

L.U.S.T.LINE

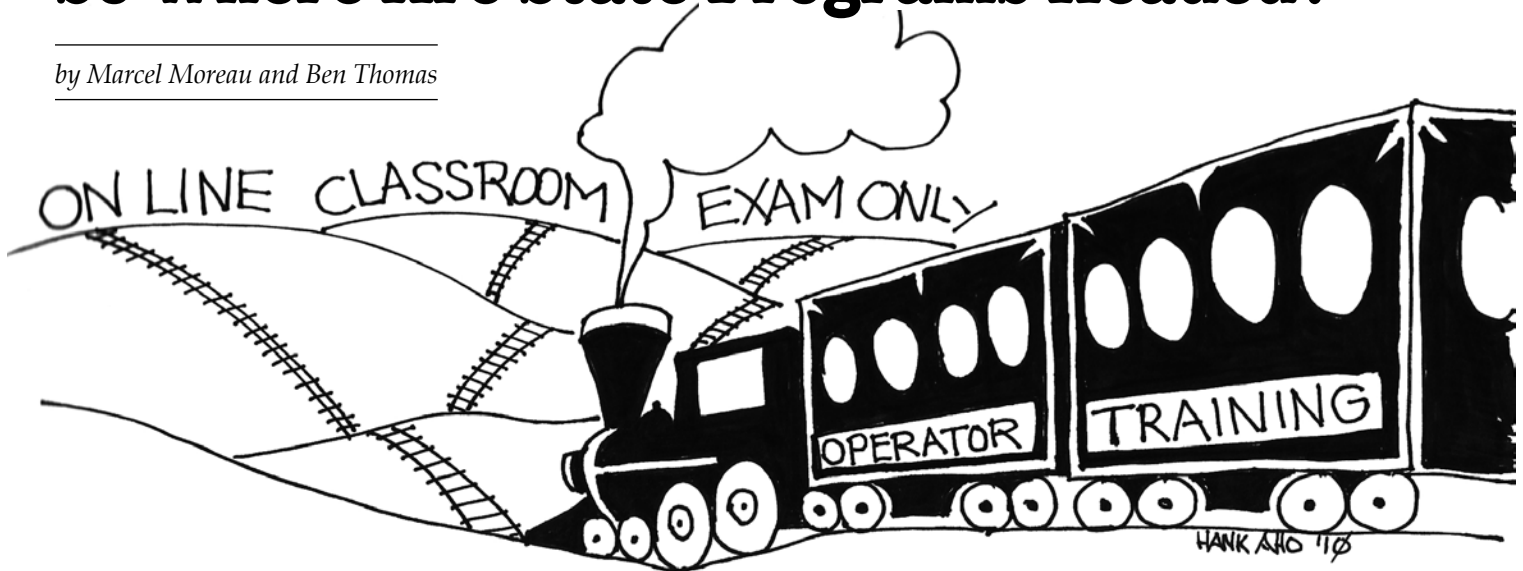


A Report On Federal & State Programs To Control Leaking Underground Storage Tanks

Operator Training Has Left the Station...

So Where Are State Programs Headed?

by Marcel Moreau and Ben Thomas



UST OPERATOR TRAINING: Will it radically improve our UST compliance rates, or will it be another add-on regulation that regulators and UST owners must endure? The crystal ball is still fuzzy and we're not making any predictions, but we thought it might be useful to review some of the diverse approaches that states are taking toward implementing the operator training requirements of the 2005 Energy Act.

As we write, the deadline for training UST operators in Oregon and California passed some five years ago, and Colorado has had a training requirement in place for a few months. New Mexico is beginning to implement its operator-training requirement this year. A few states like Louisiana have a deadline of 90 days after the next upcoming compliance inspection, and Minnesota deadlines will be driven by area code (novel but painful for large operators). Most other states, as far as we can determine, are aiming for a training deadline of August 8, 2012, the deadline set in the Energy Policy Act of 2005 (EPAct). A number of states have training mechanisms or at least training plans already in place in anticipation of the 2012 deadline; however, it looks like a few states may not meet the deadline.

