



**CONSOLIDATED RAIL CORPORATION
HAZARDOUS MATERIAL
POLICIES, PROCEDURES
AND
REGULATIONS**

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Effective April 1, 1987

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GENERAL NOTICE

This book is divided into two sections. The first includes policies and procedures which have been established for the guidance of all personnel in the event of a derailment or other emergency involving hazardous materials.

Good relations with the communities and the people served by the Consolidated Rail Corporation, as well as with regulatory and other public agencies, are necessary for the success of our railroad. Our activities are highly visible, and the public's attention to these activities is inevitable, particularly during and following any emergency. Therefore, it is essential that Conrail be prepared to act quickly and positively in any incident involving hazardous materials.

The second section of this book contains instructions which have been excerpted from the Hazardous Material Regulations of the Department of Transportation (DOT) and must be complied with by all employees of the Consolidated Rail Corporation.

Employees who in any way handle or manage hazardous materials must familiarize themselves with the regulations and instructions governing their handling. When necessary to refer to the full text of the regulations, Bureau of Explosives Tariff BOE-6000 series must be consulted.

SECTION I — POLICY AND PROCEDURES

SUBPART A GENERAL POLICY

I GENERAL

Fortunately, serious rail emergencies are rare and infrequent. However, the potential for such incidents exists in many areas of our system. A great variety of commodities are shipped by rail and many of them are hazardous in nature. To handle incidents involving such hazardous material safely and efficiently without delay, and in accordance with local, state and federal regulations, it is imperative that all persons concerned familiarize themselves with these procedures and guidelines.

II PREPARATION

Each major terminal will be responsible for developing an emergency preparedness plan tailored to its individual area, consistent with these guidelines. Local emergency service groups should be invited to participate in this planning and familiarize themselves with the railroad facilities. Drills of simulated railroad incidents will assist in working out coordination problems. Each division superintendent should review this plan to insure it meets local needs. Phone numbers for local emergency services, key railroad personnel, and local agencies requiring notification must be maintained by each division on an emergency phone number checklist. Local phone numbers should be updated periodically.

Division superintendents shall designate operating supervisors to act as emergency coordinators for each location, and to relieve the train dispatcher or yardmaster of such responsibilities as soon as possible after the occurrence of an emergency. Yardmaster or train dispatcher initially handling the incident should utilize emergency phone number check sheet and give it to the relieving officer on his arrival, thus enabling him to determine what action has been taken.

The basic plan should include immediately clearing the affected area of all people, getting trained personnel to the scene, evaluating and assessing the situation, and directing a well coordinated and safe program of relief.

III PLANNING

A number of key points highlight the need for careful advance planning:

A. Accessibility

On occasion the wreck or derailment will occur within a community, exposing nearby residents. However, this also usually means that fire defense services, i.e., water systems, medical and fire personnel, traffic control, etc., will be readily available. Consequently, the time span between the accident and public safety operations will be greatly reduced.

In rural areas, when the railroad right-of-way is not near a road or highway, the fire department may encounter difficulty in reaching the scene. It is important to remember that, under these conditions, water will have to be obtained from static sources or relayed from considerable distances.

At times access may be limited to approach on the right-of-way. Extreme caution must be used in approaches along the railroad right-of-way, such as tunnels or cuts, or through adjacent fields, because of possible rapid changes in hazardous conditions. The following contingencies should always be considered:

- Adequate room should be left for withdrawal of manpower and equipment. One disabled piece of equipment can block the entire operation.
- Alternative escape routes must be identified for equipment and personnel should the hazardous condition worsen.

B. Identification

Planning strategy and tactics for rail emergencies requires an early determination of the exact nature of the commodity being shipped. The derailment scene must be considered hazardous until proven otherwise. Waybills for cars involved in the derailment must remain at the accident site. Even with no fire, a wreck or derailment will probably mean damaged containers, cars, or tanks.

Obtaining waybills from a member of the train crew should be the FIRST concern of the senior officer on the scene.

C. Notification

Divisions involved shall be responsible for obtaining advice and assistance according to the nature of the incident. In the event of a fire, spill or leak of hazardous materials, or damage to tank/container, or potential major handling of cars/containers as a result of wrecking operations (including empty tanks), local emergency forces shall be notified of conditions and necessity for their response determined. When necessary, immediate notification shall be made by the division to the following:

1. **CHEMTREC**—Phone day or night toll free:
800-424-9300

From Canada call: 202-483-7616

From Washington, DC call: 483-7616

CHEMTREC provides immediate advice and will notify shippers for you through pre-established phone contacts.

2. **Bureau of Explosives, AAR** (Territories and Telephone Numbers of District Inspectors, Bureau of Explosives, will be furnished currently.) Washington, DC office may be reached on a 24-hour basis at 202-639-2222.

3. **Department of Transportation** as required by Sections 171.15 and 171.17 (see Section II of this book) telephone, Washington, DC, 800-424-8802. In Canada, notify Canadian Transport Commission, 819-997-7887.

4. System Operation Office (through Region).

Upon receipt of information from Region involved, System Operation Office will immediately notify Manager-Hazardous Materials and Conrail's Marketing Department.

5. State Emergency Response Environmental and Public Agencies designated on emergency phone number checklist.

D. Control

A senior operations officer shall assume the responsibility as the Railroad On-Scene Commander. Operations at the scene must be carefully and skillfully organized. Planning and training will determine in advance who is in overall charge, especially when public safety forces are coequal in status and responsibility.

E. Establishment of Command Post

A command post is suggested for better supervision of fire and rescue operations, and better communication and coordination of efforts. The Railroad On-Scene Commander will designate an emergency coordinator to be stationed at the command post and act on his behalf.

The location should be handy to the scene but not exposed to the events of the emergency. Care should be taken to make the command post convenient to authorized personnel while restricting the general public. An alternative site should be selected should the situation deteriorate.

F. Communications

Communications should be established between Conrail officials and all fire, police, and rescue agencies as to the scope of the emergency and the assistance required from each service. Refer to page 16 for procedures concerning Public Affairs and the news media.

G. Survey

Size up the materials involved, the seriousness of the occurrence, and the potential hazards to life and property. Evaluate the terrain, locale and unusual conditions, extent of fire and associated peril, and determine the plan of attack and the emergency forces required.

Most importantly, the cargo in the cars, particularly tanks, must be identified, preferably at a distance. This action must be undertaken very quickly. The use of a telescope, binoculars, or even a camera's telephoto lens is suggested.

H. Firefighting

Evacuation and fire operations is usually under the direction of the senior fire officer present. Track protection for fire department personnel is an absolute must.

I. Security

The first concern of police agencies should be to seal off the entire area. Spectators will use every available means of access for "a closer look". In rural areas, much ground will have to be covered, particularly in hours of darkness, and this will usually require a large commitment of manpower.

In rural areas, regular police agencies may have to be augmented with fire-police, auxiliary police, special deputies, etc. Prior planning and coordination with all police and fire agencies will be valuable.

