

Vebatim Transcript for Introduction to ECHO Webinar

November 14, 2017

Okay, well good afternoon and welcome to a presentation on the Environmental Protection Agency's Enforcement and Compliance History Online website. Before we get started, let's review a few housekeeping items. Audio is available for this presentation through your computer's mic and speakers, or by telephone. Your call-in number, as well as your access code, is in the control panel box on the right-hand side of your screen. And all attendees have been muted to minimize background noise. Next slide, please.

If you have a question during the presentation, please type it into the Questions box on the upper right-hand side of your screen. We'll have a dedicated time to answer questions at the end of the presentation. And if you are experiencing any technical difficulties, please contact us and we'll try to troubleshoot the issues. We will have dedicated times during the presentation for live polls and a survey will appear on your screen once today's presentation concludes. Your feedback is very important so please fill these out once they display on your screen. And when you're entering your questions, please note to make the context of your question as clear as possible as we will be answering questions covering a range of topics. In order for this webinar to be as much use for all attendees, we won't be addressing site specific or individual problems during this session, but you are welcomed to use ECHO's Contact Us page for help with those type of individual questions. And today's presentation will include a live demonstration of the ECHO website, followed by a Questions and Answers session. And now, I'd like to introduce Charles Tamulonis to begin the presentation. Thank you.

Thank you, Grant. So, let's get started. The U.S. EPA uses various tools throughout the offices to provide public access to regulatory compliance and enforcement data. The Enforcement and Compliance History Online (ECHO) website is an interface that integrates data from major EPA information systems. It provides, in a sense, an easy to use one-stop shop for enforcement data.

What is ECHO? ECHO is the public facing website that provides access to compliance information. Information includes: how facilities are regulated, when they were inspected, whether facilities were found, and whether enforcement actions were taken. The site also provides dashboards to see trends through time and bulk datasets for download. To learn about dashboards, you can view the Dashboard tutorial in the Help page, which we'll show later.

ECHO contains history from more than 800,000 EPA regulated facilities. History includes: three-year compliance status, five-year inspection and enforcement history, data both from federal, state, local, and tribal sources of Clean Air Act stationary sources, Clean Water Act permitted dischargers, Resource Conservation and Recovery Act hazardous waste handlers, and Safe Drinking Water Act public water systems.

ECHO is also a way to access data for Emergency Planning and Community Right-to-Know Act, Federal Insecticide, Fungicide, and Rodenticide Act, and Toxic Substances Control Act inspections and enforcement action details.

Data comes into the various national databases maintained by EPA from several sources. EPA state and local environmental agencies and regulated entities all submit compliance and enforcement related data. Once the information makes it into the EPA national databases, ECHO will pick it up in its next weekly refresh in most cases. For a full list of data sources and refresh dates, please visit our About the Data page.

ECHO has many useful features for our users. Popular features include a facility searches for various regulatory acts, data downloads, EPA Enforcement Case Search, Comparative Maps and State Dashboards, and the Clean Water Act Pollutant Discharge Elimination System Discharge Monitoring Report Pollutant Loading Tool. We will go into the Facility Search during the live demo and you can do recorded tutorials for other tools through our Help pages.

Thank you so much. And now, as I mentioned, I'll launch a quick poll to get some of your feedback. And the first question is: "How often do you use ECHO?" And so, what you'll do is just select the option up on your screen between "Never used ECHO before," "Once or twice a year," or "Once a month." And after we've gotten responses from most of the audience, or ideally everyone, we'll go ahead and go through the results.

Okay, so now we're going to start our live demo of ECHO.

And thank you all for the feedback.

So, this is the ECHO homepage. You can navigate to it through <https://echo.epa.gov> or searching EPA ECHO in your browser. From the homepage, it's easy to use the default search to search for EPA regulated facilities by entering a zip code of interest. But did you know there's a lot more available than ECHO? Tasks are grouped into four main categories: Search Community, Explore Facilities, Create Maps, Analyze Trends which you can access by clicking on one of the four boxes surrounding the center page. The three boxes at the bottom of the page offer links to resources like video tutorials and help content and more advanced features. First, I'll describe the main boxes.