■ continued on page 2

Inside

- 6 Transition—Part 2
- 10 Release, Remediate, Repeat
- 13 Not for the Squeamish!
- 15 Plugging the Rest of the Leaks
- 17 From Our Readers
- 19 What's New at USEPA?
- 21 Short List of Potential UST Reg Changes
- 22 FAQs: Continuous Leak Detection Methods
- 23 ULSD, ULSD, ULSD...

■ Operator Training Programs

from page 1

The focus of state programs is to establish training mechanisms for what the EPAct defines as Class A and Class B operators. Class A operators can be loosely defined as “owners” and Class B operators can be loosely defined as “facility managers.” The EPAct also establishes a Class C operator that can be loosely defined as “clerk.” (See USEPA’s guidance document on operator training for the official definitions of these operator classifications at www.epa.gov/oust/fed-laws/otgg_final080807.pdf.)

Because of the large overlap in Class A and Class B operator knowledge and the relatively small number of people who are strictly Class A operators, a number of states are providing for a combination Class A/B operator. Class C operators can be trained by Class A and B operators, so states are not focusing on establishing programs to directly train this class of operator, but several private-sector training providers are promot-



L.U.S.T.Line

Ellen Frye, *Editor*
Ricki Pappo, *Layout*
Marcel Moreau, *Technical Adviser*
Patricia Ellis, PhD, *Technical Adviser*
Ronald Poltak, *NEIWPCC Executive Director*
Deb Steckley, *USEPA Project Officer*

LUSTLine is a product of the New England Interstate Water Pollution Control Commission (NEIWPCC). It is produced through cooperative agreements (US-83384301 and US-83384401) between NEIWPCC and the U.S. Environmental Protection Agency.

LUSTLine is issued as a communication service for the Subtitle I RCRA Hazardous & Solid Waste Amendments rule promulgation process.

LUSTLine is produced to promote information exchange on UST/LUST issues. The opinions and information stated herein are those of the authors and do not necessarily reflect the opinions of NEIWPCC.

This publication may be copied.
Please give credit to NEIWPCC.

NEIWPCC was established by an Act of Congress in 1947 and remains the oldest agency in the Northeast United States concerned with coordination of the multimedia environmental activities of the states of Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont.

NEIWPCC
116 John Street
Lowell, MA 01852-1124
Telephone: (978) 323-7929
Fax: (978) 323-7919
lustline@neiwppc.org



LUSTLine is printed on recycled paper.

Links to State Internet-Based Training Programs

MONTANA

TankHelper2 – <https://app.mt.gov/tank2/>

OKLAHOMA

Operator Training – <http://www.occeweb.com/operatortraining>

MAINE

TankSmart – <http://www.maine.gov/dep/rwm/ust/tanksmartonlineservice.htm>

SOUTH CAROLINA

UST Training System –

http://www.scdhec.gov/environment/lwm/UST_Training/Default.aspx

ing training specifically for Class C personnel.

In this article we will focus specifically on the approaches that states are taking toward setting up Class A and Class B (or combined Class A/B) training programs.

At present we have identified four kinds of approaches to accomplishing Class A and B operator training:

- State-funded internet-based
- State-funded classroom
- Free-market, operator-funded
- Examination only, operator-funded.

State-Funded, Internet-Based Training

MONTANA

In 2005, the Montana Department of Environmental Quality (MDEQ) unveiled a state-sponsored UST operator-training program that was 100 percent web-based and interactive. The Montana program, known as TankHelper, is being replicated in various ways in several states, including Idaho, Maine, and Kentucky.

