

Stakeholders Update

A Bi-Monthly Newsletter

November & December 2008

Virginia Propane Engine Fuel Road Show

Virginia Clean Cities in partnership with the Propane Research and Education Council will host a Propane Road Show with stops in Poquoson and Fairfax.

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Winter Fix Now Available

The Winter Fix is now available for download on the NEW Southeastern Fuels Fix website at the following link: www.fuelsfix.com

Funding for Alt Fuels Refueling Infrastructure and Incremental Cost of Alt Fuel Vehicles Available

The DOE solicitation is now on the streets.

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First E85 Public Station Opens in Virginia

Lieutenant Governor William T. "Bill" Bolling joined domestic renewable fuel enthusiasts to celebrate the opening of the first retail public E85 station in Virginia at 2 p.m. on January 5, 2009. The Stop In Food Store, operated by Petroleum Marketers, Inc. (PMI), is located at 1220 Seminole Trail in Albemarle County, just outside of the Charlottesville city limits. The station is now selling E85, an alternative fuel that is a mixture of 85 percent ethanol and 15 percent gasoline and which can be used in approximately 6 million flexible fuel vehicles (FFV) now on our nation's roads.

"We are committed to making Virginia a leader in the nation in developing alternative sources of energy, and this project is an important step in that process. If we increase the use and production of renewable fuels and do this in a sustainable fashion, biofuels

can be a source of new jobs, bolster the Commonwealth's agriculture and forestry economies and help improve environmental, energy and national security," Bolling said.

The Shell-branded Stop In also will offer a B2 biodiesel blend, making it one of the very few locations in the country to offer both renewable biofuels.

"Stop In Food Stores and Petroleum Marketers Inc. deserve a lot of credit," said Al Christopher, executive director of Virginia Clean Cities. "If alternative fuels like ethanol and biodiesel blends are going to have a significant and growing impact," he said, "motorists must be offered the choice to purchase alternative fuels in the same way and at the same place that they purchase conventional petroleum fuels. Most fuel today is sold by full-service convenience

stores like Stop In that provide everything drivers have come to expect when they stop to refuel their vehicle – high quality branded fuel at competitive prices, the convenience of a quick service restaurant, clean restrooms,



pay at the pump technology, friendly service and a broad selection of snacks, drinks and other convenience items."

Continued on pg 2, see "E85 Station Opens"

E85 Station Opens

"It is vital to have highly capable, large gasoline retailers like Stop In and PMI selling alternative fuels in order to achieve the high level of sales needed to encourage and finance more efficient distribution infrastructure," said Steve Walk, project development director for ethanol supplier Protec Fuel Management. "The vast majority of transportation fuel is used on the coasts," Walk said, "but ethanol production has been slow to migrate from the Midwest. Big players like PMI and Stop In can change this quickly for Virginia and the Mid-Atlantic."

Stop In is the first Virginia fuel retailer to qualify for a grant from a U.S. Department of Energy project to encourage the installation of more public E85 dispensers in Virginia, Maryland, and DC. The project, managed by Virginia Clean Cities, started in 2007 and has provided grant assistance to install seven E85 dispensers at stations within the Capital Beltway, which passes through Virginia and Maryland as it encircles Washington DC.

"The next step is to make sure that the Stop In and PMI get the new customers and additional business they deserve for taking this bold step," said Burl Haigwood, founder of the Flexible Fuel Vehicle Club of America and also representing the Clean Fuels Development Coalition. "It will be important to get the news to owners of FFVs that are capable of using E85 fuel that the alternative fuel is available at the Stop In," Haigwood noted. He describes the FFV Club as a "community of interest of people who are concerned about the economy, environment, energy security and national security and want to do something about our nation's addiction to oil."

"I am pleased that our Charlottesville-area customers now will have access to E85 fuel," said Sandy Fewell, chief operating officer of Jim Price Chevrolet, which is a few miles from the Stop In. "General Motors is the leading producer of flexible fuel vehicles and has committed by 2012 to ensure that FFVs comprise half of annual new car production," he said, adding that "auto makers have been producing E85-capable vehicles for more than

a decade. It is time now to make the alternative fuel more widely available in Virginia and throughout the country."

Links to more information:

Stop In Food Stores and PMI:

Affiliated with Petroleum Marketers Inc.
www.petroleummarketers.com.

Petroleum Marketers Inc (PMI) supplies gasoline, diesel, fuel oil, motor oil, hydraulic fluids, transport services, and various food brand products in Virginia, southern Maryland, southern West Virginia, eastern Tennessee, Greensboro, and Raleigh-Durham, North Carolina. The company is based in Roanoke, Virginia with additional offices in Virginia and West Virginia. The company runs a chain of convenience stores/gas stations under the banner Stop In Food Stores. Some locations have fast food eateries (run by its PM Foods division), including Burger King, Subway, and Taco Bell, located within or next door. Petroleum Marketers was founded in 1921. The company operates bulk terminals in Roanoke, Bedford, Lexington, and Richmond; and shipping warehouse locations in Roanoke, Bedford, Lynchburg, Abingdon, Lexington, Richmond, Culpeper, Covington, and Warsaw, Virginia.

