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# **UST Common Compliance Violations Report – FY 2014**

**FINAL  
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**Prepared by:  
UST Task Force  
Tanks Subcommittee**

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## Acknowledgments

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ASTSWMO is an organization supporting the environmental agencies of the 50 U.S. States, five Territories, and the District of Columbia (States). ASTSWMO's mission is to enhance and promote effective State and Territorial programs and to affect relevant national policies for waste and materials management, environmentally sustainable practices, and environmental restoration. The mission of the UST Task Force is to represent the interests of State and Territorial programs whose primary responsibility is the environmental regulation of State and Federally regulated USTs. These programs work in concert with U.S. EPA to ensure that owners and operators are in compliance with leak prevention, leak detection and financial responsibility requirements and, by so doing, reduce the impact of UST releases on human health and the environment. The Task Force serves as a liaison between State and Territorial UST Programs and the U.S. EPA and provides a forum for sharing information and ideas among State regulatory officials.

ASTSWMO thanks former and current Task Force members for their participation in the development of this report and previous years' reporting.

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Region 1: CT, ME, NH, RI,

Region 3: DC, WV

Region 4: FL, KY, NC, SC, TN

Region 5: IL, IN, MI, MN, OH

Region 6: LA

Region 7: IA, KS

Region 8: CO, MT, ND, UT, WY

Region 9: CNMI, HI, NV, Southern Nevada  
Health District

Region 10: AK, ID, OR, WA

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## Introduction

The Association of State and Territorial Solid Waste Management Officials (ASTSWMO) UST Task Force developed this report to serve as a resource to better understand the types of violations issued by UST programs. The Task Force solicited information from all 50 States, five Territories and the District of Columbia (States) in an effort to determine which violations are most often encountered during UST compliance inspections and other verification activities. The Task Force conducted similar information request in federal fiscal years (FY) 2010 and 2012. For this report, the Task Force requested FY 2014 data from all States, with 31 States responding to the request. The Southern Nevada Health District also contributed to this report. Minor changes were made in the FY 2014 request, mainly to the choices available within the main violation categories.

The intent of this report is to provide a national perspective with regard to which UST violations are discovered in greatest frequency and may require additional attention. The data could impact where States allocate resources and how they perform onsite UST inspections, where the regulated community can best allocate their resources to improve compliance, and future decisions regarding the long-term direction of State and federal programs. It is also of interest to the Task Force to determine which States had higher or lower frequencies pertaining to a specific violation. That analysis proves fruitful in identifying any trends that may be unique to a specific region or operational condition and provides States with potential contacts in other States that can share what they have done to achieve high compliance rates for specific types of violations.

It seems reasonable to assume violations that occur with the greatest frequency are those that are the most challenging to prevent, address, and/or correct. States may use this document to provide targeted outreach to UST facilities within their jurisdiction in an effort to increase Significant Operational Compliance (SOC) rates. The Task Force feels that if proven State compliance and prevention practices are shared, then the overall frequency by which these violations are encountered will be reduced, as well as the frequency and severity of UST releases and the accompanying impact on human health and the environment.

## Methodology

After revising the original FY 2010 information request for the FY 2012 request, the UST Task Force used a similar request for FY 2014 to incorporate State feedback and address the challenges of data collection identified in previous years. As in 2012, the Task Force took a structured approach and identified 8 general categories of violations that are typically recognized by most States:

- Release Detection
- Release Prevention
- Secondary Containment
- Financial Responsibility
- Operator Training
- Notification, Permit, and Fee Violations
- Not reporting or investigating suspected release

- Improper Temporary Closure

States also had the option of providing Other/State Specific violations, as well as more options once a general violation category was chosen.

Respondents identified their most common compliance violation by selecting a violation category (ex., Release Prevention) followed by a specific violation (ex., no spill prevention device). Once completed for the first violation, the request was repeated for the second most common violation in the respondent's State, then the third and so forth, until providing their top eight violations. The Task Force distributed the final, revised information request to all State UST programs in January 2015. The reported data focused on violations in FY 2014.

The Task Force will continue to refine the information request as areas of improvement are identified and distribute to States on a biennial basis in order to collect current common compliance violation data for analysis. The UST Task Force hopes that the results will be informative and helpful for gauging where each stands with violations when compared with overall national results.

