



## EPA Unveils Two Proposed SPCC Amendments

Managers of an aboveground storage tank (AST) storing no more than 10,000 gallons (37,843 liters) of fuel would be able to self-certify the tank for compliance with federal Spill Prevention, Control and Countermeasure (SPCC) rules under a regulatory amendment proposed in December.

The self-certification would eliminate the need for an AST manager to obtain a review and certification of an SPCC plan by a professional engineer.

The U.S. Environmental Protection Agency (EPA), targeting an opportunity to streamline regulatory requirements, proposed the rule change. Among other things, SPCC regulates aboveground storage tanks that potentially could release fuels into navigable waterways.

Most affected by the proposal would be owners and managers of shop-fabricated ASTs. The vast majority of field-erected ASTs are designed for capacities much higher than 10,000 gallons.

Tank owners and specifiers continue to specify shop-fabricated ASTs as an alternative to USTs due to their accessibility for inspection. An increasing number of ASTs during the last 15 years have been constructed with integral secondary containment to provide a reliable means to contain and detect releases.

The second amendment offered by EPA would extend a compliance date for all regulated AST facilities to amend and implement their SPCC plans by Oct. 31, 2007. (See the chart linked below this story for a list of industry categories that may be affected by the provisions.)

The agency requested comments from stakeholders on each proposal. The deadline for commenting was Feb. 10 for the proposed revised provisions, and Jan. 11 for the proposed compliance date extension.

The EPA proposal also includes other provisions that affect:

- Secondary containment requirements for facilities that have certain types of oil-filled equipment
- Possible exemptions for motive power containers
- Possible exemptions for airport mobile refuelers
- Requirements for storage of animal fats and vegetable oils
- A separate extension of the compliance dates for farms

A more-detailed discussion of the proposed changes can be viewed at <http://www.epa.gov/oilspill/index.htm>.

[Click here to view Industry sectors potentially impacted by the new SPCC rules](#)

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## Massive AST Overfill in Ohio Symbolizes Need for National Standards

Because of an overfill of an aboveground storage tank (AST), more than 100,000 gallons (378,430 liters) of regular unleaded gasoline spilled and seeped into the ground at a fuel distributor's facility in East Toledo, Ohio.

The situation underscored the emerging industry awareness of why overfills should be eliminated.

According to the Toledo Blade newspaper, the distributor began an immediate cleanup. But after four days of work in November, remediation crews determined that a secondary containment wall had been breached and the gasoline had spread beyond the facility's property lines, a company official said.

The containment-wall failure was under investigation by environmental regulators. Nearby construction of a bridge for an interstate highway helped to prevent the overflowing gasoline from spreading farther, the official said. The cleaning process involved digging holes to collect the gas before extraction from the soil and disposal, the official said.

"This is the way that's most effective, but it's also the most time-consuming," he said. Most of the spill was contained on the company's property and gas did not spread into the Maumee River.

For more on the Ohio incident, click this link:

<http://toledoblade.com/apps/pbcs.dll/article?AID=/20051203/NEWS01/512030445>

On a national level, two associations are moving forward with proposals that would strengthen protections against the inherent hazards of overfilling ASTs.

The Petroleum Equipment Institute has begun to develop a new standard on "Recommended Practices on the Proper Installation, Inspection, Testing and Maintenance of Overfill Protection Devices for Shop-Fabricated Aboveground Storage Tanks (RP600)." PEI leaders anticipate that the project will take 12 to 18 months to complete.

Also, the National Fire Protection Association (NFPA) accepted comments until March 3 on an AST proposal that would require all tank owners storing more than 1,320 gallons (4,995 liters) of Class I and Class II flammable and combustible liquids to have a procedure in place to prevent overfills.

Such procedures could include equipment that warns and shuts off the filling process. Presently, NFPA 30 requires such practices on large tanks being filled with Class I liquids by pipeline or barge over waterways – and secondary containment tanks on which the containment serves as a form of spill control, in lieu of diking or remote impounding.

Even small, occasional filling operations, such as generator-base tanks, would be affected by the NFPA proposal. Equipment suppliers such as Clay & Bailey and Morrison Bros. have recently marketed new products that will prevent generator-base tank overfills.

