




Hazardous Materials Guidance

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Approved: 	

Summary:

The purpose of this Hazardous Materials Guidance is to remind tank car users of upcoming regulatory requirements for improved tank car safety features and to state FRA's enforcement policy on this topic.

Discussion:

The HMR (Hazardous Materials Regulations), at 49 CFR § 173.31, "Use of Tank Cars," state requirements for persons using DOT-specification tank cars and, where permitted, non-DOT specification tank cars, to transport hazardous materials. These requirements include time-phased requirements¹ for safety systems, PIH materials (materials poisonous by inhalation, some refer to these materials as TIH: toxic inhalation hazard); and hazardous substances.

- 173.31(b)(3)(iii), *Tank-head puncture resistance requirements*² states:

... those tank cars ... not requiring a tank-head puncture resistance system prior to July 1, 1996, must have a tank-head puncture resistance system installed no later than July 1, 2006.

- 173.31(b)(4)(ii), *Thermal protection requirements*³ states:

A tank car transporting a Class 2 material that was not required to have thermal protection prior to July 1, 1996, must be equipped with thermal protection no later than July 1, 2006.

¹ The end of the regulatory phase-in period is July 1, 2006.

² Applies to tank cars transporting Class 2 materials and tank cars constructed of aluminum or nickel plate used to transport hazardous materials.

³ Applies, with exceptions not germane to this Hazardous Materials Guidance, to tank cars transporting Class 2 materials.

- 173.31(b)(5) *Bottom-discontinuity protection requirements*⁴ states:

Tank cars not requiring bottom-discontinuity protection under the terms of Appendix Y of the AAR Specifications for Tank Cars as of July 1, 1996, must conform to (the requirements of E9.00 and E10.0) no later than July 1, 2006, except that tank cars transporting a material that is hazardous only because it meets the definition of an elevated temperature material or because it is molten sulfur do not require bottom discontinuity protection.

- 173.31(e)(2) *Special requirements for materials poisonous by inhalation*⁵ states:

A tank car used for a material poisonous by inhalation must have a tank test pressure of 20.7 Bar (300 psig) or greater, head protection, and a metal jacket (e.g., DOT 105S300W) except that ... a tank car which does not conform to the requirements of this paragraph (e)(2), and was authorized for the materials poisonous by inhalation under the regulations in effect on June 30, 1996, may continue in use until July 1, 2006.

- 173.31(f)(iii) *Special requirements for hazardous substances*⁶ states:

... a tank car which does not conform to the requirements of this paragraph ..., and was authorized for a hazardous substance under the regulations in effect on June 30, 1996, may continue in service until July 1, 2006.

FRA has a long-standing policy of not granting continuances for mandated safety improvements; users of tank cars should expect no different policy to be applied to the requirements stated above. The rulemaking proceeding which promulgated these requirements included a 10-year phase-in period and that period is about to close. FRA is taking this opportunity to remind tank car users and owners of the July 1, 2006, compliance date and the agency's enforcement policy: Tank cars not in compliance on July 1, 2006, may not be loaded with a material to which the standards above are applicable, tank cars loaded prior to July 1, 2006, may continue to destination for unloading and may not be reloaded until brought into compliance; tank cars in residue status or tank cars cleaned and purged may move to a shop for necessary modifications or for scrapping without further permission.

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⁴ Applies to tank cars with bottom-discontinuities; application of bottom-discontinuity protection was phased-in on the basis of risk-ranking applied to relevant hazardous materials as listed in Appendix Y of the Association of American Railroads' Tank Car Manual.

⁵ Materials poisonous by inhalation are defined at 49 CFR § 171.8.

⁶ Hazardous substances are defined at 49 CFR § 171.8.