### **Results and Analyses**

The data collection tool sought to group violations into the general categories listed above. While the title of most of these categories is indicative of the content, a few merit further explanation. Due to concerns that States may not be able to differentiate their data, respondents were asked to include both pre- and post-Energy Policy Act secondary containment/interstitial monitoring violations under the Secondary Containment category rather than including the pre Energy Policy Act violations under the Leak Detection category. The Other/State specific option was included to allow for States to report top violations that do not fit within any of the other categories. Respondents were encouraged to use this category as a last resort and if possible, fit all violations within the other specific options. Several States do have requirements that fall outside of the federal rules and the selections provided in this request, and these violations often fall among their top violations. Some examples of this include: routine equipment inspections, universal inventory control requirements, shear valve issues, and vapor recovery.

Task Force members compiled raw data that each responding State transmitted individually. The Task Force members then combined and categorized the State-specific datasets, and contacted some States for additional information to ensure that the information they provided was properly assigned.<sup>1</sup> The Task Force also took some liberty in re-categorizing some responses submitted as Other/State specific issues if it fit within one of the existing categories. As mentioned above, the FY 2014 dataset represents the responses of 31 States and one local agency, and accounts for nearly 43,000 UST inspections. The Task Force evaluated the data in two ways, with each of these methods contributing value to the overall common violations picture and each having some limitations.

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<sup>1</sup> The States contacted for more information included those who provided responses outside of the data collection tool and those that provided "Other/State Specific" violations.

### Percentage of Reporting States that Rank the Violation in Top Eight (% States)

The percentage of reporting States that rank the violation in their top eight, % States or  $S\%$ , is simply the number of States reporting a specific violation,  $S_v$ , divided by the total number of States responding to the survey,  $S_r$ :  $S\% = \frac{S_v}{S_r}$ . This method of analysis is a good measure of the degree of occurrence throughout the entire the nation. Violations that rank high in this measure are prevalent in most States and are typically not a regional issue or a function of how the program is implemented. This measure does not take into account how frequently the violation occurs; it gives the same weight to violations that are ranked one and eight or from a State with a large tank population versus a small population.

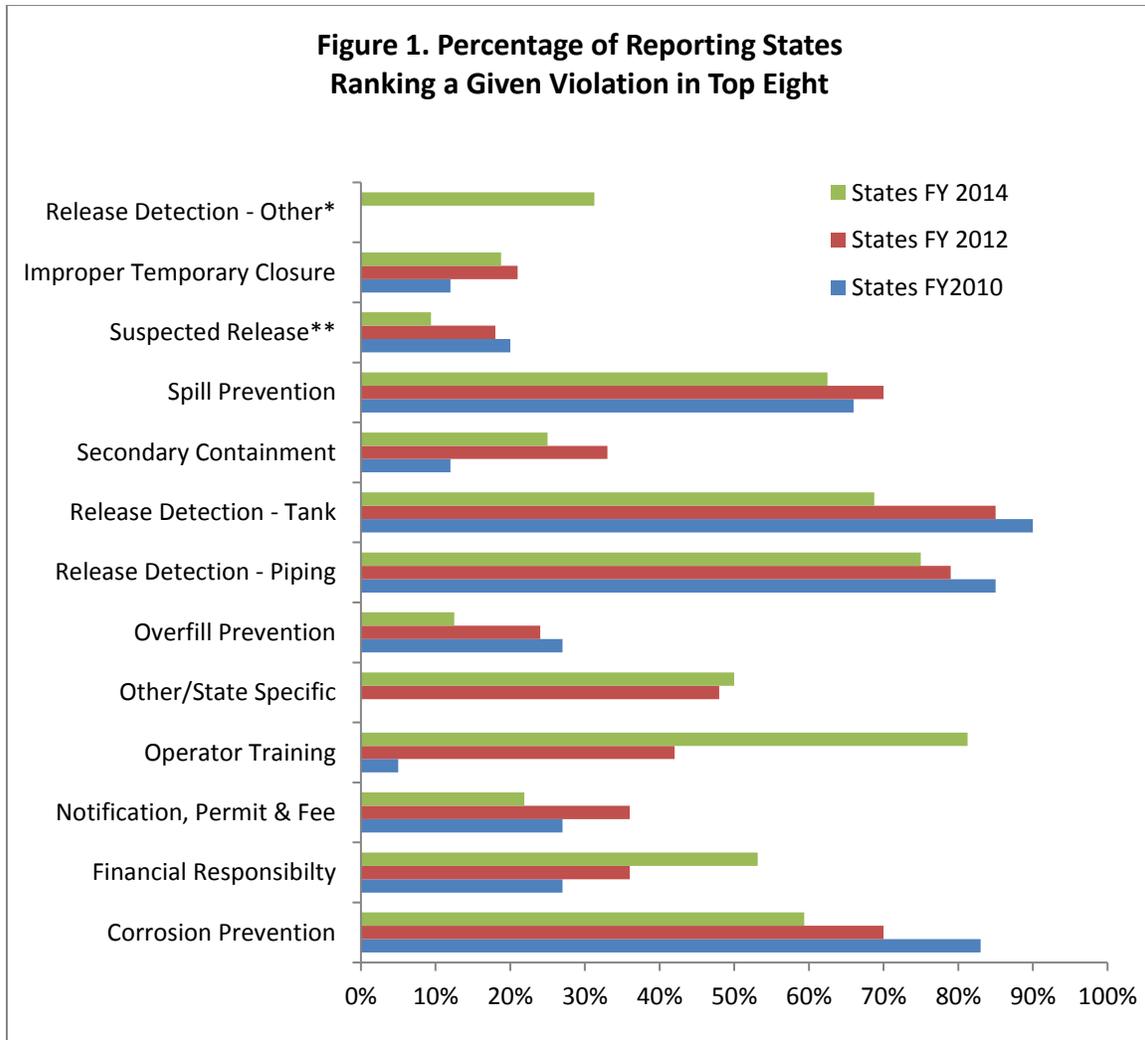
### Percentage of Total Reported Violations (% Violations)

