
# Summer 2014

## Compliance Inspector Training and Licensing

To become a licensed compliance inspector or UST installer/remover, a person must meet certain requirements. Get a recap of DEQ's most recent Compliance Inspector Training and find out what Montana's requirements are to become licensed.

## More Online UST Data Coming Soon!

You've read articles about the department's webpage, "Mapping DEQ's Data", and hopefully have found useful information on it. Find out what new data will be available in the near future.

## Online Licensee Testing

The UST program now has some exams available online, with more available in the near future.

## Guidance for Disposal of Wastes Associated with Underground Storage Tank Removal

This is a document intended to provide general guidance for owners, operators, and responsible parties with direction for determining if waste generated from the contents remaining in USTs are regulated hazardous wastes.

## Ask the Expert

What do I do if there is a release after hours?

## UST Common Compliance Violations Report - FY 2012 (ASTSWMO)

This is a document prepared by the Association of State and Territorial Solid Waste Management Officials (ASTSWMO) Tank Subcommittee's UST Task Force. This report was developed to serve as a resource to better understand the types of violations issued by UST programs.

## Correction

There may have been some confusion regarding a previous article, titled Administrative Orders and Fund Eligibility: There is a Connection, originally printed in the Spring 2014 edition of the *MUST News*. Although it is possible for certain tanks to be denied eligibility because of an Administrative Order (AST and non-federally regulated tanks), it would have been better to state that an UST system with a current operating permit cannot lose eligibility, but can lose their fund assistance.

## Fund and Release Status Report

## Petro Board Meeting Schedule and Minutes

## Click here to view past issues of the MUST News

## For More Information

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MONTANA UNDERGROUND STORAGE TANK NEWSLETTER

MUST News

Montana Department of Environmental Quality

## Compliance Inspector Training and Licensing

Redge R. Meierhenry, DEQ

On May 14 and 15, 2014, the Underground Storage Tank (UST) section of the Department of Environmental Quality (DEQ) conducted a training seminar for those individuals wanting to become UST compliance inspectors licensed by the department. Training is comprehensive and based on DEQ's Montana Compliance Inspector Training Manual, available here: http://deq.mt.gov/UST/PDFfiles/USTInspectorManual.pdf .


Montana has features that are different from the Environmental Protection Agency requirements and most other states. Notable differences are that Montana has what are termed "third-party compliance inspectors," or inspectors not employed by DEQ. This is quite rare in the United States; few other states

accomplish the required every-three-years compliance inspection of owner facilities using third-party inspectors. This is why Montana DEQ trains and licenses compliance inspectors while most other states use department employees to conduct inspections. Third party compliance inspectors are certainly equal and likely better at the job of conducting UST compliance inspections. Besides compliance advice, third party compliance inspectors often have practical experience that gives UST owners and operators additional insight into the operation and maintenance of their UST systems.

Montana differs in other ways as well. The Montana Constitution, in requiring a clean and healthy environment, says that UST owners and operators of emergency generators, heating oil tanks above 1100 gallons, and above ground storage tanks connected to underground piping must also be included in regulatory requirements and reviews by the UST program. This is different from other states and clearly, all Montanans benefit from legislative intent to protect the environment.

Jointly hosting and conducting the training was Ben Thomas. Ben is a nationally recognized UST trainer and it was refreshing to have his national viewpoint, while I brought the Montana perspective. Ben's web site is located at: http://www.usttraining.com/ and there is access to his on-line training for the required Class C operator training (required for every UST facility).

Following the classroom training, students took a written test developed by the department and electronically administered using a professional educator tool called "Moodle" (https://moodle.org/). The test takes about three hours for trainees to complete. The test is difficult and typically only half of people taking it pass. To complete the licensing process, trainees must perform a compliance inspection at each of two facilities arranged by DEQ. Results are graded as a pass/fail and the inspection is an excellent teaching experience.

Those individuals that take the 12 hour classroom training, pass the written test, and pass the field practical test are then licensed by the department. This is a rigorous process and ensures that only the most qualified individuals perform an inspection at your facility.

But that's not all. DEQ is committed to licensee's continued training as UST professionals. Whether an UST inspector or installer/remover, that person is required to attend a department sponsored "refresher" course every three years. In addition to the eight hours of training from the department, a licensee must also earn an *additional* eight hours of training to maintain their license and remain in good standing with the department. This additional eight hours is typically earned by completing classes offered to UST service providers by manufacturers.

Next time a licensed compliance inspector is at your facility, know that he or she is expected to perform to the highest standards of conduct and professionalism. If your experience is anything different from that, please let me know.

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## More Online UST Data Coming Soon

Dalynn Townsend, DEQ

The Underground Storage Tank (UST) program will have additional tank and facility related data available on the Mapping DEQ's Data website in the near future. When you click on a Facility or Tank Point, more than the just the Facility and Tank ID numbers will show up. More specific facility and tank data will be available, such as: the site name, address, owner name, operating permit expiration date, tank status, tank substance, tank capacity, tank material and more.

The UST program and DEQ GIS Supervisor Nat Carter will be adding points where tanks once existed and were removed prior to the end of 2012. These points were originally derived from address matching or TRS Centroid. Permanently Out-of-Use Tank Points will only be available for those tanks that were removed since the end of 2012, when the contractor collected and provided tank level coordinates to the department.

Even more detailed information regarding the Facility and Tanks will be available in the years to come via the MTDEQ Data Search Tools website or alternate sources.

