 30 days after any of the following:

- An incident that was reported by telephonic notice under §171.15;
- An unintentional release (see definitions) of a hazardous material during transportation including loading, unloading and temporary storage related to transportation;
- A hazardous waste is released;
- An undeclared shipment with no release is discovered; or
- A specification cargo tank 1,000 gallons or greater containing any hazardous materials that (1) received structural damage to the lading retention system or damage that requires repair to a system intended to protect the lading retention system, and (2) did not have a release.

To clarify the requirement for a report based on structural damage to a specification cargo tank, the table below illustrates some examples:

**Table 2 - Examples to Clarify When to Report Structural Damage to a Specification Cargo Tank**

Incident report required	No incident report required
Damage to an outlet valve that affects seating and requires replacement.	Handle broken or knocked off valve — but otherwise undamaged.
Serious damage that, if worse, could have resulted in the loss of the contents of the cargo tank. Damage to outlet lines that contain hazardous materials during transportation is in this category.	Serious damage that, even if worse, would not have resulted in the loss of the contents of the cargo tank. Damage to outlet lines that are normally not charged during transportation is in this category.
Cargo tank damage that requires professional inspection or recertification to ensure it is capable of meeting requirements.	Minor damage that obviously will not affect continuation of the cargo tank in service.
Cargo tank damage that requires immediate or subsequent repair because of questions about cargo tank integrity.	Cargo tank damage that requires repair for cosmetic reasons only.

## When Is a Report Not Required?

You are not required to report a release of a hazardous material if ALL of the following apply:

- The shipment is not being offered for transportation or being transported by air;
- None of the criteria in §171.15(a) applies;
- The material is not a hazardous waste;
- The material is properly classified as an ORM-D, or a Packing Group III material in Class or Division 3, 4, 5, 6.1, 8, or 9;
- Each package has a capacity of less than 20 liters (5.2 gallons) for liquids or less than 30 kg (66 pounds) for solids;
- The total aggregate release is less than 20 liters (5.2 gallons) for liquids or less than 30 kg (66 pounds) for solids;
- The material does not meet the definition of an undeclared hazardous material in §171.8; AND
- The shipment is an undeclared material discovered in an air passenger's checked or carry-on baggage during the airport screening process.

Also, you are not required to report releases of minimal amounts of material (i.e., a pint or less) released from the manual operation of seals of pumps, compressors, or valves, during the connecting or disconnecting of loading and unloading lines, or, for materials for which venting is authorized, from vents, provided these releases do not result in property damage or trigger any of the telephonic notifications requirements found in §171.15.

## When Must I Make a Telephonic Report?

Under §171.15, you must provide telephone notice within 12 hours after the incident occurs when one of the following conditions occurs during the course of transportation and is a direct result of the hazardous material:

- A person is killed;
- A person receives an injury requiring admittance to a hospital;
- The general public is evacuated for one hour or more;
- One or more major transportation arteries or facilities are closed for one hour or more;
- The operational flight plan or routine of an aircraft is altered;
- Fire, breakage, spillage or suspected radioactive contamination occurs involving a radioactive material;
- Fire, breakage, spillage or suspected contamination occurs involving an infectious substance other than a diagnostic specimen or regulated medical waste;

- There is a release of a marine pollutant in a quantity exceeding 450 liters (119 gallons) for liquids or 400 kilograms (882 pounds) for solids; or
- A situation exists of such a nature that in the judgment of the person in possession of the hazardous material, it should be reported to DOT's National Response Center (NRC) even though it does not meet the above criteria.

You may decide that the situation should be reported even though it does not meet any of the above criteria.

Make sure that you request the NRC report number when you make your telephonic report.

## What Telephone Number Do I Call To Make an Immediate Notification of a Hazardous Materials Incident?

You must call 800-424-8802 (toll-free) or 202-267-2675 (toll-call) to make a telephonic incident report. This is the number to the NRC. This call must be made within 12 hours of the events that trigger this requirement. If the incident involves an infectious substance, you may notify the Director, Center for Disease Control and Prevention (CDC), U.S. Public Health Service, Atlanta, Georgia, toll-free at 800-232-0124. If a discrepancy of a shipment intended for air is discovered following its acceptance aboard aircraft, notify the nearest Federal Aviation Administration Civil Aviation Security Office as soon as practical.

## How Long Do I Have To Submit the Written Report?

You must submit your written report within 30 days of discovery of the incident, §171.16(a).

## Am I Required To Update the Information in the Report?

Yes. You must use DOT Form F 5800.1 and check the "A supplemental (follow-up) report" box on question 2 to provide additional information after the initial report. You are required to provide updates for up to one year after the initial filing if more information is gained or new developments arise concerning the following, for example:

- A death results from injuries caused by a hazardous material;
- The person responsible for preparing the original report learns that there is a misidentification of hazardous material or package information;
- Damage or loss or related costs that were not known at the time the report was filed become known; or
- Revised estimates of damages, losses, and related costs result in a change of \$25,000 or more, or 10% of the original cost estimates, whichever is greater, even if the original estimate was under \$500.

