With energy costs soaring, thieves are swiping used cooking oil to power vehicles

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OGDEN — A nationwide rash of waste oil thefts has Top of Utah biodiesel enthusiasts staking out their turf.

A few years ago, drums of used French fry oil were of interest to only a small network of underground biofuel brewers who would use the slimy oil to power their diesel vehicles.

Now, with gasoline prices at record levels, skyrocketing interest in the yellow waste oil has users closely guarding their suppliers.

Rich, an Ogden man who asked that the Standard-Examiner use only his first name to protect his operation, has had a relationship picking up the oil from a downtown restaurant for more than two years. Rich uses the oil to run his Ford F-250 pickup.

A few weeks back, he went to empty his barrels only to find someone else had beat him to it. It wasn't the first time it had happened.

"It makes me angry, quite frankly. My barrels are very plainly marked that they're mine. It's just theft," he said. "It's morally wrong, and if I catch them, I will press charges."

Daniel Olsen, who runs Premier Foods in Brigham City, had one of his barrels stolen last year. After getting information about who may have been behind the theft, Olsen threatened legal action.

Running on vegetable oil
A $1,000 conversion kit can make a diesel car run on used vegetable oil found at local restaurants.

Starting up
1. Diesel fuel starts the engine
2. Radiator fluid transfers heat to the vegetable oil tank to warm up the oil

Running
3. Once the heated oil's viscosity matches that of diesel fuel, the car runs on vegetable oil: a filter removes large grease chunks

Shutting down
4. Before the engine is stopped, the car switches back to diesel fuel to prepare for the next start-up

Vegetable oil fuel tank
Diesel fuel tank

• Provides the same fuel economy as diesel fuel, which tends to be 40 percent more efficient than gasoline
• Because they tend to use pure canola or soy oil, which is easy to filter, Asian restaurants have the best grease for use in conversion engines

Vehicles have lower emissions due to a lack of sulfur; emit less carbon dioxide than the plants that produce vegetable oil absorb

Source: Greencar Vegetable Fuel Systems

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Graphic: Chicago Tribune

INSIDE: More about the process/6A
See OIL I Page 6A
Oil

From 1A

gal action and the barrel was returned.

Now he refines his oil to help power the company's fleet of vehicles.

Used cooking oil is transformed into fuel through a chemical process called transesterification, which removes glycerine and adds methanol to the oil, leaving a thinner product that can power a diesel engine.

"You can do it on the stove, but your wife not might like it," said Graydon Blair, owner of Utah Biodiesel Supply, a Web site run out of Syracuse.

Interest in putting the waste oil to good use is at an all-time high, he said.

"We've been swamped. Our volume went up 200 percent of normal in the past month," he said. "We get on the magnitude of 30 to 35 calls a day right now. I'm staring at 22 people that I have to call back today."

He said he's noticed a change in his clientele in the last couple of months as well.

"It used to be just guys with disposable income, usually in their mid 50s with time to play, but right now it's business owners — lots and lots of business owners," Blair said.

Most calls are from small-business owners and construction companies, he said. "Fuel prices are killing them."

Biodiesel can be blended with petroleum diesel, and blends of the alternative fuel are now sold at 1,400 gas stations across the country. But as the price of diesel shoots up, so, too, does the value of used oil.

In the last three years, the price of soybean oil — the main feedstock for biodiesel made in the United States — has tripled.

Last week, a gallon of crude soybean oil fetched 66 cents on the open market, according to the National Biodiesel Board.

The cost of bulk oil has gone from 10 cents a pound to 30 cents a pound in the last year, Blair said.

Those kinds of numbers have encouraged biofuel enthusiasts to plunder restaurants' greasy waste, and have even spurred the city of San Francisco to get into the grease-trap cleaning business.

The National Biodiesel Board reports that U.S. production of biodiesel reached 500 million gallons last year, up from just 75 million gallons in 2005.

Information from the Associated Press is included in this report.

Driving on vegetable oil

Outline of the process used to convert vegetable oil to biodiesel:

1. Pour Oil Into Processor
2. Heat Oil To 120°F
3. Check Titrination Level
4. Mix Lye & Methanol In Separate Container
5. Pour Solution Into Processor
6. React Oil By Mixing
7. Allow Oil To Separate
8. Remove Glycerin Layer
9. Wash Biodiesel
10. Allow Water & Oil To Separate
11. Remove Water Layer
12. Transfer To Storage Container
13. Allow Biodiesel To Dry
14. Fill Fuel Tank

Source: Utah Biodiesel Supply