

# REGISTRY UPDATE



Winter 2004

In this issue of the Registry Update, find out the latest on READ—the Registry for EPA's Applications and Databases. Also learn about updates to the registries, the status of data standards development efforts, and Web services.

## READING is Fundamental

The newest addition to the Agency's System of Registries (SoR) is the [Registry of EPA Applications and Databases \(READ\)](#)—a one-stop resource for finding out about the Agency's diverse holdings of applications, databases, and other information resources ([www.epa.gov/read](http://www.epa.gov/read)).

READ will provide a comprehensive list of all applications owned by EPA's offices and regions. Its holdings will range from large data systems that manage programmatic data submitted by States, to small tracking systems operated by the Agency offices and regions for internal purposes, as well as most everything in between.

READ is intended to improve the Agency's ability to manage its diverse information resource holdings. The Agency needs a comprehensive inventory to effectively respond to Congressional inquiries and public requests for information. READ will also meet internal EPA objectives by enabling those creating new systems to identify other systems from which they could gain insight for development; meeting EPA's commitments to OMB for a comprehensive list of information systems; and enabling EPA to quickly identify information systems that are subject to the Capital Planning and Investment Control (CPIC) process.

READ will maintain very basic information (i.e., metadata) about each system, including the name and contact information, a short system description, and the EPA office or region that owns the data system. Future updates will also include technology related information including the system's platform, programming language, and database maintenance system.

The success of any registry, including READ, depends on the currency and accuracy of the data. The SoR team relies on the data owners (i.e., EPA program offices and regions) to fulfill this responsibility. READ provides an easy to use interface and highly secure database, using passwords and user identification numbers, to allow data owners to enter and update their data. At a minimum, READ will require owners provide annual updates.

For further information about READ, please contact John Harman in the Office of Information Collection (OIC), (202) 566-0748.

## Data Standards Progress Update

Efforts by states and EPA to develop standards are continuing at a brisk pace. EPA has recently adopted three Environmental Data Standards Council (EDSC)-developed data standards and their associated business rules:

- The **Contact Information** data standard specifies the basic information for contacting an individual or organization.
- The **Federal Facility Identification** data standard specifies the basic information for

indicating if a facility (or the land that it occupies) is owned or operated by the Federal government.

- The **Permitting Information** data standard expands upon the permitting data standard, including information of interest to multiple programs.

Work continues toward development on a number of standards. The EDSC, a partnership of EPA, States, and North American tribal organizations, is requesting an internal 90-day review (Dec. 12, 2003 – Mar. 12, 2004) of a suite of draft standards related to the reporting of laboratory results. These standards include:

- Environmental Sampling, Analysis, and Results (ESAR)
- Sampling Treatment
- Method
- Measure
- Attached Binary Object
- Date and Time

ESAR and allied standards will address the life cycle of laboratory analysis from field sampling to actual reports.

### Thanks for your patronage!

Usage of the registries has increased dramatically over the last two years. From 2001 to 2003, downloading of information rose significantly—from 3,600 items downloaded in 2001 to 5,750 in 2003. Customer feedback is also increasing—in 2003, 278 feedbacks were received compared to 171 in 2001.

### Registry Improvements

- SoR: Provided access to registries related briefings and presentations through a “Presentations” link located on the menu bar.
- XML Registry: A Challenge Grants page was added to the XML Registry, and a search window was added to the XML Registry menu.
- EDR: The Data Standards Process page was updated to reflect changes in the process for

developing, implementing, and reviewing data standards.

- SRS: A new sort feature allows users to limit the list of substances associated with an information resource by classification and to sort by substance name, Chemical Abstract Service (CAS) number, substance name, or withdrawn date. The SRS was updated to include chemical information for Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS), National Emission Inventory of Hazardous Air Pollutants (NEI-HAP), and Environmental Radiation Ambient Monitoring System (ERAMS).
- TRS: Added 1,300 new terms from the USEPA Controlled Vocabulary List.
- Program Specific Data Standards: Redesigned the EPA Office of Water Data Standards page.

### Linking to the SoR: Help is on the way!

Envision a future computing environment where computers conduct repetitive information management tasks (data quality checks against data registries, database/registry synchronization, data exchange/reporting, etc.) to meet reoccurring business needs, leaving more time and money for agencies to accomplish the business of environmental management. It sounds promising, but maybe too much like a sales pitch or strategic planning vision. The reality is SoR and Exchange Network staff members are actively researching and prototyping technologies to support this goal.

EPA is working with state partners in many areas to take advantage of available information management technologies to enhance our business, specifically the use of XML and Web services (WS) for data exchange. In their simplest form, WS are ways for computers to provide services to other computers to meet an organization's business needs. They are used every time we access an ATM for cash, conduct on-line banking, or purchase something on the Web.

Web services will help improve our ability to provide the services of the SoR. For now, access to the registries is primarily through a Web interface using Web browsers. Initial steps toward this future goal have already begun through development of the

[Environmental Metadata Gateway \(EMG\)](#). The EMG allows registry users to automate customized access through multiple search engine portals that publish information from the underlying SoR metadata in EPA default, or user-defined, templates. Using the EMG, anyone inside or outside EPA can search and seamlessly navigate to pages displaying metadata registry content using standard URL expressions.

Next steps are to develop XML schemas and Web services to provide basic registry services to our state partners. The Exchange Network has completed some research on providing services from the facility registry to state partners. This work will provide some excellent lessons learned and shared components to reuse for the rest of the SoR. SoR staff have begun discussions with some state partners to clearly

understand their current requirements for the other registries and possible uses of WS to meet them.

We plan to develop services from the Substance Registry System (SRS) and provide basic substance identification information. One of these services is data validation—for example, if a user sends a set of CAS numbers, the WS will provide a validate function and return the standard substance identification information for each CAS number in an XML formatted message. Another service to be prototyped is a synchronize function which will verify lists of substance data against the information in SRS. We will report progress to you as we work toward our vision of providing a wide range of access possibilities to our registry data and services.



For additional information, contact Sara Hisel McCoy, Data Standards Branch Chief, Office of Environmental Information at 202-566-1649, [hisel-mccoy.sara@epa.gov](mailto:hisel-mccoy.sara@epa.gov).  
For current and previous issues of the newsletter, see the Newsletter page. Visit the System of Registries at [www.epa.gov/sor/](http://www.epa.gov/sor/) for related information.