## How and Where Do I Submit My Completed Report?

- You can mail paper copies of the report to the Information Systems Manager, U.S. Department of Transportation, Research and Special Programs Administration, Office of Hazardous Materials Safety, DHM-63, Washington, DC 20590-0001; or
- You can submit the report on-line at <http://hazmat.dot.gov>.

## How Long Must I Keep a Copy of the Report?

You must keep a copy of each report or an electronic image of the report for two years after the date you submit it to RSPA (§171.16(b)(3)).

## Where Must I Keep a Copy of the Report?

The report must be accessible through your company's principal place(s) of business. You must be able to make the report available upon request to authorized representatives or a special agent of the Department within 24 hours of such a request (§171.16(b)(3)).

## How Can I Get a Blank Copy of the Form F 5800.1?

There are a variety of sources for obtaining the DOT Form F 5800.1. Please note that you are allowed to make unlimited photocopies of the form and distribute them.

- You may obtain limited copies of the form from the Information Systems Manager at the above address.
- You may download a copy of the form from our website at <http://hazmat.dot.gov/spills.htm>.
- Our Fax on Demand service has copies of the instructions and the form. Call 1-800-467-4922 and choose the Fax on Demand option #2.

## How Long Does It Take To Complete the Report?

RSPA anticipates that it will take you approximately 1.6 hours to complete this report. This estimate includes the time it will take you to review the instructions, search your existing data sources for information, gather the required data, and complete and review the report.

## How Can I Comment on the Length of Time Needed To Complete the Report or on the Amount of Information Required in the Report?

You can send your comments on the report, and any suggestions you have for reducing the amount of time needed to complete the report, to the following address:

(1) Information Systems Manager, U.S. Department of Transportation, Research and Special Programs Administration, Office of Hazardous Materials Safety, DHM-63, Washington, DC 20590-0001.

Please verify that your information is accurate. Although the required information is generally available at the time of the incident, you may need to do some additional investigation in order to obtain all of the facts pertaining to deaths, injuries or damage amounts. If you submit complete and accurate information at the time you file the report, it will decrease the chance of your having to supply missing information to DOT at a later date. RSPA may follow up on incomplete forms.

## Instructions Completing DOT Form F 5800.1

Please print. Fill in all applicable blanks accurately to the best of your ability.

### Part I: Report Type

**(1) This is to report:** Check the box that describes why you are filling out this form. This will normally be "A) A hazardous material incident." If you are reporting an undeclared shipment with no release, check the corresponding box, "B)." If you are reporting an incident involving a cargo tank motor vehicle containing a hazardous material that received structural damage to the lading retention system that may affect its ability to retain lading but does not release a hazardous material, check that appropriate box, "C)."

**(2) Indicate what type of report this is:** If this is an initial report, check the "initial report" box. If this is a follow-up to a previous report, check the "A supplemental (follow-up) report" box. If you are using additional pages, check the "Additional Pages" box.

### Part II: General Incident Information

**(3), (4) Date & Time of Incident:** Enter the date and time the incident occurred. If you do not know the actual date and time, give the date and time you discovered the incident. Use 24-hour time for the incident time (e.g. "2400" for midnight, "1200" for noon, "0747" for 7:47 a.m., "2115" for 9:15 p.m.).

**(5) Enter National Response Center Report Number:** If this incident was reported to the National Response Center (NRC), fill in the report number NRC assigned to the incident.

**(6) If you submitted a report to another Federal DOT agency, enter the agency and report number:** If you were required to fill out a report for another federal agency such as the Federal Railroad Administration (FRA) or the Federal Motor Carrier Safety Administration (FMCSA) for this incident, please include the agency and report number. This will facilitate our combination of information.

**(7) Location of Incident:** Enter the geographic location of the incident (city, county, state, and zip code). If you do not know the actual location where the incident occurred, give the location where it was discovered. If the incident occurred at an airport or rail yard, include the name of the facility. If the incident occurred on a body of water, include the name and/or river mile. If you do not know the street address, or if the incident occurred on a highway, include a description such as "On I-70, mile marker 240."

**(8) Mode of Transportation:** Enter the code that corresponds to the mode of transportation in which the incident occurred or was discovered. If the incident occurred or was discovered in an in-transit storage area (e.g., a terminal or warehouse), check the box that corresponds to the mode by which the package was last transported.

**(9) Transportation Phase:** Enter the code that describes where the incident occurred in the transportation system. In transit means the incident occurred or was first discovered while the package was in the process of being transported. In-transit storage is storage incidental to transportation, such as at a terminal waiting for the next leg of transportation.

**(10) Carrier/Reporter:** Provide the name, street address, Federal DOT number (if applicable), and hazmat registration number of the carrier or the entity who is reporting the incident (if other than a carrier). The entity in physical possession of the material when the incident occurred or was discovered must report the incident.

**(11) Shipper/Officer:** Enter the information about the person or entity that originally offered for transportation the material or package involved in the incident.

**(12) Origin:** Enter the origin of the shipment if the address is different than the shipper/officer information entered in item #11.

