# 2018 WQRF Research Grant Program - Request for Proposals

Issued: October 26, 2017

Submission Deadline: February 16, 2018

## Introduction

The Water Quality Research Foundation (WQRF) is issuing this request for proposals under an annual program which awards one research grant for a project relating to the point-of-use and point-of-entry drinking water treatment industry. This award is in addition to the other funding allocated by the WQRF for project specific requests.

The aim of this program is to allow academic and independent researchers more flexibility for direct submission of study proposals which are topical to the WQRF research agenda. For the 2018 grant, the WQRF will award funding to one proposal which falls under either of the following research agenda categories:

> Emerging Contaminants - Research to aid or support implementation of technologies to provide cost effective (*point-of-use and/or point-of-entry*) options for emerging contaminants.
>
> Regulatory Affairs - Conduct research to support efforts to defeat ill-conceived codes and rules or promote technologies in highly regulated areas.

For the 2018 grant the cost of the research proposal shall not exceed $50,000, with preference for indirect costs not to exceed 13%.

## Who is WQRF?

The Water Quality Research Foundation (WQRF) was formed in 1949 to serve as a universally recognized, independent research organization for residential, commercial and industrial drinking water treatment topics. Since inception, WQRF has sponsored numerous research studies which have established best practices, generated essential marketing information, positively impacted legislative change, and helped decrease product testing costs.

## Research Agenda Topics

The proposal shall be relevant to either the Emerging Contaminants or Regulatory Affairs research agenda topics. More information on these research agenda topics is provided above and in Appendices B and C.

## Requirements for Researchers

Researchers must be well-qualified and have expertise relevant to point-of-use and point-of-entry drinking water treatment. The names and qualifications of primary investigators involved in this project must be provided.

The researchers must have the facilities and capabilities to accomplish this project, or provide a list of partners and their qualifications they will work with to accomplish this project, as well as a list of the primary investigators from those partners.

## Timeline

The timeline for the proposed project should be no more than 1-2 years (start to final report), with a preference for the shortest reasonable timeline.

## Restrictions

The proposal shall be scoped to prevent use of the study to promote or disparage a specific product model, company or brand name.

While the WQRF supports the benefits of product validation testing, the WQRF does not fund validation testing of new products or emerging technologies.

The researchers cannot have a commercial interest in any products or technologies proposed for inclusion in the study.

The research shall not be of a type ordinarily carried on by commercial or industrial operations such as the ordinary testing and inspection of materials or products, or design and construction of water treatment equipment or parts thereof.

## Business Requirements and Responsibilities

In support of this project, WQA and WQRF agree to the following duties and responsibilities:

- WQRF will provide the researcher with any background information needed, such as a list of industry stakeholders.
- WQRF technical staff and the WQA Water Sciences Committee will take an active role in technical review of interim reports and approval of final report, especially with regards to industry specific knowledge or operations which the researcher may not be otherwise aware of.
- WQA will track progress and provide any necessary coordination with industry stakeholders throughout the course of the research, will supply technical input upon request, and will facilitate support and input from the Water Sciences Committee.
- WQA will provide public access to an executive summary of the report, and provide access to the full report for WQA members or through the WQRF.

The researcher will contract with WQRF to perform the following activities, and any other activities necessary:

- Perform all aspects of the research concept.
- Provide an invoicing schedule for completing the research, including a schedule of interim reports for peer review by the research task force, and complete the study in a timely manner according to the schedule.
- Engage with and provide response to the WQRF questions relating to progress and coordination, as well as Water Sciences Committee comments on interim reports.
- Agree all intellectual properties and copyrights are owned by the Water Quality Research Foundation.
    - Please note that WQRF does not wish to fund product development activities (e.g., new product validation, ordinary testing and inspection of materials or products, design and construction of water treatment equipment, design of water treatment products or components with the intent to patent, etc.). Consistent with this policy, use of any patents

or trademarks resulting from this research shall be made available to the public-at-large on a non-discriminatory basis.

- None of the research information/results can be published without prior review and approval by WQRF (or where so designated the WQA Water Sciences Committee), however it is WQRF's preference that after such review and approval of the final report, the researcher will seek to publish the study in a peer-reviewed publication

## Confidentiality

All proposals will be treated as confidential and will not be shared outside of the WQRF, with the exception of committees, task forces and WQA staff members who are acting under restriction of confidentiality on behalf of the WQRF. The distribution list includes the WQA Water Science Committee (members only) and their assigned Research Task Force. The Water Science Committee and its assigned Research Task Force are made up of subject matter experts from the water treatment industry.

## Proposal Format

Proposals shall follow the format provided in Appendix A and be accompanied with the one page Executive Summary form.

## Selection Criteria

Proposals will be mainly evaluated based on value by rating the potential (positive) impact of the research compared to the cost. The WQRF prefers to keep indirect costs at or below 13% of the total research budget. The researcher's credibility, previous experience, qualifications and publications will also be taken into consideration. Additional factors will be considered where applicable.