The percentage of total reported violations, % Violations or  $V\%$ , is the total reported count of a specific violation,  $V_s$ , divided by the total number of violations reported,  $V_t$ :  $V\% = \frac{V_s}{V_t}$ . This method of analysis is a good measure of the frequency at which a given violation occurs. The violations that rank high in this measure are those most frequently found. With a complete dataset, this would be the most telling common violations measure, but due to an incomplete response rate and the fact that some responding States could not provide the actual number of violations, the dataset behind the measure is not complete.

The summary of all collected data is available in Appendix A. This report will focus on the top five general violations as identified by the previously described measures. When possible the data will be broken down to a more detailed level of violations. The data collected in the FY 2010 and FY 2012 efforts have been included when applicable but is not always analogous due to changes in the data collection process.

### **General Violation Analysis**

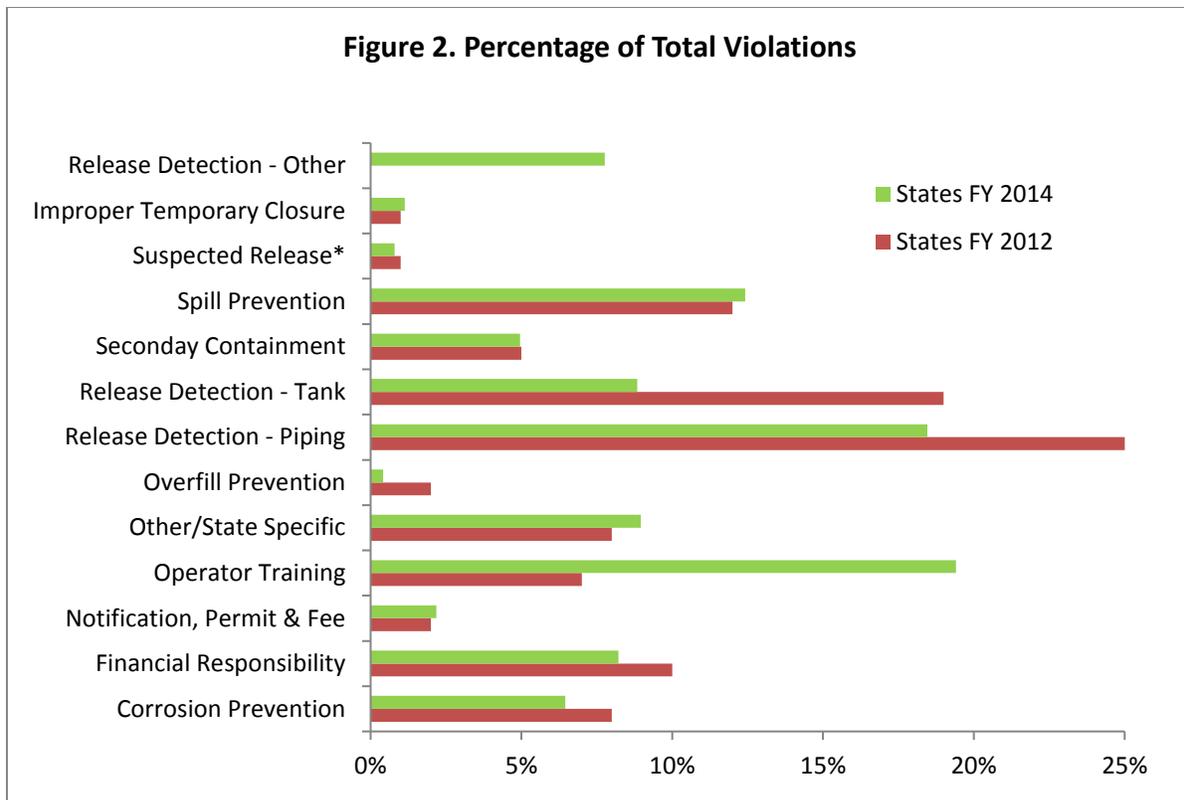
Figure 1 graphs the percentage of reporting States that rank a violation in their top eight (% States) for FY 2014. For the 2014 data, Operator Training is the top violation with 81% of the States reporting it in their top eight; this is followed by Release Detection – Piping at 75%, Release Detection – Tank at 69%, Spill Prevention at 63%, Corrosion Protection at 59%, Financial Responsibility at 53%, and Other/State Specific at 50%. It should be noted that all violations decreased in reported percentage from 2012 to 2014 except for Operator Training, which almost doubled, Financial Responsibility, and Other/State Specific, which stayed approximately the same.



