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Informational Webinar for Applicants

Hosted by EPA's Office of Research and Development epa.gov/research-grants/water-research-grants



December 5, 2019

EPA National Priorities RFA: Research on PFAS Impacts in Rural Communities and Agricultural Operations

SAFE AND SUSTAINABLE WATER RESOURCES RESEARCH PROGRAM

Webinar Slides: Located under "Handouts" in the right navigation bar of your screen. To Ask a Question: Type in the "Questions" box located in right navigation bar on your screen. Webinar Support: Send email to webcastinfo@cadmusgroup.com



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Webinar Overview

Webinar Agenda:

- General information about the Request for Applications (RFA)
- RFA application process, eligibility, and peer review processes
- Q&A Session

Webinar Ground Rules:

- Questions will be held until the end of the presentation.
- Clarifying questions regarding what is written in the RFA announcement may be answered during the Q&A session.
- Specific research projects or ideas cannot be discussed.

There will be no new information, this is an overview of what has already been provided in the RFA.

Award Information

Estimated Number of Awards and Total Funding:

- Approximately 3 awards
- Anticipated funding is approximately \$5 million total for all awards

Potential Funding per Award:

- Up to a total of \$1.6 million per award
- Total includes direct and indirect costs
- Maximum duration of 3 years



Research Areas

- Better understanding of PFAS occurrence, fate, and transport in water sources used by rural communities and agricultural operations.
- 2. Novel or improved PFAS treatment methods appropriate for small drinking water and wastewater systems including influents, effluents, and biosolids/residuals.





Better Understanding of PFAS Occurrence and Fate and Transport

Research

- Nationally, what are the major sources of PFAS contamination in rural drinking water systems and public and privately-owned wells?
- What are the levels of PFAS in rural wastewater treatment influent and effluents used in agricultural operations for crops and animals?
- Are there sources more prevalent in rural areas due to previous pesticide application or other agricultural practices?





Better Understanding of PFAS Research **Occurrence and Fate and Transport**

- What variety of PFAS compounds and degradation products are present in rural communities and agricultural operations?
- In rural areas, what is the contribution of PFAS exposure from the various sources?
- Locally, how can the extent of PFAS contamination be estimated from the various sources?





Better Understanding of PFAS Occurrence and Fate and Transport

Research

- What are the fate, transport, and transformation characteristics of PFAS when soil amendments, such as land applied biosolids and industrial materials, are applied?
- To what extent does PFAS contaminated soil interact with surface/subsurface constituents?
- How does contaminated groundwater impact drinking water treatment decisions for rural communities and agricultural operations?



Example Outputs

- Information on relative risk/source contribution from various sources in rural areas and agricultural operations.
- Risk communication materials and tools that translate scientific results into easily understandable outreach and education materials for wastewater professionals and the public.



Research



Novel or Improved PFAS Treatment Methods



- What Innovative and cost-effective technologies and operational factors are available for small, rural, and agricultural drinking water treatment systems?
 - Technologies to remove PFAS from waters used during growth and harvesting of agricultural products
 - Technologies to treat residual streams
- What promising pretreatment technologies and pollution prevention for manufacturing processes are available?
 - How do pretreatment costs compare to costs for improved treatment methods in small water and wastewater treatment systems?



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Novel or Improved PFAS Treatment Methods

Research Area 2

- What is the fate of PFAS in wastewater and solids treatment trains?
 - Including facilities that recycle wastewaters for agriculture and aquifer recharge
- What are the fate and transport and transformation characteristics of PFAS in small drinking water/wastewater systems?
 - During treatment, storage or in groundwater infiltration basins? during water reuse?
- What is the impact of operational factors on the efficacy of mgmt strategies for PFAS?
 - Serial biosolids applications
 - Impact of soil/crop type and landscape traits, such as topography



Example Outputs

- Results of pilot and/or full-scale testing:
 - Promising and cost-effective processes for PFAS removal from wastewater and biosolids.
 - Promising and cost-effective processes for PFAS removal from rural and agricultural small drinking water treatment systems.
- Resources for small systems for PFAS treatment:
 - Pretreatment strategies at PFAS source locations, such as industrial sites and airports.
- Disposal management options and costs for handling PFAS laden residuals from water and wastewater treatment processes.
- Economic analyses evaluating the feasibility of processes, treatment technologies, and interventions.



Research

Area 2

FINDING-

RESULTS

OUTCOMES

ANSWERS

CONCLUSIONS

SOLUTIONS

Collaboration and Engagement Plan

Applications should describe the following:

- Type of collaboration/support proposed and what role it will play in the overall project.
- How the collaboration will enhance the capacity of the project.
- How related or complementary projects/studies will be coordinated with activities of the project.
- How you will ensure that the collaboration will materialize during project performance.



Sustainability

- Research applications must include a discussion on how the proposed research will seek sustainable solutions.
- The goal of sustainability, derived from the U.S. National Environmental Policy Act of 1969 (NEPA) is to "create and maintain conditions, under which humans and nature can exist in productive harmony, that permit fulfilling the social, economic, and other requirements of present and future generations."





Eligibility Information

Eligible:

This solicitation is available to public and private nonprofit institutions and public and private universities and colleges located in the United States.

Not Eligible:

- Foreign entities; states (including the District of Columbia and state and local government departments); and territories, possessions, and tribal nations of the U.S. are not eligible to apply under this RFA.
- Profit-making firms are not eligible to receive assistance agreements from EPA under this program.

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Application Materials

- To apply under this solicitation, use the application package available at <u>Grants.gov</u> For further submission information, see Section IV.F. Submission Instructions and other Submission Requirements
- Note: With the exception of the current and pending support form (available at Research Funding Opportunities: How to Apply and Required Forms), all necessary forms are included in the electronic application package. Make sure to include the current and pending support form in your Grants.gov submission.





Other Information

- Please refer to Section IV. Application And Submission Information.
- Please refer to Section V. Application Review Information.

Solicitation Closing Date and Time: February 11, 2020: 11:59 pm Eastern Time



Agency Contacts

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Q&A Session



RFA Website:

epa.gov/research-grants/national-priorities-research-

pfas-impacts-rural-communities-and-agricultural