

Reporting Ammonia Releases

It is often confusing and even stressful to navigate the requirement for reporting ammonia releases to government agencies. In an attempt to make sense of the requirements, we have prepared answers to commonly asked questions related to reporting releases.

What laws govern release reporting?

At the Federal level, there are two primary EPA regulations that govern release reporting of hazardous materials:

- [Comprehensive Environmental Reporting and Compensation Act \(CERCLA\)](#)
- [Emergency Planning and Community Right To Know Action \(EPCRA\)](#)

In general, CERCLA (also known as Superfund) was enacted to ensure that hazardous material spills are properly reported so that they can be cleaned. EPCRA, on the other hand, requires reporting of releases that have the potential to impact the community outside the boundary of the facility.

California enacted the [Health and Safety Code §25550-25519](#) “in order to protect the public health and safety and the environment”. [CA H&SC §25510](#) addresses the topic of release notifications. The [OES website](#) contains a variety of helpful resources for facilities located in California.

What is the definition of a “release”?

Both California and Federal law define a release in similar terms:

[Title 40 CFR §302.3](#) states that a “release means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment”. The definition includes four exclusions, one of which is stated as follows “any release which results in exposure to persons solely within a workplace, with respect to a claim which such persons may assert against the employer of such persons.”

[CA H&SC §25501\(p\)](#) states that “‘Release’ means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment, unless permitted or authorized by a regulatory agency.”

What is the reportable quantity for an ammonia release?

According to Federal law ([Title 40 CFR §302.4\(a\)](#) and [Title 40 CFR §355 Appendix A](#)), the reportable quantity for an ammonia release is 100 lb within a 24-hour period ([Title 40 CFR §302.6\(a\)](#)).

In California, release reporting is not required on the basis of a threshold quantity. Rather, any release or threatened release must be reported. [CA H&SC §25510\(a\)](#) requires that a facility must “immediately report any release or threatened release of a hazardous material to the unified program agency, and to the office [Office of Emergency Services], in accordance with the regulations adopted pursuant to this section.”

California is still finalizing its release reporting regulation. The proposed regulation is available for review at the [OES website](#).

If no one outside of my facility notices the release, do I still have to report it?

According to EPCRA ([Title 40 CFR §355.40\(a\)\(2\)](#)), notification is not required for “any release which results in exposure to persons solely within the boundaries of the facility”. However, bear in mind that in regards to a vapor release (e.g. ammonia), it can be difficult to ascertain where the chemical traveled after being released. In addition, there is no such exemption in California H&SC. For these reasons, it is recommended that most ammonia releases be reported.

How do I determine the quantity of ammonia that has been released?

Determining the quantity released can be very difficult and often requires hours of engineering analysis. The release calculation is affected by many variables – leak duration, pressure, size of opening, ambient weather conditions, etc. Many resources exist to assist in estimating the quantity of ammonia released. One of the best is [Dow's Chemical Exposure Index Guide, 1st Edition](#), which is a must-have for a person desiring to learn more about calculating chemical releases. Typically, the quantity released will not be known at the time of release, so the decision to report or not must be made prior to determining the quantity that was lost.

Which authorities must I notify?

Federal regulation requires ammonia releases over 100 lb to be reported to the National Response Center ([Title 40 CFR §302.6\(a\)](#)). Additionally, all releases must be reported to the local emergency planning committee (LEPC) and State emergency response commission (SERC) ([Title 40 CFR §355.40\(b\)\(1\)](#)). In California, releases must also be reported to the local Certified Unified Program Agency (CUPA) ([CA H&SC §25510\(a\)](#))

To summarize, ammonia releases in California must be reported to the following agencies:

- Local Emergency Responder - 911
- National Response Center (NRC) (if over 100 lb) – 1 (800) 424-8802
- State Office of Emergency Services (OES) – 1 (800) 852-7550
- Certified Unified Program Agency (CUPA) – Phone number varies by location

[California Hazardous Materials Spill / Release Notification Guidance](#) lists several other agencies that may need to be notified, depending on the release circumstances. These agencies include:

- **United States Coast Guard** - Waterway Spill / Release Sectors
- **California Occupational Safety and Health Administration (Cal/OSHA)** - For serious injuries or harmful exposures to workers, contact the local Cal/OSHA District Office
- **California Department of Health Services, Radiological Health Branch** - All radiological incidents, contact the California State Warning Center
- **Department of Toxic Substances Control (DTSC)** - Hazardous waste tank system releases, and secondary containment releases, contact the appropriate DTSC Regional Office
- **Department of Conservation Division of Oil, Gas, and Geothermal Resources (DOG GR)** - Release of Oil and Gas at a Drilling and Production Facility, contact the appropriate DOGGR Office
- **Public Utilities** - Natural Gas Pipeline Releases, contact the Public Utilities Commission (PUC)
- **Department of Fish and Wildlife, Office of Spill Prevention and Response (DFW)** - Waterway Spill/Release, contact the appropriate DFW Office or the California State Warning Center
- **Regional Water Quality Control Board (RWQCB)** - Waterway Spill/Release, contact the appropriate RWQCB Office

California Office of Emergency Services (OES) has developed [a helpful matrix](#) to explain the release reporting requirements for various types of releases.

How much time do I have to notify authorities?

Chemical releases subject to notification requirements must be reported *immediately*. EPA has demonstrated by precedent that “immediately” has been interpreted to mean “*within 15 minutes*”. Some [EPA publications](#) have even listed 15 minutes as the requirement. In regards to the time allowed to report releases, California and Federal law are written as follows (emphasis mine):

- [Title 40 CFR §355.40\(b\)\(1\)](#) requires that “*The owner or operator of a facility subject to this section shall **immediately** notify the community emergency coordinator for the local emergency planning committee of any area likely to be affected by the release and the State emergency response commission of any State likely to be affected by the release. If there is no local emergency planning committee, notification shall be provided under this section to relevant local emergency response personnel.*”
- [Title 40 CFR §302.6\(a\)](#) requires that “*Any person in charge of a vessel or an offshore or an onshore facility shall, **as soon as he has knowledge of** any release (other than a federally permitted release or application of a pesticide) of a hazardous substance from such vessel or facility in a quantity equal to or exceeding the reportable quantity determined by this part in any 24-hour period, immediately notify the National Response Center ((800) 424–8802; in Washington, DC (202) 426– 2675)”*
- [CA H&SC §25510\(a\)](#) requires that “*the handler or an employee, authorized representative, agent, or designee of a handler, shall, upon discovery, **immediately** report any release or threatened release of a hazardous material to the unified program agency, and to the office, in accordance with the regulations adopted pursuant to this section. The handler or an employee, authorized representative, agent, or designee of the handler shall provide all state, city, or county fire or public health or safety personnel and emergency response personnel with access to the handler's facilities.*”

Whose responsibility is it make the proper notifications?

[Title 40 CFR §355.40\(b\)](#) places the responsibility for notification on “*the owner or operator of a facility*”. Similarly, [Title 40 CFR §302.6\(a\)](#) requires “*any person in charge of a vessel or an offshore or an onshore facility*” to notify the National Response Center in the event of a release. [CA H&SC §25510\(a\)](#) requires that “*the handler or an employee, authorized representative, agent, or designee of a handler, shall, upon discovery, immediately report any release or threatened release of a hazardous material...*”

While the law places the responsibility for notification on the owner/operator of the facility, it also allows flexibility for that responsibility to be delegated to an “*authorized representative*” such as a contractor or consultant.

What questions will I be asked when making notifications?

When making release notifications, be prepared to have the following information available ([Title 40 CFR §355.40\(b\)\(2\)](#)):

- The chemical name or identity of any substance involved in the release.
- An indication of whether the substance is an extremely hazardous substance.
- An estimate of the quantity of any such substance that was released into the environment.
- The time and duration of the release.
- The medium or media into which the release occurred.
- Any known or anticipated acute or chronic health risks associated with the emergency and, where appropriate, advice regarding medical attention necessary for exposed individuals.
- Proper precautions to take as a result of the release, including evacuation (unless such information is readily available to the community emergency coordination pursuant to the emergency plan).
- The names and telephone number of the person or persons to be contacted for further information.

In addition, EPA has prepared a [list of information](#) that will be requested by the National Response Center when notification is made:

- Your name, location, organization, and telephone number
- Name and address of the party responsible for the incident; or name of the carrier or vessel, the railcar/truck number, or other identifying information
- Date and time of the incident
- Location of the incident
- Source and cause of the release or spill
- Types of material(s) released or spilled
- Quantity of materials released or spilled
- Medium (e.g. land, water) affected by release or spill
- Danger or threat posed by the release or spill
- Number and types of injuries or fatalities (if any)
- Weather conditions at the incident location
- Whether an evacuation has occurred
- Other agencies notified or about to be notified
- Any other information that may help emergency personnel respond to the incident

In most instances, exact answers to all of the questions will not be known at the time of the call. If that is the case, it is recommended that you inform the agency that the information has not yet been determined and that you will call them back when it is available. The National Response Center and State Office of Emergency Services assigns a case number to each phone call that they receive. It is important that you record the case number so that as more information becomes available, you can call back to update what was originally provided.