"Most shutoff valves are designed for larger tanks," said Brad Holmes of Clay & Bailey. "Our new design for generator-base tanks can handle high pressure."

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### STI/SPFA NEWS

#### [STI/SPFA Calendar of Events](#)

Click the link for a complete listing of current course offerings. Brochures, course information, educational requirements and location information is available for each course. Register online using our secure site. Check back often as courses are added frequently.

#### [2006 AST Inspector Training Courses](#)

Atlanta, Georgia  
Level 1&2 Tank Inspection  
Certification  
April 24 - 28, 2006

Level 2 ONLY  
April 26 - 28, 2006

Madison, Wisconsin  
Level 1&2 Tank Inspection  
Certification  
June 19-23, 2006

Level 2 ONLY  
June 21 - 23, 2006

Contact Dana at 847/438-8265  
x 246 to request a private  
seminar.

#### [2006 Cathodic Protection Tester Courses](#)

Edison, New Jersey  
April 26 - 27, 2006

NFPA has also expanded requirements for the filling of large tanks and references American Petroleum Institute standard, API 2320.

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## **New Paper Examines Risk-Based Inspection Concepts for ASTs**

A new paper by Philip Myers of Chevron Corp. explores the role of risk-based inspection guidelines as incorporated in the latest revision of SP001, an aboveground storage tank (AST) inspection standard developed by Steel Tank Institute.

The formal name of SP001 is "Standard for the Inspection of Aboveground Storage Tanks."

Myers has served on the SP001 committee that since 2004 has modified the standard to provide reasonable guidelines for owners, managers, regulators and inspectors of shop-built tanks to enable compliance with the Spill Prevention, Control and Countermeasure (SPCC) regulation of the U.S. Environmental Protection Agency (EPA).

The committee has been composed of a balanced group of environmental regulators, tank owners and users, inspectors and manufacturers.

The Myers paper explains the rationale for how the new standard links inspections to a risk-based matrix – so facilities with extensive safeguards in place to prevent, detect and contain spills from tanks will face less-frequent inspections than those facilities with fewer protective measures.

The SP001 standard is available at this URL:  
[http://www.steeltank.com/whats\\_new.aspx](http://www.steeltank.com/whats_new.aspx)

The full text of the Myers paper can be accessed by [clicking this link](#).

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## **STI/SPFA Unveils Tanks, Pipes and Fabricated Products of the Year**

STI/SPFA has announced its 2005 Steel Tanks of the Year, Pipeline Projects and Fabricated Products of the Year winners. The competition honors superior innovations in design and fabrication of steel water tanks, pipelines and other steel plate projects.

### **Tanks**

In the Reservoir category, a 2,650,884-gallon (10,031,800 liters) tank fabricated for Princeton University in Princeton, N.J. received the top honor. Assembled by CBI Services, Inc. of Plainfield, Ill., the project featured a concrete moat – 20 feet (6.1 meters) below grade – to help hide an 80-foot-tall (24.4 meters) thermal energy storage tank. By placing the tank in the moat, the design minimized the visual impact upon the Ivy League university campus.

Richmond, Virginia  
July 12 - 13, 2006

Contact: Lorri Grainawi  
847/438-8265 x 244.

### **[2006 Water Storage Tank Seminars](#)**

Additional Seminars  
will be held in  
Dallas, Texas  
Kansas City, Mo  
Sacramento, Ca  
Portland, Or

Contact: Anne Kiefer  
847/438-8265 x 233.

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Schmidt.

In the Elevated category, there were two winners:

A 3 million-gallon (11,352,900 liters) tank – 180 feet (54.9 meters) in height and 120 feet (36.6 meters) in diameter – tied for best in class. Fabricated by Caldwell Tanks, Inc. of Louisville, Ky. for Public Water Supply District No. 2 of St. Charles, Mo., the massive water tower included engineering solutions to compensate for enormous potential lateral load factors. St. Charles is near the New Madrid earthquake fault.

