Session 11.
Special Topic: WASH & Water Supply Activities
Technical presentation and dialogue

Summary

Access to safe drinking water is central to the recovery and/or development of any community. The increased use of water for agricultural irrigation can also accelerate economic growth and improve livelihoods. USAID supports a range of activities in the Water, Sanitation and Hygiene (WASH) and agricultural sectors, many of which entail the establishment of new water access points or the rehabilitation of existing structures or systems. In these scenarios USAID must assure that water supplies meet certain quality criteria for domestic and agricultural purposes. As such, water quality assurance, including testing and monitoring, is a key aspect of any water provision effort.

Specific water quality requirements will vary by activity, but generally must account for:

a) a baseline, or initial water quality assessment to determine if water is safe; and

b) a periodic testing or monitoring regime to determine if water source becomes contaminated.

The initial test will ideally provide information on the chemical, biological and physical qualities of the proposed water source (e.g., well, natural spring, stream or river, etc.). Initial water quality testing and monitoring requirements are typically contained in a Water Quality Assurance Plan (WQAP); many IEEs will require preparation of a WQAP in response to proposed water provision efforts (domestic or agricultural). The WQAP will also specify a Response Protocol that details the steps to be taken in the event that water quality test results exceed certain thresholds (e.g., if Arsenic or coliform levels are higher than allowed).

Water quality assurance often presents a practical challenge for project staff. This session will consider the logistical demands of initial testing and monitoring across many, potentially dispersed systems or water access points, in addition to the reality that certain tests may require refrigeration, incubation and laboratory analysis. There are a number of field-oriented tools and resources available to meet some of the most common water quality testing requirements. However, projects are often encouraged to explore multiple options based on their specific water quality assurance needs (e.g., bigger investment in field equipment, use of contract labs, etc.).

Objectives

Review water quality assurance requirements and procedures for USAID-supported water provision activities, including WASH initiatives.

Understand practical approaches to water quality assurance and the types of challenges encountered and solutions developed.