

Fill Pipe Protection

When ordering fuel for your underground fuel tank, there are many questions you should be asking yourself, in addition to: “How much room do I have in that tank?” Some of those other questions include:

“Is the transport going to be able to lock on tight to my fill pipe?”

“Is the spill bucket cleaned out, and can it provide adequate storage in the event of an overfill or spill?”

“Is the overfill prevention free from obstruction?”

These are all good questions to ask yourself, and a good transport driver will let you know if any of these items are not adequate. It is so important because the expensive monitoring equipment that you purchased, i.e. automatic tank gauge, will not detect spilled fuel during delivery.

It is very important that the transport is able to lock on tight to the fill pipe. Obviously, if it is not tight, there is a chance of fuel leaking into the spill bucket, or even worse spraying outside the spill bucket. If the fill pipe extends beyond the spill bucket, it is possible for the fuel to spray outside the bucket, or even overflow as the bucket fills up. After every load, you should check the fill pipe adaptor, because it can loosen when the locked delivery hose is moved around during delivery. A loose adaptor can be another way for fuel to spill during delivery.

Many petroleum releases occur when fuel is delivered to a tank, and proper maintenance of your spill buckets can be a major tool in preventing UST contamination! As part of our inspection process this year, we found that 32% of all sites are not in compliance with spill bucket requirements. If a spill bucket is completely full of water or fuel, there is no room for additional spilled fuel to be contained. Spill buckets must be kept clean and empty.

When checking the fill pipe adaptor and spill bucket, you should also look down the fill pipe to make sure there aren't any obstructions in the overfill shutoff valve. A tank measuring stick is commonly used to disable the valve. If you do find anything foreign in the valve, you need to contact your service company to check the valve for proper operation. It may have been malfunctioning prior to the drop, or possibly damaged when the stick was forced down the fill pipe. If you don't have that type of overfill protection, you may have a ball float restrictor valve (vent line) or an overfill alarm included with the tank monitor. These devices must be checked for operation, as well. The transport driver is likely the best person to ask if everything is operating properly.

Other issues with the fill pipe that should be inspected routinely include the drive lid, fill pipe cap, and the drop tube in the fill pipe. Drive lids can be a serious problem if it is resting on any riser pipe attached to the tank. If a vehicle drives over the lid, it will apply direct pressure on the tank, and possibly compromise the integrity of the structure. If you have a situation where the lid does not fit properly over the tank, you should contact your

service company to correct the situation immediately. Lids that are damaged or do not fit properly can also create a nightmare for you when trying to keep your spill bucket clean.

When not being used, the fill pipe must be properly capped. If the fill pipe is not properly sealed, water and debris can get into the tank. Check the cap for any damage, and make sure the gasket is still in place. The cap must snap down tight to ensure a tight seal on the fill pipe.

Although the drop tube is not a requirement, it is a good idea to have one in the fill pipe. If you have a shutoff valve in the fill pipe, the drop tube is part of that device. The drop tube must be installed within a foot of the bottom. It is supposed to limit the amount of agitation or disturbance when filling the tank. When agitation is limited, the amount of vapors being released is limited. As you may know, vapors are a liquid turned into a gaseous state. In other words, you are losing fuel every time you smell vapors. It is a very dangerous situation if vapors collect near a fire or spark, or if they enter the store. Vent pipes must be installed properly, including proper height, protection and separation from structures.

Fuel vapors can be released on any part of the tank system that is not tight; for example, a loose cap on the tank monitor probe. Vapor leaks are a significant factor causing releases and subsequent environmental remediation. Tank systems must be installed properly and maintained, so the system is tight and vents properly to the environment.

As you can see, there are many things to keep track of when getting fuel. Routine inspections are very important, and will aid in preventing releases and ultimately expensive cleanup. It is your responsibility to make sure your system is functioning properly.