With Search Community, you can instantly search for facilities in a specific city, state, or zip code. This will bring you to an interactive map with facilities regulated by any of the acts tracked through ECHO. Use this option if you're looking for all active facilities in a particular area.

Explore Facilities: You can also search for facilities or EPA enforcement cases using detailed search forms. Here, you can access these forms. Use this option if you're interested in a very specific group of facilities. We'll come back to this in a bit.

Create Maps: You can also analyze EPA regulated facilities by starting with a map. If you choose one of these options on the left, you'll be taken to the same results as if you had started from the search form under Explore Facilities. The advantage of Create Maps is you can refine your results right on the map. I will come back to demonstrate this in a moment. Here, we also have links to maps developed by other offices within EPA that offer different information.

Analyze Trends: Analyze Trends offers links to dashboards of summary enforcement and compliance activity, pollution tracking tools, and other information. The dashboards provide charts of annual compliance monitoring and enforcement activity nationally and by state. If you're interested in dashboards, please check out the short video tutorial that is on the ECHO Tutorials page.

If you're particularly interested in the Clean Water Act, the Discharge Monitoring Report Pollutant Loading Tool can help you determine who is discharging, what pollutants they are discharging, and how much, and where they are discharging. This feature has its own set of resources to help you make the most of it.

Now we'll move to the bottom of the page. Like I said, the bottom three buttons are mostly resources for you. Help: From the Help Box, you can access links to training, short video tutorials I mentioned before, and detailed information about the various reports provided in ECHO.

The Resource button is home to links to What's New with ECHO and information About the Data and when it was last updated, the Tool Guide, and more. I just want to click on About the Data.

ECHO Data Sources and Refresh Dates: So, here you can see when the data was last extracted and when it will be next refreshed.

Advanced Tools: For Advanced Tools, you can access large data downloads and Developer Tools like Web Services. If you're interested in a training on web services, please let us know because we would love to do one.

I've mentioned facility searches of a few types now. They are ECHO's most popular features. You can begin a search with the Search Community box I showed you using a detailed Facility Search form or right here under Create Maps. Selecting any of the first four links under Customized Maps will return a national map of clustered facilities in a table with data aggregated by state. You can use interact components to drill down to more detailed data.

I'm going to first demonstrate the future features available for water facilities and then come back and show another example using the Facility Search form. So under Create Maps, I am going to select Map Water Facilities. As mentioned, results are initially displayed in clusters on the map with summary information about the clusters in the data table until you get down to 500 facilities. When using the Interactive Map view, there is no limitation to the number of results returned as you can see 267,654 new water act facilities. As shown, aggregated data are initially presented by state. So, here are the states and here are the counts per state. So, the summary data can also be downloaded. And since we have more than 100,000 facilities, we can only download the aggregated data. Once you get below 100,000 facilities, then you can get it at the facility data level.

So, counts are common questions users often have about facilities are also displayed right here, Explore Enforcement Compliance Criteria. If, for example, you're interested in the number of facilities that have Current Significant Violations, you select this. It would reduce your count to 5,022. Components of the search results page are synchronized. You manipulate the map, data in the table and the counts will update accordingly. You can control the map using a variety of controls. You can use this plus and minus button. You can use the wheel on your mouse. You can use the Zoom To box. You can change base map - the base map option and the top widget bar as well, so I'll do that. I'm going to go to the topographic map. Close this.

You can refine and modify your search results directly from the results page by drilling down to Aggregated Data Table by selecting a State row. So I'm going to do that with California. California has 15,988 facilities or 15,991 facilities. Here they are. You can go further by selecting on Facilities with

Current Violations. This will get us down to 750 facilities. Other options: Facilities with Formal Enforcement Actions. A formal enforcement action include administrative orders, administrative penalty orders, or civil judicial cases filed in federal court which varies now in consent decrees. There's Facilities with Informal Enforcement Actions and Formal Enforcement Actions are typically notifications like letters from EPA or state agencies to clean up potential violations. So what I'm going to do now is I'm going to do the zoom. I'm going to zoom in. That's it; one more time. So you actually can see there's only six facilities on my map. These are in sync so I'm just going to drag this over here and it's going to readjust. The map, the table are in sync. So, the Enforcement Compliance check boxes modify your search whereas filters and layers, that I'll demonstrate next, will not change your search. And actually, you can see that right here. If you look at this box, this criteria right. So, I'm going to click this 23, watch what happens. It changes the criteria that's being searched upon. Now when we get to the filters - when we click on the filters, they will not affect, it will not change the actual search criteria.

