



CWA HAZARDOUS SUBSTANCE FACILITY RESPONSE PLANS

INTRODUCTION/BACKGROUND

On March 14, 2024, the Environmental Protection Agency (EPA) issued a final rule requiring certain facilities to develop facility response plans (FRP) for worst-case discharges of Clean Water Act (CWA) hazardous substances. The EPA defines a worst-case discharge as, “**the largest foreseeable discharge in adverse weather conditions, including extreme weather conditions due to climate change.**” The rule applies to facilities that could potentially cause substantial harm to the environment through a discharge of a CWA hazardous substance.

RULE APPLICABILITY

Facilities affected by the new rule may be identified through a **self-identification process**, or the **EPA may assess facilities on a case-by-case basis**. **Self-Identification Process** screening criteria:

- **Maximum onsite quantity of CWA hazardous substance that meets or exceeds 1,000 times the Reportable Quantity (see 40 CFR 117.3) [threshold amount]; and**
- **Within 0.5-mile of navigable water or a conveyance to navigable water**

Threshold determinations must include **the entire amount of a CWA substance present** at the facility in aggregate, regardless of container size or capacity and includes rail cars and/or other mobile containers not under active shipping papers. Mixtures must be evaluated per the mixture rule to determine the amount of CWA hazardous substance present.

Certain exemptions are allowed for counting purposes in determining if a facility meets threshold amounts:

- *Regulated underground storage tanks (UST)*
- *Articles - manufactured item formed to a specific shape/design during manufacture, has end use functions dependent upon the shape or design, and does not release or otherwise result in exposure to a CWA hazardous substance under normal conditions of processing and use*
- *Uses – substances in use for structural components of the facility, janitorial maintenance, or employee food/drugs/cosmetics/other personal items*
- *CWA hazardous substance present in process or non-contact cooling water as drawn from the environment or municipal sources*
- *Wastewater treated by a POTW with a NPDES permit*
- *Use of CWA hazardous substances present either air used as compressed air or as part of combustion*
- *Retail and personal uses. Use for personal, family, or household purposes, or present in the same form and concentration as a product packaged for distribution and use by the general public*
- *RCRA hazardous waste – storage or accumulation*

SUBSTANTIAL HARM CERTIFICATION FORM

If the above screening criteria are met, a facility must prepare a **Substantial Harm Certification Form** to document the evaluation of the substantial harm criteria. The form must include all calculations and documentation supporting the evaluation of the criteria and potential receptors that could be impacted by a CWA hazardous substance release.

RULE HISTORY

In 1994, EPA promulgated regulations for facility response plans for worst-case discharges of oil under 40 CFR part 112, subpart D. Section 311(j)(5) of the CWA directs a facility to prepare and submit a plan for responding, to the maximum extent practicable, to a worst-case discharge, of oil or a hazardous substance. In 2019, a suit was filed alleging EPA had violated the CWA by failing to promulgate regulations requiring facility response plans for worst-case discharges of Clean Water Act hazardous substances. The plaintiffs requested an order from the Court to compel EPA to promulgate CWA Hazardous Substance Worst Case Discharge Planning Regulations. A consent decree was entered in 2020, which required EPA to issue a proposed rulemaking action within two years and to promulgate a final action within 30 months subsequent to the proposal. EPA published a proposed rule on March 28, 2022.

SUBSTANTIAL HARM CRITERIA

The EPA developed criteria to determine if a facility has the potential to cause substantial harm to a downstream sensitive environment in the event of a worst-case discharge of a CWA hazardous substance. Once the screening criteria are met, the facility must conduct an evaluation of the four substantial harm criteria and if any are met, must prepare an FRP. Evaluation of the substantial harm criteria is completed by evaluating the potential for the worst-case discharge (WCD), or *aqueous form of the WCD*, to cause injury¹ to sensitive environments located within the **calculated planning distance**.