Clean Fuels Development Coalition

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

CFDC is a non-profit organization that actively supports the increased production and use of fuels that can improve air quality, reduce oil imports, and provide economic benefits to the United States. The coalition's goal is to drive the demand for clean low-carbon fuels, like ethanol, through a combination of efforts that include collaborating with industry, educating and communicating with the media and other strategic influencers.

Flex Fuel Vehicle Club of America

www.flexiblefuelvehicleclub.org

The FFV Club goal is to work with every person or organization that will encourage consumers to find out if they own an FFV now, help get the right information so they consider buying a new FFV for their next,

used or 2nd vehicle purchase, and then help those empowered FFV owners find and buy E85 fuel.

General Motors Corporation

www.gm.com

The number one selling vehicle manufacturer in the world for 76 consecutive years, GM was founded in 1908 and today employs more than a quarter-million people. With global headquarters in Detroit, GM manufactures its cars and trucks in 35 countries. In 2007, nearly 9.37 million GM cars and trucks were sold globally under 14 brands. GM offers 23 FFV models in 2009, the most of any manufacturer.

Jim Price Chevrolet

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

Jim Price Chevrolet is part of Jim Price Automotive, which also includes Hyundai, Isuzu, and Kia dealerships and is located in Charlottesville. It has been a family owned and operated Charlottesville Chevrolet, Hyundai, Isuzu and Kia dealer since 1968.

Protec Fuel Management

www.protecfuel.com

Founded in 1999, Protec Fuel Management, LLC is an energy marketing and trading company headquartered in Boca Raton, Florida. Protec markets and trades physical and financial energy products, refined products, natural gas, ethanol and biodiesel.



VA PROPANE ENGINE FUEL ROAD SHOW

Virginia Clean Cities, in cooperation with the Propane Education and Research Council (PERC), will host a Virginia Propane Engine Fuel Road Show in March. Two stops are scheduled for Poquoson and Fairfax, and each will feature presentations from industry experts and a ride-n-drive opportunity with vehicles and conversions available today for purchase.

PRESENTED BY:

Virginia Clean Cities
Propane Research and Education Council

HOSTED BY:

City of Poquoson, VA
Fairfax County, VA

SPONSORS:

Virginia Propane Gas Association
Phillips Energy, Inc.
Blossman Propane Gas & Appliance
Revere Gas
American Alternative Fuel

AGENDA

Lunch (Thanks to PERC)

Propane Safety Overview

Dennis Cruise, Virginia Propane Gas Assn

Propane as an Engine Fuel and National Propane Initiatives

Greg Zilberfarb, Propane Education & Research Council

Propane Infrastructure Overview

John Phillips, Phillips Oil & Gas (Poquoson Event)

Steve McCoy, Blossman Propane & Gas (Fairfax Event)

Propane Vehicle Availability

*CleanFUEL USA, Mike Perticone
Roush, Todd Mouw
American Alternative Fuels, Geof Hoffman*

Propane Vehicle Ride N Drive

*To Begin at 2:00 p.m., featuring:
Bluebird Propane Vision School Bus
Roush Propane F-150
Red Top Cab Propane Vehicle
EnviroGuard Zero-Turn Mower
LPG / Gasoline Hybrid*

March 18, 2009

Poquoson City Council Chambers
500 City Hall Avenue
Poquoson, VA

March 19, 2009

Fairfax County Government Center
12000 Government Center Parkway
Fairfax, VA

Visit <http://www.hrccc.org/propane/propaneroadshow.html> to register and find more detailed information.

ROUSH Propane Kit Available for F-150

If you'd like to increase the size of your alternative fuel vehicle fleet, save some money on fuel and you have access to propane and late-model half-ton Ford pickups, you have a rare opportunity to accomplish a conversion to alternative fuel very quickly.

Roush has developed a propane kit for the 2007.5 and 2008 Ford F-150 pickup that is in stock and ready for delivery. This is a complete replacement of the fuel system so the truck is powered by liquid propane. Roush has already delivered several hundred kits. Please visit www.roushperformance.com/propane to learn more.

Let us know if you'd like for Roush to conduct a workshop, possibly in Richmond, to focus on the F-150 propane conversion opportunity. Email cjenkins@hrccc.org if you'd like to attend or host a workshop.

According to the folks at Roush, the propane kit can:

1. Reduce operating costs
2. Reduce dependency on foreign oil
3. Reduce greenhouse gas emissions by 18%, nitrous oxide emissions by 20% and carbon monoxide by 60%
4. Qualify for a federal tax credit up to \$2,500
5. Maintain factory warranty

FUTURE PRODUCTS: Roush is also developing the following propane powered products:

1. F-250: Will begin taking orders in the next 30 days for delivery beginning in late July 2009
2. E-250/350: Will begin taking orders early in 2010 for deliveries beginning in May 2010
3. 2010 F-150: Will begin taking orders early in 2010 for deliveries beginning in June 2010

Stay tuned for a schedule of shows and events Roush will be attending in 2009, including two Virginia Propane Engine Fuel Road Shows sponsored by Clean Cities, as well as for updates on any new products or news relating to the development of their alternative fuel products.

