

Multi-State EPA Integrated Project Team Develops Standard XML Schema for Drinking Water Submissions

The Laboratory-to-State Drinking Water Integrated Project Team (IPT) is announcing the release of the e-Drinking Water (e-DWR) XML schema for electronic submission of drinking water information from laboratories and water systems to State agencies. The Laboratory-State Drinking Water IPT was formed in June 2003 as a collaborative multi-State/EPA effort tasked with the creation of one data exchange format that could satisfy the core drinking water submission requirements of all States. The team consisted of key representatives from EPA's Office of Ground Water & Drinking Water (OGWDW) and State drinking water and Information Technology programs.

The e-DWR XML schema will allow State agencies to accept electronic submission of drinking water information from laboratories and water systems. The current paper-based drinking water data submission process is inefficient for both laboratories and the State agencies. Current paper-based processes force laboratories to perform duplicative data entry to maintain their own database and satisfy the state/federal permit requirements. Similarly, all paper submitted data is re-keyed by agency staff into their own drinking water submission systems for compliance and enforcement monitoring. Duplication adds costs to all parties and adds to data coding errors and reduced data quality. Furthermore, laboratories that do business in multiple states have complained about the inconsistency of electronic submission formats among states and have expressed the desire for a national standard that could satisfy all drinking water submissions.

The e-DWR XML schema now provides a solution to these problems, and lays the foundation for States to develop electronic submission systems that take advantage of a standardized electronic submission process. These systems will allow states to electronically receive required drinking water data, validate the data for meeting compliance, enforcement-tracking and other permit requirements, acknowledge receipt of the data and integrate the data into their own Drinking Water Information Management systems.

The schema contains information that allows it to be compatible with SDWIS/STATE (a Drinking Water Information System designed and provided by EPA) as well as customized solutions developed by individual states. EPA OGWDW has expressed an interest in working with the IPT to ensure future versions of SDWIS/STATE are integrated with the e-DWR schema, while still allowing the schema to be generic to satisfy states without the SDWIS/STATE system.

One driving force for the creation of the IPT was an EPA Exchange Network Challenge Grant project, entitled 'Electronic Storage and Sharing of Laboratory Information' that had been awarded to New Hampshire, Vermont, Rhode Island, Maine, and New Jersey to implement a process of electronic data flow directly from laboratories to the State Drinking Water Programs. A number of the States in this Challenge Grant project are now ready to use the e-DWR XML schema developed by the IPT to complete the implementation of their Drinking Water Submission Systems. Please contact Laurie Cullerot, Information Technology Manager (email: lcullerot@des.state.nh.us) or Michael Beaulac, Chief of MI DEQ Information Management Unit (email: BEAULACM@michigan.gov) if you are interested in learning more about this exciting project.