\*10 States reported Other or State-Specific Release Detection violations. This information was not collected in FY 2010 or FY 2012 reports.

\*\*"Suspected Release" = Not reporting or investigating suspected release.

Figure 2 graphs the percentage of total violations (% Violations) for FY 2012 and FY 2014. The actual count of violations was not collected in the FY 2010 dataset and thus not compared here. For FY 2014, States participating in this report reported 47,667 total violations in their Top 8. Most of the top violations are the same but in a somewhat different order. Operator Training is the most frequently occurring violation at 19.4%, followed by Release Detection- Piping at 18.5%, Spill Prevention at 12.4%, Other/State Specific at 9%, Release Detection – Tank at 8.8%, and Financial Responsibility (FR) at 8.2%. It should also be noted that Release Detection – Other is very close to making the top five at 7.8%. In addition, nearly half of the total violations in FY 2012 were related to release detection, coming in at 44%. In FY 2014, this number dropped to 35.1%. Also, release prevention issues dropped from approximately 22% of the violations in FY 2012 to 19% in FY 2014.



\*"Suspected Release" = Not reporting or investigating suspected release.

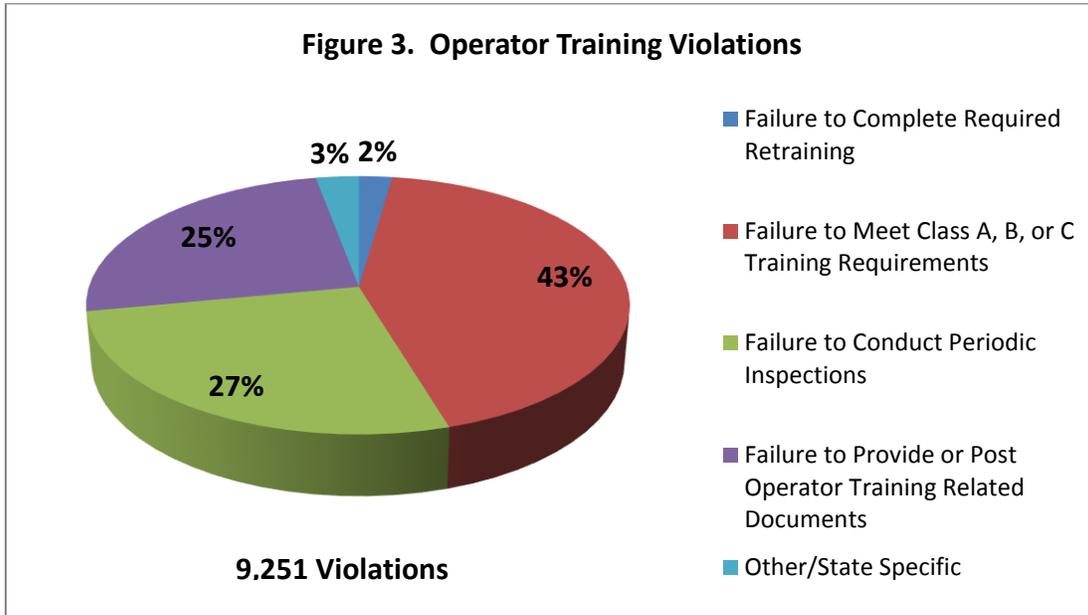
### Summary of Top 5 Violations

The sections below summarize the data provided for the five top common compliance violations identified by the Task Force. In addition to collecting data on the general categories of violations, this effort