Any Virginia inquiries regarding purchase of the F-150 conversion kit or future product offerings should be directed to the Roush Regional Manager: Steve Ford, 734.377.1375, steve.ford@roush.com

First 6 of Army's 4,000 Electric Vehicles Going to Ft. Myer

Excerpt Taken from Army Press Release:

<http://www.army.mil/-newsreleases/2009/01/12/15707-army-announces-historic-electric-vehicle-lease/>

In what is the single largest acquisition of its kind ever, Secretary of the Army Pete Geren announced that the Army plans to lease thousands of neighborhood electric vehicles (NEVs).

"The Army is committed to substantially reducing the greenhouse gas emissions through our acquisition of Neighborhood Electric Vehicles," Geren said. "This historic acquisition will constitute the largest acquisition of electric vehicles not just in the military, but in the entire country."

The announcement was made during an acceptance ceremony at Ft. Myer, where six of the new vehicles will be incorporated into base operations. Ft. Myer is in Arlington County, across from Arlington National Cemetery. The NEVs are part of a more comprehensive and far-reaching energy security strategy designed to save energy and money, and to wean the Army from fossil fuels. The Army is focused on harnessing renewable and alternative energy sources like geothermal, solar and biomass conversion.

The 4,000 non-tactical electric vehicles will be used on Army bases for passenger transport, security patrol, and maintenance and delivery services.

In addition to the vehicles delivered to Fort Myer, the Army will lease 794 more NEVs this year; 1,600 will be leased in 2010, and 1,600 leased in 2011. A General Services Administration announcement in FedBizOps.Gov solicits NEV manufacturers to help provide the vehicles to meet the Army's goal of 4,000 NEVs in three years.

The vehicles delivered to the Fort Myer Installation today were two four-passenger sedan NEV models and four two-passenger NEV utility models. The utility model has a

stake bed and a 1,000 pound payload capability. With a full eight-hour charge, the NEVs can traverse 30 miles at a top, street-legal speed of 25 miles per hour.

These first six electric vehicles are manufactured by the Global Electric Motorcars division of Chrysler Corporation. But dozens of other companies that manufacture electric vehicles can compete to meet Army vehicular requirements in the future.

The Army will save money by leasing electric vehicles vice leasing gasoline- or hybrid-powered vehicles. Fuel or energy costs for the electric vehicles also are significantly less than estimated \$460 annually for the electric vehicle versus an estimated \$1,200 annually for gasoline-powered cars.

The environmental benefits, likewise, are impressive. By using electric vehicles, the Army will reduce its fossil fuel consumption by 11.5 million gallons over a six-year period. This translates into 115,000 fewer tons of CO2 emissions during that same period. This is significant because CO2 emissions contribute to global warming.

The 4,000 electric vehicles will be used in a non-tactical environment; however, as part of its Future Combat Systems (FCS) ground force modernization program, the Army is developing a suite of eight new hybrid-electric powered Manned Ground Vehicles (MGVs) for its armored forces. These more fuel-efficient vehicles will reduce the Army's dependence on fossil fuels and reduce the number of refueling convoys exposed in combat.

The FCS vehicles also will give Soldiers the power output to deploy on the battlefield vastly more capable life-saving technologies including superior reconnaissance, surveillance and intelligence assets. More modern and robust reconnaissance, surveillance and intelligence capabilities have proven decisive in key battles in Iraq and Afghanistan."

The Army will continue to leverage new and emerging technologies to ease its dependence on fossil fuels," said Deputy

Assistant Secretary for Energy and Partnerships and Senior Energy Executive for the Army Paul Bollinger.

"With more than 12 million acres and 155 installations, the Army has the secure land and facilities to provide industry with a strong foundation for commercial development of renewable energy for our country. The Army can and will be a catalyst for greater production and innovation by renewable and alternative energy producers," Bollinger said.

For more information contact Army Public Affairs: Dave Foster / dave.foster@hqda.army.mil / 703-697-5344 or Melissa Black / blackml@conus.army.mil / 703-697-7592.

Washington DC Metro Expands NGV Bus Fleet



Excerpt from NGV America Newsletter

Twenty-two new 60-foot CNG BRTs have been delivered to Washington Metropolitan Area Transit Authority (WMATA) by North American Bus Industries (NABI). "It was time for us to move away from the 'breadbox' design of our current model buses," said WMATA General Manager John Catoe. The 22 new BRTs went into service October 27, carrying customers on a bus line in the District of Columbia and suburban Maryland. Bill Coryell, NABI VP for Sales, said it was important for WMATA to replace older diesel articulated buses with these new CNG-powered models, having had very good success with its CNG vehicles." The 22 new BRTs, powered by Cummins-Westport engines will bring WMATA's number of CNG buses to 461 vehicles, which represents just under a third of its operating fleet.

