Background

What is required on satellite systems (master/slave units) to alert the user of fuel diversion during their fueling process?

NIST HB 44, Sec. 3.30 Liquid-Measuring Devices:

S.3.1. Diversion of Measured Liquid. - "No means shall be provided by which any measured liquid can be diverted from the measuring chamber of the meter or its discharge line...."

S.3.2. Exceptions. - "The provisions of S.3.1. Diversion of Measured Liquid shall not apply to:

- 'truck refueling devices when diversion of flow to other than the receiving vehicle cannot readily be accomplished and is readily apparent. Allowable deterrents include, but are not limited to, physical barriers to adjacent driveways, visible valves, or lighting systems that indicate which outlets are in operation, and explanatory signs.'

UR.2.4. Diversion of Liquid Flow. - "A motor-fuel device equipped with two delivery outlets used exclusively in the fueling of trucks shall be so installed that any diversion of flow to other than the receiving vehicle cannot be readily accomplished and is readily apparent. Allowable deterrents include, but are not limited to, physical barriers to adjacent driveways, visible valves, or lighting systems that indicate which outlets are in operation, and explanatory signs."

Interpretation

Any dispenser in use as a master with a slave unit for the exclusive purpose of fueling trucks must have a deterrent to prevent, or indicate, diversion of fuel into another vehicle while the master is in use. This includes, but is not limited to, appropriate fences, walls, visible valves, or lights on the master, along with explanatory signs, to direct the user's attention to the protection system and indicate how it works.

Signs, by themselves, do not meet full compliance with this requirement.