

# Water Management Policy for Tanks Containing Ethanol Blended Product

Proper water management in underground storage tanks is critical with ethanol blended gasolines. Ethanol blended gasoline has a much greater propensity to attract and absorb water than non-ethanol blended gasoline. Water absorbed by ethanol can cause Phase Separation in the gasoline by creating an off-spec layer of ethanol and water. It may take as little as 30 gallons of water in 6,000 gallons of E10 to cause Phase Separation, resulting in off-spec product. **Accordingly, beginning April 1, 2014, fuel will not be delivered to a direct-serve retail station tank with 1 inch or more free water, as indicated on the Tank Level Monitor.**

## Good Housekeeping

It is imperative to practice good housekeeping standards of your USTs to maintain product integrity. Chevron recommends following these practices:

1. Water, condensate or water/gasoline mixtures collecting in spill buckets should never be drained to the tank. Liquid should be removed with a hand pump and properly disposed of in the on-site barrels.
2. Spill bucket drains should be properly maintained and replaced when necessary to prevent leakage of water from the spill bucket into the tank. Spill buckets should be kept clean and free of dirt and debris.
3. Veeder Root Water Warnings/Alarms should be set at the minimum detectable level of 0.75.
4. Water Alarms should be promptly responded to and any water removed.
5. False Water Alarms should be investigated and any contributing causes corrected. Frequent causes of false Water Alarms may include the following:
  - a. ATG probe is too short which allows the probe to shift within the riser pipe.
  - b. Sludge or debris at the bottom of the tank. This prevents the water float from properly resting on the bottom, leading to chronic False Alarms. Tanks should be cleaned and debris removed.
  - c. Water float is damaged and should be replaced.
6. Water finding paste specifically for ethanol blends should be used to check for water. Be sure to follow the manufacturer's instructions as the indications vary.
7. Tanks should be tested weekly with a tank stick. If you experience chronic False Water Alarms you should check the tank daily with a tank stick and water paste until the issue is resolved.

In addition to these practices, all gasoline products should have **ethanol spin-on filters** at the dispensers. These filters react to water or Phase Separation and will cause slow-flow at the dispenser. If slow-flow occurs, shut down the impacted product dispenser immediately and have the tank investigated for water/Phase Separation.

## Presence of Free Water

Delivery of clean ethanol blended product into a tank with free water can contaminate the entire inventory. To help protect the delivery, customers and its strong reputation for supplying high-quality products, Chevron will therefore apply the following to all direct-serve stations and recommends that marketers apply the following to their marketer-served stations.

- Beginning April 1, 2014, Chevron will lower its maximum tolerance for tank water levels to less than 1 inch of free water. Fuel will not be delivered to a direct-served retail station tank with a distinct water layer at or above 1 inch, as indicated on the Tank Level Monitor, also known as the VeederRoot.
- Once the water layer is removed, the tank is checked for phase separation, and any water intrusion sources are repaired, request that deliveries be resumed by calling COED at (800)-642-2490
- If Phase Separation is detected, follow the remediation guidelines below.

- Some states have different requirements for water levels. Refer to your state and local guidelines for specifics.

## **Remediation of Phase Separation**

If Phase Separation is suspected:

- Immediately discontinue sale of the suspected product(s).
- Gauge all tanks using your tank stick and water finding paste to verify if Phase Separation has occurred. Do not rely solely on the Tank Level Monitor for the detection of Phase Separation as this monitor is not designed to accurately detect whether separation has occurred.
- Contact your Business Consultant if you suspect that any issues with a recent fuel delivery, provide your Business Consultant with the following documentation:
  - relevant bill of lading (printed at the truck rack);
  - results of the current water stick test and the most recent water stick test prior to the questionable product delivery; and
  - verification that the proper ethanol compatible water stick paste was used.
- Before normal deliveries can resume, the existing fuel inventory must be removed and the tank must be vacuumed, all lines must be purged, and dispenser filters must be replaced.
- Once these steps have been completed and any water intrusion sources have been repaired, request that deliveries be resumed by calling COED at (800)-642-2490

## **Impacts of Selling Off-Spec Product**

- Non-compliance with local, state and/or federal regulatory requirements
- Customers may experience car engine performance issues which could lead to damage claims.
- Brand and/or business reputation in the marketplace could be damaged.

## **Recommended dispenser Filters - 10 micron**

- Filter Spin-on type: PetroClear Model #40510A or Cim-Tec 300MB-10 for ¾” outlet and 400MB-10 for 1” outlet.



Petro Clear 40510-A



Cim-Tek 300MB-10 or 400MB-10

- Particulate or Hydrosorb filters are not for use with ethanol blends.

### **Recommended Water Finding Paste**

- Sargel Water Indicating Paste – Please follow the manufacturer’s recommendation for use. Call SARTOMER at (610) 363-4100 if you have any questions.
- Kolor-Kut Modified Water Finding Paste – Please follow the manufacturer’s recommendation for use. Call Kolor-Kut at (713) 926-4780 if you have any questions.

*NOTE: Paste is for single use only. Even if the paste remains brown after dipping, the gauge stick must be wiped clean and the paste reapplied.*