Governor Kaine Announces Legislation to Promote Green Jobs

Adapted from Official Site of Governor Tim Kaine: <http://www.governor.virginia.gov/>

Governor Timothy M. Kaine proposed several pieces of legislation on January 12, 2009 designed to promote green jobs as part of his "Renew Virginia" initiative. Governor Kaine made his announcement from the headquarters of Solar Services Inc., a Virginia Beach company that installs solar panels.

"Creating green jobs and a renewable energy sector of the Virginia economy is one way we can create opportunity from our current economic challenges," Governor Kaine said. "With this package of bills, not only will we be able to create jobs for hardworking Virginians, but we will be taking proactive steps to reduce our reliance on foreign oil and improve our environment."

The Governor's legislative proposals include:

Clean Energy Manufacturing Incentive

This bill will expand the existing incentive grant available to solar photovoltaic manufacturers to include manufacturing of other low and no-carbon energy sources. The grants will be available to new and expanding businesses producing goods and equipment for energy efficiency, as well as solar, biomass, wind, nuclear, and other clean energy sources.

The incentive grant will be a valuable tool to the Interagency Task Force for Energy Project Recruitment, which was announced in December and provides a necessary tool to bring green jobs to Virginia. The size of the grants will be based on the economic return to the Commonwealth from the new business activity.

These also will be performance grants so that the Commonwealth will already have received the benefits of the investments before providing state incentives -- a unique partnership between government and private businesses.

To prime this effort and help to support Virginia's commitment to green jobs, \$2 million is included for this program in the introduced budget.

Biofuels Incentive Grant

This bill will modify the existing financial support given to biofuel producers to provide a higher level of support for biofuels produced from sources that are not also used for food. The bill will provide a 10-cents-per-gallon incentive for biofuels produced from these sources. Biofuels produced from food crops would receive a lesser amount, 7.5-cents-per-gallon.

The bill will also reduce the minimum threshold required to be eligible for the grant from two million gallons per year to one million gallons per year. This will encourage the development of a network of biofuels producers across Virginia's farming communities and provide new economic development opportunities in rural areas.

Renewable Energy System Income Tax Credits

This bill establishes Renewable Energy System Income Tax Credits.

This will be an income tax credit for individuals and corporations installing solar photovoltaic, solar thermal, and small wind systems.

The credits vary based on the size of the systems installed: individuals can receive up to \$8,000 for solar photovoltaic, \$4,000 for solar thermal, and \$6,000 for wind-power electric generators. Corporations can receive up to \$20,000 for solar photovoltaic, \$10,000 for solar thermal, and \$15,000 for wind-powered electric generators. The total tax credits available for all individual and corporate taxpayers would be capped at \$1 million total per year for residential taxpayers and \$1 million total per year for corporate taxpayers.

This proposal balances the need to provide incentives with the need to be careful with financial commitments in the state budget. This takes the first steps towards building a

long-term marketplace for renewable energy in Virginia.

Renewable Energy Equipment Sales Tax Exemption

This bill exempts, year round, solar photovoltaic and thermal systems as well as small wind systems from payment of sales tax. This also will provide savings to these companies' consumers, lowering their costs to install the systems.

Standing with Governor Kaine to emphasize the important role green jobs will play in Virginia's future economy were Senator Creigh Deeds of Bath County; Skip Stiles, Executive Director of Wetlands Watch and a member of the Governor's Commission on Climate Change; Richard Good, owner of Solar Services Inc.; and leaders from the environmental and energy communities.

"What Governor Kaine has done, and what we need to continue doing in the coming years, is to put together a state strategy for bringing green jobs and the energy research of the future right here to Virginia," Senator Deeds said.

"These bills, and the rest of Governor Kaine's Renew Virginia initiative, start us moving toward the energy generation technologies of the next century, away from the environmental consequences of this century's technologies, and will grow new green jobs and businesses in the process," Stiles said. "They hit the trifecta of energy, environmental, and economic needs we face in Virginia."

Renew Virginia is Governor Kaine's year-long initiative to promote renewable energy, green jobs, and environmental protection. For more information on Renew Virginia, visit www.governor.virginia.gov/Initiatives/RenewVirginia.



National Government Green Fleet Awards & Best Practices Workshops

Do you want a green fleet, but are not sure how to get there? Have you made significant improvements in your fleet's operation and would like to be recognized? Then you might consider applying for one of two awards at The 100 Best Fleets Website.

The 100 Best Fleets in North America contest uses 12 criteria that are universal drivers of change and excellence. Every year, they choose the very best-of-the-best fleet operations in North America. The top 100 winners are chosen each year by highly seasoned government fleet professionals, with the top 20 listed in numerical order on their website and are also featured in their magazine.

The National Government Green Fleet Award is a comprehensive set of criteria specifically tailored around the challenges and requirements of the government fleet manager. The criteria was carefully selected and compiled over a period of several months, using hundreds of sources in green fleet planning and methodology from around the globe. It not only functions as the assessment standards for the yearly award, but also serves as a foundation for drafting and implementing your own green fleet program.

