

## **Mass DEP Penalty Reduced After Carrier Deploys On-Board Spill Reporting System**

By Thomas Moses  
Spill Center President

Pottle's Transportation of Bangor, Maine, a long-time Spill Center client, has deployed an on-board spill reporting system in its fleet of 109 company tractors and 440 trailers. The recent move has helped substantially reduce a penalty levied against the truckload carrier by the Massachusetts Department of Environmental Protection (Mass DEP) after a diesel fuel spill incident in Charlton, Mass.

The new on-board reporting system enables a driver to quickly fill out a pre-formatted electronic spill message and transmit it directly from the truck to provide authorities with rapid notification and details of a spill. We at Spill Center worked closely with Pottle's and wireless communications specialist QUALCOMM®, to develop the system. It is designed to improve private and public sector response to hazmat incidents and increase efficiencies in the resolution of spills by quickly providing critical information needed to frame an appropriate incident response.

In the Pottle's fuel spill, a company truck ran over a piece of metal in the roadway, resulting in a punctured diesel fuel saddle tank. A local police officer noticed the trail of leaking fuel on the pavement and followed it to the Pottle's truck. The officer pulled over the unsuspecting driver, who plugged the leak with a stick, and he called the fire department.

The "reportable quantity" of spilled material – the amount requiring a formal incident report – varies from state to state. In Massachusetts, the reportable quantity of any spilled petroleum product is 10 gallons, and the DEP must be notified within two hours of the incident to avoid a citation. Other triggers include any release of oil causing a sheen on surface water, which is reportable to Mass DEP and to the EPA in the National Response Center.

When the fire department arrived at the scene, an inflatable pool was used to contain the leaking fuel while the remainder in the tank was pumped into a drum. The driver and fire officials estimated that 20-30 gallons of fuel had leaked out, based on the flow of fuel and the time elapsed from the point of impact until the leak was stopped.

### **Communications Breakdown**

If Pottle's emergency spill plan had been followed, the safety manager would have been notified immediately after the spill. But due to a breakdown in communications, the manager didn't find out about it until the next morning. The driver did call Pottle's maintenance facility to report the trouble. He also notified Operations to say he would probably be late on his delivery.

Safety Manager Sheldon Cote recounts: "As soon as I learned about it, I called Spill Center®, which notifies the proper authorities in these situations. Our Spill Contingency Plan is on file in Spill Center's computer. They sent out the required notifications and reports right away, but we knew the DEP's two-hour window had already closed and that we could expect a citation in the mail." The Mass DEP late-notification infraction carries a penalty of \$11,500.

"We don't have a lot of these incidents, and that's part of the reason I think that people forget about what to do in these situations," Sheldon observes. "In 20 some years, we may have had a half-dozen of these spills happen. It has always been road debris that comes up and punctures a fuel tank."

The late-notification infraction carries a penalty of \$11,500, but the Mass DEP offers a special enforcement settlement known as a Supplemental Environmental Project (SEP), which can reduce the amount of a penalty. SEPs are agreements to perform activities which provide an increased level of environmental protection, observed Nick Child, Chief of Emergency Response in the DEP's Central Regional Office. During an enforcement conference, Cote proposed the on-board spill reporting system as a SEP, and it was accepted by the DEP.

Chief Child called the On-board Spill Reporting System an innovative way to sound the alarm after a spill. "With any release to the environment, time is a huge factor. If this allows rapid notification of public safety and environmental officials, it can only help," said Child. "Faster response is definitely better for the environment."

## **On-Board Reporting**

Development of the on-board spill reporting system involved adapting homeland security technology to environmental protection. The system is based on a Public Sector Reporting Center (PSRC) concept and technology developed by Spill Center in response to the U.S. government's post-Sept. 11 efforts to prevent commercial vehicles carrying hazardous materials from being used in terrorist attacks.

We designed PSRC to create centralized information processing and command and control capabilities using existing technologies. It provides the ability to integrate a wide variety of telematic devices with event messaging and alert notification. The system enables the sharing of information, including data from truck tracking systems and various security devices, without regard to proprietary hardware or software.

We successfully demonstrated the effectiveness of PSRC during the U.S. DOT's extensive Hazardous Materials Safety and Security Field Operational Test (FOT), which concluded in 2005. During the FOT, we worked with team leader Battelle Memorial Institute, the Commercial Vehicle Safety Alliance, and QUALCOMM to show how PSRC could be used to enhance public safety and security, especially in the transportation of hazardous materials that can be used as weapons of mass destruction.

## **Electronic "Spill Macro"**

In adapting the system for Pottle's Transportation, we created a "spill macro" to be loaded into the QUALCOMM OmniTRACS satellite-based wireless communications terminals in all the company trucks. An assigned key on the driver's terminal brings up the blank spill form, which the driver fills in with pertinent information about the spill.

Once the driver sends the message, it instantaneously travels from the truck to QUALCOMM's Network Operations Center in San Diego, Calif., where it is processed through the Multiple Access Software System (QMASS®). That enables automatic data sharing with authorized third parties, such as Spill Center. The message is forwarded both to Pottle's headquarters and to Spill Center's 24/7 call center, which immediately notifies authorities and completes the required reports.

Sheldon Cote said he believes that the on-board system enhances the carrier's spill preparedness. "The driver looks at his QUALCOMM keyboard everyday, and that spill macro label serves as a reminder of what needs to be done after a spill. The driver is the key individual in this whole thing," he says. "The system gives us an extra margin of insurance that the message is going to get through much quicker than a phone call."

In addition to deploying the on-board spill reporting system, Pottle's has taken other steps to avoid the communications breakdown that occurred last year. On-going training is a part of the solution; payday stuffers are now used every month; plus a new policy has the driver calling Spill Center directly after the spill message is transmitted.

We at Spill Center commend Pottle's Transportation for deploying an integrated solution in its effort to achieve best management practices for over-the-road safety and emergency response management procedures. We look forward to discussing the system with other fleets who are interested in adding another layer of preparedness to their spill emergency program.

*About the Author – Thomas Moses is an environmental attorney, toxicologist, and president of Spill Center, Inc., Hudson, Mass, an environmental claims management company that helps transporters control costs and limit liability arising from accidental releases of hazmat and other regulated materials. He serves as secretary of the CVSA Transportation Security Committee.*

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