J. Medical/First Aid

Consideration must be given to developing plans with local hospitals utilizing the Health Services Department. Some hospitals may request immediate notification to allow for a standby status. Again, prior planning is necessary.

K. Investigation and Reports

Emergency coordinators at the scene should begin recording facts immediately. In some cases, railroad accidents may be investigated weeks or months later by the National Transportation Safety Board, other government agencies, lawyers for damaged parties, etc., and details suddenly become very important. All significant communications should be logged and names of public service agency officials exchanged and recorded.

Sources of any technical advice should be noted. Otherwise, times, names, and other details can be difficult to remember.

A portable tape recorder should be available in the command and communications vehicle.

This assignment should also include identification of all parties concerned with the emergency; collection of maps, drawings and damage reports, and obtaining information on any additional hazardous materials involved.

IV CONCLUSIONS AND RECOMMENDATIONS

An accident involving the railroad will present a challenge to any officer because of the potential for a large-scale disaster. The nature of the accident will be such that there will be many variables, all of which require attention as the tactical plan evolves. Successful and safe operations require planning, training, and the ability to coordinate the efforts of many services and agencies.

Help must be summoned quickly, and there should be no hesitancy in seeking advice and counsel of those who can provide facts upon which to base sound decisions.

It is a good idea to develop and practice a plan of operation even for the accident that never takes place.

SUBPART B

EMERGENCY ACTION GUIDELINES

I GUIDELINES

The magnitude of an incident involving hazardous materials can normally be reduced with a quick, effective response to the scene. A quick, effective response is contingent on all key personnel being familiar with their respective role. It is essential they know what equipment and materials are readily available not only on Conrail but also from outside sources.

Division movement offices for the territory under their jurisdiction, except a major terminal, and trainmaster/terminal superintendent office for major terminals, could be designated as emergency coordination centers. STO's and trainmasters/ terminal superintendents on duty will initially assume responsibility as coordinator until an officer designated by the superintendent can be summoned to take over such duties.

When an incident occurs involving hazardous materials, it must be assumed it could cause an actual or potentially serious hazard for all persons and property involved. Immediate notification of key personnel is essential to limit the hazard potential and to allow proper action to be taken as rapidly as possible.

II FIRST-TO-ARRIVE ACTION TO BE TAKEN AT SCENE

The following actions are to be taken as rapidly as possible by railroad personnel at the scene, if safe to do so:

- Rescue injured, keep everyone, including employees, at a safe distance pending determination of chemicals involved.
- Survey the scene and adjacent area, determine conditions and notify by quickest available means appropriate person or persons (in yards and terminals the ranking yard officer on duty; on line road the division train dispatcher who will notify key personnel as required).

- If unidentified fuming liquids or gases are present, do not approach.
- If no fire, approach spill from upwind; no closer than necessary to obtain car number (use binoculars if available); keep out of low areas.
- If evidence of fire, move away from scene immediately.
- Remove all possible ignition sources. Do Not Smoke.
- Do not touch, taste or smell spilled material, and avoid any direct contact with it.
- Restrict access to area.
- Be readily accessible to advise emergency response forces of suspected danger, and contents and conditions of cars. Furnish them all emergency response information available.

III STO/TRAIN DISPATCHER RESPONSIBILITIES

Upon notification by railroad personnel at the scene of the emergency, the train dispatcher will take appropriate measures to provide protection at the scene in accordance with CT-225 and the applicable operating rules. He will also:

- Identify location of accident and access, i.e., in vicinity of city or town, farm or occupied building, open land.
- Determine if medical assistance is required.
- Establish with the personnel at the scene the location where emergency personnel can expect to find them on their arrival.
- Review waybills with train crew to determine if hazardous commodities may be involved.
- Estimate distance and direction of occupied buildings. Advise weather conditions (wind, rain, temperature).

- Establish initial response procedures for hazardous materials involved utilizing computer-generated data.
- When immediate action is required, advise personnel at the scene on such matters as securing the area, approaching scene from upwind to inspect damage, and containing the spill. If crewmen agree that an inspection can be made safely, have them determine the position and condition of cars, and if any cars are leaking. When tank cars are overturned, it should be determined if safety valves or vents are free to function.
- Contact local emergency services for hazardous material spills or potential spills. Advising:
 - (a) Location and known accident details.
 - (b) Initial emergency response procedures for all hazardous materials which could be involved.
 - (c) Location they may expect to find conductor and other members of the crew.
 - (d) Advise that the division movement office is the emergency coordination center.
 - (e) Arrange for frequent or continuous contact with emergency services personnel.
- Contact divisional officer designated to assume coordination of the emergency. Contact other key railroad personnel as designated by this plan.
- Contact CHEMTREC, the Bureau of Explosives, and others who may offer information and assistance.

IV TERMINAL SUPERINTENDENT/TRAINMASTER RESPONSIBILITIES

NOTE: Duties may vary, depending on individual terminal disaster plan. Some of the responsibilities may be assigned to other personnel.

- Ascertain from reporting party nature of emergency, injuries, cars involved, condition or position of cars, tracks involved.

- Establish exact time of any fire or explosion, advising emergency services of this information.
- Announce emergency on all radio channels. Designate one channel for emergency use only.
- Review track list and bill rack for any hazardous materials or empty tank cars that may be involved.
- Determine emergency response procedures for hazardous materials involved from computer.
- Advise switch crew and others in the area of potential danger, i.e., need for evacuation, exposure hazard, fire danger, etc.
- Notify emergency services. Advise products involved and response procedures for hazardous materials. Provide directions to the scene.
- Notify designated supervisor who will relieve you of coordination responsibilities and other key railroad personnel.
- Notify train dispatcher when an emergency involves or is near the main tracks.
- Advise switch crews on cutting designated yard crossings and removal of cars from tracks in area of emergency.

V DESIGNATED DIVISION OFFICER RESPONSIBILITIES

- Immediately report to the emergency coordination center to relieve the train dispatcher (or yardmaster) of emergency duties.
- Arrange for communications to be established and maintained between the incident scene and the coordinating center.
- Review the emergency response check sheet. Assume responsibility as emergency coordinator.
- Coordinate efforts with Operating, Mechanical, and Maintenance of Way officers at the scene. Notify regional and system railroad personnel.

- Jointly with supervision on the scene decide on cleanup method of any oil, hazardous materials, or hazardous substances.
- All emergency response contractors should be directed to the command post.
- Notify all government agencies as required.
- Prepare required reports.

VI Railroad On-Scene Commander

The Railroad On-Scene Commander is usually a senior operating officer responsible for the region or division where the incident has taken place. The Railroad On-Scene Commander would be responsible for the coordination of activities at the incident site, thus becoming the focal point for all participants having a role to play at the site.