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MONTANA UNDERGROUND STORAGE TANK NEWSLETTER

MUST News

Montana Department of Environmental Quality

## Online Licensee Testing

Dalynn Townsend, DEQ

The Underground Storage Tanks program had six potential compliance inspectors take the online Compliance Inspector exam on May 16th. This was the first time that the program had used online testing and it was a great success. The program also has the Installer Remover exam available online and will have the Remover exam built and released this month. For now, potential licensees must still travel to Helena in order to take the exam, but there is potential that the exams will be offered at testing centers across the state in the future.

*Newly Licensed Compliance Inspector, Paul Heath, takes the online exam.*

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# Guidance

# For Disposal of Wastes Associated

# With Underground Storage Tank

# Removal

*This document is intended as general guidance for owners, operators and responsible parties with direction for determining if waste generated from the contents remaining in underground storage tanks (USTs) are regulated hazardous wastes. This document provides guidance only and is not meant to modify or replace the promulgated regulations, which undergo periodic revisions. In the event of a conflict between this guidance and promulgated regulations, the regulations govern. This guidance may not cover all situations and may be revised as needed.*

Waste and Underground Tank Management
Montana Department of Environmental Quality
June 2014

The Montana Department of Environmental Quality (DEQ) Hazardous Waste Program is providing this document to give you guidance about managing and disposing of oil and gas related wastes, such as used oil, gasoline, diesel and fuel oil, from petroleum underground storage tanks (USTS). It gives direction to tank owners, operators and responsible parties for determining whether or not wastes from the contents inside USTs are regulated hazardous wastes. Hazardous waste is a solid waste that will be discarded and presents a hazard to human health or the environment because of its chemical composition or characteristics.

You will find contact information and the location of guidance materials that may apply to other tank activities such as tank handling, site assessment and management at the end of this fact sheet.

**This guidance does not apply to:**

1. Empty tanks with less than 1" of residue.

2. Conditionally exempt small quantity generators. If the amount of hazardous waste generated from the contents of the tank is less than 220 pounds of non-acute hazardous waste (as described in 40 CFR 261.5(a), and incorporated by reference in ARM 17.53.501), it is exempt from regulation as a hazardous waste.

**Tank Waste Management**

Various wastes are generated during tank removal. Tank owners, operators, or responsible parties are responsible for managing and disposing of waste according to all applicable regulations.

If the tank isn't considered empty and the contents being discarded have certain characteristics or are listed in 40 CFR Part 261, as incorporated by reference in ARM 17.53.501, they may be classified as a regulated hazardous waste. If you test the waste and it meets the criteria of a characteristic hazardous waste, it must be stored, handled, and disposed in accordance with Montana hazardous waste rules.

The next sections cover hazardous waste characteristics, methods for determining hazardous waste status, and proper management and disposal.

**Types of waste generated from tank closures are**:

1. Oil and gas related wastes from petroleum underground storage tanks that are not empty.
    a) If the material in the tank is reclaimed or used as a product, it is not considered a waste.

b) If the material in the tank is unusable product, sludge, sediment, tank bottoms or wastewater, you may apply operator knowledge or test for the hazardous waste characteristics by using the table below to determine if the waste is a hazardous waste. If it is a hazardous waste, it must be stored, managed, transported, and disposed as a regulated hazardous waste.

**Test Parameters Table**

| Unusable Product | Used Oil | Regulatory limit |
|---|---|---|
| Benzene* | Benzene* | 0.5 mg/l |
| Lead* | Lead* | 5.0 mg/l |
| | Chromium* | 5.0 mg/l |
| Ignitability ** | Ignitability** | 140 degrees |
| | TOX (for Total Organic Halogens)*** | 1000 mg/l |

**Must prepare sample using Toxicity Characteristic Leaching Procedures (TCLP)*
*** Ignitability for hazardous wastes is determined by a Flashpoint of 140 degrees or less for free liquids*
****Rebuttable presumption for used oil*

2. Contaminated media:
   Contaminated media is soil, groundwater, and debris from the cleanup of an UST. This is the material outside and around the tank. According to 40 CFR 261.4(b)(10),as incorporated by reference in ARM 17.53.501, contaminated media may be excluded from the definition of a hazardous waste, even if the waste has some of the toxicity characteristics. The media is excluded if it fails the Toxicity Characteristic test of 261.24, as incorporated by reference in ARM 17.53.501, and is subject to the corrective action regulations under part 280 of 40 CFR. This exclusion does not apply to media with toxicity characteristics other than Hazardous Waste Codes D018 -D043. For example, arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver [D004-D011 (RCRA metals)] are not excluded under 40 CFR 261.4(b)(10), as incorporated by reference in ARM 17.53.501. This exemption does not apply to contents inside a UST.

3. If the material in the tank is a hazardous material, you should determine your disposal options by referring to the hazardous waste regulations to determine if it is a listed waste or characteristic waste. Testing for hazardous characteristics may include ignitability, corrosivity, reactivity, and toxicity.

Contact the following Montana DEQ programs for further information:
Hazardous Waste Program at 406-444-5300 or visit the website http://deq.mt.gov/HazWaste/default.mcpx.
Underground Tank Program at 406-444-5300 or visit the website http://deq.mt.gov/UST/default.mcpx.
Solid Waste Program at 406-444-5300 or visit the website http://deq.mt.gov/SolidWaste/default.mcpx.
Remediation Program at 406-851-5000 or visit the website http://deq.mt.gov/Rem/default.mcpx.

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MONTANA UNDERGROUND STORAGE TANK NEWSLETTER


## Ask the Expert

**What do I do if there is a release after hours?**

The Hotline for Reporting Leaks is manned by DEQ personnel Monday through Friday, 8:00 AM to 5:00 PM, except on holidays. Disaster and Emergency Services (DES) receives leak calls after hours and on weekends and holidays. DES is available 24-hours a day, 7-days a week, and their phone number is 1-406-324-4777. DES relays suspect and confirmed releases to DEQ as soon as possible after they receive the call.