A 500,000-gallon (1,892,150-liter) tank – designed to create a vintage look reminiscent of cone-roof tanks from early in the 20th century – was also honored for the best Elevated design. Built for the city of Scottsburg, Ind. by Phoenix Fabricators & Erectors, Inc. of Avon, Ind., the water tower features slanted perimeter columns and a balcony railing fitted with an “X” bracing to complete the nostalgic effect.

For Special Storage Systems, Chicago Bridge and Iron of Plainfield, Ill. was recognized for its work on three egg-shaped anaerobic digesters that reduce wastewater solids and produce energy for the public works department of Gwinnett County in Lawrenceville, Ga. Built to a column height of 88 feet (26.8 meters) and a diameter of 62 feet, 4 inches (19 meters), the digesters have an aggregate capacity of 3 million gallons (11,352,900 liters).

[Click here for photographs of the award-winning tanks.](#)

#### **Fabricated Products**

For Atmospheric tanks, Modern Welding Co., Inc. of Owensboro, Ky. received honors for six 50,000-gallon (189,215-liter) and one 10,000-gallon (37,843-liter) Fireguard protected fire-rated aboveground storage tanks manufactured for the Jacksonville Transit Authority in Florida. To meet the client’s delivery requirements the tanks with interstitial monitoring capabilities and a two-hour fire rating were built at three Modern Welding facilities in Houston, Texas, Augusta, Ga. and Owensboro.

For Special Fabrication, Brown-Minneapolis Tank Co. of Albuquerque, N.M. was recognized for creating a rocket for Space Vector of Chatsworth, Calif. Designed to serve as an experiment, the rocket measured 572 9/16 inches (14.5 meters) and was destroyed as part of its intended use. The cone of the rocket was 106 1/16 inches (2.7 meters); the base was 466.5 inches (11.8 meters)

[Click here for photographs of the award-winning special fabrication projects.](#)

#### **Pipelines**

For Pipeline projects, two companies were honored:

The Pipeline project of the year was managed by American SpiralWeld Pipe Company, LLC of Columbia, S.C., which fabricated a 5,400-foot steel replacement for an old, wooden penstock line. The work was performed for the city of Danville, Va. Due to the remote valley location of the replacement pipeline, a helicopter was used to haul out demolished wooden debris and to transport new steel pipe in 20-foot (6.1-meter) and 25-foot (7.6-meter) lengths to the site. The outer diameter of the new pipe was 69.75 inches (1.8 meters). The wall thickness was .312 inches (7.9 millimeters).

Recognized for the Pipeline Fabrication project of the year was Continental Pipe Manufacturing Co., Inc. of Pleasant Grove, Utah, which built a pig launcher to be deployed on a 10,000-linear-foot (3,048-meter) water-transmission pipeline near St. George, Utah for the Washington County Water Conservancy District. A pig launcher is a special fitting that enables a bullet-shaped device to be pushed

through the water pipe to clean the interior surface. The pipeline diameter was 60 inches (1.5 meters). Madison Chemical Industries supplied lining and coating for the project.

[Click here for photographs of the award-winning pipe projects.](#)

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## **Florida Regulators Offer New Revisions to UST, AST System Rules**

The Florida Department of Environmental Protection (DEP) has published proposed changes to the state's regulations governing underground and aboveground storage tank systems (USTs and ASTs).

A 53-page presentation document summarizing proposed changes to the UST system regulations, and a similar 61-page document on AST rules are available at the following link:

[http://www.dep.state.fl.us/waste/categories/tanks/pages/rulemaking761and762\\_2006.htm](http://www.dep.state.fl.us/waste/categories/tanks/pages/rulemaking761and762_2006.htm)

Also available at the link are documents showing the actual proposed changes within the format of formal regulations.

DEP officials conducted public workshops on Jan. 23 and 24 to discuss the proposals in Tallahassee.

Public comments were accepted in writing through March 1.

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## **New Chart Summarizes Code Mandates for ASTs at Motor Vehicle Fueling Locations**

STI/SPFA has updated a table that compares aboveground storage tank (AST) system requirements enacted by the National Fire Protection Association and the International Fire Code for locations at which motor vehicles are fueled from ASTs.

[Click here](#) for the table.