The following steps are typical of the On-Scene Commander activities:

- Upon arrival at the incident site, determine all events surrounding the incident and all actions taken by those present, including local emergency forces if already at the site.
- Establish a command post, in conjunction with response forces, to be used as the focal point for the coordination of activities and the dissemination of information at the scene.
- Schedule meetings as may be necessary with emergency forces, shipper, regulatory agencies, and other railroad officers for the purpose of evaluating the emergency actions taken at the scene and making recommendations as the latest events dictate.

VII INITIAL EMERGENCY HANDLING INFORMATION

- Primary emergency response information for hazardous materials in train is computer generated and usually in possession of conductor, included with the waybills or printed on train consist.

- Identical hazardous information may be obtained from the computer by entering an inquiry of "HAZ=" requested by car initial and number. This is the recommended procedure for obtaining information on cars in a terminal.
- Responses to inquiries by car depend on waybill information being in the computer. For cars not entered, inquiry must be made by "49" series STCC number found on the waybill.
- The Bureau of Explosives book "Emergency Handling of Hazardous Materials in Surface Transportation" provides the same emergency response data as the computer. This book should be consulted in case of computer failure, or when product names are known but STCC numbers are not available (commodities are not identified by STCC numbers in mixed loads).
- Safeguard against error by comparing the product name appearing on the computer printout against the name appearing on the waybill. Many chemicals have similar names. Chemical names must be spelled out when requesting information verbally.
- Contact shipper for additional product information or assistance should be made through CHEM-TREC, 800-424-9300.

SUBPART C

INTERNAL RESOURCES

Whenever a significant incident requires emergency response, the response manager generally organizes his resources and acts in accordance with previously prepared contingency plans. Emergency response must be a Conrail team effort in order to be effective.

Pre-incident contingency planning is an important step whereby much can be done to develop an attitude of cooperation among responding departments. Determining ahead of time what role each function will play under varying circumstances is paramount. Cooperative approaches to handling an emergency incident are required by all departments if the corporation's concerns are to be alleviated and carried out with optimal use of resources. These approaches involve selection of key departmental resources that would assist in mitigation efforts.

Each concerned department within the corporation has their own policies and procedures to be followed. Departments responding directly to the emergency should initially adhere to the following guidelines:

POLICE DEPARTMENT

The resources of the Conrail Police Department will be put at the disposal of the railroad officer in charge through the senior police official on the scene. They will:

- Establish and maintain liaison with the responding law enforcement, fire and medical services personnel.
- Assist in establishing proper routes for travel to and from the scene with alternative routes to allow for changes in wind or other variable factors, as well as setting and securing a safe perimeter around the incident scene.

SAFETY DEPARTMENT

Region and Division Safety personnel responding to the scene will report to the command center advising the

Railroad On-Scene Commander of their presence and act on his behalf in:

- Liaison with local emergency response agencies on the scene.
- Ensure safety precautions are adhered to by employees responding to the scene.
- Ensure adequate personnel protection levels are employed.
- If needed, ensure continuous area monitors are used to test the area for toxic, explosive, or oxygen-deficient situations.
- Liaison with federal and state safety agencies.

ENVIRONMENTAL CONTROL DEPARTMENT

The Environmental Control representative will immediately proceed to the command post reporting to the Railroad On-Scene Commander and act in his behalf in:

- Identifying the lead (Environmental) agency or the Federal On-Scene Coordinator (OSC) and coordinate necessary cleanup requirements.
- Overseeing and monitoring the cleanup activities of the Conrail contractor.
- Obtaining any necessary agency approvals to cease cleanup operations.

DAMAGE PREVENTION DEPARTMENT

Damage Prevention Services personnel responding to the scene will report to the command post advising the Railroad On-Scene Commander of their presence and act on his behalf in:

- Arranging, or assisting division personnel with arrangements, to transfer and forward lading.
- If necessary, survey the portion of the train not involved directly in the accident, but which may be delayed, to identify any loads which require service or surveillance.

HEALTH SERVICES DEPARTMENT

Regional Medical Director and Health Services Manager responding to the scene will report to the command post advising the Railroad On-Scene Commander of their presence and act on his behalf in:

- Providing medical expertise and advice as needed to surrounding community and injured and/or ill Conrail employees.

CLAIMS DEPARTMENT

Claims Department personnel responding to the scene will advise the Railroad On-Scene Commander and proceed to handle claims resulting from the emergency in accordance with the department's contingency plan.

LAW DEPARTMENT

The Law Department has designated in-house Conrail lawyers specializing in environmental and personal injury litigation who are familiar with Conrail's Chemical Disaster Contingency Plan and are prepared to render legal assistance both at corporate headquarters in Philadelphia and, if necessary, at the site of the disaster.

LABOR RELATIONS DEPARTMENT

The Labor Relations Department will be responsible for advising interested organization representatives concerning the extent of the emergency, and the progress of the cleanup effort. General chairmen will be contacted by the System Labor Relations office, and local chairmen will be contacted by the office of the involved Regional Director of Personnel.

PUBLIC AFFAIRS DEPARTMENT

The Public Affairs Department will work in conjunction with all other departments to ensure that timely and accurate information is disseminated, to emphasize the corporation's responsiveness and concern for the affected area.

Operating supervisors or other employees not designated to speak for Conrail at the scene should courteously direct reporters to the appropriate party, or give them the Public Affairs Media phone number: (215) 977-4594. Designated supervisors on the scene should confer with Public Affairs regarding any information they plan to issue to the news media.

II GENERAL REGULATIONS

1. General Transportation Requirements (171.2)

No person may offer, accept, or transport a hazardous material, substance or waste unless that material is properly classed, described, packaged, marked, labeled, and in condition for shipment as required or authorized by the Department of Transportation (DOT).

2. Definitions (171.8)

For the purpose of the DOT Hazardous Materials Regulations, the following definitions apply:

“Hazardous Material” Means a substance or material which has been determined by the Secretary of Transportation to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and which has been so designated.

“Hazardous Substance” Means a material and its mixtures or solutions, when offered for transportation in one package, or in one transport vehicle if not packaged, and when the quantity of the material therein equals or exceeds the reportable quantity (RQ), as indicated by the Department of Transportation.

“Hazardous Waste” For the purposes of this subchapter, means any material that is subject to the hazardous waste manifest requirements of the EPA specified in 40 CFR Part 262 or would be subject to these requirements absent in interim authorization to a state under 40 CFR Part 123, Subpart F.

“Engine” Means a locomotive propelled by any form of energy and used by a railroad.

“Occupied Caboose” Means a rail car being used to transport non-passenger personnel.

“Person” Means an individual, firm, co-partnership, corporation, company, association, or joint-stock association, and includes any trustee, receiver, assignee, or personal representative thereof.

“Placarded Car” Means a rail car which is placarded in accordance with the requirements of the DOT regulations except those cars displaying only the “FUMIGATION” placards.

“Rail Freight Car” Means a car designed to carry freight or non-passenger personnel by rail, and includes a box car, flatcar, gondola car, hopper car, tank car, and occupied caboose.

