

Secondary Containment and Compatibility

Secondary containment is the only method of leak detection that can detect a leak without allowing a release to the environment. It is the best method available to protect against spills and leaks to the environment. However, if not operated and maintained properly, secondary containment systems are ineffective, or worse, become inoperable and you may not know about the problem until a release to the environment has occurred.

Secondary containment consists of the double wall pipe and sumps at both ends (submersible pump and dispenser) of the fueling system. Research on several manufacturers has revealed that **secondary containment is not designed to store product** for any amount of time. In fact, many manufacturers specifically exclude “storage of product” in their warranties. Although the containments are designed to “capture” spilled or leaking petroleum from your system before there is a release to the environment, the containment must be emptied immediately. Most warranties require proper installation and maintenance, which includes prompt removal of all liquid and debris from the containment system.

All secondary containment MUST be kept clean and empty. Since most releases occur through the fuel delivery system, we need to take the necessary steps to minimize these releases. Adequate secondary containment must be sealed tight to prevent the transfer of liquid in and out of the containment system. Manufacture warranties warn against storing liquid in the secondary containment. **Surprisingly, many secondary containment systems are not compatible with petroleum products, and they will deteriorate if exposed to fuel for any extended period of time.** This can cause cracking and deformation of the pipe as well as the containment. This is why it is very important that you conduct frequent inspections and routine maintenance to remove liquid and debris from every part of your secondary containment system. Also, check to make sure all clamps and boots are in place and tightly secured.

Is your secondary containment system working? You will only know if you inspect it.

As part of our inspection process, we find that over 34% of all sites are not in compliance with secondary containment requirements and over 15% are not in compliance with leak detection requirements. Many of these are containment systems that have been compromised. Obviously, if the secondary containment is completely full of water or fuel, there is no room for additional spilled fuel to be contained. In addition, secondary containment systems are also compromised by damaged entry boots, deteriorated sumps or piping, debris in the containment and cracked or damaged containment. If the system is compromised, it is not in compliance and can no longer be used as leak detection or secondary containment.

Secondary containment is only effective if it is maintained properly. It is your responsibility to inspect and maintain your secondary containment system. Don't waste your money on a secondary containment system by not operating it correctly.

Inspect your secondary containment systems at least monthly.