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## **Canadian Newsmen Questions Ethanol's Effects on FRP Tanks**

A newspaper columnist for The Ottawa Citizen has questioned whether provincial regulators have adequately studied the effect of alcohol blends on fiberglass-reinforced plastic underground storage tanks.

In a column published on Dec. 16, columnist Brian Turner wrote:

"I'm still sifting through the mail prompted by our column on ethanol, but I can tell

you that more than a few questions have been raised."

"An Internet reader from Long Island brings up one point I hadn't considered. He notes that the 10 percent ethanol fuel blend (E10) mandated in his part of New York created havoc in the marine industry by damaging fiberglass-lined fuel tanks and causing a rash of running problems for boat engines."

"Ontario, however, will allow fuel suppliers to offer ethanol-free fuel to marine and aircraft users and to the historic-vehicle sector of the market, says Ellen Klupfle, a senior policy adviser with the Ministry of the Environment."

"As well, a public education campaign is being created to ensure consumers know their choices in fuel types."

"The question of damage to underground fuel storage tanks is harder to answer. Fuel transport, storage and handling are overseen by the province's Technical Standards and Safety Authority."

"When I spoke with Sandra Cooke, team leader of the agency's fuels safety program, I was surprised to hear that the TSSA has no idea how many underground fuel storage tanks are at risk from contact with E10 fuel."

"Ms. Cooke offered that her group is gathering information prior to the January 2007 launch of Ontario's mandated ethanol fuel program. The problem, however, is that some gas chains already sell ethanol fuel in Ontario, and according to Shell Canada, E10 can reduce the integrity of fiber-reinforced plastic fuel tanks by 30 to 50 per cent."

"With all the effort Ontario is putting into protecting groundwater quality, you'd think resolving the fuel tank concern would be a higher priority."

Editor's note: Industry literature provides a variety of information on this topic, which means compatibility questions ultimately should be directed to tank manufacturers. For example, a brief review of literature found:

- A U.S. Department of Energy publication, "Handbook for Handling, Storage and Dispensing E85," states "fiberglass storage tanks manufactured prior to 1992, may not be able to handle E85."
- According to a September 2005 Wisconsin Storage Tank Regulation Section program overview on ethanol motor fuel storage, "Precautions must be taken with the storage of E-blend fuels in single-walled fiberglass tank systems fabricated prior to Jan. 1, 1984, as these tanks may not be compatible with ethanol."
- An American Petroleum Institute document entitled, "Impact of Gasoline Blended with Ethanol on the Long-Term Structural Integrity of Liquid Petroleum Storage Systems and Components" states that since 1987, the UL 1316 standard that governs fabrication of FRP underground storage tanks has required 180-day immersion tests on fiberglass laminates that would be used for storage of ethanol and ethanol-blended fuels. Prior to 1987, the standard did not require such testing. The current UL 1316 standard does not require alcohol-immersion testing for tanks intended strictly for petroleum product storage. For tanks intended to store ethanol/fuel mixtures, the standard calls for high-temperature, double-sided exposure of test specimens so that the material retains 50 percent of its short-term flexural strength and stiffness, and impact resistance when test results are extrapolated to 270 days.

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## **Indiana Boosts Alternative Fuel Infrastructure Through Grants**

In Indiana, like many Midwestern states, momentum is emerging to support the building of an infrastructure capable of sustaining demand for alternative fuels.

Late in 2005, the Indiana Department of Agriculture signed a memorandum of understanding with the Indiana Energy Group to administer a \$1.1 million Alternative Fuels Grant Program.

“We are working to create a culture in Indiana in which it is natural for Hoosiers to use biofuels and companies to want to produce it here,” said Lt. Gov. Becky Skillman, who oversees Indiana agriculture and energy policy. “This program is important in making this possible.”

Indiana is one of many states offering grants, loans or tax breaks for organizations converting existing fueling facilities, or building new ones, to include ethanol blends such as E85 or biodiesel in plans for storage and handling systems.

The Indiana Alternative Fuels Grant Program is funded through grant money from the U.S. Department of Energy, and locally administered by Indiana officials. The program will pay for installation of E85 pumps and the use of B20 biodiesel.

