

PREPUBLICATION NOTICE

The EPA Administrator, Michael Regan, signed the following Federal Register document on March 10, 2022:

Title: Clean Water Act Hazardous Substance Worst Case Discharge Planning Regulations

Action: Proposed Rule

Docket No.: EPA-HQ-OLEM-2021-0585

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 118 and 300

[EPA-HQ-OLEM-2021-0585; FRL-7881-02-OLEM]

RIN 2050-AH17

Clean Water Act Hazardous Substance Worst Case Discharge Planning Regulations

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule

SUMMARY: The Clean Water Act (CWA) states that regulations shall be issued which require an owner or operator of a facility to prepare and submit a plan for responding, to the maximum extent practicable, to a worst case discharge, and to a substantial threat of such a discharge, of a hazardous substance. The Environmental Protection Agency (EPA or Agency) proposes to require planning for worst case discharges of CWA hazardous substances for onshore non-transportation-related facilities that could reasonably be expected to cause substantial harm to the environment by discharging CWA hazardous substances into or on the navigable waters, adjoining shorelines, or exclusive economic zone.

DATES: Comments must be received on or before **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: You may send comments, identified by Docket ID No. EPA-HQ-OLEM-2021-0585, by any of the following methods:

- Federal eRulemaking Portal: <https://www.regulations.gov/> (our preferred method). Follow the online instructions for submitting comments.

- Mail: U.S. Environmental Protection Agency, EPA Docket Center, EPA-HQ-OLEM-2021-0585 Docket, Mail Code 28221T, 1200 Pennsylvania Avenue NW, Washington, DC 20460.

- Hand delivery or courier (by scheduled appointment only): EPA Docket Center, WJC West Building, Room 3334, 1301 Constitution Avenue, NW, Washington, DC 20004. The Docket Center's hours of operations are 8:30 a.m. to 4:30 p.m., Monday through Friday (except Federal holidays).

Instructions: All submissions received must include the Docket ID No. for this rulemaking.

Comments received may be posted without change to <https://www.regulations.gov/>, including any personal information provided. For detailed instructions on sending comments and additional information on the rulemaking process, see the "Public Participation" heading of the SUPPLEMENTARY INFORMATION section of this document. Out of an abundance of caution for members of the public and our staff, the EPA Docket Center and Reading Room are open to the public by appointment only to reduce the risk of transmitting COVID-19. Our Docket Center staff also continues to provide remote customer service via email, phone, and webform. Hand deliveries and couriers may be received by scheduled appointment only. For further information on EPA Docket Center services and the current status, please visit us online at <https://www.epa.gov/dockets>.

FOR FURTHER INFORMATION CONTACT: Rebecca Broussard, Office of Emergency Management, Mail Code 5104A, Environmental Protection Agency, 1200 Pennsylvania Avenue NW, Washington, DC 20460; telephone number: 202-564-6706; e-mail: broussard.rebecca@epa.gov.

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I. Public Participation

A. Written Comments

Submit your comments, identified by Docket ID No. EPA-HQ-OLEM-2021-0585 at <https://www.regulations.gov> (our preferred method), or the other methods identified in the ADDRESSES section, above. Once submitted, comments cannot be edited or removed from the docket. The EPA may publish any comment received to its public docket. Do not submit to EPA's docket at <https://www.regulations.gov> any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e., on the web, cloud, or other file sharing system). For

additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <https://www.epa.gov/dockets/commenting-epa-dockets>.

Due to public health concerns related to COVID-19, the EPA Docket Center and Reading Room are open to the public by appointment only. Our Docket Center staff also continues to provide remote customer service via email, phone, and webform. Hand deliveries or couriers will be received by scheduled appointment only. For further information and updates on EPA Docket Center services, please visit us online at <https://www.epa.gov/dockets>.

The EPA continues to carefully and continuously monitor information from the Centers for Disease Control and Prevention (CDC), local area health departments, and our Federal partners so that the Agency can respond rapidly as conditions change regarding COVID-19.

II. General Information

A. Does this action apply to me?

A list of NAICS codes at the three-digit level that could be affected by requirements established under CWA section 311(j)(5) is provided in Table 1:

Table 1. Entities potentially affected by the proposed rule

NAICS 3	North American Industry Classification System (NAICS) Description
111	Crop Production
115	Support Activities for Agriculture and Forestry
211	Oil and Gas Extraction
212	Mining (except Oil and Gas)
213	Support Activities for Mining
221	Utilities
311	Food Manufacturing
314	Textile Product Mills
321	Wood Product Manufacturing
322	Paper Manufacturing
324	Petroleum and Coal Products Manufacturing

NAICS 3	North American Industry Classification System (NAICS) Description
325	Chemical Manufacturing
326	Plastics and Rubber Products Manufacturing
327	Nonmetallic Mineral Product Manufacturing
331	Primary Metal Manufacturing
332	Fabricated Metal Product Manufacturing
333	Machinery Manufacturing
335	Electrical Equipment, Appliance, and Component Manufacturing
336	Transportation Equipment Manufacturing
423	Merchant Wholesalers, Durable Goods
424	Merchant Wholesalers, Nondurable Goods
441	Motor Vehicle and Parts Dealers
444	Building Material and Garden Equipment and Supplies Dealers
447	Gasoline Stations
453	Miscellaneous Store Retailers
488	Support Activities for Transportation
493	Warehousing and Storage
511	Publishing Industries (except Internet)
522	Credit Intermediation and Related Activities
562	Waste Management and Remediation Services
611	Educational Services
622	Hospitals
811	Repair and Maintenance
812	Personal and Laundry Services
928	National Security and International Affairs

This table is not intended to be exhaustive, but rather provides a likely minimal set of affected entities likely to be regulated by this action. This table lists the types of entities that EPA is aware could potentially be subject to this proposed action. Other types of entities not listed in the table may also be subject to this proposed action. To determine whether your facility is subject to this proposed action, you should carefully examine the applicability criteria proposed in § 118.3. If you have questions regarding the applicability of this action to a particular entity or facility, consult the person listed in the FOR FURTHER INFORMATION CONTACT section.

B. What action is the agency taking?

The EPA is proposing new requirements for Facility Response Plans (FRPs) for worst case discharges of CWA hazardous substances for onshore facilities that, because of their location, could reasonably be expected to cause substantial harm to the environment by discharging into or on the navigable waters, adjoining shorelines, or exclusive economic zone.

C. What is the agency's authority for taking this action?

This proposal is authorized by section 311(j)(5) and 501(a) of the CWA, (33 U.S.C. §§ 1321(j)(5), 1361(a)).

D. What are the costs and benefits of this action?

EPA estimated the total costs of the proposed action by combining the per-facility estimates of compliance costs with the estimate of the affected facility universe. EPA estimated the annualized cost of the proposed rule over a 20-year analysis period, using three percent and seven percent discount rates, as presented in Table 2.

Table 2. Total compliance cost of the proposed action, 20-year present value and annualized (\$2020)

	Present Value, 7%	Annualized Cost, 7%	Present Value, 3%	Annualized Cost, 3%
Cost	\$300,375,193	\$28,353,293	\$410,322,776	\$27,580,136

EPA also estimated the annualized cost of the proposed action to EPA to develop and implement the proposed requirements, which can be found in the Regulatory Impact Analysis (RIA) titled, “Regulatory Impact Analysis: Clean Water Act Hazardous Substance Worst Case Discharge Planning Regulations,” available in the docket for this action. The proposed action is expected to have a mitigating effect on CWA hazardous substance worst case discharges because the proposed rule provisions address the kind of damages and adverse impacts expected from this

type of discharge. The planning activities associated with developing CWA hazardous substance FRPs are likely to mitigate several damage categories through pre-discharge planning and identification of potential receptors and applicable endpoints; the emergency response information provisions; descriptions of discharge detection systems, hazard evaluation, and training programs; and drills and exercises. Information on previous worst case discharges of a similar nature suggests that the benefits of mitigating these discharges could be large relative to the proposed rule's estimated cost.

Sections 6 and 7 of the RIA developed for this proposed action provide additional details on costs and benefits, respectively, and EPA solicits comment on the contents therein and associated data sources.

E. List of Abbreviations and Acronyms

ACP	Area Contingency Plan
AEGLs	Acute Exposure Guideline Levels for Airborne Chemicals
ANPRM	Advanced Notice of Proposed Rulemaking
APA	Administrative Procedures Act
AWIA	America's Water Infrastructure Act
BHP	Biodegradation, Hydrolysis, and Photolysis
CAA	Clean Air Act
CASRN	Chemical Abstract Service Registry Numbers
CBI	Confidential Business Information
CCC	Criterion Continuous Concentration
CDC	Centers for Disease Control and Prevention
CFR	Code of Federal Regulations
CMC	Criterion Maximum Concentration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFATS	Chemical Facility Anti-Terrorism Standards
CTAC	Chemical Transportation Advisory Committee
CWA	Clean Water Act
DHS	United States Department of Homeland Security
DOI	United States Department of the Interior
DOT	United States Department of Transportation
EJSCREEN	Environmental Justice Screening and Mapping Tool
E.O.	Executive Order

EPA	United States Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ERAP	Emergency Response Action Plan
ERPGs	Emergency Response Planning Guidelines
FR	Federal Register
FRP	Facility Response Plan
FWSE	Fish, Wildlife, and Sensitive Environments
HAZWOPER	Hazardous Waste Operations and Emergency Response
ICR	Information Collection Request
ICS	Incident Command System
IDLH	Immediately Dangerous to Life or Health
IRIS	Integrated Risk Information System
LC50	Lethal Concentration 50%
LD50	Lethal Dose 50%
LEPC	Local Emergency Planning Committee
MCL	Maximum Contaminant Level
MOU	Memorandum of Understanding
MRLs	Minimum Risk Levels
MSHA	Mine Safety and Health Administration
MTR	Marine Transportation Related
NAICS	North American Industry Classification System
NCP	National Contingency Plan
NIIMS	National Interagency Incident Management System
NIOSH	National Institute for Occupational Safety and Health
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NPRM	Notice of Proposed Rulemaking
NRC	National Response Center
NTSIP	National Toxic Substance Incidents Program
NTTAA	National Technology Transfer and Advancement Act
OMB	Office of Management and Budget
OPA 90	Oil Pollution Act of 1990
OSC	On-Scene Coordinator
OSHA	Occupational Safety and Health Administration
OSRO	Oil Spill Removal Organization
PALs	Provisional Advisory Levels for Hazardous Agents
PCBs	Polychlorinated Biphenyls
PHMSA	Pipeline and Hazardous Materials Safety Administration
PRA	Paperwork Reduction Act
PREP	Preparedness for Response Exercise Program
QI	Qualified Individual
RA	Regional Administrator
RCP	Regional Contingency Plan
RCRA	Resource Conservation and Recovery Act
RFA	Regulatory Flexibility Act

RIA	Regulatory Impact Analysis
RMP	Risk Management Plan
RQ	Reportable Quantity
SBA	Small Business Administration
SDWA	Safe Drinking Water Act
SERC	State Emergency Response Commission
SMCRA	Surface Mining Control and Reclamation Act
SPCC	Spill Prevention Control, and Countermeasure
SRO	Spill Response Organization
SWPA	Source Water Protection Area
TBD	Technical Background Document
TEPC	Tribal Emergency Planning Committee
TERC	Tribal Emergency Response Commission
TRI	Toxics Release Inventory
TSCA	Toxic Substances Control Act of 1976 as amended by the Lautenberg Act
TSDF	Treatment, Storage, and Disposal Facility
UMRA	Unfunded Mandates Reform Act
USCG	United States Coast Guard
UST	Underground Storage Tank

III. Background

A. Statutory Authority and Delegation of Authority

1. Statutory Requirements

The CWA as amended by the Oil Pollution Act of 1990 (33 U.S.C. 2701 et seq; hereafter, “OPA 90”), states, “The President shall issue regulations which require an owner or operator of a tank vessel or facility . . . to prepare and submit to the President a plan for responding, to the maximum extent practicable, to a worst case discharge, and to a substantial threat of such a discharge, of oil or a hazardous substance” (33 U.S.C. 1321(j)(5)(A)(i)). For this action, a facility is determined to be “. . . [an] onshore facility that, because of its location, could reasonably be expected to cause substantial harm to the environment by discharging into or on the navigable waters,¹ adjoining shorelines, or the exclusive economic zone” (33 U.S.C. 1321(j)(5)(C)(iv)). As

¹ Navigable waters are defined in 40 CFR 120.2 as waters of the United States, including the territorial seas. This

described below, the Administrator has been delegated this authority under E.O. 12777 (56 FR 54757, October 18, 1991). The Administrator also has authority under CWA section 501 to prescribe such regulations as are necessary to carry out provisions of the Act. In 33 U.S.C. 1321(j)(5)(D), the CWA states that these response plans must:

- 1) Be consistent with the National Contingency Plan (NCP) and Area Contingency Plans (ACP);
- 2) Identify the qualified individual (QI) having full authority to implement removal actions, and require immediate communications between that individual and the appropriate Federal official and the persons providing personnel and equipment;
- 3) Identify, and ensure by contract or other means approved by the President the availability of private personnel and equipment necessary to remove to the maximum extent practicable a worst case discharge (including a discharge resulting from fire or explosion), and to mitigate or prevent a substantial threat of such a discharge;
- 4) Describe the training, equipment testing, periodic unannounced drills, and response actions of persons on the vessel or at the facility, to be carried out under the plan to ensure the safety of the vessel or facility and to mitigate or prevent the discharge, or the substantial threat of a discharge;
- 5) Be updated periodically; and
- 6) Be resubmitted for approval of each significant change.

EPA's responsibilities in the CWA (33 U.S.C. 1321(j)(5)(E)) for this action for onshore facilities that could reasonably be expected to cause significant and substantial harm to the environment by discharging into or on the navigable waters are to:

- 1) Promptly review plans;

document will refer to "navigable water" to include "adjoining shorelines and the exclusive economic zone."

- 2) Require amendments when plans do not meet the statutory requirements;
- 3) Approve plans; and
- 4) Review each plan periodically.

Additionally, EPA may require inspection of containment booms, skimmers, vessels, and other major equipment used to remove discharges (33 U.S.C. 1321(j)(6)(A)). EPA also has the authority to conduct unannounced drills of removal capability in areas for which Area Contingency Plans (ACPs) are required and under relevant FRPs (33 U.S.C. 1321(j)(7)).

2. Delegation of Authority

Under E.O. 12777 (56 FR 54757, October 18, 1991), EPA was delegated the authority to regulate non-transportation-related onshore facilities and non-transportation-related offshore facilities landward of the coastline.² DOT was the delegated authority for transportation-related facilities and the U.S. Coast Guard (USCG) was delegated the authority for tank vessels and marine transportation-related (MTR) facilities. Section 2(i) of E.O. 12777 allows for further delegation between the agencies as later occurred in a February 3, 1994 MOU between EPA, the U.S. Department of the Interior (DOI), and DOT (59 FR 9494, February 28, 1994). DOI redelegated 33 U.S.C. 1321(j)(5) authority to regulate non-transportation-related offshore facilities landward of the coastline to EPA. This MOU applies to both oil and CWA hazardous substance facilities.

EPA has delegated authority over offshore facilities landward of the coastline as per 40 CFR part 112 Appendix B. However, this action is limited to non-transportation-related onshore facilities as defined in the consent decree described in Section III.D of this document. EPA

² E.O. 12777 Implementation of Section 311 Of The Federal Water Pollution Control Act of October 18, 1972, as Amended, and the Oil Pollution Act of 1990. See <https://www.archives.gov/federal-register/executive-orders/1991.html#12777>.

solicits data, information, and comment on CWA hazardous substance facilities located offshore landward of the coastline and their regulation under this action.

B. CWA Hazardous Substance Designation and Reportable Quantities

The term “hazardous substance” is defined in the CWA as those substances designated pursuant to 33 U.S.C § 1321(b)(2), wherein EPA is authorized to list hazardous substances which, when discharged in any quantity into jurisdictional waters, present an imminent and substantial danger to public health or welfare, including, but not limited to, fish, shellfish, wildlife, shorelines, and beaches (33 U.S.C. 1321(a)(14)).

Once a chemical (i.e., “element and compound”) is designated as a CWA hazardous substance, the reportable quantity is established by regulation under 33 U.S.C. 1321(b)(4). Section 311 of the CWA prohibits discharges of CWA hazardous substances in quantities that may be harmful into navigable waters and waters of the contiguous zone, except where permitted under the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973,³ and where permitted in quantities and at times and locations or under such circumstances or conditions as the President may, by regulation, determine not to be harmful (33 U.S.C 1321(b)(3)).

C. Regulatory Background

1. EPA CWA Hazardous Substance Actions

EPA designated a list of CWA hazardous substances in 40 CFR part 116⁴ and subsequently established reportable quantities (RQs) for those substances in 40 CFR part 117,

³ Protocol of 1978 relating to the International Convention for the prevention of pollution from ships, 1973 (with annexes, final act and International Convention of 1973). Concluded at London on 17 February 1978; registered by the International Maritime Organization on 26 November 1983.
<https://treaties.un.org/doc/Publication/UNTS/Volume%201340/volume-1340-A-22484-English.pdf>

⁴ 43 FR 10474, March 13, 1978

the discharge of which at or above the RQ is a violation of CWA section 311(b)(3) and requires notice, including notice as set forth in 40 CFR 117.21 and the National Contingency Plan in 40 CFR 300.125(a).⁵ The RQs constitute the quantities EPA deemed may be harmful and were initially based on a five-level rating system derived from acute aquatic toxicity and set in 40 CFR 117.3. The most acutely toxic CWA hazardous substances were classified as Category X and assigned a one-pound RQ, which was determined based on the smallest container commonly used in commerce.⁶ Under EPA's scaled system, EPA assigned the other categories on a proportional basis. If the upper aquatic toxicity limit of a category is 10 times the upper limit of the preceding, more toxic category, then the harmful quantity was set as 10 times larger, excepting category D, at five times larger, and so forth. CWA RQs (in lbs.) for the five categories are X: 1, A: 10, B: 100, C: 1,000, and D: 5,000.

2. EPA Oil Pollution Prevention Regulation

Promulgated under the authority of CWA section 311, the Oil Pollution Prevention regulation sets forth requirements for the prevention of, preparedness for, and response to oil discharges at specific non-transportation-related facilities (see 40 CFR part 112). The goal of the regulation is to prevent discharges of oil and oil mixed with hazardous substances from onshore facilities and to contain such discharges. The regulation requires facilities to develop and implement Spill Prevention, Control, and Countermeasure (SPCC) Plans and establishes procedures, methods, and equipment requirements to prevent oil discharges to navigable waters or adjoining shorelines.

Additionally, subpart D of the Oil Pollution Prevention regulation requires certain facility

⁵ 44 FR 50766, August 29, 1979

⁶ 43 FR 10496, March 13, 1978

owners or operators to prepare and submit a facility response plan (FRP) for responding to a worst case discharge of oil. The Oil Pollution Prevention FRP requirements apply to a subset of SPCC-regulated facilities from which a discharge, or substantial threat of discharge, may cause substantial harm to the environment.⁷

3. USCG CWA Hazardous Substance Worst Case Discharge Actions

In response to OPA 90, the USCG published rulemaking actions regarding response plans for CWA hazardous substances. On May 3, 1996, the USCG published an Advance Notice of Proposed Rulemaking (ANPRM) addressing vessel and facility response plans (61 FR 20084, May 3, 1996). USCG held two public meetings in 1996 and then developed proposed regulations and published two separate NPRMs for tank vessels and MTR facilities in 1999 (64 FR 13734, March 22, 1999) and 2000 (65 FR 17416, March 31, 2000), respectively. On February 17, 2011, USCG reopened the comment period. In 2019, USCG withdrew their proposed rulemakings (84 FR 2799 and 84 FR 2800, February 8, 2019) based on findings of the Chemical Transportation Advisory Committee (CTAC) that the proposed rules are no longer applicable to the current state of chemical industry spill response. Specifically for MTR facilities, “[d]ue to the services and requirements industry frequently engages in to satisfy insurance requirements and company sustainability policies, together with the existence of new terminal inspection protocols like that developed by the Chemical Distribution Institute, CTAC was unable to identify any significant gaps in hazardous substance spill response planning at marine transportation-related facilities that would be reduced by the 2000 proposed rulemaking” (84 FR 2799-2800). Additionally, for vessels, “CTAC also identified many areas in which the NPRM may overlap with existing local,

⁷ See 40 CFR part 112 Appendix C

state, and international regulatory schemes as well as current industry practice” (84 FR 2799). To date, a USCG regulation has not been finalized.

D. Litigation

On March 21, 2019, the Natural Resources Defense Council, on behalf of Clean Water Action and the Environmental Justice Health Alliance for Chemical Policy Reform filed suit in the United States District Court for the Southern District of New York alleging violations of CWA 311(j)(5)(A)(i) and the Administrative Procedures Act (APA).⁸ The first claim alleged that EPA’s failure to issue “regulations mandated by the [CWA] requiring non-transportation-related substantial-harm facilities to plan, prevent, mitigate and respond to worst case spills of hazardous substances . . . constitutes a failure to perform a non-discretionary duty or act in violation of the [CWA].” The second claim alleged that, “EPA’s failure to issue these regulations constitute[d] agency action unlawfully withheld contrary to and in violation of the [APA] and the [CWA].” The plaintiffs requested an order from the Court to compel EPA to promulgate CWA Hazardous Substance Worst Case Discharge Planning Regulations. Following EPA’s Answer, filed on June 4, 2019, the plaintiffs and EPA entered discussions regarding a potential resolution of the lawsuit.

The plaintiffs and EPA entered into a consent decree on March 12, 2020 that resolved the litigation.⁹ The consent decree requires that within two years (24 months) of entry into the consent decree, or by March 12, 2022, EPA will sign a notice of proposed rulemaking pertaining to the issuance of the CWA Hazardous Substance Worst Case Discharge Planning Regulations

⁸ Complaint for Declaratory and Injunctive Relief, *Environmental Justice Health Alliance for Chemical Policy Reform v. EPA*, No. 1-19-cv-02516 (S.D.N.Y., filed March 21, 2019).

⁹ *Envtl. Justice Health All. for Chem. Reform v. EPA*, No. 1:19-cv-02516-VM, Document 32 (S.D.N.Y., filed March 12, 2020).

for non-transportation-related onshore facilities. The consent decree further requires EPA to sign a notice taking final action within an additional two and a half years, or 30 months after publication of the proposal. This proposed action satisfies EPA's first obligation under the consent decree.

E. CWA Hazardous Substance Discharge History and Impacts Analysis

To gain a historic perspective of CWA hazardous substance discharges to water over time, EPA researched and analyzed multiple sources of available CWA hazardous substance discharge data. EPA analyzed National Response Center (NRC) data on CWA hazardous substances discharges to water. 40 CFR 117.21 requires immediate notification to the NRC once the person in charge of a vessel or an offshore or onshore facility has knowledge of a discharge of a CWA hazardous substance from the facility in quantities equal to or exceeding its assigned RQ in any 24-hour period. Reporters may not always be familiar with RQ levels for CWA hazardous substances and reported quantities released are usually inaccurate or unknown, the NRC will field and process all reported CWA hazardous substance incidents and forward the initial information to the Federal On-Scene Coordinator (OSC) for further investigation. Reports are also made under the NCP reporting requirement in 40 CFR 300.125. NRC data are generated by notifications received immediately following a discharge and often lack complete information on chemicals and quantities discharged, incident and response details, impacts, and locations. Although the data have limitations of accuracy, completeness, and over- and under-reporting of incidents, the NRC database is the most comprehensive database for CWA hazardous substance discharges. It is important to recognize that these data reflect the impacts reported upon discovery of an incident (e.g., evacuations, injuries, hospitalizations, fatalities, waterway closures, and water supply contamination), which often result directly from the event that caused

the discharge, rather than the totality of impacts that could be attributed to the discharge itself. In many cases, it can take days, weeks, and even months to fully characterize the harm caused by a discharge. NRC data are not updated to reflect that harm. This analysis is also hindered by the lack of a robust national database of the types of CWA hazardous substance discharges that EPA is proposing to regulate in this action.

1. Discharge History and Reported Impacts

While there are notable instances of high-volume discharges of non-CWA hazardous substances to water, EPA found limited data on historical worst cases discharges to water of CWA-regulated hazardous substances and the NRC has no information related to the origination of the data cited in this section and Table 3. Between 2010 and 2019, 252,238 total discharges were reported to the NRC. Of those, 98,306 were non-transportation-related, of which CWA hazardous substance discharges comprised 19,657. EPA then identified 2,489 non-transportation-related CWA hazardous substance discharges which either reached water (1,311) or it is unknown whether they reached water (1,178). Of the 2,489 discharges in those categories, 131 had reported impacts. Finally, of those 131, EPA identified 52 discharges of CWA-regulated hazardous substances that could be linked to non-transportation-related facilities (i.e., within EPA's regulatory jurisdiction). Given the generally cursory nature of data provided to the NRC as part of an emergency notification, the Agency was unable to determine whether any of the 52 discharges could have been considered worst case discharges (i.e., the largest foreseeable discharge in adverse weather conditions, including a discharge resulting from fire or explosion; see Section IV.A.3.b of this preamble) of CWA hazardous substances based on volume and

impacts.¹⁰

Over the 10-year period of 2010 to 2019, the average number of CWA hazardous substance discharges declined from 289 to 219 discharges (a decrease of 24 percent). EPA has no information as to the cause of this decline.

2. Most Frequently Discharged CWA Hazardous Substances

A chart of the distribution by CWA hazardous substance of the 2,489 CWA hazardous substance discharges that may have reached water is shown in Table 3.

Table 3. Distribution of discharges by CWA hazardous substance 2010 to 2019. Source: NRC.

CWA Hazardous Substance	Discharged (Percent)
PCBs	55%
Sulfuric acid	8%
Sodium hydroxide	6%
Ammonia	5%
Benzene	4%
Hydrochloric acid	4%
Chlorine	4%
Sodium hypochlorite	3%
Other	12%

The majority of discharges (55 percent, or 1,358) comprised polychlorinated biphenyls (PCBs), typically PCB-containing transformer leaks or discharges, most often due to vehicles colliding with transformers (most likely on telephone poles). Fifteen chemicals accounted for 90 percent of CWA hazardous substance discharge incidents (by frequency, not by volume), 263 of 362 CWA hazardous substances (includes alternate names) had no reported discharges, and 80

¹⁰ The NRC database does not identify how many of the 2,489 discharges involving a CWA hazardous substance reached or may have reached navigable waters. For this analysis, EPA took a conservative approach and assumed that all discharges impacted navigable water.

CWA hazardous substances had fewer than 10 discharges.

EPA banned PCBs in 1979 and while they are no longer commercially produced, they are still present in materials and products produced before the ban. EPA regulates PCBs through the Toxic Substances Control Act of 1976 (TSCA). Implementation of TSCA includes a PCB cleanup policy which addresses mitigating the impacts of PCB discharges. Additionally, most PCBs discharges or threats of discharges are comingled with oil. Oil of any kind and in any form, including oil mixtures, are subject to regulation under EPA's Oil Pollution Prevention regulation. Please see the Technical Background Document (TBD) for additional information.

3. Impacts to Waterways and Sensitive Environments

In reviewing the identified 131 non-transportation-related CWA hazardous substance discharges that may have reached water with reported impacts, EPA determined that 46 involved residences, dumping, third-party damage to transformers (typically vehicle crashes), swimming pools, drills or exercises (not actual discharges), vehicles, incidents that occurred outside of the time period (pre-2010) but were reported later, duplicates, incidents outside of the United States, or miscellaneous hydraulic fracturing reports (e.g., odor coming from tap due to drilling occurring nearby).

Of the remaining 86 discharges, 52 could be linked to non-transportation-related facilities that are within EPA's regulatory jurisdiction. Of note:

- Water supply contamination: 50 incidents (six discharges reached water, 44 discharges where it is unknown if discharges reached water¹¹)
- Waterway traffic corridor closed: two incidents (one discharge reached water, one

¹¹ Indicator in NRC database for water contamination provides options of yes, no, and unknown to have reached water. Forty-four of these incidents reported 'unknown' if reached water. The data are unclear as to whether any of these incidents reached water and/or whether they contaminated the water.

discharge where it is unknown if the discharge reached water)

Other impacts,¹² to the extent to which known, are described in Table 4. Since the NRC fields and processes initial incident information, impact information cited in Table 4 is most often unknown.

Table 4. Other reported impacts of CWA hazardous substance discharges from non-transportation-related facilities that may have reached water 2010 to 2019

Other Reported Impacts	# of Incidents	# of Individuals	Notes
Evacuations	35	1,115	Typically impacts facility workers
Shelter-in-place	1	No data available	Barge offloading toluene discharged 50 gallons into the Mississippi River
Injuries (without hospitalizations)	2	4	All reported injuries appear to be workers onsite, but NRC data are not explicit
Hospitalizations	11	18	All reported hospitalizations appear to be workers onsite, but NRC data are not explicit

4. NRC Data Limitations

The NRC data on which EPA relied for this analysis have numerous limitations. As described in the subsequent section, EPA has not been able to identify another dataset which is more complete and/or includes the types of discharges that would be regulated by this proposed rule, so despite their limitations, EPA is using the NRC data for this analysis. There may be impacts (i.e., additional or other than evacuations, injuries, hospitalizations, fatalities, waterway closures, and water supply contamination) from the universe of CWA hazardous substance discharges to jurisdictional water from non-transportation-related facilities which were not reported to the NRC and, thus, could not be quantified in this analysis. These may include the loss of productivity due to a facility or process unit shutting down because of a discharge,

¹² No fatalities resulted from a CWA hazardous substance discharge. The only fatality identified was due to a tractor trailer collision on a bridge where the driver perished, and the vehicle landed on the toe of a temporary cap on an EPA Superfund site.

emergency response and restoration costs, transaction costs such as the cost of resulting litigation, damages to water quality, fish kills, or impacts to property values due to changes in perceived risk or reduced ecological services. EPA was not able to identify data sources to quantify these impacts, other than the cited data from the NRC. The NRC data are discussed and analyzed further in the RIA.