To complete one or both applications, click here: www.the100bestfleets.com



100 Best Fleets, the organization processing the applications, also produces fleet workshops.

The 100 Best Fleets also conducts workshops across the country. Virginia Clean Cities is considering hosting one of these workshops which focuses on not only alternative fuels but also greening your fleet and best practices. If you are interested in attending one of these workshop, or hosting one, please contact us. You can see example material from Tennessee Clean Fuels' workshop here: <http://eerc.ra.utk.edu/etcfc/workshop.html>.

NAFA's 2nd Annual Green Fleet Awards Seeks Submissions

Adapted from NAFA January 19 Press Release: www.nafa.org

NAFA Fleet Management Association (NAFA) has opened the submission process for the 2nd Annual Green Fleet Awards. Awards will be handed out in April at NAFA's annual Institute & Expo in New Orleans.

Last April, NAFA handed out its first ever Green Fleet Awards in front of a huge crowd of fleet professionals proving that the time is right to reward innovative ideas that help the environment and improve overall fleet efficiency. NAFA has opened the submission process for the 2009 Green Fleet Awards and is looking forward to rewarding the best and most innovative ideas in New Orleans this April.

NAFA's Green Fleet Awards honor fleet

management professionals who have implemented pioneering, innovative, and creative programs to help with their company's overall "going green" initiative. Four awards will be offered; two for a sedan/light-truck fleet (less than 10,000 GVWR) and two for a truck/equipment fleet. Awards will be split between mandated areas and non-mandated areas. The mandated areas category includes fleets located in EPA's and clean air mandated areas of the United States or in those located in Pollution Emission Management Areas (PEMA) of Canada. The non-mandated category includes fleets located in non-mandated areas of the United States or Canada.

The deadline for submissions is February 25, 2009. There is no entry fee, but entrants must be Members of NAFA Fleet Management Association to be considered. Applications may be submitted by any individual who is directly employed in a vehicle management role by any company, utility government agency, or not-for-profit organization in the United States or Canada. This year's winners will be honored on the Expo floor in the Green Zone of NAFA's 2009 Institute and Expo in New Orleans held April 25-28, 2009.

The criteria for judging will include originality, innovativeness, and demonstrated accomplishment for reducing energy consumption.

For more information or to download an entry form, visit <http://www.nafa.org/greenfleetawards>

TECHNICAL BULLETIN

Underwriters Laboratories Announces Position on Use of B5 Biodiesel Blends

Underwriters Laboratories Inc. (UL) is announcing that products intended to use biodiesel blends up to B5 that are compliant with applicable ASTM International fuel standards will not require special investigation by UL. This is consistent with ASTM standards for heating oil and diesel fuel, which were recently updated to indicate that B5 blends may be considered the same as the conventional petroleum fuels under their scope.

In anticipation of the changes to the ASTM fuel standards, UL initiated a technical review of biodiesel fuel and technologies working closely with US Department of Energy, National Renewable Energy Laboratory, Brookhaven National Laboratory, Oak Ridge National Laboratory, and the National Biodiesel Board. UL also conducted performance testing of heating equipment using B5.

The findings indicated no adverse safety effects. It is acknowledged however that introduction of biodiesel may potentially affect fuel quality, mobilize contaminants in the fuel system, or increase the potential for microbial contamination. These performance issues are outside of the scope of UL standards and certification. Manufacturer instructions for use and maintenance of equipment should always be followed.

Use of biodiesel at levels above 5% may have a significant effect on materials, performance or combustion of some equipment. UL is in the process of finalizing product safety

requirements for equipment specified for use with biodiesel (B100) and biodiesel blends up to B20.

UL is an independent, not-for-profit product safety certification organization. We remain committed to promoting safe living and working environments through the development of effective safety standards, product investigations and ongoing safety-based audits of products that bear the UL Mark. UL remains independent in this mission and does not endorse, recommend or favor one product over another.

Status Update: Clarification of Ethanol Certification Limits for Legacy Equipment

Recent articles in the media and technical references regarding permissible ethanol blends and blend limits associated with Underwriters Laboratories (UL) certifications have generated a lot of questions and led to confusion. Discussions about blended fuels are certainly complicated, especially as the topic continues to evolve. With political and industry focus on possibly increasing ethanol content for commonly used gasohol blends, UL would like to clarify limitations associated with current UL listings to the standard UL 87.

UL listed gasoline dispensers—those legacy dispensers currently in service and used most often in gas stations around the country today—are certified under UL 87 and authorized for dispensing blends up to 10% ethanol, or E10. Because UL often uses safety margins during testing, some subassemblies have been tested with fuels containing 15%

ethanol (leading to some technical references to this level; but that does not mean that those dispensers are certified to dispense fuels containing greater than 10% ethanol).