The grants can pay for 50 percent of the cost of installing an E85 pump, up to \$50,000. For B20, the money can be used to buy down half the difference in price for a fleet to use B20 fuel. For example, if B20 is 8 cents per gallon more than petroleum fuel, the grant would pay 4 cents per gallon.

Companies, schools and local governments in Indiana can all qualify for alternative fuel grants. During 2005, more than \$625,000 in Alternative Fuels grants were awarded across the state. The grants were designed to offset more than 2.1 million gallons (7,947,020 liters) of conventional transportation fuel. The 2005 funding was a notable increase from the previous year during which the state awarded \$74,937 in alternative fuels grants, offsetting almost 51,000 gallons (192,999 liters) of traditional fuel.

“Our goal is to have at least 40 operational E85 pumps publicly available across the state by the end of 2006, putting us on par with our neighboring states,” said Indiana Agriculture Director Andy Miller. “This grant program will aid retailers in making E85 more available to consumers, and encourage more businesses and communities to use B20.”

For more information about the Indiana program, contact the Department of Agriculture at 317-232-8770 and ask for the Alternative Fuels Grant Program administrator.

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## **States Create Incentives for Developing Liquid Alternative Fuel Infrastructure**

A successful push for greater use of biodiesel and ethanol, as recommended by President George Bush in his recent State of the Union address, depends upon the development of fueling infrastructure.

Almost 50 percent of states are already providing programs to boost alternative fuel infrastructure development.

The following states, according to the U.S. Department of Energy, have some type of financial assistance available to organizations that are converting existing liquid fuel facilities to alternative fuels such as ethanol or biodiesel, or building new facilities. Depending upon the state, the financial assistance could be grants, loans, rebates or tax credits – or a combination.

California	Maine	Pennsylvania
Colorado	New Jersey	Rhode Island
Connecticut	New Mexico	Tennessee
Hawaii	New York	Texas
Illinois	North Carolina	Utah
Iowa	Ohio	Virginia
Kansas	Oklahoma	Washington
Louisiana	Oregon	

Click this link for more detailed information:

[http://www.eere.energy.gov/afdc/laws/incen\\_laws.html](http://www.eere.energy.gov/afdc/laws/incen_laws.html)

Some states with infrastructure assistance programs may not be listed on the Department of Energy web site because the initiatives were just recently approved or implemented.

Visit the new STI web page on alternative fuel storage at

[http://www.steeltank.com/E85\\_tanks.aspx](http://www.steeltank.com/E85_tanks.aspx).

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## UL Starts New Process to Modify Tank Standards

In 2005, Underwriters Laboratories hosted Standard Technical Panel (STP) meetings to review and revise many of its atmospheric storage tank standards using its new web-based UL Collaborative Standards Development System (UL CSDS).

- **STP 58** covers activity for UL 58, Standard for Safety for Steel Underground Tanks for Flammable and Combustible Liquids; UL 1316, Standard for Safety for Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products, Alcohols, and Alcohol-Gasoline Mixtures; and UL 1746, Standard for Safety for External Corrosion Protection Systems for Steel Underground Storage Tanks.
- **STP 142** covers activity for UL 142, Standard for Safety for Steel Aboveground Tanks for Flammable and Combustible Liquids; and UL 2245, Standard for Safety for Below-Grade Vaults for Flammable Liquid Storage Tanks.
- **STP 80** covers activity for UL 80, Standard for Safety for Steel Tanks for Oil-Burner Fuel; UL 180, Standard for Safety for Liquid-Level Indicating Gauges for Oil Burner Fuels; and UL 443, Standard for Safety for Steel Auxiliary Tanks for Oil-Burner Fuel.

Dan Ryan, UL chairman of each STP, said, "UL intends to pursue these standards as American National Standards. As such, UL will be following ANSI's model procedures for the continuous maintenance method of ANSI approval. All proposed revisions will be forwarded to the STP for ballot following the ANSI approval of the entire standard."

In 2006, the STP Committees will likely be balloted on revisions to standards for which a preliminary consensus was reached. Work groups were formed to review and further develop proposals that were more difficult in scope for later revisions to the standards. An STP Committee for UL 971, Standard for Safety for Nonmetallic Underground Piping for Flammable Liquids, was formed in late 2002 and continues to process changes.