5. Data Sources Examined

Since the mission of the NRC is to be the initial point of contact for all oil and hazardous substances releases and forward that information to the Federal OSC for response, the initial data collected does, in most cases, have limitations. Due to this lack of information on discharges with impacts in the NRC database, EPA examined additional data sources including:

- National Oceanic and Atmospheric Administration (NOAA) Incident News
- Risk Management Plan (RMP)¹³ rule five-year accident history data
- Toxics Release Inventory (TRI) discharge to water data
- Survey data from previous CWA Hazardous Substance Spill Prevention rulemaking effort¹⁴
- National Toxic Substance Incidents Program (NTSIP)
- Chemical Safety and Hazard Investigation Board Reports
- State discharge reports

EPA did not identify any instances of worst case discharges of CWA hazardous

¹³ Chemical Accident Prevention Provisions, RMP (40 CFR part 68)

¹⁴ EPA sent a voluntary survey to states, tribes and U.S. territories in June 2018 as part of the final Clean Water Act Hazardous Substances Spill Prevention rulemaking (84 FR 46100; September 3, 2019) requesting information on the number and type of EPCRA Tier II facilities reporting CWA hazardous substances onsite, as well as information about historical discharges of CWA hazardous substances, ecological and human health impacts of those discharges, and existing state and tribal regulatory programs that serve to prevent discharges of hazardous substances (Docket EPA-HQ-OLEM-2017-0444).

substances (i.e., the largest foreseeable discharge in adverse weather conditions, including a discharge resulting from fire or explosion, see Section IV.A.3.b of this preamble) previously unknown to the Agency from the above list of data sources. The RIA contains additional information on these data sources and EPA's research to identify discharge information sources. EPA requests data on occurrences of CWA hazardous substance discharges into navigable waters along with documented impacts.

F. Analysis of Existing Regulatory Programs

To understand the degree to which CWA hazardous substances worst case discharge planning requirements are regulated under existing regulations, the Agency reviewed and analyzed the current Federal and state regulatory framework as well as industry standards for overlap with and coverage of CWA hazardous substance worst case discharge FRP provisions required by CWA section 311(j)(5) as detailed in Section III of this preamble.

EPA's analysis did not find any combination of Federal programs that comprehensively cover all the CWA section 311(j)(5)(D) requirements for all CWA hazardous substances. CWA hazardous substance facilities subject to the Oil Pollution Prevention Program requirements or RMP rule will have some overlap for the required program elements. RCRA hazardous waste regulations are comprehensive for CWA hazardous substances present as waste. State programs do not provide uniform coverage and are a patchwork, while industry standards are voluntary.

The TBD compares the programs analyzed to the CWA hazardous substance FRP required program elements and provides a matrix of each program examined and elements of those programs that have requirements comparable to those in CWA section 311(j)(5).

EPA analyzed the following EPA requirements:

- America's Water Infrastructure Act of 2018 Amendments to section 1433 of the Safe Drinking

Water Act (42 U.S.C. 300i–2)

- Chemical Accident Prevention Provisions, RMP (40 CFR part 68)
- Emergency Planning and Community Right-to-Know Act:
 - Emergency Planning Notification and Emergency Release Notification (40 CFR part 355)
 - Hazardous Chemical Reporting: Community Right-to-Know (40 CFR part 370)
 - Toxic Chemical Release Reporting: Community Right-to-Know (40 CFR part 372)
- National Pollutant Discharge Elimination System (NPDES) Regulations
 - NPDES (40 CFR part 122)
 - General Pretreatment Regulations for Existing and New Sources of Pollution (40 - CFR part 403)
- Oil Pollution Prevention Regulations
 - Subpart A, Applicability, Definitions, and General Requirements for All Facilities and All Types of Oils, SPCC (40 CFR part 112)
 - Subpart D, Response Requirements, FRP (40 CFR 112.20 and 112.21)
- Pesticide Regulations
 - Pesticide Management and Disposal (40 CFR part 165)
 - Pesticide Agricultural Worker Protection Standard (40 CFR part 170)
- Resource Conservation and Recovery Act (RCRA) Regulations
 - Criteria for Classification of Solid Waste Disposal Facilities and Practices Subpart D, Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments (40 CFR part 257)
 - Standards Applicable to Generators of Hazardous Wastes (40 CFR part 262)

- Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF) (40 CFR parts 264 & 265)
- Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks (UST) (40 CFR part 280)
- TSCA: PCBs Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions (40 CFR part 761)

EPA also analyzed the following non-EPA Federal requirements:

- Mine Safety and Health Administration (MSHA) Subchapter H – Education and Training, Subchapter I – Accidents, Injuries, Illnesses, Employment, and Production in Mines (30 CFR parts 46-50)
- Occupational Safety and Health Administration Regulations:
 - Hazard Communication Standard (HazCom) (29 CFR 1910.1200)
 - Hazardous Waste Operations and Emergency Response (HAZWOPER) (29 CFR 1910.120)
 - Process Safety Management of Highly Hazardous Chemicals (29 CFR 1910.119)
 - Emergency Action Plan (29 CFR 1910.38)
- Pipeline and Hazardous Materials Safety Administration (PHMSA) Hazardous Materials Regulations (49 CFR parts 171-179)
- Surface Mining Control and Reclamation Act (SMCRA) Mineral Resources, Office of Surface Mining Reclamation and Enforcement, Department of the Interior (30 CFR parts 700-999)
- United States Department of Homeland Security (DHS) Chemical Facility Anti-Terrorism Standards (CFATS) (6 CFR part 27)

EPA also analyzed the existing state regulatory framework for CWA hazardous substance

FRPs for all 50 states and found 27 programs with elements potentially comparable to those required by CWA section 311(j)(5), available in the TBD. EPA found state coverage is an inconsistent patchwork and cannot be relied upon for uniform, nationwide CWA hazardous substance FRP requirements.

Additionally, EPA analyzed existing industry standards related to CWA hazardous substance FRPs for four standards with elements potentially comparable to those required by CWA section 311(j)(5). However, these standards are voluntary and do not provide comprehensive coverage of proposed CWA hazardous substance FRP program elements.

Again, the TBD contains a more detailed discussion of each proposed program element and regulation, program, or standard. EPA solicits comment on this analysis as well as on other programs or standards EPA should examine.

IV. Proposed Action

EPA is proposing a regulatory program whereby those facilities that could reasonably be expected to cause substantial harm to the environment, based on their location, are required to prepare and submit CWA hazardous substance FRPs for worst case discharges to the EPA. EPA will approve only those CWA hazardous substance FRPs submitted for facilities that could cause significant and substantial harm to the environment. EPA proposes that FRPs must be consistent with the NCP and ACPs; identify the qualified individual having full authority to implement response actions and require immediate communications between that individual and the appropriate Federal official and the persons providing personnel and equipment, with a description of duties; identify, and ensure by contract or other approved means, the availability of private personnel and equipment necessary to respond to the maximum extent practicable to a worst case discharge of CWA hazardous substances (including a discharge resulting from fire or

explosion), and to mitigate or prevent a substantial threat of such a discharge; describe the training, equipment testing, periodic unannounced drills, and response actions of persons at the facility; and review and update facility response plan periodically and resubmit to the RA for approval of each significant change. Specific CWA hazardous substance FRP components will include: facility information, owner or operator information, hazard evaluation, reportable discharge history, response personnel and equipment, evidence of contracts or other approved means to ensure the availability of personnel and equipment, notification lists, discharge information, personnel roles and responsibilities, response equipment information, evacuation plans, discharge detection systems, response actions, disposal plans, containment measures, training and exercise procedures, self-inspection, a coordination activities. Please see section IV.B of this preamble for specific discussion of each of these components.

To identify potential elements to include in this proposal, EPA reviewed existing regulations that include emergency response planning provisions as well as the USCG regulatory proposals to establish requirements for CWA hazardous substance worst case discharges. Specifically, EPA considered existing requirements for Oil Pollution Prevention FRPs under 40 CFR part 112 (or oil FRPs) given that these requirements have been in place since 1994 and were promulgated under the same statutory authority as this proposal. Of note, CWA hazardous substances vary widely in physical and chemical properties when compared to oils; EPA has closely considered these variations in this proposal. Additionally, EPA examined requirements under the RMP rule under 40 CFR part 68, which implements section 112(r)(7) of the Clean Air Act and requires facilities that use regulated substances to develop an RMP.

A. Applicability Criteria

The statute governing CWA hazardous substances worst case discharges specifies that

those facilities that could reasonably be expected to cause substantial harm to the environment, based on their location, are required to prepare and submit CWA hazardous substance FRPs for worst case discharges to the EPA. EPA will approve or disapprove only those CWA hazardous substance FRPs submitted for “significant and substantial harm facilities.”

EPA is proposing in § 118.3 two initial screening criteria to determine whether a facility, because of its location, could cause substantial harm to the environment from a worst case discharge into or onto navigable water. The first step in assessing applicability is to determine whether a facility has the container capacity for a CWA hazardous substance onsite at or above a threshold quantity. If so, the facility owner or operator then determines whether the facility is within one-half mile to navigable water or a conveyance to navigable water. EPA solicits comment on alternative or additional screening criteria with supporting rationale and data. If those two conditions are satisfied, the owner or operator determines whether the facility meets any of the four substantial harm criteria: the ability to adversely impact a public water system; the ability to cause injury to fish, wildlife, and sensitive environments (FWSE); the ability to cause injury to public receptors; and/or having had a reportable discharge of a CWA hazardous substance within the last five years. If any of those substantial harm criteria are met, then the owner or operator must submit a CWA hazardous substance FRP to EPA. Additionally, EPA is proposing in § 118.5(a) that an EPA Regional Administrator has the authority to require CWA hazardous substance FRPs, after consideration of site-specific factors for a facility, regardless of whether a facility meets the criteria in proposed § 118.3. To determine whether a facility could reasonably be expected to cause substantial harm following a CWA hazardous substance worst case discharge, EPA is proposing factors for the RA to evaluate in § 118.5(b). Please see further discussion of Regional Administrator authorities to require CWA hazardous substance FRPs and

determination of significant and significant and substantial harm in A.2.f of this section.

Proposed applicability criteria include:

Threshold Quantity: To account for the 296 different CWA hazardous substances with various properties, EPA is proposing to apply a maximum capacity onsite criterion threshold quantity for each CWA hazardous substance by using a multiplier of the CWA RQ, based on the RQ categories specified in 40 CFR part 117.

Facility location: EPA is proposing to use facility location relative to navigable waters as an applicability screening criterion for CWA hazardous substance FRP facilities. Specifically, facilities meeting or exceeding the CWA hazardous substance maximum capacity onsite threshold quantity and located within one-half mile of a navigable water or a conveyance to a navigable water must determine if the facility meets at least one substantial harm criterion.

Ability to cause injury to fish, wildlife, and sensitive environments (FWSE): EPA proposes a substantial harm criterion for facilities located at a distance such that a CWA hazardous substance discharge has the potential to cause injury to FWSE. EPA proposes to codify parameters and toxic endpoints to be used by facility owners when determining whether a worst case CWA hazardous substance discharge could cause injury to FWSE.

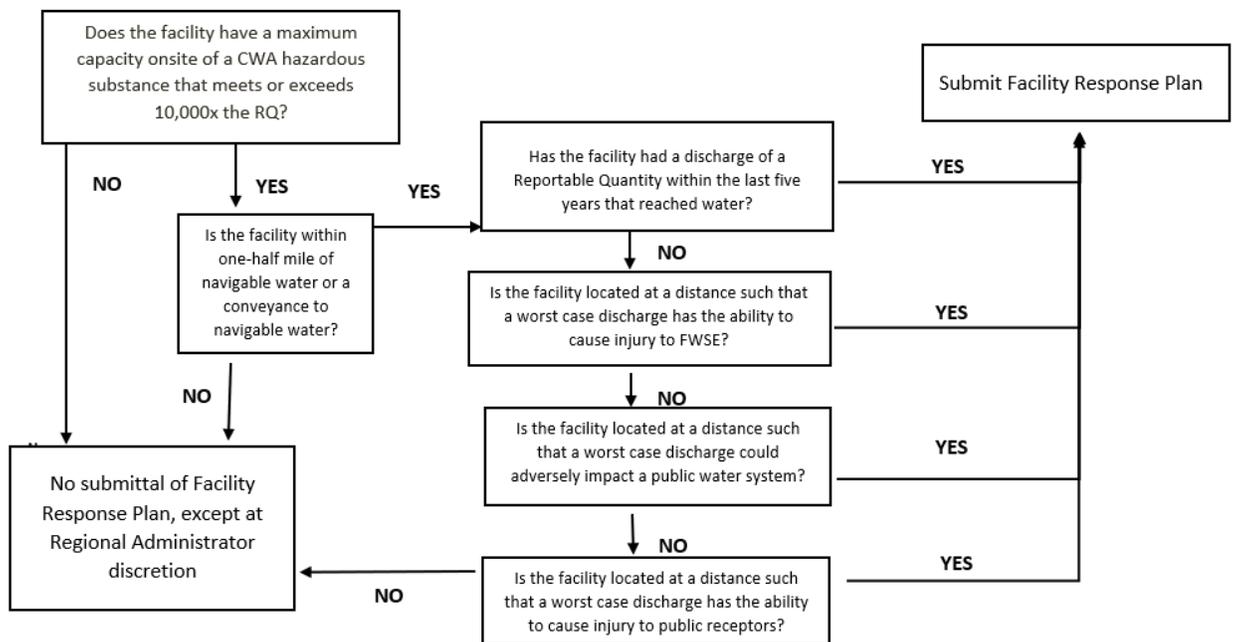
Ability to adversely impact a public water system: EPA is proposing to require facility owners or operators to coordinate with nearby public water systems to determine whether a CWA hazardous substance worst case discharge could adversely impact a public water system.

Ability to cause injury to public receptors: EPA is proposing a substantial harm criterion for facilities located at a distance such that a CWA hazardous substance discharge could cause injury to public receptors. EPA proposes a definition for public receptors as those areas where the public could be exposed to a CWA hazardous substance worst case discharge to navigable

waters. EPA further proposes that the same parameter and toxic endpoints used for the FWSE substantial harm criterion apply for determining injury to public receptors.

Reportable discharge history: EPA is proposing a substantial harm criterion that identifies whether the facility has had a reportable CWA hazardous substance discharge to water within the last five years. A reportable discharge is defined in 40 CFR 117.21 as any discharge in quantities equal to, or exceeding, in any 24-hour period, the reportable quantity in 40 CFR 117.3, the discharge of which violates CWA section 311(b)(3).

Figure 1. Proposed applicability criteria for CWA hazardous substance worst case discharge FRP-subject facilities.



EPA is proposing a definition of “facility” in § 118.2 that is adopted from the Oil Pollution Prevention regulation at 40 CFR 112.2.¹⁵ This definition is broad and captures the

¹⁵ See EPA’s “SPCC Guidance for Regional Inspectors” <https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations/spcc-guidance-regional-inspectors>

types of facilities intended to be regulated by EPA under CWA hazardous substance worst case discharge regulations. The Agency recognizes that under this definition, the owner or operator has the discretion to determine what constitutes a facility. That is, the proposed rule may become applicable to a facility in cases of aggregation of buildings, structures, or equipment and associated storage or type of activity, or the division of the facility may end applicability due to separation of buildings, structures, or equipment and associated CWA hazardous substance storage or type of activity. However, an owner or operator may not make facility determinations indiscriminately and in such a manner as to simply avoid applicability of the proposed rule (for example, the division of one facility into separate facilities with one CWA hazardous substance container located at each facility where all containers are located side-by-side or in close proximity to each other and are used for the same purpose). EPA solicits comment on this definition and any appropriate adjustments with supporting rationale and data.

1. Screening Criteria

a. CWA Hazardous Substance Capacity Threshold Quantity

i. 10,000x CWA Hazardous Substance RQ Multiplier

In § 118.3, EPA is proposing that if the maximum capacity onsite, as defined in § 118.2 (the total aggregate container capacity for each CWA hazardous substance present at all locations within the entire facility at any one time) at the facility of any CWA hazardous substance, at any one time, meets or exceeds 10,000 times its RQ, the facility has met the threshold quantity. If a facility's container capacity meets or exceeds the threshold quantity for any one CWA hazardous substance and the facility is within one-half mile of navigable waters, then the facility owner or operator must determine if the facility meets at least one substantial harm criterion proposed in this action. If so, the entire facility would be subject to the CWA

hazardous substance FRP requirements proposed in this action for all CWA hazardous substances stored or used at the facility.

EPA chose to use a multiplier of the CWA hazardous substance RQ as the threshold quantity because RQs represent a quantity that may be harmful when discharged to navigable waters. For a facility to cause substantial harm to the environment, it would need to reasonably be expected to cause a discharge in a quantity larger than the RQ and would therefore need to have the capacity to store significantly larger quantities onsite.

RQs exist for all CWA hazardous substances and reflect relative (in relation to other CWA hazardous substances, due to the five categories detailed below, see Table 5) and aquatic toxicity.¹⁶ In accordance with 40 CFR 117.21, CWA hazardous substance discharges to navigable waters or adjoining shorelines require notification to the NRC when the CWA hazardous substance discharge is equal to, or exceeds, in any 24-hour period, the RQ in 40 CFR 117.3.

The RQs were originally developed in 1979 and adjusted beginning with an evaluation of the intrinsic physical, chemical, and toxicological properties of each CWA hazardous substance. The intrinsic properties examined, also called the “primary criteria,” were aquatic toxicity, mammalian toxicity (oral, dermal, and inhalation), ignitability, reactivity, chronic toxicity, and potential carcinogenicity.¹⁷ Generally, for each intrinsic property, EPA ranked CWA hazardous

¹⁶ These values were later adopted by Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)

¹⁷ In 1979, EPA established RQs at 40 CFR 117 (44 FR 50766, August 29, 1979), which used the acute aquatic toxicity of the CWA hazardous substances to determine RQs. For a detailed discussion of this methodology, see 43 FR 10489-92 (March 13, 1978) and 40 FR 59982-89 (December 30, 1975). In 1985, EPA amended 40 CFR part 117 to make reportable quantities adjusted under CERCLA the applicable reportable quantities for hazardous substances pursuant to CWA section 311 (50 FR 13456, April 4, 1985). In this action, EPA established a methodology for adjusting RQs, which established “primary criteria” as aquatic toxicity, mammalian toxicity (oral, dermal, and

substances on a scale, associating a specific range of values on each scale with an RQ value of 1, 10, 100, 1,000, or 5,000 lbs. EPA evaluated the data for each CWA hazardous substance using various primary criteria; each CWA hazardous substance may have received several tentative RQ values based on its particular intrinsic properties. The lowest of the tentative RQs became the “primary criteria RQ” for that substance, which EPA used to assign an initial category of X, A, B, C, or D. After EPA assigned the primary criteria RQ, EPA further evaluated substances for their susceptibility to certain degradative processes, which were used as secondary adjustment criteria. These natural degradative processes were biodegradation, hydrolysis, and photolysis (BHP). If a CWA hazardous substance, when discharged into the environment, degrades relatively rapidly to a less hazardous form by one or more of the BHP processes, its RQ (as determined by the primary RQ adjustment criteria), was generally adjusted down one level (e.g., from Category A to Category B). Conversely, if a CWA hazardous substance degrades to a more hazardous product after its discharge, the original substance was assigned an RQ equal to the RQ for the more hazardous substance, which may have been one or more levels higher than the RQ for the original substance (e.g., from Category C to Category A). This approach in developing RQs may not reflect the ignitability or reactivity of single substances or among multiple substances that may come together, or the potential for the additive or synergistic effects in the toxicity of two or more CWA hazardous substances.

Table 5. CWA hazardous substance categories and reportable quantities

Category	Reportable Quantity (lbs)
X	1
A	10

inhalation), ignitability, reactivity, and chronic toxicity. EPA subsequently established a methodology for including potential carcinogenicity as a “primary criterion” (see, for example, 54 FR 33418, August 14, 1989 and 54 FR 33426, August 14, 1989).

B	100
C	1,000
D	5,000

Using the RQ as a basis to characterize a facility that has the ability to cause substantial harm in the event of a worst case discharge has the advantage of building a regulatory structure using existing quantifiable values that have previously been vetted through the rulemaking process. The public, industry, and EPA are familiar with these concepts. Additionally, RQs reflect varying levels of and relative risk, based on the methodology outlined above, so applicability criteria under the proposed rule are scaled to the specific circumstances of each facility, rather than applying a one-size-fits-all approach. However, the properties of listed CWA hazardous substances may not be fully captured in the RQs because the existing RQs may not be based on the most current risk data.

This rulemaking is explicitly focused on response planning for worst case CWA hazardous substances discharges to navigable waters. EPA recognizes that multiple factors contribute to the likelihood of a CWA hazardous substance worst case discharge to navigable waters, including but not limited to, physical and chemical properties of the CWA hazardous substance, quantity stored onsite, size of storage containers, cause of the discharge, proximity to navigable waters or conveyances, properties of the terrain, drainage pathways, weather, etc. EPA expects that excessively low threshold quantities would likely be overly cautious and regulate facilities that are not likely to cause substantial harm to the environment. Establishing a lower threshold planning quantity for all CWA hazardous substances could potentially overwhelm local and facility emergency planning efforts and would not be commensurate with the danger posed by individual substances.

The 10,000x RQ multiplier assumes that larger capacities of CWA hazardous substances generally correspond to an increased risk of adverse impacts to receptors should a worst case discharge occur. As discussed in Section III of this preamble, the RQs are quantities that “may be harmful,” thus, by definition, they do not represent a worst case discharge quantity. Additionally, as discussed in Section IV(A)(2)(d) of this preamble, the definition of “size classes of releases” in 40 CFR 300.5, which corresponds with hazardous substance releases under the NCP, is not tied to a particular quantity; rather, a major release is a “release of any quantity of hazardous substance(s), pollutant(s), or contaminants(s) that poses a substantial threat to public health or welfare of the United States or the environment or results in significant public concern.” Under the NCP, the On-Scene Coordinator (OSC) makes the final determination of the appropriate classification of a hazardous substance release based on consideration of the particular release (e.g., size, location, impact, etc.). EPA concludes that to focus on the threat of these major releases, in terms of applicability, adjusting the RQ upward is warranted.

EPA recognizes that the multiplier proposed here does not represent a “safe” quantity in the event of a CWA hazardous substance discharge. However, EPA determined the 10,000x RQ multiplier reflects the range of risks posed by the listed CWA hazardous substances, whether they are used at large or small facilities, by preserving the underlying toxicity parameters used to establish the original RQs. EPA notes, however, owners and operators are responsible for remaining cognizant of the maximum capacity(ies) onsite of all CWA hazardous substances at any one time and determining whether the maximum capacity onsite is at or exceeds 10,000x the RQ found at 40 CFR 117.3.

The proposed rule requires detailed planning requirements for responding to worst case discharges. These requirements should be triggered only when maximum capacities onsite of

CWA hazardous substances are large enough to pose a risk of substantial harm to public health or the environment. While EPA recognizes that site-specific factors, such as site elevations and location and nature of the discharge point, could affect the likelihood or effects of a discharge, EPA does not believe it is feasible to develop a methodology for establishing threshold quantities based on site-specific factors that would be applicable uniformly nationwide for every CWA hazardous substance. This is consistent with EPA's original approach in setting the RQs and reflected in the regulatory history and language.¹⁸ EPA examined other threshold multipliers, available in the RIA, including 10x, 100x, and 1,000x multipliers; however, these multipliers would not focus the proposed emergency planning requirements on those facilities with the greatest potential to cause substantial harm to human health or the environment. EPA solicits comment on using a 10,000x multiplier of the RQs for the screening criteria with supporting rationale and data. EPA also solicits comment on the use of alternative RQ multiplier values, as well as different multipliers for each category of CWA hazardous substance, in addition to any supporting data or studies on this topic.

I. Alternative Applicability Approaches

Establish New Regulatory Thresholds Based on Toxic Endpoints.

EPA also considered developing applicability thresholds using representative receptors for each of the three categories of receptors considered under this proposed rule (FWSE, public receptors, and public water systems) in order meet the specific objectives of this rule.

Under this approach, EPA would set new threshold quantities for each CWA hazardous substance using the most current risk data. Each CWA hazardous substance would be evaluated

¹⁸ See Footnote 17.

to determine (1) how a discharge could cause substantial harm to each type of receptor, and (2) the concentration at which substantial harm would be likely to occur for each type of receptor. The lowest concentration that could cause substantial harm to any receptor would serve as the basis for establishing a single applicability threshold for each CWA hazardous substance. A standard conservative dilution factor would be used to relate the substantial harm concentration to a quantity of the CWA hazardous substance onsite at a facility that would then serve as the applicability threshold for that CWA hazardous substance.

While this approach could effectively target facilities based on their effects on the receptors of interest, there are significant drawbacks to this strategy. Development of new CWA hazardous substance-specific worst case discharge thresholds would unduly delay implementation of this protective regulation, and there would be data gaps. Additionally, simplifying assumptions would be necessary to develop a dilution factor used to convert a concentration at a downstream receptor to a mass stored at a facility. EPA solicits comment on establishing new regulatory thresholds for CWA hazardous substance FRP applicability using the most current risk data and appropriate endpoints, including the methodology, data, and rationale; appropriate dilution factors; and feasibility of implementation.

Establish Thresholds Using Distance-based Multipliers.

EPA considered establishing applicability thresholds using distance-based multipliers for CWA hazardous substance RQs. This approach recognizes that the potential for a CWA hazardous substance worst case discharge from a facility to cause substantial harm to a downstream receptor (i.e., public water system, FWSE, or public receptor) depends on the distance and travel time from the facility to a downstream receptor over land and water, among other factors (e.g., river width, gage height, flow velocity, land transport considerations, lateral

dispersion and/or diffusion). As distance increases, the contaminant concentration at the receptor decreases, while the time available to respond to the discharge increases; thus, the further a facility is from a receptor, the lower the potential for substantial harm, all other factors being equal. By applying a multiplier to the RQ based on the distance from the facility to the nearest downstream receptor, the regulation could better target facilities that are more likely to cause substantial harm in the event of a worst case discharge.

Under this approach, an owner or operator would be required to calculate a planning distance to the nearest downstream receptor if the following two conditions are met: the facility has more than 10x the RQ of the CWA hazardous substance onsite and the facility is within one-half mile of navigable water or a conveyance leading to navigable water. The planning distance to the nearest downstream receptor is then used to establish the distance-based applicability threshold using the simple equation: $RQ \times \text{distance} \times 100$, where distance is the planning distance, in miles, between the facility and the nearest downstream receptor. The planning distance includes travel overland and in water. For a release of the same amount, the concentration at a receptor is inversely proportional to the distance from the point of release to the receptor. Thus, inclusion of a “distance factor” in the equation to establish an applicability threshold will appropriately establish a lower threshold for facilities that are closer to downstream receptors, and thus present a greater risk.

Facilities with onsite quantities greater than this distance-based threshold would then be required to conduct an analysis to determine whether the facility has the potential to cause substantial harm in the event of a worst case discharge. Only if the analysis determines that the facility has the potential to cause substantial harm in the event of a worst case discharge would the facility be required to develop a CWA hazardous substance FRP.

EPA recognizes that use of planning distance in the applicability determination may better target facilities with the potential to cause substantial harm without unnecessarily increasing the size of the regulated universe, because facilities located further upstream from a receptor would have a proportionately higher applicability threshold. This approach would be more complicated for the regulated community to implement, relative to the use of a single threshold multiplier (e.g., 10,000), and for EPA to evaluate and enforce. EPA solicits comment on this approach, as well as any supporting data, information pertaining to additional costs, considerations for appropriate multipliers to use, and underlying methodology, data, and rationale.

Thresholds from Other Hazardous Substances Regulations (non-CWA).

EPA reviewed other hazardous substance regulations for potential consideration of applicability thresholds, including:

- Chemical Accident Prevention Provisions, RMP List of Substances (40 CFR 68.130)
- EPCRA Section 302: Threshold Planning Quantities for Emergency Planning (40 CFR part 355, Appendices A and B)
- EPCRA Section 304: Reportable Quantities for Emergency Release Notification (40 CFR part 355, Appendices A and B)
- EPCRA Sections 311 and 312: Reporting Thresholds for Hazardous Chemical Reporting: Community Right to Know (40 CFR 370.10)
- EPCRA Section 313: Toxic Chemical Release Reporting (40 CFR 372.65)

These are detailed in the TBD. EPA concluded that the methodologies used to create the reporting thresholds under these regulations are not appropriate for CWA hazardous substance response planning. Additionally, EPA found that only EPCRA Sections 311 and 312 include all

substances on the 40 CFR part 116 list of CWA hazardous substances. However, the applicability for EPCRA sections 311 and 312 regulations is if any OSHA hazardous chemical is present at the facility at or above the reporting thresholds at any one time. EPA solicits comment on any other chemical threshold approaches from Federal or state regulations, industry standards, etc. that EPA should consider, including data and rationale.

II. Alternative Thresholds by Aggregated Category

EPA considered options involving aggregating chemical capacity by RQ category or by removability or recoverability in the event of a discharge. To aggregate by RQ category to determine whether a facility meets the threshold quantity for the maximum capacity onsite proposed in § 118.3(a), a facility could be required to add up the capacities of CWA hazardous substance containers present onsite by category. If, in aggregate, the capacity of those containers in each category reaches the threshold quantity, the owner or operator would be required to determine whether the facility is within one-half mile of navigable water and then whether the facility meets any of the substantial harm criteria.

EPA decided this approach is inappropriate due to the wide variability of physicochemical properties for CWA hazardous substances within each category. Additionally, under this approach, facilities with small amounts of multiple chemicals in each category may be required to do facility response planning for improbable events impacting multiple small containers, or other containers where the likelihood of concurrent catastrophic discharge is very low. Finally, this approach would require EPA to select a capacity threshold for each category above which facilities would be regulated. EPA found no basis for selecting a threshold for aggregate capacity for each category.

EPA solicits comment on the approach to aggregate CWA hazardous substances within

categories to determine whether a facility has reached the threshold quantity for applicability, as well as alternative approaches to aggregating quantities of different CWA hazardous substances with supporting rationale and data.