## Questions

The contact for this RFP is Eric Yeggy. Questions can be directed to Eric at any time.

Contact info:
*Eric Yeggy*
*WQRF Scientific Consultant*
*630-929-2539*
*eyeggy@wqa.org*

## Due Date

Proposals must be submitted by email (eyeggy@wqa.org) no later than **February 16th, 2018**.

# APPENDIX A – Format

Proposals should include the following sections, and if necessary other sections may be added:

Abstract – Summarize the research project, plan, timeline and objectives. Identify which research agenda topic the proposal falls under. Explain the potential (positive) impact on the industry from your proposed project.

Introduction and literature review – Should include an overview of the research topic, especially focal points which are relevant to the proposed work, and a review of related research or publications which define what is already known about the research topic.

Detailed research plan and methodology - Describe the proposed experiment(s) including any equipment and methods which will be used to complete the work.

Deliverables - Describe the deliverable(s) that you will be providing for this work. For example, the project deliverables might include:

- Raw data;
- Interim research report(s);
- Final research report;
- Hosting a workshop; or
- Other deliverables.

Estimated timeline – This should be completed based on an unknown start date (e.g., the first interim report will be issued 3 months from the authorized start date…) The projected start date is subject to change, but estimated to fall between September 2018 and March 2019 inclusive. The timeline shall not exceed 1-2 years from the start date, with a preference for the shortest reasonable timeline. Please include an estimated invoicing schedule along with your timeline that includes the percent owed at the start of the project and its various milestones.

Credentials and qualifications – A statement of qualifications, previous experience, and related publications of the primary and supporting investigators.

Budget – Total budget shall not exceed $50,000. At a minimum, the budget should be broken down by the following categories (where applicable): Salaries, Fringe Benefits, Equipment (including materials & supplies), Travel, Subcontract fees, and Indirect costs. The WQRF prefers to keep indirect costs at or below 13%. Other categories may be added as needed.

Potential Conflict Circumstances statement (required) – A statement shall be included reporting any direct or indirect circumstances which could potentially create a conflict of interest. For example, if the proposed study could further the interests of a company with which the researcher or the research organization has a contractual agreement to provide testing, certification, consulting or other services (or is negotiating such an agreement), that shall be disclosed as a potential conflict circumstance. The WQRF shall have final authority over whether a potential conflict circumstance represents a Conflict of Interest.

# APPENDIX B – Emerging Contaminants

*Emerging Contaminants - Research to aid or support implementation of technologies to provide cost effective (point-of-use and/or point-of-entry) options for emerging contaminants.*

Emerging contaminants that the WQRF is tracking or is aware of (listed in no specific order) include, but are not limited to:

- Contaminants which have been, or are currently being, monitored through the Unregulated Contaminant Monitoring Rule (UCMR)
- Perfluorochemicals (PFCs) such as perfluorooctanoic acid (PFOA) or perfluorooctanesulfonic acid (PFOS)
- Hexavalent chromium
- Pharmaceuticals and personal care products
- Endocrine disruptors
- Opportunistic pathogens such as legionella and other microbial contaminants
- Manganese

# APPENDIX C – Regulatory Affairs

*Regulatory Affairs – Research to support efforts to defeat ill-conceived codes and rules or promote technologies in highly regulated areas.*

Regulatory issues that the WQRF is tracking or is aware of (listed in no specific order) include, but are not limited to:

Chloride discharge – Cation Exchange Water Softeners can have a significant contribution to the chloride levels which reach the waste water treatment plant. Many waste water treatment plants which did not previously have a chloride discharge limit are now being regulated for chloride. In some cases, this has led to softener bans which denies the consumer access to soft water and all the benefits of softening. The WQRF has previously funded research to quantify the benefits of softening (see "Softened Water Benefits Study"), and has also funded research to identify successful strategies for lowering chloride levels by working with the softener industry as an alternative to softener bans (see "Reduction of Effluent Chloride Study").

Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) – Many Drinking Water Treatment products are regulated under FIFRA. Some require registration as "pesticides", while others are regulated under FIFRA as "pesticide devices". The EPA Office of Pesticides does not necessarily recognize or accept the testing which is already used to establish safety and performance of these products according to ANSI standards. This duplication of testing can be extremely expensive, and those costs are either passed onto the consumer or in some cases they may create a barrier for small companies to enter the market.

Health Goals for Emerging Contaminants – It can be confusing for drinking water treatment professionals to target treatment levels for emerging contaminants which do not have an EPA established Maximum Contaminant Level.

Private Wells – The water quality of private wells is not regulated through the Safe Drinking Water Act. The WQRF is tracking, and aware of, the challenges of ensuring private well owners have safe drinking water.

Potentially harmful water conditions – The WQRF has funded previous work on examining the causes and frequency of Potentially harmful water conditions (See "Boil Water Notices in the U.S., 2012-2014" for example). There is no national reporting system for boil water alerts, and it is unclear why some states claim to have almost no boil water alerts, while other states report that there are many.