Petroleum Product Storage Tank Regulation

Safety and Buildings Division
Bureau of Petroleum Inspection and Fire Protection

NOTE: THIS OUTLINE SHOULD NOT BE USED AS A DOCUMENT FOR DETERMINING AN OWNER’S SPECIFIC REQUIREMENTS FOR COMPLIANCE. THE FEDERAL RULES PHASE IN OVER DIFFERENT TIME FRAMES AND THERE ARE DIFFERENT REQUIREMENTS FOR NEW AND EXISTING PETROLEUM PRODUCT STORAGE TANK SYSTEMS. DETAILED INFORMATION ON THE SPECIFIC TIME FRAMES FOR COMPLIANCE CAN BE OBTAINED BY CONTACTING THE FOLLOWING ORGANIZATION:

BUREAU OF PETROLEUM INSPECTION AND FIRE PROTECTION
P.O. BOX 7969
MADISON, WISCONSIN 53707

I. The Bureau regulates underground and aboveground petroleum product storage tanks. The regulation is based upon:

A. Ind. 8, the Flammable and Combustible Liquids Code, which originated in 1931 and has been updated periodically. The current version was created in 1982.

B. The delegation of the responsibility for implementing the federal EPA tank rules. This delegation was by the Governor and it made the Bureau responsible for:

1. The technical tank standards (design, construction, installation, inspection, removal, testing, and leak detection).

2. The financial responsibility requirements of the federal rules.

NOTE: The DNR based upon state statute is responsible for the part of the Tank program concerning corrective action and cleanup.

C. The issuance of the federal rules preempted a number of the provisions of the state code. Tanks which are federally regulated are now covered by both the state code (Ind. 8) and the federal rules. The tanks covered under the federal regulations are:

1. Underground tanks that store petroleum products or certain hazardous chemicals.

2. The federal rule does exclude some tanks, however, and these are:
   a. Farm and residential tanks holding 1,100 gallons or less motor fuel used for noncommercial purposes.
   b. Tanks storing heating oil used on the premises where it is stored.
   C. Tanks on or above the floor of underground areas, such as basements.
   d. Septic tanks, storm and waste water tanks, flow-through process tanks, tanks holding 110 gallons or less and emergency spill and overfill tanks.
D. The federal rules establish a new tank standard which new tanks being installed must meet at time of installation and which existing tanks must meet by 1998. The EPA standard is:

1. Corrosion protection of the tank through the use of a cathodically protected and coated steel tank, a fiberglass tank or a clad tank.

2. Corrosion protection of the lines through the use of cathodically protected and coated steel lines or fiberglass lines.

3. Leak detection for tanks which can include the use of a tank monitor, groundwater monitoring wells, vapor monitoring wells, or for a ten year period inventory control combined with tightness testing.

4. Leak detection for piping. Depending on whether the piping system is pressurized or a suction system, the requirements vary.
   a. Pressurized piping must have a flow restrictor or automatic shutoff device or an alarm system and a monitoring system or annual line testing.
   b. Suction systems that have the check valve at the tank must have a monitoring system or be tested every three years.
   C. Suction systems that have the check valve at the dispenser and inspectable, have no special requirements.

5. Spill and overfill devices.

E. The financial responsibility requirements of the federal rules require that:

1. Non-marketers, with less than 10,000 gallons per month average throughput, have coverage of $500,000 per occurrence and $1,000,000 annual aggregate.

2. Marketers with 1 to 99 tanks and non-marketers not included in #1 have to have coverage of $1,000,000 per occurrence and $1,000,000 annual aggregate.

3. Marketers with more than 100 tanks will have to have $1,000,000 per occurrence and a $2,000,000 annual aggregate.

4. Financial responsibility requirements phase in but by October 26, 1990, all federally regulated tanks are to be covered.

II. To resolve the overlap between the two sets of rules, the Department is in the process of carrying out a rewrite of the state code. The rewrite of the code is accomplished through the use of a code committee made up of members of the regulated community, the public, government and other interested groups.

A. The code committee is responsible for:

1. Reviewing and making changes to a draft which was prepared by the staff of the Division.

2. Reviewing and approving for hearings the final code draft.

3. Considering comments from the public hearings and making decisions on the changes that need to be made in order to respond to the comments.
B. The code committee has completed its initial work and suggested that the draft code be taken to hearing. The Secretary’s Office is now reviewing the document and will likely provide their approval for hearings in the near future. If individuals would like to be on the mailing list for a draft of the code, this can be accomplished by sending a post card to:

BUREAU OF PETROLEUM INSPECTION AND FIRE PROTECTION
P.O. BOX 7969
MADISON, WI 53707

III. The new code will be known as ILHR 10 and will accomplish both an updating of the current state regulations and the incorporation of the federal rules. Significant features of the new code are:

A. In Wisconsin we have a statutory mandate to regulate all underground storage tank and those aboveground tanks that are 5,000 gallons in size or larger. We do not have to regulate the tanks to the same degree but we must provide for both fire prevention and groundwater protection.

