Alert 14-15: Lessons from the Elk River Chemical Spill

On Thursday, Jan. 9, 2014, a 48,000-gallon tank at a storage facility about a mile north of the Elk River near Charleston, W.Va., began leaking 4-Methylcyclohexane Methanol (MCHM), a compound used to wash coal of impurities in a process used to create coal for metallurgical purposes. An estimated 5,000 gallons of the chemical reportedly spilled from a hole in the bottom of the tank and began seeping into the Elk River just 1.5 miles upstream of a wastewater treatment plant. As a result, a five-day ban on tap water use was in effect for more than 300,000 residents in nine counties along the Elk River and a state of emergency was declared for the region. Although the site did have a brick and concrete containment dike, it apparently needed repair.

State and federal regulators are currently investigating the causes behind the faulty bulk storage tank. Meanwhile, the Industrial Steel Drum Institute (ISDI) encourages all stakeholders involved in the transportation and storage of hazardous and non-hazardous materials to put safety and security first.

It appears that the storage tank located at the facility in Elk River fell outside the current regulatory scheme designed to protect public health and the environment. It does not appear that the site’s owners and operators were required to inspect the tanks periodically. As a result, they were unaware of the deteriorating conditions that may have contributed to the leak.

Regardless of the cause of the leak, steel drums may have been a better choice to ensure the safe transportation of the material in question. Though lower in capacity, steel drum manufacturers certify their products for conformance with regulations from the U.S. Department of Transportation (DOT). Prior to release for use, every steel drum is 100 percent leak tested, and must undergo compliance testing and periodic retesting. Bearing a U.N./DOT mark ensures that a drum is properly made and provides a high degree of security and safety.

Links for More Information
- For more about the safety and security of steel drums, visit www.whysteeldrums.org/safety-security.
- Read Alert 14-09 to learn more about the required markings for steel drums.
- View ISDI’s press release for more about the organization’s position on this topic.

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