In terms of categorizing CWA hazardous substances by removability and recoverability for response resource planning, EPA previously proposed and revoked rules that could guide that discussion. On March 13, 1978, EPA issued 40 CFR part 117 to determine the removability of each CWA hazardous substance and 40 CFR part 119, which determined units of measurement and penalties (43 FR 10488 and 43 FR 10495). On November 2, 1978, section 311 of the CWA was amended by Pub. L. 95-576. The amended statute no longer required the Agency to make determinations of removability or units of measurement for computing penalties. Therefore, 40 CFR parts 117 and 119 of the March 13, 1978 regulations were revoked on February 16, 1979 (44 FR 10269). The basis for determining reportable quantities, formerly termed “harmful quantities,” was simplified by the amendment and, thus, part 118 of the March 13, 1978 regulations was also revoked and reportable quantities were repropose as a new part 117 on February 16, 1979 (44 FR 10271) as “quantities that may be harmful.”

In 40 CFR part 117: Determination of Removability of Hazardous Substances (43 FR 10488) (since revoked), EPA discussed designating certain substances as those that can actually be removed under most conditions of discharge. These substances have limited water solubility, a relatively cohesive mass, and are less dense than water. Thus, they resemble petroleum oils in their behavior when discharged to water. The substances can be described as those with specific gravities less than 1.0 and water solubility less than 1,000 mg/l. Accordingly, the revoked final rule made the determination that allyl acetate, ethylbenzene, xylene, allyl chloride, benzene, cyclohexane, isoprene, methyl methacrylate, styrene, and toluene could actually be removed and

identified them as oil-like CWA hazardous substances.

Additionally, under 40 CFR part 119: Units of Measurement & Rates of Penalty (43 FR 10495) (now revoked), EPA discussed applying an adjustment factor to penalties (0.1 to 1.0) using a profiling operation based on the solubility, density, volatility, and associated propensity for dispersal in water of each CWA hazardous substance. Each CWA hazardous substance was placed in one of eight categories combining these physical, chemical, and dispersal properties in various ways. EPA then ranked the relative harm these categories posed to the environment. Table 6 shows the terms involved; final relative ranking of physical, chemical, and dispersal categories in increasing order of relative damage potential; and physical, chemical, and dispersal factor of each category.

Table 6. Material classification and relative harm

Material Classification	Physical/Chemical/Dispersal Category	Rank	Physical/Chemical/Dispersal
Insoluble Volatile Floater	IVF	1	0.10
Insoluble Nonvolatile Floater	INF	2	0.23
Insoluble Sinker	IS	3	0.36
Soluble Mixer	SM	4	0.49
Precipitator	P	5	0.62
Soluble Sinker	SS	6	0.75
Soluble Floater	SF	7	0.88
Miscible	M	8	1.0

The eight categories were defined as:

1. *IVF (insoluble volatile floater)*: materials lighter than water with a vapor pressure greater than 10 mm Hg and a solubility of less than 1,000 ppm (weight per weight basis) or materials with vapor pressure greater than 100 mm Hg and solubility less than 10,000 ppm.
2. *INF (insoluble nonvolatile floater)*: materials lighter than water with a vapor pressure greater than 10 mm Hg and a solubility of less than 1,000 ppm (weight per weight basis).
3. *IS (insoluble sinker)*: materials heavier than water and with a solubility less than 1,000 ppm (weight per weight basis).
4. *SM (soluble mixer)*: solid substances with a solubility greater than 1,000 grams of solute per 1,000 grams of water.
5. *P (precipitator)*: salts which dissociate or hydrolyze in water with subsequent precipitation of a toxic ion.
6. *SS (soluble sinker)*: materials heavier than water and a solubility greater than 1,000 ppm (weight per weight basis).
7. *SF (soluble floater)*: materials lighter than water and a solubility greater than 1,000 ppm (weight per weight basis).
8. *M (miscible)*: liquid substances which can freely mix with water in any proportion.

EPA considered, but decided against, using these revoked categories for a listed hazardous substance's ability to be removed under most conditions of discharge to aggregate hazardous substances for establishing an applicability threshold quantity. EPA judged that aggregating in this fashion is impractical; may not adequately reflect risks, including inherent, CWA hazardous substance-specific toxic, explosive, ignitable and/or reactive natures, especially during an extreme event; and implementation and compliance would be complicated.

Additionally, as these regulations were revoked, industry is unfamiliar with this approach and

facility planners do not use these categories in their planning. EPA solicits comment on aggregating CWA hazardous substances, as detailed above, with supporting rationale and data.

Additionally, in the USCG proposed rules for tank vessels and MTR facilities (64 FR 13734, March 22, 1999 and 65 FR 17416, March 31, 2000), some CWA hazardous substances were defined as “sinkers” and “floaters”, where “sinkers” are those CWA hazardous substances whose physical and chemical properties, following a discharge into water, result in a substance in the water that does not float, react chemically with water, rapidly vaporize, or rapidly dissolve. Under ambient conditions, these chemicals have a solubility of less than 0.01 percent, specific gravity greater than 1.0, and a vapor pressure less than 1 PSIG. “Floaters” are those CWA hazardous substances whose physical and chemical properties, following a discharge into water, result in a substance on the water surface that does not rapidly sink, react chemically with water, vaporize, or dissolve. Under ambient conditions, these CWA hazardous substances have a solubility of less than 0.01 percent, a specific gravity less than 1.0, and a vapor pressure less than 1 PSIG. Neither a “sinker” or “floater” designation was intended to include CWA hazardous substances that are highly reactive in water or volatile, and therefore could not be reasonably contained or collected under any conditions.

Categorizing chemicals in this fashion is more intuitive than the EPA-revoked eight categories in Table 6 above. Additionally, “sinker” and “floater” would specifically link to response requirements, the main focus of this action. However, again due to the wide variability in chemical properties and requirements around responding to a worst case discharge, EPA determined that categorizing and aggregating chemicals generally is not appropriate for this action for the reasons specified above for aggregating by the revoked categories.

EPA solicits comment on using “sinkers” and “floaters” as chemical categories to require specific response planning resources be available or contracted, or in aggregating chemicals for threshold determinations with supporting rationale and data.

ii. Maximum Capacity Onsite v. Maximum Quantity Onsite

EPA is proposing in § 118.2 to define maximum capacity onsite as the total aggregate container capacity of each CWA hazardous substance present at all locations within the entire facility at any given time, similar to the approach taken in the Oil Pollution Prevention regulation (see 40 CFR part 112). EPA is proposing a definition for permanently closed containers in § 118.2 such that facilities would not need to count these containers in their CWA hazardous substance maximum capacity onsite threshold quantity calculations.

EPA recognizes that for the chemical industry, chemical inventory quantities routinely fluctuate, and facilities use a wide variety of containers to store CWA hazardous substances; common containers include storage tanks, process vessels, railcars, and other onsite shipping containers not in transportation. Thus, regulating facilities based on the maximum container capacity onsite will allow regulated stakeholders an opportunity to plan for the worst case quantities of CWA hazardous substances at the facility. This approach also allows emergency response planners to reflect the risk posed by CWA hazardous substances onsite in those maximum possible quantities. This is a simpler approach for inspectors to determine facility applicability based on container sizes instead of reviewing and aligning quantities in fluctuating inventories. Furthermore, calculating applicability using container shell capacity could be viewed as a more conservative approach to determine whether a facility has reached the threshold quantity of CWA hazardous substances.

There are some limitations to this approach. Chemical mixtures would be complex to

regulate, and the approach does not allow for flexibility. Oils are fundamentally different from CWA hazardous substances in that when an oil is mixed with another substance, the entire mixture is subject to regulation under CWA section 311 and the Oil Pollution Prevention regulation. Therefore, when determining applicability for oils, the shell capacity of the container can be taken into account because the entire mixture in the container is considered an oil for regulatory purposes. However, CWA hazardous substances may be combined into mixtures and therefore it is necessary to understand the quantities of each substance in the mixture to determine total quantities onsite when determining applicability. Furthermore, EPA understands that CWA hazardous substance facility quantities and batch process operations often vary and therefore EPA inspectors would still need to consider facility inventories to understand facility storage capacities. Additionally, this approach is not consistent with how industry manages their chemicals under similar chemical preparedness and reporting regulations. The typical amount of CWA hazardous substances at a facility may be less than the total capacity because facilities are oversized to meet seasonal demands or changing facility need. Finally, containers may be designed to never actually hold the maximum quantity possible due to the need for freeboard or headspace, thus using the maximum capacity onsite may not be a realistic accounting of CWA hazardous substance quantities for planning purposes.

EPA considered proposing that the maximum quantity stored onsite means the total amount of a CWA hazardous substance present at all locations within the entire facility at any given time (e.g., storage tanks, process vessels, onsite shipping containers) and that this amount be used to determine whether a facility meets or exceeds the threshold quantity proposed in § 118.3(a). This is consistent with other EPA chemical accident preparedness and reporting

programs, for example EPCRA Sections 311 and 312.¹⁹ A facility owner or operator would use the maximum total aggregate amount of a CWA hazardous substance in all containers onsite at any one time to calculate this quantity. Once a facility becomes subject to the regulation for one CWA hazardous substance, the facility would include all CWA hazardous substances on site in their planning activities.

EPA solicits comment on the proposed approach, the definition of permanently closed containers, using maximum quantity onsite rather than maximum capacity onsite for applicability threshold quantity calculations, the number of facilities that may be regulated under the proposed approach versus using maximum quantity onsite, and potential alternative approaches with supporting rationale and data.

iii. Accounting for Mixtures

When designating CWA hazardous substances, EPA defined mixture in 40 CFR 116.3 to mean any combination of two or more elements and/or compounds in solid, liquid, or gaseous form except where such substances have undergone a chemical reaction so as to become inseparable by physical means. Additionally, 40 CFR 116.4 states that the elements and compounds appearing in Tables 116.4 A and B are designated as hazardous substances in accordance with CWA section 311(b)(2)(A). This designation includes any isomers and hydrates, as well as any solutions and mixtures containing these substances.

Under 40 CFR 302.6 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Notification Requirements, hazardous substance mixtures are calculated by the following: (i) If the quantity of all of the hazardous constituent(s) of the

¹⁹ See 40 CFR part 370.

mixture or solution is known, notification is required where an RQ or more of any hazardous constituent is discharged; (ii) If the quantity of one or more of the hazardous constituent(s) of the mixture or solution is unknown, notification is required where the total amount of the mixture or solution discharged equals or exceeds the RQ for the hazardous constituent with the lowest RQ.

As the regulated community is already familiar with determining RQs for mixtures or solutions for release notification under CERCLA section 103(a) (40 CFR 302.6), EPA is proposing the same requirements in § 118.9 for mixtures or solutions in this action. As such, if a facility has a mixture wherein the quantities of all the hazardous constituents of the mixture are known, the threshold quantity would be reached when any individual CWA hazardous substance constituent quantity reaches that level as extrapolated to the maximum container capacity. However, if a facility has a mixture wherein the quantities of the constituents are not known, the facility has met the threshold when the entire quantity of the mixture onsite reaches or exceeds the threshold quantity for the hazardous constituent with the lowest threshold when extrapolated to the maximum container capacity. EPA solicits comment on this approach or suggested alternative approaches with supporting data for determining CWA hazardous substance threshold quantities for mixtures.

Because this proposed action would determine threshold quantity applicability based on maximum capacity onsite, a facility would follow the mixture rule proposed in § 118.9 to determine the capacity quantities of CWA hazardous substances onsite. For the worst case discharge planning quantity, please see Section IV.A.4.iv of this preamble.

b. Distance to Navigable Water

i. One-half Mile to Navigable Water or Conveyance to Navigable Water

EPA is proposing that facilities meeting the threshold quantity of CWA hazardous

substances and located within one-half mile of navigable water or a conveyance to navigable water complete the substantial harm determination. This distance is based on research related to the Oil Pollution Prevention FRP regulation.²⁰ As discussed in the preamble to the Oil Pollution Prevention FRP regulation,²¹ all facilities with worst case discharges of oil to navigable water examined in the case studies were located such that their closest opportunity for discharge was within one-half mile of navigable waters. Thus, 40 CFR part 112, Appendix C, Attachment C-III – Calculation of the Planning Distance considers one-half mile proximity to a navigable water or a conveyance to navigable water as part of the planning distance calculation for overland transport. These overland transport planning distance calculations, combined with in-water calculations, determine whether the facility could cause substantial harm to public health and sensitive environments due to a worst case discharge. Additionally, conveyances located close to the facility can provide a direct pathway to navigable waters. If this distance is less than or equal to one-half mile, a discharge from the facility could pose substantial harm given that the time to travel the distance from the storm drain or other conveyance to the navigable water could be considered virtually instantaneous (40 CFR 112, Appendix C). Given that the Oil Pollution Prevention FRP regulation has been in place for over 30 years, industry is familiar with this approach.

EPA considered using both lower and higher values for the distance to navigable water or conveyances to navigable water and solicits comment on alternative approaches to determining whether a facility, because of its location, could reasonably be expected to cause substantial harm to the environment by discharging CWA hazardous substances into or on the navigable

²⁰ 58 FR 8832, February 17, 1993.

²¹ *ibid*

waters, with supporting rationale and data.

ii. Alternatives to One-half Mile to Navigable Water or Conveyance to Navigable Water

EPA considered a facility self-determination model, wherein an owner or operator would determine whether the facility has a reasonable expectation to cause substantial harm by discharging to navigable waters based on locational and geographic considerations using EPA-defined criteria. Under this model, the determination would be customized by each facility to their unique circumstances. The main drawback to this approach is that defining universally applicable criteria to determine whether facilities are located at a distance that may cause substantial harm may be complicated and implementation may be difficult and burdensome.

EPA also considered establishing proximity distances to navigable waters for CWA hazardous substances using chemical characteristics or historical discharge data. Under this approach, EPA would use available CWA hazardous substance physicochemical data to calculate overland distances to navigable water to indicate that a facility's location potentially poses a substantial threat. However, the Agency concluded that determining the appropriate physicochemical properties influencing fate and transport for the 296 CWA hazardous substances is not feasible when accounting for the large number of mixtures or wastes containing CWA hazardous substances. Additionally, worst case discharge historical data are sparse, and EPA has identified an insufficient number of historical worst case discharges of CWA hazardous substances to accurately set a distance threshold using discharge history data.

EPA solicits comment and any information pertinent to these alternative approaches as well as supporting data and rationale.

2. Substantial Harm Criteria

After determining whether a facility satisfies the initial screening criteria, EPA is proposing that an owner or operator would then assess whether their facility meets any of the four substantial harm criteria: (1) ability to cause injury to FWSE, (2) ability to adversely impact a public water system, (3) ability to cause injury to public receptors, and (4) reportable discharge history. If any one of these substantial harm criteria are met, then the facility must prepare and submit a response plan to EPA.

EPA considered the substantial harm criteria in the Oil Pollution Prevention regulation in 40 CFR part 112 as a basis for developing CWA hazardous substances substantial harm criteria. These criteria and steps to determine whether they are met are further detailed below.

a. Ability to Cause Injury to Fish, Wildlife, and Sensitive Environments (FWSE)

i. Proposed Approach

EPA is proposing a substantial harm criterion to consider the facility's ability to cause injury to FWSE. This is based on 40 CFR 112.20(f)(1)(ii)(B) for oil FRPs, in which EPA established a criterion for determining injury to FWSE as follows: "The facility is located at a distance . . . such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments . . ." Furthermore, in 40 CFR 112.20(f)(2)(i) EPA identified that an EPA Regional Administrator (RA) shall consider proximity to FWSEs and other areas he or she determines to possess ecological value in his or her assessment of whether a facility could reasonably be expected to cause substantial harm to the environment.

EPA judged that a similar approach considering ability to cause injury to FWSE is appropriate to determine the potential for CWA hazardous substance discharges to cause substantial harm to the environment.

I. Definition of FWSE

40 CFR part 112 Appendix C references the DOC/NOAA document, “Guidance for Facility and Vessel Response Plans Fish and Wildlife and Sensitive Environments,” which outlines guidance for interpreting fish, wildlife, and sensitive environments (59 FR 14713, March 29, 1994). In six appendices (I-VI), the guidance document outlines the Federal agencies responsible for specific environmental resources (I); critical habitats for endangered/threatened species (II); federally protected areas (III); sensitive biological and human-use resources (IV); ranking of shoreline habitats impacted by oil spills (V); and contact information for regional offices (VI). As part of the statutory requirements under the CWA, any hazardous substances worst case discharge program must “be consistent with the requirements of the National Contingency Plan (NCP) and Area Contingency Plans (ACPs).”²² EPA is proposing to require owners and operators to evaluate the substantial harm criteria using the fish and wildlife definition under 40 CFR 112.2 (proposed in this rulemaking in § 118.2) as well as use applicable ACP guidance in defining fish, wildlife, and sensitive environments in their respective regions.

An ACP is used by all agencies engaged in responding to environmental emergencies within a defined geographical area. When implemented in conjunction with the NCP, the ACP must be adequate to remove a worst-case discharge, and to mitigate or prevent a substantial threat of such discharge from a vessel, offshore facility, or onshore facility operating in or near the defined geographical area. Additionally, the ACP identifies areas within its bounds that may require tailored protection or response strategies due to unique environmental attributes. These may be endangered species habitats or other areas defined by the ACP. The ACP provides guidance on how responders should incorporate the needs of these areas into response strategies.

²² 33 U.S.C. 1321(j)(5)(D)(i). Accessed January 14, 2021. Available at: <https://www.govinfo.gov/content/pkg/USCODE-2019-title33/pdf/USCODE-2019-title33-chap26-subchapIII-sec1321.pdf>

The ACP Fish and Wildlife and Sensitive Environments Plan annex is developed in consultation with the U.S. Fish and Wildlife Service, NOAA, and other interested parties, including state fish and wildlife conservation officials. The annex, consistent with the NCP and Regional Contingency Plans (RCPs), addresses fish and wildlife resources and their habitat, and other areas considered sensitive environments, and provides the necessary information and procedures to immediately and effectively respond to discharges that may adversely affect these resources, including provisions for a response to a worst case discharge (40 CFR 300.210(c)(4)). EPA solicits comment on how FWSEs are defined for this action.

II. FWSE Planning Distance Calculation

To determine whether a facility could cause substantial harm to a FWSE, EPA is proposing that facilities self-determine formulas and/or methodologies to use for overland transport and transport in water for planning distance, using EPA-provided parameters and the lethal concentration 50 percent (LC50) toxicity intervals provided by EPA (Table 7). The facility owner or operator would be required to evaluate whether the facility is located at a distance such that a worst case discharge from the facility could cause injury to FWSE. EPA is proposing in § 118.10 that a facility owner or operator calculate the worst case discharge scenario of the maximum single CWA hazardous substance container, interconnected containers, pipe, or piping system capacity onsite for a CWA hazardous substance at or above the threshold quantity set in § 118.3(a) that represents the largest capacity. If the worst case discharge scenario indicates that the facility could cause injury to FWSE, then the owner or operator must prepare an FRP that addresses all CWA hazardous substances where the maximum capacity onsite meets or exceeds the threshold quantity. The goal of calculating planning distance is two-fold. First, planning distance determines a facility's potential to cause substantial harm, and second, planning distance

may be part of the response plan implementation to identify appropriate response actions. Thus, the worst case discharge scenario is used to both determine applicability and in the hazard evaluation.

EPA is proposing to provide the toxicity thresholds and parameters for overland transport and in-water transport, while the facility must determine (1) where the FWSE receptors are located, and (2) if, based on the parameters provided, a worst case discharge of CWA hazardous substances would result in exposure of receptors to a concentration equal to or greater than the toxicity threshold concentration provided by EPA. The following describes the parameters reviewed, the proposed methodology, and toxic endpoints and parameters for planning distance calculations.

Toxic Endpoints

EPA is proposing in Appendix B of 40 CFR part 118 to use 10 percent of a range of LC50 concentrations. A common risk assessment method, use of an uncertainty factor of 10 to estimate the lower limit by dividing the LC50 threshold by 10 (LC50/10) extrapolates the lethal concentration used in laboratory aquatic toxicity tests to lower concentrations than the lethal dose. This method results in a concentration of concern that is more conservative and likely more relevant to discharges of CWA hazardous substances to the environment. EPA used tests involving adult fathead minnows to create the original RQ classification; they are available for all 296 CWA hazardous substances (43 FR 10474, March 13, 1978). EPA proposes to use 96-hour LC50 intervals for each RQ category as the criterion for FWSE (Table 7). For mixtures of CWA hazardous substances, EPA proposes in § 118.10(a) that an owner or operator shall assume the entire capacity of the container holds the CWA hazardous substance with the lowest RQ. EPA judges that this approach will appropriately capture the risk of CWA hazardous substance

worst case discharges causing injury to FWSE.

Table 7. Proposed concentrations for FWSE (proposed Part 118 Appendix B).

Category	RQ (lbs.)	Aquatic toxicity (mg/L)		10% (mg/L)
		Lower	Upper	
X	1	0	0.1	0.01
A	10	0.1	1	0.1
B	100	1	10	1
C	1,000	10	100	10
D	5,000	100	500	50

EPA reviewed several options for toxicity endpoints for FWSE. These included both the Criterion Maximum Concentration (CMC) and Criterion Continuous Concentration (CCC), as well as a percentage of the LC50 for acute aquatic toxicity tests. While the CMC and CCC have the advantage of combining the results of multiple toxicity tests, using overarching chemical components, there are 104 freshwater CMCs, 116 freshwater CCCs, 97 saltwater CMCs and 97 saltwater CCCs for CWA hazardous substance chemical compounds.²³ EPA solicits comment on methods of estimating concentrations based on aquatic toxicity testing that are relevant to human and aquatic endpoints for the 296 CWA regulated hazardous substances and how to address mixtures, with supporting rationale and data.

Planning Distance Parameters

EPA is proposing in § 118.10(b) that owners or operators shall use any methodology(ies) or formula(s) that accurately reflect the conditions at the facility location and that consider parameters provided by EPA for overland transport and transport over water. Overland transport

²³ Further information is available in the TBD.

parameters shall include ground conditions (e.g., topography, land use, soil absorption) and properties of the CWA hazardous substance (e.g., evaporation, reactivity). In-water transport parameters include: the point of entry to the water (i.e., flow rate, duration, direction of the discharge); conditions of the water (i.e., velocity, slope, currents, turbulence, water temperature, salinity); and properties of the CWA hazardous substance in water.

The proposed approach differs from the Oil Pollution Prevention FRP program which specifies formulas for calculating planning distance and allows the owner or operator to use an alternative formula(s) for calculating planning distance (see 40 CFR part 112 Appendix C, Attachment C-III). In this action, EPA is proposing flexibility for determining planning distance for CWA hazardous substances to account for the variety in chemical and physical properties of the 296 CWA hazardous substances. EPA determined a one-size-fits-all approach for calculating planning distances for CWA hazardous substances is not appropriate for this particular action given the variety of hazardous substances and the range of physicochemical properties resulting in differences in their fate and transport. Facility owners and operators may choose to use existing models and formulas to calculate planning distance such as those in 40 CFR part 112 Appendix C. The owner or operator must provide supporting documentation, rationale, and assumptions for the formula used to calculate planning distance in order for the EPA to evaluate the facility's determination of substantial harm.

EPA explored other potential models for planning distance, which are further discussed in the TBD, and considered whether the Agency should specify formulas for calculating planning distance and/or develop a tool to assist facility owners and operators in completing calculations. An example of one such tool is RMP*Comp, a free software program an owner or operator can use to complete the Off-site Consequence Analyses (both worst case scenarios and alternative

scenarios) required under the RMP rule. RMP*Comp allows a user to input data elements and then guides the user through the process of conducting the analysis.

EPA solicits comment on the various model parameters, in-water and overland transport models, scenarios, and variables which should be included in a potential planning distance calculation as well as whether EPA should develop a comparable tool to the RMP*Comp system for worst case discharges CWA hazardous substances.

ii. Alternative Approaches

EPA considered using the same parameter and toxic endpoint approach as proposed above, except with endpoints established from the CWA RQ concentrations. In this alternative approach, EPA would use the lower end of each RQ category concentration range for the toxic endpoint value. Although this approach ensures that the program remains consistent by using the RQs, considering both aquatic toxicity and mammalian toxicity (oral), the range of concentrations for each RQ category may be too large to accurately reflect the risk of each substance. EPA solicits comment on this approach and potential alternatives along with supporting data and rationale.

EPA also considered specifying formulas by chemical, chemical category, or some other categorization. The Agency evaluated existing modeling programs for water and land but chose not to adopt an approach that specifies formulas for CWA hazardous substance planning distance.²⁴ The chemical and physical property variation across the 296 CWA hazardous substances make it challenging to adopt a one-size-fits-all approach to accurately calculate planning distances. EPA solicits comment on available technologies, methodologies, modeling

²⁴ Details on the models evaluated are included in the TBD.

programs, or formulas that could be used to establish planning distance.

b. Ability to Adversely Impact a Public Water System

i. Proposed Approach

EPA is proposing in § 118.3(c)(2) that facilities located at a distance such that a worst case discharge from the facility has the ability to adversely impact a public water system could reasonably be expected to cause substantial harm to the environment. Facilities would be required to coordinate with the public water system to determine whether concentrations from a worst case CWA hazardous substance discharge would result in scenarios adversely impacting the public water system.

Public drinking water was specifically highlighted as an area of risk of substantial harm in the OPA 90 Conference Report under proximity to potable water.²⁵ EPA proposes in § 118.2 to adopt the definition of public water system as stated in 40 CFR 141.2 and used by the Oil Pollution Prevention FRP program, designating a public water system as a system of public piped water for human consumption with at least fifteen service connections or that regularly services 25 individuals for at least 60 days of the year.

In determining whether a CWA hazardous substance discharge would adversely impact a downstream public water system, the facility owner or operator would be required to evaluate whether a worst case discharge concentration would:

1. Violate Federal and state drinking water standards (e.g., Maximum Contaminant Levels (MCLs)),
2. Compromise the ability of a public water system to produce water that complies with

²⁵ Legislative History of the Oil Pollution Act of 1990: P.L. 101-380: 104 Stat. 484: August 18, 1990. in 8 Washington, D.C., Covington & Burling; p. 150.

Federal and state drinking water standards,

3. Result in adverse health impacts in individuals exposed to contaminated drinking water,
4. Contaminate public water system infrastructure, and/or
5. Cause a public water system to issue water use restrictions.

EPA expects that facilities would need to gather relevant information related to the CWA hazardous substances onsite and information relevant to their fate and transport following a discharge in order to determine whether the facility has the ability to adversely impact public water systems. This may include modeling a worst case discharge scenario and obtaining the arrival time, duration, and concentration of the discharge as it reaches a water intake. With that information, the facility would coordinate with downstream public water systems to determine impacts to the system and would be required to document coordination.

State drinking water primacy agencies (“State agency”) may be another resource to aid in determining impacts to public water systems. EPCRA section 304 requires facilities to notify their State Emergency Response Commission (SERC) or Tribal Emergency Response Commission (TERC) and Local Emergency Planning Committee (LEPC) or Tribal Emergency Planning Committee (TEPC) of any releases of extremely hazardous substances (EHSs) defined under EPCRA section 302 or CERCLA hazardous substances at or above their RQ. The America’s Water Infrastructure Act (AWIA), which amended EPCRA section 304, requires facilities to notify the applicable State agency, which in turn notifies community water systems of a discharge that has the potential to impact the system’s source water. In Appendix A of 40 CFR part 118, EPA is proposing to require facilities to document and retain efforts to coordinate with nearby public water systems regarding this substantial harm criterion.

All states, except for Wyoming, have primacy for implementing the Safe Drinking Water

Act (SDWA). The EPA Regional Water Program implements the SDWA for Wyoming, Washington D.C., several Indian Tribes, and the territories. State drinking water primacy agencies are required to enforce Federal standards. State drinking water programs also have the discretion to (1) place more stringent standards on contaminants regulated under SDWA or (2) regulate a contaminant that is not currently regulated under SDWA. EPA intends the proposed language to encompass Federal drinking water standards as well as more stringent state drinking water regulations.

This general approach covers any site-specific considerations and contains clear and unambiguous requirements, as well as negates the need to specify values (i.e., concentration or total mass) that result in substantial harm; rather, it focuses on adverse outcomes that could result from a worst case discharge. Additionally, this approach avoids the issue of whether drinking water treatment could (or could not) reduce the concentration of the CWA hazardous substance to below harmful levels.

EPA recognizes challenges with this approach. First, this approach places a burden on public water systems to voluntarily participate in coordination activities with an unknown number of upstream facilities. A limited number of public water systems could be inundated with coordination requests depending on the number of potentially regulated facilities located upstream. Second, public water systems may not fully understand whether worst-case discharges for particular CWA hazardous substance would result in adverse health impacts in exposed individuals or contaminate their infrastructure given the variability of CWA hazardous substance physiochemical properties and toxicities. This may be especially true for smaller systems that lack the knowledge and resources to assist in this evaluation. EPA recognizes that guidance would need to be developed to support such evaluations. Lastly, given their variability, the

treatability of some CWA hazardous substances is not known. Further, if a public water system does not respond to requests to coordinate, facility owners or operators may be in a position to make the determination without the support and expertise of water system staff. In these instances, the regulated facility would measure compliance at the water treatment facility intake. Another challenge with this approach is that it does not consider other water intakes (e.g., industrial water intakes) that may be downstream of a potentially regulated facility. EPA solicits comment on the merits and limitations of this approach, including situations where a public water system declines to participate or does not respond; suggested alternatives to this approach; and supporting data and rationale for these alternatives.

ii. Alternative Approaches

EPA considered categorizing all facilities within Source Water Protection Areas (SWPAs) as meeting substantial harm criteria. The 1996 Amendments to SDWA emphasized the importance of pollution prevention to protect the safety of drinking water supplies and required states to create a Source Water Assessment Program for all public water systems. State drinking water programs were required to:

1. Identify the land area(s) which provide water to each public drinking water source in their state;
2. Complete an inventory of existing and potential sources of contamination in those areas;
3. Determine the susceptibility of each drinking water system to contamination; and
4. Distribute the results of the assessment to water users and other interested entities.

