

# **ECHO Web Site Modernization**

2013 and Beyond





# Introduction

- **Project goal**

Modernize an aging data system to take advantage of new technologies that offer more flexibility and opportunities for enhancement.

- **Purpose of briefing**

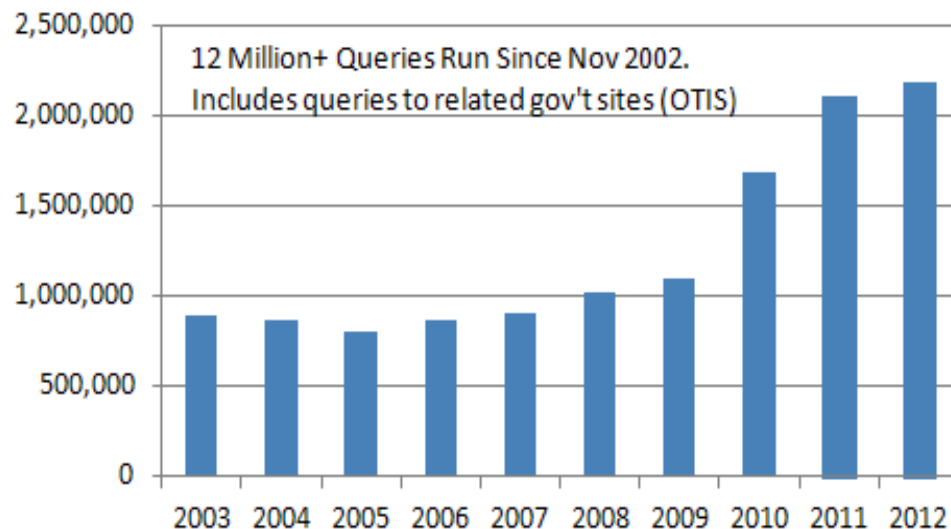
Share plans for ECHO website modernization and describe how modernization affects popular features.



# Background - ECHO Through the Years

- Enforcement and Compliance History Online (ECHO) launched in 2002.
- Steadily enhanced to meet user needs, including improved search results, integrated water quality and pollutant loading data, and more.
- 2011- drinking water data added; 2012: CWA state comparative map and dashboard; 2013: new CAA, CWA, RCRA state comparative maps and dashboards.

**Number ECHO Queries by Fiscal Year**



- Use has increased steadily over the years, providing answers to 2 million queries per year regarding environmental compliance and enforcement data.
- President Obama cited ECHO in 2011 as a model for transparency for other federal agencies to follow.



## Why Modernize?

- Offer new or improved ECHO features that are not possible with our current older system.
  - Quicker data refreshes
  - Improved ability to query and use data
  - Future enhancements like customized alerts, mobile apps, machine-readable data/web services, etc.
- New system allows EPA to more easily offer such future transparency features as:
  - Integration of new data
  - Enhanced mapping
  - Better drinking water health data
  - Mobile apps



## Why Modernize? continued

- ECHO's popularity has resulted in helpful user feedback that will be easier to implement with modern system.
- Many features have been added to ECHO over the years, and a redesign will improve navigation.
- Helps Agency meet requirements of transparency-related executive orders.
- Current data system is operating at risk, as it is based on old technologies; must reprogram website to work with new system.



# Summary of Current Plans

- Highest 2013 priority is replacement of existing ECHO website with modernized ECHO site.
  - Redesign site and launch “priority” features.
  - New projects/enhancements must remain on hold while ECHO modernized.
  - Web address (URL) will change.
- Phase in remaining features during 2014.
- Build new capabilities in 2015.



# Schedule: September 30, 2013

## Focus of September launch:

- Redesign
  - Enhance transparency through reorganization/better navigation
  - Ability to view on mobile devices
  - Bring state comparative maps/dashboards into new website design
- Multimedia Facility Search
  - Allows access to all ECHO facility data
  - Includes all associated features:
    - Summary search results and download
    - Detailed Facility Report
    - Error reporting and user support



## Schedule: 2014 and Beyond

- On October 1, many features will be temporarily unavailable, but will be added incrementally to modernized ECHO.
- Single-media facility search options released as finished throughout 2014, followed by other features.
- 2015: goal is to begin work on new tools/data.