Prominent features of the Montana TankHelper program include:

- The TankHelper program links to the Montana UST database so the training information presented to the operator is facility-specific. For example, if a facility is all fiberglass, uses an ATG for tank leak detection, and has safe-suction piping, then these topics are presented and all other methods of corrosion protection and leak detection are ignored. This

approach to training requires an accurate database but has huge advantages in that it presents only information that the UST operator needs to know. This suits the great majority of UST operators who just want to meet the regulations and are not interested in becoming all-around experts in UST management. It also eliminates the problem faced by many operators who do not know what kind of tanks, pumps, or leak-detection method they have and emerge overwhelmed and confused from a training course that covers all the possible variations of UST systems.

- At the end of the training, the operator is presented with a facility-specific compliance plan. The plan describes the operational and leak-detection requirements for each facility in a concise format so operators have a complete listing of exactly what they must do to be in compliance at their facility.
- The program is funded entirely by the state and is available free to the operator.
- The MDEQ maintains complete control over the program.

The original version of TankHelper was silent. Users would log onto the website, select a facility, read a series of screens, and then take a quiz to evaluate their understanding of their UST site. In 2009, MDEQ unveiled Version 2 of TankHelper, which provides the operator with a video and audio presentation of the training material and requires very little reading. For those who pass the final exam with an 80 percent score or higher, the State of Montana issues a Class A/B certificate of completion.

MAINE

Maine has developed a program very similar to the original version of Montana's TankHelper; it goes by the name of TankSmart. The Maine program also links to the UST database so that facility-specific information can be presented. The student reads screens and then takes an exam. In addition to the web-based program, the Maine program includes a downloadable manual that can be printed for future reference by the UST operator or provided upon request by the DEP via mail to operators who do not have convenient computer access. While the Maine training is facility specific, the TankSmart program does not produce a facility-specific compliance plan. TankSmart provides a combined Class A/B certificate to UST operators who successfully pass the exam. TankSmart is funded by the State of Maine and is provided free of charge to UST operators.

SOUTH CAROLINA

South Carolina has a hybrid web-based training program that provides a library of downloadable PDF documents on the various aspects of UST systems. The student selects, downloads, and reviews the lessons, then returns to the web to take an online exam. The program allows the user to download only the lessons they need; the state assumes you know which lessons apply (a big assumption). South Carolina has also combined the A/B training. South Carolina, like California, expects operators to know their stuff afterward and now requires a monthly inspection form be completed. The program is free but must be completed by August 11, 2011. (We assume the site will remain in business after the deadline for new and replacement operators.) Users who successfully complete the program are issued a certificate.

OKLAHOMA

Oklahoma has developed an online PowerPoint-like show as its UST operator-training mechanism. The program is self-guided, generic (i.e., not site-specific), and silent and includes a short quiz after each training category. The trainee is prompted to print a certificate after each category is reviewed and each category exam is passed.

IDAHO

Idaho has developed a program similar in format to the Montana TankHelper program in that it links to the UST database and provides facility-specific information and a facility-specific management plan. The Idaho approach has a unique teaching method. Instead of having the UST operator go to the web to learn the information, an Idaho UST inspector delivers the training on a laptop computer as part of the facility inspection process. The inspector also prints out the management plan and provides a binder in which to store the plan and the required recordkeeping paperwork. A certificate is printed for operators who pass the associated quiz.

The goal is to raise the bar on UST-operator knowledge. A training program that does little more than review material that UST operators already know will only serve to bless the status quo and not produce the desired improvements in UST management.

KENTUCKY

The Kentucky Division of Waste Management is creating an online operator-training program, modeled closely on the Montana TankHelper program, called TOOLS (Tank Operator Online Learning System.) This program is still under development, but the plan is to include a series of PowerPoint-based lessons with audio narration. The program will provide facility-specific training based on information contained in the state UST database and a facility-specific compliance management plan. Operators who successfully complete the exam will receive a combination Class A/B certificate that includes a listing of the lessons taken.

The TOOLS program will provide the names of certified operators and the UST facility(ies) with which they are associated to the Kentucky UST database so that compliance

with the UST-operator requirements can be easily tracked. UST owners will also be able to go online and assign or remove UST operators from UST facilities as personnel change over time.