Visit UL's website on standards development: <http://ulstandardsinfontet.ul.com> for other details on how UL develops and maintains ANSI/UL Standards for Safety.

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## **Low Price and High Cost: Water-Diluted Gasoline Stops Motorists 'Dead in our Tracks'**

The motorist complaints made it all the way to a Philadelphia television station.

A convenience store in the Crescentville section of Philadelphia received two nights of TV notoriety in November thanks to water-fouled gasoline that affected about a dozen drivers and their vehicles. WPVI-TV ran consecutive-night reports on the service station and how water from an underground storage tank had paralyzed the vehicles.

One woman told a reporter: "All of us were (stopped) dead in our tracks. I stalled down the street. I made it off the lot but I stalled down there."

The station owner made arrangements with motorists for repairs as staff members tried to determine how water entered the storage system.

The convenience store manager said the location has relationships with a variety of fuel distributors – and one had offered a delivery to them at two cents above cost. That enabled the station to post a street price 26 cents per gallon lower than a nearby competitor.

A tank-monitor computer printout one morning showed only eight gallons (30.27 liters) of water in the 8,000 gallon (30,274 liters) underground tank. However, after a late afternoon delivery, the report showed the water content had skyrocketed. The station manager told WPVI that "it had to come with delivery."

For more details, check the following links:  
<http://abclocal.go.com/wpvi/story?section=local&id=3626904>

<http://abclocal.go.com/wpvi/story?section=local&id=3625017>

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## **Bank Yanks Tank after Finding Big Leak, Crack**

A manufacturer's defect may have caused a heating-oil leak of about 7,000 gallons (26,490 liters) in December from an underground storage tank (UST) at the main office of a Fitchburg, Mass. bank, according to the Sentinel & Enterprise newspaper.

"The people we have involved in this, they have never seen a crack like this before," the bank's chief executive officer said. "There had to have been a weakness there."

A spokesman for the Massachusetts Department of Environmental Protection told the newspaper that the oil leaked into soil surrounding the tank, and also reached the Nashua River. No fish or bird kills from the spill were reported and none were anticipated.

The crack in the fiberglass UST was discovered after it was excavated. A tank-maintenance check the previous day found that 7,000 gallons of heating oil had disappeared in the few days since the 9,500-gallon (35,951 liters) tank had been filled, the bank official said.

The Department of Environmental Protection was notified shortly after the leak was discovered and clean up began promptly. Regulators issued a notice of responsibility for the spill to the bank to pinpoint clean-up responsibility. No immediate decision on a possible fine had been made.

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## Conferences and Meetings

March 19 to 21, 2006

EGSA Spring Convention, Electrical Generating Systems Association, Sarasota, Fla. <http://www.egsa.org/>

March 19 to 22, 2006

International Forecourt & Fuel Equipment Show 2006, Birmingham, U.K. <http://www.forecourtshow.com/>

April 10 to 12, 2006

Power-Gen Renewable Energy & Fuels Conference, Las Vegas, Nev. <http://pgre06.events.pennnet.com>

April 19 to 21, 2006

Aboveground Storage Tank Conference, National Institute for Storage Tank Management Orlando, Fla. <http://www.nistm.org/>

April 20 to 21, 2006

Wind Power: Technology, Economics and Politics, Institute of Electrical and Electronics Engineers, the North American Electric Reliability Council, the American Wind Energy Association and the Utility Wind Integration Group  
Washington, D.C.

[http://www.ieee.org/portal/site/pes/menuitem.2b4756efb9a16c58fb2275875bac26c8/index.jsp?&pName=pes\\_level1&path=pes/subpages/meetings-folder/2006\\_Wind&file=windpower.xml&xsl=generic.xsl](http://www.ieee.org/portal/site/pes/menuitem.2b4756efb9a16c58fb2275875bac26c8/index.jsp?&pName=pes_level1&path=pes/subpages/meetings-folder/2006_Wind&file=windpower.xml&xsl=generic.xsl)

April 23 to 27, 2006

2006 Spring National Meeting, American Institute of Chemical Engineers (AIChE)

Orlando, Fla.

