

Arkema's Texas plant unprepared for Harvey floods, inquiry finds

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An environment services vehichle enters the main gate of the Arkema plant that received major damage from flooding caused by Hurricane and Tropical Storm Harvey

A US oversight agency said Thursday that a flooded Arkema chemical



plant in Texas, where organic compounds ignited during last year's Hurricane Harvey, was inadequately prepared for a catastrophic flood.

An investigation by the US Chemical Safety Board (CSB) found that the French multinational company's plant outside of Houston relied on the judgment of its employees rather than official flood insurance maps to determine the amount of flood risk it faced.

But the agency added that chemical <u>plants</u> around the country have not received adequate guidance for dealing with major floods.

"The regulations do not specifically identify flood insurance maps and related studies as required process safety information," the CSB said.

Consequently, while Arkema had safety procedures in place for extreme weather, they proved no match for the historic floods that inundated parts of Texas as Hurricane Harvey deluged the region in late August 2017.

"Considering that <u>extreme weather</u> events are likely to increase in number and severity, the <u>chemical</u> industry must be prepared for worst case scenarios at their facilities," CSB Chairwoman Vanessa Sutherland said in a statement.

Arkema's facility in Crosby, Texas had a written <u>hurricane</u> preparedness plan. But the company based that plan "on the collective experience" of the facility's employees, instead of flood zone information compiled by the Federal Emergency Management Agency, the CSB found.

"Employees with decades of plant experience expected light flooding at the facility, but not enough to impair any safety systems," the report said.



As the Houston area flooded, workers at the plant moved volatile organic peroxides to cold storage trailers. The facility was inundated by six feet (1.8 meters) of water and some of the trailers failed, causing chemicals inside to overheat and ignite.

Hundreds of residents in a 1.5-mile radius around the plant were evacuated for a week, and nearly two dozen received medical treatment for exposure to fumes and smoke.

In a statement, Arkema said it was pleased with the report, because it "accurately depicts the unforeseeable nature" of Hurricane Harvey's flooding.

"If the floodwaters had only reached a 500-year <u>flood</u> level, the incident likely would have been prevented based on Arkema's existing policies and procedures," the company said.

Hurricane Harvey killed at least 68 people and flooded 300,000 structures in the Houston area, forcing some 40,000 people to flee their homes.

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