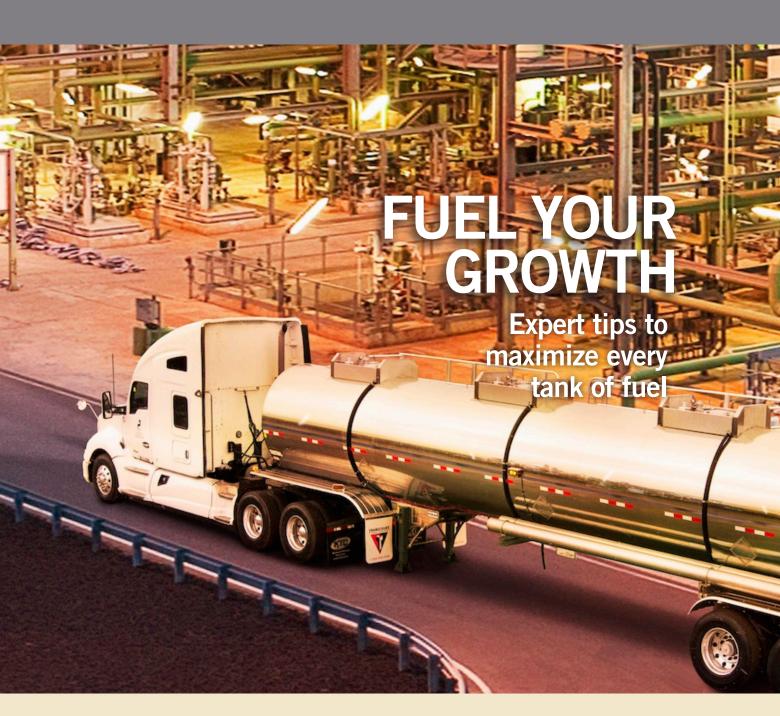
### Management VOLUME 2 Best Practices





#### Welcome back to Fleet Management Best Practices

Are you optimizing each tank of fuel? With diesel pricing on the rise, fuel economy is becoming increasingly critical to sound fleet management practices.

FUEL YOUR GROWTH brings you the insights of two Canadian tanker fleets which have worked hard with the spec'ing, training and monitoring practices to ensure fuel efficiency drives their operations. This is the second of our three digital supplements brought to you by Newcom Trucking Group in partnership with Transcourt Tank Leasing.

Written by the editors and writers of Newcom Trucking Group, Canada's largest publisher of trucking industry focused publications, the Fleet Management Best Practices digital supplements provide expert insights on key areas such as safety, fuel economy and spill response. The aim is to arm fleet owners, executives and managers with information critical to helping them improve their operations. The series is part of a larger thought leadership initiative to develop an industry-specific network where relevant content from transportation professionals can be created, curated, and shared.

For more features, news stories, videos and research on the topic of Management Best Practices please also visit the specially created Knowledge Centre on trucknews. com and look for a series of insightful messages on social media. We hope you will join in the conversation.

Lou Smyrlis Managing Director, Newcom Trucking Group

# Driver demand

What was Gorski Bulk Transport's key to fuel efficiency? **GETTING THE DRIVERS INVOLVED.** 

#### When Gorski Bulk Transport

joined the SmartWay Partnership Program in 2010, then under the domain of the US Environmental Protection Agency, it initially did so at the urging of a customer.

"One of our customers who was focused on conserving non-renewable resources had invited all their carriers to get involved with the SmartWay program," Ted Gorski Jr., president of Gorski Bulk Transport recalled. "We looked at it and realized it was very much in sync with our own ideas and how we operated our business."

Gorkski, founded in 1957, has always been a fuel-conscious fleet. As a bulk carrier, Gorski operates lightweight, fuel-efficient equipment to maximize the product it can haul each trip and to reduce its fuel consumption. But until it joined SmartWay, it had no way of determining how its practices stacked up against those of other carriers.

"It was eye-opening," Gorski said of the benchmarking the company did against other SmartWay carriers. "There are some surprises when you start going down that path and comparing yourself to others." Through SmartWay, Gorski Bulk Transport, which operates out of locations in Toronto, Windsor and Detroit, learned of new ways to further improve fuel economy and reduce emissions. But from the start, the company realized the key to maximizing the benefits of the program was to involve the drivers in decision-making processes.

"Everybody had their ideas on how to improve fuel economy," Gorski said. "It seemed that the more we reached out to the drivers in the discussion, the better the results became."

Not every fuel-saving device or technique that's in use by mainstream van carriers can be applied by tanker fleets. For example, most of the trailer-related aerodynamic devices in widespread use are not practical on tankers. However, Gorski said that doesn't mean a tank trailer can't be spec'd to optimize fuel consumption.

