

LOW LEVEL SUMP TESTING ORIGINS

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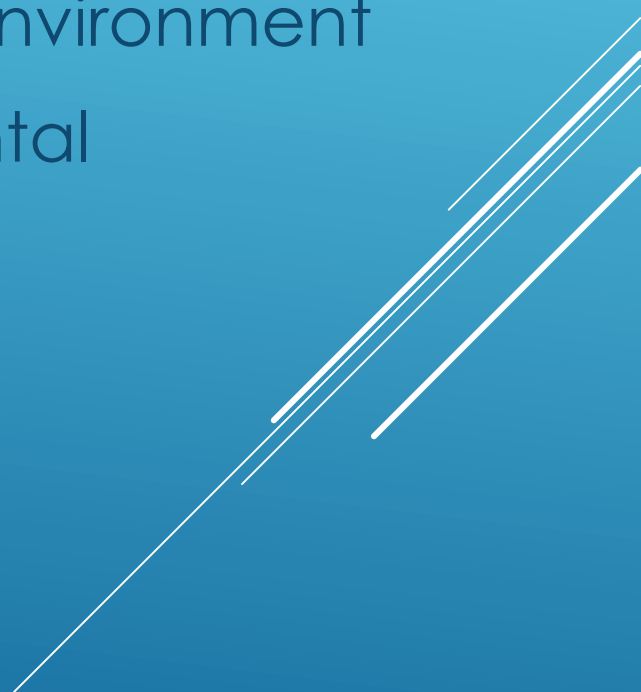
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Who is PMAA


- ❖ PMAA member associations represent wholesalers and retailers of gasoline, diesel, heating oil, lubricants and renewable fuels. Additionally, these companies supply motor fuels to 40,000 independently owned retail outlets and heating oil to seven million homes and businesses. They sell their product under either their own private brand or the trademark of their supplier.
- ❖ The majority of PMAA marketers are small businesses serving homes, farms, business and industry. When Small Business Administration guidelines are applied to the PMA membership, the majority of marketers fall within SBA jurisdiction.

PETROLEUM MARKETERS GOALS

- ❖ Invest in real estate to develop Petroleum Facilities
 - ❖ Protect their investment by protecting the environment
 - ❖ Invest in technology to achieve environmental compliance
 - ❖ Receive a return on their investment
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OPTIONS