The 1996 program requirements were intended to provide communities with the information needed to formulate and implement protection measures. By the early 2000s, source water assessments were completed for all public water systems. The 1996 SDWA Amendments

do not require states to update source water assessments periodically. However, some states opt to implement state-specific policies requiring periodic evaluations and/or updates of assessments. States may provide access to public water system source water assessment reports on their websites or respond to information requests for these reports. Updating assessment plans by the states is voluntary. As such, states, not EPA, maintain the information and geographic boundaries of SWPAs.

For SWPAs that are publicly available, facilities could easily determine whether they are within a boundary and it would obviate the need for distance planning. However, EPA chose not to adopt this approach for several reasons. First, this would increase the number of facilities that must develop facility response plans without clearly focusing on those that could cause the greatest harm. Additionally, many states do not make their SWPAs available to the public, so facility owners or operators would have to request them from the state. Responding to these requests could place a burden on state drinking water programs. Further, EPA does not possess the geographic boundaries of current state SWPAs, which hinders EPA's ability to assess how feasible this option would be to implement. This presents challenges to estimating the facility universe or costs for this approach. Additionally, states regulate and define SWPAs differently, and EPA has no information on how often these areas are updated. SWPAs can be quite large, which would likely expand the facility universe and increase compliance costs imposed on the regulated community without necessarily corresponding to the potential to cause substantial harm. This is especially true in states that identify larger areas, such as entire watersheds, to delineate SWPAs.

EPA also considered an approach whereby facility owners or operators would self-determine whether they could adversely impact public water systems using parameters and toxic

endpoints. This approach would parallel the methodology recommended to determine impacts to FWSE. Setting concentration thresholds at the drinking water intake would provide certainty to the regulated community. This approach could be less burdensome to regulated facilities if they are not required to coordinate with public water systems. However, the drinking water standards EPA evaluated (e.g., MCLs) apply only to the finished water rather than source water. Applying those drinking water standards at the water intake, before the water is treated, may not be an accurate reflection of whether a worst case discharge could cause substantial harm. Additionally, it may be impractical, if not impossible, to develop threshold concentrations at the intake that would result in substantial harm that would broadly apply to most public water systems for all the types of substantial harm listed under the preferred option and for all 296 CWA hazardous substances.

EPA solicits comment on these approaches and methodologies, with supporting rationale and data.

c. Ability to Cause Injury to Public Receptors

i. Proposed Approach

Given the intrinsic properties (e.g., physicochemical; toxicity) of some of the CWA hazardous substances, EPA is proposing in § 118.3(c)(3) a separate substantial harm criterion for facilities that could cause injury to public receptors through a worst case discharge to navigable waters. Additionally, EPA is proposing that substantial harm be determined through the same parameter and toxic endpoint approach proposed for FWSE.

EPA's proposed definition of public receptor is adapted from an EPA chemical accident prevention and preparedness program, the Clean Air Act (CAA) Risk Management Program, at 40 CFR 68.3, which defines a public receptor as: "offsite residences, institutions (e.g. schools,

hospitals), industrial, commercial, and office buildings, parks, or recreational areas inhabited or occupied by the public at any time without restriction by the facility where members of the public could be exposed to toxic concentrations as a result of a worst case discharge.” However, the definition proposed in § 118.2 is specific to discharges to navigable waters and public receptors subsequently likely to be affected.

This approach proposes the same planning distance parameters recommended for FWSE, but sets the toxic endpoints at the upper bound of the 10 percent of the RQ concentration value for mammalian oral toxicity for each of the RQ categories: X, A, B, C, and D. This extrapolates to lower concentrations that are more relevant to discharges of CWA hazardous substances near public receptors (see Table 8, below).

While the original CWA hazardous substance RQs were based on aquatic toxicity, subsequent RQ adjustments updated the RQ levels to account for mammalian toxicity (oral, inhalation, and dermal), as well as other physicochemical properties.²⁶ A substance was rated as toxic based on its LC50 or lethal dose 50 percent (LD50) value, which is the concentration or dose of a substance which causes the death of 50 percent of a defined experimental animal population. Upper-bound toxicity values were identified for each of the three intervals. These values were correlated with a 5,000-lb RQ value. An upper-bound oral (ingestion) toxicity value of 500 mg/kg was adopted based on the assumption of a “standard man” (70 kg body weight, swallow volume of 21 cubic centimeters) being exposed to a situation which would allow him to take one swallow of a CWA hazardous substance. Once the upper-bound toxicity levels were chosen, the toxicity ranges in Table 8 for the 1-, 10-, 100-, 1000-, and 5,000-lb RQ categories

²⁶ See Footnote 17.

were scaled for mammalian toxicity in the same ratios as the ranges for aquatic toxicity.

The mammalian oral toxicity values, which are of interest for CWA hazardous substance discharges to water and human exposure (i.e., public receptors), correspond with the aquatic toxicity ranges (presented in mg/kg and mg/L). Because these are both parts per million, EPA proposes using the mg/L concentrations relevant to water in Appendix B of 40 CFR part 118. The lower end of the toxicity levels is effectively 10 percent of the upper bound. For category X, the lower bound is effectively zero, though by taking 10 percent of the upper bound, EPA established a proposed concentration of 0.01 mg/L.

Table 8. Proposed concentrations for public receptors.

Category	RQ (lbs)	Mammalian toxicity (oral) (mg/kg)		10% (mg/kg)	Aquatic toxicity (mg/L)		10% (mg/L)
		Lower	Upper		Lower	Upper	
X	1	0	0.1	0.01	0	0.1	0.01
A	10	0.1	1	0.1	0.1	1	0.1
B	100	1	10	1	1	10	1
C	1,000	10	100	10	10	100	10
D	5,000	100	500	50	100	500	50

While this approach does not account for inhalation toxicity, EPA concluded that any air releases (even from a liquid discharge to navigable water) are more appropriately covered under the CAA. This proposal is focused on worst case discharges to navigable water, due to the statutory authority upon which this action is based, however, EPA notes that exposure pathways are complex. In some scenarios, aerial deposition on waterways may be an important exposure pathway for public receptors and FWSE. EPA solicits comment on the appropriateness of requiring facility owners or operators to assess whether worst case discharges could cause injury to public receptors via inhalation exposures to either the parent compounds or degradation

byproducts (e.g., phosgene emanating from chlorinated solvents exposed to high temperatures) and/or following volatilization followed by aerial deposition on waterways of concern. EPA is proposing in § 118.11 that CWA hazardous substance FRPs consider potential inhalation risks in the hazard evaluation, discharge detection systems, and response resources.

ii. Alternative Approaches

EPA reviewed several information sources for human health toxicity values and associated endpoints for public receptors including: EPA Integrated Risk Information System (IRIS) reference doses or reference concentrations, National Institute for Occupational Safety and Health's (NIOSH) Immediately Dangerous to Life or Health (IDLH), Acute Exposure Guideline Levels for Airborne Chemicals (AEGs), Emergency Response Planning Guidelines (ERPGs), Minimum Risk Levels (MRLs), and Provisional Advisory Levels for Hazardous Agents (PALs). Of these, AEGs, IDLHs, and ERPGs are relevant to emergency response, but are based on inhalation toxicity tests not relevant to water discharge exposures. While PALs are potentially relevant, they are available for only six CWA hazardous substances. Additionally, PALs toxicity values are not provided for acute exposures of less than 24 hours and EPA judged that shorter exposures are more relevant for the emergency discharge scenarios covered by this rulemaking. Similarly, while MRLs are established for 88 of the CWA hazardous substances, they have acute exposures for only 24 hours (not less than 24 hours).²⁷

EPA also considered a stratified approach, which would first apply MRLs for those 88 CWA hazardous substances for which MRLs exist, followed by 10 percent of the CWA RQ toxicity bounds provided to create the RQ categories in 40 CFR part 117. Using the MRLs may

²⁷ Additional information on the toxicity values reviewed is available in the TBD.

provide a more accurate representation of human exposure risk. However, the MRLs do not use an acute toxicity value that would be appropriate for this action. Under a discharge to water scenario, the duration of human exposure should be at most hours, and not over one day. Additionally, a stratified approach may be overly complicated and difficult for regulated entities to understand and implement.

Finally, EPA considered not including ability to cause injury to public receptors as a substantial harm criterion. The Agency anticipates that the greatest risk to human health is through drinking water contamination, which would be covered under the substantial harm criterion of the ability to adversely impact public water systems. This approach would omit any specific substantial harm criteria for public receptors. It is unclear how many public receptors would be impacted by a worst case discharge of a CWA hazardous substance.

However, not accounting for human health effects beyond public water system impacts may be shortsighted. An assumption of no prolonged exposure relies on timely detection, notification, and response, which cannot necessarily be assumed, particularly if there are no CWA hazardous substance FRP requirements for the facility.

EPA solicits comment on the appropriateness of its proposed definition of public receptor, including ability to cause injury to public receptors as a substantial harm criterion, EPA's approach to air releases, the proposed approach, and alternative approaches, including supporting rationale and data.

d. Reportable Discharge History

i. Proposed Approach

EPA is proposing in § 118.3(c)(4) to include reportable discharge history as a substantial harm criterion. A discharge at or exceeding the RQ, as listed in 40 CFR 117.3, that violates

CWA section 311(b)(3) (i.e., reaches navigable waters or adjoining shorelines) is a reportable discharge. If a facility that meets the screening criteria has had a reportable discharge within the last five years that reached water, the facility would be considered a facility that has the potential to cause substantial harm in the event of a worst case discharge.

40 CFR 117.21 outlines requirements to report CWA hazardous substance discharges. Once a facility owner or operator has knowledge of a discharge at or exceeding the RQ, they must report the discharge in accordance with 33 CFR part 153.203 (i.e., to the NRC or, if not practicable, to the USCG or EPA predesignated OSC for the geographic area where the discharge occurred). This reporting requirement serves as a trigger for informing the government of a discharge so that Federal personnel can evaluate the need for a response action and undertake any necessary action in a timely fashion in accordance with the NCP.

ii. Alternative Approaches

EPA considered an alternative approach where a reportable discharge would include a discharge above the RQ that may not have impacted water. EPA anticipates this approach would be more protective in that it would capture more discharges and thus result in more facilities meeting this substantial harm criterion. Further, initial reporting to the NRC is often done with incomplete information and before it is clear whether a discharge has violated CWA section 311(b)(3) and a review of these reports may not accurately identify circumstances where facilities have impacted navigable waters. However, EPA concluded that it is more appropriate to remain consistent with CWA statutory authority when establishing substantial harm criteria, including specifically considering instances where discharges violate CWA section 311(b)(3).

EPA also looked to the NCP to identify whether that would help to establish an appropriate basis for a reportable discharge quantity to determine the potential to cause

substantial harm. However, The NCP does not provide a quantitative value for major releases of hazardous substances. Instead, the NCP states that a major release of a hazardous substance poses a substantial threat to public health or welfare or the environment, or results in significant public concern. The OSC makes the final determination of the appropriate classification of a hazardous substance release based on the specifics of the particular release scenario.²⁸ Regulated facilities would need to determine whether any of their releases in the past five years have met the major release definition. Facilities exceeding the onsite threshold quantity of CWA hazardous substances that are within one-half mile of navigable water and that have also had a major discharge would self-certify as meeting substantial harm criteria and be required to submit a CWA hazardous substance FRP. This may be difficult to evaluate and enforce, since there are no metrics to consider in the NCP definition of size classes for this approach.

EPA also considered not including reportable discharge history as a substantial harm criterion. This would simplify this substantial harm determination but may not be a logical approach, since EPA determined that discharge history can be a reliable indicator of future discharge potential.

EPA solicits comment on including reportable discharge history as a substantial harm criterion, the time horizon for discharge history to be examined, as well as on whether EPA should use the RQ, a discharge that reached water, some other metric, and/or a “major release” of a hazardous substance as defined in the NCP to determine which discharges should be considered for this criterion, as well as supporting rationale and data.

e. Other Substantial Harm Criteria Considerations

²⁸ See 40 CFR 300.5, Size classes.

i. Climate Change Risk Considerations

EPA recognizes that the potential to cause substantial harm to the environment is not static and evolves over time as factors at the facility change, especially factors related to the changing climate and the corresponding increase in adverse weather events and their severity. EPA considered a forward-looking approach where a facility owner and operator would determine the facility's vulnerability to climate change impacts in terms of discharge potential due to flooding, increased extreme weather events, and other changes, such as sea level rise and subsidence.

EPA judged that the proposed criteria, which rely on consideration of adverse weather conditions (see Section IV.A.3.b.i of this preamble), capture this forward-thinking approach; however, the Agency is particularly interested in feedback on how best to ensure ongoing consideration of climate risks in preparing for CWA hazardous substance worst case discharges. EPA solicits comments, suggestions and supporting rationale and data on how best to incorporate climate risks into CWA hazardous substance FRPs.

ii. Consideration of Passive Mitigation Measures and Administrative Controls

EPA considered including lack of adequate secondary containment as a substantial harm criterion for this action but concluded this would be difficult for regulated entities to implement and for EPA to enforce for CWA hazardous substances.

First, secondary containment may not be an appropriate discharge prevention measure for all CWA hazardous substances. CWA hazardous substances vary widely in physicochemical properties and prevention and response strategies correspondingly differ based on the substance. Prescribing specific containment requirements for each of the 296 CWA hazardous substances as well as mixtures would be difficult to determine and evaluate and may be inappropriate for some

substances altogether. Requirements to prevent CWA hazardous substances discharges are based on many different regulatory regimes and industry standards and thus may be difficult for an inspector to assess.

Further, EPA is proposing in § 118.6 to allow facility owners and operators to appeal their substantial harm determination. This appeal can include consideration of prevention measures and/or secondary containment and/or reduce their worst case discharge planning quantity using the process. Therefore, a substantial harm criterion for adequate secondary containment is not necessary.

EPA also considered proposing to allow for passive mitigation and administrative controls in distance planning for a worst case discharge to FWSE, public water systems, and public receptors in § 118.10 to further encourage facilities to use secondary containment or other prevention measures, where appropriate. Passive mitigation could be defined as equipment, devices, or technologies that function without human, mechanical, or other energy input, but not active mitigation systems, if such systems are capable of withstanding destructive events (e.g., fires, explosions, floods, hurricanes, and earthquakes). Scenarios involving passive mitigation systems that have connections to the environment (such as a rainwater drain valve) would have to assume failure of that connection. The threat of natural disasters would be specific to certain geographic regions, and sources could certify that their passive mitigation meets or exceeds local natural disaster design standards as capable of withstanding destructive natural events. USTs might also be considered a passive mitigation system for liquids. This would be similar to the RMP program's allowance of passive mitigation in offsite consequence analyses.²⁹ EPA did not

²⁹ See 40 CFR 68.25(h), 68.28(d)

take that approach in this proposed regulation because in the event of a worst case discharge during adverse weather conditions, it is entirely likely that passive mitigation measures or administrative controls could fail.

EPA solicits comment on whether and how to include passive mitigation measures, such as secondary containment, and administrative controls in determining substantial harm, as well as whether to consider passive mitigation and administrative controls in planning distance calculations. EPA also solicits comment and data on CWA hazardous substances for which secondary containment and/or passive mitigation might not be appropriate. Additionally, EPA solicits comment on examples of secondary containment, passive mitigation measures, or administrative controls that mitigated discharges thereby avoiding a CWA section 311(b)(3) violation.

iii. Transfers over Water

EPA considered, but did not choose to propose, a separate threshold quantity for facilities that transfer CWA hazardous substances to or from vessels over water as a “substantial harm” criterion. The Oil Pollution Prevention FRP requirements in 40 CFR part 112 contain provisions for facility transfers of oil over water to and from vessels and has a total oil storage capacity greater than or equal to 42,000 gallons. EPA lacks information on these types of facilities for CWA hazardous substances and on whether those facilities pose a greater threat to human health and the environment.

In 2000, the USCG estimated that 225 companies owned approximately 450 facilities transferring bulk chemicals to or from vessels in the United States (65 FR 17416, March 31, 2000). This estimate did not account for chemicals on the CWA hazardous substances list (40 CFR 116.4). The number of facilities under EPA jurisdiction with transfer operations over water

of CWA hazardous substances is unknown. The USCG proposed (65 FR 17416, March 31, 2000) that all MTR facilities that transfer any bulk CWA hazardous substances to vessels be designated as “significant and substantial harm” facilities unless otherwise reclassified by the Captain of the Port.

In establishing a threshold for over-water transfers, EPA also considered proposing to use the same ratio as the Oil Pollution Prevention FRP program threshold quantity for oil storage capacity for facilities that do not transfer over water (1,000,000 gallons) to those that transfer over water (42,000 gallons) to CWA hazardous substances. In this approach, facilities meeting initial screening criteria and transferring approximately 4 percent of the RQ 10,000 multiplier over water would automatically be considered to meet the substantial harm criteria and be required to prepare and submit a CWA hazardous substance FRP. Alternatively, EPA considered proposing another lower multiplier of the RQ (e.g., 10x, 100x) as the threshold amount for facilities transferring CWA hazardous substances over water. EPA did not adopt these approaches because the Agency lacks information about these types of CWA hazardous substance facilities and their potential to cause substantial harm to the environment.

EPA solicits comment on these approaches to develop a substantial harm criterion for facilities that transfer CWA hazardous substances over water, including whether EPA should include a criterion for facilities transferring CWA hazardous substances over water, what threshold quantity would be appropriate for these facilities, and whether EPA should consider a blanket determination that these facilities pose both significant and substantial harm to the environment. EPA further requests data or information on the number and types of facilities conducting CWA hazardous substance over-water transfers currently operating in the United States.

f. Regional Administrator (RA) Determinations of Substantial Harm and Significant and Substantial Harm

The CWA directs the President to develop criteria to identify those facilities that could reasonably be expected to cause substantial harm to the environment. Consistent with the approach in 40 CFR part 112 for oil FRPs, EPA concluded that the RA has the authority to require CWA hazardous substance FRPs, after consideration of site-specific factors for a facility, regardless of whether a facility meets the criteria in proposed § 118.3. In § 118.5(a), EPA is proposing language that identifies the RA authority and the notification requirements and timeframe within which the facility owner or operator must submit the plan. EPA judged that this is appropriate for CWA hazardous substances due to the wide variability in the substances themselves, how they are used and stored, surrounding communities, and other local considerations of which the RA will have considerable knowledge.

To determine whether a facility could reasonably be expected to cause substantial harm following a CWA hazardous substance worst case discharge, EPA is proposing factors for the RA to evaluate in § 118.5(b). The RA can consider transfer operation type; CWA hazardous substance quantities and categories onsite; proximity to FWSE and other areas that possess ecological value; ability to adversely impact public water systems; location in a SWPA; ability to cause injury to public receptors; reportable discharge history; lack of passive mitigation measures, including measures that enhance resilience to climate change; potential for a worst case discharge to cause harm to communities with environmental justice concerns; potential vulnerability to climate change; or other site-specific characteristics and environmental factors that the RA determines to be relevant to protecting the public or environment from substantial harm by CWA hazardous substances discharges into navigable waters. These factors provide

flexibility for EPA to identify those facilities that could cause substantial harm to the environment that might not otherwise fit the criteria proposed in this action.

Furthermore, the CWA directs the President to develop criteria to identify a subset of the substantial harm facilities that could reasonably be expected to cause both significant and substantial harm to the environment. EPA is proposing in § 118.5(d) that the RA can consider, in addition to the substantial harm criteria found in §§ 118.3(c) and 118.5(b), factors that include: frequency of past reportable discharges; proximity to navigable waters or conveyances to navigable waters; age of equipment; potential for hazards such as flooding, hurricanes, earthquakes, or other disasters that could result in a worst case discharge; and other facility-specific and Region-specific information, including local impacts on public health. The Agency concluded that these considerations, in addition to the substantial harm criteria proposed in §§ 118.3(c) and 118.5(b), provide a flexible, risk-based approach to designating facilities that meet substantial harm or significant and substantial harm criteria. By allowing the RA to consider a wide variety of data points and local considerations, he or she can appropriately target those CWA hazardous substance facilities posing a significant and substantial harm to human health or the environment to prepare CWA hazardous substance FRPs and require EPA approval of those plans.

Consistent with CWA requirements, EPA is proposing to specify actions that EPA will take to review CWA hazardous substance FRPs in § 118.5(c). This includes promptly reviewing plans, requiring amendments, approving plans, and reviewing plans on a schedule.

Finally, EPA is proposing in § 118.6 a process for facility owners or operators to appeal the substantial harm or significant and substantial harm determinations. See Section IV.C. of this preamble for further discussion.

EPA solicits comments on these provisions and supporting rationale or data for alternative approaches.

3. Other Applicability Criteria

a. Exceptions

EPA analyzed applicability exceptions for major EPA and Federal non-EPA hazardous substances regulations. EPA also reviewed industry and use-specific exemptions in EPA hazardous substances programs. These exceptions can extend so far as to exclude facilities storing or using hazardous substances in exempted categories from all requirements of the program.

EPA is proposing in § 118.8(a)(4) to except USTs as defined in 40 CFR part 280 from the regulatory requirements in this action. This proposed exception aims to reduce the burden of overlapping regulatory requirements. Under 40 CFR part 280, a hazardous substance UST is defined as an underground storage tank system containing a hazardous substance defined in section 101 of CERCLA, including mixtures of substances with petroleum, which is not a petroleum UST system. For the hazardous substances UST program, owners and operators must report releases to the Agency within 24 hours, take immediate action to prevent any further release of the substance, and identify and mitigate fire, explosion, and vapor hazards.

USCG regulates facilities transferring oil or hazardous materials in bulk and considers exemption requests from facilities.³⁰ USCG reviews exemption requests to determine that compliance with the regulatory requirement is economically or physically impractical; that no alternative procedures, methods or equipment standards exist that would provide an equivalent

³⁰ See 33 CFR 154.108

level of safety from pollution by hazardous materials; and the likelihood of discharge does not increase as the result of an exemption. EPA addresses this petition issue (discussed in detail in Section IV.C.4 of this preamble) through proposing to adopt language allowing facilities to request reconsideration of substantial harm status from the RA. Therefore, the Agency is not proposing to adopt language allowing facilities to request reconsideration of substantial harm status from the RA as an exemption but solicits comment on whether a similar provision is needed for this proposed regulation.

b. Threshold Exemptions

Several hazardous substance regulations, under both EPA and other Federal agencies, exempt the counting of hazardous substances with specific uses towards the calculation of the threshold quantity. EPA is proposing in § 118.8(b) to exempt articles and specific uses including in use as a structural component of the facility; use of products for routine janitorial maintenance; use by employees of foods, drugs, cosmetics, or other retail and personal items containing the CWA hazardous substance; process water or cooling water; use of CWA hazardous substances present in process water or non-contact cooling water as drawn from the environment or municipal sources; use of CWA hazardous substances present in air used either as compressed air or as part of combustion; and retail and personal uses.

The intent of these exemptions is to reduce the burden of incorporating limited quantities of hazardous substances contained within articles and other products listed, which are unlikely to be discharged in a worst case scenario. EPA proposes to adopt these exemptions in counting CWA hazardous substances toward total threshold quantity calculations.

c. Alternative exceptions and exemptions

EPA solicits comments and rationale for excluding any industries, product types, or uses

for both excepted from all regulatory requirements (§ 118.8(a) Exceptions) as well as in threshold quantity calculations (§ 118.8(b) Exemptions).

4. Worst Case Discharge Calculations

In § 118.2, EPA is proposing a regulatory definition for worst case discharge for onshore non-transportation-related facilities. Specifying the definition is necessary for a facility owner or operator to determine a planning quantity that corresponds to the largest foreseeable amount of a CWA hazardous substance that could be discharged under worst case circumstances when preparing a response plan, and to determine distance to endpoints for applicability. EPA is proposing a definition for distance to endpoint in § 118.2 as the distance a CWA hazardous substance will travel before dissipating to the point that a worst case discharge will no longer cause injury to public receptors or fish, wildlife, and sensitive environments as in proposed Appendix B or adversely impact a public water system as in proposed § 118.3(c)(2). The facility's worst case discharge quantity will significantly affect the response resources and equipment necessary to implement the plan. The CWA defines a worst case discharge as the largest foreseeable discharge in adverse weather conditions.³¹ EPA is proposing to adopt this definition in this action, consistent with the Oil Pollution Prevention FRP program and DOT's worst case discharge regulations. EPA is proposing in § 118.10 that for all CWA hazardous substances, the worst case discharge scenario will represent the largest capacity container of a single CWA hazardous substance, which meets or exceeds the threshold quantity at the facility as a whole, in a container or group of interconnected containers. Therefore, the facility owner or operator need only to define one worst case discharge quantity regardless of how many CWA

³¹ See 33 U.S.C. 1321(a)(24)

hazardous substances are present onsite. However, an FRP will need to identify and plan for all CWA hazardous substances with a maximum capacity on site that meets or exceed the threshold quantity.

EPA recognizes that there are advantages and disadvantages to establishing a worst case discharge quantity for a facility. Specific information on the worst case discharge scenario will assist facility and public emergency planners and responders recognize the maximum hazard potential surrounding the facility. This allows planners to identify the necessary resources and equipment to respond to the worst case discharge from the facility.

However, the worst case discharge scenario may be unlikely in comparison to other discharge scenarios with smaller quantities of CWA hazardous substances posing lesser potential consequences. Focusing on the worst case scenario alone, therefore, could lead facility owners and operators, public agencies, and the public to overestimate the threat posed by a facility and commit unnecessary resources for planning purposes. EPA solicits comment on the proposed definition of a worst case scenario, as well as the approach to focus on a single worst case discharge planning quantity for a facility that could have multiple CWA hazardous substances onsite.

a. Adverse Weather Conditions

The worst case discharge scenario is defined as the largest foreseeable discharge in adverse weather conditions. EPA is proposing in § 118.2 to define adverse weather conditions as weather conditions that hinder response activities and that must be considered in identifying appropriate response strategies, tactics, and equipment, to include the potential for increased incidence and severity of extreme weather events due to climate change, as well as other climate change impacts. EPA judged that this definition is appropriately forward-looking and

encompasses a wide range of potential weather conditions due to climate change that could affect a facility's potential worst case discharge and response to such a discharge. EPA solicits comment on this definition and alternative language and considerations.

b. Worst Case Discharge Scenarios

i. Proposed Approach

In § 118.10, EPA is proposing to require facilities to develop one worst case discharge scenario for the container with the largest capacity of a CWA hazardous substance with a maximum capacity onsite that meets or exceeds the threshold quantity in one container or group of interconnected containers. This would capture the worst case discharge at the facility for CWA hazardous substances and be used to both determine applicability and for the FRP hazard evaluation.

This action is focused on worst case discharges of CWA hazardous substances and EPA is not proposing to require planning for less than worst case discharge scenarios, as per the statutory authority. Additionally, planning for a worst case discharge should help ensure that the appropriate plans, response personnel, and equipment are ready should a less than worst case discharge occur.

This approach may be problematic for some facilities such as batch processors and warehouses where the use of CWA hazardous substances or inventory may vary considerably. It also would not account for a facility that could have different worst case discharge scenarios reaching two different bodies of water or requiring different response resources under adverse weather conditions.

ii. Alternatives to Proposed Worst Case Discharge Approach

I. Additional Worst Case Scenarios if Response Equipment Differs

EPA considered requiring one worst case scenario for the largest capacity container or group of interconnected containers at a facility and additional scenarios for additional CWA hazardous substances if the response equipment differs from the primary worst case scenario. One worst case discharge scenario would be defined for the largest capacity container of a single CWA hazardous substances above a threshold quantity or group of interconnected containers, as detailed in the proposed worst case discharge quantity. However, if the facility also has a second CWA hazardous substance that exceeds the threshold quantity which would require differing response equipment or procedures than the primary worst case scenario, the facility must develop a second worst case scenario. This would account for a facility that could have different CWA hazardous substances reaching different navigable waters, one CWA hazardous substance reaching multiple navigable waters, or different CWA hazardous substances reaching the same navigable waters but requiring different response equipment, which all occur in adverse weather conditions. However, this still may be problematic for some facilities such as batch processors and warehouses where use of CWA hazardous substances or inventory may vary considerably.

II. Additional Worst Case Scenarios if Receptors Differ

EPA also considered requiring one worst case scenario for each CWA hazardous substance with a maximum capacity onsite above the threshold quantity if different receptors would be affected and different response resources would be required. One worst case discharge scenario would be defined to represent each CWA hazardous substance above a threshold quantity in its largest container. A facility would be required to evaluate worst case scenarios for each CWA hazardous substance at the facility, unless it can show that no additional receptors (public water system, FWSE, or public receptors) would be impacted in a worst case discharge with the additional CWA hazardous substance(s) or categories of CWA hazardous substances.

Each worst case scenario would include planning distance calculations.

III. Additional Worst Case Scenarios Based on Hazard Class

EPA considered requiring additional worst case discharge scenarios based on hazard classification. In this situation, an owner or operator would model a worst case discharge scenario for each hazard class of the CWA hazardous substances with a capacity onsite above a threshold quantity at his or her facility. Requiring scenarios based on hazard classification may clarify response requirements and ensure equipment and response resources available are appropriate to each class of hazardous substance present onsite, since response considerations are likely to be similar within hazard classes. Additionally, industry and responders should be familiar with these types of commonly used classification systems. Examples of common hazard classification systems are DOT's hazard classification system found at 40 CFR 173.2 or the CWA hazardous substance reportable quantity categories in 40 CFR 117.3.

EPA solicits comment on requiring additional worst case discharge scenarios based on hazard classification, including the preferred classification system and reasons for its use.

IV. Alternative Discharge Scenarios

EPA also considered requiring alternative discharge scenarios. This approach would require facility owners or operators to evaluate additional alternative discharge scenarios to account for more probable discharge scenarios and varying adverse weather conditions which could impact different downstream receptors compared to the worst case discharge. EPA recognizes that the worst case scenario may often be improbable compared to other discharge scenarios with potentially fewer and less serious consequences. Focusing on the worst case scenario alone, therefore, could lead facility planners, public agencies, and the public to overestimate the threat posed by a facility. Therefore, EPA considered requiring facilities to

examine a range of events in addition to the worst case scenario, including more probable discharges, and communicating information on these events to public agencies and the public to provide additional information on the hazards posed by the facility. This approach would reflect disparate chemical risk and offsite consequences. However, it is unclear whether requiring facilities to examine more probable discharge scenarios would result in a different emergency response action as compared to the worst case discharge.