State-Funded Classroom Training**KANSAS**

Since 2007, the Kansas Department of Health and Environment has contracted with the Petroleum Marketers & Convenience Store Association of Kansas to provide live UST-operator classes at various locations across the state. The classes are presented free of charge to the UST operators. The association promotes the classes, registers UST operators, and provides instructors for the classes. Class A/B certificates are provided to attendees. Kansas plans to continue to fund these live classes for at least the next few years. In order to obtain an UST operating permit in 2012, operators will need to prove that they have attended an UST-operator class.

LOUISIANA

The Louisiana Department of Environmental Quality has adopted an operator training approach that is nearly identical to the Kansas model.

U.S. VIRGIN ISLANDS

The Virgin Islands (VI) Department of Planning and Natural Resources, using federal funding, decided to act quickly and offer free classroom training to the island's UST-facility owners (about 60). Training was completed in early May 2010, before the UST-training rules were finalized. With such a small population of owners, VI should be able to reach all operators with not too much effort. It remains unclear what VI will do after the presumed 2012 deadline.

Free Market, Operator-Funded Training

In our classification system, "free market" states are ones where the state agency is approving or authorizing private-sector training vendors to provide training for a fee to

■ continued on page 4

■ Operator Training Programs

from page 3

UST operators. Usually, training can be provided through a variety of venues, including traditional classroom, webinars (where an instructor is present at specific times to teach the class via the Internet), and online (where a course is available anytime the student wishes to take it). Many states appear to be pursuing this type of operator-training approach. Only a few representative examples are described here.

OREGON

With a deadline of March 2004, Oregon was the first state to require UST operator training. (See LL #58, "Operator Training—The Oregon Experience;" LL #47, "Mandatory Training for UST Operators.") Oregon took the approach of having the private sector run the operator-training program. The state merely authorizes trainers to provide the training. Operators have a number of private training providers from which to choose. To date, only live classes have been offered. The number, location, and cost of the classes offered is entirely up to the training providers, who provide a certificate to the attendees. The state provides little oversight to monitor the quality of the training.

Oregon also allows operators to use the International Code Council (ICC) UST operator exam to meet the state requirements. The ICC provides a list of reference documents to prepare for the exam but does not provide any actual training. As far as we can tell, live training classes have proven to be much more popular among UST operators than the ICC exam.

COLORADO

Colorado's operator-training deadline was January 1, 2010. The state encouraged the free-market approach and approved a variety of classroom, internet-based, and examination options. Several vendors were approved to provide classroom training, concluding with an examination; one vendor was approved to provide training in a webinar format with an online exam. Colorado is also accepting the ICC UST operator

exam. As might be expected, most of the training activity took place in the two months immediately prior to the regulatory deadline. A number of UST consulting firms started a Colorado market for third-party Class A/B operators, where the owner on record outsources the training and monthly/annual inspections.

NEW MEXICO

Like Colorado, New Mexico is approving private sector vendors to provide training in a variety of formats. The state has chosen to stagger the training deadlines between now and 2012. Owners of 12 or more UST facilities must have their operators trained this year. Owners of between three and eleven facilities must meet a 2011 deadline. Operators of one or two facilities have until 2012. New Mexico is also requiring training for aboveground storage tank operators.

Examination-Only, Operator-Funded Training

In our classification system, "Exam-only" states are ones where the emphasis is placed on passing a required exam, and the prospective UST operator is left to fend for himself in terms of learning the information needed to pass the exam. To date, states adopting this approach are using the UST-operator exam developed by the ICC.

CALIFORNIA

California's UST-operator certification deadline was January 1, 2005, which became effective prior to the passage of the Energy Policy Act. The California strategy requires that each UST facility have a designated operator (DO). The DO must conduct a monthly inspection of the UST facility(ies) for which they are responsible, and provide basic leak-detection and alarm response training to onsite personnel. Private-sector vendors are providing live classes to assist prospective DOs in preparing for the ICC examination. These classes are not subject to any state-approval process. A substantial number of California UST owners have outsourced their DO responsibilities to third-party service providers.

