

# CDL Tanker (N) Endorsement Exam

QUICK REFERENCE CHEAT SHEET | FMCSA / 49 CFR Part 383

## LIQUID SURGE & VEHICLE STABILITY

Concept	Explanation
Liquid Surge	Liquid in partially-filled tank moves on acceleration, braking, turns -- affects handling
Baffled tank	Baffles reduce front-to-back surge; do NOT prevent side-to-side surge
Unbaffled tank	Greater surge in all directions; requires extra skill and caution
High center of gravity	Tankers roll more easily; reduce speed on curves and ramps
Outage (ullage)	Space left in tank for liquid expansion; required by regulations
Safe fill level	Never overfill -- liquid expands with temperature; check spec for outage %

## TANKER-SPECIFIC RULES

Rule	Requirement
Who needs N endorsement?	Driver of tanker vehicle designed to transport 1,000+ gal liquid/gas
Pre-trip inspection	Check tank body, valves, piping, baffles, emergency shutoffs, venting
Surge compensation	Leave more following distance; brake early and gently
High speeds on curves	ALWAYS reduce speed -- tankers tip at lower speeds than other trucks
Emergency shutoff valves	Know location and operation -- required on all tankers
Vapor recovery	Required on many liquid fuel tankers -- check connections before moving

## HAZMAT COMBINATION

Hazmat + Tanker	Additional Requirements
H endorsement also required	When transporting hazardous materials in a tanker
Placarding	Required when carrying hazmat above threshold quantities
Shipping papers	Required in driver's reach or door pocket at all times
Emergency response	Know ERSG (Emergency Response Guidebook) procedures
Security plan	Required for certain hazmat materials -- know your company's plan

## EXAM-DAY TIPS

- + Liquid surge is most dangerous in partially-filled tanks (about 50% full is worst).
- + Baffled tanks: reduce front-to-back surge only -- lateral surge still present.
- + Always check outage requirements for the specific liquid being transported.
- + Speed on curves: posted speed is for cars -- reduce further for tankers due to high CG.
- + Emergency shutoff valves: required at outlet of each tank compartment.
- + Practice 1,000+ questions -> [voltexam.com/apps/cdl-tanker](http://voltexam.com/apps/cdl-tanker)

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