



Oak Ridge Environmental Information System (OREIS) Fact Sheet

OVERVIEW: This fact sheet contains information about OREIS, a description of the types of data in OREIS, and how to access the data in OREIS.

I. OREIS

The Oak Ridge Environmental Information System, commonly referred to as **OREIS**, is a centralized, standardized, quality-assured, and configuration-controlled **environmental data management system**. It is comprised of hardware, commercial software, customized integration software, a database, geographic information, and documentation.

OREIS operates under a Department of Energy Oak Ridge Operations (DOE-ORO) written and approved charter and was developed to **fulfill the environmental information management obligations** required by the *Federal Facility Agreement for the Oak Ridge Reservation*, referred to as the FFA. Given the advantages and cost-effectiveness of computer technology for managing massive amounts of data, the parties to the FFA chose to automate the centralized storage and retrieval of environmental data. The parties to the FFA are the U.S. Environmental Protection Agency (EPA) Region IV, the U.S. Department of Energy (DOE), and the Tennessee Department of Environment and Conservation (TDEC).

The **basic mission** of OREIS is efficient retrieval and long-term retention of ORO environmental data.

The **objectives** of OREIS are to maintain data that are complete, consistent, and fully qualified as to their usability; to provide easy accessibility to the data in order to support environmental planning, analysis, and decision making; to facilitate the efficient access, reporting, analysis, display, mapping, import, and export of data; to minimize the uncertainties associated with data, data products, and interpretation of results by strictly controlling data input, revision, and storage; to ensure that metadata are available for establishing the legal defensibility of the data and data products; and to minimize duplicative costs to DOE for data collection, management, analysis, and reporting as contractor and subcontractor changes occur.

The **primary users** of OREIS include EPA, TDEC, DOE, and DOE's contractors and subcontractors who perform environmental restoration, compliance, and surveillance activities.

II. DATA IN OREIS

The web-based OREIS interface provides access to the data in the OREIS database. Types of data in OREIS include **radiological, biological, field measurements and chemical analyses** from various media such as groundwater, surface water, sediment, soil, air, and biota. OREIS contains extensive descriptive and qualifier information to help document data quality and to enable end users to analyze the appropriateness of the data for secondary uses. OREIS also includes **raster and vector geographic data** depicting such features as roads, buildings, streams, locations where samples have been collected. The Oracle database contains approximately **15 million analytical and field results** and the web server contains approximately **28 gigabytes of geographic data**.

III. ACCESSING THE DATA IN OREIS

A userid and password is required to **access the OREIS web application**.

The URL is <https://oreis.ettp.energy.gov/>.

To request an OREIS account, send an e-mail to oreis@ettp.doe.gov. In your e-mail specify your name, organizational affiliation, telephone number, and reason for accessing the data.

Extensive documentation about OREIS and how to use OREIS is available via the OREIS web site. **Training** on the use of the system can be scheduled based on user requests and the training content can be geared towards the user's specific needs.

The primary avenue for accessing OREIS data is the **OREIS Spatial Query Tool (SQT)**, which provides a geographical interface to the data.

Contact Information

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Oak Ridge Environmental Information System (OREIS)

- Federal Facility Agreement (FFA): Oak Ridge National Priority List (NPL) Site - Map
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
- FFA is the 3 party administrative basis for the CERCLA cleanup of the Oak Ridge NPL Site: Requires **OREIS**

OREIS – Database for all FFA validated, environmental media characterization data

- Cleanup Decisions (RODs) are determined based upon characterization data: **OREIS**
- Some OR decisions will leave hazardous waste in place – what is left (verification data) and where: **OREIS**
- Post-Remediation: DOE’s stewardship program will ensure that wherever remediation has been completed and hazardous waste remains (Affected Area) that the remedial action will remain effective and protective to the public and to the environment until controls are no longer necessary.

Stewardship is both Engineering Controls (maintenance/monitoring) and Land Use Controls (institutional)

LUC types

Property Record Notices (upon ROD approval and remediation completion of an Affected Area): **OREIS**

Property Record Restrictions (land transfer deeds): **OREIS**

Excavation/Penetration Permit Program + **OREIS**

Access Controls (postings, advisories, fences, security, gates, signs, etc.)

Reports

- Annual Remediation Effectiveness Report (RER - groundwater monitoring and trending): **OREIS**
- Five (5) Year Review – Effectiveness and Protectiveness of completed and on-going remediation