



# CONCORD FIRE & LIFE SAFETY

## *Fire Marshal's Office*

Post Office Drawer 308 • Concord, North Carolina 28026-0308

Telephone 704-920-5517 • Fax 704-782-3488

### **Aboveground and Belowground Tank Submittal Requirements (Including Generator Base and Day Tanks)**

Plan review and inspections are conducted through the Fire Marshal's Office of the Concord Department of Fire & Life Safety. The Plan Reviewers office is located at the City Hall Annex Building, 66 Union Street South, Concord, NC, 28025.

All submittals must include a Certificate of Compliance (COC) Application from the Concord Department of Fire & Life Safety. A copy of the application can be obtained by contacting the Fire Marshal's Office at 704-920-5517. Submittals for New and Up-fit Construction shall be made in accordance with the City of Concord Developmental Services Policies and Guidelines.

Submittals shall include at least one (1) complete set of documents with the designer indicated and the date of design. All plans must be sealed by a North Carolina registered Professional Engineer (PE) or other approved design certification or show equivalent training and experience. At the discretion of the Fire Official, the PE seal requirement may be waived for simplistic systems of 300 gallons capacity or less.

Parties desiring a signed set of documents with comments approved by the Fire Department shall submit a least two (2) sets of documents at the time of submittal along with a full-size, self-stamped addressed envelope. The second set of plans will be stamped "Approved" and returned to the applicant. A complete set of documents including comments shall be available on-site at all times during installation.

All tanks shall be designed and installed in accordance with the applicable chapters of the North Carolina Fire Prevention Code, NFPA Standards, American Petroleum Institute (API) and all other referenced standards. Plan submittal shall include the following:

1. Specifications detailing the design and construction of the tank (including the materials to be used in the exterior and interior construction of the tank).
2. The UL Listing of the tank and dispenser.
3. The hazard class, quantities and types of materials to be stored.
4. The operating pressure of the tank.
5. The normal and emergency venting methods of the tank (including vent piping materials and locations).
6. Tank gauging and leak detection devices utilized.
7. Fill connection location(s) and tank vehicle access routes.
8. Overfill prevention system design and operation.

9. If installed, design and methods used to manifold tanks.
10. The design of above ground tank supports (documentation shall include the seismic design of tank supports).
11. Below ground tank anchoring methods utilized (including bedding materials to be used).
12. If a tank vault is installed, construction and design documents for the installation of the vault.
13. The method of dispensing of liquids must be indicated including specifications for nozzles and/or other devices.
14. Specifications for all emergency shut-off control devices and their intended locations.
15. The distances from other tanks, dispensers, property lines, and buildings.
16. All vehicle collision barriers (including design, type and number).
17. All fire protection appliances and associated equipment (including the location, type, and size of all portable fire extinguishers).
18. If required, secondary containment provisions and equipment.
19. If applicable, vapor recovery design and operation.
20. Specifications of all signs to be used (including emergency directions and normal operating instructions).

***(Additional information may be required prior to approval of the submitted plans. The above requested information is not all-inclusive.)***

Plans approved by the Concord Department of Fire & Life Safety give permission for installation. Installation shall not begin without a permit. Final approvals are subject to field inspections. Any approval issued by the Fire Marshal's Office does not release the contractor or property owner from the responsibility of full compliance with applicable codes.

All installations shall be in accordance with the approved plans. Any deviations from the plans should be discussed with the Plan Reviewer for your project prior to making changes. Some changes *may* require a re-submittal to the Fire Marshal's Office for re-approval.

All tanks, associated appliances and devices shall be tested in accordance with all applicable standards prior to being placed into service. Any tanks, associated appliances or devices failing to pass final testing shall be repaired/replaced and retested prior to being placed into service.

For additional information please contact the Fire Marshal's Office at (704) 920-5517.