

Overflow + Ignition Source = Tank Farm Fire

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This is what can happen when a tank containing a flammable liquid overflows!

What Happened?

Late one evening, a large storage tank containing a flammable liquid began to overflow. It was not detected until a security guard noticed a strong odor. He immediately called the area operations personnel to report his concern. Two operators responded by driving a truck to the area to investigate. Within minutes, there was a loud explosion and fire. (It is believed that their truck provided the ignition source that caused the initial deflagration and ensuing fires.) It took plant and civic personnel a day and a half to extinguish the fires which moved from one tank to the next. More than a dozen employees were hospitalized and there was significant property damage.

How Did it Start?

The tank was being filled but the operators did not know that the level indication **AND** the safety alarm systems had failed. They did not monitor the filling operation closely because they believed that the tank still had plenty of capacity remaining. And, they did not take the security guard seriously or respond promptly when he reported the strong odor since he was new on the job. Like most significant events, a number of things “failed” —all at the same time!

What YOU Can Do

- Transferring flammable liquids is always a risk with potentially significant consequences. Monitor transfers closely so you can detect and respond to spills and leaks early!!!!
- Never drive into a flammable cloud! Vehicles can provide ignition sources—such as a hot engine manifold or muffler. These are often well above the autoignition temperature of many flammables. Remember, if a cloud is ignited by the vehicle you are driving, you will have a front row seat and be the center of the explosion.
- Take every report of an unusual occurrence or odor seriously and respond quickly and thoroughly. *Note: If the engine of the vehicle you are driving begins to rev up on its own, shut it down and get out immediately. You may have driven into a flammable atmosphere.*

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Whenever Flammables are Released, a Fire is Just a Spark Away!

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