



## HAZARDOUS MATERIALS SAFETY TIP

### RAILROAD TERMINOLOGY

Hazardous materials response training for volunteer or remote emergency responders should include an introduction to essential railroad terminology that relates to the transportation of hazardous materials.

**HAZARDOUS MATERIAL:** A hazardous material is defined as a substance or material that the Secretary of Transportation has determined is capable of posing an unreasonable risk to **HEALTH, SAFETY**, and **PROPERTY** when transported in commerce, and is designated as hazardous under section 5103 of Federal hazardous materials transportation law (49 U.S.C. 5103). Hazardous materials include hazardous substances, hazardous wastes, marine pollutants, elevated temperature materials, materials designated as hazardous in the Hazardous Materials Table (see 49 CFR 172.101), and materials that meet the defining criteria for hazard classes and divisions in 49 CFR part 173.

**TRAIN:** A train is defined as 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.

**UNIT TRAIN:** A unit train is defined as a train with the following key characteristics:

1. Transports only one commodity
2. Travels from one origin to one destination
3. Cars are not switched enroute

Unit trains can transport either hazardous or non-hazardous commodities. When hazardous commodities are transported in unit train service, a non-hazmat "buffer car" is placed between the locomotive(s) and the first hazmat car.

**KEY TRAIN:** A key train is any train with one of the following:

1. One tank carload of poison or toxic inhalation hazard (Hazard Zone A, B, C, or D), anhydrous ammonia (UN1005), or ammonia solutions (UN3318), or,
2. 20 carloads or intermodal portable tank loads of any combination of hazardous material, or,
3. One or more carloads of spent nuclear fuel or high-level radioactive waste.

**HIGH HAZARD FLAMMABLE TRAIN:** A high hazard flammable train is defined as a single train transporting either:

1. 20+ loaded tank cars of a Class 3 flammable liquid in **one continuous block**, or,
2. 35+ loaded tank cars of a Class 3 flammable liquid **throughout the train consist**.



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### RAILROAD TERMINOLOGY (continued)

**RAIL SECURITY SENSITIVE MATERIALS:** Rail Security Sensitive Materials (RSSM) comprise the following:

1. A rail car containing more than 2,268 kg (5,000 lbs.) of a Division 1.1, 1.2, or 1.3 (explosive) material, as defined in 49 CFR 173.50;
2. A tank car containing a material poisonous by inhalation as defined in 49 CFR 171.8, including anhydrous ammonia, Division 2.3 gases poisonous by inhalation as set forth in 49 CFR 173.115(c), and Division 6.1 liquids meeting the defining criteria in 49 CFR 173.132(a)(1)(iii) and assigned to hazard zone A or hazard zone B in accordance with 49 CFR 173.133(a), excluding residue quantities of these materials; and
3. A rail car containing a highway route-controlled quantity of a Class 7 (radioactive) material, as defined in 49 CFR 173.403.

**RESIDUE:** Residue, as defined in 49 CFR §171.8, refers to the hazardous material remaining in a packaging, including a tank car, **AFTER** its contents had been unloaded to the maximum extent practicable and **BEFORE** the packaging is either refilled or cleaned of hazardous material and purged to remove any hazardous vapor.