UL is currently working with the U.S. Department of Energy (DOE) and the U.S. Environmental Protection Agency (EPA) on its ongoing research to investigate the impact of using higher ethanol blends in current legacy vehicles and engine systems (that were not originally designed for use with ethanol blend levels above E10). If new federal guidelines are established that approve higher ethanol blend levels for public use, UL will review products currently certified under UL 87 to determine whether UL can provide data enabling the authorities having jurisdiction to approve such use.

UL did announce the establishment of new safety requirements for higher ethanol fuel-blend dispensing equipment on October 16, 2007. These requirements (Subject UL 87A) are available to manufacturers looking to get their equipment tested and certified for ethanol fuel blends greater than 10% and up to 85%. This means that dispensing equipment evaluated to the requirements in Subject 87A would be considered to be acceptable for dispensing blends with any ethanol content up to 85%. UL will continue to test and certify new equipment to these higher-level blends as we work with the DOE and EPA regarding legacy systems.

For more information, visit the [UL Web site](#).

TECHNICAL BULLETIN

Propane Tank Overfill Safety Advisory

The use of propane vehicles can enhance our energy security and improve air quality. Today, propane vehicles are most often used in school and shuttle bus fleets, in mass transit and taxi fleets as well as light-duty truck applications throughout the United States. There has been some concern over reported cases of fuel tanks on propane vehicles being overfilled, potentially resulting in emissions from pressure release valves or safety hazard. A Department of Energy Clean Cities "Tiger Team" Project was initiated to evaluate this condition.

Project Activity Summary

Seven propane fleets, of varying sizes, were included in the LPG tank fueling evaluation. At each of these fleets a sampling of vehicles were observed during fueling (105 vehicles total). Vehicles were noted when their overfill prevention device (OPD) failed to activate and stop the fueling process. This was done to quantify the frequency of such an occurrence in practice in the field, which could lead to safety and environmental issues.

Results

Of the 105 vehicles tested at seven fleets, roughly 16% had OPDs that did not operate properly to stop fueling at the appropriate level. While this number is significant, the overfill scenario is only one of three conditions necessary for a potential incident to occur from overfilling. 1.) Overfilled tank that leads to a release of fuel; 2.) Rising ambient temperatures; and 3.) Ignition source.

Rising temperatures cause expansion of LPG, so if a tank is overfilled during a cool time of day and sits, without driving and consuming fuel, hot temperatures later in the day may cause the expansion of the fuel and potentially lead to a fuel release or leak through the pressure release device (PRD). The PRD is designed to release propane gas if pressure in the tank rises above set safe levels. However, even if conditions result in a fuel release an ignition source must be present for a fire or safety incident to occur. We are not aware of any incidents caused due to overfilling of LPG vehicle tanks.

Next Steps

While 16% failure of OPDs is significant, given that motor vehicle tanks are all equipped with PRDs to ensure safe levels of LPG pressure in the tanks and major safety incidents have not been reported, the following steps are recommended:

1. Inspection of OPDs in vehicle fleets — fleet operators using LPG vehicles should inspect the OPDs to ensure they are operating properly and repair or replace them as necessary. Also, fleets should develop a process for ongoing inspection as part of routine maintenance.
2. Training and education of LPG vehicle users — users should be trained on proper fueling and maintenance practices, and awareness of overfill dangers.
3. Documentation of OPD maintenance — industry groups should develop and implement standard maintenance inspections and practices for OPDs to ensure they work properly.

The US DOE Clean Cities (DOE-CC) program is working with the National Propane Gas Association (NPGA) and the National Fire Protection Association's (NFPA) Technical Standards and Safety Committee to ensure they are made aware of this issue and these recommendations. Work is already underway in this committee, on a proposal to examine this issue more closely. Underwriters Laboratory (UL) and the Propane Education and Research Council (PERC) are involved in this process.

DOE-CC will support recommendations by NFPA and will work with NPGA, UL and PERC to develop training and maintenance practices and communicate them to fleets and stakeholder groups through webcasts, workshops, the Alternative Fuels and Advanced Vehicle Data Center website, and printed materials as appropriate.

As a best practice, all fleet managers, owners, and operators of LPG powered vehicles are encourage to re-emphasize the importance of closely following the LPG tank manufacturer's fueling instructions as part of their ongoing training and safety programs. It is important to understand the safe and proper operation of LPG refueling equipment and integrated safety devices. Anyone who suspects or observes that an LPG tank has been overfilled or that an OPD or other safety device is not operating properly should not operate the vehicle and should immediately report the matter to their fleet safety manager or other appropriate official.

TECHNICAL BULLETIN

Biodiesel Not the Problem

You might have heard reports of school closings in Minnesota on January 16 that were attributed to school bus fuel filters clogged by biodiesel. You might also know that Minnesota has a B2 mandate.

Properly blended B2 should have an infinitesimal impact on cold weather operability. Hence the initial news reports quoting folks who blamed biodiesel were highly suspect by the biodiesel industry and other experts, who investigated for improper blending or other causes.

Predictably, it turns out that according to an independent laboratory analysis of clogged filters, biodiesel appears not to have had a role. And the temperatures and vehicle conditions that apparently caused wax elements to drop out of the PETROLEUM component of the fuel were extraordinary: -20 to -30 degrees F and an unusual filter placement.

