

Bipartisan Infrastructure Law Clean Water State Revolving Fund Emerging Contaminants Supplemental Appropriation

Frequently Asked Questions

President Biden signed the Bipartisan Infrastructure Law (BIL) on November 15, 2021. The BIL appropriates \$1 billion to the Clean Water State Revolving Fund (CWSRF) specifically to address emerging contaminants, including perfluoroalkyl and polyfluoroalkyl substances (PFAS) in wastewater, stormwater, and nonpoint source pollution. This is a unique opportunity to prioritize investment to local communities that are on the frontline of contamination and that have few options to finance solutions through traditional programs. The Environmental Protection Agency (EPA) Office of Water (OW) is committed to partnering with federal agencies, states, Tribes, territories, and water utilities to address PFAS and other emerging contaminants adversely impacting the environment and public health in communities throughout the nation.

Because this is a new stream of funding through the CWSRF for projects targeting emerging contaminants, EPA recognizes states and communities may face initial challenges developing projects and Intended Use Plans (IUPs). Below are some questions and answers to assist states in developing their application for BIL capitalization grants for the CWSRF emerging contaminants funding. EPA will add these to the current list of [Frequent Questions about BIL State Revolving Funds](#) and will provide additional information as we continue to engage with stakeholders on the current and future needs for addressing emerging contaminants and consider the flexibilities allowed under Section 603(c) of the Clean Water Act (CWA).

What is an Emerging Contaminant?

Emerging contaminants refer to substances and microorganisms, including manufactured or naturally occurring physical, chemical, biological, radiological, or nuclear materials, which are known or anticipated in the environment, that may pose newly identified or re-emerging risks to human health, aquatic life, or the environment. These substances, microorganisms, or materials can include many different types of natural or manufactured chemicals and substances – such as those in some compounds of personal care products, pharmaceuticals, industrial chemicals, pesticides, and microplastics. A description of emerging contaminants for the purposes of CWSRF financing can be found in Appendix B of EPA’s March 2022 Memorandum [Implementation of the Clean Water and Drinking Water State Revolving Fund Provisions of the Bipartisan Infrastructure Law](#).

Contaminants with [water quality criteria](#) established by EPA under CWA section 304(a), except for PFAS, are not considered emerging contaminants. This includes nutrients (e.g., ammonia, nitrogen, and phosphorus), certain organics, and certain metals.

Funding Eligibility Requirements

For a project or activity to be eligible under this appropriation, it first must be otherwise eligible under section 603(c) of the CWA and the primary purpose must be to address emerging contaminants. Section 603(c) of the CWA provides the CWSRF with a broad range of project eligibilities including the construction of publicly owned treatment works (POTWs), stormwater

management, and nonpoint source pollution control. Only capital costs (e.g., construction activities, equipment purchase) are eligible. The CWSRF cannot fund operation and maintenance activities, including monitoring, unless the monitoring is an integral part of the planning and design for a capital project. Planning and design for capital projects, as well as broader water quality planning where there is a reasonable expectation that the planning will result in an eligible capital project, are eligible. Recipients eligible to receive assistance are dependent on project type and are defined in section 603(c) of the CWA.

States have the flexibility to craft single assistance agreements (e.g., loans or grants) that contain multiple types of construction components and activities and can charge *eligible components* of larger projects to this appropriation.

Questions and Answers on Identifying Eligible Uses and Projects

1. What types of projects are eligible for CWSRF emerging contaminants funding?

Any project or activity for which the primary purpose is to address emerging contaminants and meets the criteria for any of the twelve CWSRF eligibilities outlined under section 603(c) of the CWA is eligible. This includes but is not limited to:

- **Projects at wastewater treatment facilities:** Installation of technology to treat for PFAS and other emerging contaminants at POTWs is eligible.
 - In Alabama, the wastewater treatment plant at West Morgan-East Lawrence Water and Sewer Authority is looking to fund a project to treat PFAS contaminated backwash from their water treatment facility. This would help significantly decrease the load of PFAS released from the backwash of the drinking water treatment plant eventually entering the Tennessee River with drinking water intakes located downstream of the NPDES permitted outfall.
- **Water reuse:** Potable and non-potable water reuse/reclamation projects that may be applying advanced treatment (e.g., reverse osmosis, granulated activated carbon, or ion exchange) to remove PFAS or other emerging contaminants are eligible.
 - In Arizona, the City of Tucson is looking to fund a project to treat reclaimed water contaminated with PFAS that is intended for aquifer storage/indirect potable reuse and landscape irrigation. The city submitted a preliminary application and is likely to propose using granular activated carbon (GAC) for treatment.
 - In Virginia, the Upper Occoquan Service Authority is considering upgrades to its regional water reclamation plant to add ozone biofiltration to its existing GAC treatment to remove a wider array of chemical compounds and pathogens of concern including perchlorate, 1-4 dioxane, nitrosamines, PPCPs, flame retardants, and alkyl acids (including PFAS).
- **Stormwater:** In areas that are impaired or impacted by emerging contaminants based on previous monitoring efforts, projects that can trap and/or treat the contaminants in runoff

prior to reaching waterbodies or instream treatment or removal may be eligible. Some examples include:

- Construction of structures at industrial facilities to cover PFAS-containing materials that would otherwise be exposed to and transported in stormwater.
 - Development of a stormwater plan to identify capital projects that address emerging contaminants.
 - Purchase and installation of sampling equipment for industrial and municipal stormwater.
 - Purchase and installation of mesh screens and containment systems designed to capture and remove microplastics from industrial and municipal stormwater.
 - Installation of stormwater controls designed to filter and remove microplastics from stormwater.
 - Purchase of a vacuum or vacuum-type system to pick up microplastics to prevent flushing into stormwater.
 - Installation of stormwater controls designed to collect and capture emerging contaminants like 6PPD-quinone in stormwater discharges.
- **Other non-point source projects:** Eligible nonpoint source projects are capital projects that support the implementation of a current EPA approved state nonpoint source (NPS) management program plan or nine-element watershed-based plan established under Section 319 of the Clean Water Act and may be publicly or privately owned.
 - **Landfills:** Eligible landfill projects could include landfill closure (e.g., capping) or landfill runoff and leachate collection and treatment that will reduce runoff contaminated with PFAS or other emerging contaminants. The modification/expansion of existing or construction of new publicly owned landfills (local and regional) primarily designed and permitted (per state and federal regulations) to accept POTW biosolids with emerging contaminants is also eligible.
 - **Contaminated sites:** Contaminated sites may include Brownfields, Superfund sites, and sites of current or former aboveground or underground storage tanks. Projects that address PFAS through capping, in-situ treatment, or removal of contaminated material as part of the implementation of a state nonpoint source management plan may be eligible.
 - **Surface Water Protection and Restoration:** Projects that address emerging contaminants in waterbodies include:
 - Equipment for the physical or chemical removal of HABs, for example, strategically placed aeration blowers to remove and control algal blooms or flocculant-based methods to facilitate algae removal.
 - Projects that can skim surface water to remove microplastics along with other plastic pollutants.

2. What kinds of planning and assessment activities are eligible for CWSRF emerging contaminant funding?

Planning and design for capital projects, as well as broader water quality planning, are eligible provided there is a reasonable expectation that the planning will result in a capital project. For example, funding can be used for preconstruction activities to help prepare planning, preliminary engineering, and alternatives analysis documents. Funding may also be used to procure and install monitoring equipment (e.g., auto samplers). States may also lend to non-profits under section 603(c)(11) of the CWA to provide assistance to small and medium sized POTWs in planning, design, and associated preconstruction activities related to emerging contaminants.