**(13) Destination:** Enter the final destination of the shipment involved in the incident.

**(14) through (19):**

**Hazardous Material Description:** Enter the proper shipping name, technical or trade name, hazard class or division, ID number, packing group, and amount of material released. All of this information, except the amount of material released, can be found on the shipping papers that accompany the shipment, §172.202. When indicating the amount of material released, include units of measurements (examples: 115 gallons, 69 tons).

**(20) Was the material shipped as a hazardous waste?** Check the "Yes" box if the material meets the definition of a hazardous waste in §171.8 (requires an EPA Uniform Hazardous Waste Manifest). Include the EPA Manifest number.

**(21) Is this a Toxic by Inhalation (TIH) material?** If the material involved in the incident meets the definition of a Toxic by Inhalation material in §173.132, check the "Yes" box and enter the Hazard Zone in the space provided.

**(22) Was the material shipped under an Exemption, Approval, or Competent Authority Certificate?** If the shipment was shipped under an exemption, an approval, or a Competent Authority Certificate, check the "Yes" box and provide the appropriate assigned number.

**(23) Was this an undeclared hazardous materials shipment?** If this material was not indicated in any way to be a hazardous material even though it was required to be described as such on a shipping paper, or if the material would normally be excepted from the shipping paper requirements (such as a small quantity material) and does not have the required markings, it is considered an undeclared hazardous material shipment. Check the appropriate box.

### Part III: Packaging Information

**(24) Packaging Type:** Check the box that corresponds to the type of packaging involved in the incident. If more than one packaging type was involved in an incident, reproduce Part III of the form and fill out this section for each of the packaging types. For example, if three different packaging types were involved in an incident, fill out a separate Part III for each packaging type. If the type of packaging is not represented, check the "Other" box and enter a brief description such as "non-specification bulk bin."

**(25) Enter the appropriate failure codes (found at the end of the instructions):** Enter the codes that describe what failed on the packaging, how the packaging failed, and the cause(s) of the failure. Be sure to enter the codes from the list that corresponds to the particular packaging types checked above (#24). Enter the most important failure point in line 1. If there is a second failure point, enter in line 2. If there are more than two failure points, provide additional information in this format in Part VI. The following explains the content of each line:

**What Failed:** You can enter up to 2 "What Failed" codes to describe the part of the packaging that fails and was the immediate cause of the release. Often, on a simple packaging, only one code will be required. On more complex packaging, additional entries will help identify where that failure occurred. The first entry should designate the specific point of failure, followed by entries that help identify where that failure occurred. For instance, a deteriorated gasket on a pipe flange on the liquid line would have failure code 121 for gasket entered first and failure code 118 for flange entered second.

**How Failed:** Enter the "Failure" code that describes how the corresponding part of the packaging failed. The primary way the packaging failed should be entered first.

**Cause(s) of Failure:** Enter the "Cause of Failure" code that describes what caused the corresponding part of the packaging to fail in the way it did. The most probable or fundamental cause of failure should be entered first.

If none of the codes on the list fit exactly, use the closest matches and provide additional detail in Part VI. Also, if you believe a better set of codes would be more descriptive of what failed, how it failed, and the causes of failure, suggest them in Part VII.

**(26a) Provide the complete packaging identification markings, if available:** Every specification packaging, UN or DOT, has a packaging identification printed or stamped on it or on a plate attached to the packaging. Examples are provided on the form.

**(26b) For Non-bulk, IBC, or non-specification packaging:** Only fill out 26b if the marking is incomplete, destroyed, or unknown. Fill in the Outer and Inner packaging type and material of construction information, as appropriate. If the packaging is Non-bulk or Intermediate Bulk Container (IBC), use the codes below to enter the number or letter that applies for either Non-bulk or IBC packaging. For non-bulk, IBC or non-specification packaging provide a description of the packaging in the space(s) provided.

**Table 3 - Non-bulk and IBC Packaging Identification Codes**

Non-Bulk Packaging		
Outer Packaging		
Type	Material	Head Type
1 Drum	A Steel	1 Non-removable
2 Wooden Barrel	B Aluminum	2 Removable
3 Jerrican	C Natural Wood	
4 Box	D Plywood	
5 Bag	F Reconstituted Wood	
6 Composite Packaging	G Fiberboard	
7 Pressure receptacle	H Plastic	
	L Textile	
	M Paper, multi-wall	
	N Metal other than steel or aluminum	
	P Glass, porcelain, or stoneware	
Inner Packaging		
1 Bottle	A Metal (any type)	
2 Can	B Glass, porcelain, or stoneware	
3 Box	C Plastic	
4 Bag	D Fiberboard or cardboard	
5 Cylinder	E Wood (any type)	
IBC Packaging Identification Codes		
Material of Construction		
1 Metal	3 Composite	5 Wooden
2 Plastic	4 Fiberboard	6 Flexible

**(27) Describe the package capacity and the quantity:** Enter the total capacity of the inner and outer package. Also enter the actual amount of hazardous material that was shipped in the package, the number of packages in the shipment, and the number of packages that failed. Please include the units of measurement (liter, gallons, pounds, cubic feet, etc.)