drilled down to more specific infractions, where applicable. This additional level of detail was available for many of the top five violations presented below. For each of the top five violations, the UST Task Force hopes that individual States will utilize this resource to pursue potential improvements that will lead to increased compliance. Appendix B includes a list of States responding to the information request that appear to have a high compliance rate in the general categories of violations given that item did not make their list of top eight common compliance violations. Appendix C provides feedback from States that have used results from previous ASTSWMO Common Compliance Violations reports in their State UST programs.

#### Violation 1: Operator Training

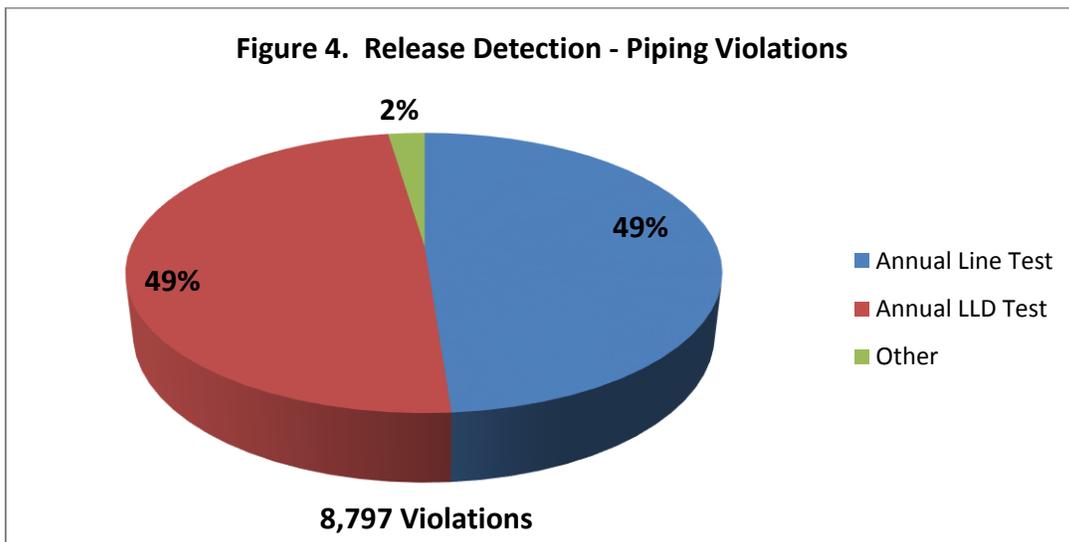
Figure 3 graphs the most frequently occurring violations within the Operator Training category. Over 40% of the violations reported were for failure to meet Class A, B, or C training requirements and an additional 50% was split between failure to conduct periodic inspections and failure to post or provide copies of operator training documents at the site. The remaining violations consist of failing to complete required retraining and State specific operator training violations. Operator Training violations doubled from 2012 to 2014. This follows a large increase in violations from 2010 to 2012. This continues to mirror

the States’ efforts to implement and enforce the Operator Training requirements of the Energy Policy Act of 2005.