<http://www.aiche.org/Conferences/SpringMeeting/index.aspx>

April 25 to 27, 2006

API Pipeline Conference and Cybernetics Symposium, Fort Worth, Texas

[http://api-ep.api.org/training/index.cfm?objectid=4F0CF075-11C8-402A-B73D1F034001DFDA&method=display\\_body&er=1&bitmask=08D3CA1E-4E5D-42C5-8CDC593AFEC12F63](http://api-ep.api.org/training/index.cfm?objectid=4F0CF075-11C8-402A-B73D1F034001DFDA&method=display_body&er=1&bitmask=08D3CA1E-4E5D-42C5-8CDC593AFEC12F63)

April 26 to 27, 2006

API/NFPA Safe Tank Workshop, Atlantic City, N.J.

<http://www.nfpa.org/catalog/product.asp?catalog%5Fname=NFPA+Catalog&pid=STE2&category%5Fname=Professional%2BDevelopment%2BSeminars%2B%7C%2BOther&src=catalog#TabAnchor>

May 1 to 3, 2006

2006 Spring Refining and Equipment Standards Meeting, Dallas, Texas

[http://api-ep.api.org/training/index.cfm?objectid=66F1CAAA-FB17-4514-98AE668E17903F79&method=display\\_body&er=1&bitmask=002005001000000000](http://api-ep.api.org/training/index.cfm?objectid=66F1CAAA-FB17-4514-98AE668E17903F79&method=display_body&er=1&bitmask=002005001000000000)

May 2 to 4, 2006

Electric Power 2006, GenCo Alliance, Atlanta, Ga.

<http://www.electricpowerexpo.com/>

May 6 to 9, 2006

National Association of Fleet Administrators, Orlando, Fla.

<http://www.nafa.org/>

May 24 to 25, 2006

API/NFPA Safe Tank Workshop, New Orleans, La.

<http://www.nfpa.org/catalog/product.asp?catalog%5Fname=NFPA+Catalog&pid=STE2&category%5Fname=Professional%2BDevelopment%2BSeminars%2B%7C%2BOther&src=catalog#TabAnchor>

June 4 to 7, 2006

WindPower 2006, American Wind Energy Association, Pittsburgh, Pa.

<http://www.awea.org>

June 4 to 8, 2006

NFPA World Safety Conference & Exposition, Orlando, Fla.

<http://www.nfpa.org/>

June 5 to 7, 2006

26th Annual Conference & Trade Show, Independent Liquid Terminals Association, Houston TX <http://www.ilta.org/>

June 20 to 21, 2006

10-Hour Safety Training Meeting, STI/SPFA, Deer Park, Texas

<http://www.steeltank.com/>

June 22, 2006

Pressure Vessel Conference, STI/SPFA, Houston, Texas

<http://www.steeltank.com/>

July 23 to 27, 2006

ASME Pressure Vessels and Piping Conference, Vancouver, B.C., Canada

<http://divisions.asme.org/pvp/call/PVP06CallForPapers.doc>

Oct. 21 to 25, 2006  
WEFTEC, Dallas, Texas  
<http://www.weftec.org/>

Oct. 29 to 31, 2006  
73rd Annual NLGI Meeting, Orlando, Fla.  
<http://www.nlgi.org/>

Nov. 28 to 30, 2006  
Power-Gen International Conference, Orlando, Fla.  
<http://pgi06.events.pennnet.com/fl/index.cfm>

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## Online Sources of UST & AST News and Information

### Online Publications

2004 Biodiesel Handling and Use Guidelines  
<http://www.nrel.gov/vehiclesandfuels/npcf/pdfs/tp36182.pdf#search='2004%20Biodiesel%20Handling%20and%20Use%20Guidelines'>

**NEW** Buncefield Fire <http://www.buncefieldinvestigation.gov.uk/>

Engineering News-Record Special Section on Steel  
<http://www.enr.com/resources/special/archives/2005/steel.asp>

Fuel Oil News <http://www.fueloilnews.com/>

**NEW** International Code Council <http://www.ecodes.biz/>

National Ethanol Vehicle Coalition E85 Compatible Products and Manufacturers List [http://www.e85fuel.com/pdf/E85\\_Equipment\\_and\\_manufacturers.xls](http://www.e85fuel.com/pdf/E85_Equipment_and_manufacturers.xls)

