

## CASE STUDY: CITY OF NEWPORT NEWS

### BACKGROUND

The City of Newport News, Va., is renowned for its commitment to sustainability and green initiatives that improve community air quality and the environment for generations to come. Named one of America's Top 50 Green Cities by *Popular Science Magazine* (2008), environmentally friendly programs and practices are a priority for Newport News—including finding ways to reduce the carbon footprint of their vehicle fleet.

When Vehicle Services Director Bob McElheney discovered how running vehicles on propane autogas would reduce both emissions and fuel costs, he knew switching to autogas sounded like a smart choice for the Newport News fleet.

### ALLIANCE AUTOGAS PROGRAM SNAPSHOT

The city obtained funding through the Southeast Propane Autogas Development Program (SPADP) to convert 12 Ford Crown Victorias and 10 Chevrolet Silverado 2500 trucks to clean-burning autogas. Vehicle conversions were completed in the Fall of 2011.

In partnership with the Program, Alliance AutoGas has provided autogas vehicle conversion equipment, fuel station installation and fuel supply, maintenance-staff training, and ongoing technical support for fleets like Newport News.

For Newport News, Alliance fueling partner Phillips Energy installed a 1,000 gallon autogas tank with an easy-to-use fueling dispenser at the fleet's home base. Phillips implemented the autogas station at no upfront cost and provides a year-round autogas fuel supply to support the city, as part of a fuel contract. According to Christopher Perry, fleet administration manager for Newport News, it took only around two days to install the autogas fuel station.

Pleased with the conversion process and their experience with the fuel provider, McElheney said, the experts at Phillips Energy "have played large parts in the overall program's success." Phillips Energy trained the Newport News drivers at the beginning of the process, and McElheney says they have been satisfied with the safety of the new autogas vehicles and the convenience of fueling at their home base.

### RESULTS AND AUTOGAS BENEFITS

The City of Newport News is saving significantly on fuel costs, currently paying less than \$2 per gallon for propane autogas. Since the 22 vehicles they converted through Alliance will use approximately 18,000 gallons of autogas each year, the city expects to save at least \$22,000 on fuel costs annually.

Switching to propane autogas is also helping the fleet ensure cleaner air for the community. The environmentally friendly propane vehicles have already eliminated more than 6.6 tons of greenhouse gases. Newport News is also displacing thousands of gallons of imported oil by utilizing a domestically produced fuel, since 98 percent of the U.S. autogas supply is made in America.



Bob McElheney  
Vehicle Services  
Director  
Newport News, VA

### FLEET STATISTICS

#### FLEET TYPE:

Public Safety & City Services

**AUTOGAS VEHICLES IN FLEET:**  
22

**ADDITIONAL VEHICLES SLATED  
FOR AUTOGAS CONVERSION:**  
16

**TOTAL ESTIMATED ANNUAL  
FUEL COST SAVINGS:**  
\$22,000

**ANTICIPATED ANNUAL USAGE  
(gallons of gasoline displaced):**  
18,000 gallons

**AUTOGAS FUELING:**  
Onsite autogas fueling  
infrastructure, including 1,000-  
gallon autogas tank and Trak Fuel  
System

**TIME OPERATING ON AUTOGAS:**  
5 months

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### RESULTS AND AUTOGAS BENEFITS (CONTINUED)

“We were able to quickly incorporate the autogas vehicles into our fleet and begin experiencing all of the environmental, cost savings and other benefits of autogas,” said McElheney. “We made the right decision to convert our vehicles, and we certainly look forward to doing more.”

Newport News fleet drivers have also been pleased with the Alliance AutoGas Prins VSI system. The bi-fuel Prins vapor injection system allows autogas vehicle drivers to revert to gasoline in the event that an autogas filling station cannot be reached. “One of the key benefits of bi-fuel autogas vehicles is the extended range they provide, which is especially useful for long distance travel,” said McElheney, stressing the importance of reliable transportation in servicing the local community.

“We’re happy with the vehicles, the technology, reducing our fleet’s emissions and the lower fuel costs, which will benefit both our city government and Newport News residents,” said McElheney.

### MOVING FORWARD

City officials in Newport News plan to convert more vehicles to propane autogas in the future because they have been so pleased with the overall conversion experience and the fuel cost savings. The city fleet has plans to convert an additional four Ford F-150 trucks under the Southeast Propane Autogas Development Program, and they are also purchasing conversion systems to equip 12 Ford F-250 trucks to run on gaseous alternative fuels like autogas.

“Autogas is a good fit for our fleet,” said McElheney. “We’re saving on fuel costs and reducing vehicle emissions, not to mention that the infrastructure cost is lower compared to other alternative fuels and our vehicle performance has actually improved. We were fortunate to receive some funding assistance with SPADP. However, because of the significant fuel savings we’re seeing with autogas, we intend to purchase more propane autogas-capable vehicles in the future.”