“Railroad” Means a person engaged in transportation by rail.

“Shipping Paper” Means shipping order, bill of lading, manifest, or other shipping document serving a similar purpose and containing the information required by the DOT.

“Train” Means one or more engines coupled with one or more rail cars, except during switching operations or where the operation is that of classifying and assembling rail cars within a railroad yard for the purpose of making or breaking up trains.

3. CANADIAN SHIPMENTS AND PACKAGES (174.11)

A Canadian shipment or package may be transported by rail car within the United States if it is in compliance with the DOT regulations or the TRANSPORTATION DANGEROUS GOODS and the CANADIAN TRANSPORT COMMISSION.

4. Immediate notice of certain hazardous materials incidents (171.15)

(a) At the earliest practicable moment, each carrier who transports hazardous materials (including hazardous wastes) shall give notice in accordance with paragraph (b) of this section after each incident that occurs during the course of transportation (including loading, unloading and temporary storage) in which as a direct result of hazardous materials-

- (1) A person is killed;
- (2) A person receives injuries requiring his hospitalization;
- (3) Estimated carrier or other property damage exceeds \$50,000;
- (4) Fire, breakage, spillage, or suspected radioactive contamination occurs involving shipment of radioactive material; or
- (5) Fire, breakage, spillage, or suspected contamination occurs involving shipment of etiologic agents; or
- (6) A situation exists of such a nature that, in the judgment carrier, it should be reported in accordance with paragraph (b) of this section even though it does not meet the criteria of paragraph (a)(1),(2), or (3) of this section; e.g., a continuing danger of life exists at the scene of the incident.

(b) Each notice required by paragraph (a) of this section shall be given to the Department by telephone (toll free) on 800-424-8802 or (toll call) on 202-426-2675. Notice involving etiologic agents may be given the Director, Center for

Disease Control, U.S. Public Health Service, Atlantic, GA., Area Code 404-633-5313, in place of the notice to the Department. Each notice must include the following information.

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

(c) Each carrier making a report under this section shall also make the report required by Sec.171.16.

5. Detailed Hazardous Materials Incident Reports. (171.16)

(a) Each carrier who transports hazardous materials shall report in writing in duplicate on DOT Form F 5800.1 to the Department within 15 days of the date of discovery, each incident that occurs during the course of transportation (including loading, unloading, or temporary storage) in which, as a direct result of the hazardous materials, any of the circumstances set forth in Sec.171.15(a) occurs or there has been an unintentional release of hazardous materials from a package (including a tank), or any quantity of hazardous waste has been discharged during transportation. If a report pertains to a hazardous waste discharge-

- (1) A copy of the hazardous waste manifest for the waste must be attached to the report, and

- (2) An estimate of the quantity of the waste removed from the scene, the name and address of the facility to which it was taken, and the manner of disposition of any unremoved waste, must be entered in Part H of the report (Form F 5800.1).
- (b) Each carrier making a report under this section shall send that report to the Chief, Information Systems Division, Transportation Programs Bureau, Department of Transportation, Washington, D.C. 20590.
- (c) Except as provided in paragraph (d) of this section, the requirements of paragraph (a) of this section do not apply to incidents involving the unintentional release of hazardous materials being transported under the following proper shipping names:
- (1) Consumer commodity
 - (2) Battery, electric storage, wet
 - (3) Paint, Enamel, Lacquer, Stain, Shellac or Varnish Aluminum, Bronze, Gold, Wood filler, liquid or Lacquer base liquid when shipped in packagings of five gallons or less.
- (d) The exceptions to incident reporting provided in paragraph [c] of this section do not apply to:
- (1) Incidents required to be reported under Sec.171.15(a);
 - (2) Incidents involving transportation aboard aircraft; nor
 - (3) Incidents involving the transportation of hazardous waste.

6. Hazardous Substance Discharge Notification. (171.17)

- (a) When a hazardous substance is discharged into the environment in a reportable quantity from one package, or from a transport vehicle, aircraft, vessel or facility if not packaged, the

person in charge of the transport vehicle, aircraft, vessel, or facility from which the hazardous substance is discharged shall, as soon as that person has knowledge of such discharge, notify directly, or indirectly through the carrier, the U.S. Coast Guard National Response Center at (toll free) 800-424-8802, or (toll call) (202) 426-2675, and furnish to the official to whom the discharge notification is made:

- (1) The information required by Sec.171.15,
 - (2) The name of the shipper of the hazardous substance, and
 - (3) The quantity of the hazardous substance discharged, if known
- (b) If the person in charge of the aircraft, vessel, transport vehicle or facility is incapacitated or otherwise unable to make the notification required by this section, the carrier shall make the notification.
- (c) An estimate of the quantity of the hazardous substance removed from the scene and the manner of disposition of any unremoved hazardous substance shall be entered in Part H of the report required by Sec.171.16 of this Part.

III REQUIRED DOCUMENTATION

1 SHIPPING PAPERS [174.24]

No person may accept for transportation by rail any hazardous material unless he has received a shipping paper prepared as outlined below.

2 INFORMATION REQUIRED ON SHIPPING PAPERS [174.25(b)]

When the initial movement of a loaded rail car required to be placarded is a switching operation, the switching order, switching receipt, prepared by the shipper, or by the carrier under the shipper's written authority, must contain the following:

- (a) The shipping description consisting of:
- (1) The proper shipping name specified for the material.
 - (2) The hazard class specified for the material, except when the hazard class is part of the proper shipping name [172.202(a)(2)];
 - (3) The identification number preceded by "UN" or "NA" as appropriate; and
 - (4) The total quantity (by weight, volume or as otherwise appropriate) of the hazardous material covered by the description.
- (b) The placard notation, when required.
- (c) For any entry of a material that is a hazardous substance, the letters "RQ" entered before or after the basic description
- (d) Except when a certified bill of lading is tendered to the carrier, the shipper's certification and signature.
- (e) If the inhalation toxicity of any material falls within the criteria specified in 173.3a(b)(2) of the Hazardous Material Regulations, the words "POISON-INHALATION HAZARD" shall be entered on the shipping paper in association with the shipping description.
- (b) The shipping paper for each Class DOT-113 tank car containing a flammable gas must contain the notation "DOT-113A" and the statement "Do Not Hump or Cut Off Car While in Motion".
- (c) The words "Dangerous When Wet" shall be entered on the shipping paper when a package covered by the shipping description is required to be labeled with a "DANGEROUS WHEN WET" label.
- (d) Notwithstanding the class to which a material is assigned—
- (1) If the name of the compound or principal constituent that causes a material to meet the definition of a poison is not included in the proper shipping name for the material, the name of that compound or constituent shall be entered on the shipping paper in association with the shipping description for the material.
 - (2) If a liquid or solid material in a package meets the definition of a poison, and the fact that it is a poison is not disclosed in the shipping name or class entry, the word "Poison" shall be entered on the shipping paper in association with the shipping description.
- (e) If the inhalation toxicity of any material falls within DOT's criteria, the words "Poison—Inhalation Hazard" shall be entered on the shipping paper in association with the shipping description. However, the word "Poison" need not be repeated if it is entered as part of the shipping description.