## Features to be Phased in after Sept.30

- Drinking water (Safe Drinking Water Act) system search
- Clean Water Act (CWA) facility search, effluent charts, and water quality data
  - Popular CWA Discharge Monitoring Report Pollutant Loading Tool will remain available while new CWA search is built.
  - New CWA search will include closer pollutant loading data integration.
- EPA Enforcement Cases Search and case report
- Hazardous Waste (Resource Conservation and Recovery Act) facility search
- Clean Air Act facility and pollutant search
- Some specialized mapping options
  - EPA and State Annual Enforcement Actions Map
  - ECHO map widget



# Participation

- Small group of external website users commented on proposed home page design.
  - Commenters included state and EPA contacts, as well as a few members of the general public.
  - Many comments incorporated, and others recorded for consideration during programming.
- Comment during and after this webinar.
- Usability testing late summer.
- Subscribe to ECHO News for updates (<http://www.epa-echo.gov/echo/signup.html>).

# ECHO Enforcement and Compliance History Online

Welcome John Smith [Logout](#)

[My ECHO](#) [Contacts](#)



Search Community

## Discover Compliance in Your Community

Use ECHO to search for regulated facilities in your community. Access other features to conduct advanced searches, visualize data, track your state's performance, and investigate pollution sources. [Learn more about ECHO](#)

### Quick Search



Create Maps



Explore Facilities




Analyze Trends

### Latest News

- ▶ [Transocean Sentenced to \\$400 Million for Criminal Conduct Leading to Deepwater Horizon Disaster](#)
- ▶ [Monroe County Company, Owner Plead Guilty to Discharging Wastewater](#)

[Read More News...](#)



Popular Features



Resources



Advanced Tools

- Website tasks organized into four key areas
- Focus has been on design – wording may change
- Moving to latest EPA web template

# ECHO Enforcement and Compliance History Online

Future releases will allow some user customization of site with log-in

Welcome John Smith  [Logout](#)  
[My ECHO](#) [Contacts](#)



Search Community



Explore Facilities

## Explore Facilities

### Evaluate Compliance


- ▶ [All Facility Data](#)
- ▶ [Air](#)
- ▶ [Water](#)
- ▶ [Hazardous Waste](#)
- ▶ [Drinking Water](#)

### Find Cases

- ▶ [EPA Civil Enforcement Case Search](#)
- ▶ [Criminal Case Search](#)

### Dig Deeper

- ▶ [Advanced Facility Search](#)
- ▶ [Advanced EPA Enforcement Cases Search](#)



Create Maps




Analyze Trends

### Latest News

- ▶ [Transocean Sentenced to \\$400 Million for Criminal Conduct Leading to Deepwater Horizon Disaster](#)
- ▶ [Monroe County Company, Owner Plead Guilty to Discharging Wastewater](#)


[Read More News...](#)



Popular Features



Resources



Advanced Tools

Popular Features :  
Based on user activity (top searches, popular downloads)

Resources:

- Become an ECHO Pro
- All site documentation
- Program information
- Links to more state data

Advanced Tools:

- Bulk data downloads
- Developer tools
  - Quick Search Widget
  - Maps Widget



## Choose a Report Type

▶ Multimedia

Hazardous Waste

Air

Drinking Water

Water



+ Expand All - Collapse All

X Clear All



### Geographic Location



EPA Region

Address 1

Address 2

City

Add More

State

Zip Code

Add More

County

In Indian County

Yes  No

Facility located near  
US-Mexico Border

Any  Yes  No

Watershed (HUC)



Environmental Conditions



Facility/System Characteristics



Enforcement & Compliance



Pollutant



### Search Criteria Selected

#### Report Type

Multimedia



#### Geographic Location

City:

City Name 1



City:

City Name 2



#### Enforcement & Compliance

Formal Enforcement Actions:

EPA



Search

Sections of search form expand and collapse.

Selected search criteria displayed on right side.

This is a draft - changes may be made during programming.