**(28) Provide package construction and test information, as appropriate:** In the case of Non-bulk packagings or IBCs enter the name of the packaging manufacturer or the symbol of the manufacturer only if complete identification markings were not provided in #26b. Enter the date of manufacture and the serial number, if applicable. Enter the last test date if the packaging requires periodic testing. Also include the design pressure, shell thickness, head thickness, and service pressure if the failed packagings are of the type indicated in parenthesis after each question. If the packaging contained a valve, or other device that failed and resulted in a hazardous material release, enter the valve or device type, manufacturer (if present and legible), and model number (if present and legible).

**(29) If the package is for Radioactive Materials, complete the following:** Complete this question only if a radioactive material was involved. Indicate the packaging category, the packaging certification, certification number, and which nuclides were present, the transportation index (TI), activity of the nuclides, and the criticality safety index.

#### Part IV: Consequences

**(30) Result of Incident:** Check all boxes that describe what occurred during the incident or as a result of the incident. For example, in a situation where a truckload of 55 gallon drums of corrosive liquids overturns resulting in a release that contaminates a nearby wetlands and stream the boxes "Spillage," "Material Entered Waterway/Storm Sewer," and "Environmental Damage" may apply.

**(31) Emergency Response:** Check all boxes that correspond with any emergency response and cleanup crews that participated in

resolving the incident. If a fire crew, EMS, or police unit responded to the incident, include the report number.

**(32) Damages:** You are required to provide information on estimated damages if your damages exceed \$500.00. This figure includes the cost of the material lost, property damage, vehicle damage, response costs, and clean-up costs. If you do not know these amounts at the time you complete the report, or the actual costs are revised by more than \$25,000, you must submit a follow-up report after you determine the amounts. The following definitions explain each of the costs:

**Material Loss:** Enter the value of material released and unrecoverable. Base this entry on the amount of material released multiplied by the unit value (e.g., price per gallon or price per pound) as listed on the shipper's invoice. If the invoice is not available, estimate the cost per unit using the shipper's basis.

**Carrier Damage:** Enter the total value of damage incurred by the carrier. Major components include costs to repair the damaged vehicle and costs resulting from damage to cargo. If the vehicle is declared "totaled," enter the insured value of the vehicle. This entry should not include damage to other property or to vehicles owned by other persons.

**Property Damage:** Enter the total value of costs resulting from damage to the property of others involved in the incident. These include: repair and replacement costs of other vehicles; repair and replacement costs to buildings and other fixed facilities; and restoration of open land beyond decontamination and cleanup.

**Response Cost:** Enter the total value of response costs. Response costs are those costs incurred immediately after the incident, and include local emergency response from police and fire departments and emergency response teams, as well as costs incurred by the responsible party. Response costs also include costs to contain the hazardous material released.

**Remediation/Cleanup Cost:** Enter the total value of the cost to cleanup and remediate the site. Cleanup costs are those costs incurred to collect, transport, and ultimately dispose of all material collected during the response phase. Remediation costs are those costs incurred to restore the incident scene to its pre-incident state, and could include excavation, disposal and replacement of contaminated soil, pumping, treatment and re-injection of contaminated groundwater, or absorption and disposal of hazardous material released into surface water.

**(33a) Did the hazardous material cause or contribute to a human fatality?** If a person was fatally injured by contact with the hazardous material or its vapors or by a fire or explosion that resulted from the hazardous material, check the "Yes" box and enter the number of fatalities that resulted directly from the hazardous material.

**(33b) Were there human fatalities that did not result from the hazardous material?** If the fatalities were not caused directly by the hazardous material, check the "Yes" box and enter the number of fatalities. An example: if a passenger car collided with a cargo tank carrying gasoline and the automobile driver was killed due to the collision, then the fatality was not caused by the hazardous material released. If, however, the accident resulted in the release of gasoline from the cargo tank and a resulting fire killed the automobile driver, then the fatality was caused by the hazardous material.

**(34) Did the hazardous material cause or contribute to a personal injury?** If a person was injured by contact with the hazardous material or its vapors or by a fire or explosion that resulted from the hazardous material, check the "Yes" box and enter the number of persons injured by the hazardous material.

Hospitalized means admitted to a medical facility, not treated and released from a facility, such as a hospital emergency room, where the person was never admitted to the hospital proper. Non-hospitalized individuals are those who may have received attention from medical personnel on-site or at a facility (including hospital emergency room), but were not admitted to a medical facility. Indicate the number of injured employees, emergency responders (firefighters, police, medics, etc.) and members of the general public.

**(35) Did the hazardous material cause or contribute to an evacuation?** If the incident required the evacuation or removal of persons from a specific area because of possible or actual contact with the hazardous materials involved in the incident, check the "Yes" box. Separately specify the numbers of individuals from the general public evacuated and number of employees of the facility or workers in the area that were evacuated. Also provide the total number of individuals evacuated. Indicate the duration of the evacuation (in hours).

**(36) Was a transportation artery or facility closed?** If a road or transportation facility was closed due to the incident, check the "Yes" box and indicate the duration (in hours) here.