Either the facility owner or operator or EPA would need to determine the appropriate number of alternative discharge scenarios to be evaluated. Although the worst case scenario is specifically defined, facilities are likely to use varying models and approaches to estimate offsite impacts, which may be appropriate in accounting for site-specific conditions associated with other scenarios.

EPA solicits comment on the worst case discharge number of scenarios, scenarios for different CWA hazardous substances onsite, quantity calculations, examining chain reactions of failures, methodologies, and the types of alternative discharge scenarios facilities should consider with supporting rationale and data. EPA also solicits comment on allowing consideration of active mitigation, which could be equipment, devices, or technologies that need human, mechanical, or other energy input to function, in worst case discharge scenarios. Examples of active mitigation for CWA hazardous substance discharges to land and water could include containment dams in onsite conveyances, culvert plugs, chemical neutralization, sorbent materials, and other measures.

c. Worst Case Discharge Distance to Endpoints

EPA is proposing in § 118.10(b) that a facility owner or operator may use a methodology, model, or other technique that accounts for the stated requirements to calculate the distance to

each endpoint. An owner or operator may use proprietary models provided that he or she allows EPA access to the model and describes the model's features to local emergency planners, upon request. The stated requirements are:

1. Identifying endpoints: This step in the process requires the identification of endpoints for each CWA hazardous substance. EPA is proposing endpoints in Appendix B for FWSE and public receptors.
2. Calculating the distance to endpoints: Endpoints are critical in calculating distances from the nearest opportunity for discharge, within which human health and the environment could expect to be adversely affected. In addition to the characteristics of the CWA hazardous substances the FRP addresses, distances to endpoints are affected by planning quantities and impact analysis parameters.
3. Compare endpoint concentration(s) against calculated concentration(s).

The Agency recognizes facilities will need to have in-house expertise or hire consultants with such expertise to complete these offsite impact analyses. This may pose a significant resource burden on some facilities. The Agency requests comment on approaches to minimize this burden and ensure the results are useful for facility and local emergency planners.

The Agency recognizes the limitations associated with simple, generic tools needed to cover a potentially wide variety of scenarios. It would be difficult to construct a generic methodology inclusive of all chemical characteristics and other site-specific parameters. As a result, a generic methodology will generally be less sensitive to these site-specific conditions and therefore may provide less realistic estimates of offsite impacts. The Agency requests comment on this approach and requests input on possible innovative ways to assist facilities in offsite impact analysis that might reduce the burden and provide meaningful, useful results.

d. Worst Case Discharge Quantity

In § 118.10(a), EPA is proposing that the worst case planning quantity be based on the largest capacity container of a CWA hazardous substance or group of interconnected containers for a CWA hazardous substance with a maximum capacity onsite above the threshold quantity. For mixtures, an owner and operator should assume the entire capacity of the container holds the CWA hazardous substance with the lowest RQ. Using the container or interconnected containers with the largest storage capacity as a worst case discharge quantity provides a conservative approach by using the largest potential discharge quantity. It may also be simpler for both facilities and EPA to calculate storage capacity versus the maximum quantity stored in a single container or group of interconnected containers.

Under CWA section 311, a worst case discharge is defined as the largest foreseeable discharge in adverse weather conditions, including a discharge resulting from fire or explosion. This quantity will be used in the distance planning calculation to determine whether a facility is considered to meet substantial harm criteria with respect to the various receptors. The worst case discharge quantity will also be used by the facility owner or operator to plan appropriate response resources, equipment, and actions.

EPA considered but is not proposing to allow facilities to take written administrative controls that limit the maximum quantity in a container into account. EPA determined that these types of controls may be overridden or are easily overlooked, and thus may not be reliably counted on to limit quantities. EPA solicits comment on allowing administrative controls to be accounted for in worst case discharge quantity calculations.

EPA is not proposing to apply a credit for single-facilities with existing secondary containment for the worst case discharge quantity for CWA hazardous substances. In the Oil

Pollution Prevention FRP program (Appendix D to 40 CFR part 112), for the worst case discharge planning volume calculation at single-tank facilities, secondary containment credit is applied by multiplying the capacity of the tank by 0.8 (i.e., 80 percent of the tank capacity). Please see the discussion of secondary containment and passive mitigation in Section IV.A.2.e.ii of this preamble.

For this action, interconnected containers are defined containers that are connected via pipes, hoses, or other conveyance to allow movement of a CWA hazardous substance between containers. In a worst case discharge scenario, a single failure could cause the discharge of the contents of more than one container if they are interconnected. The owner or operator must provide evidence in the response plan that containers with common piping or piping systems are not operated as one unit. If such evidence is provided and is acceptable to the RA, the worst case discharge planning quantity would be based on the largest CWA hazardous substance maximum capacity onsite in interconnected containers without common piping systems or in one container, whichever is greater.

EPA solicits comment on the proposed definition of worst case discharge quantity, calculation of the worst case discharge quantity based on capacity, mixtures, and a secondary containment or passive mitigation reduction.

5. Substantial Harm Certification Form

a. Proposed Approach

EPA is proposing a Substantial Harm Certification Form in 40 CFR part 118 Appendix A that includes the substantial harm criteria and additional data requirements. The proposed form includes fields to capture the screening and substantial harm criteria, as well as the names, Chemical Abstract Service Registry Numbers (CASRN), and quantities of onsite CWA

hazardous substances, distance planning calculations, impact analysis, model schema and data dictionaries, if not already vetted by industry and academia.

In § 118.4(c), EPA is proposing that all facilities that meet the CWA hazardous substances threshold quantity in § 118.3(a) and the proximity to navigable waters criterion in § 118.3(b) must complete the Substantial Harm Certification Form proposed in Appendix A of this action. This includes all facilities that meet criteria in § 118.3(a) and (b), regardless of whether they meet the substantial harm criteria pursuant to § 118.3(c). In accordance with § 118.4(c)(1), the facility owner or operator must complete and submit to the RA the certification form contained in Appendix A to this part within one month of the compliance date proposed in this action (See Section IV.C.2 of this preamble for a discussion of proposed compliance dates) or, for new facilities, within one month of meeting the § 118.3(a) and (b) criteria. All owners or operators required to complete the substantial harm certification form would submit the form to the RA as well as maintain the form onsite so that it is available during compliance inspections. EPA is further proposing in § 118.4(c)(3) that the owner or operator submit updates to the RA every five years or within 60 days of a change at or outside of the facility (e.g., construction of a new water intake) that impacts the facility's potential to cause substantial harm to the environment in accordance as outlined in § 118.3. This ensures that the facility review their potential to cause substantial harm to the environment periodically and that EPA has access to updated information in a timely manner. This proposed approach is based on the Oil Pollution Prevention FRP program, in which facility personnel must complete, and maintain at the facility, a certification form which identifies substantial harm information for the facility (see 40 CFR part 112 Appendix C, Attachment C-II). The form is required of all SPCC-regulated facilities and requires signature by the certifier for the facility.

EPA is proposing in § 118.4(c)(2) that the facility attach information that demonstrates the reliability and analytical soundness of the substantial harm evaluation as well as a review of potential receptors that could be impacted as a result of a CWA hazardous substance discharge. The additional information would assist EPA in making compliance determinations as well as provide sufficient information to identify those facilities that could reasonably be expected to cause significant and substantial harm to the environment.

EPA proposes that the Substantial Harm Certification Form found in Appendix A include a value for “Parent Company” that comports with the definition proposed in Parent Company Definition for TRI Reporting (86 FR 53577, September 28, 2021). This would provide consistency across programs and aid in compliance and enforcement activities.

EPA requests comment on the proposed approach to require a Substantial Harm Certification Form. EPA further requests comment on the information requested in the certification form proposed in Appendix A, the requested supporting documentation, and the timeframes for submitting and updating the information.

b. Alternative Approaches

EPA also considered, but did not propose, requiring facilities that meet the initial screening criteria in § 118.3(a) and (b) to maintain the form only onsite, rather than submit it to EPA. Under the Oil Pollution Prevention regulation (40 CFR part 112), SPCC plans are not filed with EPA, but FRP facilities must submit FRP plans for review, and approval as appropriate. Under this onsite only approach, the burden on facilities to submit the form, and on EPA to maintain the data, would be reduced. However, the largest burden related to the certification form is the planning distance calculation and impact evaluation. Regardless of whether EPA requires this information in the certification form, the facilities would be required to complete

planning distance calculations and submit their supporting documentation to EPA.

EPA also considered requiring facilities to submit their information electronically. EPA determined that electronic submission and management of CWA hazardous substance FRPs would simplify the process for both industry and the Agency. Using this type of system would allow industry to easily submit and make changes and amendments to their plans, while EPA could review, require amendments, and approve plans. However, such a system could be costly to set up and maintain.

An electronic submission and review system could also be used to provide the public with access to all or some of the submitted data from facility owners and operators, which allows for transparency and availability of data to the public including communities with environmental justice concerns and those vulnerable to climate change impacts. EPA chose not to specify electronic submission in the regulatory text to allow flexibility in implementing regulatory requirements based on available resources.

EPA solicits comment on these approaches. Specifically, EPA solicits comment on whether to make the Substantial Harm Certification form available to the public, including methods, systems, and data elements that should be shared, as well as alternatives to the proposed approach, including supporting data and rationale.

B. Response Planning

This proposed rulemaking is specific to the requirements in CWA section 311(j)(5) for facilities that, because of their location, could reasonably be expected to cause substantial harm to the environment by discharging CWA hazardous substances into or on the navigable waters. Additionally, these proposed regulations would require an owner or operator of a covered facility to prepare and submit to the EPA a plan for responding, to the maximum extent practicable, to a

worst case discharge, and to a substantial threat of such a discharge, of a CWA hazardous substance.

EPA is proposing to define “maximum extent practicable” as within the limitations used to determine CWA hazardous substance discharge planning resources for recovery, shoreline protection, and cleanup for worst case discharges from onshore non-transportation-related facilities in adverse weather, as appropriate. It includes the planned capability to respond to a worst case discharge in adverse weather, as described in a CWA hazardous substance FRP. This planned capability may require planning for actions other than containment and recovery of discharged CWA hazardous substances.

With regard to the involvement of Federal response resources in determining maximum extent practicable, EPA notes that one major objective of the OPA 90 amendments to section 311(j)(5) of the CWA was to create a system in which private parties supply the bulk of response resources needed for an oil spill response in a given area.³² While a worst case discharge of hazardous substances will likely require the use of both public and private resources, section 311(j)(5)(D)(iii) states specifically that facility owners or operators must identify and ensure by contract or other means the availability of private personnel and equipment necessary to respond to the maximum extent practicable to a worst case discharge.

EPA is proposing in § 118.11 requirements that ensure access to certain information and equipment during a response and the availability of appropriate technical expertise, as necessary. Certain requirements mirror those found in the Oil Pollution Prevention FRP regulation and others do not. A written plan that complies with other Federal contingency plan regulations or is

³² See OPA Conference Report, H.R. Rep. No. 101-653, 101st Cong., 2d Sess. 1990 at p. 150.

consistent with the approach in the National Response Team's Integrated Contingency Plan Guidance (“One Plan”) and that includes the elements required would satisfy the requirements of this proposed rule. Facilities may augment an existing response plan with requirements that are specific to this action.

The proposed requirements below closely follow those required by the Oil Pollution Prevention FRP regulation, with some modifications to address concerns specific to CWA hazardous substances.

1. Consistency with the NCP and ACPs

The CWA section 311(j)(5)(D)(i) requires that response plans, “. . . be consistent with the requirements of the [NCP] and [ACPs]. . .” The NCP is the Federal government's blueprint for responding to both oil spills and hazardous substance discharges. The NCP is the result of efforts to develop a national response capability and promote coordination among the hierarchy of responders and contingency plans. Congress has broadened the scope of the NCP over the years. As required by the CWA of 1972, the NCP was revised to include a framework for responding to hazardous substance releases, as well as oil spills. OPA 90 further amended the CWA to establish Area Committees to create ACPs that, when implemented in conjunction with the NCP and RCPs, be adequate to remove a worst case discharge, and to mitigate or prevent a substantial threat of such a discharge, of oil and of hazardous substances, amongst other requirements.

ACPs are mandated under CWA section 311(j)(4) and prepared by Area Committees comprised of members appointed by the President from qualified Federal, state, and local agency personnel. The term “ACP” is used generically to represent the applicable ACP, RCP, Regional Integrated Contingency Plan, etc., as geographically relevant to the area(s) under discussion. When implemented in conjunction with the NCP, ACPs must be adequate to remove a worst case

discharge, and to mitigate or prevent a substantial threat of such a discharge, from a facility operating in or near the area covered by the plan. ACPs cover discharges affecting all navigable waters and adjoining shorelines. Under E.O. 12777, EPA and the USCG are responsible for establishing Area Committees for the inland and coastal zones, respectively. In the inland zones for which EPA has jurisdiction, ACPs have been completed by Area Committees and approved by EPA. The ACP process is dynamic, and Area Committees will continue to refine the ACPs to provide more detailed information on protection priorities, develop protection strategies, and identify appropriate cleanup strategies for inland areas. Area Committees have the option to further subdivide their areas into smaller, geographically distinct subareas and develop geographic-specific annexes for these subareas. Members of the public may contribute to the ACP refinement process through communication with Area Committees in the development of geographic-specific annexes.

In § 118.11(a)(1), EPA is proposing that CWA hazardous substance FRPs shall be consistent with the requirements of the NCP and applicable ACPs prepared pursuant to section 311(j)(4) of the CWA. Additionally, the owner or operator shall review relevant portions of the NCP and applicable ACP annually and, if necessary, revise the CWA hazardous substance FRP to ensure consistency with these plans. EPA solicits comment on this approach.

2. LEPC or TEPC Coordination

The OPA Conference Report states that Oil Pollution Prevention FRPs should be consistent with plans prepared under other programs, and that any information developed under CWA section 311(j) should be made available to SERC or TERC and LEPC or TEPC.³³

³³ See OPA Conference Report, H.R. Rep. No. 101-653, 101st Cong., 2d Sess. 1990 at p. 151.

Consistent with that approach, for CWA hazardous substances the EPA is proposing in § 118.12 that a CWA hazardous substance FRP should be consistent with the local emergency response plan for the community in which the facility is located. To ensure consistency, facility owners or operators should coordinate FRPs with their LEPC (or TEPC) local emergency response plan developed under EPCRA section 303. In addition, upon request by the SERC (or TERC) and LEPC (or TEPC), the facility should provide a copy of the CWA hazardous substance FRP.

EPA has examined numerous examples of emergency planning coordination in existing regulations. Under the Oil Pollution Prevention FRP regulation, 40 CFR 112.20(g)(1), “The facility response plan should be coordinated with the local emergency response plan developed by the local emergency planning committee under section 303 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (42 U.S.C. 11001 et seq.). Upon request, the owner or operator should provide a copy of the facility response plan to the local emergency planning committee or State emergency response commission.”

The RMP rule has an equivalent provision under section 68.95(c) and additional local emergency planning and response organization-related provisions at 68.93, such as:

- The owner or operator of a stationary source shall coordinate response needs with local emergency planning and response organizations to determine how the stationary source is addressed in the community emergency response plan and to ensure that local response organizations are aware of the regulated substances at the stationary source, their quantities, the risks presented by covered processes, and the resources and capabilities at the stationary source to respond to an accidental release of a regulated substance.
- Coordination shall occur at least annually, and more frequently if necessary, to address changes: At the stationary source; in the stationary source’s emergency response and/or

emergency action plan; and/or in the community emergency response plan (40 CFR 68.93(a)).

- Coordination shall include providing to the local emergency planning and response organizations: The stationary source's emergency response plan if one exists; emergency action plan; updated emergency contact information; and other information necessary for developing and implementing the local emergency response plan. For responding stationary sources, coordination shall also include consulting with local emergency response officials to establish appropriate schedules and plans for field and tabletop exercises. The owner or operator shall request an opportunity to meet with the local emergency planning committee (or equivalent) and/or local fire department, as appropriate, to review and discuss those materials (40 CFR 68.93(b)).

- The owner or operator shall document coordination with local authorities, including: The names of individuals involved and their contact information (phone number, email address, and organizational affiliations); dates of coordination activities; and nature of coordination activities (40 CFR 68.93(c)).

EPA considered following the RMP model in this proposed action. Both the Oil Pollution Prevention FRP program and the RMP rule account for coordination with local emergency response planners (i.e., LEPCs), but the RMP rule includes specifics on activities during coordination between the facility and the local response organization, the frequency of coordination, and documentation of the coordination. Due to the likely involvement of local emergency responders in CWA hazardous substance response actions, EPA judged that this level of detail is warranted for coordination and documentation.

EPA is considering various documentation requirements for this action. Under the RMP rule (40 CFR 68.93(c)), the owner or operator must document coordination with local authorities.

EPA solicits comment on including the documentation requirement in this action, as well as on expanding this requirement to document agreement between the facility and local responders on actions or resources that are identified as the responsibility of the local responders.

As per Section IV.2.d.xvii of this preamble, EPA is proposing in § 118.13 that facility owners or operators coordinate with local emergency response officials and invite them to participate in drills and exercises. CWA section 311(j)(6) authorizes periodic inspection of containment booms, skimmers, vessels, and other major equipment used to remove discharges. CWA section 311(j)(7) requires unannounced drills. Establishing a program that follows the National Preparedness for Response Exercise Program (PREP) guidelines satisfies the exercise requirements of the EPA, USCG, the Pipeline and PHMSA, and the Bureau of Safety and Environmental Enforcement (BSEE).³⁴ PREP is a joint industry and government effort to establish recognized national guidelines for conducting drills and exercises to meet the CWA section 311 drill and exercise requirements.

Under the RMP rule, coordination occurs at least annually and more frequently, if necessary. Aligning with RMP is logical due to the overlap in potentially regulated facilities,³⁵ and LEPCs or TEPCs that will likely play a significant role in responding to CWA hazardous substance discharges. Note that EPA's cost estimates do not include costs incurred by state and local agencies to identify water intakes, nor coordination and planning costs for emergency planning and exercises that SERCs, LEPCs and emergency responders may incur.

EPA solicits comment on the cost and appropriate frequency of coordination, including

³⁴ See the 2016.1 PREP Guidelines, effective October 1, 2018, at <https://homeport.uscg.mil/Lists/Content/DispForm.aspx?ID=30271&Source=/Lists/Content/DispForm.aspx?ID=30271>.

³⁵ See RIA for more information.

for public water systems, LEPC time commitment, and procedures if an LEPC in the area is inactive.

3. QI Designation and Duties

The CWA section 311(j)(5)(D)(ii) requires that response plans, “. . . identify the qualified individual having full authority to implement removal actions and require immediate communications between that individual and the appropriate Federal official and the persons providing personnel and equipment . . .” One of the primary responsibilities of the QI is, upon learning of a discharge of CWA hazardous substance, to immediately communicate with the appropriate Federal official and the persons providing personnel and equipment for the discharge response. This procedure will ensure timely notification of Federal officials so that they may activate ACPs; notify other Federal, state, tribal, and local agencies; ensure adequate measures are taken by the responsible party; and activate governmental response resources, when necessary. It also ensures that response resources identified will commence appropriate response actions in a timely manner. EPA is proposing that regulated facilities be required to identify a QI who is capable of immediately communicating with the appropriate Federal official and response resource providers and has the full authority to implement removal actions to contain and remove the CWA hazardous substance(s) discharged.

EPA is proposing specific duties for QIs in § 118.11(a)(2). The Agency is proposing the same duties for the QI as are required in the Oil Pollution Prevention FRP regulation and is also proposing an additional requirement to notify and provide necessary information to public water

systems that may be impacted by a discharge.³⁶ The Agency is not assuming that the QI for an oil spill response will necessarily be the appropriate QI for CWA hazardous substance incidents.

A QI must have basic knowledge of chemical response to be able to characterize the nature of the incident to responders. Therefore, EPA is proposing minimum training requirements for a QI. To build on an existing standard that is widely accepted and demonstrates the appropriate skill set, EPA proposes that a QI must be trained as an incident commander under the OSHA HAZWOPER provisions in 29 CFR 1910.120(q)(6)(v). OSHA's emergency response training guidance (29 CFR 1910.120 Appendix E) further describes qualifications for incident commanders. The OSHA training requirement for incident commanders should be interpreted as a minimum qualification, not an absolute measure of expertise.

EPA solicits comment on the specific duties of the QI, how he or she should be designated and identified, training and recordkeeping requirements, and other approaches to fulfilling these requirements.

4. CWA Hazardous Substance FRP Components

a. Facility Information

EPA is proposing in § 118.11(b)(1) that a CWA hazardous substance FRP include facility information including the facility name; latitude and longitude; street address, including city, state, and zip code; telephone number, and information regarding the facility's location described in a manner that would aid a reviewer and a responder in locating the facility. EPA solicits comment on additional or alternative data elements that should be included.

b. Owner or Operator Information

³⁶ See 40 CFR 112.20(h)(3)(ix).

EPA is proposing in § 118.11(b)(2) that a plan include the name and preferred contact method of the owner or operator. EPA solicits comment on additional or alternative data elements that should be included.

c. Hazard Evaluation for Worst Case Discharge with Risk-Based Decision Support System

EPA is proposing requirements for developing a hazard evaluation for a worst case discharge scenario in § 118.11(b)(3). The intent of this requirement is to ensure that in the event of a worst case discharge, owners or operators will have pre-identified the areas in which adverse impacts to human health and the environment could occur. Please see Section IV.A.4 of this preamble for a more in-depth discussion of worst case discharge scenarios and requirements.

Hazard evaluation is a widely used industry practice that allows facility owners or operators to develop a complete understanding of potential hazards and the response actions necessary to address these hazards. Hazard identification and evaluation will assist facility owners or operators in planning for potential discharges, thereby reducing the severity of discharge impacts that may occur in the future by allowing expeditious implementation of preplanned and practiced CWA hazardous substance-specific response actions designed to mitigate impacts. The evaluation also may help the operator identify potential sources of discharges. In addition, hazards to workers and emergency response personnel health and safety shall be evaluated. The hazard evaluation should include CWA hazardous substance-specific information for all CWA hazardous substances with a maximum capacity onsite that meets or exceeds the threshold quantity, including cautionary response considerations, health hazards, fire and explosion hazards, chemical reactivity, hazard classifications, and physical and chemical properties. This section also requires the facility owner or operator to examine the facility's

operations closely.

Additionally, the hazard evaluation shall address the potential effects (e.g., to human health, property, or the environment) of a CWA hazardous substance worst case discharge as per the discussion in Section IV.A.b of this preamble on the ability to adversely affect public water systems, ability to cause injury to FWSE, and ability to cause injury to public receptors. This analysis should examine impacts to communities with environmental justice concerns, using tools such as EPA's Environmental Justice Screening and Mapping Tool (EJSCREEN), as well as consider the potential impacts of climate change, including but not limited to increased flooding or subsidence, sea level rise, and an increase in the number and severity of extreme weather events.

Because of the many variables that influence the fate, transport, and effects of a CWA hazardous substance discharge, these analyses are designed to provide a macroscopic view of potential impacts. By identifying worst case discharge planning quantities, endpoints, and distances to endpoints, diagrams of impacted areas for each CWA hazardous substance can be developed. Further, within these impact areas, owners or operators will be able to identify the magnitude of potential exposure to humans and the environment and factor this information into the overall response planning and actions.

EPA is proposing to define "endpoint" in § 118.2 as the point at which a worst case discharge no longer has the ability to cause injury to public receptors or fish, wildlife, and sensitive environments as in Appendix B or adversely impact a public water system as in § 118.3(c)(2). Under the RMP rule, the endpoint for airborne releases of most RMP-regulated toxic substances is its ERPG Level 2, developed by the American Industrial Hygiene Association (see

61 FR 31668, June 20, 1996).³⁷ Endpoints can be obtained or derived from health guideline values from a recognized authority, to include Federal or state agencies, professional associations, or scientific studies. Useful values could be those for oral or incidental digestion that could characterize waterborne exposure, as found in EPA's oral reference dose values from IRIS assessments³⁸ or ATSDR's MRLs, the latter of which are defined as an estimate of the daily human exposure to a hazardous substance that is likely to be without appreciable risk of adverse non-chance health effects over a specified duration of exposure.³⁹ MRLs are not intended to define clean up or action levels for ATSDR or other Agencies. An endpoint is used to determine the perimeter of an area adversely impacted by a CWA hazardous substance discharge to water. EPA envisions that the analysis will result in a series of diagrams illustrating the areas potentially impacted, as well as human and environmental receptors within those areas, as proposed in §118.11(b)(3)(i).

EPA is also proposing in § 118.11(b)(3)(ii) that plan holders develop a risk-based decision support process. This requirement provides a tool to be used by plan holders and responders to ensure thorough consideration of risk factors that may influence response activities. This section of the plan would include a description of processes to identify, evaluate, control, and communicate risks of a CWA hazardous substance incident. This requirement could be met through a checklist, decision tree, flow diagram, automated system, or any other method that contains the required components. At a minimum, the process must include the following:

³⁷ For substances that did not have an established ERPG-2, the toxic endpoint was the level of concern (LOC) from EPA's 1987 Technical Guidance for Hazards Analysis, updated where necessary to reflect new toxicity data. See 61 FR 31668, June 20, 1996.

³⁸ See https://iris.epa.gov/AtoZ/%3Flist_type=alpha

³⁹ See <https://www.atsdr.cdc.gov/mrls/index.html>

- Risk identification, which describes the process which will be used to determine the extent and route of CWA hazardous substance exposure to humans and the environment;
- Risk characterization, which describes the process which will be used to establish relative degrees of risk and prioritizing risks;
- Risk control, which describes the process that will be used to determine feasible response methods to eliminate or reduce CWA hazardous substance discharge impacts on human health and the environment; and
- Risk communication, which describes the process which will be used to communicate information resulting from the above three bullets to parties internal and external to response activities.

EPA recognizes that a worst case discharge at a facility could have cascading effects on co-located or proximate facilities, as well as a chain reaction of failures. An analysis of this potential is required in the Oil Pollution Prevention FRP regulation. An example of this type of incident was the storage tank fire at Intercontinental Terminals Company, LLC (ITC) in Deer Park, TX, on March 17, 2019. In that instance, a fire originated in the vicinity of an 80,000-barrel aboveground atmospheric storage tank that stored naphtha, a flammable liquid, typically used as a feedstock or blend stock for production of gasoline. ITC was unable to isolate or stop the release of naphtha product from the tank, and the fire continued to burn, intensify, and progressively involved additional tanks in the tank farm.⁴⁰ EPA solicits comment on including the potential effects of cascading failures within and between facilities in a hazard analysis and the feasibility of this type of information sharing between facilities, outside of the context of

⁴⁰ See Factual Update, Chemical Safety Board, October 30, 2019
https://www.csb.gov/assets/1/20/itc_factual_update_2019-10-30.pdf?16522

local emergency planning and LEPCs or TEPCs. Additionally, EPA solicits comment on the proposed elements of the hazard evaluation as well as additional considerations that should be included, with supporting data and rationale.

d. Reportable Discharge History

EPA proposes in § 118.11(b)(4) that facilities report in their CWA hazardous substance FRP any discharge above the RQ of CWA hazardous substances with a maximum capacity onsite above the threshold quantity that reached water in the last five years. Please see Section IV.1.b.iv of this preamble for a more in-depth discussion on the proposed requirement. The owner or operator shall report the following information when available: date, time, and approximate duration of the discharge; CWA hazardous substance(s) discharged; estimated quantity discharged in pounds; the type of discharge event and its source; weather conditions; onsite impacts; offsite impacts; initiating event; contributing factors; clean-up actions taken, steps taken to reduce possibility of recurrence, and description of how the discharge was detected. EPA solicits comment on the data elements required and the inclusion of these in the plan, including supporting data and rationale.

e. Response Personnel and Equipment

EPA proposes in § 118.11(b)(5) that plans include the identity of private personnel and equipment necessary to remove to the maximum extent practicable a worst case discharge of a CWA hazardous substance, and to mitigate or prevent a substantial threat of a worst case discharge. It is likely that personal protective equipment, monitoring equipment, and dispersion models would be necessary to assess the potential risks and develop response strategies. Many CWA hazardous substances, once discharged, cannot be contained or collected. The first priority for these discharges would be to ensure that exposure to the CWA hazardous substances is

minimized. The proposed equipment requirements are designed to do this. Additionally, if facilities determine that equipment is required, owners or operators must include times within which the equipment and personnel will be onsite in the event of a worst case discharge. In this action, EPA is not proposing minimum response times due to the wide variability in appropriate response actions, resources, and equipment needed to respond to discharges of CWA hazardous substances.

EPA solicits comment on this approach and on requiring equipment and personnel onsite in specified time frames, with supporting data and rationale.

f. Contracts

Under the CWA section 311(j)(5)(D)(iii), an FRP is required to “identify, and ensure by contract or other means approved by the President the availability of, private personnel and equipment necessary to remove to the maximum extent practicable a worst case discharge...” To address “by contract or other approved means,” the Oil Pollution Prevention regulation codified the following definition of contract or other approved means (§112.2):

- (1) A written contractual agreement with an oil spill removal organization that identifies and ensures the availability of the necessary personnel and equipment within appropriate response times; and/or
- (2) A written certification by the owner or operator that the necessary personnel and equipment resources, owned or operated by the facility owner or operator, are available to respond to a discharge within appropriate response times; and/or
- (3) Active membership in a local or regional oil spill removal organization (OSRO) that has identified and ensures adequate access through such membership to necessary personnel and equipment to respond to a discharge within appropriate response times in the specified

geographic area; and/or

(4) Any other specific arrangement approved by the RA upon request of the owner or operator.⁴¹

The Oil Pollution Prevention regulation also defined an OSRO (§112.2) as an entity that provides response resources and includes any for-profit or not-for-profit contractor, cooperative, or in-house response resources that have been established in a geographic area to provide required response resources.⁴² The Oil Pollution Prevention regulation’s fourth definition of contract or other approved means (any other specific arrangement approved by the RA upon request of the owner or operator), as above, allows flexibility for all regulated facilities to propose other means of demonstrating adequate response capability, subject to approval by the appropriate RA. For oil spills from Oil Pollution Prevention FRP-regulated facilities, the OPA 90 Conference Report states that the intent was to put the onus on facilities to provide personnel and equipment to respond to spills either through in-house resources or through OSROs.⁴³

EPA is proposing to adopt the Oil Pollution Prevention FRP regulatory definition of “ensure by contract or other means” and CWA hazardous substance Spill Response Organization (SRO) in § 118.2 and require evidence of contracts or other approved means for ensuring the availability of such personnel and equipment in § 118.11(b)(6), while specifically referring to “response/respond” rather than “remove/removal”, since in many cases, it may be infeasible or impossible to remove a CWA hazardous substance. EPA solicits comment on this approach and information on such organizations relevant to this regulation, specifically regional availability of these services, readiness fees, and general costs, as well as supporting data and rationale.