WYOMING

Wyoming also limits operator-certification mechanisms to the national- and state-specific ICC UST operator examinations. The Wyoming DEQ initially provided a number of free seminars to prepare prospective operators for the exams. Future exam preparation will be handled, for the most part, by private-sector providers.

How Will We Measure Success?

So as most states (and hopefully UST owners and operators) begin to ramp up activities for the 2012 operator-training deadline, we think this is a good time to ask, "How will the success of operator training be measured?" All too often, regulators measure success by the mere fact that a required program exists. While the existence of a program is no doubt a significant achievement, the purpose of the EPAct was not to increase bureaucracy.

So how will the states measure the success of their UST operator-training programs? Will it be measured by the number of certificates issued? By the number of people who take the various courses? By the increase in reports of suspected or confirmed releases? By increases in the rates of significant operational compliance? While any of these measures is feasible, it seems to us that the goal of UST operator training is to increase compliance with UST regulatory requirements. If this is correct, then the success of a program might be measured by increases in the percentage of facilities found to be in compliance with UST requirements.

OUST has been tracking rates of regulatory compliance as reported by states since 2002. To satisfy our curiosity, we plotted the percentage of UST facilities in compliance with release-detection and release-prevention requirements for several states: Oregon, California, Kansas, and Colorado (see Figures 1a, 1b).

Oregon's UST operator training requirements went into effect on March of 2004. California's program took effect on January 1, 2005. Kansas has been doing some training since 2008, but this is in advance of the Kansas deadline, so it is not clear how

FIGURE 1a

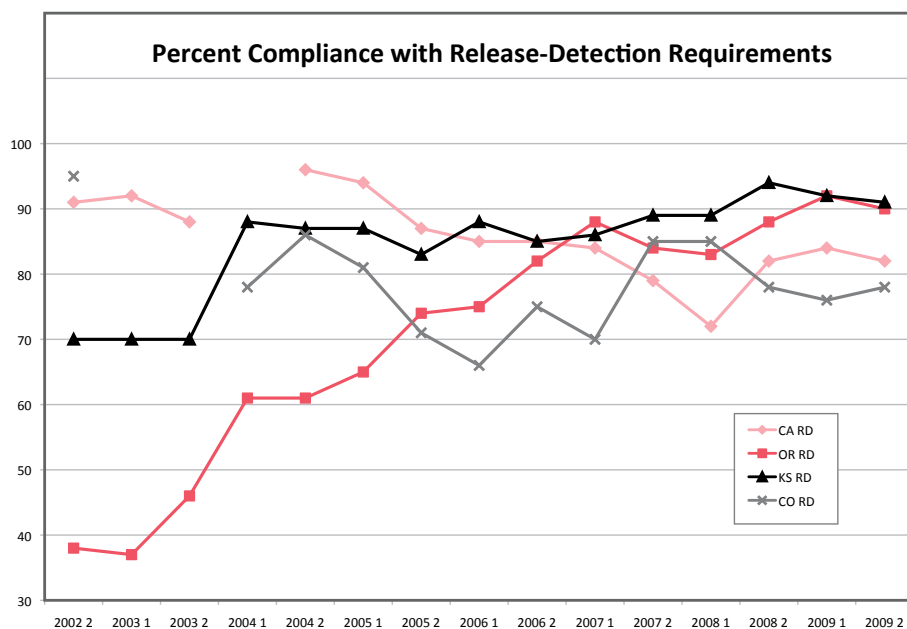
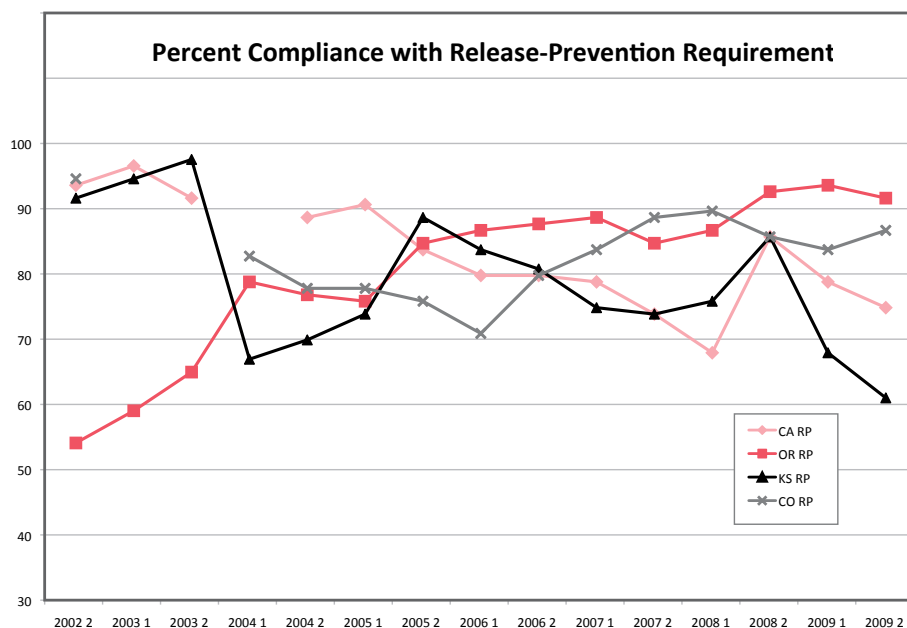