**(37) Was the material involved in a crash or derailment?** Check the "Yes" box if a hazardous material was involved in a crash or derailment. Provide the estimated speed and weather conditions at the time of the crash, such as rain, blowing snow, sleet, iced roadway, sun glare, fog, dry pavement, high winds, etc. Indicate if the vehicle overturned or left the roadway or track.

### Part V: Air Incident Information

This section is for incidents with packagings transported or intended for transportation by aircraft. If your packaging was not transported or intended to be transported by air, skip this section.

**(38) Was the shipment on a passenger aircraft?** Indicate whether the shipment in question was on a commercial passenger aircraft. If so, indicate if the material was tendered (accepted for shipment) as cargo, or was located in a passenger's baggage, either in the cabin or baggage compartment.

**(39) Where did the incident occur or where was the incident discovered?** Indicate where in the course of transportation the incident occurred or was discovered.

**(40) What phase(s) had the shipment already undergone prior to the incident?** Check all boxes that describe the transportation phases the shipment went through before the incident occurred or was discovered.

### Part VI: Description of Events and Packaging Failure

Please describe the events involved in the incident to provide us with a better understanding of the incident. Include information that has not been collected elsewhere on this form, and include special scenarios, outstanding circumstances, or other information that provides a complete picture of the incident. Describe the sequence of events that led to the incident, the package failure (if any) and actions taken at the time of discovery. Submit photographs and diagrams when necessary for clarification. You may continue on additional sheets if necessary.

### Part VII: Recommendations/Actions Taken To Prevent Future Incidents

Recommendations may be preliminary in nature, may suggest actions by other parties, and may be subject to further investigation, refinement, acceptance, or rejection. Often, it may be beyond the ability of the preparer to offer recommendations, but where such recommendations can be made they have the potential of resulting in important improvements with safety benefits. For instance, such information can help companies identify common problems and alert the DOT to the need for additional measures such as outreach or broad training needs. This information can also help support regulatory changes.

### Part VIII: Contact Information

Provide the name, title, telephone number, fax number, business name and address, hazmat registration number and email address of the contact person at your company who can answer questions about the information provided on this form. Make sure to check the box that describes the function of your firm: carrier, shipper, facility owner/operator, or other. If "Other" is checked, describe the function.

#### Failure Codes for All Packaging Types — Complete List

Code	What Failed
101	Air Inlet
102	Auxiliary Valve
103	Basic Material
104	Body
105	Bolts or Nuts
106	Bottom Outlet Valve
107	Check Valve
108	Chime
109	Closure (e.g., Cap, Top, or Plug)
110	Cover
111	Cylinder Neck or Shoulder
112	Cylinder Sidewall — Near Base
113	Cylinder Sidewall — Other
114	Cylinder Valve
115	Discharge Valve or Coupling
116	Excess Flow Valve
117	Fill Hole

#### Failure Codes for All Packaging Types — Complete List

Code	What Failed
118	Flange
119	Frangible Disc
120	Fusible Pressure Relief Device or Element
121	Gasket
122	Gauging Device
123	Heater Coil
124	High Level Sensor
125	Hose
126	Hose Adaptor or Coupling
127	Inlet (Loading) Valve
128	Inner Packaging
129	Inner Receptacle
130	Lifting Feature
131	Lifting Lug
132	Liner
133	Liquid Line
134	Liquid Valve
135	Loading or Unloading Lines
136	Locking Bar
137	Manway or Dome Cover
138	Mounting Studs
139	O-Ring or Seals
140	Outer Frame
141	Piping or Fittings
142	Piping Shear Section
143	Pressure Relief Valve or Device — Non-Reclosing
144	Pressure Relief Valve or Device — Reclosing
145	Remote Control Device
146	Sample Line
147	Stub Sill (Tank Car)
148	Sump
149	Tank Head
150	Tank Shell
151	Thermometer Well
152	Threaded Connection
153	Vacuum Relief Valve
154	Valve Body
155	Valve Seat
156	Valve Spring
157	Valve Stem
158	Vapor Valve
159	Vent
160	Washout
161	Weld or Seam
Code	How Failed
301	Abraded
302	Bent
303	Burst or Ruptured
304	Cracked
305	Crushed
306	Failed to Operate
307	Gouged or Cut
308	Leaked
309	Punctured
310	Ripped or Torn
311	Structural
312	Torn Off or Damaged
313	Vented

#### Failure Codes for All Packaging Types — Complete List

Code	Cause(s) of Failure
501	Abrasion
502	Broken Component or Device
503	Commodity Self-ignition
504	Commodity Polymerization
505	Conveyer or Material Handling Equipment Mishap
506	Corrosion — Exterior
507	Corrosion — Interior
508	Defective Component or Device
509	Derailment
510	Deterioration or Aging
511	Dropped
512	Fire, Temperature, or Heat
513	Forklift Accident
514	Freezing
515	Human Error
516	Impact with Sharp or Protruding Object (e.g., nails)
517	Improper Preparation for Transportation
518	Inadequate Accident Damage Protection
519	Inadequate Blocking and Bracing
520	Inadequate Maintenance
521	Inadequate Preparation for Transportation
522	Inadequate Procedures
523	Inadequate Training
524	Incompatible Product
525	Incorrectly Sized Component or Device
526	Loose Closure, Component, or Device
527	Misaligned Material, Component, or Device
528	Missing Component or Device
529	Overfilled
530	Overpressurized
531	Rollover Accident
532	Stub Sill Separation from Tank (Tank Cars)
533	Threads Worn or Cross Threaded
534	Too Much Weight on Package
535	Valve Open
536	Vandalism
537	Vehicular Crash or Accident Damage
538	Water Damage

