



**2016 CLM Annual Conference**  
**April 6-8, 2016**  
**Orlando, FL**

## **Boom! Catastrophic Explosions: Practical Strategies for Maximizing Recoveries**

### **Discussion Handout**

#### **I. Hypothetical Case Study: Railcar Explosion**

K-Boom Industries, a publicly traded company, operates a cement manufacturing facility in a farming community. K-Boom employs 100 residents of nearby river town, Muskieville. The town is gearing up to host its annual Independence Day large-mouth bass tournament. Muskieville's tournament brings millions of tourism dollars to the community.

K-Boom operates a cement kiln that is also a hazardous waste disposal facility. It accepts flammable hazardous waste liquid solvents from railcar shipments. It then blends the waste with other fuels and burns the blended waste in its kiln to make cement.

Two days before the tournament, K-Boom receives multiple railcars containing flammable, hazardous waste. While two workers were unloading a railcar, a catastrophic explosion occurs, killing one worker and seriously injuring the other.

The concussion from the explosion was felt by the Muskieville residents, many of whom began Tweeting about the loud boom. Anglers who already arrived for the fishing tournament immediately begin warning other tournament participants through Facebook to stay away. The explosion spews thousands of gallons of the toxic waste into the nearby river and water supply. The river carries the waste downstream and pollutes the water supply for local residents and the farming community. Dead bass are seen floating in the river. Aerial views of the river reveal a stark color change in the river water.

Local and regional media descend upon Muskieville, interviewing residents who express concern for K-Boom's safety record. A former, disgruntled employee of K-Boom blogs about the event and paints K-Boom in a negative light. Current employees, while defending K-Boom online, inadvertently spread misinformation about the occurrence. One blogger claims it was a terrorist attack. National media appears and begins asking difficult questions of the company representative, Donte Recall.

K-Boom risk manager, Saul Goodman, notifies the authorities. Within hours, the NTSB, EPA, CDC, CSB, OSHA, and the fire marshal, as well as first responders, take over the scene. They secure the site, restrict access, and demand records from K-Boom.

## Investigation

The investigation reveals that the toxic, hazardous waste contained in the railcar was toluene diisocyanate (TDI), shipped from Wedoncare, a chemical company located in a neighboring state. K-Boom uses TDI as fuel for its cement kiln. The railcar held 20,000 gallons of toxic waste. K-Boom agreed to accept based upon Wedoncare's certified waste composition. K-Boom also relied upon handling instructions from an onsite representative of Wedoncare. While a material safety data sheet (MSDS) was provided for the TDI waste, much of the information Wedoncare gave to K-Boom was inaccurate.

The consistency of the waste varied from railcar to railcar between something like honey and peanut butter. In most cases, the railcar had to be heated with steam for several hours before the waste could easily flow and be unloaded. The subject railcar was difficult to unload. Wedoncare's representative told K-Boom to heat the railcar. The workers did so. **It exploded.**

An investigation was undertaken. The TDI waste material was toxic, and sample analysis of the collected samples indicated the presence of contamination and a composition that was inconsistent with the certified waste profile. The investigation evaluated several hypotheses for generating enough internal pressure to rupture the railcar.

The subrogation-liability theory was that the explosion was caused by over pressurization due to decomposition of a contaminant in the railcar. Wedoncare allegedly failed to provide accurate information regarding the waste, and shipped the waste in a railcar with an inappropriate heating system for unloading.