EXAMPLES OF REQUIRED INFORMATION ON SHIPPING PAPERS:

1 T/C	or	80 Drums
Sulfuric Acid		Flammable Liquid, N.O.S.
Corrosive Material		(Glycol Ethers)
UN 1830 RQ		UN 1993
Placarded Corrosive		Placarded Flammable

3. ADDITIONAL DESCRIPTION REQUIREMENTS [172.203]

- (a) Each shipping paper issued in connection with a shipment made under an exemption must bear the notation "DOT-E" followed by the exemption number

4. INFORMATION REQUIRED FOR EMPTY TANK CARS [174.25(c)]

For a tank car that contains only the residue of a hazardous material, the shipping papers must contain the words "RESIDUE: Last contained . . .," the shipping description of the hazardous material last contained in the tank car, and the placard notation followed by the word "RESIDUE". For a tank car

that contains only the residue of a hazardous substance, the letters "RQ" must also be entered on the shipping paper.

**EXAMPLES OF DESCRIPTIONS FOR EMPTY TANK
TANK CARS ON SHIPPING PAPERS:**

RESIDUE: Last Contained	or	RESIDUE: Last Contained
Sulfuric Acid		Acetone
Corrosive Material		Flammable Liquid
UN 1830 RQ		UN 1090
Placarded Corrosive-Residue		Placarded Flammable-Residue

**5. ADDITIONAL INFORMATION REQUIRED ON
WAYBILLS, SWITCHING ORDERS AND OTHER
BILLINGS [174.25(a)]**

In addition to the shipping description described in Items 2, 3 and 4 of this section, each shipping paper prepared by the carrier for a rail car required to be placarded must also contain the following:

- (a) The placard endorsement specified for the hazardous material or class concerned near the space on the face of the billing provided for the car number for rail cars required to be placarded; and
- (b) In the case of a flatcar carrying trailers or containers, an indication of which trailers or containers contains the hazardous material.

6. HAZARDOUS WASTE MANIFEST [172.205]

- (a) No person may offer, transport, transfer or deliver a hazardous waste unless a hazardous waste manifest is prepared, signed, carried and given as required of that person by this section.
- (b) A copy of the hazardous waste manifest bearing all required dates and signatures must be -
 - (1) Carried during transportation in the same manner as required by the regulations for shipping papers,

(2) Given to a person representing the designated facility receiving the hazardous waste.

(c) If a shipment is delivered to the hazardous waste facility by Railroad, the hazardous waste manifest information may be included on the waybill in lieu of complying with Section III.6(b)(1).

(1) The delivering carrier shall obtain receipt for hazardous waste shipments that include date and hand written signature of the person representing this facility.

**7. NOTICE TO TRAIN CREWS OF PLACARDED CAR
[174.26]**

(a) A member of the train crew of a train transporting hazardous materials must have in his possession a copy of the shipping papers for the shipment of hazardous materials being transported showing the information required by the DOT regulations.

(b) The train crew must have a document indicating the position in the train of each loaded placarded car containing hazardous materials, except when the position is changed or the placarded car is placed in the train by a member of the train crew. A train consist may be used to meet this requirement.

(c) At each terminal or other place where trains are made up or switched by crews other than train crews accompanying the outbound movement of cars, the carrier shall execute consecutively numbered notices showing the location in each train of each rail car placarded "EXPLOSIVES A" or "POISON GAS". A copy of each notice must be delivered to the train and engine crew concerned, and a copy thereof showing delivery to the train and engine crew must be kept on file by the carrier at each point where the notice is given. At points where train or engine crews are changed, the notice must be

transferred from crew to crew. A train consist may be used to meet this requirement, if a copy of the train consist is provided to the engine crew in addition to the train crew.

8. HANDLING OF SHIPPING PAPERS ENROUTE

When setting out cars containing hazardous materials, the waybills or other appropriate shipping documents shall be left as instructed for that location.

When picking up cars containing hazardous materials, the shipping papers for those cars must also be picked up unless the crew has the required shipping paper information in their possession at that time.

IV MARKING AND PLACARDING HAZARDOUS MATERIALS

1. MARKING AND PLACARDING OF RAIL CARS [174.59]

No person may transport a rail car carrying hazardous materials unless it is marked and placarded as required by the DOT regulations.

2. APPLICABILITY OF PLACARDING REQUIREMENTS [172.500]

- (a) Each person who offers for transportation or transports any hazardous material subject to the DOT regulations shall comply with the applicable placarding requirements.
- (b) These placarding requirements do not apply to:
 - (1) Etiologic Agents;
 - (2) Hazardous materials classed as ORM-A, B, C, D, or E;
 - (3) Hazardous materials authorized by the DOT regulations offered for transportation as Limited Quantities when identified as such on shipping papers.

3. GENERAL PLACARDING REQUIREMENTS [172.504]

- (a) Except as otherwise provided in the DOT regulations, each motor vehicle, rail car and freight container containing any quantity of a hazardous material must be placarded on each end and each side with the type of placard specified in the DOT regulations. (See Notes 1 and 2.)
- (b) A freight container, motor vehicle or rail car containing two or more materials classified as Blasting Agents, Combustible Liquid, Corrosive Material, Class C Explosives, Flammable Gas, Flammable Liquid, Flammable Solid, Irritating Material, Nonflammable Gas, Organic Peroxide, Oxidizer, or Poison B may be placarded DANGEROUS in place of the separate placarding specified for each of those classes of materials specified. However, when 5,000 lbs. or more of one class of material is loaded therein at one loading facility, the placard specified for these hazard classes must be applied. This paragraph does not apply to a portable tank, cargo tank or tank car.
- (c) No placard is required on a rail car, freight container or motor vehicle when each rail car, freight container or motor vehicle contains less than 1,000 lbs. gross weight of one or more materials from the hazard classifications listed in the preceding subparagraph.
- (d) RESIDUE Placard. Each tank car containing the residue of a hazardous material must be placarded with the appropriate RESIDUE placard. The RESIDUE placard must correspond to the placard that was required for the material the tank car contained when loaded, unless the tank car-
 - (1) Is reloaded with a material requiring no placards or different placards; or
 - (2) Is sufficiently cleaned of residue and purged of vapor to remove any potential hazard.

4. SPECIAL PLACARDING REQUIREMENTS FOR CERTAIN POISONOUS MATERIALS [172.505]

Each transport vehicle and freight container that contains a material subject to the "Poison-Inhalation Hazard" shipping description, must be placarded POISON on each side and each end in addition to the placards required by Section 172.504.

