

Ground Water Forum Fact Sheet Appendix



Electronic Data Deliverables: The Importance of Receiving Your Site and Project Data Electronically

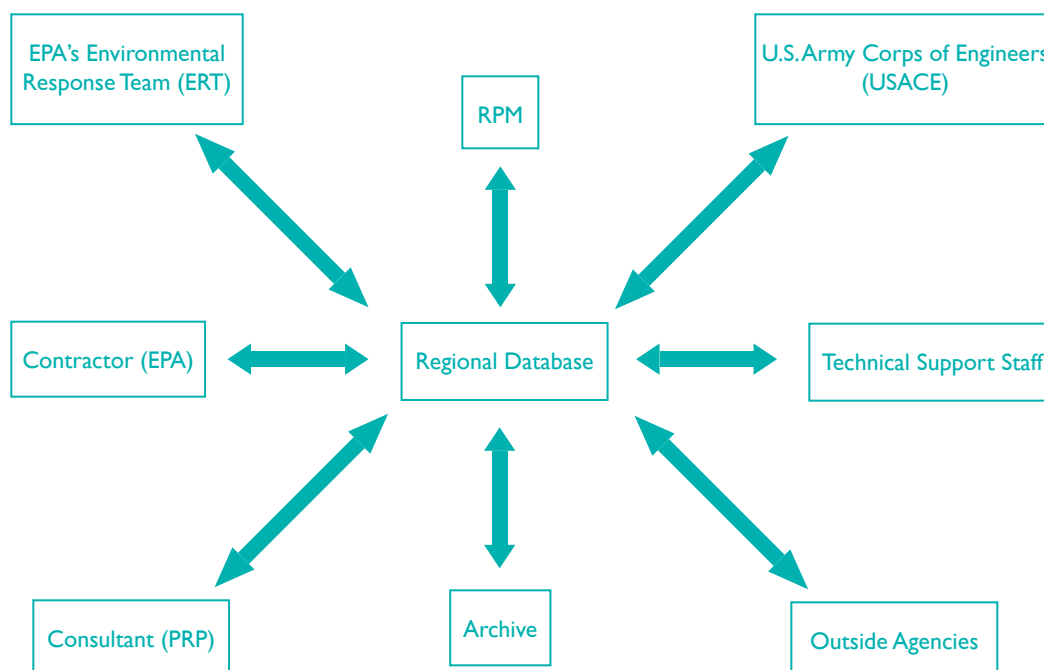
Note: This appendix to the Ground Water Forum's fact sheet, "Electronic Data Deliverables: The Importance of Receiving Your Site and Project Data Electronically," provides supplemental information.

What to request in electronic data deliverables (EDD)

Data generated by or submitted to the Agency need to be in a format that is universally accepted by most database or image processing software. Numerical data can be submitted in a text (comma or tab delimited) or similar file format. Image files can be submitted in a PDF, JPG, GIF, or similar file format. To the extent possible, a non-proprietary format for electronic data submissions is preferred to ensure that the data can be read not only today but in the future, and not be tied to specific vendors or subcontractors.

Note that individual Regions or programs may have more specific EDD specifications. Consequently, agencies or contractors submitting EDDs to EPA need to consult with their EPA project manager regarding the required EDD file format.

How Electronic Data are Shared in the Regulatory Environment



Examples of Data to be Submitted Electronically

Site Map:

- Preference is for GIS layer file or computer-aided design (CAD) format with all relevant surface features; however, PDF or other file format may be acceptable.

Boring Logs and Well Construction Details:

- X,Y, and Z coordinates, and location ID.
- Ground surface elevation, top of casing elevation, depth to lithologic units, lithologic descriptions, depth to well construction material, well construction material type, diameter of casing, drilling method, well development information, etc.
- Field test data [e.g., photoionization detector (PID), field x-ray fluorescence (XRF), immunoassay, etc.].
- Aquifer slug test or pump test data.
- Geophysical test data.

Location Data:

- X,Y, and Z coordinates.
- Coordinate system and projection in use.

Water Level Data:

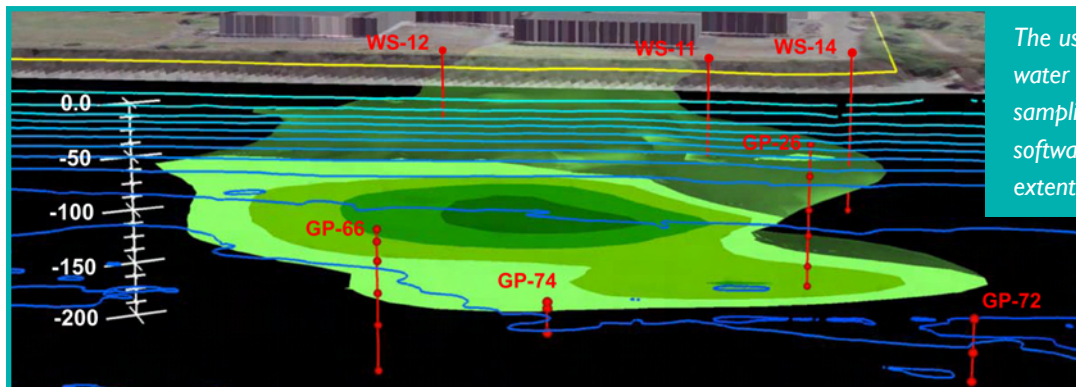
- Location ID and X,Y, and Z coordinates.
- Depth to water.
- Date and time of measurement.
- Measurement equipment or system used.

