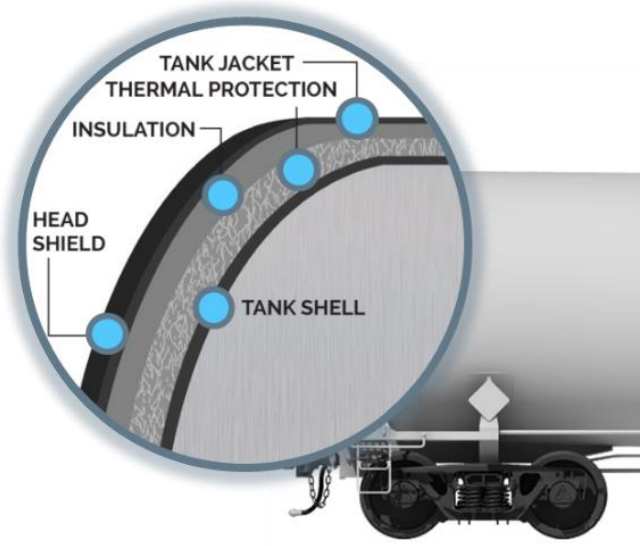
Short Line Safety Institute

## HAZARDOUS MATERIALS SAFETY TIP

## TANK CAR ORIENTATION – PART II

Effective hazardous materials incident response and communication requires proper tank car orientation.

**Part I** of this safety tip focused on side and end orientation as well as the most important car markings to be aware of. **Part II** outlines the major physical characteristics of tank cars.




**TANK SHELL**. The cylindrical section of a tank car tank, without heads. Don't confuse the tank shell with the tank jacket.

**THERMAL PROTECTION**. A material or system applied to tanks to limit the transfer of heat to the tank in the event of exposure to fire.

**INSULATION**. A material enclosed within a metal jacket, used to maintain or moderate the temperature of the lading during transportation.

**TANK JACKET**. A metal covering surrounding a tank car tank designed to protect and secure the tank car's insulation and/or thermal protection systems.

**HEAD SHIELD**. A method of providing tank head puncture-resistance by mounting a metal shield on the end of a tank car to protect against punctures.

**FULL SILL**. The center longitudinal structural member that forms the backbone of the car's underframe.

**STUB SILL**. Draft sills at each end of the tank instead of a continuous center sill that utilizes the tank as part of the car structure.

**PROTECTIVE HOUSING**. On pressure and some non-pressure tank cars, a heavy, circular steel housing is located above the tank that protects the tank car's fittings.

**SKID PROTECTION**. A device attached to the bottom of a tank car to protect the bottom outlet, washout and/or sump.