3. Can the CWSRF emerging contaminant funds be used to conduct monitoring?

While water quality monitoring activities (including monitoring of PFAS associated with NPDES permit or pretreatment requirements) at POTWs are generally not eligible, monitoring for the specific purpose of project development (planning, design, and construction) is eligible. Monitoring in this capacity, and within a reasonable timeframe, can be integral to the identification of the best solutions (through an alternatives analysis) for addressing emerging contaminants and characterizing discharge and point of disposal. Though ideally the planning and monitoring for project development would result in a CWSRF-eligible capital project, in some instances, the planning could lead to outcomes other than capital projects to address the emerging contaminants. For nonpoint source projects, funding may also be used to assess project effectiveness after construction.

Examples of eligible planning and monitoring activities/costs could include:

- Purchase of monitoring or laboratory analysis equipment.
- Monitoring to characterize stormwater or wastewater to inform an engineering report and the identification and selection of the appropriate treatment technology/project alternatives. Wastewater characterization may already be a current requirement in some states for wastewater treatment system project planning. For example, the State of Washington Department of Ecology's [*Criteria for Sewage Works Design*](#) requires Engineering Reports to contain a statement of the present and expected future quantity and quality of wastewater, including any industrial wastes which may be present or expected in the sewer system.
- Monitoring of wastewater influent/effluent/sludge to determine the fate of PFAS, antimicrobial resistant bacteria, or other emerging contaminants, to inform the identification and selection of the appropriate treatment technology.

4. What sources of funding may be used for emerging contaminant planning, monitoring, and assessment efforts?

Under the BIL, states have the flexibility to use up to an amount equal to 2% of their CWSRF capitalization grant for the purpose of hiring staff, nonprofit organizations, or regional, interstate, or municipal entities to assist rural, small, and tribal POTWs. The form of that assistance is flexible and could include, but is not limited to, community outreach,

technical evaluation of wastewater solutions, preparation of applications, preliminary engineering reports, and financial documents necessary for receiving SRF assistance. For example, these funds could be used for a state staff position or eligible non-profit organization to assist rural, small, and tribal systems with emerging contaminant sampling and monitoring, including identification of emerging contaminant sources within the sewershed. This technical assistance could also include assisting the systems with understanding the monitoring results and identifying follow up actions, such as the need for capital projects to address the emerging contaminants.

Beyond using CWSRF emerging contaminants funds to conduct planning and monitoring to support capital project development, additional funding sources that states can use to more broadly assist with emerging contaminants monitoring and planning efforts include:

- **Water Quality Management Planning Grants (604(b)):** States can use all or a portion of the 604(b) grant funding from CWSRF base, supplemental, and emerging contaminants allotments to perform POTW influent emerging contaminant monitoring, sewershed monitoring (emerging contaminant source identification), including hiring state staff to perform monitoring. States must develop a workplan for EPA review and approval describing activities or projects to be funded. In addition, the workplan developed by the state must show how the state is working with and providing at least 40% of the 604(b) funds to Regional Public Comprehensive Planning Organizations and interstate organizations. The Governor can request a waiver with the appropriate justification if this requirement cannot be met. The 604 (b) workplan must also show how disadvantaged communities will benefit from the proposed activity. For more information, see EPA's [*Interim Implementation Guidelines for Clean Water Act Section 604\(b\) Water Quality Management Planning Grants for Fiscal Years 2022 through 2026*](#).
- **Fees:** States that charge SRF administrative fees can use nonprogram income to provide grants for monitoring to help build their project pipeline or pair with SRF funding where the SRF covers the eligible monitoring equipment. Fees may be used to pay for the lab analysis cost, staff, and other non-SRF eligible expenses.

5. How does a state determine whether particular components of projects are eligible for the BIL Emerging Contaminant pot of funding?

If the project component is integral to the emerging contaminant purpose of the project, then expenses related to that component may be drawn from the BIL EC pot of money. For example, if an existing water treatment plant is being upgraded to add PFAS treatment, but other components/upgrades are necessary at the plant to support this addition (in other words, the other upgrades are essential to the function or security of the PFAS treatment component being installed), then the additional components/upgrades are also eligible under the SRF BIL EC pot of funding.

These questions and answers can be found online in the [*Frequent Questions about BIL State Revolving Funds*](#). Any updates or additional information will be added to the online version as we continue to identify examples of eligible emerging contaminants projects.