Web Data Portals for Contaminated Site Projects

Alan MacGregor
John Haasbeek
ENVIRON International Corp.
Web Portals as a Project Collaboration Technique

Meeting the need to develop a common understanding of site conditions

Categories such as time, space, cause, and number represent the most general relations which exist between things; surpassing all our other ideas in extension, they dominate all the details of our intellectual life. If humankind did not agree upon these essential ideas at every moment, if they did not have the same conception of time, space, cause, and number, all contact between their minds would be impossible….


Let us turn to the practice of graphical excellence, the efficient communication of complex quantitative ideas.


In order to decide how to proceed, the project team must understand where we are, and how we got here.
Web Portal Components
In various combinations with project portal functionality

Combination of three important components for contaminated site management:

1. **Data**: *analytical database* for environmental samples

2. **Documents**: *historical site documents, reference materials, project working documents, and work products*

3. **Maps**: interactive *GIS maps* for spatial analysis and review of site conditions

*Add links between components as needed*
How the Components Work Together

A classic “mashup” of available, proven technologies
Seamless Integration
Safe, secure, and easy to learn and use

- Secure, web-based application and data store
- Single sign-in for ease of navigation
- On-screen and in-application user guides
- Combinations of components in a web portal format:
  - Project background, photos, recent accomplishments, and upcoming milestones
  - Frequently-Asked Questions (FAQs), Links, Definitions
  - Project Contacts (with Administrator email to team)

Provide all documentation and instructions within the portal
Basic Navigation

The web portal main navigation bar

- Select a **Map** from list on the portal Home page
- Click **Data** to open the Sample Manager analytical database (the map will remain open in the background)
- Click **Library** to open the project libraries
- All of the Portal features (**Links**, **Glossary / Acronyms**, **FAQs**, **Contacts**) are always available from the main navigation bar
- The Materials **link** is an example of a custom feature

*Administrator maintains content and provides updates*
Underlying Technologies

Portals can be hosted by ENVIRON, by our customers, or at a 3rd party hosting facility

- Microsoft ASP.NET v2.0 – coding framework
- Microsoft SQL Server v2005 – database
- ESRI GIS Server v9.3 – web-based maps
- IT Nexus Map Viewer v9.3 – add-in tool
- Gembox – spreadsheet export utility
- Microsoft Internet Explorer v7 - preferred browser
- Mozilla Firefox v3 – alternate browser

Different development environments for test and production
Web Portal Demonstration

- **Question:**
  - “Can we build a Mockup of a Prototype?”

- **Answer:**
  - “That would be called a “Mototype”

*Demonstration of existing technologies and possible designs, providing a “proof of concept” and a starting point for project development*
Secure Login Screen

Users require unique User Name & Password. Set strength to meet customer requirements.

Click “I forgot my password” link for Administrator to reset Password to application default. Users must change their password the next time that they log in.

As a security measure, ENVIRON closes connections after 20 minutes of inactivity.
Microsoft SharePoint Document Metadata

Full-text search inside Microsoft Office documents and Adobe Acrobat pdfs, including scans with OCR
Interactive GIS Maps

Select visible layers

Pan & Zoom to area of interest

Publish existing images, GIS shapefiles, CAD layers
Sample Manager - Analytical Database

Use combinations of selection criteria to create list of samples that meet your filter criteria.

- Date Range
- Site
- Project
- W.O.
- Matrix
- Location Type
- Location
- Waste Type
- Text Search
- Test Suites
- Limit Exceedances (one or more results)

Search Results:
Samples that meet the criteria
Plot Selected Sample Locations on Map

Example sample locations
Questions?

for more information, please contact:

ENVIRON International Corp
303 East 17th Avenue, Suite 400
Denver, CO 80203

Alan MacGregor
303.382.5465
amacgregor@environcorp.com

John Haasbeek
303.382.5468
jhaasbeek@environcorp.com