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Association of State and Territorial
ASTSWMO
Solid Waste Management Officials

# UST Common Compliance Violations Report – FY 2012

## FINAL
## April 2014

**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 States and Territories. ASTSWMO's mission is to enhance and promote effective State and Territorial programs for waste and materials management, to encourage environmentally sustainable practices, and to affect relevant national waste and materials management policies. 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 the following members for their participation in the development of this report:

Therron Blatter, UT – Task Force Chair
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ASTSWMO also thanks the former members of the UST Task Force and Tanks Subcommittee for their earlier work in 2010.

The UST Task Force would like to thank the States who provided program information and data to ASTSWMO, and helped make this document possible:

Region 1: CT, ME, NH, RI, VT
Region 2: NJ, PR
Region 3: DE, DC, WV
Region 4: AL, GA, KY, NC, SC, TN
Region 5: IL, MI, OH, WI
Region 6: NM
Region 7: IA, KS, MO, NE
Region 8: CO, MT, UT, WY
Region 9: CA, CNMI, HI
Region 10: AK, ID, OR

## Introduction

The Association of State and Territorial Solid Waste Management Officials (ASTSWMO) Underground Storage Tank (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 were most often encountered during UST compliance inspections and other verification activities. The Task Forced conducted an information request in federal fiscal year (FY) 2010 and collected data from 42 States about common compliance violations occurring nationwide. ASTSWMO presented the results in various forums between 2011 and 2012. In FY 2012, the Task Force revised the information requested based on feedback it received from States and distributed the request to all States. Thirty five (35) States provided data to the FY 2012 request.

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

In 2011, the UST Task Force shared results of its first common compliance violations request with State representatives. This initial request asked States to respond with their most significant areas of UST regulatory compliance violations. The time period for violations requested covered FY 2010. Due to the questions in the initial effort being somewhat vague, the data submitted by respondents varied drastically. For example, some respondents provided the top four or five common compliance violation categories that occurred in their State, while other respondents provided as many as 20 to 30 areas of compliance violations. In addition, the FY 2010 request did not include pre-determined violation categories, rather each respondent was asked to provide a descriptive title of their State's violation categories. This proved to be

very challenging for the Task Force to interpret, consolidate, and categorize all responses into common and consistent categories of violations.

In 2012, the UST Task Force revised the original information request to incorporate State feedback and address the challenges of data collection identified the previous year. The Task Force took a more structured approached 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 Requirements
- Not reporting/investigating suspected release
- Improper Temporary Closure

States also had the option of providing "Other/State Specific" common violations.

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 March 2013. The reported data focused on violations in FY 2012.

The Task Force will continue to refine the information request as areas of improvement are identified and distribute to States on an annual or 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/Interstitial Monitoring 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.

The online data collection tool compiled raw data that each responding State transmitted individually, and Task Force membered compiled some responses that States transmitted via e-mail. 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.[1] The Task Force also took some liberty in re-categorizing some responses submitted as "State specific/Other" issues if it fit within one of the existing categories. As mentioned above, the FY 2012 dataset represents the responses of 35 States and accounts for nearly 59,000 UST inspections. The Task Force evaluated the data in three ways, with each of these methods contributing value to the overall common violations picture and each having some limitations.

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, $S_r$: — . 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, $V_t$ : —. 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.

[1] 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.

Average Ranking of the Violation

The average rank, $R_{ave,}$ is the average of the relative ranking assigned by reporting states, $R_{state}$: $\frac{\sum R}{\quad}$. The ranking values range from one to eight, with one being most frequent. This method of analysis is similar to the percentage of violations method in that it somewhat accounts for the frequency of a violation. It does not account for States where the ranking falls below eight and tends to overvalue issues that are highly ranked by a small population of States. This measure does allow the inclusion of data from States that provided their top eight violations but were unable to offer an actual count of violations. This is important, as California alone reported on nearly 24% of the completed inspections, but was only able to provide a relative ranking and not actual violation counts.

