

NATIONAL WATER RESEARCH INSTITUTE

Independent Advisory Panel: Technical Requirements for Public Health Standards for Onsite Water Systems (WERF Project No. SWIM10C15)

Purpose and Scope of Panel Activities

Many communities throughout the country use onsite water treatment systems to provide non-potable water in buildings and districts. Interest in these types of systems is increasing; however, public agencies need additional information and guidance on how to develop, manage, and oversee onsite water systems to protect public health. Specifically, recommendations for criteria would need to address a range of factors, such as water quality, monitoring, reporting, operations, and permitting strategies for onsite water systems.

1. Purpose of the Panel

The Independent Advisory Panel (Panel) for this project, which includes individuals with technical expertise in criteria setting, risk assessment, water treatment, microbiology, water quality, and regulations, will review information currently available on criteria, regulations, and experience for the purpose of recommending an approach for oversight of onsite water systems. The Panel will also receive input and comments from a stakeholder advisory committee comprised of local, state, and federal public health officials. The goal of the project is to establish guidelines that can be used by public officials in developing programs to manage and oversee onsite water systems.

The Panel will formulate findings and recommendations by assessing the questions and issues associated with onsite treatment systems. These topics will address the following:

- Water quality criteria for a number of alternate water sources (i.e., graywater, rainwater, blackwater, stormwater, and foundation drainage)
- Applications and end uses of treated alternate water sources (toilet/urinal flushing and irrigation)
- Available treatment technologies
- Monitoring regimes and reporting for performance
- Operational requirements and permitting strategies

Performance criteria is not specific to water quality and can also address treatment system performance monitoring and operational needs. The Panel will discuss these options and identify what needs to be included in their recommendations. Most studies on these systems have not been risk-based, and existing regulations have been conservative. This approach has been acceptable for recycled water. Moving to the scale of buildings, the public is looking for more cost-effective systems, and regulators are trying to determine which criteria must be set. The

public health community also believes that failures in treatment or operations could be a significant issue.

2. Panel Activities

Pre-Workshop #1

- Develop questions that cover a range of topics and issues to be addressed by the Panel. The questions would be germane to developing guidance for implementing on-site water treatment systems.
- Prior to Workshop #1, the Panel will provide initial responses to the questions. These initial responses will be presented at the workshop for further discussion.

Workshop #1

- Stakeholders and public agencies will attend Workshop #1.
- The Panel's initial responses will be presented at the workshop and further discussed among the Panel members and workshop attendees.
- The Panel will work to finalize the questions/topics in collaboration with workshop attendees. The Panel will also review the responses and develop an approach for addressing questions.

Post-Workshop #1

- The Panel will continue responding to the questions discussed at the workshop. The responses will inform the development of their findings and recommendations.
- An outline will be developed for the ensuing Panel report. This outline will be shared with the projects sponsors.

Pre-Workshop #2

- The Panel will finish addressing the questions of interest.
- The Panel will review the responses.
- Consensus findings will be developed in a draft "Technical Guidance for Public Health Standards Report," which is expected to help guide the permitting of onsite treatment systems for the supply of non-potable water.
- The stakeholder advisory committee and public agencies will receive a draft report prior to workshop #2.

Workshop #2

- Workshop #2 will be scheduled to review the draft findings with the stakeholder group.

Post-Workshop #2

- A final report would be prepared based on the outcomes of Workshop #2.