The first link included is to a news story in which biodiesel is blamed. Unfortunately, there were, no doubt, many of these, probably getting prominent play in newspapers, radio and TV news reports in Minnesota and picked up for days by news outlets across the country.

The next two links are a press release and a copy of the clogged filter analysis, from the National Biodiesel Board website. The release and lab analysis indicate that biodiesel had no role and that petroleum diesel and inadequate fuel management for extreme cold caused the clogged

filters, on only a handful of buses with unusual characteristics (filter placement away from the warmth of the engine compartment) that are more susceptible to cold weather operability problems than the typical school bus.

Admittedly, this instant “analysis” was thrown together quickly and based on “Google” research. Nothing recounted here has been verified first hand. However, this episode closely follows the typical knee-jerk pattern where biodiesel is blamed, with no evidence, for everything from a flat tire to a blown headlight and it later is learned – usually much later and not on anywhere near the same scale in which the initial false reports were disseminated – that biodiesel was not the culprit.

<http://www.startribune.com/local/south/37689189.html?elr=KArksUUUU>

<http://nbb.grassroots.com/resources/BloomingtonBusReport.pdf>

<http://nbb.grassroots.com/09Releases/B2Cleared/>

Baker Equipment Signs On as Baytech Qualified System Retrofitter

This week, Baker Equipment announced that it had reached agreement with Baytech Corporation to retrofit Chevrolet, GMC, Isuzu and Workhorse Custom Chassis vehicles using Baytech Corporation’s EPA- and CARB-certified CNG fuel injection systems. Baker operates four east coast locations -- including Pottstown, Pennsylvania; Richmond, Virginia; Raleigh, North Carolina, and Atlanta, Georgia. Baytech will train Baker technician’s onsite to install all multi-point fuel injection systems in accordance with Baytech, CARB and EPA standards. All Baker locations will provide labor for warranty and service repairs, greatly increasing east coast availability for service work. Baker is already a qualified system retrofitter of BAF Technologies systems for Ford vehicles. For more information about Baker Equipment, contact Ronn Jones at 800/446 – 2610 or rjones@bakerequipment.com.

For a list of Baytech Corporation’s EPA and CARB certified LEV, ULEV and SULEV low-emission CNG and propane systems for General Motors vehicles and engines, visit <http://www.baytechcorp.com/>. Available products include light, medium, and heavy duty trucks, vans and SUVs, and heavy duty engines for specialty vehicles.



Photo Credit: www.caranddriver.com

Toyota Unveils Natural Gas Hybrid Camry Concept Car

Toyota officially unveiled its hybrid Camry powered by CNG equipped with a 2.4-liter inline-four cylinder engine at the LA Auto Show. Two carbon-fiber-wrapped tanks hold the equivalent of 8 GGEs at a maximum of 3600 psi, giving the CNG concept car a 250-mile range. The tanks are located in the spare-tire well (and come with run-flat tires), so there is no loss of visible truck space. Toyota estimates fuel economy of 32 mpg city and 34 mpg highway, only one mpg less than a gasoline Camry hybrid.

PREP Tool Now Available

The Petroleum Reduction Planning Tool (PREP), now available on the Alternative Fuels and Advanced Vehicles Data Center, is designed to help fleets, consumers, and business owners develop a strategy to reduce conventional fuel use in fleet and personal vehicles. This interactive tool allows users to evaluate and calculate petroleum reductions by choosing from eight different methods that best suit their situations. Please visit <https://www.afdc.energy.gov/afdc/prep/index.php> to check out this powerful tool!

Want to Learn More about the CNG-Hybrid Camry and Many Other Alternative Fuel and Advanced Technology Vehicles?

If your answer is yes, then you should register to attend the Alternative Fuels & Vehicles National Conference + Expo 2009 to be held in Orlando, Florida. The event will take place April 19-22, 2009 at the Walt Disney World Dolphin Resort. Alternative fuels, vehicles and advanced technologies for public and private fleet applications are the focal points of this fuel and technology neutral conference. As the largest conference and tradeshow of its kind, AF&V 2009 is the place to find the best solutions for your fleet. AF&V 2009 embraces advanced technologies that result in fuel efficiency, petroleum displacement and emissions improvements. Included are hybrid-electric and plug-in hybrid technologies; blends, including hydrogen; fuel cells; and idle-reduction devices. All of these are featured, along with CNG, LNG, LPG and biofuels as part of the diverse program, Expo Hall and Ride-n-Drive. Website: www.afv2009.com

Chesterfield County Only Municipal Government Fleet that is ISO 14001 in VA

On January 8, 2009, The Chesterfield County fleet organization passed their ISO 14001 surveillance audit of their environmental management system. The fleet currently has many ongoing pollution prevention and energy saving projects, including burning used oil in all the fleet shop furnaces, instituting spill prevention containment plans with well trained teams located in all shops, and purchasing higher fuel mileage vehicles. Chesterfield holds extensive training programs for environmental health, safety, and operational controls. With the ISO program in place, Chesterfield is more efficient, more productive, and has lowered the cost to operate the fleet organization. The county has a biodiesel program that has increased the number of vehicles and equipment using the renewable fuel each year. The fleet division is also exploring more options to integrate alternative fuels and vehicles. To their knowledge, they are the only ISO 14001 registered fleet in the Commonwealth of Virginia.