#### Failure Codes by Packaging Type General Non-bulk and IBCs

Code	What Failed
103	Basic Material
104	Body
105	Bolts or Nuts
108	Chime
109	Closure (e.g., Cap, Top, or Plug)
110	Cover
119	Frangible Disc
120	Fusible Pressure Relief Device or Element
121	Gasket
125	Hose
128	Inner Packaging
129	Inner Receptacle
130	Lifting Feature
132	Liner
140	Outer Frame
143	Pressure Relief Valve or Device — Non-Reclosing
144	Pressure Relief Valve or Device — Reclosing
161	Weld or Seam

#### Failure Codes by Packaging Type General Non-bulk and IBCs

Code	How Failed
301	Abraded
302	Bent
303	Burst or Ruptured
304	Cracked
305	Crushed
306	Failed to Operate
307	Gouged or Cut
308	Leaked
309	Punctured
310	Ripped or Torn
311	Structural
312	Torn Off or Damaged
313	Vented

  

Code	Causes of Failure
501	Abrasion
503	Commodity Self-ignition
504	Commodity Polymerization
505	Conveyer or Material Handling Equipment Mishap
506	Corrosion — Exterior
507	Corrosion — Interior
508	Defective Component or Device
510	Deterioration or Aging
511	Dropped
513	Forklift Accident
514	Freezing
515	Human Error
516	Impact with Sharp or Protruding Object (e.g., nails)
517	Improper Preparation for Transportation
521	Inadequate Preparation for Transportation
522	Inadequate Procedures
523	Inadequate Training
529	Overfilled
530	Overpressurized
534	Too Much Weight on Package
535	Valve Open
536	Vandalism
537	Vehicular Crash or Accident Damage
538	Water Damage

#### Failure Codes by Packaging Type Cylinders

Code	What Failed
111	Cylinder Neck or Shoulder
112	Cylinder Sidewall — Near Base
113	Cylinder Sidewall — Other
114	Cylinder Valve
119	Frangible Disc
120	Fusible Pressure Relief Device or Element
122	Gauging Device
132	Liner
143	Pressure Relief Valve or Device — Non-Reclosing
144	Pressure Relief Valve or Device — Reclosing
161	Weld or Seam

  

Code	How Failed
301	Abraded
303	Burst or Ruptured
304	Cracked
306	Failed to Operate
307	Gouged or Cut
308	Leaked

**Failure Codes by Packaging Type**  
**Cylinders**

Code	How Failed
309	Punctured
313	Vented
Code	Cause(s) of Failure
501	Abrasion
502	Broken Component or Device
503	Commodity Self-ignition
504	Commodity Polymerization
505	Conveyer or Material Handling Equipment Mishap
506	Corrosion — Exterior
507	Corrosion — Interior
508	Defective Component or Device
510	Deterioration or Aging
512	Fire, Temperature, or Heat
513	Forklift Accident
514	Freezing
515	Human Error
516	Impact with Sharp or Protruding Object (e.g., nails)
517	Improper Preparation for Transportation
519	Inadequate Blocking and Bracing
520	Inadequate Maintenance
521	Inadequate Preparation for Transportation
522	Inadequate Procedures
523	Inadequate Training
524	Incompatible Product
525	Incorrectly Sized Component or Device
526	Loose Closure, Component, or Device
527	Misaligned Material, Component, or Device
528	Missing Component or Device
529	Overfilled
530	Overpressurized
535	Valve Open
536	Vandalism
537	Vehicular Crash or Accident Damage

**Failure Codes by Packaging Type**  
**Portable Tanks**

Code	What Failed
105	Bolts or Nuts
106	Bottom Outlet Valve
107	Check Valve
108	Chime
109	Closure (e.g., Cap, Top, or Plug)
110	Cover
119	Frangible Disc
120	Fusible Pressure Relief Device or Element
121	Gasket
122	Gauging Device
125	Hose
127	Inlet (Loading) Valve
131	Lifting Lug
132	Liner
135	Loading or Unloading Lines
137	Manway or Dome Cover
140	Outer Frame
141	Piping or Fittings
143	Pressure Relief Valve or Device — Non-Reclosing
144	Pressure Relief Valve or Device — Reclosing
152	Threaded Connection
153	Vacuum Relief Valve
161	Weld or Seam

