

When disaster strikes, our hearts go out to those affected. When disaster touches our colleagues in the micro distilling industry, the pain hits a little closer to home. “There but for the grace of God go I”.

Recently, two people were badly injured in a micro distillery when ethanol vapors ignited, with explosive force. This was the result of an employee blending vodka with an electric immersion blender, reported ABC news 13 in Houston TX.

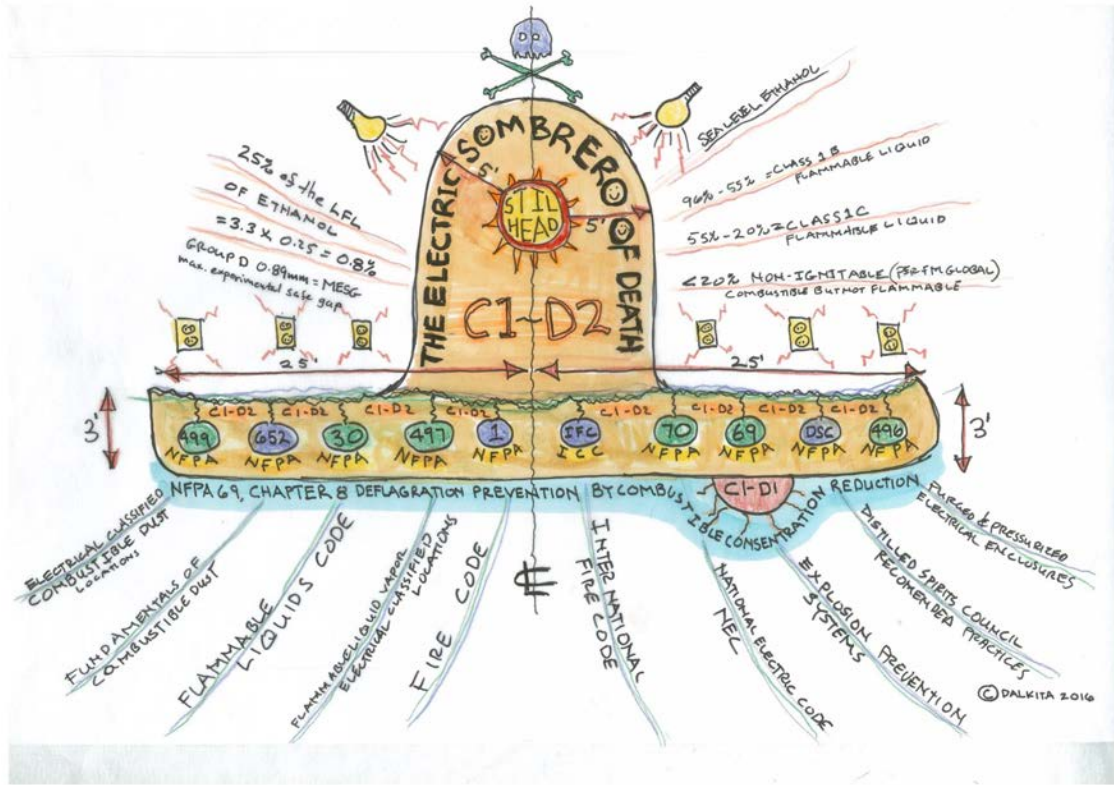
This is not the first time electrical equipment in contact with alcohol vapors has badly burned distillery workers. The image below was taken, during a news conference, just before the vaporized and atomized ethanol spewing from the top of the still were ignited by the fluorescent lights above. We were given the rights to this image by The Oklahoman reporter who took the photograph, provided we would use it to help assure this never happened again.



*Photo courtesy of The Oklahoman*

Notwithstanding the multitude of non-electric related safety faux pas in the above picture, fires involving electrical equipment and ethanol are easily prevented with a little care and knowledge.

1. Never bring non-classified electrics into the “The Electric Sombrero of Death”, better know to code and design professionals as the electrically classified area.



Dalkita will be presenting this topic at the upcoming ADI convention. An hour of your time attending could save a life, perhaps even your own.

2. If it is impossible to keep electrics out of the classified area, take the time to eliminate the classified area by installing a ventilation system that assures ethanol vapors cannot accumulate to greater than 25% of the LFL (Lower Flammable Limit).
3. If ventilation is not available right now, use only intrinsically safe equipment, like as air powered mixers labeled as such. Or, obtain electrical equipment that is rated as explosion proof or for Class 1, Division 2 use above the floor and Class 1, Division 2 below the floor or behind containment walls.

Your safety and the safety of those around you is in your hands. Please, take it seriously. Take the time to understand the rules (and their reasoning) regarding the operation and construction of your distillery. Ignorance of the laws of physics is no excuse.

By: Scott Moore, Architect, Contractor, Distillery Code Expert, and President of Dalkita Architecture and Construction.