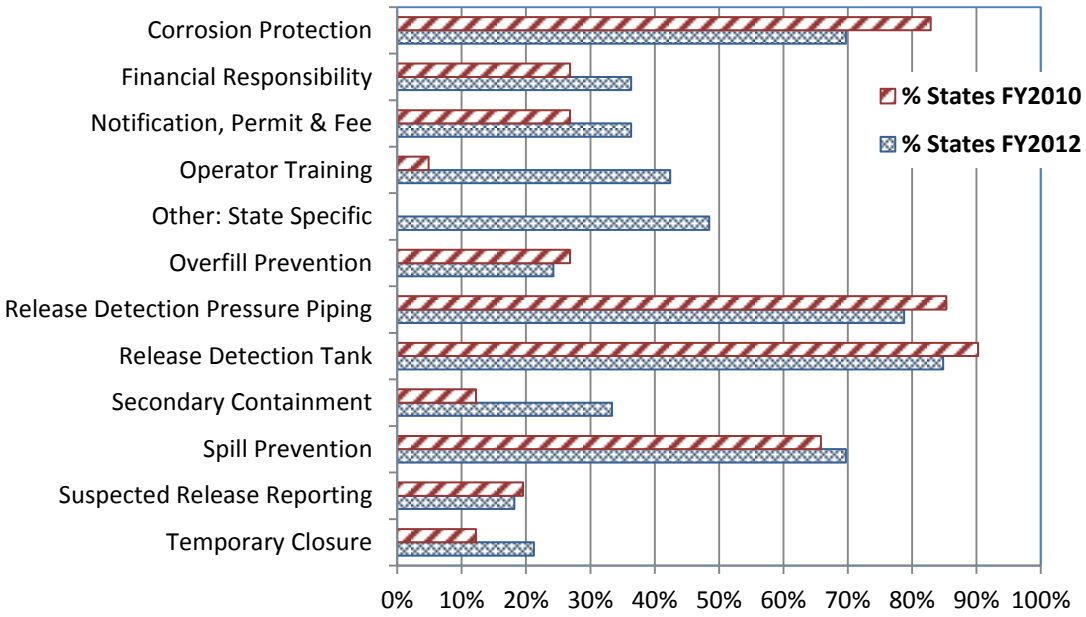
The summary of all collected data is available in Appendix A. This report will focus on the top five general violations as identified by the previously described measures. When possible the data will be broken down to a more detailed level of violations. The data collected in the FY 2010 effort have 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 both FY 2010 and FY 2012. For the 2012 data, Release Detection Tank is the top violation with 85% of the States reporting it in their top eight; this is followed by Release Detection Pressure Piping at 79%, Corrosion Protection at 70%, Spill Prevention at 70%, and Other: State Specific at 48%. This is similar to the FY 2010 data with the exception that Other: State Specific was not identified in the 2010 data. It should be noted that all of the top violations decreased in reported percentage from 2010 to 2012 except for Spill Prevention, which increased by 4 percentage points. It is also interesting to note that Operator Training increased from 5% in 2010 to 42% in 2012, apparently mirroring the States' efforts to implement and enforce the Operator Training requirements of the Energy Policy Act of 2005.

Figure 2 graphs the percentage of total violations (% Violations) for FY 2012. The actual count of violations was not collected in the FY 2010 dataset and thus not compared here. Most of the top violations are the same but in a somewhat different order. Release Detection Pressure Piping is the most frequently occurring violation at 24.9%, followed by Release Detection Tanks at 19.2%, Spill Prevention at 11.7%, Financial Responsibility (FR) at 10.4%, and Other: State Specific at 8.2%. It is interesting to note that FR makes the top five in percentage of total violations when only 36% of the respondents have it in their top eight. It should also be noted that Corrosion Protection (fourth in the % States measure) and Operator Training are very close to making the top five at 8.1% and 7.3% respectively. In addition, nearly half of the total violations are related to release detection. In comparison, release prevention issues only account for about 22% of the violations.

## Figure 1. Percentage of Reporting States Ranking a Given Violation in Top Eight




## Figure 2. FY 2012 Percentage of Total Violations

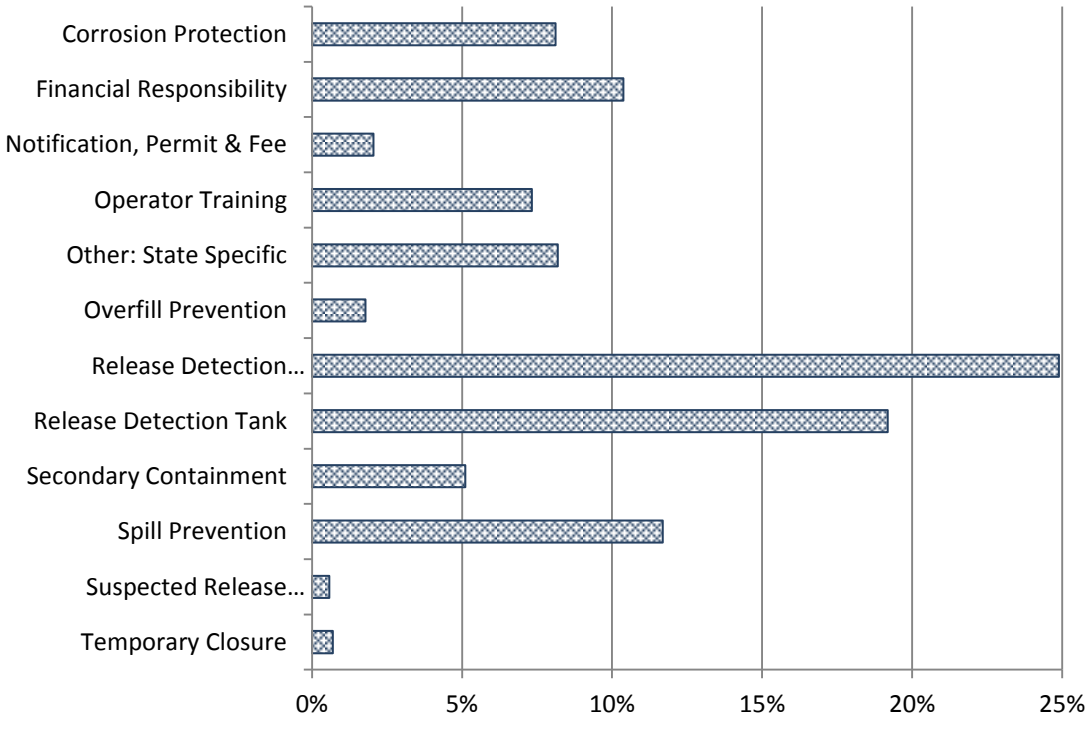
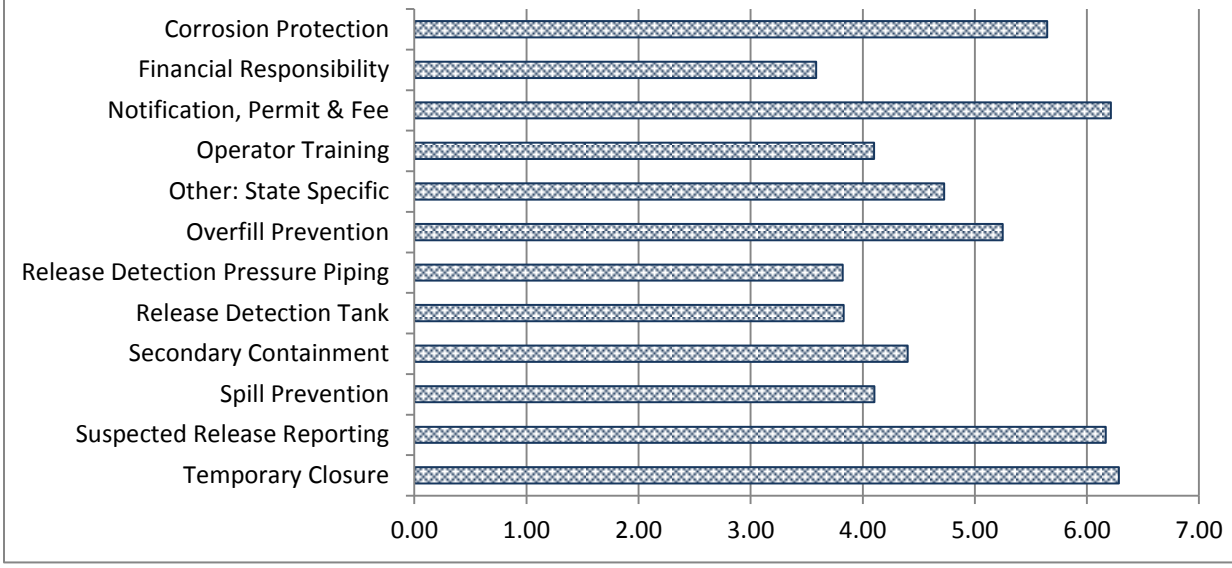