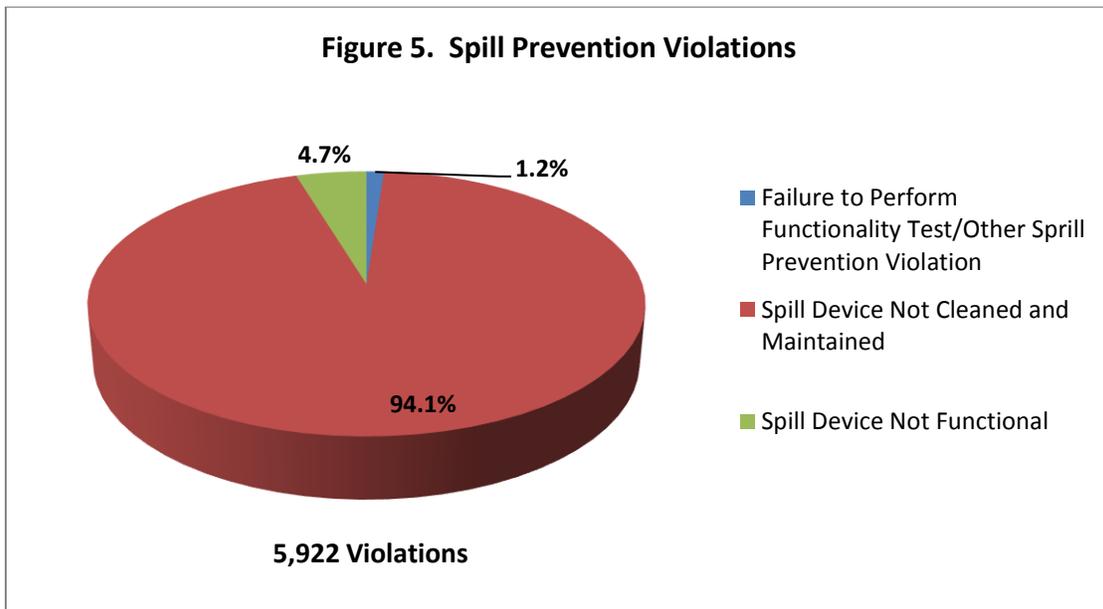
Violation 2: Release Detection – Piping

Figure 4 graphs the most frequently occurring violations within the release detection for piping category. Ninety Eight (98%) of the violations were either failure to perform annual line testing (49%) or line leak detector testing (49%). The remaining 2% included failure to perform monthly monitoring and equipment that was not installed or functioning properly. The number of violations related to Release Detection – Piping the #1 violation in FY 2012, continues to remain a top violation. This may be due to the existence of or lack of closure requirements for single walled piping.



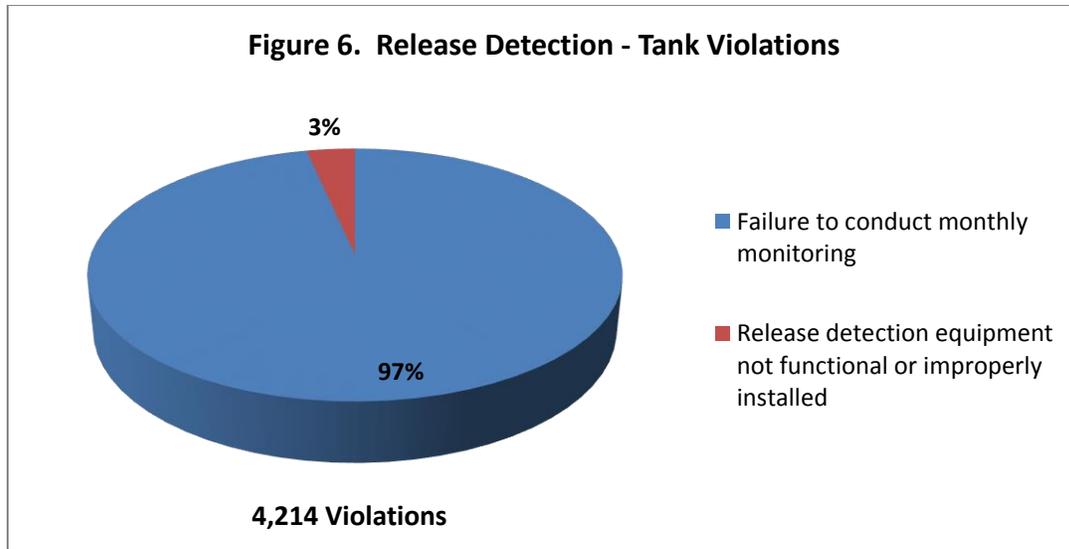
Violation 3: Spill Prevention

Figure 5 graphs the most frequently occurring violations within the spill prevention category. Ninety four percent (94%) of the violations were related to the spill device not being cleaned or maintained. With the adoption of the new EPA Federal regulations in 2015, it would be expected that this number would gradually go down due to visual inspection being conducted on a monthly basis. It would also be expected that failure to perform functionality test and spill device not functional violations would go up given the new three year testing requirement. It will be interesting to watch these numbers closely as the new regulations are implemented in the States.