Before going further into filters, I'd like to discuss the data table. Each column of the table can be sorted by selecting the up or down arrows. So, I'm going to sort alphabetically by city. And I click it again, I'll go the other way - descending, ascending. Default displays include facility details such as the Name, ID, Address, City, State. Now I'm going to select this bubble right here in the map column to instantly open up a map pop up and Facility Summary. Other default columns include: current Significant Noncompliance status, Quarters in Compliance, Effluent Violations, Inspections, and Number of Formal Enforcement Actions. To learn more about each column or what the abbreviation in the columns mean, you can select Results Guide and it will open a tab with more information. If you'd like to add more columns of data, you can select Customize Columns. You can turn off or turn on any number of columns. The descriptions for available columns are included in the Results Guide I showed you. Update Columns. We will now have a table with all the IDs that we just added. So this table we just created can now be downloaded with Download Data. So since we are below 100,000 facilities, we are now returned at the facility level and since we're below 10,000, we have an option for downloading in an Excel format.

I'd like to show you how we've incorporated some Facilities Search Form filters directly onto this page. You can use this sidebar to navigate your way to the variety of filters and map layers. So Map Layers, here; Filters, there. I am going to click Major Facilities. I want to click Major Facilities. Notice the facility count in the filter panel update because ECHO is now filtering only on major facilities which tend to have a relatively higher level of pollutant discharge than other facilities. ECHO displays a comparison count indicating how many facilities are filtered out of the universe of your search results. See right here: 5 of 23 facilities. This adjustment happens with every filter you put in place. This is helpful because it allows you to see how many facilities fit this criteria and will help you to decide if these are the filters you'd like to use for your analysis or not.

By Environmental Justice Index above the 80th percentile. This filters out facilities that are in areas where at least one index of EJScreen is above the 80th percentile. I'm going to clear the filters. Customize Map Layers allows you to visually enhance your analysis by adding EJScreen map layers, created for EJScreen, an environmental justice mapping and screen tool that provides EPA and other users with nationally consistent data set, an approach for combining environmental and demographic indicators.

So, the current zone of this map is 30%. If I expand the layers, each layer will show me what zoom level I need in order for the layer to be displayed on the screen. 48 percent. I guess this one's all set then. The EJScreen layers provided this year are important for the EJScreen Tool I showed you earlier in the demo.

But here, the layers are displayed with the ECHO facilities. You click the "I." A legend describing the symbology used in the various layers is accessible. You can also view the Map Legend.

I just want to point out, here. So we did a toggle between major facilities and minor facilities. And you can tell the difference by the size; this is going to be a major, this is going to be a minor based on the size. The coloring in the body facility indicates serious noncompliance, it can be red. It's blue, it has no violations in the database. Yellow, it's a noncompliance. The numbers inside the body indicate how long since the facility was last inspected. No number means it was never inspected. The top bar here, this color right here, indicates what media or statute under which the facility is regulated. So, we did a search for Clean Water so we would expect it they would all be blue.

As I mentioned earlier, all page interactions dynamically update as you manipulate the map altering your search results unless you freeze your table counts.

Now, I've just un-synced the map and the table. So now I can move around and it's not going to readjust the search criteria. The count is going to stay as it is. ECHO shows your current zoom level and the point needed to reach to enable specific map layers. To enable the Impaired Waters layer, I need a zoom of 48%. So, I'm going to zoom in. Now I'm at 35%, 39%, 43%, 48%. And I'm just going to click on this bubble, so now I have this facility right here. It can be helpful to learn about an area surrounding a facility as well. So this layer illustrates water bodies that have been determined to be too polluted. So Assessed Waters 305B, Total Maximum Daily Loads, Impaired Waters 303D. You can click on the icon here. Basic facility information can be accessed by clicking the facility pin on the map. Related components on the search results page are enabled. The map attributes bubble displays a three-year compliance status survey by quarter. The related data table as highlighted is positioned at the top. The Facility Summary panel is displayed with a close-up aerial view of the facility. For many of these features you can access a Detailed Facility Report, or DFR. So I'm going to click save and open the Detailed Facility Report. The DFR, or Detailed Facility Report, is displayed in a new tab. View bars provide more detailed information for each facility. View bars provide a lot of information. Data are organized into six primary categories, each of which is controlled by expandable, collapsible sections that allow you to focus on the information that is of most interest.