Figure 3 graphs the Average Rank for FY 2012. On this scale, the lower the number, the higher the ranking and more frequent the violation. Using this measure, the highest ranking violation is FR, followed by Release Detection Piping, Release Detection Tank, and Spill Prevention and Operator Training (tied). Again, it should be noted that FR is highly ranked but only made the top eight violations for 36% of the States. This indicates that for many of these States, FR is a top issue of concern. All of the other top violations are consistent with the other two measures.

**Figure 3. 2012 Average Rank (low number = high ranking)**




If all three measures are given equal weight and their rankings are combined (with an attempt to account for the States that did not provide actual violation counts), the overall rankings are as follows:

**Table 1: Top Common Compliance Violations**

| Violation | % States | % Violations | Average Rank | Overall Average |
|---|---|---|---|---|
| Release Detection - Pressure Piping | 2 | 1 | 2 | **1.7** |
| Release Detection - Tank | 1 | 2 | 3 | **2.0** |
| Spill Prevention | 3 | 3 | 4.5 | **3.5** |
| Financial Responsibility | 6 | 4 | 1 | **3.7** |
| Corrosion Protection | 4 | 5 | 9 | **6.0** |
| Operator Training | 7.5 | 6 | 4.5 | **6.0** |

Clearly, the top two issues are release detection for pressure piping and release detection for tanks. These issues score high in all three measures. Spill prevention is consistently in the middle third while corrosion protection and operator training are in the lower third. The only real oddity is financial responsibility. This may be due to the variety of mechanisms by which the financial responsibility requirement is met, the differences in how State funds are

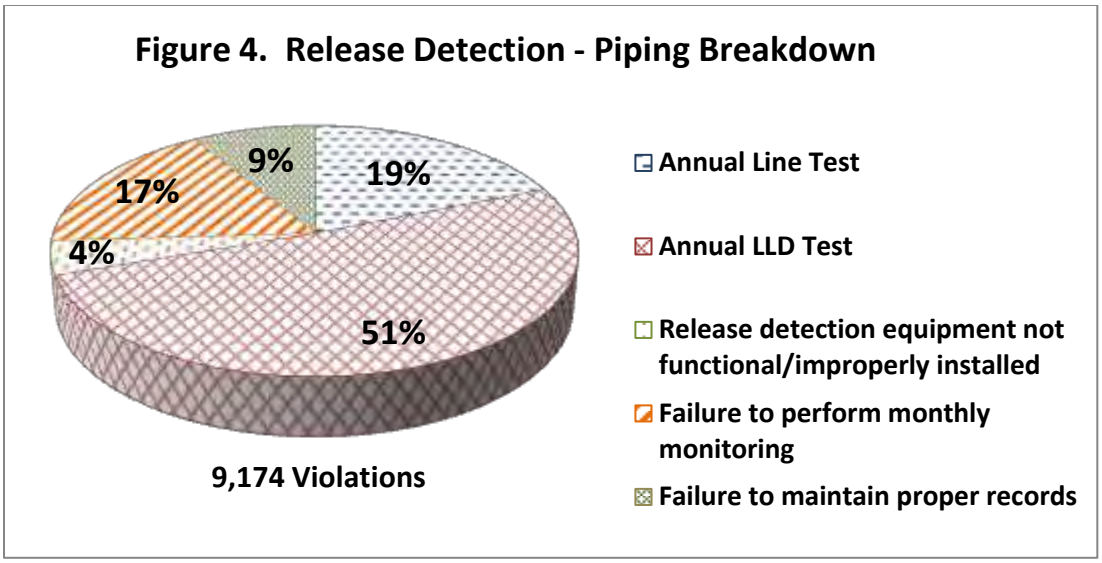
structured, and the ways that compliance with financial responsibility is verified by each State. Another possible factor is that all of the other violations, with the exception of operator training, which is a new requirement, have been reported semi-annually for the past 10 years as part of the SOC measures. The focus on accurate data collection and consistent reporting required to produce SOC numbers may not exist to the same degree for financial responsibility data. It is also important to remember that many States were still in the process of implementing their operator training program at the time the data was being collected. One might expect substantially more operator training related violations in the near future as States ramp up their inspection efforts for this new requirement.