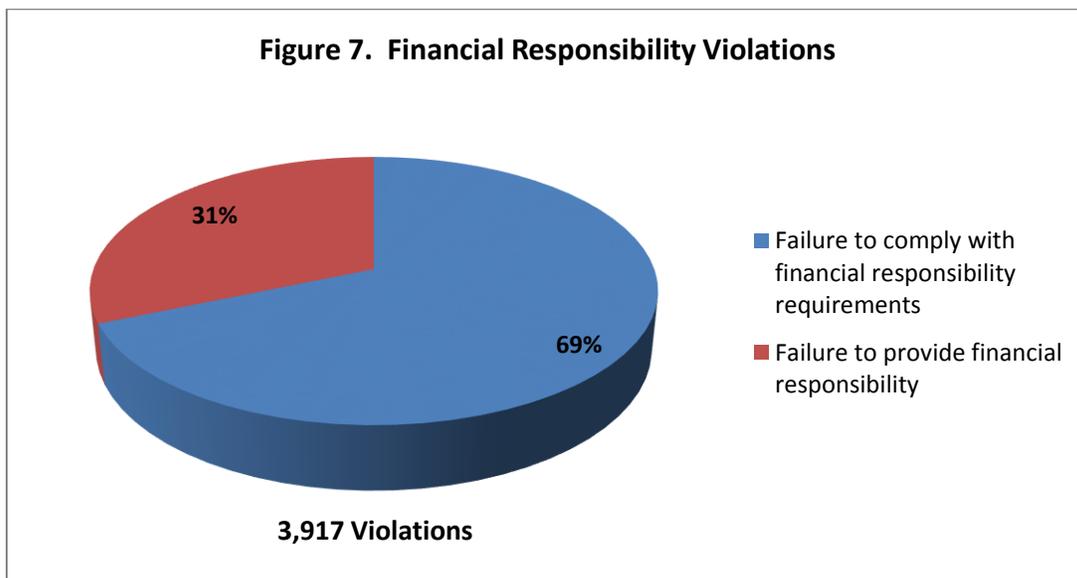
Violation 4: Release Detection – Tank

Figure 6 graphs the most frequently occurring violations within the Release Detection – Tank category. The main violation, at 97%, related to failure to conduct monthly monitoring. Specifically, the violations had to do with failure to conduct automatic tank gauging. The number of violations related to Release Detection – Tank, the #2 violation in FY 2012, continues to decrease as single walled tanks are being closed and replaced.



Violation 5: Financial Responsibility

Figure 7 graphs the most frequently occurring violations within the Financial Responsibility category. There were two main violations found in this category: failure to comply with financial responsibility requirements at 69% and failure to provide financial responsibility at 31%. This is the first time that Financial Responsibility is in the top 5 since 2010. This rise in violations may be due to State cleanup funds no longer being a financial mechanism in many States.



### Analysis of State Specific Data

Table 1 provides a list of Other/State Specific Violations submitted to ASTSWMO. The list includes violations that States reported do not fit within the 8 main categories of violations. For the most part this is due to implementation of more stringent requirements than the Federal Rule. Many of these violations include the facility not providing access to State inspectors, not providing access to records, and above grade violations relating to hoses and dispensers.

**Table 1: Other State Specific Violations**

Failure to provide access to the Department	1,008
Failure to provide records to the Department upon request	954
Failure to provide records of release detection calibration.	333
Equipment not installed per manufacture specs	325
Failure to allow for/perform a breach of integrity test	285
Permanent records available within 5 work days notice: no reasonable facility access	199
Anchoring hardware on shear valve not properly installed.	180
Other	169
Water in the submersible turbine pump containment area.	162
Not conducting a compliance inspection 90 days prior to expiration of Operating Permit	160
No records on site	119
Dispensing hoses were not operating or maintained properly.	76
Failure to maintain records and have them available for inspection	74
Failure to keep spill buckets clean.	62
Water fill sumps, water needs to be removed	52
Fill covers not properly labeled	38
Combined as "miscellaneous"	19
Release Prevention - other	19
ATG console power light is not working.	18
Lack of proper identification by labeling on all ports, vents or other apparatus	8
Failure to perform an MSA at a facility that has never performed one, and the tanks are between 18-20 years old	6
Failure to maintain twelve months of release detection records at the facility	2
<b>Total:</b>	<b>4,268</b>

### Conclusions

An analysis of the UST common compliance violations as identified by required onsite compliance inspections and other verification activities provide insight into aspects of the UST program that merit additional consideration. Operator training, leak detection, spill prevention, financial responsibility, and corrosion prevention are included within the top eight violations in most States and may be indicative of mutual challenges that warrant collaboration between States and stakeholders in an effort to reduce the frequency of these violations. Violations related to financial responsibility and operator training appear to be more a function of how various aspects of the UST program are implemented in a given

State. Other violations – secondary containment, overfill prevention, notification, permit & fee - may be indicative of emerging issues and/or problems that other States would find if the requirements were part of their inspection process.