⁴¹ See 40 CFR 112.2.

⁴² Ibid.

⁴³ Legislative History of the Oil Pollution Act of 1990: P.L. 101-380: 104 Stat. 484: August 18, 1990. in 8 Washington, D.C., Covington & Burling; p. 147.

g. Notifications

EPA is proposing in § 118.11(b)(7) to require CWA hazardous substance FRPs to include the identity and contact information of individuals or organizations to be notified in the event of a discharge so that immediate communications between the QI and the appropriate Federal officials and persons providing response personnel and equipment can be ensured.

The notification list should include: the NRC, the QI, the company response team, the Federal OSC and/or Regional Response Center, the local response team (fire department or cooperatives), the fire marshal, the SERC or TERC, the state police, the LEPC or TEPC, downstream public water systems, a local television/radio station for evacuation notification, local hospitals, and any other potential receptor or interested party who could be impacted by a discharge.

In § 118.11(b)(7), EPA is also proposing a description of the methods, such as email, telephone, etc., facilities should use to make notifications, as well as a list of those individuals and organizations required to be notified. Due to the potential for exposure to public receptors following a discharge, plans must include notifications to local public response organizations so they may initiate established response procedures and discharge notifications.

EPA is proposing in § 118.11(b)(7) that each plan describe how the responsible party will coordinate with local response organizations following a CWA hazardous substance discharge. Although the CWA explicitly requires the availability of private resources to respond to these discharges, local emergency responders, such as firefighters and hazardous materials response teams, may respond as well. This requirement recognizes the benefits gained by ensuring an effective liaison between the responsible party and these response organizations. EPA solicits comment on the required notifications and methods, including supporting data and rationale.

h. Discharge Information

EPA is proposing in § 118.11(b)(8) that a CWA hazardous substance FRP include a description of information to pass to response personnel in the event of a discharge, including specifics about the event, CWA hazardous substance name and quantity discharged, possible areas and receptors affected, potential routes of transport, distance(s) to nearby waterways and conveyances, data on the characteristics of the CWA hazardous substance and other hazardous substances in proximity, ignition sources, and any other information that may be helpful to responders and the public. EPA solicits comment on this plan element, with supporting data and rationale.

i. Personnel Roles and Responsibilities

EPA is proposing in § 118.11(b)(9) that the CWA hazardous substance facility response plan include the identification and description of responsibilities and the activities that personnel have been trained in and are qualified to conduct in the event of a worst case discharge or substantial threat of such a discharge. EPA solicits comment on this plan element, with supporting data and rationale.

j. Response Equipment Information

EPA is proposing in § 118.11(b)(10) that the CWA hazardous substance facility response plan shall include equipment-specific information, as dictated by the worst case discharge scenario. This includes information about the type of equipment at the facility, its location, response times, and testing requirements.

The CWA requires that worst case discharge response plans, “. . . describe the . . . equipment testing . . . at the facility, to be carried out under the plan to ensure the safety of the vessel or facility and to mitigate or prevent the discharge, or the substantial threat of a

discharge.” (33 U.S.C. 1321(j)(5)(D)(iv)). EPA is proposing in § 118.11(b)(10) that covered facilities for the proposed program be required to submit information on equipment testing in accordance with statutory requirements. EPA solicits comment on this approach to the equipment testing requirements, equipment location information, types of equipment onsite, response times for equipment, and other data elements that should be included, with supporting data and rationale.

k. Evacuation Plans

In § 118.11(b)(11), EPA is proposing requirements for evacuation plans, which should be coordinated with community evacuation plans, as available. Owner and operators should develop a facility-wide evacuation plan in addition to plans to evacuate parts of the facility that are at a high risk of exposure in the event of a discharge, with routes shown on a diagram of the facility. Considerations should be given to: location of CWA hazardous substances; hazards imposed by discharged material; discharge flow direction; water currents, tides, or wave conditions; arrival route of emergency response personnel and response equipment; limitations on evacuation routes, their capacities, and potential for those routes to be impacted by adverse weather events; transportation of injured people to nearest emergency medical facility; location of alarm/notification systems; the need for a centralized check-in area for evacuation validation (roll call); selection of a mitigation command center; and location of shelter at the facility as an alternative to evacuation. These are important considerations for CWA hazardous substance response planning because discharges may behave unpredictably, especially in adverse weather conditions. Additionally, almost all covered facilities will likely be required to comply with OSHA’s emergency action plan requirements at 29 CFR 1910.38, which include procedures for evacuation plans and exit route assignments for personnel onsite and overlap with some of the

proposed requirements. EPA solicits comment on this requirement and the specifics therein, as well as supporting data and rationale.

l. Discharge Detection Systems

EPA is proposing in § 118.11(b)(12) that the facility owner or operator shall provide a detailed description of the procedures and equipment used to detect discharges as well as detect and monitor any hazardous air releases resulting from discharges to navigable water. A section on CWA hazardous substance discharge detection by personnel and a discussion of automated discharge detection, if applicable, shall be included for both regular operations and afterhours operations and be characterized by CWA hazardous substance. In addition, the facility owner or operator shall discuss how the reliability of any automated system will be checked and how frequently the system will be inspected. EPA solicits comment on this approach and other approaches to discharge detection systems, including supporting data and rationale.

m. Response Actions

In § 118.11(b)(13), EPA is proposing that facility owners or operators explain in detail how to implement the facility's response plan by describing response actions to be carried out under the plan to ensure the safety of the facility and to mitigate discharges. This section of the plan must contain prioritized procedures necessary to protect the facility's personnel and mitigate, control, and remediate a CWA hazardous substance discharge. This should include personnel safety, and if applicable, the use of personal protective equipment; facility personnel responsibilities by job title; facility personnel actions in the event of an incident; facility personnel assigned to gather information that must be provided to response personnel; and facility responsibilities to mitigate a CWA hazardous substance incident. If facility personnel will sample or monitor air or water, then include personnel responsibilities for recordkeeping and

sampling of CWA hazardous substances involved in an incident, procedures for sharing real time data with response personnel and the public, personal protective equipment requirements, and safety procedures during the sampling or monitoring operation. EPA solicits comment on this approach and other approaches to enumerating and detailing response actions to be carried out, with supporting data and rationale.

n. Disposal Plans

EPA is proposing in § 118.11(b)(14) that facility owners or operators must describe how and where the facility intends to recover, reuse, decontaminate, treat, and/or dispose of materials after a discharge has taken place and include plans for temporary storage of recovered materials. The appropriate permits required to manage recovered materials according to local, state, and Federal requirements must be addressed.⁴⁴ Materials that must be accounted for in the disposal plan, as appropriate, include recovered product; contaminated soil and water; contaminated equipment and materials, including drums, tank parts, valves, and shovels; personal protective equipment; decontamination solutions; adsorbents; and spent chemicals. These plans must be prepared in accordance with Federal (e.g., RCRA), state, and local regulations, where applicable. For example, a facility could follow the EPA publications *A Guidance Manual: Waste Analysis at Facilities that Generate, Treat, Store, and Dispose of Hazardous Wastes*⁴⁵ and *Pre-Incident All-Hazards Waste Management Plan Guidelines: Four-Step Waste Management Planning Process*.⁴⁶ EPA solicits comment on this approach and other approaches to disposal plans for

⁴⁴ See EPA requirements at <https://www.epa.gov/hwpermitting/what-specific-areas-must-hazardous-waste-permit-address> and a model RCRA permit <https://www.epa.gov/sites/default/files/2016-03/documents/rcra-model-1988.pdf>

⁴⁵ U.S. Environmental Protection Agency (2015). *Waste Analysis at Facilities that Generate, Treat, Store, and Dispose of Hazardous Wastes – Final*. EPA 530-R-12-001. <https://www.epa.gov/hwgenerators/guidance-manual-waste-analysis-facilities-generate-treat-store-and-dispose-hazardous>

⁴⁶ U.S. Environmental Protection Agency. *Pre-incident All-hazards Waste Management Plan Guidelines: Four-step*

CWA hazardous substances with supporting data and rationale.

o. Containment Measures

EPA proposes in § 118.11(b)(15) that a plan should include measures to provide adequate containment and drainage of discharged CWA hazardous substances to limit the threat of harm to human health and the environment. This section shall describe how to contain and control a discharge through drainage, including the available volume of containment, the route of drainage from storage and transfer areas, the construction materials used in drainage troughs, the type and number of valves and separators used in the drainage system, sump pump capacities, the containment capacity of weirs and booms that might be used and their locations, and other cleanup materials. EPA solicits comment on this approach and other approaches to provide adequate containment and draining of discharged CWA hazardous substances with supporting data and rationale.

p. Training Procedures

The CWA requires that response plans describe training for responding personnel (33 U.S.C. 1321(j)(5)(D)(iv)). In this rulemaking, EPA is proposing in § 118.13(b) to reference OSHA's 29 CFR 1910.120 training specific to hazardous substances, while also ensuring that training is conducted not only for facility personnel, but for private personnel, casual laborers, and volunteer responders. EPA is proposing additional considerations for employee training, given the wide range of CWA hazardous substances covered by this proposed regulation and the potential exposure of employees, volunteer responders, and casual laborers to these CWA hazardous substances during a response. Additionally, OSHA's 29 CFR 1910.120 already

applies to emergency response operations for releases of, or substantial threats of release of, hazardous substances without regard to the location of the hazard (§ 1910.120(a)(1)(v)).

Therefore, facilities should already be complying with these regulations in responding to worst case discharges of CWA hazardous substances. Section (q) of 1910.120 is applicable to this proposed rulemaking, and includes specific requirements based on the role of the responder (Incident Commander, etc.), annual refresher training, training on implementing response plans and understanding of the CWA hazardous substances involved, knowledge of the incident command system, and use of personal protective equipment. Requiring that training is conducted in compliance with 29 CFR 1910.120 will further minimize exposures that are hazardous to the health of response personnel.

Finally, EPA is proposing in § 118.13(b)(4) that facilities keep logs for five years following training. Given the ease of storing records electronically, EPA does not believe this poses a significant burden on facilities. Access to training logs is necessary for conducting compliance inspections with the training portion of response plans proposed in this rulemaking. EPA solicits comment on training and documentation requirements with supporting data and rationale.

q. Drills and Exercises

EPA is proposing requirements to develop a drill and exercise program in § 118.13(c). This section references PREP, which is a joint industry/government effort to establish recognized national guidelines for conducting drills/exercises to meet the requirements in section 311(j)(5) of the CWA and existing exercise requirements for oil spill response plan exercises specified by

agency-specific regulations.⁴⁷ A program that follows PREP will be deemed satisfactory.

Additionally, if a facility has a discharge, they may complete an after-action report and adjust operations accordingly, which can count for this requirement.

Drills and exercises are designed to periodically test the ability of response personnel to ensure the safety of the facility and to mitigate or prevent discharges of CWA hazardous substances. A drill and exercise program comprises facility drills and exercises, including tabletop and field exercises, both announced and unannounced, as well as participation in larger area drills and exercises and evaluation of these drills and exercises.

Field exercises should include tests of procedures to notify the public and the appropriate Federal, state, and local emergency response agencies about a worst case discharge; tests of procedures and measures for emergency response actions including evacuations and medical treatment; tests of communications systems; mobilization of facility emergency response personnel, including contractors, as appropriate; coordination with local emergency responders; emergency response equipment deployment; and any other action identified in the response plan, as appropriate.

Tabletop exercises should include discussions of procedures to notify the public and the appropriate Federal, state, tribal, and local emergency response agencies; procedures and measures for emergency response including evacuations and medical treatment; identification of facility emergency response personnel and/or contractors and their responsibilities; coordination with local emergency responders; procedures for emergency response equipment deployment; and any other action identified in the response plan, as appropriate.

⁴⁷ See the 2016.1 PREP Guidelines, effective October 1, 2018, at <https://homeport.uscg.mil/Lists/Content/DispForm.aspx?ID=30271&Source=/Lists/Content/DispForm.aspx?ID=30271>

The purpose of area exercises is to have the entire response community practice discharge response actions in a particular area. An area is defined as that geographic area for which a separate and distinct ACP has been prepared. The response community is comprised of the Federal, state, and local government and industry, and as appropriate, tribal entities.

EPA solicits comment on the appropriate frequency for drills and exercises, the types of drills and exercises that should be required, evaluation reports, and the level of coordination with LEPCs or TEPCs and other response organizations, with supporting data and rationale.

r. Self-inspection

In § 118.11(b)(18), EPA is proposing that owners and operators include written procedures and records of inspections. Facility self-inspection requires two-steps: (1) a checklist of things to inspect; and (2) a method of recording the actual inspection and its findings. An owner or operator should note the date of each inspection and keep CWA hazardous substance FRP records for five years. EPA solicits comment on this approach and alternative methods for self-inspection and self-inspection recordkeeping with supporting data and rationale.

s. Alternative Approaches

EPA considered, but did not propose, to require that plans describe the organizational structure that will be used to manage response operations. This structure could outline the roles and responsibilities of the specific functional areas contained in the National Interagency Incident Management System (NIIMS) Incident Command System (ICS).

EPA also considered proposing different requirements for non-responding versus responding facilities. The RMP regulations (40 CFR 68.90) make a distinction between responding (facilities at which employees will respond to accidental releases of regulated substances) and non-responding facilities (facilities at which employees will not respond to

accidental releases of regulated substances, provided the owner or operator coordinates with local response agencies to ensure that they will be prepared to respond to an emergency at the facility). Responding facilities must comply with the emergency response plan elements of § 68.95 while non-responding facilities are not required to, provided they meet certain criteria in § 68.90(b). While this distinction is appropriate for the RMP program, the CWA stipulates that a facility that has the potential to cause substantial harm in the event of a worst case discharge is required to develop a response plan. For this CWA proposed rulemaking, non-responding facilities would be required to comply with all the planning requirements. EPA is proposing in § 118.11(a)(3) to require the facility owner or operator to identify the resources to be provided by the facility as per CWA section 311(j)(5)(D)(iii).

The Oil Pollution Prevention FRP regulation specifies the amount of time in which facilities must have resources onsite based on the size of the spill, type of oil, and other hazard evaluation criteria. Due to the variability in fate and transport of CWA hazardous substances and their individual response equipment and action needs, EPA is not including similar requirements in this proposed action.

Additionally, EPA considered requiring an Emergency Response Action Plan (ERAP), similar to the provision under the Oil Pollution Prevention FRP regulations at 40 CFR 112.20(h)(1). The ERAP's purpose is to provide a summary of steps for spill source stabilization, including immediate actions by the facility incident management team, such as internal and external notifications and initiation of oil spill preparedness and evacuation procedures, to be kept in the front of the oil FRP or in a separate binder to accompany the full oil FRP. If owners or operators have already prepared a federal or state response plan that addresses the oil FRP requirements and it is cross-referenced, they need not prepare a separate plan (58 FR 8837;

February 17, 1993). Such a requirement in this action could provide an important compilation of critical response information for facility personnel and responders, especially if required on a site-specific basis, where one CWA hazardous substance ERAP would be required for each site, rather than allowing multi-facility CWA hazardous substance ERAPs. Multi-facility CWA hazardous substance ERAPs could ease the burden of preparing individual CWA hazardous substance ERAPs but may not be practicable in terms of accessing time-sensitive information across a multi-facility plan in an emergency situation. EPA anticipates that CWA hazardous substance ERAPs would facilitate owner or operator response to incidents by including condensed versions of select sections from the overall response plan proposed in this action. EPA has found ERAPs to be helpful to planholders responding to oil spills.

EPA solicits comment on these alternative approaches and supporting data and rationale.

C. Implementation and Enforcement

1. Office Delegation

EPA is proposing in § 118.4 that facility owners and operators submit plans to their respective RAs, following the regional delegation model used in the Oil Pollution Prevention regulation. As is currently the practice, and has been for over 30 years, EPA Regions administer the Oil Pollution Prevention FRP program with guidance from EPA Headquarters. This creates effective and efficient localized knowledge and field experience enabling the regions to interact with the regulated community. This is especially true for the potential to require additional facilities to be regulated by the determination of the RA. Additionally, EPA Regional Offices can further delegate to OSCs or other staff as needed. EPA Regional staff have extensive knowledge of the scope of the localized variables for the areas, but EPA understands that this approach will increase the workload in the regions and may require additional staff and resources.

2. Compliance Dates

EPA is proposing in § 118.4(a)(1) that initially regulated facilities that meet the criteria in § 118.3 or are notified by the RA that they meet the criteria for substantial harm found in § 118.5 must prepare and submit a CWA hazardous substance FRP within 12 months. Additionally, EPA is proposing in § 118.4(a)(2) that newly regulated facilities (facilities in operation after the effective date of the Final Rule and that meet the criteria in § 118.3 or are notified by the RA that they meet the substantial harm criteria in § 118.5) submit plans within six months, but no sooner than 12 months after the effective date of the final rule. EPA is proposing in § 118.4(a)(3) that newly constructed facilities (facilities that come into existence after the effective date of the final rule) that meet the applicability criteria must prepare and submit a response plan in accordance with the final rule prior to the start of operations, but no sooner than 12 months after the effective date of the final rule. EPA is proposing in § 118.4(a)(4) that plans be updated and in place prior to the implementation of planned change in design, construction, operation, or maintenance at the facility that results in the facility meeting the criteria in § 118.3, but no sooner than 12 months after the effective date of the final rule. An unplanned event or RA determination will require response plan submission within six months, but no sooner than 12 months after the effective date of the final rule, as proposed in § 118.4(a)(4). EPA is proposing in § 118.4(b)(1) that owner or operator of a facility shall revise and resubmit their plan within 60 days of each facility change, including material, capacity, spill response organization capability, discharge mitigation and response equipment or emergency response procedures, or other changes that may affect the response to a worst case discharge. Materially change means introduction of a new process, new equipment, or regulated substance, an alteration of process chemistry that results in any change to safe operating limits, or other alteration that introduces a new hazard or affects the

facility's potential for a discharge.

These proposed timelines are roughly based on OPA 90 transition provisions, which directed EPA (as delegated by the President in E.O. 12777) to issue regulations for oil worst case discharge response plans (oil FRPs) under section 311(j)(5) of the CWA within 24 months. Facilities could submit the Oil Pollution Prevention FRPs beginning 30 months from enactment (February 18, 1993) and were required to be submitted by 36 months of enactment (August 18, 1993) for facility compliance of onshore facilities pursuant to CWA section 311(j)(5)(E). The Agency set forth existing and new facility compliance requirements in the Oil Pollution Prevention FRP regulations that plans be submitted within six months from the time of discovery or notification that a facility could cause "substantial harm," and a material change requirement for owner or operator plan resubmittal within 60 days of each material change in facility or plan that could affect the adequacy of a facility's response capabilities, such as the ability to respond to a worst case discharge. CWA section 311(j)(5)(G) allows the owner or operator of a facility to seek Federal authorization to operate for up to two years after the plan has been submitted for approval if the owner or operator has certified that he or she has ensured by contract or other federally approved means the availability of private personnel and equipment necessary to respond, to the maximum extent practicable, to a worst case discharge or substantial threat of such a discharge.

EPA solicits comment on the proposed timelines and alternatives, with supporting data and rationale.

3. Confidential Business Information

EPA is proposing in § 118.4(d) that a facility owner or operator may make a claim of CBI if he or she is able to show that the information meets the substantive criteria set forth in 40 CFR

2.302. These criteria generally require that the data be commercial or financial in nature, that they not be available to the public through other means, that an owner or operator take appropriate steps to prevent disclosure, and that disclosure of the data would be likely to cause substantial harm to a competitive position. Review of any CBI claims will be handled as provided for in 40 CFR part 2. However, EPA is proposing in 40 CFR part 118 that certain CWA hazardous substance FRP data elements may not be claimed as CBI because they do not convey any business sensitive information. EPA is proposing specific procedures for submission of CBI claims for CWA hazardous substance FRPs in § 118.4(d)(3). This approach will ensure that EPA and the public have access to critical emergency planning information, while preserving industry competitiveness. EPA solicits comment on this approach and alternatives.

4. Appeals Process

EPA is proposing in § 118.6 to allow owners or operators to participate in and appeal the RA's determination of substantial harm or significant and substantial harm, and the disapproval of a CWA hazardous substance FRP. EPA recognizes the importance of allowing facility owners or operators to present relevant information and therefore proposes a two-part appeals process. The first stage allows a facility owner or operator to submit to the RA a request for reconsideration that includes information and data to support the request. The RA shall evaluate the submitted information and reach a decision on the facility's risk classification or the status of plan approval (including whether changes to a facility's worst case discharge planning quantity are necessary for approval) as soon as practicable. Once the RA renders a decision, the facility owner or operator must submit a plan within 60 days. EPA expects that the request for reconsideration process will be the primary mechanism to address disputes over decisions. However, a follow-up process will also be available for appeal of the RA's determination to the

Administrator of EPA. EPA solicits comment on the proposed process and alternative approaches.

5. Stakeholder Petitions

EPA is proposing a petition process to allow the public and other government agencies the opportunity to provide input on a voluntary basis on CWA hazardous substance facilities that should be required to submit an FRP to EPA in § 118.7. EPA concluded that the availability of the petition process is important for public involvement in the designation of substantial harm facilities and could be an important mechanism for communities with environmental justice concerns and those impacted by climate change to participate in the CWA hazardous substance FRP process. The Agency judged that information provided by the public and other government agencies will assist, rather than burden, the RA. This proposed petition process is similar to one in the Oil Pollution Prevention FRP Final Rule (59 FR 34070, July 1, 1994), where any member of the public or representative from a Federal, State, or local agency may petition the Agency with information that a facility meets the substantial harm criteria and thus should be required to prepare a response plan (see 40 CFR 112.20(f)(2)(ii)). Under this provision, petitions are submitted to the RA, and the RA considers and responds to the petition as soon as practicable. The petition process was implemented to allow the opportunity for public involvement. In addition, the Agency believed that information provided by the public and other government agencies would assist the RA.

It is not necessary for petitioners to determine quantitatively whether the facility meets one of the specific applicability or substantial harm criteria, but rather, petitioners should provide a reasonable basis for asserting that the facility may pose a risk of substantial harm to the environment. A petition that fails to document the reasons why a facility should be classified as a

facility that has the potential to cause substantial harm in the event of a worst case discharge (e.g., the facility is near a source water supply or a priority sensitive environment listed in an ACP, the facility has a history of frequent discharges or poor maintenance, etc.) will not be considered by the RA. However, petitioners are not required to provide detailed analyses and calculations. Other avenues of participation for the public in the response planning process include involvement in the ACP development process or participation in the LEPC or TEPC.

EPA solicits comment on the proposed petition process and alternatives, with supporting data and rationale.

6. Consistency with the NCP

Section 311(j)(5)(D) of the CWA states that Facility Response Plans must be consistent with the NCP and ACPs. As such, in §§ 300.185, 300.211, and 300.411, EPA is proposing minor changes to 40 CFR part 300 to ensure uniformity.

In §§ 300.185 and § 300.211, EPA is proposing to add references to proposed 40 CFR part 118. EPA is proposing to add § 300.411 to detail requirements for responses to CWA hazardous substance worst case discharges, to mirror the requirements for oil worst case discharges in § 300.324, including OSC responsibilities to notify the National Strike Force Coordination Center, require the FRP be initiated, implement ACP worst case discharge plans, take response actions, and coordinate private and public equipment for response.

D. Additional Considerations

1. Communities with Environmental Justice Concerns

EPA recognizes the unique challenges faced by communities with environmental justice concerns. Evidence of the disproportionate co-location of historically marginalized populations

and hazardous waste was demonstrated over 30 years ago⁴⁸ with subsequent environmental justice literature establishing that industrial facilities and aboveground storage tanks are disproportionately located in communities with environmental justice concerns,⁴⁹ and similarly, our co-location assessment confirms, and likely underestimates, historical trends. Please see the section 8.7 of the RIA for further description of our analysis of environmental justice impacts. However, the impacts of worst-case discharges of CWA hazardous substances on these communities are also influenced by the unique circumstances of a discharge and a facility's positioning up or downstream from public water systems that often serve large and diverse communities. This proposed rule would protect human health and the environment by requiring facilities to prepare and respond to worse case discharges of CWA hazardous substances.

Additionally, EPA is proposing that RAs have wide authority to require CWA hazardous substance FRPs for facilities located in communities with environmental justice concerns, as well as those that could impact such communities with a worst case discharge in § 118.5. EPA is also proposing that any stakeholder (e.g., member of the public, organization, or local, state, Tribal, or Federal government) can petition EPA to require that a specific facility prepare and submit a CWA hazardous substance FRP in § 118.7. Communities with environmental justice concerns are also considered in the hazard evaluation as discussed in Section IV.C.2.d.iii of this preamble.

EPA considered using impacts to communities with environmental justice concerns as an

⁴⁸ Commission for Racial Justice. (1987). *Toxic Wastes and Race In the United States: A National Report on the Racial and Socio-Economic Characteristics of Communities with Hazardous Waste Sites*. United Church of Christ. <https://www.nrc.gov/docs/ML1310/ML13109A339.pdf>

⁴⁹ Ringquist, E. J. (2005). Assessing evidence of environmental inequities: A meta-analysis. *Journal of Policy Analysis and Management*, 24(2), 223–247. <https://doi.org/10.1002/pam.20088>

applicability criterion to determine whether such facilities have the potential to cause substantial harm in the event of a worst case discharge and is interested in possible approaches, methodologies, and data sources to do so. EPA solicits comment on alternate ways to prioritize the needs of communities with environmental justice concerns and is open to other approaches to meaningfully address risks from lack of planning to respond to worst case discharges of CWA hazardous substances among these communities. Please see section V.J. of this preamble for a discussion of E.O. 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.

2. Climate Change

Climate change will have a significant impact on CWA hazardous substance facilities, including through increases in both the number and the severity of extreme weather events. Additionally, the rise in sea levels occurring along the southern and eastern coasts of the United States may further exacerbate the effects of these weather events. Climate change is also contributing to subsidence, which is the gradual settling or sudden sinking of land surface due to removal or displacement of subsurface resources. In the United States, the principal cause of subsidence is the over-extraction of ground water. With increases in the number and severity of droughts, population, and economic growth, subsidence is a critical aspect to consider in the future.

This proposed regulation is inherently a climate change adaptation regulation in that the statute requires planning for worst case discharges in adverse weather conditions. Additionally, our analysis shows that 90 percent of facilities estimated to meet or exceed the CWA hazardous substance maximum capacity onsite threshold quantity are within one-half mile of navigable water, and therefore are often located in floodplains. The definition of a worse case discharge is

the largest foreseeable discharge in adverse weather conditions, so including flood plains and tidal zones as a substantial harm criterion may be duplicative and unnecessary, since facility owners and operators should already be examining these metrics in their worst case discharge scenarios for determining planning distance. Please see Section IV.A.2.e.i of this preamble for more discussion on climate change risk considerations in applicability.

A hazard evaluation is a required element for the response plan for worst case discharges. Hazard evaluation will, by its nature, include hazards posed by climate change, increased flooding, temperature changes, etc. Additionally, the hazard analysis is intended to address climate change adaptation and resilience in facility emergency response planning for worst case discharges of CWA hazardous substances.

EPA solicits comment on methodologies to take climate change into account in both applicability criteria as well as response plan requirements.

3. Facility Density

EPA recognizes the increased risk of worst case discharges in areas with a high density of CWA hazardous substance facilities. EPA considered additional requirements for facilities in areas with high facility density, as well as including co-location of facilities with less than the threshold quantity of CWA hazardous onsite but proximate to other facilities which, in the aggregate, meet the CWA hazardous substance threshold quantity as an applicability criterion. EPA solicits comment on these approaches as well as the appropriate proximity metrics, quantities, and methods for determining shared risk amongst facilities.

V. Statutory and Executive Orders Reviews

Additional information about these statutes and Executive Orders can be found at <http://www.epa.gov/laws-regulations/laws-and-executive-orders>.

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

Under E.O. 12866 (58 FR 51735; October 4, 1993), this action is a "significant regulatory action" because it is likely to raise novel legal or policy issues under section 3(f)(4).

Accordingly, EPA submitted this action to the Office of Management and Budget (OMB) for review under E.O. 12866 and E.O. 13563 (76 FR 3821; January 21, 2011); any changes made in response to OMB recommendations have been documented in the docket for this action (EPA-HQ-OLEM-2021-0585). EPA prepared an economic analysis of the potential costs and benefits associated with regulatory options considered for this action. This analysis, "Regulatory Impact Analysis: Clean Water Act Clean Water Act Hazardous Substance Worst Case Discharge Planning Regulations," is available in the docket.

The RIA discusses the potential costs and benefits associated with this proposed action. As presented in Section 6 of that analysis, EPA estimated the final rule will result in annualized costs of \$27.6 to \$28.4 million per year, at three percent and seven percent discount rates, respectively. The benefits of the proposed action are assessed qualitatively and include a wide diversity of potential benefit mechanisms, such as reductions in: impacts to public water systems and other waterways used for recreational and commercial purposes; impacts to the ecosystem and environment; impacts to human health; and other socioeconomic impacts driven by business disruption, evacuations, and other elements of emergency response.

B. Paperwork Reduction Act (PRA)

The information collection activities in this proposed rule have been submitted for approval to the OMB under the PRA. The Information Collection Request (ICR) document that the EPA prepared has been assigned EPA ICR number 2710.01. You can find a copy of the ICR

in the docket for this rule, and it is briefly summarized here.