National Petroleum News <http://www.npnweb.com/>

Petroleum Equipment & Technology <http://www.pe-t.com>

Steel Tank Institute Water in Fuel Tanks Research  
<http://www.steeltank.com/library/pubs/waterinfuel tanks.pdf>

TulsaLetter <http://www.pei.org/newsletter/>

Underground Tank Technology Update <http://uttu.engr.wisc.edu/>

### Associations

American Automobile Manufacturers Association discussion on fuel compatibility standards  
<http://www.e85fuel.com/forretailers/fuelethanolcompatibilitystandardsanddispensingequipmentlist.pdf>

American Iron & Steel Institute <http://www.steel.org//AM/Template.cfm?Section=Home>

**NEW** American Lung Association of the Midwest Clean Air Choice  
<http://www.cleanairchoice.org/outdoor/>

American Petroleum Institute <http://api-ep.api.org/>

American Water Works Association <http://66.45.110.61>

National Association of Convenience Stores  
<http://www.nacsonline.com/NACS/News/>

National Biodiesel Board <http://www.biodiesel.org/>

National Ethanol Vehicle Coalition <http://www.e85fuel.com>

National Leak Prevention Association <http://www.nlpa-online.org/standards.html>

National Oilheat Research Alliance <http://www.nora-oilheat.org>

**NEW** Petroleum Equipment Institute Learning Center <http://learn.pei.org/home.php>

Petroleum Marketers Association of America <http://www.pmaa.org/>

Society of Independent Gasoline Marketers of America <http://www.sigma.org/>

STI/SPFA (Steel Tank Institute & Steel Plate Fabricators  
Association) <http://www.steeltank.com/>

### **Federal Regulatory Agencies (United States)**

U.S. Department of Energy Alternative Fuels Data Center  
<http://www.eere.energy.gov/afdc/index.html>

U.S. Department of Energy Alternative Fuels Data Center Related Industry Links  
<http://www.eere.energy.gov/afdc/progs/related2.cgi?afdc||0>

U.S. Department of Energy E85 Fleet Toolkit Equipment Requirements and  
Specifications  
<http://www.eere.energy.gov/afdc/e85toolkit/>

U.S. Department of Energy, Energy Information Administration Ethanol  
Compendium  
<http://www.eia.doe.gov/oiaf/ethanol3.html>

U.S. Department of Energy Equipment Conversions  
<http://www.eere.energy.gov/afdc/e85toolkit/conversions.html>

U.S. Environmental Protection Agency, Office of Underground Storage Tanks  
<http://www.epa.gov/swerust1/>

U.S. Environmental Protection Agency, Office of Underground Storage Tanks,  
MTBE and Underground Storage Tanks  
<http://www.epa.gov/swerust1/mtbe/index.htm>

U.S. Environmental Protection Agency, Oil Program, Spill Prevention Control and  
Countermeasure <http://www.epa.gov/oilspill/index.htm>

### **State Regulatory Agencies (United States)**

California Air Resources Control Board <http://www.arb.ca.gov/homepage.htm>

U.S. Environmental Protection Agency database of state UST program websites  
<http://www.epa.gov/swerust1/states/index.htm>

## **Regulatory Agencies (Australia)**

**NEW** Department of Environment and Conservation, New South Wales (new UST secondary containment requirements)

<http://www.environment.nsw.gov.au/resources/upssris067.pdf>

## **Model Codes and Testing Organizations**

American National Standards Institute <http://www.ansi.org>

ASTM International <http://www.astm.org/>

International Code Council <http://www.iccsafe.org/>

International Fire Code Institute <http://www.ifci.org/>

National Fire Protection Association <http://www.nfpa.org/>

Southwest Research Institute <http://www.swri.edu/>

Underwriters Laboratories <http://www.ul.com/>

Underwriters Laboratories Canada <http://www.ulc.ca/>

Underwriters Laboratories Collaborative Standards Development System

<http://csds.ul.com/Home/Default.aspx>

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