PLANNING DISTANCES

Facilities must calculate distances to endpoints, for each CWA hazardous substance at the facility above a threshold, based on overland and water transport factors identified in the rule and properties of the substance released. Distances are to be calculated by modeling fate and transport following a WCD. While the rule identifies natural disasters and potential extreme weather situations as WCD scenarios to consider, modeling may need to include various flow conditions to evaluate arrival time, concentration, and duration of exposure from a potential discharge to a sensitive area to be able to determine the potential for injury. For example, some discharges in low flow conditions may result in higher peak concentrations and greater potential for injury than discharges during large storm events with high flow conditions. All calculations and/or modeling must be included with the Substantial Harm Certification Form submittal to the Regional Authority.

1. FISH, WILDLIFE, AND SENSITIVE ENVIRONMENTS (FWSE)

Facilities must evaluate potential impacts to FWSE identified in the Area Contingency Plan. Once the planning distance calculations are completed, the concentration results are compared to the parameters and toxic endpoints identified in the rule to determine the potential for injury to the identified FWSEs.

2. PUBLIC WATER SYSTEMS (PWS)

Facilities are required to evaluate potential impacts to PWS with the assistance of the PWS operator, if possible. EPA has established five criteria that must be evaluated with regard to PWS. These include evaluation of the potential for the WCD, or aqueous form of the WCD to cause a(n):

- Violation of the National Drinking Water Standard (NDWS) or a State Drinking Water Standard (SDWS)
- Compromise the ability of the PWS to produce water compliant with a NDWS or a SDWS
- Health impacts to users exposed to a maximum concentration in distribution system
- Contaminate the PWS infrastructure to a degree that requires remediation
- Impair taste, odor, or other aesthetic characteristics of the water entering the system

If these parameters cannot be evaluated with the assistance of the PWS owner, it must be documented in the substantial harm certification.

¹ Injury is defined as a “measurable adverse change, either long- or short-term, in the chemical or physical quality or the viability of a natural resource or public receptor resulting either directly or indirectly from exposure to a discharge, or exposure to a product of reactions (e.g., more hazardous degradation products, ignition, or reaction) resulting from a discharge.”



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3. PUBLIC RECEPTORS

Facilities must evaluate the potential for the WCD, or aqueous form of the WCD, to cause injury to public receptors. Public receptors are defined as parks, recreational areas, docks, or other public spaces inhabited, occupied, or used by the public at any time where members of the public could be injured. Similar to the evaluation of FWSE, the concentration results are compared to the parameters and toxic endpoints

identified in the rule to determine the potential for injury to identified public receptors.

4. REPORTABLE DISCHARGE HISTORY

Facilities with a reportable quantity discharge to waters of the state or adjacent shorelines within the past five years are considered a substantial harm facility.

FACILITY RESPONSE PLANNING

If the screening criteria and one or more substantial harm criteria are met, a facility must prepare a **facility response plan**. FRPs will detail a WCD scenario and response plan for each chemical onsite that exceeds a threshold quantity. The regulation requires a detailed hazard analysis for each CWA hazardous chemical of concern and documentation of adequate containment measures. Response personnel, equipment, and actions (both facility and contracted) must be identified. A personnel training program, plan drill/exercise program, and facility self-inspection protocol must be identified. In an effort to keep local leaders informed and ensure responses proceed smoothly, facilities are required to coordinate with Local Emergency Planning Committees (LEPCs) at least annually.

SUBMITTALS

Existing facilities meeting the screening criteria must prepare and submit a Substantial Harm Certification Form to the Regional Authority (EPA) by June 1, 2027. The form includes all calculations and modeling related to planning distances and evaluations of the substantial harm criteria. Facilities are required to **review and resubmit the Substantial Harm Certification Form every five years or within 60 days of a change that impacts the potential to cause substantial harm**. Facilities meeting the screening criteria and one or more substantial harm criteria must prepare and submit a Substantial Harm Certification Form and Facility Response Plan to the Regional Authority (EPA) by June 1, 2027.

NEXT STEPS

Interpreting and implementing new regulations can be challenging. Although the rule and guidance are subject to change, it may be beneficial to start reviewing your operations early. Providence can help you with this evaluation and potential implementation of the new regulations, whatever your needs for may be. Providence has experience with regulatory analyses and response planning. Give us a call today.

SOURCES

[Federal Register :: Clean Water Act Hazardous Substance Facility Response Plans](#)

<https://www.epa.gov/hazardous-substance-spills-planning-regulations/final-rulemaking-clean-water-act-hazardous>