5. REMOVAL OF PLACARDS AND CAR CERTIFICATES AFTER UNLOADING [174.69]

When lading requiring placards or car certificates is removed from a rail car other than a tank car, each placard and car certificate must be removed by the person unloading the car. For a tank car which contained a hazardous material, the person responsible for removing the lading must assure that the tank car is properly placarded for any residue which remains in the tank car.

6. REPLACEMENT OF PLACARDS [174.59]

Placards and car certificates lost in transit must be replaced at the next inspection point, and those not required must be removed at the next terminal where the train is classified.

7. IDENTIFICATION NUMBER MARKINGS [172.332(a)]

When required by the DOT regulations, identification numbers shall be displayed on orange panels or placards as specified in this section. (See Note 3.)

- Note: 1. Two or more placards may be displayed in the four locations for some hazardous materials shipments.
2. Placards may be displayed in placard holders, on placard boards, or taped or glued to the car or trailer body.
3. Regulations require the display of identification numbers on portable tanks, cargo tanks and tank cars. Identification numbers may be displayed on other packages, freight containers or transport vehicles.

8. IDENTIFICATION NUMBERS; PROHIBITED DISPLAY [172.334(a)]

- (a) An identification number may not be displayed on a POISON GAS, RADIOACTIVE or EXPLOSIVES placard.
- (b) An identification number may not be displayed on an orange panel or a placard affixed to any package, freight container or transport vehicle that does not contain a hazardous material associated with that identification number.

9. IDENTIFICATION NUMBERS; SPECIAL PROVISIONS [172.336]

For hazardous materials in hazard classes for which placards are not required, identification numbers may be displayed on a plain white square-on-point configuration having the same outside dimensions as those required for placards. An identification number displayed as authorized by this paragraph is not considered a placard.

10. DISPLAY OF IDENTIFICATION NUMBERS ON ORANGE PANELS [172.332(b)]

Display of an identification number on an orange panel shall be in conformance with the following:

- (a) The orange panel is approximately six (6) inches high by sixteen (16) inches wide with a black outer border. The identification number shall be printed in four (4) inch numerals on the orange panel.
- (b) Except for size and color, the orange panel and identification number shall be as illustrated for Liquified petroleum gas:

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11. DISPLAY OF IDENTIFICATION NUMBERS ON PLACARDS [172.332(c)]

(a) Display of an identification number on a placard shall be in conformance with the following:

(1) The identification number shall be printed across the center area of the placard in 3½-inch numerals on a white background four (4) inches high and approximately 8½ inches wide.

(2) When an identification number is displayed on a placard, the United Nations hazard class number for the material shall be displayed in the lower corner of each placard. The United Nations hazard class numbers and corresponding hazard classes are shown below [172.102(h)]:

- 1 Explosive A, B and C, Blasting Agent
- 2 Flammable Gas, Nonflammable Gas, Poison A
- 3 Flammable Liquid, Combustible Liquid
- 4 Flammable Solid
- 5.1 Oxidizer
- 5.2 Organic Peroxide
- 6 Poison B, Etiologic Agent
- 7 Radioactive Material
- 8 Corrosive Material
- 9 Other Regulated Material (ORM)

(3) For a COMBUSTIBLE placard used to display an identification number, the entire background below the white background for the identification number must be white during transportation by rail or highway.

12. REPLACEMENT OF IDENTIFICATION NUMBERS [172.338]

If more than one of the identification number markings on the placards or orange panels that are required to be displayed are lost or destroyed during transportation, the carrier shall replace all the missing identification number(s) as soon as practicable.

However, in such a case, the numerals may be entered legibly by hand using an indelible marking material. (See Note 1.)

NOTE: 1. When replacing missing identification numbers displayed on placards and orange panels:

(a) One missing identification number can be replaced by a placard displaying the name of the class of the material being transported.

(b) Two or more missing identification numbers must be replaced by using blank corresponding placards and filling in the identification number with an indelible pen.

V INSPECTION OF HAZARDOUS MATERIAL SHIPMENTS

1. INSPECTION [174.8 and 174.9]

At any point where a train is required to be inspected (see Note 1), each placarded rail car and each rail car immediately adjacent thereto, must be inspected. The cars may continue in transit only when the inspection indicates that the cars are in safe condition for transportation.

(a) The inspection of a rail car carrying hazardous materials must include a visual inspection for obvious defects of the running gear and any leakage of contents from the car and to determine whether all required placards, and car certificates for shipments of Class A explosives are in place and conform to the information given on the train consist or other shipping document.

(b) Each loaded placarded tank car must be inspected by the carrier before acceptance at the originating point and when received in interchange to see that they are not leaking and that the air and hand brakes, journal boxes, and trucks are in proper condition for service.

- (c) An empty tank car which previously contained a hazardous material and which is tendered for movement or received in interchange must have all manhole covers, outlet valve reducers, outlet valve caps, outlet valve cap end plugs, and plugs or caps or other openings securely in their proper places, except that heater coil inlet and outlet pipes must be left open for drainage.

2. INSPECTION OF CARS AT INTERCHANGE [174.10]

- (a) Each rail car containing explosives requiring "EXPLOSIVES A" placards which is offered by a connecting line must be visually inspected externally by the receiving line. If practicable, the receiving line should also inspect the lading. The car may not be forwarded until all discovered violations have been corrected.
- (b) If the car shows evidence of, or if there is any reason to suspect that it has received rough treatment, the lading must be inspected and placed in proper condition before the car is permitted to proceed. When interchange occurs and the inspection is performed after daylight hours, electric flashlights should be used and naked lights may not be used.
- (c) In the case of a tank car which has developed small leaks in the course of its movements to an interchange point and which requires a short movement to effect delivery for unloading by the consignee, the movement may be made if it can be made safely adhering to the precautions prescribed under Item 4 of this section.
- (d) A car containing packages of hazardous materials other than explosives may not be offered in interchange if the packages are in a leaking condition.

3. LEAKING PACKAGES OTHER THAN TANK CARS [174.48]

- (a) Leaking packages other than tank cars may not be forwarded until repaired or reconditioned.

- (b) Packages of hazardous materials that are damaged or found leaking during transportation, and hazardous materials that have spilled or leaked during transportation, may be forwarded to destination or returned to the shipper in a salvage drum in accordance with the DOT regulations.

4. LEAKING TANK CARS [174.50]

- (a) A tank car discovered in a leaking condition in transit may not be unnecessarily moved until the unsafe condition has been corrected. In the case of small leak, short movements may be made if a receptacle is attached under the leak to prevent the spread of liquid over tracks.
- (b) Each tank car must be protected against ignition of the liquid or vapor by flame from sources such as lanterns, torches, flares, fusees, switch lights, switch-thawing flames, fires on sides of tracks, hot coals, lighted pipes, cigars or cigarettes. All spectators should be kept at a safe distance.
- (c) A leaking tank car carrying any hazardous materials may be switched to a location distant from habitation and highways if the movement can be safely made.
- (d) Whenever the leaking condition of a tank car requires the transfer of lading or makes the tank unfit for reloading, the car must be stenciled on both sides in letters three inches in size, adjacent to the car number, "**LEAKY TANK. DO NOT LOAD UNTIL REPAIRED**". The location of the leak must be indicated and marked with the symbol "X". The owner must be immediately notified by telegram and advised of the exact location of the leak.

