

OFFICE OF THE STATE FIRE MARSHAL
STATE OF ILLINOIS

Statute, Rule or Standard Policy Interpretation: **Emergency Internal Check Valves for
ASTs Supplying Fire Pumps**

Title:	Storage, Transportation, Sale and Use of Gasoline and Volatile Oils: Rule and Regulations Relating to General Storage
Part:	41 Ill. Adm. Code 160
Section Number:	160.190
Section Title:	Emergency Internal Check Valves
Policy Number:	01-TS-2010

Purpose: This instruction provides for current policy and guidance to ensure uniform enforcement of Title 41 Illinois Administrative Code Part 160 *“Storage, Transportation, Sale and Use of Gasoline and Volatile Oils: Rule and Regulations Relating to General Storage”* and specifically for the interpretation of rules to be applied to the necessary installation of internal emergency valves for aboveground storage tanks (ASTs) supplying fuel to fire pumps (fire pump drivers).

Scope: Statewide

Current Code: The Part 160 rules applicable to aboveground storage tanks require that in addition to any normal valves, there must be an extra valve at each pipe line connection to any tank below normal liquid level, (regardless of when installed) which valve is effective inside the tank shell and is operated both manually and by an effective heat actuated device which, in case of fire, will automatically close the valve to prevent the flow of liquid from the tank even though the pipe lines are broken from the tank.

Policy: The OSFM will not require the presence of the Part 160.190 required emergency internal check valve on aboveground fuel storage tanks containing fuels for the purpose of supplying fire pump drivers. This allowance to exclude the emergency internal check valve does not apply to ASTs used to contain fuels for purposes other than fire pump supply. Note that NFPA 20 *“Standard for the Installation of Stationary Pumps for Fire Protection”* requires that *“the fuel supply tank and fuel shall be reserved exclusively for the fire pump diesel engine”*. Therefore, ASTs supplying fuel for fire pumps and also used for other purposes should not be encountered.

Reason: The presence of this emergency internal check valve, which is activated either manually or automatically by excessive heat, can present unexpected interruptions in the flow of fuel. When the fuel contained in an aboveground tank serves the purpose of supplying a driver for a fire pump, this interruption of fuel, besides possibly resulting in a violation of codes applicable to fire pump fuel supplies, can cause the installed fire suppression system to be ineffective.

Effective Date: May 2010