## Highland Tank

## **Maintenance Instructions - Aboveground Storage Tanks**

Maintenance of your aboveground storage tank is very simple and can lead to a long, useful life for the storage tank. The tank should be inspected monthly for water on the bottom of the tank. Water can accumulate in the bottom of the tank from several different places: (1) water can be delivered with the fuel from condensation in a tanker truck:

(2) condensation can form in the tank when product is delivered at a temperature different than the temperature of the existing fuel in the tank.

Regardless of where the water comes from, it is important that, when any detectable accumulation is present, it's immediately removed and disposed of following the local and federal rules. There are two primary problems with water in the bottom of a tank. The first problem is microbial growth, which develops from microbes that are naturally occurring in the atmosphere. They tend to live in the water layer and feed off the petroleum product. When this occurs, colonies will form in the bottom of the tank, causing microbial corrosion cells that can cause pitting over time.

The second problem, of course, is if enough water accumulates and then it gets pulled up the suction line, you would then end up contaminating the vehicle into which the product was being pumped.

This is important with both motor fuel tanks as well as heating oil tanks. To check for water, you need to purchase water finding paste. It should be applied to a manual gauge stick and pressed to the bottom of the tank. When removed, the paste will change color to indicate the presence of water. It is further recommended that the tank be inspected for sludge. This can be done visually or with cameras.

Often, you can tell that there's sludge accumulating by checking for residue on the gauge stick that you would use to check for water. The check for water should be done monthly. It is recommended that the check for sludge be done on annual basis. If there is any appreciable sludge accumulation, you will need to have the tank professionally cleaned.

In addition, it will be important to remove any electronic water sensor device that you have and make sure it is clean. When you have sludge, it could sometimes clog that device and make it non-functioning. The exterior of the aboveground tank needs to be inspected annually for any damage to the coating system by delivery people and people doing inspections for water. Normal operations can sometimes cause nicks in the coating that, if addressed quickly with touch-up paint, can completely solve any rusting problem.

It is also important to inspect all the connections across the top of the tank and make sure that any device that is screwed into the tank or attached to the tank is protected from rust, as the rust from anything in that area could spill over the sides of the tank and form stains. Generally, if this occurs and is caught within the yearly inspection, it can be removed with just a soap solution and sponges and then rinsed off with a garden hose.

Maintaining the outside of your tank will make it possible for the finish to last for a long time. Should you need to repaint your tank, please contact Highland Tank for suggestions on coating systems. You should also do a monthly walk-around inspection to ensure no product is leaking from the tank. For double-wall tanks using electronic monitoring in the interstice, the interstitial probe should be removed and inspected annually. If there is any condensation in the interstice. it should be removed.

Following these simple instructions will make your storage tank last for many, many years. These inspections ay not be necessary for tanks storing non-petroleum products. Tanks with internal linings should also inspect interior following the coating manufacturer's recommendations. Should have any questions please contact any of the Highland tank offices listed below





Manheim, PA 4535 Elizabethtown Rd. Manheim, PA 17545 (717) 664-0600 **Watervliet, NY** 958 19th St. Watervliet, NY 12189 (518) 273-0801 **Greensboro, NC** 2700 Patterson St. Greensboro, NC 27407 (336) 218-0801 **Friedens, PA** 1510 Stoystown Rd. Friedens, PA 15541 (814) 443-6800 **Clarkston, MI**4701 White Lake Rd.
Clarkston, MI 48346
(248) 625-8700

**Mancelona, MI** 9517 Lake St. Mancelona, MI 49659 (231) 587-8412