All information submitted to the agency in response to the ICR will be managed in accordance with applicable laws and EPA's regulations governing treatment of confidential business information at 40 CFR Part 2, Subpart B. Any information determined to constitute a trade secret will be protected under 18 U.S.C. 1905. The facility plans required under the proposed revisions to section 311(j)(5) of the CWA are submitted to the EPA for compliance review and approval. The information would also likely be shared with state and local officials who could use the information to develop or modify emergency response plans for their communities. The burden to regulated facilities is estimated in terms of the time (in hours) spent by facility personnel to review the proposed regulation and prepare a response plan and maintain the plan on an annual basis. Additional detail is provided in the ICR for the proposed rule referenced above.

Respondents/affected entities: The industries that are likely to be affected by the requirements in the proposed regulation fall into numerous NAICS categories. About 72 percent of facilities are in the following major NAICS groups at the three-digit level that may be subject to the proposed regulation: Utilities (221), Chemical Manufacturing (325), and Merchant Wholesalers, Nondurable Goods (424). Other facilities may be covered by these regulations in other NAICS categories. A complete list of NAICS categories with covered facilities is included in the ICR accompanying the proposed rule.

Respondent's obligation to respond: Mandatory (40 CFR Parts 118 and 300).

Estimated number of respondents: 1,659 initially, plus 25 new respondents annually.

Frequency of response: One-time response required; burden also includes annual maintenance of the plan.

Total estimated burden: 330,740 hours (average per year for first three years). Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: \$52,434,008, (average per year for first three years), includes \$15,188,371 annual operations and maintenance costs.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9.

Submit your comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden to the EPA using the docket identified at the beginning of this rule. The EPA will respond to any ICR-related comments in the final rule. You may also send your ICR-related comments to OMB's Office of Information and Regulatory Affairs using the interface at www.reginfo.gov/public/do/PRAMain. Find this particular information collection by selecting "Currently under Review - Open for Public Comments" or by using the search function. OMB must receive comments no later than **[insert date 60 days after publication in the Federal Register]**.

C. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. The small entities subject to the requirements of this action includes small businesses. The Agency has determined that among the 421 potentially regulated small entities, 138 small entities may experience an impact between one and three percent of revenues. These entities are in three industries: Animal Food Manufacturing, Sawmills and Wood Preservation, and Marine Cargo Handling. The Agency also estimated, and that five

small entities in the Electric Power Generation industry may experience an impact greater than three percent of revenues (or about 1.3 percent of all small entities). Details of this analysis are presented in Section 9.3 of the proposed rule RIA, available in the docket.

In summary, EPA has prepared a small entity impact screening analysis to assess whether the proposed action would have “a significant impact on a substantial number of small entities.”

This analysis involved three main steps:

1. Identifying the subset of small entities potentially affected by the proposed action based on Small Business Administration (SBA) size criteria for each NAICS industry;
2. Assessing the potential impact of the rule on those small entities by comparing the entity-level compliance cost to entity-level revenue (i.e., applying a cost-to-revenue test). EPA used threshold compliance costs of one percent or three percent of revenue to categorize the degree of significance of the economic impacts; and,
3. Based on the results of the threshold test, assessing (1) magnitude of economic impact that may be experienced by regulated small entities; (2) total number of regulated small entities that may experience the economic impact; and, (3) percentage of regulated small entities that may experience the economic impact, in order to make a SISNOSE determination.

Among the 1,659 facilities estimated to be required to develop response plans, EPA estimated that 669 of these facilities are owned by 421 small entities. EPA’s cost-to-revenue test estimated that 8 small entities would have costs between one and three percent of revenues (or about 2 percent of all small entities), and 5 entities would have costs exceeding three percent of revenues (or about 1 percent of all small entities). Based on the results, EPA concluded that the proposed action’s requirements will not have a significant impact on a substantial number of small entities.

D. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate of \$100 million or more as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. Under UMRA Section 202, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with “Federal mandates” that might result in expenditures by state, local, and tribal governments, in the aggregate, or by the private sector, of \$100 million (adjusted annually for inflation) or more in any one year. Based on the cost estimates detailed previously, EPA determined that compliance costs in any given year will be below the threshold set in UMRA. This proposed action is also not subject to the requirements of section 203 of UMRA because it does not significantly or uniquely affect small governments.

EPA determined that the proposed local coordination requirements build upon existing requirements under EPCRA section 303, and thus do not impose an unfunded mandated upon LEPCs or public water systems that would coordinate with regulated facilities. LEPCs are required to develop community emergency response plans under EPCRA section 303, and this proposed rule provisions are intended to ensure that facility representatives coordinate with LEPC and local emergency response officials in developing those plans. Water systems are similarly required under the AWIA to develop or update risk assessments and emergency response plans. Furthermore, EPA provided flexibility in this proposed rule to allow LEPC and other local officials to participate as their schedules allow. For example, EPA is proposing that when appropriate, facility owners or operators coordinate with local public emergency response officials and invite them to participate in drills and exercises. The proposed rule does not require participation in drills and exercises.

E. Executive Order 13132: Federalism

This action does not have Federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

This action does not have tribal implications as specified in E.O. 13175 (65 FR 67249, November 6, 2000). EPA mapped the location of the available sample of 661 in-scope facilities present in EPA's Tier II data against EPA's geographic boundaries for tribal lands and did not identify any facilities located on tribal lands. EPA notes that these data capture only a portion of potentially regulated facilities, and do not include some states with relatively higher proportions of Tribal lands, such as Oklahoma. In addition, EPA lacks information on the location of water intakes associated with facilities, which is a further uncertain potential source of tribal impacts. Thus, Executive Order 13175 does not apply to this action.

EPA will consult with Tribal officials as it develops this regulation to permit them to have meaningful and timely input into its development. Consultation will include conference calls, webinars, and meetings with interested tribal representatives to ensure that their concerns are addressed before the rule is finalized. In the spirit of E.O. 13175 and consistent with EPA policy to promote communications between EPA and Tribal governments, EPA specifically solicits comment on this proposed rule from tribal officials.

G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

This action is not subject to E.O. 13045 (62 FR 19885, April 23, 1997) because it is not economically significant as defined in E.O. 12866 (58 FR 51735, October 4, 1993), and because

the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. This action's health and risk assessments are contained in the RIA for this proposed rule, available in the docket.

H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution or Use

This action is not a “significant energy action” because it is not likely to have a significant adverse effect on the supply, distribution or use of energy. The proposed rule does not directly regulate energy production or consumption. Adding CWA hazardous substance FRP requirements is not expected to impact energy production or distribution.

I. National Technology Transfer and Advancement Act (NTTAA)

This proposed action does not involve technical standards and is therefore not subject to the requirements contained in NTTAA section 12(d), 15 U.S.C. 272.

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA concluded that this action does not have disproportionately high and adverse human health or environmental effects on minority populations and low-income populations and/or Indigenous peoples, as specified in E.O. 12898 (59 FR 7629, February 16, 1994).

The documentation for this decision is contained in section 8.7 of the RIA. Worst case discharges of hazardous substances from facilities regulated by this action would likely pose disproportionate risks to minority and low-income populations. EPA has concluded that the regulatory requirements will advance fair treatment of those populations, by reducing the disproportionate damages that worst case discharges might otherwise inflict on underserved and overburdened communities. To further ensure that the regulation is addressing needs of those

specific communities, this regulation would give authority to RAs to regulate facilities which potentially affect communities of environmental justice concern if they are otherwise not captured by the proposed applicability criteria.

The Agency's environmental justice screening tool, EJSCREEN, was developed to combine environmental and demographic indicators to screen communities for those at potentially greater risk of environmental exposures. Here, EPA used EJSCREEN to combine information on the universe of facilities with the potential to discharge into navigable waters given their proximity. The Agency quantified facilities with threshold quantities of CWA hazardous substances within a one-half mile of navigable water (n=661), using available Tier II data from 17 states. Tier II data reporting is required under section 312 of EPCRA. Tier II data is meant to provide State, tribal, and local officials, and the public with specific information on potential hazards including locations and amounts of hazardous chemicals present at a facility. Tier II reporting includes all CWA hazardous substances. For this analysis, EPA used Tier II data from the Clean Water Act Hazardous Substances Discharge Prevention Rulemaking, Docket ID EPA-HQ-OLEM-2018-0024.

This environmental justice analysis shows that minority and low-income populations are more likely to live in proximity to those facilities (and thus are at greater risk) than other populations. EPA found 46 percent of individuals in proximity (defined as living within a one-half mile radius) to potentially regulated facilities are low-income; the average in the United States population is 38 percent. Low-income is defined here as less than twice the Census Bureau's poverty threshold. EPA also found that 52 percent of people in proximity to potentially regulated facilities are racial and ethnic minorities, including any designation except for "Non-Hispanic, White," which includes those identifying as Hispanic white or as multiracial white.

The average in the United States population (overall) is 37 percent. This is likely an underestimate given that the 17 states do not include Texas and Louisiana: two states which have known communities with environmental justice concerns.

List of Subjects

40 CFR Part 118

Environmental protection, Hazardous substances, Reporting and recordkeeping requirements, Water pollution control.

40 CFR Part 300

Environmental protection, Hazardous substances, Reporting and recordkeeping requirements, Water pollution control

Dated:

Michael S. Regan,
Administrator.

For the reasons stated in the preamble, Title 40, chapter I, of the Code of Federal Regulations is proposed to be amended as follows:

1. By adding Part 118 to Subchapter D to read as follows:

Subchapter D Water Programs

PART 118—CLEAN WATER ACT HAZARDOUS SUBSTANCES WORST CASE

DISCHARGE PLANNING REGULATIONS

Authority: 33 U.S.C. 1251 *et seq.*, and Executive Order 11735, superseded by Executive Order 12777, 56 FR 54757.

Sec.

118.1 Purpose.

118.2 Definitions.

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Appendix A to Part 118 : Certification Form

Appendix B to Part 118: Toxicity endpoints for calculating planning distance for fish, wildlife and sensitive environments and public receptors.

§ 118.1 Purpose.

This part establishes Clean Water Act (CWA) hazardous substance facility response plan requirements for the owner or operator of any non-transportation-related onshore facility that,

because of its location, could reasonably be expected to cause substantial harm to the environment by discharging CWA hazardous substances into or on the navigable waters, adjoining shorelines, or the exclusive economic zone.

§ 118.2 Definitions.

For the purposes of this part:

Adverse weather means weather conditions that make it difficult for response equipment and personnel to clean up or respond to discharged CWA hazardous substances, accounting for the potential for increased and more severe extreme weather events and other impacts due to climate change, and that must be considered when identifying response systems and equipment in a response plan for the applicable operating environment.

Article means a manufactured item that is formed to a specific shape or design during manufacture, has end use functions dependent in whole or in part upon the shape or design during end use, and does not release or otherwise result in exposure to a CWA hazardous substance under normal conditions of processing and use.

Container means any device or portable device in which a CWA hazardous substance is processed, stored, used, transported, treated, disposed of, or otherwise handled.

Contract or other approved means is defined as:

- (1) A written contractual agreement with a spill response organization that identifies and ensures the availability of the necessary personnel and equipment within appropriate response times;
- (2) A written certification by the owner or operator that the necessary personnel and equipment resources, owned or operated by the facility owner or operator, are available to respond to a discharge within appropriate response times;
- (3) Active membership in a local or regional spill response organization that has identified and ensures adequate access through such membership to necessary personnel and equipment to respond to a discharge within appropriate response times in the specified geographic area; and/or
- (4) Any other specific arrangement approved by the Regional Administrator upon request of the owner or operator.

CWA Hazardous Substance means any hazardous substance designated in 40 CFR Part 116.

Discharge includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of a CWA hazardous substance, but excludes: discharges in compliance with a permit under section 402 of the CWA; discharges resulting from circumstances identified, reviewed, and made a part of the public record with respect to a permit issued or modified under section 402 of the CWA, and subject to a condition in such permit; and continuous or anticipated

intermittent discharges from a point source, identified in a permit or permit application under section 402 of the CWA, that are caused by events occurring within the scope of relevant operating or treatment systems.

Distance to the endpoint is the distance a CWA hazardous substance will travel before dissipating to the point that a worst case discharge will no longer cause injury to public receptors or fish, wildlife, and sensitive environments as in Appendix B or adversely impact a public water system as in § 118.3(c)(2).

Endpoint means the concentration at which a worst case discharge no longer has the ability to cause injury to public receptors or fish, wildlife, and sensitive environments as in Appendix B or adversely impact a public water system as in § 118.3(c)(2).

Facility means any non-transportation-related onshore mobile or fixed building, property, parcel, lease, structure, installation, equipment, pipe, or in-plant pipeline (other than a vessel or a public vessel), used in CWA hazardous substance handling, production, manufacturing, storage, processing, refining, transfer, distribution, treatment, or in which any CWA hazardous substance is used. The boundaries of a facility depend on several site-specific factors, including but not limited to, the ownership or operation of buildings, structures, and equipment on the same site and types of activity at the site. Contiguous or non-contiguous buildings, properties, parcels, leases, structures, installations, pipes, or pipelines under the ownership or operation of the same person may be considered separate facilities. Non-transportation-related onshore facility means any facility of any kind located in, on, or under any land within the United States and excludes movement of CWA hazardous substances in interstate or intrastate commerce under active shipping papers by rail, pipeline, highway vehicle, or vessel pursuant to 49 CFR 171-180.

Fish, wildlife, and sensitive environments mean areas that may be identified by their legal designation or by evaluations of Area Committees (for planning) or members of the Federal On-Scene Coordinator's spill response structure (during responses). These areas may include wetlands, National and state parks, critical habitats for endangered or threatened species, wilderness and natural resource areas, marine sanctuaries and estuarine reserves, conservation areas, preserves, wildlife areas, wildlife refuges, wild and scenic rivers, recreational areas, national forests, Federal and state lands that are research national areas, heritage program areas, land trust areas, and historical and archaeological sites and parks. These areas may also include unique habitats such as aquaculture sites and agricultural surface water intakes, bird nesting areas, critical biological resource areas, designated migratory routes, and designated seasonal habitats.

Injury means 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.

Interconnected containers mean containers that are connected via pipes, hoses, or other conveyance (either permanent or temporary) to allow movement of a CWA hazardous substance

between containers.

Maximum extent practicable means within the limitations used to determine CWA hazardous substance release planning resources for recovery, shoreline protection, and cleanup for worst case discharges from onshore non-transportation-related facilities in adverse weather. It includes the planned capability to respond to a worst case discharge, including a discharge resulting from fire or explosion, as contained in a facility response plan that meets the requirements in § 118.11 or in a specific plan approved by the Regional Administrator.

Maximum capacity onsite means the total aggregate container capacity for each CWA hazardous substance present at all locations within the entire facility at any one time.

Mitigation or mitigation system(s) means specific activities, technologies, or equipment designed or deployed to capture or control substances upon loss of containment to minimize exposure of the public or the environment. Passive mitigation means equipment, devices, or technologies that function without human, mechanical, or other energy input.

Navigable waters mean waters of the United States, including the territorial seas, as defined in 40 CFR 120.2, adjoining shorelines, and the exclusive economic zone. Exclusive economic zone means the zone contiguous to the territorial sea of the United States extending to a distance up to 200 nautical miles from the baseline from which the breadth of the territorial sea is measured.

Offshore facility means any facility of any kind (other than a vessel or public vessel) located in, on, or under any of the navigable waters of the United States, and any facility of any kind that is subject to the jurisdiction of the United States and is located in, on, or under any other waters.

Offsite means areas beyond the property boundary of a facility, and areas within the property boundary to which the public has routine and unrestricted access during or outside business hours.

Onshore facility means any facility of any kind located in, on, or under any land within the United States other than submerged land. Furthermore, this extends to in, on, or under any submerged land as delegated to the Environmental Protection Agency (EPA) pursuant to 40 CFR 112 Appendix B.

Owner or operator means any person owning or operating an onshore facility or an offshore facility, and in the case of any abandoned offshore facility, the person who owned or operated or maintained the facility immediately prior to such abandonment.

Permanently closed means any container or facility for which:

- (1) All CWA hazardous substance and residue has been removed from each container and connecting line; and
- (2) All connecting lines and piping have been disconnected from the container and blanked off, all valves (except for ventilation valves) have been closed and locked, and conspicuous signs have been posted on each container stating that it is a permanently closed container and noting

the date of closure.

Person includes an individual, firm, corporation, association, or partnership.

Planning distance means the distance to an endpoint such that a worst case discharge of CWA hazardous substances to water from a facility could adversely impact a public water system or cause injury to fish, wildlife, and sensitive environments or public receptors, as described in § 118.10.

Public receptors mean 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 as a result of a worst case discharge to navigable waters.

Public vessel means a vessel owned or bareboat-chartered and operated by the United States, or a state or political subdivision thereof, or by a foreign nation, except when such vessel is engaged in commerce.

Public water system is a system as defined in 40 CFR 141.2. A public water system is either a “community water system” or a “non-community water system.”

Qualified individual (QI) means the individual having full authority to implement response actions and required to initiate immediate communications with the appropriate Federal official and the persons providing personnel and equipment to respond, to the maximum extent practicable, to a worst case discharge (including a discharge resulting from fire or explosion) and to mitigate or prevent a substantial threat of such a discharge.

Regional Administrator means the Regional Administrator of the EPA, in and for the Region in which the facility is located.

Respond or response means containment, removal, remediation, neutralization, source control, mechanical recovery, bioremediation, or other release countermeasures, in accordance with the applicable Regional Contingency Plan and Area Contingency Plan, of the CWA hazardous substances from the water and adjoining shorelines or the taking of such other actions that may be necessary to prevent, minimize, or mitigate damage to the public health or welfare, including, but not limited to, persons, fish, shellfish, wildlife, public water systems, and public and private property, shorelines, and beaches.

Reportable quantities mean quantities that may be harmful as set forth in § 117.3, the discharge into the environment during a 24-hour period, which is a violation of Clean Water Act section 311(b)(3) and requires notice as set forth in § 117.21.

Response equipment means equipment (including firefighting equipment), or other mitigating substances and devices, available to an owner or operator and Federal, state, and local or Tribal agencies, designed or used to ensure an effective and immediate response to a discharge, and to ensure mitigation or prevention of a substantial threat of a discharge.

Response resources means the personnel, equipment, supplies, and other capability necessary to perform the response activities identified in the facility response plan required under this part.

Source water protection area: The area delineated by the state for a public water system or including numerous public water systems, whether the source is ground water or surface water or both, as part of the state Source Water Assessment Program approved by EPA under section 1453 of the Safe Drinking Water Act (42 U.S.C. 300j-13).

Spill response organization (SRO) means an entity that provides spill response resources to mitigate or remove CWA hazardous substances from the environment and mitigate associated impacts.

Transportation or transport means the movement of property and loading, unloading, or storage incidental to movement pursuant to 49 CFR 171-199.

Transportation-related onshore facility means any facility of any kind, in, on, or under any land within the United States which provides movement or conveyances of CWA hazardous substances in interstate or intrastate commerce by rail, pipeline, highway vehicle, or vessel pursuant to 49 CFR 171-199.

United States means the States, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, Guam, American Samoa, the U.S. Virgin Islands, and the Pacific Island Governments.

Vessel means every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water other than a public vessel.

Water distribution system means a system which delivers potable water to many end users and has a source of water, a treatment plant to make the water drinkable, storage facility to keep water until it is needed and distribution system to deliver water to the end user.

Worst case discharge for an onshore non-transportation-related facility means the largest foreseeable discharge in adverse weather conditions including a discharge resulting from fire or explosion.

§ 118.3 Applicability.

This part applies to the owner or operator of any non-transportation-related onshore facility that, because of its location, could reasonably be expected to cause substantial harm to the environment by discharging CWA hazardous substances into or on the navigable waters by meeting the following criteria:

- (a) *Threshold quantity.* The maximum capacity onsite for any CWA hazardous substance listed at 40 CFR 116.4, at any one time, meets or exceeds 10,000 times the Reportable Quantity in pounds (kilograms) found at 40 CFR 117.3. Do not include any exemptions identified in § 118.8 or permanently closed containers in this determination. To calculate the threshold quantities of CWA hazardous substances in mixtures, follow the procedures in § 118.9; and
- (b) *Proximity to navigable waters.* The facility is located within one-half mile of navigable waters or a conveyance to navigable waters; and
- (c) *Substantial harm criteria.* The facility meets one or more of the following substantial harm criteria:

- (1) *Ability to cause injury to fish, wildlife, and sensitive environments.* The facility is located at a distance to an endpoint as calculated using a planning distance in § 118.10(b) such that a worst case discharge from the facility could cause injury to fish, wildlife, and sensitive environments. For identification of fish, wildlife, and sensitive environments, facilities shall use the applicable Area Contingency Plan prepared pursuant to section 311(j)(4) of the Clean Water Act, in addition to identifying other areas pursuant to the definition in § 118.2;
- (2) *Ability to adversely impact a public water system.* The facility is located at a distance to an endpoint such that a discharge from the facility could adversely impact a public water system. Ability to adversely impact a public water system includes a concentration of a CWA hazardous substance reaching a public water system which:

- (i) Violates any National Primary Drinking Water Standard or State Drinking Water Regulation, such as an exceedance of a Maximum Contaminant Level at the point of compliance. If the facility is unable or unwilling to work with the public water system to determine the point of compliance, the facility shall use the water intake;

- (ii) Compromises the ability of the public water system to produce water that complies with any National Primary Drinking Water Standard or State Drinking Water Regulation;
 - (iii) Results in adverse health impacts in people exposed to the maximum concentration that could enter a drinking water distribution system;
 - (iv) Contaminates public water system infrastructure, including but not limited to intake structures, treatment facilities, and drinking water distribution systems, or premise plumbing systems to a degree that requires remediation to restore system components to acceptable performance;
 - (v) Impairs the taste, odor, or other aesthetic characteristic of the water entering a drinking water distribution system to a degree that could make the water unacceptable to consumers and that could prompt the public water system to issue use restrictions;
- (3) *Ability to cause injury to public receptors.* The facility is located at a distance to an endpoint as calculated using a planning distance in § 118.10(b) such that a discharge to navigable water from the facility could cause injury to a public receptor as defined in § 118.2; or
- (4) *Reportable discharge history.* The facility has had a reportable CWA hazardous substance discharge under § 117.21 within the last five years.

§ 118.4 General requirements.

(a) *Preparation and submission of facility response plans.* The owner or operator of any facility meeting the applicability requirements of § 118.3 shall prepare and submit a facility response plan to the EPA, according to the following provisions:

- (1) *Initially regulated facilities.* The owner or operator of a facility in operation on the effective date of the final rule that satisfies the criteria in § 118.3 or that is notified by the

Regional Administrator pursuant to § 118.5 shall prepare and submit a facility response plan that satisfies the requirements of this section to the Regional Administrator within 12 months of meeting the criteria or notification.

(2) *Newly regulated facilities.* The owner or operator of a facility in operation after the effective date of the final rule that satisfies the criteria in § 118.3 or that is notified by the Regional Administrator pursuant to § 118.5 shall prepare and submit a facility response plan that satisfies the requirements of this section to the Regional Administrator within six months of meeting the criteria or notification, but no sooner than 12 months after the effective date of the final rule.

(3) *Newly constructed facilities.* For a newly constructed facility that commences operation after the effective date of the final rule, and is required to prepare and submit a facility response plan based on the criteria in § 118.3, the owner or operator shall submit the facility response plan to the Regional Administrator prior to the start of operations, but no sooner than 12 months after the effective date of the final rule. Adjustments to the facility response plan to reflect changes that occur at the facility during the start-up phase of operations must be submitted to the Regional Administrator after an operational trial period of 60 days.

(4) *Facilities regulated as a result of a planned event or change.* For a facility required to prepare and submit a facility response after the effective date of the final rule as a result of a planned change in design, construction, operation, or maintenance so that the facility now meets the criteria in § 118.3, the owner or operator shall submit the facility response plan to the Regional Administrator before the portion of the facility undergoing the planned change commences operations, but no sooner than 12 months after the effective date of the final rule (adjustments to the facility response plan to reflect changes that occur at the facility during

the start-up phase of operations must be submitted to the Regional Administrator after an operational trial period of 60 days).

(5) *Facilities regulated as a result of an unplanned event or change.* For a facility required to prepare and submit a facility response plan after the effective date of the final rule, as a result of an unplanned event or change in facility characteristics that renders the facility subject to the criteria in § 118.3, the owner or operator shall submit the facility response plan to the Regional Administrator within six months of the unplanned event or change, but no sooner than 12 months after the effective date of the final rule.

(b) *Facility response plan amendments.*

(1) The owner or operator of a facility for which a facility response plan is required under this part shall revise and resubmit revised portions of the facility response plan within 60 days of each facility change that materially may affect the response to or potential for a worst case discharge, including:

- (i) A change in the facility's configuration that materially alters the information included in the facility response plan;
- (ii) A change in the CWA hazardous substance maximum capacity onsite (e.g., commissioning or decommissioning of containers; replacement, reconstruction, or movement of containers) that materially alters the required response resources;
- (iii) A material change in capabilities of the spill response organization(s) that provide equipment and personnel to respond to discharges of CWA hazardous substances described in § 118.11(a)(3);
- (iv) A material change in the facility's discharge mitigation and response equipment or emergency response procedures; and

(v) Any other changes that materially affect the implementation of the facility response plan.

(2) Except as provided in paragraph (b) of this section, amendments to information in the facility response plan (such as personnel, contact information, or changes in the spill response organization(s)) that do not result in a material change in response capabilities do not require review and approval by the Regional Administrator. Facility owners or operators shall provide a copy of such changes to the Regional Administrator as the revisions occur.

(3) The owner or operator of a facility that submits changes to a facility response plan as provided in the preceding paragraphs of this section shall provide the EPA-issued facility identification number (where one has been assigned, such as Facility Registry Service number) with the changes.

(4) The Regional Administrator shall review and approve or disapprove changes to a facility response plan submitted pursuant to the requirements in paragraph (b)(1) of this section for a facility that he or she has determined pursuant to § 118.5(c) to have the potential to cause significant and substantial harm to human health or the environment.

(c) *Substantial harm certification form submission.* If the facility meets the criteria in § 118.3(a) and (b), the owner or operator must:

(1) Complete and submit to the EPA Regional Administrator the substantial harm certification form in Appendix A to this part within 12 months of the effective date of the final rule or, for new facilities, within one month of meeting the criteria in § 118.3(a) and (b), but not sooner than 12 months after the effective date of the final rule. Owner or operators must retain their completed Appendix A and supporting documentation for the duration that the CWA hazardous substance maximum capacity onsite is at or exceeds the threshold

quantity and for an additional 10 years.

(2) Attach to the form documentation, calculations, and any other information necessary to demonstrate the reliability and analytical soundness of the substantial harm determination as well as a review of potential receptors that could be impacted as a result of a CWA hazardous substance discharge.

(3) Submit to the EPA Regional Administrator updates to the substantial harm certification every five years, or within 60 days of a change at or outside the facility that impacts the facility's potential to cause substantial harm to the environment in accordance with the criteria in § 118.3.

(d) *Assertion of claims of confidential business information.*

(1) Except as provided in paragraph (2), an owner or operator of a facility required to submit a facility response plan or otherwise provide information under this part may make a claim of confidential business information for any such information that meets the criteria set forth in § 2.302 of this chapter.

(2) Notwithstanding the provisions of 40 CFR part 2, an owner or operator of a facility subject to this part may not claim as confidential business information the following information:

(a) Data required by § 118.11 (b); and

(b) Data required in Appendix A of this part, excluding the supporting documentation.

(3) Notwithstanding the procedures specified in 40 CFR part 2, an owner or operator asserting a claim of CBI with respect to information contained in its facility response plan as per § 118.11, shall submit to EPA at the time it submits the facility response plan the following:

- (a) The information claimed confidential, provided in a format to be specified by EPA;
- (b) A sanitized (redacted) copy of the facility response plan, with the notation “CBI” substituted for the information claimed confidential, except that a generic category or class name shall be substituted for any chemical name or identity claimed confidential; and
- (c) The document or documents substantiating each claim of confidential business information, as described in paragraph (e) of this section.

(e) *Substantiating claims of confidential business information.*

- (1) An owner or operator claiming that information is confidential business information must substantiate that claim by providing documentation that demonstrates that the claim meets the substantive criteria set forth in § 2.302 of this chapter.
- (2) Information that is submitted as part of the substantiation may be claimed confidential by marking it as confidential business information. Information not so marked will be treated as public and may be disclosed without notice to the submitter. If information that is submitted as part of the substantiation is claimed confidential, the owner or operator must provide sanitized and unsanitized versions of the substantiation.
- (3) The owner, operator, or senior official with management responsibility at the facility shall sign a certification that the signer has personally examined the information submitted and that based on inquiry of the persons who compiled the information, the information is true, accurate, and complete, and that those portions of the substantiation claimed as confidential business information would, if disclosed, reveal trade secrets or other confidential business information.

§ 118.5 Regional Administrator determination of substantial harm and significant and substantial harm.

(a) *Regional Administrator authority to require facility response plans.* The Regional Administrator may at any time require the owner or operator of any non-transportation-related onshore facility to prepare and submit a facility response plan under this section after considering the factors in paragraph (b) of this section. If such a determination is made, the Regional Administrator shall notify the facility owner or operator in writing and shall provide a basis for the determination. If the Regional Administrator notifies the owner or operator in writing of the requirement to prepare and submit a facility response plan under this section, the owner or operator of the facility shall submit the facility response plan to the Regional Administrator within six months of receipt of such written notification but no sooner than 12 months after the effective date of the final rule.

(b) *Regional Administrator substantial harm determination.* To determine whether a facility could, because of its location, reasonably be expected to cause substantial harm to the environment by a discharge, or substantial threat of a discharge, of CWA hazardous substances to navigable waters, the Regional Administrator may consider the following:

- (1) Type of transfer operation(s);
- (2) CWA hazardous substance quantity and category as determined in 40 CFR 117.3 stored onsite;
- (3) Proximity to fish, wildlife, and sensitive environments and other areas determined by the Regional Administrator to possess ecological value;
- (4) Ability to adversely impact public water systems as described in § 118.3(c)(ii);
- (5) Location in a source water protection area;
- (6) Ability to cause substantial harm to public receptors due to a worst case discharge to navigable waters;

(7) Lack of passive mitigation measures or systems, including those that enhance resilience to climate change;

(8) Potential for a worst case discharge to adversely impact communities with environmental justice concerns;

(9) Potential vulnerability to adverse weather conditions resulting from climate change;

(10) Reportable discharge history; or

(11) Other site-specific characteristics and environmental factors that the Regional Administrator determines to be relevant to protecting the public or environment from harm by discharges, or a substantial threat of discharge, of CWA hazardous substances into or on navigable waters.