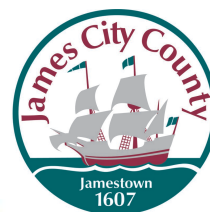
STAKEHOLDER SPOTLIGHT

Clean Cities is a government-industry partnership designed to reduce petroleum consumption in the transportation sector by advancing the use of alternative fuels and vehicles, idle reduction technologies, hybrid electric vehicles, fuel blends, and fuel economy. Virginia Clean Cities is one of almost 90 coalitions across the U.S. that help meet the objectives of improving air quality, developing regional economic opportunities, and reducing the use of imported petroleum.

Sponsors & Strategic Partners



Coalition Stakeholders



JOIN US! Visit <http://www.hrccc.org/joinus.html>

Calendar of Upcoming Events

Conservation, Alternative Fuel, and Advanced Technology Vehicle Related Events

2009 National Biodiesel Conference & Expo

February 1-4, 2009
Moscone Center West, San Francisco, CA
www.biodieselconference.org/2009/default.asp

Making Energy Work - Building a Sustainable Energy Economy in the SE

NC Sustainable Energy Association
February 3, 2009
Raleigh Convention Center
www.makingenergywork.org

Climate Communities Meetings with Key Obama Administration and Congressional Leaders

February 4-5, 2009

Visit http://www.climatecommunities.us/documents/february_meetings.pdf for more information
Climate Communities members will meet directly with key leaders of the Obama Administration and the Congress to continue to make our case for the investment of federal resources in local climate action.

2009 Virginia Agriculture Summit - Energy: Impacts and Opportunities

February 9-10, 2009
Richmond Omni Hotel
Farmers and industry professionals will learn the best ways to conserve energy

at the 2009 Virginia Agriculture Summit. They will also explore zoning issues, financing options, legal considerations and much more.

Cost: Early bird* registration is \$50. Registration increases to \$75 after January 30, 2009
www.agsummit.com/

The Role of Ag and Forestry in a Reduced Carbon Economy Webinar

February 12, 2009
11:00 a.m. CST
Email info@25x25.org

RETECH 2009: Renewable Energy Technology Conf.

February 25-27, 2009
Las Vegas Convention Center
www.retech2009.com/

Energy Independence Days 2009

March 2-4, 2009
Washington, DC
Email cjenkins@hrccc.org for more information or visit the website at <http://www.transportationenergypartners.org/> to learn more.

Waste to Fuels

March 17-19, 2009
San Diego, CA
www.waste-to-fuels.org/

Virginia Propane Engine Fuel Show

March 18 & 19, 2009
Poquoson & Fairfax, VA
Visit www.hrccc.org/propane/propaneroadshow.html

Alternative Fuels & Vehicles Conference & Expo 2009

April 19-22, 2009
Orlando, FL
www.afv2009.com/

Local Climate Action Summit

May 18-20, 2009
Visit <http://www.climatecommunities.us/calendar.html>
Climate Communities and ICLEI USA are hosting a Local Climate Action Summit in Washington, DC. The event will provide an opportunity to advocate for federal resources for local climate actions. More details to come.

If there is an event our readers may enjoy, please send an email to Chelsea at cjenkins@hrccc.org so we can add the event to our calendar and our website.

Funding for Refueling Infrastructure for Alternative Fuels and Incremental Costs of Dedicated Alternative Fuel Vehicles Available

The DOE National Energy Technology Laboratory, on behalf of EERE, is seeking applications for projects covering a range of commercial technology deployment and educational activities under the Clean Cities Transportation Sector Petroleum Reduction Technologies Program. The announcement is comprised of three areas of interest:

- * Refueling Infrastructure for Alternative Fuels - Funds are being offered for cost-shared projects for expanding alternative fuel refueling and blending infrastructure
- * Incremental Costs of Dedicated Alternative Fuel Vehicles - Funds are being offered to help reduce the incremental cost for the purchase of new Original Equipment Manufacturers (OEM) AFVs or the retrofit/conversion/repower of new and/or used conventional vehicles to run on authorized alternative fuels.
- * Education, Outreach & Workshops for Petroleum Reduction Fuels and Technologies - Funds are being offered for projects to raise awareness and foster a greater understanding of alternative fuels and advanced vehicle technologies through targeted outreach and education effort.

If you have a project idea and are interested in seeking funding through this opportunity, please send us a request. Please read through the solicitation thoroughly to determine if your project is eligible before contacting us.

To view the funding opportunity, visit <https://e-center.doe.gov/iips/faopor.nsf/UNID/D8576DD519F4CD6485257527005CC028?OpenDocument>