## 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.

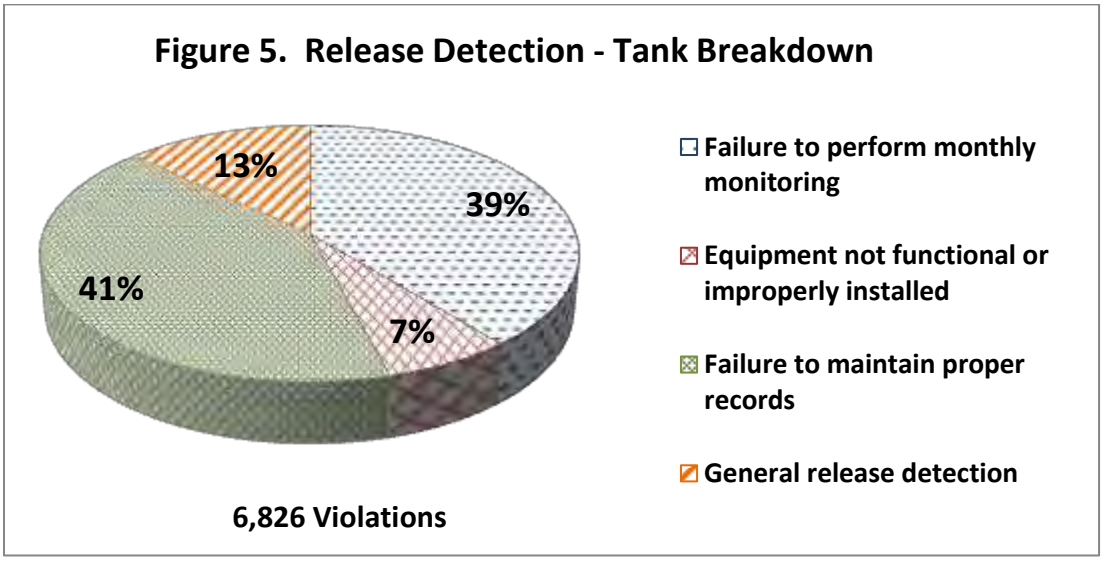
### Violation 1: Release Detection - Piping

Figure 4 graphs the most frequently occurring violations within the release detection for pressurized piping category. Over 50% of the violations reported were for failure to annually test the automatic line leak detector and an additional 19% were for failure to perform an annual line tightness test. The remaining violations consist of failure to perform monthly monitoring, failure to maintain proper records, and equipment issues. Seventy percent (70%) of the deficiencies from the top category of violations related to system component testing that is often conducted in unison. If States implement strategies to reduce these two violations, one would expect a significant rise in release detection SOC rates. Thus, it seems prudent that States share ideas on best practices that address this issue.



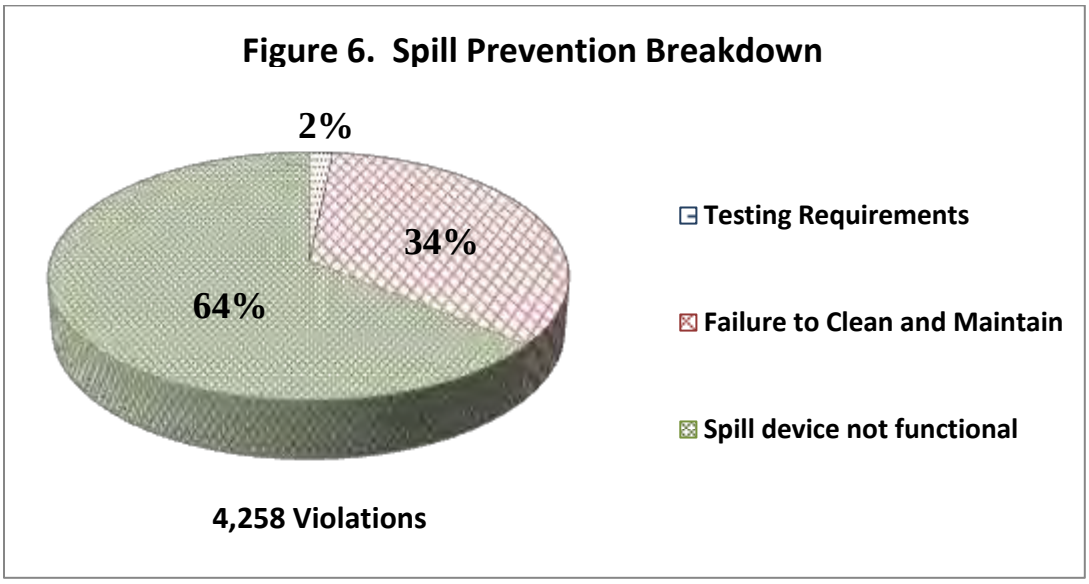

Violation 2: Release Detection - Tank

Figure 5 graphs the most frequently occurring violations within the release detection for tank category. Eighty percent (80%) of the violations were either failure to perform monthly monitoring or failure to maintain proper records, with an additional 13% that lumped into general release detection. It should be noted that there is potential for considerable overlap in all three of these groupings and the Task Force hopes to address this in future reporting. The remaining violations involve problems with release detection equipment and maintenance. One thing that would be of interest is to identify the monthly monitoring method being utilized, which was not easily extracted from the data. This will be considered as a potential enhancement to the information request for future years.