FIGURE 1b



large a portion of the Kansas UST operator population has been trained to date. Colorado's program went into effect on January 1 of this year, so it is clearly too early to see any effects of this training in the data.

From the Figure 1a and 1b graphs, it would appear that Oregon's rate of compliance with both release-detection and release-prevention measures has been increasing since the operator-training requirements went into effect, with a substantial jump in compliance coincident with the implementation of the program in March of 2004. The California trend

is not so rosy; the compliance rates appear to have held steady or even declined slightly since 2005. The Kansas and Colorado compliance rates seem more or less the same over the years presented in the graphs.

There is considerable variability in most of the state data, so we need to be careful when reaching conclusions, but the Oregon data indicate that there may be some hope that operator training can result in improved compliance. The California data point out that the success of operator training may be elusive, or that measuring success may be

more complex than just monitoring reported compliance rates.

Operative Words— Enforcement! Training!

The premise for including UST operator-training requirements in the EPCRA was that compliance with UST requirements was lagging. The remedies prescribed for this problem were increased inspection frequency (hopefully accompanied by increased enforcement via red-tag authority) and increased operator knowledge of the regulations via training. There is no question in our minds that without effective enforcement, the operator-training requirements will not bear the desired fruit.

It is also clear to us that the purpose of training is to increase knowledge. The goal is to raise the bar on UST-operator knowledge. A training program that does little more than review material that UST operators already know will only serve to bless the status quo and not produce the desired improvements in UST management. As state agencies that are adopting the "free market" approach review the course materials presented to them by vendors for approval, they would do well to keep this in mind. Examinations should be structured so that if UST operators were to simply take the exam without any preparation, a large percentage of them would fail. If the training is effective, then most UST operators will pass the exam only after they have taken the training. ■

NOTE: If your state is doing something you think is special with regards to operator training, let LUSTLine Editor Ellen Frye know, and maybe it can be covered in a future issue.

Marcel Moreau is a nationally recognized petroleum-storage specialist whose column Tank-nically Speaking is a regular feature of LUSTLine. He can be reached at marcel.moreau@juno.com. Ben Thomas was one of the first UST-operator trainers in Oregon and continues to provide operator-training services across the U.S. He can be reached at bthomas@whidbey.com. Marcel and Ben are partners in Petroleum Training Solutions, developing online operator-training courses for all levels of UST operators.