



CP



Home Safe™

United States

Hazardous Materials Instructions for Rail

**March 1, 2022
Version 1**

SECTION VI. TRAIN PLACEMENT

1. GENERAL REQUIREMENT

Place placarded hazardous material shipments in a train so as to comply with the instructions on the Position-in-Train Chart (see Figure 15).

Note: Correct hazardous materials train placement errors at the first location that allows switching, once the error is identified.

A **Train** is one or more engines coupled, with or without rail cars, displaying a marker, requiring an appropriate air brake test, and authorized to operate on a main track.

2. WHEN TO USE THE POSITION-IN-TRAIN-CHART

Use the chart to make sure placement position in train is correct:

- a. before a train departs the initial terminal
- b. before a train departs an intermediate station where pickups and setouts were made en route
- c. when delivering cars to or picking cars up at interchange tracks that are owned and operated by another railroad.

3. HOW TO USE THE POSITION-IN-TRAIN-CHART

a. Select the applicable column of the Position-in-Train Chart. To do so:

1) Identify the placards and/or markings applied to the car, either from the shipping documents or from observation.

Note: When placards are displayed but are not required by regulation (permissive placarding), the rail car must be switched as required for the placard displayed.

Note: Molten sulfur identified on the shipping document as a 4.1 moving to or from Canada and displaying the letters and numerals "UN2448" or the numerals "2448" and the words "MOLTEN SULFUR"

2) Determine whether the car is loaded or residue/empty.

Note: The notation "RESIDUE: LAST CONTAINED" on the shipping documents indicates a residue/empty shipment.

3) Identify the car type involved by observation (e.g. tank car, hopper car, gondola, etc.).

b. Find the applicable section on the chart, based on the placard or marking applied, the load or residue/empty status, and the car type.

c. Follow the instructions associated with the placard or marking, as the "X"s in the columns indicate.

4. GENERAL INFORMATION

a. For train placement purposes, each platform or well of an intermodal rail car counts as one car.

b. A buffer car is a:

- 1) non-placarded rail car
- 2) Rail car with a placard or marking shown in Group E
- 3) residue/empty tank car, as long as it complies with Instruction # 2 on the Position-in-Train Chart
- 4) placarded rail car, other than a tank car, as long as it complies with Instruction # 6 on the Position-in-Train Chart.

i) The word "TOXIC" can appear in place of the word "POISON" on placards.

ii) A business car train is not a passenger train.

iii) A locomotive dead in tow in engine consist or in train consist is still considered an engine for the train placement of hazardous materials.

iv) Railroad wheel sets loaded on wheel car flats, in gondolas with no ends, or loaded with the axles above the top of the car are considered a shiftable load for train placement of hazardous materials.

v) Unit trains of hazardous materials (e.g. ethanol unit trains) require a minimum of one (1) buffer car between the first placarded car and the engine (working or not working). If the unit train does not have at least five (5) buffer cars then the hazardous materials may be placed between the available buffer cars (e.g. a unit train with two (2) available buffer cars is permitted to be configured with a buffer car at the head end and a buffer car at the tail end of the train with or without Distributed Power).

NOTE: Buffer cars used for any **LOADED** unit train of hazardous materials/dangerous goods (such as but not limited to ethanol or petroleum crude oil) must weigh a minimum of 45 tons and cars less than 32 feet cannot be coupled to a car longer than 65 feet and/or cars less than 41 feet cannot be coupled to a car longer than 80 feet.

4.1 DOT Special Permit 20996

a. This special permit authorizes the transportation in commerce of hazardous materials by rail without buffer cars between placarded cars and unoccupied distributed power locomotives.

1) A buffer car is not required between an unoccupied distributed power locomotive, dead-in-tow locomotives and placarded hazmat carrying cars.

2) Packaging includes all train types and railcars types used with unoccupied distributed power units and dead-in-tow locomotives.

3) Employees must not deadhead on distributed power units or dead-in-tow locomotives under this special permit.

4) Unoccupied and dead-in-tow locomotives are prohibited from placement next to the following rail cars and must be separated by at least one (1) buffer car:

i) Divisions 1.1 and 1.2.

ii) Division 2.3 (TIH/PIH) tank cars.

iii) Division 6.1, Packing Group I, Zone A tank cars.

iv) Class 7 (SNF & HLRW shipments only).

b. Until the Marshalling Messages can be updated in the system, the following will apply when these messages are received on your train consist list. Messages 4004 and 4005 will not require remarshaling as DOT-SP 20996 applies:

DCM - MESSAGE DISPLAY			
NUMB	TYP	----- MESSAGE TEXT -----	
1004	A	GROUP A NEXT TO ENGINE. **** REMARSHAL ****	NO CHANGE
1005	W	GP A NEAR ENGINE - 5 BUFFERS REQD IF LENGTH ALLOWS	NO CHANGE
2004	A	GROUP B NEXT TO ENGINE. **** REMARSHAL ****	NO CHANGE
2005	W	GP B NEAR ENGINE - 5 BUFFERS REQD IF LENGTH ALLOWS	NO CHANGE
3004	A	GROUP C NEXT TO ENGINE **** REMARSHAL ****	NO CHANGE
4004	A	GROUP D NEXT TO ENGINE. **** REMARSHAL ****	DOT-SP 20996 applies
4005	W	GP D NEAR ENGINE - 5 BUFFERS REQD IF LENGTH ALLOWS	DOT-SP 20996 applies

Note: See Appendix 2 for full copy of Special Permit DOT-SP 20996

