NATIONAL WATER RESEARCH INSTITUTE

Proposed Panel Members

Expert Panel for the California Department of Public Health

Development of Water Recycling Criteria for Indirect Potable Reuse through Surface Water Augmentation and the Feasibility of Developing Criteria for Direct Potable Reuse

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A 501c3 nonprofit organization, the National Water Research Institute (NWRI) was founded in 1991 by a group of California water agencies in partnership with the Joan Irvine Smith and Athalie R. Clarke Foundation to promote the protection, maintenance, and restoration of water supplies and to protect public health and improve the environment. NWRI's member agencies include Inland Empire Utilities Agency, Irvine Ranch Water District, Los Angeles Department of Water and Power, Orange County Sanitation District, Orange County Water District, and West Basin Municipal Water District.

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1. INTRODUCTION

The National Water Research Institute (NWRI), a 501c3 nonprofit research and education organization, proposes to form an independent, third-party Expert Panel to provide expert peer advice to the State of California on the following:

- Development of Water Recycling Criteria for indirect potable reuse (IPR) through surface water augmentation; and
- Feasibility of developing criteria for direct potable reuse (DPR), including a review of current DPR research efforts.

The Expert Panel will be held on behalf of the California Department of Public Health (CDPH) and administered by NWRI.

This proposal presents and summarizes NWRI's efforts to identify and recruit a 10-member Expert Panel to assist the State of California.

2. DESCRIPTION OF THE PANEL

Brief descriptions of the role, activities, and end-products of the NWRI Expert Panel process are provided in this section.

2.1 Panel Role

The purpose of the Expert Panel is to provide an independent review, identify knowledge gaps, and make recommendations based on the current state-of-the-science for the following:

• Development of Water Recycling Criteria for IPR through surface water augmentation.

Specifically, the Panel's role involves the evaluation of proposed California criteria and making a finding, based on their expert opinion, whether the proposed criteria would adequately protect public health. Water Code Section 13564 provides a list of items CDPH must consider when developing the criteria. The items comprising that list should be considered by the Panel.

• Feasibility of developing criteria for DPR, including a review of current DPR research efforts.

Specifically, the Panel's role involves investigating the feasibility of developing California Water Recycling Criteria for DPR. Water Code Section 13566 provides a list of items CDPH must consider when investigating the feasibility of developing uniform water recycling criteria for DPR. The items comprising that list should be considered by the Panel. In addition, the Panel will have the opportunity to review the DPR research plans of water organizations early in their deliberations.

2.2 Panel Activities

As detailed below, NWRI proposes organizing a Panel of 10 independent, third-party experts in the field who would meet five times in person, as follows:

Meeting 1: Review with the Panel CDPH's views on the Panel's charge and goals for the process. Investigate the research needs necessary to draft DPR regulations that are adequately protective of public health.

Meeting 2: Complete investigation of research needs necessary to draft DPR regulations that are adequately protective of public health. Complete draft of a report that details what those research needs are and recommendations for how they can be accomplished.

Meeting 3: Begin the review and discussion of the initial draft of CDPH's criteria for IPR though surface water augmentation. Provide feedback to CDPH on changes

necessary for the Panel to determine that the criteria are adequately protective of public health.

Meeting 4: Review and discuss the revised draft of CDPH's criteria for IPR though surface water augmentation. Provide feedback to CDPH on changes necessary for the Panel to find the criteria are adequately protective of public health.

Meeting 5: Review and discuss the final draft of CDPH's criteria for IPR though surface water augmentation. Make a determination as to whether the criteria are adequately protective of public health. Produce a report documenting the Panel's determination.

2.3 Final Products of the Panel Review

The final products of the Expert Panel review process will be reports that address the following:

- An assessment of what, if any, additional areas of research are needed to be able to establish uniform regulatory criteria for DPR and a recommended approach for accomplishing any additional needed research regarding uniform criteria for DPR in a timely manner.
- A finding regarding the adequacy of proposed criteria for IPR through surface water augmentation to protect public health.

3. DESCRIPTION OF THE PANEL MEMBER SELECTION PROCESS

NWRI has a well-established Expert Panel process, which includes the selection of Panel members. A brief description of the Panel member selection process is included in this section.

3.1 Panel Member Characteristics

The goal of the selection process is to determine the most qualified experts to serve on the Panel. These experts include academics, utility staff members, retired regulators, current or retired federal agency staff, and independent consultants with professional knowledge, experience, and standing in areas relevant to surface water augmentation and potable reuse.

3.2 Objectives of the Selection Process

Because the selection of experts to serve as Panel members is critical to the success of the Panel review, the selection process has to achieve the following objectives:

- Panel members must be viewed as experts in their field.
- The expertise of Panel members must cover the appropriate areas of review.
- Panel members must be viewed as credible and independent, without the appearance of conflicts of interest.
- The Panel must be able to work together to carry out its assigned tasks and develop consensus findings and recommendations.

3.3 Role of the Panel Chair

The Expert Panel will be led by a Panel Chair, who is selected based on a number of factors, including: expertise, leadership capabilities, and ability to assist NWRI in managing the Panel.

The Chair is typically involved with Panel activities related to:

- Developing Panel meeting materials.
- Facilitating Panel meetings.
- Facilitating the preparation of Panel reports.
- QA/QC of Panel reports and other deliverables.
- Engaging in additional project activities or meetings, such as public meetings or dialogue with CDPH staff.

3.4 Process to Identify and Select Panel Members

The process used by NWRI to identify and select Expert Panel members involves the following steps:

- NWRI ensures its understanding of the CDPH Panel effort by reviewing overall goals and objectives with CDPH.
- Based on Panel needs, a list of disciplines required for Panel membership is reviewed with CDPH.
- Based on identified disciplines, potential candidates for the Panel are assembled using suggestions from CDPH, NWRI staff experience, a review of available publications, and recommendations based on interviews with known experts. Three to five candidates are typically identified for each Panel discipline.
- NWRI contacts each potential candidate via telephone to determine if the candidate has the appropriate background for the Panel. If so, NWRI assesses the interest, availability, and potential conflicts for each candidate.
- NWRI develops a summary matrix of potential candidates, including name, affiliation, position, a brief background summary, and any potential conflicts of interest.
- NWRI identifies preferred candidates based on their background and other information. In addition, NWRI assembles their vitas, biographies, or resumes.
- NWRI reviews the matrix of potential candidates with CDPH. Note that CDPH will convene an advisory committee that will be consulted on the proposed Panel members.
- NWRI selects Panel members based on input from CDPH.
- NWRI formally invites the selected individuals to serve on the Panel. NWRI also collects written statements regarding conflicts of interests from Panel members, if necessary, for review by CDPH.

Altogether, the selection effort is designed to be an open and collaborative process between NWRI and CDPH.