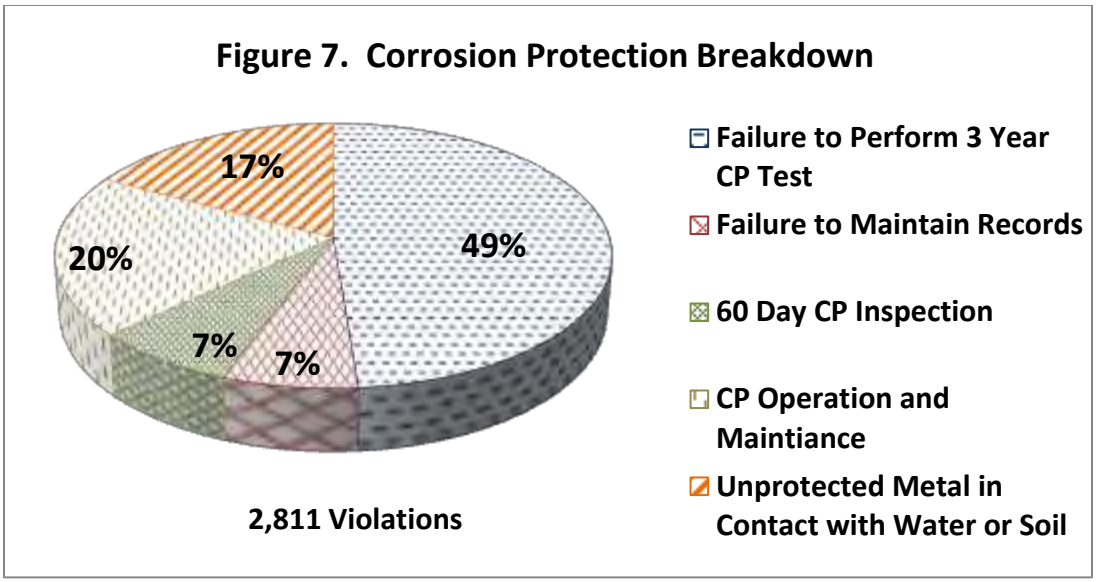
Violation 3: Spill Prevention

Figure 6 graphs the most frequently occurring violations within the spill prevention category. Sixty four percent (64%) of the violations were for a non-functional spill device, 34% were for failure to clean and maintain the spill device, and 2% for failing to meet a testing requirement. These results reinforce the importance of onsite inspections. While nearly all UST systems have been equipped to comply with the spill containment requirement, inspection findings suggest that a significant number of the devices are no longer functional. Routine testing of spill buckets is not required by the current federal UST regulations. The Task Force included this option in its request because it is included in U.S. EPA's initial proposed regulation changes released in 2011 and is required by some State programs. It will be interesting to watch the data on spill prevention violations if a routine testing requirement is implemented nationwide. One would expect a spike both in violations related to the testing requirement and violations for having a non-functional spill device due to devices that fail the required test.



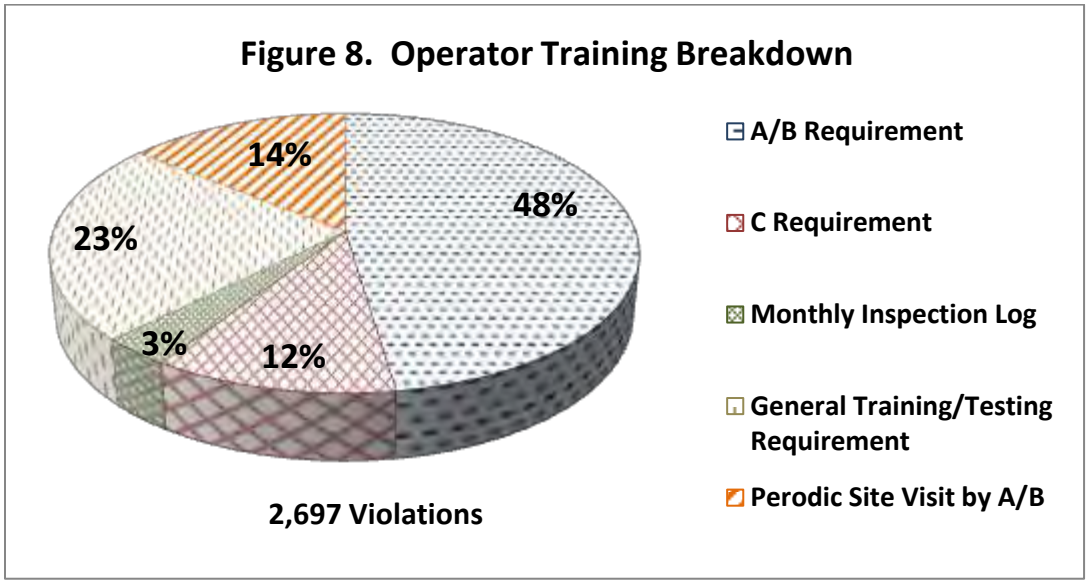

Violation 4: Corrosion Protection

Figure 7 graphs the most frequently occurring violations within the corrosion protection category. Nearly 50% of the violations were for failure to perform the three-year cathodic protection (CP) test, 20% were for failure to maintain and operate the CP system properly, 17% for unprotected metal in contact with soil or water, and 7% each for failure to complete the 60-day CP operational test and failure to maintain records. Like piping release detection, this is an area where finding ways to significantly correct one issue can have positive affect on SOC rates. It should be noted that over 80% of these violations involve cathodic protection of metal tanks and metal UST system components (piping, flex connectors, etc.). These UST systems are often the older, higher risk systems and pose the greatest risk of catastrophic release.