Hide Map

Modify Search



Report Violation



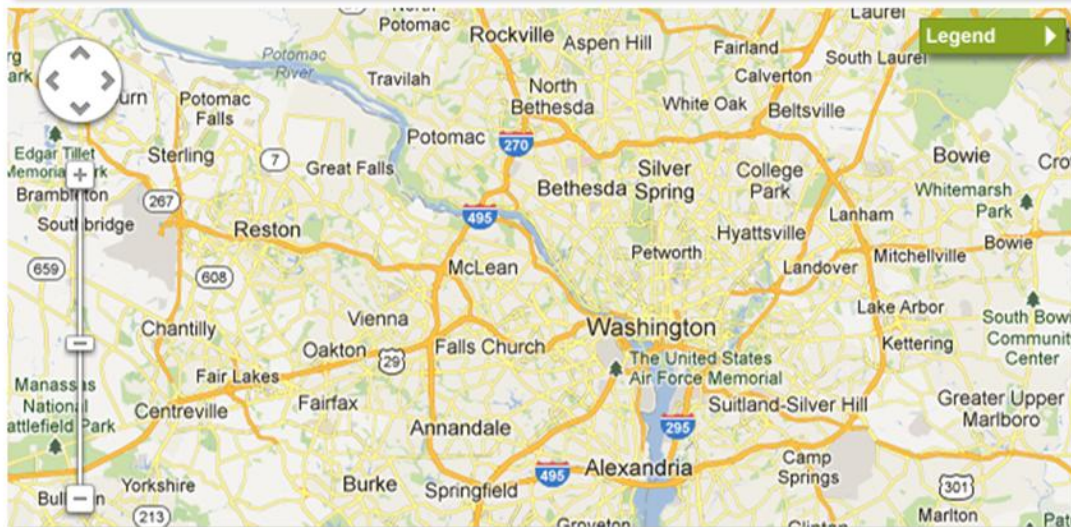
Report Data Error



Print



Help



Legend

Search Statistics

Refine Results

Facility Summary

US ARMY CORPS OF ENGINEERS, DALECARLIA WTP  
 5900 MACARTHUR BOULEVARD, N.W. WASHINGTON, DC 20016



Show Data Grid

Customize Columns

Download Data

Reports Legend

Facility Name	FRS ID	State	Reports	Inspections (5 yrs)	Alleged Significant Violations	Informal Enforcement Actions (5yrs)
<a href="#">U.S.ARMY COE, WASHINGTON AQUED</a>	110009048495	DC		0	0	0
<a href="#">US ARMY CORPS OF ENGINEERS DAL</a>	110000500841	DC		4	0	0
<a href="#">US ARMY CORPS OF ENGINEERS MCM</a>	110000500832	DC		3	0	0
<a href="#">ABEL LAKE WATER TREATMENT...</a>	110002151947	VA	W	0	0	0
<a href="#">ADDISON EVANS WATER PRODUCTION</a>	110010917204	VA	E L W	0	0	0
<a href="#">AIR NATIONAL GUARD</a>	110006886691	VA	W	0	0	0
<a href="#">AMERICAN WATER ENTERPRISES INC</a>	110006886691	VA		0	0	0
<a href="#">ARWA WATER TREATMENT PLANT</a>	110043515773	VA	I L W	0	0	0
<a href="#">ASHBY WATER TREATMENT PLANT</a>	110000535519	VA	W	0	0	0
<a href="#">AUGUSTA SPRINGS WTP</a>	110044765037	VA	W*	1	0	0
<a href="#">BEACON HILL WATER TREATMENT...</a>	110008997844	VA	W	0	0	0
<a href="#">BERRYVILLE TOWN OF WTP</a>	110009767118	VA	W	0	0	0
<a href="#">BIG MEADOWS LEWIS SPRING CALCI...</a>	110010914840	VA	W	0	0	0
<a href="#">BRIDGEWATER WTP</a>	110038335502	VA	W	1	0	0
<a href="#">BRISTOL VIRGINIA UTILITIES BOA</a>	110010915661	VA	E L W	2	0	0

Current Compliance Status

CAA	No Violation
CWA	Non-Compliance
RCRA	Significant Non-Compliance

Operating Status: Active

Days Since Last Inspection: 1,067

Date of Last Enforcement Action: 10/19/2012

Last Penalty Amount: \$37,500

[More Facility Details](#)

Search Criteria

Data last updated

Options available to hide map, data table, and/or right side bar.

Options available to change search criteria from this page.

This is a draft - changes may be made during programming.



## Popular User Requests

Request	Goal
More frequent data updates (currently monthly)	Weekly: 2013
Easier to use/better organization/simpler navigation	2013
Street address search	2013
Allow query modification directly on search results screen	2013
Closer integration of enforcement/compliance data with pollutant loading data	2014
Options to display more than five years of data	2014
Provide links to/information from documents (such as inspection reports, enforcement actions, etc.)	2015
More data on “non-standard” Clean Water Act facilities (such as animal feeding operations)	2015
More powerful, customizable mapping capabilities	2015



## Conclusion

- ECHO Modernization offers a more efficient, flexible system – opening up greater possibilities for future enhancements.
- 2013 and 2014 focus is largely on replacing existing products, but will include immediate improvements:
  - More frequent data refreshes
  - Improved website navigation and mapping
  - Viewing on mobile devices.
- Additional improvements, like registering for specific data alerts and providing web services, will be a focus of 2015.





# Feedback?

- Contact ECHO Support  
(<http://echo.epa.gov/contact>)