

As Hurricane Season Begins:
A Reminder to Minimize
Process Shutdown Related Releases
and to Report Releases In a Timely
Manner

Introduction

The onset of a hurricane is predictable and, as a result, lends itself to early preparations for minimizing its effect on a facility. Before hurricane force winds and associated storm surge flooding can damage industrial processes and cause uncontrolled releases of hazardous chemicals, owners/operators typically take prudent preventive action by safely shutting down processes (i.e., de-energize or isolate process equipment) or otherwise operate under emergency operations procedures, as was widely performed in preparations for Hurricane Katrina.

For complex industrial processes, shutdown operations require special care beyond normal operations. Process shutdown often involves numerous simultaneous activities and rapidly changing process conditions. Normally automated systems or process controls may be bypassed, disconnected, or under manual control. Of particular concern are the hazards associated with the additional human/process interactions required during shutdown operations, as process parameters may be in unusual ranges and operators may have less experience controlling plant conditions during a shutdown.

EPA reminds owners/operators that various laws and regulations require that they *minimize chemical releases during process shutdown operations; and if reportable releases occur, they*

must be reported immediately upon constructive knowledge of occurrence.

Release Minimization Requirements

The Clean Air Act (CAA) Section 112(r)(1), 42 U.S.C. 7412(r)(1), establishes that owners/operators have a general duty to prevent accidental releases of certain listed substances and other extremely hazardous substances and to minimize the consequences of accidental releases which do occur (see 40 C.F.R. Section 68.130 for the list of substances). This duty involves assessing the potential hazards of such releases, designing and maintaining a safe facility, and taking such steps as are necessary to prevent accidental releases and minimize their consequences.

Also, facilities subject to the national emission standards for hazardous air pollutants general duty clause, 40 C.F.R. Section 63.6 (e)(1)(i), are required at all times, including periods of startup, shutdown and malfunction, to operate and maintain any affected source in a manner consistent with safety and good air pollution control practices for minimizing emissions of hazardous air pollutants.

Reporting Requirements

Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended, 42 U.S.C. 9603 *et seq.*, requires facilities to immediately notify the National Response Center (NRC) of any release of a hazardous substance in an amount equal to or greater than the reportable quantity (RQ) for that substance.

Section 304 of the Emergency Planning and Community Right-to-Know Act (EPCRA) also requires owners/operators to immediately notify both their respective State Emergency Response Commissions (SERCs) and Local Emergency Planning Committees (LEPCs) whenever their facility has released an RQ of a CERCLA hazardous substance or an EPCRA extremely hazardous substance (EHS).

Federally Permitted Releases to Air

The federally permitted release exemption for RQ reporting requirements may apply to certain air emissions when such emissions are subject to a permit or control regulation issued pursuant to the CAA Sections 111 and 112, Title I part C, Title I part D or Section 110 State Implementation Plans.

CAA permit limits and control regulations usually do not control or limit unanticipated releases such as accidents or malfunctions. For that reason, such releases generally do not qualify for the CERCLA Section 101(10)(H) federally permitted release exemption.

Stationary sources subject to a CAA regulation that limits their total annual emissions should generally report their RQ releases that are caused by accidents, malfunctions, un-anticipated releases and other releases that are not part of the facility's normal operations.

Additionally, if a release of a hazardous substance is not subject to CAA emission limits or other emission controls during the startup or shutdown of an operation, then such uncontrolled release usually does not qualify for the

federally permitted release exemption and the owner/operator normally would have to comply with CERCLA and EPCRA notification requirements.

In all cases, each facility is responsible for determining whether its releases in excess of an RQ qualify for the federally permitted notification exemption.

Continuous Releases

Continuous release reporting refers to the provisions under CERCLA Section 103 (f)(2) which allows certain facilities the qualified exemption of RQ release notification requirements. In general, a continuous release is a release that is "stable in quantity and rate" (e.g., occurs without interruption or abatement, or that is routine, anticipated, and intermittent and incidental to normal operations or treatment processes). Shutdown operations associated with hazardous weather conditions normally would be considered random, non-routine events. Thus, RQ releases caused by hazardous weather induced process shutdown operations typically cannot be reported as amendments/updates to prior continuous release reports.

Operate Safely and Report Timely

Owners/operators should at all times operate and maintain safe facilities. EPA encourages all industry sectors to review their operational events during shutdown operations related to previous hazardous weather events, and make appropriate administrative/procedural, operational/process equipment and hardware/software safety improvements.

On a continuous basis, emergency contact information should be updated and reported to LEPCs for local response purposes. As well, to enhance federal response effectiveness, stationary sources subject to the CAA Section 112 (r)(7) Risk Management Program should continuously update and report current emergency contact information in section 1.8 of their Risk Management Plans [40 C.F.R. Section 68.160(a)(6)]. Also, owners/operators should consider the operability issues for land based or cell phone services during hazardous weather events. If the probability of operational failure is high, emergency contact numbers should be satellite service based.

Facilities that experience process shutdown-related or hazardous weather-induced releases, spills or discharges into the environment should contact the NRC, and appropriate SERC and LEPC, immediately upon having constructive knowledge that such releases, spills or discharges exceed applicable reportable quantities.

The NRC serves as the Federal Government's point of contact for reporting all oil, chemical, radiological and biological releases in the United States. ***The NRC operates continuously and can be contacted at (800) 424-8802 or (202) 267-2675.***

The NRC notifies EPA's response personnel of release reports. This information is critical to EPA's ability to coordinate with SERCs and LEPCs; and determine what actions are necessary, if any, to protect human health and the environment.

This Alert does not constitute a release or waiver of federal or state regulatory requirements, whether required by statute, regulation or permit, that otherwise applies to operational or shutdown procedures.