



## Documenting UST Compatibility with Blended Fuels

On 10/13/2018 the United State Environmental Protection Agency at 40 Code of Federal Regulation Part 280.32 (Compatibility) and the State of Illinois at 41 Illinois Administrative Code 175.415 (UST Compatibility with Product Stored) established the requirement for proof of compatibility of a UST system with the product it contains and dispenses. For affected UST owners/operators this will be limited to "blended fuels," which are any gasoline/ethanol blends with concentrations of ethanol greater than 10%, and any diesel/biofuel blends with concentrations of biofuel (such as soy oil) over 20%. In other words, any fuels labeled as being over E10 or B20.

The requirement to demonstrate compatibility of fuels with concentrations of ethanol or biofuel over E10 or B20, based on Federal EPA requirements, is challenging, and will be more so in relation to how long the facility has been storing and dispensing those products. Compatibility certifications at new installations are being addressed at the permit application stage of the process now, but that won't help facilities where this was done prior to the new requirements.

- Demonstration of compatibility is not limited to just the blended fuel tank. These are the components, in addition to the tank itself, that require proof of compatibility:
  - Underground storage tank;
  - Product piping carrying product from that tank;
  - Piping containment sumps entered by that piping;
  - Spill and overfill equipment on the blended fuel tank, including ball float valves, drop tube flapper valves and the spill bucket;
  - Release detection equipment, including ATG probes, sump sensors and line leak detectors;
  - Pumping equipment, including the submersible pump or the suction pump (depending on the type of system), and dispenser pumps, as well as the hoses and nozzles used to dispense the blended fuel;
  - for new UST installations, OSFM included seals, gaskets, pipe dopes and adhesives.
- Compatibility must be demonstrated and documented using:
  - Certification or listing of UST system equipment or components by a nationally recognized, independent testing laboratory for use with the regulated substance stored; or
  - Equipment or component manufacturer approval. The manufacturer's approval must be in writing, indicate an affirmative statement of compatibility, specify the range of biofuel blends the equipment or component is compatible with, and be from the equipment or component manufacturer.
- This requirement is not just for new installations going forward. This covers new and old UST systems, regardless of how long ago they were installed.

The UST compatibility requirements went into effect 10/13/2018 in Illinois. When an OSFM inspector conducts an inspection at a facility where blended fuels over E10 and B20 are stored and dispensed, he or she will write a Notice of Violation (NOV) if there is no documentation of proof of compatibility on file with OSFM. The UST owner will then have 60 days to submit the documentation, or the blended fuel will

need to be removed from the UST system. The UST owner may need to work with their UST contractor to assemble all the required documentation.

Use OSFM's electronic Blended Fuel Compatibility Form (link #1) to facilitate your task of assembling the proofs of compatibility for all the components listed on the form. USEPA published an advisory notice in 2019 regarding the UST compatibility requirements (link #2) and the Petroleum Equipment Institute (PEI) developed an online UST component compatibility library (link #3). This library may help in identifying compatibility documentation for specific equipment (Please note that not all equipment is listed):

1. [Blended Fuel Compatibility Form](#)
2. [USEPA Compliance Advisory](#)
3. [PEI Compatibility Library](#)

We strongly recommend that an owner/operator work with a licensed UST contractor to begin to assemble this information now, to avoid violations for not having the component compatibility proof in place. The completed checklist and the documentation will be submitted to OSFM for review and approval. For new installations with blended fuels, the Checklist and supporting documentation must accompany the installation permit application.

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