What should I expect after making notifications?

Once notifications have been made, you must be prepared for follow up phone calls and inspections from regulatory agencies. Depending on the seriousness of the incident, a wide variety of government agencies may inspect your facility – OSHA, EPA, CUPA, and other local agencies. Both EPA and California OES require a [written follow-up emergency notice](#) to be submitted to the agency as soon as practicable after the release ([Title 40 CFR §355.40\(b\)](#)).

What are the implications if I don't make proper notifications?

EPA has developed a helpful [FAQ section](#) in their website that answers this exact question.

“Failure to comply with the CERCLA section 103 notification requirements may result in fines, per offense, of up to \$500,000 and prison sentences of up to three years (or up to five years for second and subsequent convictions). A person in charge of a vessel or facility with knowledge of a reportable release who fails to report the release immediately, or who submits information that he or she knows is false and misleading, is subject to these penalties. Section 325(b) of the Emergency Planning and Community Right-to-Know Act (EPCRA) establishes criminal penalties, per offense, of up to \$25,000 and prison sentences of up to two years (or up to \$50,000 and five years for second and subsequent convictions) for violations of EPCRA section 304 notification requirements.

CERCLA section 109 and EPCRA section 325 also authorize administrative penalties enforced through civil proceedings. There are two classes of administrative penalties: Class I penalties of up to \$25,000 per violation and Class II penalties, which are assessed according to section 554 of the Administrative Procedure Act (which requires a formal hearing), of up to \$25,000 per day of a continuing violation, or \$75,000 per day for subsequent violations. The Agency may also impose Class II penalties by bringing action in the appropriate U.S. district court.”

[CA H&SC §25515.3](#) warns that in addition to facing penalties for not reporting, they may also be required to pay for the cost of responding to a release:

“A person or business that violates Section 25510 shall, upon conviction, be punished by a fine of not more than twenty-five thousand dollars (\$25,000) for each day of violation, by imprisonment in a county jail for not more than one year, or by both the fine and imprisonment. If the conviction is for a violation committed after a first conviction under this section, the person shall be punished by a fine of not less than two thousand dollars (\$2,000) or more than fifty thousand dollars (\$50,000) per day of violation, by imprisonment pursuant to subdivision (h) of Section 1170 of the Penal Code for 16, 20, or 24 months or in a county jail for not more than one year, or by both the fine and imprisonment. Furthermore, if the violation results in, or significantly contributes to, an emergency, including a fire, to which the county or city is required to respond, the person shall also be assessed the full cost of the county or city emergency response, as well as the cost of cleaning up and disposing of the hazardous materials.”

What if I notice a “small leak” that has been occurring for a long period of time?

Typically, “small leaks” do not have to be reported. The basis for this allowance is as follows:

- If the release resulted in less than 100 lb being lost in a 24-hr period, it is not subject to the EPCRA and CERCLA release reporting requirements.
- In California, many CUPAs do not require or desire incidental releases (valve packing glands, shaft seals, etc.) to be reported.

OSHA’s HAZWOPER regulation ([Title 8 CCR §5192\(a\)](#) and [Title 29 CFR §1910.120\(a\)\(3\)](#)) distinguishes between incidental and emergency response events. OSHA defines each as follows:

- **Incidental release:** *An incidental release is one that does not cause a health or safety hazard to employees and does not need to be cleaned up immediately to prevent death or serious injury to employees.*
- **Emergency response, or responding to emergencies:** *A response effort by employees from outside the immediate release area or by other designated responders (i.e., mutual aid groups, local fire departments, etc.) to an occurrence which results, or is likely to result, in an uncontrolled release, which may cause high levels of exposure to toxic substances, or which poses danger to employees requiring immediate attention. Responses to incidental releases of hazardous substances where the substance can be absorbed, neutralized, or otherwise controlled at the time of release by employees in the immediate release area, or by maintenance personnel are not considered to be emergency responses within the scope of this standard. Responses to releases of hazardous substances where there is no immediate safety or health hazard (i.e., fire, explosion, or chemical exposure) are not considered to be emergency responses.*

While there is no direct correlation between OSHA’s HAZWOPER regulation and CERCLA/EPCRA, it can be helpful to classify releases as incidental or emergency response. In California, communication with the CUPA is critical. It is important to clearly discuss your release reporting strategy with your local CUPA so that you understand their expectations.