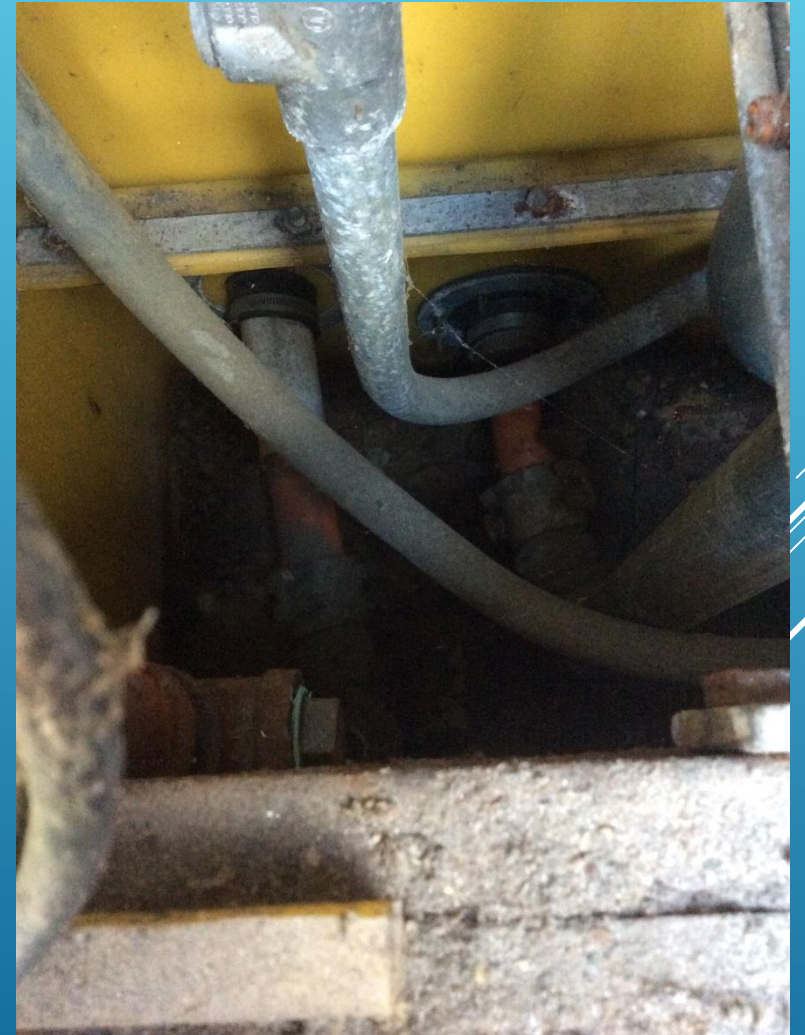
MARKETERS LOOKING FOR OPTIONS TO COMPLY

- ❖ FACILITES DIFFERENT
 - ❖ ONE APPROACH WON'T WORK FOR ALL
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DISPENSER SUMPS



DISPENSER SUMPS



TURBINE SUMPS






DISPENSER SUMPS



TRANSITION SUMPS



CONCERNS

- ❖ EQUIPMENT INSTALLED NOT CONSIDERING TESTING
 - ❖ HARD TO REACH TO ISOLATE
 - ❖ CONDUITS NOT LIQUID TIGHT
 - ❖ LARGE QUANTITY OF WATER
 - ❖ REMOVING DISPENSERS FROM ISLAND
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NEW ENGLAND INDUSTRY UST TASK FORCE



PMAA TASK FORCE AGREED



WENT TO EPA



EPA'S ALTERNATIVE SUMP TESTING


Example:

- A liquid level sensor is mounted at the lowest point in the sump and a periodic test is performed by adding liquid to a point that will ensure activation of the sensor*; and
- The pump automatically shuts off when product activates the sensor, or
- The dispenser automatically shuts off when product activates the sensor, and the facility is always staffed when the pumps are operational.

Source:

- ▶ <https://www.epa.gov/sites/production/files/2018-06/documents/low-level-hydrostatic-sump-testing-procedures.pdf>

ALTERNATIVE PROS

- ❖ MORE SENSORS INSTALLED = LEAKS IDENTIFIED QUICKER
 - ❖ INVEST IN DETECTION SENSOR
 - ❖ LESS WATER NEEDED
 - ❖ REDUCED DOWN TIME
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POTENTIAL RELEASE AMOUNTS PER SYSTEM TYPE

Assumptions

- ❖ Average Turbine Sump can hold 225 gallons
- ❖ Mechanical Line Leak Detector detects 3 GPH loss
- ❖ PLLD/Enhanced Line leak Detector detects 3 GPH with pump shut down
- ❖ Facility is open 18 hours/day

No Sump = Annual Tightness Test & No Inspection

- ❖ 2.5 GPH leak = 16,425 gallons released per year

Sump with no sensor = Annual Tightness Test & Inspection

- ❖ 2.5 GPH leak = 16,200 gallons released per year

Sump with sensor = Sump Test every three years & annual Sensor test & Sump Inspection

- ❖ 2.5 GPH leak = 60 gallons released to sump, no release to environment

PLLD/Enhanced Line Leak Detector = Annual Tightness Test & Inspection

- ❖ 2.5 GPH leak = 3 gallons released then pump shut down

TECHNOLOGY BASED TESTING APPROACH

Containment Sumps			
	All New Containment Sumps		At Time of Installation
	Existing Containment Sumps with No Monitoring		Test to Top of Sump
	Existing Containment Sumps with Monitoring		Test to the Height the Sensor Will be Activated
	Existing Double-Wall Containment Sumps with Interstitial Space Monitored		No Testing Required

ALTERNATE INSPECTION SCHEDULE

Sump Inspection Schedule

No Sump Present	Inspect Once Every Three Months
Sump With No Monitoring	Inspect Once Per Year
Sump With Continuous Monitoring	No Inspection, Only Investigate Alarms

Dispenser Cabinets

No Under Dispenser Containment or Under Dispenser Containment with No Monitoring	Inspect Monthly
Under Dispenser Containment With Monitoring or Under Dispenser Containment with .2gph Line Leak Detection	No Inspection, Only Investigate Alarms

OPTIONS

- ❖ VACUUM
 - ❖ FULL HEIGHT
 - ❖ LOW LEVEL
 - ❖ DW SUMP MONITORING
 - ❖ OTHERS COMING.....

Thank You

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