**Failure Codes by Packaging Type**  
**Portable Tanks**

Code	How Failed
301	Abraded
302	Bent
303	Burst or Ruptured
304	Cracked
305	Crushed
306	Failed to Operate
307	Gouged or Cut
308	Leaked
309	Punctured
310	Ripped or Torn
312	Torn Off or Damaged
313	Vented
Code	Cause(s) of Failure
501	Abrasion
502	Broken Component or Device
503	Commodity Self-ignition
504	Commodity Polymerization
505	Conveyer or Material Handling Equipment Mishap
506	Corrosion — Exterior
507	Corrosion — Interior
508	Defective Component or Device
509	Derailement
510	Deterioration or Aging
511	Dropped
512	Fire, Temperature, or Heat
514	Freezing
515	Human Error
517	Improper Preparation for Transportation
520	Inadequate Maintenance
521	Inadequate Preparation for Transportation
522	Inadequate Procedures
523	Inadequate Training
524	Incompatible Product
525	Incorrectly Sized Component or Device
526	Loose Closure, Component, or Device
527	Misaligned Material, Component, or Device
528	Missing Component or Device
529	Overfilled
530	Overpressurized
531	Rollover Accident
536	Vandalism
537	Vehicular Crash or Accident Damage

**Failure Codes by Packaging Type**  
**Bulk Tank Vehicles — Cargo Tank Motor Vehicles (CTMV) and Tank Cars**

Code	What Failed
101	Air Inlet
105	Bolts or Nuts
106	Bottom Outlet Valve
107	Check Valve
110	Cover
115	Discharge Valve or Coupling
116	Excess Flow Valve
117	Fill Hole
118	Flange
119	Frangible Disc
120	Fusible Pressure Relief Device or Element
121	Gasket
122	Gauging Device

**Failure Codes by Packaging Type**  
**Bulk Tank Vehicles — Cargo Tank Motor Vehicles (CTMV) and Tank Cars**

Code	What Failed
123	Heater Coil
124	High Level Sensor
125	Hose
126	Hose Adaptor or Coupling
127	Inlet (Loading) Valve
131	Lifting Lug
132	Liner
133	Liquid Line
134	Liquid Valve
135	Loading or Unloading Lines
136	Locking Bar
137	Manway or Dome Cover
138	Mounting Studs
139	O-Ring or Seals
141	Piping or Fittings
142	Piping Shear Section
143	Pressure Relief Valve or Device — Non-Reclosing
144	Pressure Relief Valve or Device — Reclosing
145	Remote Control Device
146	Sample Line
147	Stub Sill (Tank Car)
148	Sump
149	Tank Head
150	Tank Shell
151	Thermometer Well
152	Threaded Connection
153	Vacuum Relief Valve
154	Valve Body
155	Valve Seat
156	Valve Spring
157	Valve Stem
158	Vapor Valve
159	Vent
160	Washout
161	Weld or Seam
Code	How Failed
301	Abraded
302	Bent
303	Burst or Ruptured
304	Cracked
305	Crushed
306	Failed to Operate
307	Gouged or Cut
308	Leaked
309	Punctured
310	Ripped or Torn
311	Structural
312	Torn Off or Damaged
313	Vented

**Failure Codes by Packaging Type**  
**Bulk Tank Vehicles — Cargo Tank Motor Vehicles (CTMV) and Tank Cars**

Code	Cause(s) of Failure
501	Abrasion
502	Broken Component or Device
503	Commodity Self-ignition
504	Commodity Polymerization
505	Conveyer or Material Handling Equipment Mishap
506	Corrosion — Exterior
507	Corrosion — Interior
508	Defective Component or Device
509	Derailment
510	Deterioration or Aging
511	Dropped
512	Fire, Temperature, or Heat
515	Human Error
517	Improper Preparation for Transportation
518	Inadequate Accident Damage Protection
519	Inadequate Blocking and Bracing
520	Inadequate Maintenance
521	Inadequate Preparation for Transportation
522	Inadequate Procedures
523	Inadequate Training
524	Incompatible Product
525	Incorrectly Sized Component or Device
526	Loose Closure, Component, or Device
527	Misaligned Material, Component, or Device
528	Missing Component or Device
529	Overfilled
530	Overpressurized
531	Rollover Accident
532	Stub Sill Separation from Tank (Tank Cars)
533	Threads Worn or Cross Threaded
536	Vandalism
537	Vehicular Crash or Accident Damage



## Incident Reporting Requirements

### §171.15 — Immediate notice of certain hazardous materials incidents.

(a) **General.** As soon as practical but no later than 12 hours after the occurrence of any incident described in paragraph (b) of this section, each person in physical possession of the hazardous material must provide notice by telephone to the National Response Center (NRC) on 800-424-8802 (toll free) or 202-267-2675 (toll call). Notice involving an infectious substance (etiologic agent) may be given to the Director, Centers for Disease Control and Prevention (CDC), U.S. Public Health Service, Atlanta, GA, 800-232-0124 (toll free), in place of notice to the NRC. Each notice must include the following information:

- (1) Name of reporter;
- (2) Name and address of person represented by reporter;
- (3) Phone number where reporter can be contacted;
- (4) Date, time, and location of incident;
- (5) The extent of injury, if any;
- (6) Class or division, proper shipping name, and quantity of hazardous materials involved, if such information is available; and
- (7) Type of incident and nature of hazardous material involvement and whether a continuing danger to life exists at the scene.

