



Representatives from Huntsman International and Heniff Transportation Systems participated earlier this year in a demonstration of the equipment used for interplant shipments of propylene oxide.

### Propylene oxide . . .

load tank trailers in propylene oxide service to 95% to 97% full," Heniff says. "Product temperature and thermal expansion become a greater concern. Pressure monitoring is critical for shipments in transit.

"We have the newest generation of Skybitz satellite communication units on our trailers to monitor tank temperature and product temperature. The information is reported every five minutes."

#### Tare weight

While technology has been a critical factor in achieving a higher maximum payload, it was also important to trim tractor-trailer tare weight as much as possible. Combined tare weight of the newest tanker transports in propylene oxide service is 26,000 pounds.

"We have removed 2,600 pounds of tare weight by using aluminum

components wherever we can," Heniff says. "We've taken out passenger seats. We're using widebase single tires and composite trailer suspension springs."

Heniff Transportation chose Peterbilt Model 579 daycabs for the operation. The tractors are specified with PACCAR MX-13 engines rated at 455 horsepower and Eaton Fuller UltraShift Plus automated transmissions. PeopleNet on-board computers make it possible to monitor vehicle status at all times.

Heniff Transportation runs natural gas-fueled Peterbilt tractors in some of its other operations, and that was an initial consideration for the propylene oxide account. Currently, however, all of the tractors in that operation are diesel fueled.

"We've just started running a few liquefied natural gas-fueled trucks in our fleet, and we still have more work to do," Heniff says. "We still see potential for natural gas fueled trucks

in the propylene oxide business.

SAF Holland aluminum fifth-wheels help hold down tare weight. Running gear includes Bendix air disc brakes, Alcoa aluminum disc wheels, and Michelin X One tires.

Tank trailers used to transport the propylene oxide are manufactured by Polar Tank Trailer. The DOT407 stainless steel trailers incorporated some DOT412 features to be able to handle a 35 psig rating. Enhancements include two additional bolster rings around the cargo tank, resulting in an 8,500-gallon stainless steel tank trailer with an 11,000-lb tare weight.

Polar's engineering team designed the uninsulated tanks with a 10-gauge shell and eight-gauge heads. While trailers previously used were constructed of 316 stainless steel, Heniff Transportation had the newest trailers constructed using lean duplex technology.

The trailers are configured for dedicated propylene oxide service with

closed loop loading and unloading. The Polar domelid is bolted down, and the tank is fitted with a remote operated vapor recovery system from Girard Equipment and OPW Kamvalok dry disconnect hardware for loading and unloading.

The trailers have a stainless steel subframe for long life and low maintenance. Running gear includes Hendrickson's Intraax suspension with Meritor WABCO roll stability, Stemco Aeries tire inflation system, Michelin X One tires, and aluminum disc wheels.

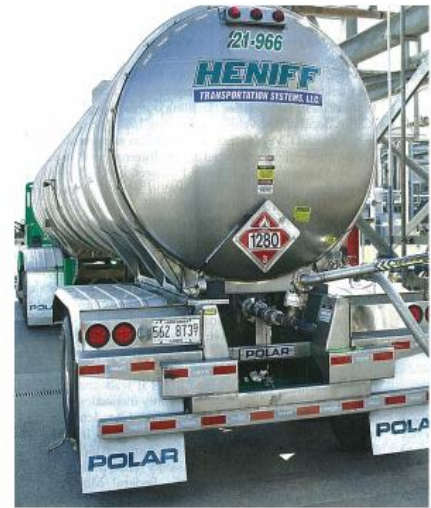
#### Busy fleet

Tractors and trailers in the propylene oxide are kept busy meeting the needs of Huntsman's Conroe and Geismar plants. The transports are handling multiple loads a week for Huntsman's Conroe and Geismar plants. Heniff Transportation operations are coordinated by Briana McCranie, a transportation coordinator for the fleet who is based Huntsman's administrative head-



Polar DOT407 stainless steel port propylene oxide.

quarters in The Woodland. All trailer loading and unloading is handled by Hur workers. Drivers stay with the trailers during loading and unloading, and they must complete



Propylene oxide is transferred to a Heniff trailer through an OPW loading system through a closed-loop system.

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