### ECHO - Enforcement and Compliance History Online

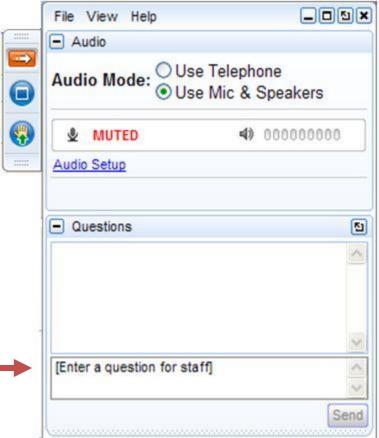
https://echo.epa.gov



### **AUDIO INSTRUCTIONS**

You are in listen-only mode (muted).

You may submit a question by typing into the Enter a question for staff box and clicking the Send button.





### Questions During the Webinar

- Please use the Questions box to type in your questions throughout the webinar.
- Please make the context of your question clear, as we will be answering questions covering a range of topics (feel free to reference live examples or slide numbers).
- In order to make this webinar useful for all attendees, we will not address site specific or individual problems during this session - please use ECHO's <u>Contact Us</u> page for help with those questions.



### Today's Topics

- From which EPA program systems does ECHO retrieve data?
- How frequently are the data updated, and how do I make corrections?
- How can I download ECHO data?
- What are ECHO web services?



### Introduction

- The U.S. Environmental Protection Agency provides public access to its regulatory compliance and enforcement data via the Internet.
- The Enforcement and Compliance History Online (ECHO) website at <u>https://echo.epa.gov</u> integrates data from major EPA information systems for public use.



### What is ECHO?

- ECHO is EPA's public website that provides compliance information about regulated facilities.
  - How they are regulated
  - When they were inspected
  - Whether violations of environmental regulations were found
  - Whether enforcement action was taken
- The site also provides dashboards with views of overall enforcement and compliance status trends and some bulk datasets for download.



### **ECHO** Content

Compliance history for more than 1,000,000 EPAregulated facilities

- Three-year compliance status and five-year inspection and enforcement history
- EPA and state, local, and tribal environmental agency data for:
  - Clean Air Act stationary sources
  - Clean Water Act permitted dischargers
  - Resource Conservation and Recovery Act hazardous waste handlers
  - Safe Drinking Water Act public water systems



### ECHO Content (continued)

- EPA data for other statutes like Emergency Planning and Community Right-to-Know Act (EPCRA), Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), and Toxic Substances Control Act (TSCA):
  - Inspections
  - Enforcement Action Details



### Sources of ECHO Data

ECHO extracts data from other EPA data systems, typically on a weekly basis:

- Integrated Compliance Information System (ICIS)
- Resource Conservation and Recovery Act Information System (RCRAInfo)
- Safe Drinking Water Information System (extracted quarterly)
- Facility Registry Service (links EPA-regulated facilities and permits under one ID number)
- Envirofacts: Toxics Release Inventory (TRI) and Greenhouse Gas (GHG) pollutant release data for context
- Full list with refresh dates on "About the Data" page (<u>https://echo.epa.gov/resources/echo-data/about-the-data</u>)



### **ECHO** Features

- Facility searches  $\rightarrow$  under home page Search Options
  - All Data (cross-program)
  - Air (stationary sources)
  - Water (dischargers)
  - Hazardous Waste (RCRA Subtitle C)
  - Drinking Water (public water systems)
  - Data downloads and web services  $\rightarrow$  *also under Data Services*
- EPA Enforcement Case Search → under home page Find EPA Cases
- State Dashboards → *under home page Analyze Trends*
- Water Pollutant Loading Tool → under home page Search Options



