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## Hazardous materials present special challenges for emergency crews

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Emergency crews dealing with a burning tanker truck full of flammable liquid need lots of information before they even get close to the flames.

The biggest question is determining what's burning, said Green Bay Assistant Fire Chief Rob Goplin, a team leader for the Brown County Hazardous Materials team. Isolating whether the vehicle is on fire or the contents of the tanker are burning is the first step, he said.

"That will ultimately determine how we approach things," Goplin said.

The contents of the tanker also is key. Had the tanker involved in Friday's crash in Marinette County been full of methanol, it would have been a "significant event," Goplin said.

A semi-tanker truck and passenger vehicle collided nearly head-on Friday on U.S. 141 in Marinette County, killing one person in the vehicle and forcing a hazardous materials alert because of uncertainty about the tanker's cargo. It was later determined to be empty, but area residents were evacuated because a placard on the semi said it was carrying methanol.

"That type of fuel is more difficult to extinguish than standard fuel because it's alcohol based," Goplin said. "You can't use normal firefighting techniques."

Fire crews would have needed lots of alcohol-resistant foam had the methanol started on fire.

"It comes down do you have enough foam on scene and can you supply long enough," Goplin said.

Using straight water isn't an option, he said.

"It just doesn't work with an alcohol fire," Goplin said. "You end up pushing the fire around more than actually putting it out."

Alcohol-resistant foam is not something carried on an average fire truck. It's usually in the stores of specialized teams or with departments near where alcohol-based fuels are stored.

If the special foam is not available, the next option is to let the fuel burn.

"You really just protect the area around it and let the fuel burn off," he said.

Ethanol and other alcohol production has seen a spike in production in the last few years, meaning more of it is moving across the nations highways and railroads.

Marinette's Ansul Inc., a fire suppression products manufacturer, hosted a symposium last fall at its Marinette Fire Technology Center focusing on fighting alternative fuel fires, like ethanol and biodiesel.

Steven Hansen, marketing manager for engineered systems and foam products at Ansul, said methanol burns with an almost transparent blue flame which can be hard to see and adds another

dimension to the fire fighting process.

While methanol does have some poisonous properties, the biggest risk is from fire and explosion, Goplin said. Once the fire is out, specialized teams are needed to clean up the diluted alcohol and dispose of the contaminated water left behind after the foam dissipates.

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