

## **Project Number**

WRF-05-005

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## ***Identifying Pharmaceuticals / Personal Care Products of Most Health Concern / Persistence through Water Treatments Used for Indirect Potable Reuse***

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**Cash Contributors (in addition to the Bureau of Reclamation):** State Water Resources Control Board (CA); Clark County, NV

### **Objectives:**

The first objective was to review methodologies for developing screening levels based on human health-risk criteria for pharmaceuticals and personal care products (PPCPs) and endocrine disrupting compounds (EDCs) potentially present in water intended for indirect potable reuse. The second was to develop decision criteria to support the selection of an appropriate screening methodology to rapidly develop a screening level (i.e., threshold concentration to trigger further studies) if a “new” chemical is found in source or drinking water.

### **Summary of Findings:**

The Project Team, in conjunction with an expert panel of toxicologists and regulators, devised a simple, conservative approach for the development of health risk-based guidelines for emerging contaminants that selects the lowest, most protective concentration in water from several possible risk assessment schemas. If a new contaminant is found in water at or above the screening level determined with this methodology, then further toxicological and occurrence studies would be warranted. Otherwise, for concentrations below the screening level, the risk to public health is predicted to be well below levels of concern and the presence of the compound does not alone warrant further toxicological studies.

### **Recommendations**

The final decision tree for determination of screening levels for new and emerging contaminants will allow trained toxicologist to make a relatively quick assessment of the danger posed by a newly discovered contaminant and to make a recommendation on the level of screening needed for the new contaminant.