VI SWITCHING PLACARDED CARS

1. SWITCHING OF CARS CONTAINING HAZARDOUS MATERIALS [174.83]

- (a) In switching operations where the use of hand brakes is necessary, a loaded placarded tank car, or a draft which includes a loaded placarded tank

car, may not be cut off until the preceding car or cars clear the ladder track and the draft containing the loaded placarded tank car, or a loaded placarded tank car, shall in turn clear the ladder before another car is allowed to follow. In switching operations where hand brakes are used, it must be determined by trial whether a loaded placarded car, or a car occupied by a rider in a draft containing a placarded car, has its hand brakes in proper working condition before it is cut off.

(b) Any car placarded "EXPLOSIVES A" or "POISON GAS" and any Class DOT-113 tank car placarded "FLAMMABLE GAS" may not be-

- (1) Cut off while in motion,
- (2) Coupled into with more force than is necessary to complete the coupling, or
- (3) Struck by any car moving under its own momentum.

(c) When transporting a car placarded "EXPLOSIVES A" in a terminal, yard or on a side track, or siding, it must be separated from the engine by at least one non-placarded car.

(d) The doors of each closed car placarded "EXPLOSIVES A" must be closed, securely fastened, and the lading securely braced before it is moved.

2. SWITCHING OF FLATCARS CARRYING PLACARDED TRAILER, FREIGHT CONTAINERS, PORTABLE TANKS OR IM PORTABLE TANKS [174.84]

(a) A placarded flatcar or a flatcar carrying a placarded trailer, freight container, portable tank or IM portable tank may not be cut off while in motion.

(b) No rail car moving under its own momentum may be permitted to strike any placarded flatcar or any flatcar carrying a placarded trailer, freight container, portable tank or IM portable tank.

(c) No placarded flatcar or any flatcar carrying a placarded trailer, freight container, portable tank or IM portable tank may be coupled into with more force than is necessary to complete the coupling.

3. PLACEMENT OF FREIGHT CARS PLACARDED "EXPLOSIVES A" IN YARDS, ON SIDINGS, OR SIDE TRACKS [174.85]

A rail car placarded "EXPLOSIVES A" while in a yard, on a siding, or side track must be placed so that it will be safe from all probable danger of fire. A car so placarded may not be placed under a bridge or overhead highway crossing, not in or alongside a passenger shed or station except for loading or unloading purposes.

VII PLACEMENT IN TRAINS OF PLACARDED CARS

1. POSITION IN TRAIN OF CARS PLACARDED "EXPLOSIVES A" OR "POISON GAS" WHEN ACCOMPANIED BY CARS CARRYING GUARDS OR TECHNICAL ESCORTS [174.86]

A rail car placarded "EXPLOSIVES A" or "POISON GAS" in a moving or standing train must be next to and ahead of any car occupied by the guards or technical escorts accompanying this car. However, if a car occupied by guards or technical escorts is equipped with a lighted heater or stove, it must be the fourth car behind any car requiring "EXPLOSIVES A" placards.

2. POSITION IN TRAIN OF CARS PLACARDED "EXPLOSIVES A" [174.88]

In a moving or standing train, a car placarded "EXPLOSIVES A" may not be placed nearer than the sixth car from the engine or an occupied caboose. However, when the length of the train will not permit this car to be so placed, it must be placed as near the middle of the train as possible, but not less than the second car from the engine or occupied caboose.

3. POSITION IN TRAIN OF CARS PLACARDED "RADIOACTIVE" [174.89]

In a moving or standing train, a car placarded "RADIOACTIVE" may not be placed next to any other loaded placarded car (other than one placarded "COMBUSTIBLE"), an engine, occupied caboose or carload of undeveloped film. Cars placarded "RADIOACTIVE" may be placed next to each other.

4. SEPARATING CARS PLACARDED "EXPLOSIVES A" or "POISON GAS" FROM OTHER CARS IN TRAIN [174.90]

(a) In a moving or standing train, a car placarded "EXPLOSIVES A" or "POISON GAS" may not be placed next to:

- (1) A passenger car or combination car that may be occupied except as provided in Section VII.1;
- (2) Any loaded placarded car other than a car placarded with the same placard or one placarded "COMBUSTIBLE";
- (3) An engine;
- (4) A loaded flatcar, except that loaded cars placarded "EXPLOSIVES A" may be placed next to each other. A flatcar equipped with permanently attached ends of rigid construction is considered to be an open-top car (See Section VII.4(a)(5));
- (5) An open-top car when any of the lading protrudes beyond the car ends, or when any of the lading extending above the car ends is liable to shift so as to protrude beyond the car ends;
- (6) A car with automatic refrigeration or heating apparatus in operation, or a car with open-flame apparatus in service, or with an internal combustion engine in operation;
- (7) A car containing lighted heaters, stoves or lanterns;

(8) A car occupied by any person, including any attendant for the cargo contained therein; or

(9) An occupied caboose, except as provided in Section VII.1

(b) In a moving or standing train, a car placarded "EXPLOSIVES A" may not be placed next to a car placarded "POISON GAS".

5. POSITION IN TRAIN OF LOADED PLACARDED TANK CAR OTHER THAN CAR PLACARDED "COMBUSTIBLE" [174.91]

Except for a tank car placarded "COMBUSTIBLE", a loaded placarded tank car in a moving or standing train may not be nearer than the sixth car from the engine, occupied caboose or passenger car. However, when the length of the train will not permit a loaded placarded tank car to be so placed, it must be placed as near the middle of the train as possible and not nearer than the second car from the engine, occupied caboose or passenger car.

6. SEPARATING LOADED PLACARDED TANK CARS OTHER THAN CARS PLACARDED "COMBUSTIBLE" FROM OTHER CARS IN TRAINS [174.92]

(a) In a moving or standing train a loaded placarded tank car, other than one placarded "COMBUSTIBLE", may not be placed next to:

- (1) A passenger car or combination car, other than a car occupied by technical escorts and authorized personnel accompanying shipments.
- (2) Any car placarded "EXPLOSIVES A", "RADIOACTIVE" or "POISON GAS";
- (3) An engine or occupied caboose;
- (4) A loaded flatcar, other than a specially equipped car in trailer-on-flatcar or container-on-flatcar service, or a flatcar loaded with vehicles secured by means of a device designed for that purpose and permanently installed on the flatcar, and of

a type generally accepted for handling in interchange between railroads subject to the following:

- (i) A flatcar equipped with permanently attached ends of rigid construction is considered to be an open-top car (See Section VII (a)(5); and
 - (ii) This exception for cars in trailer-on-flatcar service does not apply to loaded flatbed trucks, loaded flatbed trailers, loaded open-top trailers, or loaded trucks or trailers without securely closed doors;
- (5) An open-top car when any of the lading protrudes beyond the car ends, or when any of the lading extending above the car ends is liable to shift so as to protrude beyond the car ends;
- (6) A car with automatic refrigeration or heating apparatus in operation, or a car with open-flame apparatus in service, or with an internal combustion engine in operation;
- (7) A car occupied by any person, including any attendant for the cargo contained therein.

