



A Paradigm Shift in Reporting Accidental Releases

How will the CSB's new Accidental Releases Reporting Rule affect you?

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A new rule from the U.S. Chemical Safety Board (CSB) (40 CFR Part 1604) represents a paradigm shift in reporting accidental releases of regulated or other extremely hazardous substances. Unlike previous federal laws, the March 2020 rule is based on the impact of the release rather than a minimum threshold quantity.

Under the new rule, owners or operators of facilities, equipment, or installations are required to report to the CSB any accidental releases of regulated or extremely hazardous substances into the air inside or outside a facility (ambient air) that have caused a fatality, injury, or substantial property damage. Failure to report a release within eight hours could result in penalties and civil or criminal action by the U.S. Environmental Protection Agency (EPA).

Now that the one-year grace period has ended and the rule is in full effect, uncertainty about how it might be interpreted and applied is just beginning to be addressed. How can facility owners, operators, and other stakeholders be prepared to complete a formal report within eight hours if an incident triggers the new rule's reporting requirement?

The Changing Landscape of Reporting Requirements

In the past, reporting requirements imposed a minimum release quantity that triggered a reporting requirement. Under the new rule, if the release has caused death, serious injury (inpatient hospitalization), or property damage over \$1 million (including loss of use), it must be reported even if the quantity released is below existing reportable thresholds in other regulations, including 40 CFR 68 (EPA) or 29 CFR 1910.119 (OSHA).

If the release triggers the CSB's Accidental Release Reporting Rule requirements and the quantity is also above the reportable thresholds in other regulations, it must be reported to both the National Response Center (NRC) and the CSB, creating an additional reporting

requirement. Earlier this month, the CSB updated their website with instructions and a template for reporting releases.

Reading Between the Lines: The New Rule's Ambiguity

While it is clear the new rule will increase reporting requirements, other parts of the rule appear somewhat ambiguous and open to interpretation. For instance, the triggering threshold for property damage might cause some confusion, especially because the definition includes loss of use. How should the cost of the damage be computed? For a fire or explosion, the answer might be relatively simple. However, for releases that require evacuation of adjacent homes, the economic impact associated with loss of use might not be readily apparent.

Another potential challenge is the timing of the reporting. An owner or operator must file an initial report to the CSB within eight hours of the release; however, property damage may not be apparent within the eight-hour threshold. Other areas of ambiguity include terminology. For example, the term "extremely hazardous substance" appears to be a catchall for any material that has the potential to cause death, serious injury, or property damage if released into ambient air.

Also, while the rule appears to apply only to releases into ambient air, what about spills of volatile liquids? The U.S. Department of Energy has taken the position that diesel spills into waterways are not covered under this rule. However, more volatile liquids (for example liquified natural gas) will inevitably evaporate rapidly.

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If the disruption caused by the spill of a volatile liquid has an economic impact greater than \$1 million, will the CSB consider the spill reportable?

What Can You Do: Prepare Early

As the CSB increases their desktop reviews of hazardous incidents and begins to receive new reports, they could request internal investigation reports for events they choose to review in more detail. As a result, many owners or operators may need to complete their failure investigation and finalize a formal report in a relatively short period: within eight hours of the release (with a 30-day window to issue a revision and an additional 60 days to submit an updated report).

If operators and owners do not act quickly to correctly identify and then report accidental releases, this new rule empowers the CSB to refer suspected violations of the reporting requirement to EPA. Given the short reporting timeframe, it may be prudent to formally investigate and document all releases of hazardous chemicals to the atmosphere. Owners and operators can also reduce the likelihood of a reportable release by inspecting and monitoring their equipment pursuant to a comprehensive and asset-specific inspection, testing, and preventative maintenance (ITPM) program.

How Exponent Can Help

Exponent's mechanical, chemical, and electrical engineers, materials and corrosion scientists, and atmospheric dispersion/air modelers can assist clients with evaluating chemical releases and identifying and

mitigating potential equipment deficiencies that might be susceptible to future releases. Our investigations are customized for each incident and may include assessing where and why the release occurred; documenting the equipment or part that failed; identifying, preserving, and examining failed components; evaluating the quantity of hazardous materials released into ambient air; modelling the atmospheric dispersion and plume to evaluate the impact of the release; performing a root-cause analysis; and developing solutions to prevent a recurrence.



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