

The City of Cedar Rapids (Iowa) Water Pollution Control Facility (WPCF) provides wastewater treatment for 180,000 residents plus industrial and commercial customers. A multiple hearth incinerator at the WPCF treats solids from the primary and biological treatment processes. The City is currently studying the fate of per- and polyfluoroalkyl substances (PFAS) in solids after incineration, specifically how effective the multiple hearth incinerator is at degrading and destroying PFAS compounds within the solids. The City also recognizes that PFAS may need to be treated in the liquid streams. To proceed with planning, the City needs to better assess the presence and fate of PFAS at the WPCF as well as treatment options. The City and its partners propose:

**Emerging  
Contaminants:**

*PFAS*

**Project Type:**

*POTW*

- Conducting baseline PFAS monitoring of liquid and solid streams entering and leaving the WPCF along with monitoring of waste streams generated at interim treatment processes. The City also proposes sampling of the collection system upstream of the WPCF to determine PFAS contributions from various users. Though this latter sampling is not eligible for CWSRF emerging contaminants funding, it will help the City identify source reduction options.
- Evaluating commercially available treatment technologies for treatment of PFAS in liquid and solid streams based on monitoring results.
- Performing bench and/or pilot scale testing of the most viable treatment options onsite at the WPCF.
- Developing a final engineering report based on findings from pilot scale testing including recommended treatment loading and sizing criteria, a projected site plan and an estimated budget.

CWSRF emerging contaminants funds are being sought to support the above activities.

### Eligibilities:

Per Section 603(c)(1) of the Clean Water Act (CWA), the construction of a capital project at a publicly owned treatment works is eligible. The proposed project includes monitoring and testing activities that are working towards the construction of a new treatment process at the WPCF.

To be eligible for the CWSRF emerging contaminants funds:

1. The presence of an emerging contaminant(s) needs to be confirmed. The Cedar Rapids WPCF is already involved in a study and has established the presence of PFAS in biosolids at the WPCF.
2. A capital project needs to be identified. The monitoring and technology assessment proposed in this plan is to understand the occurrence and fate of PFAS at the WPCF to guide selection, design, and construction of an appropriate PFAS treatment technology.
3. Monitoring proposed as part of a project needs to be integral to capital project development. The proposed emerging contaminants monitoring to understand the concentration and occurrence of the emerging contaminants into and out of the WPCF is eligible. Proposed sampling upstream in the collection system is not eligible for CWSRF emerging contaminants funds.

All of the above make the proposed project eligible for CWSRF emerging contaminants funds, excluding sampling in the collection system.