7. POSITION IN TRAIN OF A TANK CAR DISPLAYING RESIDUE PLACARDS [174.93]

Except for tank car placarded COMBUSTIBLE—RESIDUE, a tank car displaying RESIDUE placards may not be placed nearer than the second car from an engine or occupied caboose.

Position in train of placarded cars containing hazardous materials

HOW TO USE THIS CHART:

To determine where a placarded car can be placed in a train follow these steps:

- Determine the type of placard applied to the car.
- Determine the type of car.
- Follow vertically down the chart and note which lines apply.
- The symbol X indicates the wording at the side that applies

See footnotes for explanation.

Identification numbers shown are samples. Other identification numbers may appear on placards.

RESTRICTIONS

MUST NOT BE NEXT TO:	Cars placarded:
1. WHEN TRAIN LENGTH PERMITS, must not be nearer than the sixth car from the engine, an occupied caboose or passenger car.	X
2. WHEN TRAIN LENGTH DOES NOT PERMIT, must be placed as near the middle of train as possible but not nearer than the second car from the engine, occupied caboose or passenger car.	X
3. Engine, an occupied caboose or passenger car	X
4. Car occupied by guard or escort accompanying shipment	X (1)
5. Loaded plain flatcar	X
6. Loaded bulkhead flatcar	X (2)
7. Loaded TOFC/COFC flatcar	X (3)
8. Car loaded with vehicles	X
9. Open top car with shiftable load	X (2)
10. Car with internal combustion engine in operation. Car with any heating apparatus or any lighted stove, heater or lantern	X
11. Car placarded EXPLOSIVES A	
12. Car placarded POISON GAS	X
13. Car placarded RADIOACTIVE	X
14. Loaded placarded car, other than a car placarded with the same placard or the "COMBUSTIBLE" placard	X

(1) A rail car placarded "EXPLOSIVES A" or "POISON GAS" must be next to and ahead of any car occupied by the guards or technical escorts accompanying this car. However, if a car occupied by guards or technical escorts is equipped with a lighted heater or stove, it must be the fourth car behind any car requiring "EXPLOSIVES A" placards.

(2) Restriction applies only when any of the lading protrudes beyond the car ends or when any of the lading extending above the car ends is liable to shift so as to protrude beyond the car ends.

(3) Cars placarded "EXPLOSIVES A" may be placed next to each other.

Cars placarded:	Cars placarded:	Cars placarded:	Any loaded placarded tank cars:	Empty tank cars placarded RESIDUE:	Placarded loaded cars other than tank cars:	Cars placarded:
				Corrosive		
		(6)		Poison		
				Chlorine		
				Organic Peroxide		
				Oxidizer		
				Oxygen		
				Flammable		
				Flammable Solid		
				Flammable Solid		
				Non Flammable Gas		
				Flammable Gas		
				Poison Gas		
X	X	X	X			
X		X	X			
X	X	X	X	X		
X (1)		X	X			
X		X	X			
X (2)		X (2)	X (2)			
X		X (4)	X (4)			
X		X (5)	X (5)			
X (2)		X (2)	X (2)			
X		X	X			
X	X	X	X		X	
	X	X	X		X	
X		X	X		X	
X	X					

NO RESTRICTIONS

(4) Restriction applies only to loaded flatbed or open top trucks and trailers and to loaded trucks and trailers without securely closed doors.

(5) Restriction does NOT apply to a car loaded with vehicles secured by a device designed for that purpose and permanently installed on the car and of a type generally accepted for handling in interchange between railroads.

(6) Any car placarded "RADIOACTIVE" may not be placed next to cars containing undeveloped film.

(7) Identification numbers on plain white background for ORM materials are not placards for purpose of switching placarded cars or for train placement.

Examples of U.S. Department of Transportation (DOT) Placards

EXPLOSIVES AND BLASTING AGENTS



COMPRESSED GASES

FLAMMABLE GAS

NON-FLAMMABLE GAS



CHLORINE

OXYGEN



FLAMMABLE AND COMBUSTIBLE LIQUIDS

FLAMMABLE LIQUID

COMBUSTIBLE LIQUID



FLAMMABLE SOLIDS

Flammable Solid

Flammable Solid (Dangerous When Wet)



OXIDIZERS AND ORGANIC PEROXIDES

OXIDIZER

ORGANIC PEROXIDE



POISONOUS MATERIALS

POISON A

POISON B



RADIOACTIVE MATERIALS

CORROSIVE MATERIALS

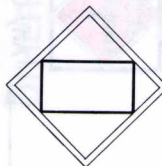


DANGEROUS

EXAMPLES OF RESIDUE PLACARDS



OTHER REGULATED MATERIALS (ORM)



Identification numbers on plain white background for ORM materials are not placards for purpose of switching placarded cars or for train placement.

REFERENCE GUIDE FOR SWITCHING PLACARDED CARS



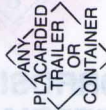
Any Car



Any Car



Tank Car
Class DOT 113
Flammable Gas



Placarded flat car or flat car carrying placarded trailers, freight containers, portable tanks, or IM portable tanks

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CARS DISPLAYING ANY OF THE ABOVE PLACARDS OR ALTERNATE PLACARDS

Must not be "HUMPED" or "KICKED"

Must not be cut of in motion

Must not be struck by any car moving under its own momentum

Must not be coupled to with any more force than is necessary to make coupling



Any Car

ADDITIONAL REQUIREMENTS FOR ANY CAR PLACARDED "EXPLOSIVES A"

Must be separated from engine by at least one non-placarded car

Must have doors closed before moving

Must not be placed or left where there is any probable danger of fire

Must not be placed or left under bridges, under overhead highway crossings or along passenger stations

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OTHER CARS DISPLAYING ANY OF THE FOLLOWING PLACARDS OR ALTERNATE PLACARDS



IN SWITCHING OPERATIONS WHERE USE OF HAND BRAKES IS NECESSARY

It must be determined by trial whether a loaded placarded car or a car occupied by a rider in a cut of cars containing a placarded car, has its hand brakes in proper working condition before it is cut off.

A loaded placarded tank car, or cut containing a loaded placarded tank car, must not be cut off until preceding cars are clear of the lead.

A loaded placarded tank car; or a cut containing a loaded placarded tank car, must be clear of lead before releasing any cars to follow.