"We've looked at tire inflation systems and those have given us a very good return," he explained. The company also uses flow-through mud flaps on its trailers, which allow air to pass through tiny holes



to reduce wind resistance. On its tractors, Gorski now spec's automated transmissions for optimized shifting and auto shutdown timers and bunk heaters to reduce idling.

"The biggest part for us has been making sure the driver is involved in the process," Gorski said. "Just putting different features on the truck, unless there is buy-in from the drivers, you are not going to get the same return."

Since the beginning, Gorski
Bulk Transport drivers have been
committed to the program and have
helped the company meet its objective of continuous improvement.
Gorski credits those drivers with the
company's success in the program.

"The driver has to be involved," he said. "They are our eyes, our ears, our best ambassadors and our best salesmen and they are the ones responsible for keeping the trucks in safe operation on the highway." Because of this, Gorski has shared the benefits with its driving force; it implemented an incentive program that rewards drivers for fuel-efficient driving.

"I think it's really important that the drivers who are spending their

#### "I can't stress enough, the importance of the driver,"

- Ted Gorski Jr., president, Gorski Bulk Transport

time on the highway understand that their carrier understands and appreciates what they are doing and that we can reward them for helping the company," Gorski said.

Gorksi is already running smaller block engines - 13-litre, rather than its traditional 15-litre - to reduce weight and improve fuel efficiency. But one of the challenges the company – and other bulk haulers like it – face, is balancing the need for efficiency with the need to get the job done. Stainless steel tanks are inherently heavy and sometimes it's necessary to idle when loading or unloading product to power accessorial equipment. Even so, some Gorski drivers have managed to reduce idle time to 5%, Gorski said proudly.

For Gorski Bulk Transport, SmartWay has been – and continues to be – a journey of continuous improvement.

"We have been an ISO 9001-registered carrier since 1999 and part of our culture here is one of continuous improvement," Gorski said. "I look at the SmartWay program in the same way. It's not so much about what everyone else is doing, it's more about how you are doing and how you are moving your own bar forward and improving relative to other carriers. That has always been an important part for us; how can we be true to our business principles and still move the bar forward so that we're improving and so that we are being good corporate citizens?

"If we are good stewards of the resources we have, then we are going to be an efficient operator and we are going to help our customers get their products to market in a costefficient, sustainable manner."

## Optimizing each tank of fuel

WHEN RATES CAN'T KEEP UP WITH THE PRICE OF TRUCKS OR THE COST OF FUEL, FUEL ECONOMY BECOMES PARAMOUNT

BY HARRY RUDOLFS

#### When Derek Varley spec's

a new tractor, fuel efficiency is paramount.

"Rates aren't going up as fast as the price of trucks or the cost of fuel, so fuel economy is very important," says the director of fleet operations

for Premier Bulk Systems in Gormley, Ont.

"I don't believe in big horsepower stuff. That's for your B-train and aggregate group - they'd rather have 600 horses than fuel economy. We're going with the 13-liter engine program now, although we still have some 15-liter engines that are pre-emissions."

Varley has adjusted his spec's along with the trend towards less horses, slower rpms, and lower rearend ratios.

"Most of our trucks are in the 80,000-lb GVW range, and we're running 455-hp Paccar engines with 1,650 lb.-ft. of torque. Currently we're sitting on 3.66 rear ends, but we've got five trucks coming with 3.08s – and for the first time these will be equipped with 12-speed automated transmissions."

In general, tanker fleets have been reluctant to jump into automatics, partly because of the perception that they wouldn't be able to keep up with the sloshing effect of the liquid in the tanks.

"We have a partner carrier in Chicago that's been running about 400

power units that are spec'd similar to ours, except they've been running automateds for the last three years. The general consensus is that there is nothing to worry about," says Varley.

"We're running SmartWay-approved equipment, but aerodynamically we can't do much – we're hauling around a 48-ft. tube. But if we spec' the truck right we can get some big (fuel saving) numbers. The more automated the units are, the better they are as far as I'm concerned. Sweet spots are dropping all the time, almost every year. I'm a firm believer that if you can get the transmission and engine talking together you can keep it in the sweet spot for a longer period of time."

But no matter how automated trucks become, the driver is still the key factor in achieving good mileage. And old habits die hard, as Varley explains: "Some guys driving manual transmissions are still of the mindset that you need to have high rpms to climb a hill, which is not the case. Torque will get you a lot further than screaming rpms."

On the other hand, drivers applying best practices to their driving technique can be remarkably fuelefficient.

#### Keeping score of your drivers

Brian Botham, Premier Bulk Systems' director of safety and compliance, has a unique tool at his fingertips. By downloading data from the PerformX software supplied by Paccar in its partnership with PeopleNet, Botham can track the performance of each truck and how it is being driven.

The program allows for the interface between the electronic on-board recorder, Paccar telematics and the Premier's home terminal in Gormley, Ont. The system is invaluable should an engine fault light come on, or something else that requires immediate attention.

