

## Environmental Chemical Solutions

January 2016

To Whom It May Concern:

As you may know, there is major concern today in the industry regarding benzene litigation. According to the **Casualty Actuarial Society** which evaluates the financial impact of current economic, legal and social trends on future events, benzene litigation is emerging as the new mass tort. Lawsuits against the industry have already resulted in major awards to plaintiffs and the feeling is that this is going to continue growing.

The focus of the litigation surrounds the elevated exposure of an employee to benzene. This exposure can range from a multitude of sources including everything from the manufacturing of lighter fluids to paint. Also included, is the distribution and dispensing of gasoline. For us there is the additional concern of having an employee respond to a spill of gasoline in a retail gasoline operation (RGO) environment that has already been determined as a "Hot Spot" with a higher level of benzene in the ambient air. The short term exposure limit for employees is 5 parts per million (ppm) over a 15 minute period. California's Prop 65 has a 49 parts per billion maximum allowable daily level (MADL). According to the California Air Resources Board report, **Gasoline Service Station Industry-Wide Risk Assessment Guidelines**, there are 3,000 ppm of benzene in gasoline vapor. During a required spill cleanup, this could result in an employee being exposed to 600 times the legal limit set by OSHA. This could put the owners of RGO's squarely in the crosshairs of this landmark benzene litigation.

Due to the increasing momentum surrounding the exposure of employees to benzene, we have conducted several studies to understand the mechanism of FM186-2 and to model the exposure of employees when responding to a gasoline spill while utilizing FM 186-2. First, we looked at the mechanism of the FM/gasoline reaction and then analyzed the air quality surrounding a spill during a response with FM 186-2. The mechanism study clearly demonstrated that the mixture of gasoline and FM186-2 has a short vaporization followed by solubilization which stabilizes the gasoline into the water phase. The next and more important study was designed to examine the exposure of the employee during the response to a spill. Air samples were taken at the South Coast Air Quality Management District (California) regulatory level of 3 inches above the spill. Air samples were analyzed for benzene. All samples fell within the average range of urban outdoor concentrations of benzene.

In order to lend support to our customers in the face of these impending employee lawsuits, we conducted these studies to demonstrate that *by utilizing the vapor suppression properties of FM 186-2, your employees have been trained to protect themselves from elevated exposure to benzene vapors while responding to a gasoline spill.*

The Environmental Chemical Solutions FM 186-2 Program has been used for fuel spill cleanup for over twenty years. It has successfully helped reduce non-point source pollution, reduced the quantity of hazardous waste and protected employees from exposure to toxic fumes.

We highly recommend utilizing Environmental Chemical Solutions' FM 186-2 chemistry or another vapor suppression chemistry when dealing with spill buckets and dispenser sump access. In addition, we recommend that your maintenance people utilize FM 186-2 when replacing fuel filters and entering turbine sump areas. We strongly suggest that you forward a copy of this letter to the proper risk management department so they have this important information and can take appropriate actions prior to the lawsuits that are assuredly going to develop. We are available to discuss updating your training program. The complete studies are also available if needed.

Sincerely,

A handwritten signature in black ink, appearing to read "E. Grubbs", written in a cursive style.

Edward Grubbs, President  
Environmental Chemical Solutions

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