Reset of Emergency Electrical Disconnects

BUREAU OF WEIGHTS AND MEASURES

PO Box 8911
Madison, WI 53708
(608) 224-4942
datcp.wi.gov

RESOURCES

Wis. Admin. Code ATCP 93:
http://docs.legis.wisconsin.gov/code/admin_code/atcp/090/93

National Fire Protection Association (NFPA):
https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=30A&year=2018

Testing of e-stops Fact Sheet:
https://datcp.wi.gov/Documents/E-StopFactSheet.pdf

Wisconsin Administrative Code ATCP 93.370 requires that an emergency electrical disconnect, also referred to as an e-stop, to be installed in accordance with NFPA 30A section 6.7 on any new or existing system that provides for the transfer of product from a fixed storage tank system to a tank vehicle, rail tank car, or vehicle fuel tank.

NFPA 30A-2018 6.7 Emergency Electrical Disconnects requires that operator Fuel dispensing systems have one or more clearly identified emergency shutoff devices or electrical disconnects. Emergency shutoffs or electrical disconnects must meet the following requirements:

- Be installed in approved locations, but not less than 6 m (20 feet) or more than 30 m (100 feet) from the fuel dispensing devices that they serve.
- Disconnect power to all dispensing devices; to all remote pumps serving the dispensing devices; to all associated power, control, and signal circuits; and to all other electrical equipment in the hazardous locations surrounding the fuel dispensing devices
- Mechanically or electrically isolate other fluid transfer systems serving the fuel dispensing area.
- When more than one emergency shutoff device or electrical disconnect is provided, all devices must be interconnected.
- Include disconnection of all other electrical equipment installed at fuel islands during emergency stop. This includes, but is not limited to vacuum cleaners, windshield washer fluid dispensing systems, and compressed air pumps.
- Be close enough to the dispensing island to be quickly accessible to the attendant or person operating the dispenser, but not so close as to be directly involved in or blocked by a fire at the island or to place anyone in jeopardy while trying to access them.
- Be clearly identified with that a sign indicating where the emergency shutoffs are located.
- Require manual intervention and the manner of resetting must be approved by DATCP.
    - Intrinsically safe electrical equipment need not meet this requirement.
    - Operations should not be resumed until the person responsible for the facility has rectified whatever emergency condition might exist.

The manual reset method must be approved by DATCP. There are currently a variety of approved manual reset methods, but the specific type allowed depends on whether the facility is a retail motor vehicle fueling facility, a commercial/mercantile (non-retail) motor vehicle fueling, or bulk plant delivery truck fueling.

(over)

For each facility type, the manual intervention requirement for the resetting of the emergency electrical disconnect is as follows:

Retail Motor Vehicle Fueling:

For Point of Sale systems, outside e-stops must be either a key reset type or a shunt trip breaker that is only accessible by facility personnel. Inside e-stops can be a push-pull style, or a light switch if accessible by store personnel only, i.e., behind the sales counter, etc.

For non-Point of Sale systems, if there is an outside e-stop, it must be either a key reset type or a shunt trip breaker that is only accessible by facility personnel. Inside e-stops can be a push-pull style or a light switch if accessible by store personnel only, i.e., behind the sales counter, etc.

Commercial/Mercantile (non-retail) Motor Vehicle Fueling:

For Point of Sale systems, outside e-stops must be either a key reset type or a shunt trip breaker that is only accessible by facility personnel. Inside e-stops can be a push-pull style, or a light switch if accessible by facility personnel only.

For non-Point of Sale systems, if there is an outside e-stop, it must be either a key reset type or a shunt trip breaker that is only accessible by facility personnel. Inside e-stops can be a push-pull style or a light switch if accessible by facility personnel only.

Note: existing Commercial/Mercantile (non-retail) Motor Vehicle Fueling facilities with an outside e-stop will not be required to change from a push-pull style or a light switch, to a key reset type or a shunt trip breaker unless the facility is upgraded.

Bulk Plant Delivery Truck Fueling:

For Point of Sale systems, outside e-stops must be either a key reset type or a shunt trip breaker that is only accessible by facility personnel. Inside e-stops can be a push-pull style, or a light switch if accessible by facility personnel only.

For non-Point of Sale systems, if there is an outside e-stop, it must be either a key reset type or a shunt trip breaker that is only accessible by facility personnel. Inside e-stops can be a push-pull style or a light switch if accessible by facility personnel only.

Note: existing Bulk Plant Delivery Truck Fueling facilities with an outside e-stop will not be required to change from a push-pull style or a light switch, to a key reset type or a shunt trip breaker unless the facility is upgraded.

For testing of Emergency Electrical Disconnects (e-stops) see the fact sheet at:

https://datcp.wi.gov/Documents/E-StopFactSheet.pdf

BUREAU OF WEIGHTS & MEASURES PO Box 8911 Madison, WI 53708 (608) 224-4942 datcp.wi.gov