But Botham uses the data to chart his 65 drivers (owner-operators are included as well) according to preset goals and parameters. He sets the 10 parameters for the activities he wants to monitor, everything from quick starts and stops, to long idle times, to overspeed infractions. Drivers are expected to meet certain standards, ie., 6.5 mpg overall, 6.75 rolling mpg, no more than five hoursof-service violations, no more than 5% of time spent over the suggested rpm, no more than 5% excess speed, and no more than three sudden starts, stops and overspeed alarms.

At the end of the month, each driver receives a scorecard in his or her mailbox. The scorecard compares the driver's performance against the goals set by the company and also shows the terminal average. If there are areas of concern, Botham schedules a meeting to address them.

"We've pretty well eliminated overspeed violations," says Botham. "I'm looking at a scorecard here where the driver scored 99.2% – a little bit of long idle. But I can forgive that, it's been really cold."

#### Identify the areas of your biggest losses

Copies of the results are also forwarded to Varley and the maintenance department. Varley is always looking to cut fuel costs.

"The drivers take pride in their

scorecard and we think our targets are reasonable," he says. "We're always trying to identify the areas of our biggest losses."

Excess idling is one of the areas of concern for Varley.

"We are hampered with having to run PTOs all the time," he says. But he also understands that idling the engine is unavoidable during extreme weather events. "We don't want our drivers taking chances at -20 C or colder and shutting the engine off."

The same holds true in the summer months. About 90% of Premier's runs are into the U.S., within a 600- to 700-mile radius, and he knows sleeping in a hot cab can be difficult.

"Our guys do a great job in trying not to idle. Our trucks do have an ambient overdrive of 80F, which is something put in place by the EPA in the U.S. So they can run the engines when it gets that hot, but as we all know 70F with 90% humidity is just as uncomfortable."

Premier has installed bunk heaters in all the units.

"Unfortunately, we don't have any trucks equipped with a gen-set or anything for air-conditioning in the summer. Running compressors and pumps, we just don't have any more room on the frame to add anything else," he says.

"The engine world has changed dramatically, especially with the lighter oils. We're seeing trucks start at negative temperatures we would have never seen before. The old days where we used to have run the engine after coming off the highway are gone. The newer oils also mean less friction and parasitic loss in rear ends and transmissions.

"There are so many factors at play in achieving good mileage," adds Varley. "We haven't got it down to a 100% science yet, but we rely heavily on telematics and on-board computers for the answers."



premier Bulk Systems runs on wide-base single tires. Director of fleet operations Derek Varley chose to go with Michelin X-Ones, on both power units and trailers. He opted for the more aggressive XDM2 tread pattern on the drive tires, sacrificing a bit of fuel economy for better traction in the winter months.

Colin Rafferty, senior account manager for Kal Tire, explains the economic benefits of wide-base singles. "Typically, one of these tires costs about as much as a set of duals, so there is no savings on that end. But right off the bat you save about 200 lbs per axle and that's something that interests bulk haulers as they can carry more product."

Rafferty says that approximately 35% of fuel consumption is lost overcoming rolling resistance.

"So, for every 1% of fuel savings, rolling resistance has to be decreased by 3%. To get a 4% fuel savings, you have to reduce the rolling resistance by 12%," he explains. "A 4% fuel savings means that a truck getting 6 mpg would be getting 6.24 mpg. This is a huge number for big fleets that spend millions on fuel."

No question, wide-base single tires have earned their place in the industry, and many fleets are adherents. But replacement tires may be difficult to source in the event of a blow-out, and wide-base tires suffer a higher rejection rate when sent for retreading. According to Rafferty, "It's absolutely essential to run them at the correct air pressure to avoid premature wear."

Michelin was the first to introduce wide-base tires more than 15 years ago. Since that time, most major tire manufacturers have come out with their own versions. But at the same time, dual tires have made great strides in the last few years.

"There was a bigger difference in fuel economy back then," says Ryan Burke, general manager of The Tire Terminal in Mississauga, Ont. "Manufacturers are making much better tires now, with wider treads, and better compounds that can achieve fuel savings that are coming closer to what wide-base manufacturers are claiming."

Burke suggests that those fleets thinking of changing over to wide-base singles might consider instead, the new generation of duals.

"I think singles have hit their peak," he claims. "I don't think they are going to continue to grow in popularity. They're at a plateau and they're going to stay there."





Chemical



Compressed Gas



Crude Oil



Dry Bulk



Food Grade



FRP/412



Hot Products



Petroleum



Transcourt supplies equipment all across Canada and the United States. We have a large fleet of tankers available for Petroleum, Crude, Chemical, Food grade/Sanitary, Dry Bulk, Propane/LPG and FRP/412.