Guidance on Flame Effect Devices: Engineer Letter Submission

Moving forward, the SFMO will accept two methods to show compliance with state law and adopted codes: compliance with NFPA 160 or a letter from a TN registered engineer. If the applicant cannot show proof that the flame effect device meets the requirements of NFPA 160, the applicant may provide a letter from a TN registered engineer certifying that the device is reasonably safe, does not create a hazard to property nor does it endanger human lives.

The letter from the engineer must certify that the following minimum standards are present in the flame effect device included on the display permit application:

- The device has as adequate heat thermal insulation shield barrier between the burner unit and the fuel reservoir.
- The hydraulic hose is adequately protected from potential external damage, and has thermal properties required to resist high temperatures.
- The fuel reservoir has adequate protection from downstream failures, specifically a shut-off valve that can be remotely controlled at the fuel reservoir outlet.
- All components of the system are rated for the operating pressures specified in the system design.

Finally, the TN registered engineer must certify that the device is reasonably safe and that the device does not create a hazard to property nor does it endanger human lives as required by T.C.A. § 68-104-211. Current TN registration for an engineer can be checked by visiting verify.tn.gov.

Please contact Mary Beth Gribble at marybeth.gribble@tn.gov or 615-532-3272 if you have any questions or if you need additional information.