Facility Summary: Each Facility Summary, with all of the basics, including a map of the facility location, basic facility identification information, facility permits or program ID numbers, and a snapshot of the facility's enforcement and compliance history.

Enforcement and Compliance: The Enforcement and Compliance section provides details of the data shown in the summaries. It includes lists of compliance monitoring events and enforcement action and recent violation history.

If you see a data error, each Detailed Facility Report has the option to report an error. After you follow the prompts and submit your report, the notification is entered into the EPA's integrated error correction process. It is routed to the appropriate data steward, who may follow up for additional

information or documentation if needed to correct an error. You will receive an email with that information from Error Tracker. We have two short DFR video tutorials on the tutorial page that I encourage you to watch to become familiar with the DFR. And stay tuned for future training opportunities.

Now we will go back to the homepage and I'll show you the Facility Search Form. So I can click Home, I can click on the logo. I clicked on the logo. I can open up Explore Facilities. Single Facility Search. If you know the facility ID number of the facility of interest to you, you can enter it here in the Single Facility search box. This is a quick and convenient search that will take you right to the results map and facility reports. We're going to click All Data. The Facility Search Form allows you to tailor your search based on a variety of criteria. The criteria are organized by topic. For example, some popular search options are under Facility Characteristics. Under Facility Characteristics, you can search by facility name or permit or program system ID numbers. You can also utilize the SIC and NAICS code search option. These are helpful if you're interested in viewing facilities in a specific industry. You can use the SIC or NAICS code lookup if you know the industry but don't know the code. So for example, I want oil refineries or petroleum refineries. Another popular section is Enforcement and Compliance. Under the Enforcement and Compliance tab, you can search for facilities based on inspections, enforcement actions, and penalties. All the searches can be used in conjunction with each other. For more information, please watch the short Facilities Search tutorial available in the tutorials link in the Help box. You can choose to view your results as the interactive map such as the one I demonstrated to you, or you can select to just see the data table. To quickly show some details, I'm going to select a random zip code. All the selections you make are shown on this Search Criteria Selected and are easy to remove by clicking the orange X if you make a mistake. I really don't want oil refinery in my search, so I'm going to get rid of that. So I have data tables and the zip code 21801. Search. Only the data table is presented. So map filters aren't available. Remember map filters were here? Some people prefer this view to analyze data in detail. You can still focus your search for additional enforcement and compliance search criteria on the right side. You can customize your columns as we did during the interactive map as well as download data and access the detailed facility report. Like all of our tools in ECHO, we're always working to make these features the most helpful to our users. So if there's something that stood out to you as extremely helpful or maybe need some adjustment or change, please let us know by using the Contact Us feature. We will begin the question and answer session shortly, but first we have one more poll question.

Thank you so much for that very useful live demonstration. So now let me launch that second poll. And this time we're interested in understanding "What is your primary use of ECHO?" Whether it's state or local government work, other work, or curiosity. So I'll let this poll go for a little bit to get your feedback.

So we're now at the questions and answers. As we start to answer your questions, I'm going to leave this slide of Helpful Links open. The presentation is also available for download on the ECHO training page. Do we have any questions?

Yes, we have a couple of questions. Do municipal wastewater treatment plants and private facilities report to ECHO?

Yes, both municipal wastewater treatment plants and private companies or any facilities that are either regulated under the four environmental statutes or permitted under a program under those statutes report to EPA databases and ECHO pulls that information in for you to use. So that would be facilities regulated under the Clean Air Act, Clean Water Act, Resource Recovery and Conservation Act, and Safe Drinking Water Act. There's different reporting requirements under different programs but typically if a facility has an activity regulated under one of those programs, they report some information to EPA and ECHO pulls in relevant facility information about releases and enforcement and compliance information.