# Please enter questions you have as the presentation goes on and we will answer them soon.



## From which EPA program systems does ECHO retrieve data?

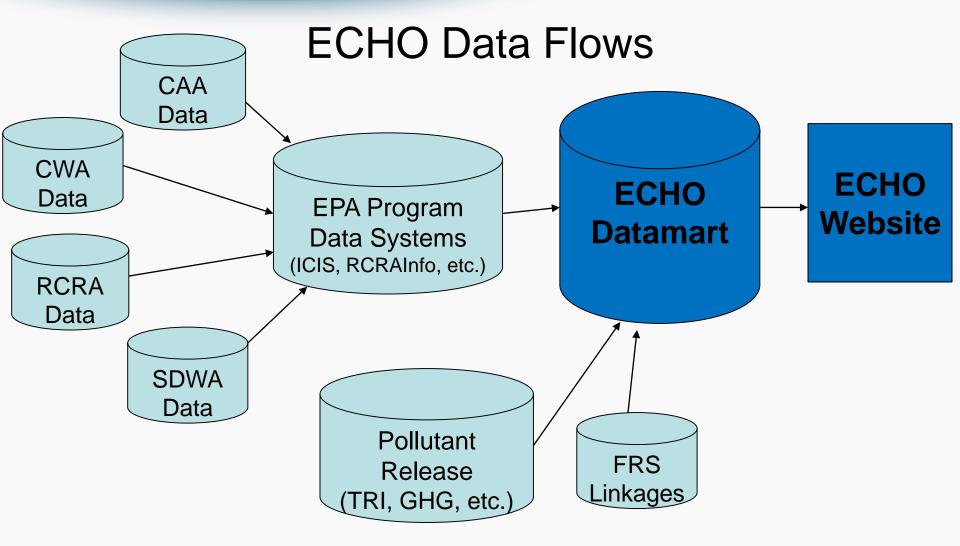


### **EPA Data Systems**

- Program Systems
  - Integrated Compliance Information System (ICIS)
  - Resource Conservation and Recovery Act Information System (RCRAInfo)
  - Safe Drinking Water Information System (SDWIS)
- Warehouse and Linking Services
  - Facility Registry Service (FRS) links EPA-regulated facilities and permits under one ID number
  - Envirofacts: Toxics Release Inventory (TRI) and Greenhouse Gas (GHG) pollutant release data for context

About the Data: <u>https://echo.epa.gov/resources/echo-data/about-the-data</u> Known Data Problems: <u>https://echo.epa.gov/resources/echo-data/known-data-problems</u>







### How frequently are the data updated, and how do I make corrections?



### Data Resources

- About the Data: <u>https://echo.epa.gov/resources/echo-</u> <u>data/about-the-data</u>
  - Links to data sources
  - Data refresh schedules
- How to Report an Error: <u>https://echo.epa.gov/help/how-to-report-error</u>
- Known Data Problems: <u>https://echo.epa.gov/resources/echo-data/known-data-problems</u>
- Detailed Facility Report (DFR) Data Dictionary: <u>https://echo.epa.gov/help/reports/dfr-data-dictionary</u>



### How can I download ECHO data?



### Data Downloads

Large data sets may be of particular use to developers, programmers, academics, and analysts.

- ECHO Exporter: <u>https://echo.epa.gov/tools/data-</u> <u>downloads#exporter</u>
  - Mass download for over 1.5 million facilities
  - Over 130 data fields for each facility
  - Too large for Excel; recommend using a database software
- ECHO Data Downloads:

https://echo.epa.gov/tools/data-downloads#downloads

- Data sets for specific programs (ICIS-Air, ICIS-NPDES, etc.)



### What are ECHO web services?



### **ECHO Web Services**

- Web services are functions that provide business logic, data, and processes and can be accessed over the internet
- Web services support ECHO and are available to the public: <u>https://echo.epa.gov/tools/web-services</u>
- The services allow web developers to design custom applications utilizing a live feed of data from ECHO
- "GET" or query-only RESTlike (REpresentational State Transfer) services, available through a simple URL HTTP link
- Output in XML, JSON, or JSONP formats

### **Additional Resources**



- Quick start guide: <u>https://echo.epa.gov/resources/general-info/learn-more-about-echo</u>
- Short video tutorials: <u>https://echo.epa.gov/help/tutorials</u>
- Webinars: <a href="https://echo.epa.gov/help/training">https://echo.epa.gov/help/training</a>
- FAQ: <u>https://echo.epa.gov/resources/general-info/echo-faq</u>
- Help: <u>https://echo.epa.gov/help</u>
- Contact Us: <u>https://echo.epa.gov/contact</u>
- ECHO Mailing list: <u>https://echo.epa.gov/resources/general-info/listserv</u>



### **Question and Answer**