

# Transportation Triumphs

By Tom Schuman

## Hybrid Helps Moving Industry Move Forward

A team effort, coordinated by an Indiana-based company, has produced the first diesel-electric hybrid truck for the U.S. moving industry.

Bill Duggan, an Atlas Van Lines agent in Walpole, Massachusetts, picked up the truck in April. Atlas is the flagship company of Evansville's Atlas World Group. The truck was purchased from Atlas Terminal Company (another subsidiary). The body was manufactured by Kentucky Trailer and the vehicle produced by Kenworth Truck Company.

Greg Hoover, president and COO of Atlas World Group, says his organization's role is one of education for the cooperative's more than 500 agents.

"On the Atlas property we probably have one tractor, to move trailers in our yard," he shares with a laugh. "In the agents' local environment, they get all the tax credits and breaks. Our guys know all the local regulations. When people come to us to buy a unit, we let them know what is out there and available. It's the same if you went to purchase a green car; you wouldn't know what was on the lot unless someone told you."

Duggan plans to use the hybrid on short haul routes between Boston and New York, which feature more stop-and-go and city driving. The battery charges when the driver steps on the brake. When traveling under 30 miles per hour, the combination of diesel and electricity is used. Standard diesel is utilized at higher speeds. There is an anticipated 30% increase in fuel efficiency and 30% reduced emissions.



Among those helping produce the first hybrid moving truck are (from left) Arif Mirza, Eaton Transmission; Joe Morris, Kenworth Truck Company; Bill Duggan, Atlas agent; and John Nichols, Palmer Trucks.

The cost of \$125,000 was about \$40,000 more than the standard moving truck. Hoover expects that to change in the near future. He tells the story of accompanying his mother to a meeting in which he saw someone with a pocket calculator that was purchased for \$1,100.

"Within a couple of years, I had one in my 10th-grade class that I bought for \$10. As (these trucks) are more widely used and become more common, the price will come down," he offers.

Hoover notes that Duggan has a strong record of environmental responsibility and that he took this step because "he thought it was the right thing to do." Kentucky Trailer had not manufactured the "box" or "straight truck" body in 20 years, he adds, but "they got back into it to be part of this." Finally, Kenworth was working on developing the technology, but when informed that a buyer was in place "they pushed it to the front burner."

### INFORMATION LINK

**Resource:** Atlas World Group at [www.atlasworldgroup.com](http://www.atlasworldgroup.com)

## 'Slugs' Boost Rail Performance at Port

The 26 companies that call the Ports of Indiana-Jeffersonville home rely on rail shipments. MG Rail, the company that completes those rail transactions, is doing so with less gas consumption and reduced diesel emissions through the use of rail "slugs" and auxiliary power units (APUs).

"We handle rail cars (anywhere between 12,000 and 20,000 a year) delivered by CSX and the Louisville and Indiana Railroad," notes Roger Wilson, MG Rail's operations superintendent. "We sort and deliver to the different companies. There are a lot of bulk materials; steel when the economy is good, grain, plastics and oil."

A rail slug has no engine or cab. Used in conjunction with a diesel-electric locomotive, it provides additional pulling power. Wilson offers a practical explanation.

"The motor on the locomotive turns the generator that produces the electricity. The spare

electricity goes to the auxiliary unit (or slug). For any moves that require a lot of power, they are perfect," he contends. "One of the biggest issues is wheel slip, as well as pulling power. For a switching operation, they are perfect.

"When you have steep curves and S-turns, which is mainly what we use the units on, it cuts the diesel fuel used by 50%," Wilson continues. "It's like having two locomotives, but the slug has no diesel engine and it is low maintenance."

MG Rail received assistance from the Ports of Indiana and the Indiana Department of Environmental Management in securing a \$200,000 grant from the Environmental Protection Agency that helped subsidize the purchase.

APUs are also known as "hot starts." Again, Wilson describes the benefits.

"We don't like to use antifreeze; it's bad for the environment and bad for the parts. Cold starts are not good for locomotives either," he states. "With the hot starts, water is circulated through the block on the locomotive, and this keeps it warm. When the block stays warm, it keeps the oil viable.

"It's a win-win. We're not burning fuel by leaving the engine running. There is a substantial impact on helping keep the air clean, and it prolongs the life of the equipment."

In 2008, IDEM calculated a nearly 25% emission reduction from MG Rail's operations at the port. The company has provided rail service to industries since the Jeffersonville facility opened in 1985.



**Rail slugs help reduce diesel fuel usage and provide additional pulling power.**

#### INFORMATION LINK

**Resource:** Roger Wilson, MG Rail, at (812) 283-9500

## Fort Wayne Fleet Enjoys Drive to Success

In late 2008, the city of Fort Wayne's fleet department (comprised of more than 2,400 vehicles across 52 departments) earned national recognition that the presenting organization called "the equivalent of winning the Super Bowl and the World Series in the same year."

The honors from *Government Fleet* magazine were on the 100 Best Fleets (Fort Wayne placed sixth) and Best Green Fleets (the city was fourth) lists. Larry Campbell, Fort Wayne's fleet operations manager since June 2004, notes some of the many changes over the last five years:

- Use of B20 fuel, with the biodiesel portion coming from soybean oil.
- Addition of 21 Ford Escape hybrids, producing an increase in the start-and-stop meter reading and parking control processes from eight to 10 miles per gallon to between 28 and 33. Another benefit has been reduced maintenance.
- Purchase of E85 vehicles, with nearly 50% of the fleet today capable of running on E85 fuel. More E85 stations in the city are planned for the next two years.
- Use of Chevrolet Impalas for some law enforcement activities – at both a lower purchase price and increased fuel mileage than other cars typically used by police departments.
- An anti-idling effort in which trucks left running are programmed to shut off in 10 minutes. The savings, according to Campbell, are 60 less gallons of fuel a year for about 300 diesel vehicles.

Campbell, one of about 65 certified public fleet professionals in the U.S. and Canada and a self-described numbers guy, takes an analytical approach to his role. He and others throughout the department are actively involved in Six Sigma improvement projects.

"For the hybrids, we pay more, about \$5,000 more," he admits, "but it only takes about three years to recover that cost in fuel savings. With gas prices last year at \$4 a gallon, that was cut down to two years. We will keep the hybrids seven to eight years. We have a couple now with over 100,000 miles. We haven't seen the first problem with any of the batteries."

The fleet department has received a number of other state and national awards for its efforts in managing waste, recycling and safety (no job accidents or injuries in all of 2008).

"It's a pride factor for our team," Campbell offers. "We know it takes a team effort, and we're doing the right thing for the environment. Personally, I want my grandkids to be able to enjoy some of the things I did as a kid – the rivers and the outdoors."



**Larry Campbell leads a team effort in efficiency at the Fort Wayne fleet department.**

#### INFORMATION LINK

**Resource:** Larry Campbell, Fort Wayne fleet department, at [www.cityoffortwayne.org](http://www.cityoffortwayne.org)