Violation 5: Operator Training

Figure 8 graphs the most frequently occurring violations within the operator training category. Over 70% of the violations appear to involve the A/B training requirement (48% A/B requirement and 23% general training and testing), 12% involve the C requirement, and the remainder encompasses various State specific requirements such as site inspections and monthly inspection logs. It is important to remember that many States were still in the process of implementing their operator training program during the time of the 2012 dataset. In addition, because no federal operator training regulations are currently in place, significant differences exist between State requirements. These two factors likely skew the data toward the States that were early adopters of the operator training requirement.



## Analysis of State Specific Data

To better understand the utilization of the States who reported using the category of "Other or State Specific," Task Force members followed up with those States. It was discovered that while all violations noted in this category are directly associated with USTs and the environmental protection or public safety of their operation, the reasons for reporting in the "Other or State Specific" category varied.

In some cases, States reported "other or State specific" violations due to its implementation of more stringent requirements than the Federal Rule. For example several States reported violations associated with monthly spill bucket logs, dispenser weeping not considered releases, dispenser inspections, and damaged or missing drop tubes, which are outside the authority of the Federal Rule, and are under State authority. Some States reported shear valve functionality and bracing violations, which also fall outside the scope of the Federal Rule, and are under State authority.

In other cases, States reported "other or State specific" violations simply because they could not immediately identify which component a violation was associated with or the specific reason why the violation was issued without reviewing each inspection report. For example, at least one State utilized this category to report general release detection violations where specific information regarding each violation was not immediately available.

## 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. Leak detection, corrosion protection, and spill 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, operator training, as well as notification, permit, and fee requirements appear to be more a function of how various aspects of the UST program are implemented in a given State. Other violations – overfill prevention, aspects of operator training, and some of the State specific items – 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 | | Number of Violations Reported, FY 2012 | Percent of Total Violations Reported, FY 2012 | Average Rank |
|---|---|---|---|---|---|---|---|
| | FY 2010 | FY 2012 | FY 2010 | FY 2012 | | | |
| Financial Responsibility | 11 | 12 | 27% | 36% | 3,845 | 10% | 3.58 |
| Release Detection Pressure Piping | 35 | 26 | 85% | 79% | 9,219 | 25% | 3.82 |
| Spill Prevention | 27 | 23 | 66% | 70% | 4,328 | 12% | 4.10 |
| Operator Training | 2 | 14 | 5% | 42% | 2,716 | 7% | 4.10 |
| Release Detection Tank | 37 | 28 | 90% | 85% | 7,107 | 19% | 3.83 |
| Secondary Containment | 5 | 11 | 12% | 33% | 1,891 | 5% | 4.40 |
| Overfill Prevention | 11 | 8 | 27% | 24% | 661 | 2% | 5.25 |
| Corrosion Protection | 34 | 23 | 83% | 70% | 3,007 | 8% | 5.65 |
| Temporary Closure | 5 | 7 | 12% | 21% | 257 | 1% | 6.29 |
| Notification, Permit & Fee | 11 | 12 | 27% | 36% | 759 | 2% | 6.21 |
| Suspected Release Reporting | 8 | 6 | 20% | 18% | 212 | 1% | 6.17 |
| Other: State Specific | -- | 16 | -- | 48% | 3,035 | 8% | 4.73 |

## Appendix B: List of States that did not Report One or More of the Top Five Violations as Identified by the Report within Their Top Eight

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.

- Release Detection Monitoring –Tanks: NH, NM, VT, HI
- Release Detection Monitoring - Piping – MT, WV, KS, ME, WY
- Spill Prevention – DC, MI, MT NC, OH, RI, SC, TN, PR, WY
- Cathodic Protection – AK, CA, RI, VT, KS, NJ, ME, PR
- Financial Responsibility – 21 States did not list this as a top five Common Violation - CA, ID, NC, NH, NM, OR, RI, SC, TN, UT, VT, WI, IA, AL, CT, KS, HI, KY, GA, CO, NJ,WY

**Note**: Operator training is not included as there are many differences among State programs. States may refer to the ASTSWMO Operator Training Resource Guide available on the ASTSWMO website (www.astswmo.org) for more information on State operator training requirements.

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## Correction

There may have been some confusion regarding the previous article titled *Administrative Orders and Fund Eligibility: There is a Connection*. Although it is possible for certain tanks to be denied eligibility because of an Administrative Order (AST and non-federally regulated tanks), it would have been better to state that an UST system with a current operating permit cannot lose eligibility, but can lose their fund assistance.

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## Fund and Release Status Report

**Petroleum Fund Financial Status – Through June 30, 2014, Fiscal Year 2014**
**(July 1, 2013 – June 30, 2014)**

Total Revenue: $7,041,272.00

Current and prior year claims expenditures: $8,245,022.00

Outstanding work waiting to be obligated: $254,050.00

**Petroleum Releases – Through June 30, 2014, Fiscal Year 2014**
**(July 1, 2013 – June 30, 2014)**

New Releases: 28
Releases Resolved (Closed): 104

**Summary of Total Petroleum Release Activity**

Total Confirmed Releases: 4,607
Total Active Releases: 1,317
Total Releases Resolved (Closed): 3,290

*Please note that this number includes sites with the status “Transferred to Another Program or Agency.” The other agency or program could be the EPA or another state-lead program (e.g. the DEQ State Superfund Program).