Laboratory Data:

- Chain-of-custody information, e.g., sample collection information (date/time collected, sample matrix, etc.), preservatives used, sample containers used, and condition after transport, etc.
- Lab results, e.g., analyses performed, parameters reported, analytical results, and analytical method detection and reporting limits, etc.
- QA/QC information, e.g., detection limits, QA/QC standard failures, laboratory narrative regarding non-compliance, etc.

Electronic Reports:

- Complete electronic copies of all project documents and reports.
- Complete electronic copies of all sampling field books and laboratory log books.



The use of electronic ground water and surface water sampling data in visualization software can help illustrate the extent of a contaminant plume.

Links to Select State and EPA EDD Guidance

The following organizations and programs are using Staged Electronic Data Deliverable (SEDD) as the electronic format for the delivery of laboratory analytical data:

- EPA [Contract Laboratory Program (CLP), Remedial Action Contracts (RACs), Superfund Technical Assessment and Response Team (START) contracts, Great Lakes National Program Office (GLNPO) Great Lakes Legacy Act Program]
- U.S. Army Corps of Engineers [Formerly Used Defense Sites (FUDS), Military Munitions Response Program (MMRP)]
- U.S. Department of Energy (Pantex Site, Amarillo, TX)
- South Carolina Department of Health and Environmental Control (Pilot Projects in the Bureau of Land and Waste Management and Bureau of Water)

SEDD is a uniform format for electronic delivery of analytical data for environmental programs.

More on SEDDs can be found at:

<http://www.epa.gov/superfund/programs/clp/sedd-geninfo.htm>

The following EPA Regions and states provide EDD guidance online:

EPA Region 2:

<http://www.epa.gov/region02/superfund/medd.htm>

EPA Region 3:

<http://www.epa.gov/reg3hwmd/edd/index.htm>

EPA Region 4:

<http://www.epa.gov/region4/waste/sf/edd/edd.html>

EPA Region 5:

<http://www.epa.gov/region5superfund/edman/index.html>

USACE – New England District:

<http://www.nae.usace.army.mil/reg/Dredging/RIM/edd.htm>

California State Water Resources Control Board:

http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/report_rqmts.shtml

Colorado Department of Public Health and Environment:

<http://www.cdphe.state.co.us/hm/samsmain.htm>

Louisiana Department of Environmental Quality:

<http://www.deq.louisiana.gov/portal/LinkClick.aspx?fileticket=YeutTjisGwo%3D&tabid=2839>

Minnesota Pollution Control Agency:

<http://www.pca.state.mn.us/index.php/water/water-monitoring-and-reporting/storet/storet-redesign.html>

Montana Department of Environmental Quality:

<http://deq.mt.gov/wqinfo/datamgmt/MTEWQX.mcpX>

New Jersey Department of Environmental Protection:

http://www.state.nj.us/dep/srp/hazsite/news/20100901_file_format_change.htm

New York State Department of Environmental Conservation:

<http://www.dec.ny.gov/chemical/62440.html>

Texas Commission on Environmental Quality:

<http://www.tceq.net/remediation/teds/teds.html>

West Virginia Department of Environmental Protection:

http://www.dep.wv.gov/insidedep/Documents/4525_WVDEPEDD%20V2.2.pdf

Washington Department of Ecology:

http://www.ecy.wa.gov/programs/tcp/data_submittal/Data_Requirements.htm

Data Interchange for Geotechnical and GeoEnvironmental Specialists (DIGGS):

<http://www.diggsml.com/>

Future Goals

The EPA Ground Water Forum recognizes that individual regional offices and units within regional offices may have different databases and EDD requirements. The Ground Water Forum supports a consistent EDD format among all EPA Regions and units in the future. A consistent EDD format would provide for more efficient and transparent inter- and intra-agency data sharing, yet would allow each office to continue to maintain its own database and enable the possibility of a future national database.

This effort is encouraged for use by other agencies and programs beyond EPA for ease of potential data sharing.

Glossary

Coordinates - A set of values represented by the letters x, y, and optionally z or m (measure), that define a position within a spatial reference. Coordinates are used to represent locations in space relative to other locations.

Electronic Data Deliverable (EDD) - An electronic tabular format for sharing, manipulating, and using data.

Location - Uniquely identified point, typically at or below the ground surface, that can be identified spatially by an x, y, and z coordinate.

Matrix - Describes the medium from which the sample was taken, such as drinking water, non-potable water, saline/estuarine water, soil, air, biological tissue, etc.