(b) **Reportable incident.** A telephone report is required whenever any of the following occurs during the course of transportation in commerce (including loading, unloading, and temporary storage):

- (1) As a direct result of a hazardous material —
  - (i) A person is killed;
  - (ii) A person receives an injury requiring admittance to a hospital;
  - (iii) The general public is evacuated for one hour or more;
  - (iv) A major transportation artery or facility is closed or shut down for one hour or more; or
  - (v) The operational flight pattern or routine of an aircraft is altered;
- (2) Fire, breakage, spillage, or suspected radioactive contamination occurs involving a radioactive material (see also §176.48 of this subchapter);
- (3) Fire, breakage, spillage, or suspected contamination occurs involving an infectious substance other than a diagnostic specimen or regulated medical waste;
- (4) A release of a marine pollutant occurs in a quantity exceeding 450 L (119 gallons) for a liquid or 400 kg (882 pounds) for a solid; or
- (5) A situation exists of such a nature (e.g., a continuing danger to life exists at the scene of the incident) that, in the judgment of the person in possession of the hazardous material, it should be reported to the NRC even though it does not meet the criteria of paragraph (b)(1), (2), (3) or (4) of this section.

(c) **Written report.** Each person making a report under this section must also make the report required by §171.16 of this subpart.

*Note to §171.15:* Under 40 CFR 302.6, EPA requires persons in charge of facilities (including transport vehicles, vessels, and aircraft) to report any release of a hazardous substance in a quantity equal to or greater than its reportable quantity, as soon as that person has knowledge of the release, to DOT's National Response Center at (toll free) 800-424-8802 or (toll) 202-267-2675.

### §171.16 — Detailed hazardous materials incident reports.

(a) **General.** Each person in physical possession of a hazardous material at the time that any of the following incidents occurs during transportation (including loading, unloading, and temporary storage) must submit a Hazardous Materials Incident Report on DOT Form F 5800.1 (01-2004) within 30 days of discovery of the incident:

- (1) Any of the circumstances set forth in §171.15(b);

- (2) An unintentional release of a hazardous material or the discharge of any quantity of hazardous waste;
- (3) A specification cargo tank with a capacity of 1,000 gallons or greater containing any hazardous material suffers structural damage to the lading retention system or damage that requires repair to a system intended to protect the lading retention system, even if there is no release of hazardous material; or
- (4) An undeclared hazardous material is discovered.

(b) **Providing and retaining copies of the report.** Each person reporting under this section must —

- (1) Submit a written Hazardous Materials Incident Report to the Information Systems Manager, DHM-63, Research and Special Programs Administration, Department of Transportation, Washington, DC 20590-0001, or an electronic Hazardous Material Incident Report to the Information System Manager, DHM-63, Research and Special Programs Administration, Department of Transportation, Washington, DC 20590-0001 at <http://hazmat.dot.gov>;
- (2) For an incident involving transportation by aircraft, submit a written or electronic copy of the Hazardous Materials Incident Report to the FAA Security Field Office nearest the location of the incident; and
- (3) Retain a written or electronic copy of the Hazardous Materials Incident Report for a period of two years at the reporting person's principal place of business. If the written or electronic Hazardous Materials Incident Report is maintained at other than the reporting person's principal place of business, the report must be made available at the reporting person's principal place of business within 24 hours of a request for the report by an authorized representative or special agent of the Department of Transportation.

(c) **Updating the incident report.** A Hazardous Materials Incident Report must be updated within one year of the date of occurrence of the incident whenever:

- (1) A death results from injury caused by a hazardous material;
- (2) There was a misidentification of the hazardous material or packaging information on a prior incident report;
- (3) Damage, loss or related cost that was not known when the initial incident report was filed becomes known; or
- (4) Damage, loss, or related cost changes by \$25,000 or more, or 10% of the prior total estimate, whichever is greater.

(d) **Exceptions.** Unless a telephone report is required under the provisions of §171.15 of this part, the requirements of paragraphs (a), (b), and (c) of this section do not apply to the following incidents:

- (1) A release of a minimal amount of material from —
  - (i) a vent, for materials for which venting is authorized;
  - (ii) the routine operation of a seal, pump, compressor, or valve; or
  - (iii) connection or disconnection of loading or unloading lines, provided that the release does not result in property damage.
- (2) An unintentional release of hazardous material when:
  - (i) The material is properly classed as —
    - [A] ORM-D; or
    - [B] a Packing Group III material in Class or Division 3, 4, 5, 6.1, 8, or 9;
  - (ii) Each packaging has a capacity of less than 20 liters (5.2 gallons) for liquids or less than 30 kg (66 pounds) for solids;
  - (iii) The total aggregate release is less than 20 liters (5.2 gallons) for liquids or less than 30 kg (66 pounds) for solids; and
  - (iv) The material is not —
    - [A] offered for transportation or transported by aircraft,
    - [B] a hazardous waste, or
    - [C] an undeclared hazardous material.
- (3) An undeclared hazardous material discovered in an air passenger's checked or carry-on baggage during the airport screening process. (For discrepancy reporting by carriers, see §175.31 of this subchapter.)