Do we have access to EJScreen?

ECHO pulls in some EJScreen information into the Facility Search. Part of that was demo'ed showing the EJScreen search results column. There's also search criteria at the very bottom of the search form that allows you to search on EJScreen indices specifically. In the View More section, you can search for facilities located in areas above the 80th percentile for an EJScreen index. There's also a search results column and a mapping feature as well.

In the report column, what do the boxes with the single letters mean?

Each single letter report is a link to a specific report within ECHO. The first report that we would suggest new users look at is the "C" report icon and that stands for the Detailed Facility Report. We also have the Reports Legend, which will show up right next to the results guide when the facility results table is showing individual facilities and not aggregated. And that explains what each single letter means, that each is a hyperlink to another specific report in ECHO.

What do you do when you want a dataset with more than 100,000 facilities?

So there's a few things that you can do if you're on the Facility Search. That has more than 100,000 records. You could split up your search into other geographic areas, such as if you're doing a nationwide search, split it up by EPA region. We also offer datasets that are not listed on the Facility Search but you can get to through Advanced Tools and Data Downloads and that allows you to download the complete dataset all at once, if you're using that for advanced features or for data analysis. You can follow that link.

What if you need to go back further than the last five years of the enforcement history?

If you need more than five years of enforcement history, which is shown on the report, these data downloads, which we're showing now on the screen, is a source for that information. Any information, basically from the inception of the program, that information will be provided in these national datasets.

How do you get inaccurate data corrected?

You can use the Report an Error feature that is provided above Specific Report in order to report potential inaccuracies or data corrections. If you're on the ECHO homepage and go to the Resources panel, there's a link with instructions on how to report errors.

Who can we call or email if we have ECHO database questions going forward?

So you can use the Contact Us link, which is at the top right of any page to ask questions about the data or using the ECHO website.

So we had a question about EPA's Discharge Monitoring Reporting Loading Tool. The DMR Loading Tool is moving into ECHO and we are going to have a separate training in about two weeks to demo the new interface. So that information for the training can be found on the same page where you registered for this webinar. We also have a link to more information about the modernization process.

Is there a way to save a data search and review or download at a later time?

At this point, there is no way to save a search to go back to at a later time. We recommend running a search and downloading your data from the results page. Just keep in mind that the data are refreshed weekly so results can change week to week or most likely data are added from week to week.

Can anyone use ECHO or do you have to register first?

Yes, anybody can use ECHO and you do not need to log in to use the tool.

We weren't logged in when we did the presentation.

Is there a way to isolate a particular geography on a map, such as showing one state or EPA region?

On the results page, you can use the Zoom To feature to zoom into a particular area, or you can also search by a particular state or EPA region. But you'll always be seeing some portion of the full map. But you have the flexibility to zoom in and out to the level of detail that suits your needs.

Can you export the map?

There is an option in Download Data to export information in a GIS format, in a GeoJSON format. If you're interested in facility locations, you can also download facility latitude and longitude in any format that's provided.

Who can register for an ECHO Gov account?

Federal and state government agencies and their contractors can register for ECHO Government accounts.

There is a Report a Violation button. Does ECHO automatically download state violation data from the state, or do states manually enter the data into ECHO?

Kind of two questions. First, in terms of data entry, states or regulated entities enter information into the national databases of record and then ECHO extracts that information and pulls it into the website. So nothing is directly entered into ECHO. ECHO's pulling information from other EPA national databases. The Report Environmental Violations form is separately meant to be used for anyone that reports an emergency or suspected violation at a regulated facility. It's not meant to enter routine data into the national databases. That would be something for spills or other releases at a specific location.

Alright, so those are all the questions that we have time to answer today. Please contact us through the ECHO Contact Us link at the top right hand of every page if you have any additional questions.

Thank you all so much for participating today. This does conclude our presentation. We do appreciate your participation. And as I mentioned earlier, we are still interested in your feedback, so please do take a moment to complete the short survey that will display on your screen in a moment, and enjoy the rest of your day. Thank you so much.