(c) *Regional Administrator responsibilities for significant and substantial harm facilities.* The Regional Administrator shall review facility response plans submitted by facilities meeting the applicability requirements of § 118.3 to determine whether the facility could, because of its location, reasonably be expected to cause significant and substantial harm to the environment by a discharge, or a substantial threat of discharge, of CWA hazardous substances into or on the navigable waters based on the factors identified in paragraph (d) of this section. If such a determination is made, the Regional Administrator shall notify the owner or operator of the facility in writing and:

(1) Promptly review the facility response plan;

(2) Require amendments to any facility response plan that does not meet the requirements of this section;

(3) Approve any facility response plan that meets the requirements of this section; and

(4) Review each facility response plan periodically thereafter on a schedule established by

the Regional Administrator.

(d) *Regional Administrator significant and substantial harm determination.* To determine whether a facility could, because of its location, reasonably be expected to cause significant and substantial harm to the environment by discharging a CWA hazardous substance into or on the navigable waters, the Regional Administrator shall consider the factors in paragraph (b) of this section and § 118.3(c), as well as the following:

- (1) Frequency of past reportable discharges;
- (2) Proximity to navigable waters;
- (3) Age of containers and equipment;
- (4) Potential for hazards such as flooding, hurricanes, earthquakes, or other disasters that could result in a worst case discharge; and
- (5) Other facility-specific and Region-specific information, including local impacts on public health.

§ 118.6 Appeals process.

(a) *Owner or operator request to reconsider requirement to prepare a facility response plan.* In the event the owner or operator of a facility does not agree with the Regional Administrator's determination that the facility could, because of its location, reasonably be expected to cause substantial harm or significant and substantial harm to the environment by discharging CWA hazardous substances into or on the navigable waters, or that amendments to the facility response plan are necessary prior to approval, such as changes to the worst case discharge planning quantity, the owner or operator may submit a request for reconsideration to the Regional Administrator and provide additional information and data in writing to support the request. The request and accompanying information must be submitted to the Regional Administrator within

60 days of receipt of notice of the Regional Administrator's original decision. The Regional Administrator shall consider the request and render a decision as soon as practicable.

(b) *Owner or operator request to reconsider facility classification status.* In the event the owner or operator of a facility believes a change in the facility's classification status is warranted because of an unplanned event or change in the facility's characteristics (i.e., substantial harm or significant and substantial harm), the owner or operator may submit a request for reconsideration to the Regional Administrator and provide additional information and data in writing to support the request. The Regional Administrator shall consider the request and render a decision as soon as practicable.

(c) *Appeal process following Regional Administrator decision.* After a request for reconsideration under paragraph (a) or (b) of this section has been denied by the Regional Administrator, an owner or operator may appeal a determination made by the Regional Administrator. The appeal shall be made to the EPA Administrator and shall be made in writing within 60 days of receipt of the decision from the Regional Administrator that the request for reconsideration was denied. A complete copy of the appeal must be sent to the Regional Administrator at the time the appeal is made. The appeal shall contain a clear and concise statement of the issues and points of fact in the case. It also may contain additional information from the owner or operator, or from any other person. The EPA Administrator may request additional information from the owner or operator, or from any other person. The EPA Administrator shall render a decision as soon as practicable and shall notify the owner or operator of the decision, at which time the owner or operator must submit a Facility Response Plan within 60 days.

§ 118.7 Petitions.

(a) Any person, including a member of the public or any representative from a Federal, state, or local agency who believes that a facility subject to this section could, because of its location, reasonably be expected to cause substantial harm to the environment by a discharge, or substantial threat of a discharge, of CWA hazardous substance into or on the navigable waters may petition the Regional Administrator to determine whether the facility meets the criteria in section § 118.3. Such a petition shall include a discussion of how the factors in § 118.3 apply to the facility in question. The Regional Administrator shall consider such petitions and respond as soon as practicable.

§ 118.8 Exceptions and exemptions.

(a) *Exceptions.* This part does not apply to the owner or operator of any facility, equipment, or operation that is not subject to the jurisdiction of the EPA under section 33 U.S.C. 1321(j)(5)(C), as follows:

(1) Any onshore facility, that due to its location, could not reasonably be expected to have a discharge, or substantial threat of a discharge, as described in § 118.3. This determination must be based solely upon consideration of the geographical and location aspects of the facility (such as proximity to navigable waters, land contour, drainage, etc.) and must exclude consideration of manmade features such as dikes, equipment, or other structures, which may serve to restrain, hinder, contain, or otherwise prevent a discharge.

(2) Any equipment, or operation of a vessel or transportation-related onshore facility which is subject to the authority and control of the U.S. Department of Transportation, and which provides movement or conveyances of CWA hazardous substances in interstate or intrastate commerce by rail, pipeline, highway vehicle, or vessel. For modes other than pipeline, this exception is limited to movement under active shipping papers prior to arrival at a final

destination pursuant to 49 CFR 171-180.

(3) Any equipment, or operation of a vessel or onshore or offshore facility which is subject to the authority and control of the U.S. Coast Guard or the U.S. Department of the Interior, as defined in the Memorandum of Understanding between the Secretary of Transportation, the Secretary of the Interior, and the Administrator of EPA (40 CFR part 112, Appendix B).

(4) Any underground storage tank and connected underground piping, underground ancillary equipment, and containment systems, at any facility, that is subject to all of the technical requirements of part 280 of this chapter or a state program approved under part 281 of this chapter.

(b) *Exemptions.* For the purposes of determining whether the maximum capacity onsite meets or exceeds the threshold quantity of a CWA hazardous substance or substances, under § 118.3(a), at the facility, the following exemptions apply:

(1) *Articles.* CWA hazardous substances contained in articles need not be considered when determining whether the maximum capacity onsite meets or exceeds the threshold quantity.

(2) *Uses.* CWA hazardous substances, when in use for the following purposes, need not be included in determining whether the maximum capacity onsite meets or exceeds the threshold quantity:

(i) Structural components. Use as a structural component of the facility;

(ii) Janitorial. Use of products for routine janitorial maintenance;

(iii) Foods, drugs, cosmetics. Use by employees of foods, drugs, cosmetics, or other personal items containing the CWA hazardous substance;

(iv) Process water or cooling water. Use of CWA hazardous substances present in process water or non-contact cooling water as drawn from the environment or municipal sources;

(v) Compressed air. Use of CWA hazardous substances present in air used either as compressed air or as part of combustion; and

(vi) 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. Present in the same form and concentration as a product packaged for distribution and use by the general public means a CWA hazardous substance packaged in a similar manner and present in the same concentration as the substance when packaged for use by the general public, whether or not it is intended for distribution to the general public or used for the same purpose as when it is packaged for use by the general public.

§ 118.9 Mixtures.

For the purposes of determining the CWA hazardous substance maximum capacity onsite at the facility of CWA hazardous substance(s), under § 118.3(a), the following provisions apply to CWA hazardous substances mixtures:

(a) If the quantity of all of the CWA hazardous substance constituent(s) of the mixture or solution is known, the mixture meets the threshold quantity when the maximum capacity onsite, as defined in §118.2, meets or exceeds the threshold quantity of any CWA hazardous substance in the mixture by extrapolating the amount of each constituent to the full capacity of the container.

(b) If the quantity of one or more of the CWA hazardous substance constituent(s) of the mixture or solution is unknown, the mixture meets the threshold when the maximum capacity onsite of the mixture or solution meets or exceeds the quantity for the CWA hazardous substance established in section § 118.3(a) with the lowest threshold quantity by extrapolating the amount

of the known constituent(s) to the full capacity of the container.

§ 118.10 Worst case discharge scenarios.

Facilities are required to model a worst case discharge scenario; calculate endpoint distances to fish, wildlife, and sensitive environments and public receptors; and compare endpoint concentration(s) against calculated concentration(s). The worst case discharge scenario represents the single CWA hazardous substance maximum capacity onsite that meets or exceeds the threshold quantity set in § 118.3(a) that equals the largest quantity following the below parameters:

(a) *Determination of worst case discharge quantity.* The worst case discharge quantity shall be the greater of the following:

- (1) For CWA hazardous substances in separate containers, the maximum capacity of a single container;
- (2) For CWA hazardous substances in interconnected containers, the maximum capacity of a group of interconnected containers; or
- (3) For substances in pipes, the maximum capacity of a pipe or interconnected pipes, and the owner or operator must provide evidence in the facility response plan that containers with common piping or piping systems are not operated as one unit.
- (4) For mixtures of CWA hazardous substances, assume the entire capacity of the container, interconnected containers, or pipes or interconnected pipes hold(s) the CWA hazardous substance with the lowest RQ.

(b) *Planning distance determinations.* To determine the distance to endpoints for fish, wildlife, and sensitive environments, public water systems, and public receptors as referenced in § 118.3(c), a facility shall use a methodology, model, or other technique that accounts for facility-

specific conditions and accounts for the stated requirements in this paragraph. A facility may use proprietary models, provided that the owner or operator allows EPA access to the model, submits documentation that demonstrates the reliability and analytical soundness of the methodology used, and describes the model's features to local emergency planners, upon request.

(1) Endpoints for fish, wildlife, and sensitive environments are provided in Appendix B of this part.

(2) Endpoints for public receptors are provided in Appendix B of this part.

(3) In determining the distance to endpoints, owners or operators shall consider the following parameters:

(i) Factors affecting overland transport including:

(A) Nearest opportunity for discharge to navigable waters;

(B) Ground conditions which may include topography of the surrounding area, drainage patterns, land use coverage, impervious cover, soil distribution or porosity, and soil absorption rate or soil saturation during adverse weather conditions; and

(C) Properties of the CWA hazardous substance, which may include evaporation rate based on wind speed; atmospheric stability, ambient temperature, pressure, and humidity; reactivity with rainwater and/or other substances; ignitability and explosive potential; flooding; and pooling.

(ii) Factors affecting in-water transport including:

(A) Point of entry to navigable water;

(B) Flow rate and duration of the discharge;

(C) Direction of the discharge at the point of entry;

(D) Surface versus underwater entry; and

(E) Conditions of the receiving water including the velocity of the navigable water which may be affected by: slope of the river; hydraulic radius; turbulence and potential for cross-channel mixing; Manning's Roughness coefficient; differentiation of still, tidal or moving waters; currents; wave height; tidal influence; and water temperature and salinity.

(iii) Adverse weather conditions, which shall be calculated based on adverse winds, currents, and/or river stages, over a range of seasons, weather conditions, and river stages.

(iv) Properties of the CWA hazardous substance such as solubility in water, speciation in water, density (relative to water), polarity, vapor pressure, reactivity with water and common solutes in natural waterbodies, human toxicity, mammalian toxicity, aquatic toxicity, and flammability.

§ 118.11 Facility response plan requirements.

(a) *General requirements.* A written plan that complies with other Federal contingency plan regulations or is consistent with the approach in the National Response Team's Integrated Contingency Plan Guidance ("One Plan") and that includes the elements provided in this section shall satisfy the requirements. The owner or operator may augment an existing plan with these required elements. All facility response plans must include the following:

(1) *Consistency with National Contingency Plan and Area Contingency Plans.* Plans must be consistent with the requirements of the National Oil and Hazardous Substance Pollution Contingency Plan (40 CFR part 300) and applicable Area Contingency Plans prepared pursuant to section 311(j)(4) of the Clean Water Act.

- (i) The owner or operator shall review relevant portions of the National Oil and Hazardous Substances Pollution Contingency Plan and applicable Area Contingency Plan annually and, if necessary, revise the facility response plan to ensure consistency with these plans.

(2) *Qualified individual.* Identify the qualified individual having full authority to implement response actions and require immediate communications between that individual and the appropriate Federal official and the persons providing personnel and equipment, with a description of duties including:

- (i) Activate internal alarms and hazard communication systems to notify all facility personnel;
- (ii) Notify all response personnel, as needed;
- (iii) Identify the character, exact source, amount, and extent of the discharge, as well as the other items needed for notification;
- (iv) Notify and provide necessary information to the appropriate Federal, state, and local authorities with designated response roles, including the National Response Center, State Emergency Response Commission or Tribal Emergency Response Commission, and Local Emergency Planning Committee or Tribal Emergency Planning Committee;
- (v) Notify and provide necessary information to public water systems that may be impacted by a discharge;
- (vi) Assess the interaction of the discharged CWA hazardous substance with water, solutes in water, water treatment chemicals, and/or other substances stored at the facility and notify response personnel at the scene of that assessment;

(vii) Assess the possible hazards to human health and the environment due to the discharge. This assessment must consider both the direct and indirect effects of the discharge (i.e., the effects of any toxic, irritating, or asphyxiating gases that may be generated, or the effects of any hazardous surface water runoffs from water or chemical agents used to control fire and heat-induced explosion) and initiate appropriate monitoring;

(viii) Implement prompt response actions to contain and respond, to the maximum extent practicable, to the CWA hazardous substance discharged;

(ix) Coordinate rescue and response actions as previously arranged with all response personnel;

(x) Use authority to immediately access company funding to initiate cleanup activities;

(xi) Direct cleanup activities until properly relieved of this responsibility; and

(xii) Acquire and maintain incident commander training requirements consistent with 29 CFR 1910.120(q)(6)(v).

(3) *Response resources.* Identify, and ensure by contract or other approved means, the availability of private personnel and equipment necessary to respond to the maximum extent practicable to a worst case discharge of CWA hazardous substances (including a discharge resulting from fire or explosion), and to mitigate or prevent a substantial threat of such a discharge;

(4) *Training, testing and drills.* Describe the training, equipment testing, periodic unannounced drills, and response actions of persons at the facility to be carried out under the plan to ensure facility safety and to mitigate or prevent the discharge, or the substantial threat of a discharge; and,

(5) *Plan updates.* Review and update facility response plan periodically and resubmit to the Regional Administrator for approval of each significant change.

(b) *Emergency response information.* The facility response plan shall include:

(1) *Facility information.* Facility details including the facility name; latitude and longitude; street address, with city, state, and zip code; telephone number; and facility location information described in a manner that would aid a reviewer and a responder in locating the facility;

(2) *Owner or operator information.* Contact information to include name and preferred contact method;

(3) *Hazard evaluation.* Hazard evaluation for worst case discharge and risk-based decision support system shall include:

(i) Chemical-specific information, including the response considerations, health hazards, fire hazards, chemical reactivity, hazard classifications, and physical and chemical properties; potential effects of a CWA hazardous substance worst case discharge on the ability to adversely impact a public water system; ability to cause injury to fish, wildlife, and sensitive environments; and ability to cause injury to public receptors; impacts to communities with environmental justice concerns; and impacts of climate change, including but not limited to increased flooding or subsidence, sea level rise, wildfires, and increased vulnerability to and changes in the frequency of natural disasters. Illustrative diagrams of the hazard evaluation should be included in the hazard evaluation.

(ii) This section of the plan must outline processes that will help responders make decisions relating to the identification, evaluation, and control of risks to human health and the environment following a CWA hazardous substance discharge. The processes

outlined below do not need to be scenario-specific but can be generic in nature. At a minimum, the processes must include all the following:

(A) *Risk identification* – describe the process that will be used to determine the extent and route of CWA hazardous substance exposure to humans and the environment including location of containers and their contents;

(B) *Risk characterization* – describe the process that will be used to establish relative degrees of risk and prioritizing risks;

(C) *Risk control* – describe the process that will be used to determine feasible response methods to mitigate CWA hazardous substance discharge impacts on human health and the environment; and

(D) *Risk communication* – describe the process that will be used to communicate information resulting from paragraphs (A), (B), and (C) of this section to parties internal and external to response activities.

(4) *Reportable discharge history*. Discharges reported under 40 CFR part 117.21 that reached navigable water with additional data including date, time, and discharge duration; CWA hazardous substance(s) discharged; estimated quantity discharged in pounds; quantity discharged that reached navigable water in pounds; the type of discharge event and its source; weather conditions; on-site impacts; offsite impacts; initiating event; description of how the discharge was detected; clean-up actions taken, steps taken to reduce the possibility of recurrence; and contributing factors;

(5) *Response personnel and equipment*. The identity and a description of response personnel and equipment and response action implementation necessary to respond to the maximum extent practicable to a worst case discharge of a CWA hazardous substance described in §

118.10, and to mitigate or prevent a substantial threat of a worst case discharge;

(6) *Contracts*. Evidence of contracts or other approved means as per the definition in § 118.2 to ensure the availability of proper response personnel and equipment;

(7) *Notifications*. A list of the identities, contact information, and preferred communication method(s) of individuals or organizations to be notified in the event of a discharge so that immediate communications and liaising between the qualified individual identified in paragraph (a)(2) of this section and the appropriate Federal officials; state, local, or Tribal response organizations; and persons providing response personnel and equipment can be ensured, and a description of communication methods. Notification shall include but not be limited to the: National Response Center, qualified individual, facility response team, Federal On-Scene Coordinator and/or Regional Response Center, local response team (fire department or cooperatives), fire marshal, the State Emergency Response Commission or Tribal Emergency Response Commission, state police, Local Emergency Planning Committee or Tribal Emergency Planning Committee, downstream public water systems, local television/radio stations for evacuation notification, local hospitals, and any other potential receptor or interested party who could be impacted by a discharge;

(8) *Discharge information*. A description of information to pass to response personnel in the event of a reportable discharge, including specifics about the event, CWA hazardous substance name and quantity discharged, possible areas and receptors affected, potential routes of transport, distance(s) to nearby waterways and conveyances, any data on the characteristics of the CWA hazardous substance and other hazardous substances in proximity, ignition sources, and any other information that may be helpful to responders and the public;

(9) *Personnel roles and responsibilities.* A description of response personnel capabilities, including the duties of persons at the facility during a response action and their response times, training, and qualifications;

(10) *Response equipment information.* A description of the facility's response equipment, the location of the equipment, last inspection or response equipment test date, inspection frequency, last deployment drill date, deployment frequency, response times, and equipment testing;

(11) *Evacuation plans.* Facility-wide plans for evacuation including a diagram and a reference to and coordination with community evacuation plans, as appropriate, and considering locations of CWA hazardous substances and their risks when discharged; anticipated flow direction; water conditions; emergency response personnel and equipment arrival routes; limitations on evacuation routes; transportation of injured personnel to nearest emergency medical facility; location of alarm/notification systems; check-in areas for evacuation validation; command center location; and location of shelter at the facility as an alternative to evacuation;

(12) *Discharge detection systems.* Procedures and equipment used to detect discharges, as well as detect and monitor any hazardous air releases resulting from discharges to navigable water, including personnel or automatic discharge detection for regular and afterhours operations by CWA hazardous substance, reliability checks, and inspection frequency;

(13) *Response actions.* Response actions to be carried out by facility personnel or contracted personnel under the facility response plan to ensure the safety of the facility and to mitigate or prevent discharges described in § 118.10 or the substantial threat of such discharges, including immediate response actions for personnel safety, personal protective equipment

use, facility personnel responsibilities by job title, facility personnel actions, facility personnel information gathering assignments for response personnel, and facility responsibilities to mitigate a CWA hazardous substance incident. For air or water sampling or monitoring, include personnel responsibilities for recordkeeping, procedures for sharing real time data with response personnel and the public, personal protective equipment requirements, and safety procedures;

(14) *Disposal plans*. Plans to dispose of contaminated cleanup materials, if appropriate to the material, including how and where the facility intends to recover, reuse, decontaminate, treat, and/or dispose of materials after a discharge has taken place and plans for temporary storage of recovered materials as well as the appropriate permits required to manage recovered materials according to local, state, and Federal requirements. The disposal plan must account for recovered product; contaminated soil and water; contaminated equipment and materials, including drums, tank parts, valves, and shovels; personal protective equipment; decontamination solutions; adsorbents; and spent chemicals;

(15) *Containment measures*. Measures to provide adequate containment and drainage of discharged CWA hazardous substances including containment volumes, draining routes from storage and transfer areas, materials used to construct drainage troughs, number and types of valves and separators used in the drainage system, sump pump capacities, containment capacity of weirs and booms and their locations, and other cleanup materials;

(16) Training procedures as per § 118.13;

(17) Exercise procedures as per § 118.13 and the schedule set under § 118.12(c); and

(18) *Self-inspection*. Written procedures and records of inspections for including an inspection checklist and method to record the inspection date and findings, to be retained for

five years.

§ 118.12 Coordination Activities.

The facility response plan shall be coordinated with the local emergency response plan developed by the Local Emergency Planning Committee or Tribal Emergency Planning Committee under section 303 of title III of the Superfund Amendments and Reauthorization Act of 1986 (42 U.S.C. 11001 et seq.). Upon request, the owner or operator shall provide a copy of the facility response plan to the Local Emergency Planning Committee, Tribal Emergency Planning Committee, State Emergency Response Commission, or Tribal Emergency Response Commission. The owner or operator of a facility shall coordinate response needs with local emergency planning and response organizations to determine how the facility is addressed in the community emergency response plan and to ensure that local response organizations are aware of the CWA hazardous substances at the facility, their quantities, the risks presented, and the resources and capabilities provided by the facility to respond to a worst case discharge of a CWA hazardous substance.

(a) Coordination shall occur at least annually, and more frequently if necessary, to address changes at the facility, in the facility response plan, and/or in the community emergency response plan.

(b) Coordination shall include providing to the appropriate state, local, or Tribal emergency planning and response organizations the facility response plan, updated emergency contact information, and other information necessary for developing and implementing the local emergency response plan.

(c) Coordination shall include consulting with appropriate state, local, or Tribal emergency response officials to establish appropriate schedules and plans for drills and exercises required

under § 118.13. The owner or operator shall request an opportunity to meet with the Local Emergency Planning Committee or Tribal Emergency Planning Committee (or equivalent) and/or local fire department as appropriate to review and discuss those materials.

(d) The owner or operator shall document coordination with appropriate state, local, or Tribal authorities, including:

(i) The names of individuals involved and their contact information (phone number, email address, and organizational affiliations), dates of coordination activities, and nature of coordination activities and

(ii) Signed agreements on activities and resources, identified by the facility, in the facility response plan to be performed by the appropriate state, local, or Tribal emergency response organizations.

§ 118.13 Facility Response Training, Drills, and Exercises.

(a) The owner or operator of any facility required to prepare a facility response plan under § 118.3 shall develop and implement a facility response training program and a drills and exercise program that satisfy the requirements of this section. The owner or operator shall describe the programs in the facility response plan as provided in § 118.11.

(b) The facility owner or operator shall develop a facility response training program to train those personnel involved in CWA hazardous substance response activities.

(1) A facility owner or operator must identify the method to be used for training any volunteers or casual laborers used during a response to comply with the requirements of 29 CFR 1910.120.

(2) The facility owner or operator is responsible for ensuring that all private response personnel are trained to meet the Occupational Safety and Health Administration standards

for emergency response operations in 29 CFR 1910.120.

(3) The facility response plan shall include a description of the training program as described in § 118.11.

(4) The facility response plan shall include logs of CWA hazardous substance facility response plan meetings, type of response training and dates, personnel responsibilities during a response action, and drills and exercises. These logs will be maintained as an annex to the facility response plan. Logs will be kept for five years following each training session.

(c) The facility owner or operator shall develop a program of facility response drills and exercises, including evaluation procedures. A program that follows the National Preparedness for Response Exercise Program (PREP) will be deemed as compliant with the drill and exercise requirements of this section. An alternative program or deviations from the PREP exercise requirements may also be developed by the owner or operator and are subject to approval by the Regional Administrator.

(1) Drills and exercises shall, when appropriate, be coordinated with local public emergency response officials and these officials shall be invited to participate.

Appendix A to Part 118: Certification Form

Facility Name:

Facility Address:

EPA Facility ID:

Facility Latitude/Longitude:

Facility Qualified Individual (Last name, First name):

Facility Contact (phone):

Facility Contact (email):

Parent Company:

Facility industry NAICS code:

1. Does the facility have a maximum capacity onsite of a CWA hazardous substance greater than or equal to the CWA Reportable Quantity (RQ) x 10,000?

Yes ___ No ___

If so, list names, CAS no., and maximum quantities (lbs) stored onsite for each CWA hazardous substance:

2. Is the facility within one-half mile of navigable waters or a conveyance to navigable waters?

Yes ___ No ___

If the answers to 1 and 2 are Yes, answer questions 3-6.

3. Is the facility located at a distance such that a discharge from the facility could cause injury to fish, wildlife, and sensitive environments? For further description of fish, wildlife, and sensitive environments, see the applicable Area Contingency Plan. Attach documentation of the formulas, assumptions, and distance to receptors calculated.

Yes ___ No ___

Distance to fish, wildlife, and sensitive environments (feet or miles):

Type of fish, wildlife, and sensitive environment receptor(s):

Names, CAS no. and worst case discharge quantity (lbs) for each CWA hazardous substance:

4. Is the facility located at a distance such that a discharge from the facility could adversely impact a public water system, including a concentration reaching a public water system intake which:

(i) Violates any National Primary Drinking Water Standard or State Drinking Water

Regulation, such as exceedance of a Maximum Contaminant Level at the point of compliance;

(ii) Compromises the ability of the public water system to produce water that complies with any National Primary Drinking Water Standard or State Drinking Water Regulation;

(iii) Results in adverse health impacts in people exposed to the maximum concentration that could enter a drinking water distribution system;

(iv) Contaminates public water system infrastructure, including but not limited to intake structures, treatment facilities, and distribution systems, or premise plumbing systems to a degree that requires remediation to restore system components to acceptable performance; or

(iv) Impairs the taste, odor, or other aesthetic characteristic of the water entering a drinking water distribution system to a degree that could make the water unacceptable to consumers and that could prompt the public water system to issue use restrictions.

Yes ___ No ___

Attach documentation of the formulas used for calculating planning distance, assumptions, and efforts to coordinate with public water systems.

Which criteria are met for the above substantial harm to drinking water (1-5)?

Attach documentation attesting to the required consultation with the applicable public water system, including name of public water system, point of contact, and date of consultation for each potentially impacted public water system, or provide detail on point of compliance at the water intake.

5. Is the facility located at a distance such that a discharge from the facility could cause injury to public receptors? Attach documentation of the formulas and planning distance used.

Yes ___ No ___

Distance to public receptor (feet or miles):

Type and description of receptor:

Name of CWA hazardous substance and worst case discharge quantity (pounds):

6. Has the facility experienced a reportable CWA hazardous substance discharge within the last five years?

Yes ___ No ___

Attach relevant documentation of past reportable discharges

For each reportable discharge identify:

Name of CWA hazardous substance, CAS no.

Date of discharge:

Duration of discharge (minutes):

Quantity discharged (lbs):

Waterway impacted:

Injury caused to FWSE:

Injury caused to public receptors:

Adverse impacts to public water systems:

NRC report number:

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Signature

Name (please type or print)

Title

Date

Phone/Email

Appendix B to Part 118- Toxicity endpoints for calculating planning distance for fish, wildlife and sensitive environments and public receptors.

Table 1. Concentrations for public receptors and fish, wildlife, and sensitive environments.

Category	RQ (lbs.)	Endpoints for public receptors			Endpoints for fish, wildlife and sensitive environments using 96-hour LC50		
		LD50			Aquatic toxicity		
		Mammalian toxicity (oral) (mg/kg)		10% (mg/kg)	(mg/liter)	10% (mg/L)	
		Lower	Upper		Lower	Upper	
X	1	0	0.1	0.01	0	0.1	0.01
A	10	0.1	1	0.1	0.1	1	0.1
B	100	1	10	1	1	10	1
C	1,000	10	100	10	10	100	10

D	5,000	100	500	50	100	500	50
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Subchapter J [Amended]

PART 300 - NATIONAL OIL AND HAZARDOUS SUBSTANCES POLLUTION

CONTINGENCY PLAN

2. The authority citation for part 300 continues to read as follows:

Authority: 33 U.S.C. 1251 *et seq.*; 42 U.S.C. 9601-9657; E.O. 13626, 77 FR 56749, 3 CFR, 2013 Comp., p. 306; E.O. 12777, 56 FR 54757, 3 CFR, 1991 Comp., p. 351; E.O. 12580, 52 FR 2923, 3 CFR, 1987 Comp., p. 193

3. Revise § 300.185 to read as follows:

§ 300.185 Nongovernmental participation.

(a) Industry groups, academic organizations, and others are encouraged to commit resources for response operations. Specific commitments should be listed in the RCP and ACP. Those entities required to develop tank vessel and facility response plans under CWA section 311(j) must be able to respond to a worst case discharge to the maximum extent practicable, and shall commit sufficient resources to implement other aspects of those plans in accordance with the requirements of 30 CFR part 254, 33 CFR parts 150, 154, and 155; 40 CFR parts 112 and 118; and 49 CFR parts 171 and 194.

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4. Revise § 300.211(c) to read as follows:

§ 300.211 Worst case discharge facility and vessel response plans.

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(c) For non-transportation-related onshore facilities, these regulations are codified in 40 CFR 112.20 and 40 CFR part 118;

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5. Add § 300.411 to read as follows:

§ 300.411 Response to CWA hazardous substance worst case discharges.

(a) If the investigation by the OSC shows that a discharge is a worst case discharge as defined in the ACP, or there is a substantial threat of such a discharge, the OSC shall:

- (1) Notify the NSFCC;
- (2) Require, where applicable, implementation of the worst case portion of an approved facility response plan required by CWA section 311(j)(5);
- (3) Implement the worst case portion of the ACP required by CWA section 311(j)(4); and
- (4) Take whatever additional response actions are deemed appropriate.

(b) Under the direction of the OSC, the NSFCC shall coordinate use of private and public personnel and equipment, including strike teams, to respond to a worst case discharge and mitigate or prevent a substantial threat of such a discharge.