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Dedicated to protecting our nation's ground water

Date: July 25, 2022

To: US Environmental Protection Agency
Docket ID No. EPA-HQ-OLEM-2021-0585 at <https://www.regulations.gov>

Subject: Proposed Clean Water Act Hazardous Substance Worst Case Discharge Planning Regulations

The Ground Water Protection Council (www.gwpc.org) appreciates the opportunity to provide comments and feedback to the Environmental Protection Agency (EPA) on the proposed changes to 40 CFR Parts 118 and 300. The following comments are intended to broadly address this proposed rule interpretation, but do not necessarily reflect the individual GWPC member state positions or all of their concerns.

The GWPC's membership consists of representatives of state groundwater and underground injection control (UIC) regulatory agencies that mutually work toward the protection of groundwater nationwide. Our focus is specifically on protecting groundwater supplies, conserving groundwater resources for all beneficial uses and recognizing groundwater as a critical component of the ecosystem. The GWPC is unique among state associations in that its members are the state officials who set and enforce regulations on groundwater protection and underground injection control.

[General Comments Regarding the Rule's Ability to Adversely Impact a Public Water System:](#)

EPA is proposing a regulatory program for facilities, which could reasonably be expected to cause substantial harm to the environment based on their location, to prepare Clean Water Act (CWA) hazardous substance Facility Response Plans (FRPs) for worst case discharges and submit them 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, including drinking water supplies. In the preamble, under Section b. Ability to Adversely Impact a Public Water System, EPA solicits comment on the proposed approaches and methodologies with supporting rationale and data.

GWPC is specifically interested in the proposed approaches to evaluate the ability to adversely impact a Public Water System that is dependent upon a groundwater intake which is located at a distance where a worst-case discharge from the facility could adversely impact the public water system or could reasonably be expected to cause substantial harm to the environment. We agree that facilities under their FRP should be required to coordinate with the public water system (including groundwater systems) to determine whether concentrations from a worst-case CWA hazardous substance discharge would result in scenarios adversely impacting the public water system (PWS).

The proposed rule defines “source water protection area” as 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)” (emphasis added). However, the proposed rule does not generally utilize this concept of for identification of a protective management area.

The GWPC recommends that FRP utilize the source water protection areas developed by the states under the Safe Drinking Water Act, as a tool for identifying PWS that need to be notified. EPA guidance should also note if the information SWAP intake location is not publicly available, there are resources such as the Drinking Water Mapping Application to Protect Source Waters, to assist facility response plan owner in checking for PWS utilities may be affected <https://www.epa.gov/sourcewaterprotection/drinking-water-mapping-application-protect-source-waters-dwmaps>.

We support the direct notification to the PWS under the FRP, in geographic areas where delineated source water protection areas (SWPAs) are publicly available, and a “worst case” discharge could be either a spill or a leak of contaminants which can travel to either downstream surface water intakes or a down gradient groundwater intake (such as a well or a spring box). Groundwater SWPAs should be explicitly and consistently addressed under this rule for the following reasons:

- While groundwater is not in itself a jurisdictional water under the CWA NPDES or the MS4 program, there is a public health responsibility to give the operators of a PWS adequate time to respond to potential contamination of their source water supply.
- There are some discharges that utilize a flow path to jurisdictional waters where groundwater flow is considered a functional equivalent to a surface water discharge (US Supreme Court in COUNTY OF MAUI, HAWAII v. HAWAII WILDLIFE FUND et al. No. 18–260 (https://www.supremecourt.gov/opinions/19pdf/18-260_jifl.pdf)). If a worst-case discharge utilizes a functional equivalent flow path located within the source water protection area of a PWS, that system should be notified.
- Under the EPA the 2020 Industrial Multi-Sector General Permit (MSGP) the use of infiltration of contaminants in industrial stormwater to groundwater is a remedy under 5.2.3.2 AIM Tier 3 Responses. Some of the infiltration methods that could be used may be Class V injection wells under the Safe Drinking Water Act and could have rapid infiltration to the subsurface. If a worst-case discharge occurs to these stormwater structures and it is located within a source water protection area for groundwater PWS, that system should be notified.

The GWPC suggests that key considerations relative for including direct notification to the PWS under the FRP related to groundwater include the following.

- Once groundwater is contaminated, it is not easily remedied and may be very costly to remediate. It is not a simple case of waiting for the contaminated plume to flow downstream past the intake. It may require installation of new treatment systems or replacement of water supply wells. Many small groundwater PWS systems only disinfect the water prior to distribution and do not have sophisticated treatment or monitoring systems. The statement in the preamble regarding applying the drinking water standards at the water intake (well) as unnecessary because “applying MCL 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” does not recognize these common practices should be revised to reflect that the MCL at the groundwater intake is important and there is a potential risk for exposure. These types of potentially vulnerable system are commonly located in underserved communities dependent on groundwater.
- Contaminants that infiltrate the soil zone and percolate through the vadose (unsaturated) zone to the aquifer may take many years to reach a human receptor or key environmental receptor. Groundwater typically flows slowly, except in certain geological settings discussed immediately in the following bullet. Because some groundwater SWPA areas may be large, we would suggest that using one-year time of travel in slower groundwater flow systems may be sufficient for a worst-case notification under the FRP.
- SWPAs located in a geologic setting where the source of the water is from karst or fractured aquifers or a system that has been determined to be using groundwater that is under the influence of surface water, can have quick travel times and be potentially affected by worst-case discharges. PWS in these geologic settings should be identified in the FRP for direct notification.
- Some groundwater karst systems are habitat to US Fish and Wildlife listed endangered species. Notification of USFW and those implementing habitat conservation plans should be part of the FRP if the concentrations from a worst-case CWA hazardous substance discharge would result in scenarios adversely impacting the designated habitat area.