The ASTSWMO UST Task Force appreciates the willingness of States to provide the data utilized by the study and believes that additional insight will emerge as the data is tracked over a period of years. The Task Force intends to continue this effort and accompanying report into the foreseeable future with the goal to further understand these violations and to work with stakeholders to make them less frequent.

**Appendix A: Summary Table of Data Compiled from all Responding States**

Violation	Number of States Reporting Violation in Top 8			Percentage of State Respondents Reporting Violation in Top 8			Number of Violations Reported, FY 2014	Percentage of Total Violations Reported, FY 2014
	FY 2010	FY 2012	FY 2014	FY 2010	FY 2012	FY 2014		
Operator Training	2	14	26	5%	42%	81%	9,251	19.40%
Release Detection – Piping	35	26	24	85%	79%	75%	8,797	18.50%
Release Detection – Tank	37	28	22	90%	85%	69%	4,214	8.80%
Spill Prevention	27	23	20	66%	70%	63%	5,922	12.40%
Corrosion Prevention	34	23	19	83%	70%	59%	3,076	6.50%
Financial Responsibility	11	12	17	27%	36%	53%	3,917	8.20%
Other: State Specific	--	16	16	--	48%	50%	4,268	9%
Release Detection – Other	--	--	10	-	-	31%	3,702	7.80%
Secondary Containment	5	11	8	12%	33%	25%	2,364	5.00%
Notification, Permit & Fee	11	12	7	27%	36%	22%	1,036	2.20%
Improper Temporary Closure	5	7	6	12%	21%	19%	542	1.10%
Overfill Prevention	11	8	4	27%	24%	13%	198	0.40%
Not Reporting or Investigating Suspected Release	8	6	3	20%	18%	9%	380	0.80%

**Appendix B: List of States that did not Report One or More of the Top Five Violations**

A list of general violation categories is provided below, along with States that did not report these as common violations. These States may be used as a resource to learn how and why these violations are not most common in their State.

- Operator Training: CNMI, FL, KS, SC
- Release Detection – Piping: CNMI, KY, ME, NH, RI, WY
- Spill Prevention: DC, ID, LA, MI, MT, NV, OH, SC, WY
- Release Detection – Tank: FL, KS, KY, LA, MN, NH, WY
- Financial Responsibility: CO, IA, KY, LA, ME, MN, NC, NH, RI, TN, UT, WA, WY

### **Appendix C: State Feedback on Previous Common Compliance Violations Reports**

ASTSWMO asked States if they implemented any changes to their program based on the 2012 Common Compliance Violations Report or use the report in any other way. Information provided by States is provided below.

**Alaska:** Focused inspections more on more common violations and increased enforcement activities.

**Indiana:** Indiana initiated a thorough review of all sites' FR requiring them to submit a Certificate of Financial Responsibility (COFR) and in turn issuing them a Certificate of Financial Assurance (COFA).

**Kentucky:** We began conducting inspections more frequently to see if compliance would increase. So far, we are finding that that it helps to do them more frequently if you can do annual or bi-annual inspections, but every three years is still better than no requirement at all. Those that are going to stay in compliance do so with frequent reminders. We feel that there are always going to be those sites that wait for the inspector to show up and issue the NOV before they do any testing.

**Tennessee:** The 2012 Common Compliance Violations Report was utilized to train staff members conducting inspections to be more aware of the most frequent types of violations found. During subsequent inspections Division staff found more frequent occurrence of these violations simply due to being aware of them.

**Utah:** We began a database generated reminder letter when line tightness tests, line leak detector tests and CP tests were about to become due. This has increased our SOC rate noticeably.

**West Virginia:** WVDEP did a short pilot project where we sent out information requests to small (10 facilities or less) owner/operators who were not due for an inspection notifying them that our records revealed certain tests (line tightness test, CP test etc.) was due and requesting a copy of the test results. For small owner/operators that were due for inspection within the year, we send out letters notifying them that an inspector would be contacting them to set up an inspection and reminded them to have all their testing performed prior to the inspector coming out. This seemed to be a real help with the small owner/operators, but due to resource issues we were only able to run the program for about 1 year.