

Refinery fire shows need for new rules

Rafael Moure-Eraso and Gayle McLaughlin

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In the wake of the 2012 Chevron refinery fire and a series of incidents at similar facilities across the country, it is clear to us that there is a refinery safety problem in America. We believe it poses a serious threat to the nation's energy supply, our economy and our security. We should no longer be satisfied with the U.S. regulatory system or even California's modified system. It is time for sweeping change.

The [U.S. Chemical Safety Board](#) has found recurring safety failures at refineries across the country in the past decade. In 2012 alone, 125 significant process safety accidents were tracked - 17 in California. The accidents, which involved spills, vapor releases, explosions and fires, are often a result of aging plant equipment being run to failure. Potential hazards are overlooked or undiscovered. Regulators lack the resources to conduct comprehensive inspections prior to an accident.

The safety board investigative team well documented these failures in a 100-page report presented at a public meeting in Richmond last week. Although the board passed a motion to delay consideration of this report, neither of us is willing to wait while workers are at risk of dying.

As we work to determine the best way forward, we would like to re-emphasize our commitment to the substance of the report and its recommendations.

The recommendations called on California to adopt the safety-case model that is so successful in Europe, where refineries suffer one-third the insurance accident losses of their American counterparts. We both support the safety-case model, as do many residents and stakeholders in the Bay Area. It provides a way for Richmond, the Bay Area and the state to work together - residents, workers and company representatives - to ensure refineries are operating at the safest practicable level.

The huge fire that erupted at Chevron's Richmond refinery was a result of the rupture of uninspected piping that had been corroding over many years. Its failure almost killed or injured 19 workers. It sent more than 15,000 residents to the hospital for medical attention from possible exposure to the plume of vapor and smoke released from the refinery.

The safety board report details how safety-case regulation, as opposed to the U.S. system of regulation, would have required Chevron to replace the piping with corrosion-resistant materials, thus avoiding the catastrophe. The U.S. system involves myriad standards and regulations promulgated by the federal [Occupational Safety and Health Administration](#) and the Environmental Protection Agency and their state counterparts. It is largely static, mainly responding to accidents or complaints rather than seeking to prevent them. This system is not working to protect workers and the public.

The safety-case system - as practiced successfully in the United Kingdom, Norway and Australia, and also in the United States by the [Nuclear Regulatory Commission](#) and NASA, requires companies to draw up a written "case" demonstrating how they plan to control major hazards and how they will reduce risks to "as low as reasonably practicable."

They must identify all the modern safety standards and technical practices they will use, and upon acceptance of the safety case by the regulator, companies are bound by law to do what they have promised.

This is fundamentally different from the U.S. system, which compels industrial facilities to simply conduct specified safety activities rather than setting enforceable goals for risk reduction. If regulators don't agree that the safety case has been made, they can refuse to let the refinery or chemical plant operate. In the United States, plants have a default right to operate even without detailing their safety measures.

California already has authorized additional technical inspectors and a plan to step up refinery inspections at Chevron's Richmond refinery. We support California's reform efforts and look forward to working with the state on implementation of the safety-case regime. If officials and members of the public join forces to effect and support this change, our communities can lead the way in assuring refinery safety and serving as a model for the nation.

Rafael Moure-Eraso is the chairperson of the U.S. Chemical Safety Board. Gayle McLaughlin is the mayor of Richmond.