In the FRP directions and guidance, several subsurface and groundwater conditions should be considered in various aspects of planning for and responding to worst-case discharges in locations of potential contaminant release:

- Where publicly available, identification of source water protection/wellhead protection areas that supply public water systems,
- Identification of contacts to notify for public water wells supplying water systems,
- Identification of locations of potential rapid infiltration (such as cave openings and abandoned wells) in karst terrain and near-surface fractured bedrock – these geologic settings may be of

greatest concern to be protected because groundwater flow may be very rapid with potentially fast movement of contaminants to aquifers,

- Identification of stormwater infiltration structures on the facility, including unsewered storm drains, dry wells and drainage wells as well as any subsurface distribution system that would allow worst-case discharges to enter the subsurface vadose zone or shallow subsurface groundwater, and
- Identification of down groundwater hydraulic gradient areas which may not be downstream of worst-case releases because groundwater flow does not always follow surface topography and surface water drainage divides.

Additionally, EPA asked for comment on protective approaches and methodologies, with supporting rationale and data. We suggest that the following points on approaches related to “source water protection areas” that provide water to community water systems that may be potentially affected by hazardous substance worst-case discharges be considered. Where publicly available, the use of SWPA for groundwater systems covers site-specific considerations and would provide clear and unambiguous requirements, as well as negate the need to specify values (i.e., concentration or total mass) that result in substantial harm. The use of SWPAs for groundwater PWS focuses notification so that actions can be taken to address potential 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.

- For nearly all 49,680 small, medium and large community water systems, source water protection/wellhead protection areas have already been delineated, of which 37,971 are groundwater-supplied. Many larger water systems have conducted groundwater flow modeling to define their source water protection areas.
- Since these protection areas have already been delineated and are widely accepted, these areas should be considered the principal human health receptor zones of highest priority for hazardous substance worst-case release planning. If a facility encounters difficulty in identifying water utility contacts or the SWPAs are not publicly available, EPA guidance should address notification of the regulatory entity which implements the SDWA drinking water program. EPA guidance could also note the availability of the Drinking Water Mapping Application to Protect Source Waters, to assist facilities to check their location in a source water protection area and utilities within that area. <https://www.epa.gov/sourcewaterprotection/drinking-water-mapping-application-protect-source-waters-dwmaps>.
- Typically, SWPAs for groundwater-supplied PWSs consider a one- or two-year time-of-travel for groundwater to reach the production well(s) as a priority protection area. Any worst-case release that occurs within this boundary or near the well(s) may have a shorter timeframe for a hazardous substance release to reach the intake point (well).

Specific Comments on Proposed Rule Language:

- Support and suggested change:

§ 118.3 Applicability. (c) Substantial harm criteria. **Suggest that the term water intake be clarified for a groundwater system to be the point at which water is withdrawn from the aquifer at the well head.** This is also consistent with §118.5(b)(4) and (5).

- Support:

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

(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:

- (4) Ability to adversely impact public water systems as described in § 118.3(c)(ii);
- (5) Location in a source water protection area;

- Support and suggested change:

For consistency with the definition of SWPA which include groundwater systems, see suggested [redline](#) text additions to:

§ 118.11 Facility response plan requirements.

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

(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 [surface water](#) public water systems, [downgradient groundwater 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;

- Appendix A to Part 118: Certification Form in number “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:” **Please clarify that intake for a groundwater system includes the well.**

Conclusions:

We urge EPA, as they move forward to finalize this proposed rule to make sure that nothing will limit or impede any state or tribal effort to protect state or tribal waters. They are in the best position to understand their own legal frameworks and recognize how to appropriately implement the proposed CWA Hazardous Substance Worst Case Discharge Planning Regulations and harmonize the various federal, state and tribal laws that may cover the discharge of pollutants to groundwater. Individual states are best able to determine which laws and regulatory schemes apply regarding the use of SWPA areas for notification of surface and groundwater public drinking water supplies and what alternatives are available, whether it be under their state-specific jurisdiction granted by individual state laws, jurisdiction provided through the delegation of federal programs under the CWA NPDES program, other federal programs such as the Safe Drinking Water Act, state laws, or other authority.

We recognize that this rule provides no protection for individual self-supplied domestic well owners or notification which could allow them to protect their water quality, especially in underserved communities. Notification to the news media when the facility recognizes that groundwater may be affected in this non-PWS scenario is possible and should be considered for inclusion either under the FRP or notification by the Regional Administrator.

Part of GWPC's mission is to provide a forum for stakeholder communication and research to improve the role of government in the protection and conservation of groundwater. GWPC feels that collaboration and cooperation with the States is necessary to effectively address issues that may arise from EPA's Proposed Rule.

In the spirit of cooperative federalism, the GWPC recommends that the concepts contained within the proposed CWA rule be communicated to the delegated drinking water programs under the Safe Drinking Water Act, and that discussions take place to minimize or eliminate misunderstanding that could inhibit rather than support the communication between the two different delegated programs and allow for cost-effective, coordinated, and appropriate regulatory implementation strategies.

If you have questions or would like to follow-up on any of these items, please contact Dan Yates, GWPC Executive Director, at (405)516-4972 or dyates@gwpc.org.

Sincerely



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