B. The federally regulated tanks and their requirements will be one subchapter in the code. If you have a federally regulated tank, the requirements will be in that segment. The rules have been maintained substantially as the EPA developed them; however, we have had to take some steps to make them operational. For example:

1. Although the EPA required site assessments at the closure of federally regulated tanks, they never specified what a site assessment would consist of. We have specified a site assessment process and this will be a part of the code.

2. The EPA exempts smaller farm and residential tanks (1,100 gallons or less) but they never define what is a farm or a residence. We have developed these definitions based upon our existing codes and statutes.

3. Additional information on leak detection methods and requirements are provided to help individuals implement systems.

C. The remaining segments of ILHR 10 will deal with the other tanks and issues that we are required to regulate in Wisconsin. Although it isn’t possible to fully describe the new code, it may be helpful to talk about some of the issues and ideas in the document.

1. The enforcement of the new code will be through the Bureau of Petroleum Inspection and Fire Protection and by a system of local program operators.

2. Local program operators will be signed up to provide services for a specified period of time and will be required to maintain a certified inspector. The first offer to operate the program will go to the local fire departments, if they decline the program we will look to other governmental agencies.
3. Local program operators will be responsible for installation inspections, on-going inspections, control of removals and general enforcement. For performing these duties, they will receive 80% of the tank installation inspection fee and 80% of the tank permit fee.

4. The enforcement of the rule will follow the traditional methods of the Department, however, there will be an expanded use of "red tag" authority. Red tag authority allows the Department to close tank systems which present a hazard to life safety or the environment. Red tagging of a system can occur in a number of different ways.
   a. Immediate shut down when there is an imminent threat to life safety (uncontrolled release of product).
   b. Closure after investigation. This approach allows closure when an investigative effort has concluded that there is reason to believe that a system is leaking. The system would be closed until it is repaired or replaced.
   c. Delayed shut down. This action would be taken where there is a long history of code violations. Based upon the failure to correct the violations, the system would be closed. The issue here is that the system is likely to result in a hazard to life safety or the environment.

5. The new code will institute a permit system for federally regulated tanks. A permit must be obtained to maintain a tank in service. The permit would be for 5 years and be priced at $100.

6. Although the EPA has exempted heating oil tanks which have product for use on the premises, the state code has always covered these tanks. The EPA believes that a mistake was made in this exemption and that the larger heating oil tanks should have been covered. The code committee also recognized a risk and additional regulations have been included for heating oil tanks. The regulations will require:
   a. Tanks of 4,000 gallons or larger to, over a phase in period, meet the EPA's new tank standard. They would, however, not have to demonstrate financial responsibility or conduct a site assessment at closure.
   b. Tanks less 4,000 gallons would have to conduct static testing for leaks on a regularly scheduled basis.

7. The use of aboveground tanks for fueling vehicles has generally not been allowed in Wisconsin. The exceptions to this have been farm, marina and temporary use at construction projects. In the draft of ILHR 10, an expanded use of aboveground fueling is proposed. The code suggests:
   a. Fleet use of aboveground tanks would be generally allowed but there would be specific requirements. Many of the requirements are based upon NFPA 30. Some of them are:
      (1). Set backs from buildings and property lines.
      (2). A liquid tight diking system able to contain 125% of the largest tank's contents.
      (3). Piping to be underground, protected against corrosion and treated as pressurized.
      (4). Maximum tank size of 10,000 gallons and maximum gallonage on site of 30,000.
b. Retail use of aboveground tanks is also being proposed. The majority of the requirements will be the same as for fleet facilities, however, retail facilities will need to:
   (1) Provide for a minimum separation between the tanks and the dispenser.
   (2) Provide for leak detection for the "pressurized" piping.

IV. The Bureau also operates the Petroleum Environmental Cleanup Fund. This fund is designed to assist individuals, with federally regulated underground petroleum product storage tanks and home heating oil tanks, deal with contamination cleanups. The PECFA fund:

1. Provides coverage for federally regulated tanks containing gasoline, kerosene, diesel fuel, aviation fuels, waste oil and other products that the Bureau charges a petroleum inspection fee on. The fund also covers home heating oil tanks but at a reduced dollar level.

2. The fund provides, for covered federally regulated tanks, 100% reimbursement of cleanup costs, after a $5,000 deductible, up to a maximum payout of $195,000. The expenses must be paid and then a claim for reimbursement can be filed with the Bureau. Approval of the cleanup, by the DNR, is also required for a claim to be eligible for reimbursement.

3. The fund also provides limited coverage for home heating oil tanks. For home heating oil tanks there is no deductible but the maximum reimbursement is $7,500.

4. PECFA also makes awards for investigation activities (when no release is found) if the owner/operator is under orders from DILHR or DNR to conduct an investigation. Reimbursement is for 100% of eligible costs incurred.

5. During the life of the program PECFA has paid 105 claims totalling in excess of 4.2 million.

6. There are a series of legislative proposal now under consideration. These proposals would change the operation and coverage of the program:
   a. Expanding coverage to include aboveground tanks. In this proposal, PECFA would cover aboveground tanks for wholesale/retail use, farm and residential tanks over 1,100 gallons and fleet tanks. The law would not cover heating oil tanks where the product was for use on the premises.
   b. Expanding coverage to make PECFA a true instrument for meeting the financial responsibility requirements of the EPA rules.