



PDHonline Course C228 (2 PDH)

Environmental Information About YOUR Facility

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COURSE CONTENT

The U.S. Environmental Protection Agency (USEPA), some state environmental regulatory agencies, and other organization have established Internet-accessible databases that make environmental information about companies and individual facilities readily available to the public. In the next two hours, you will learn how to access information from some of these data sources, what information they present, and how to submit requests for corrections.

The discussions about the websites are grouped in sections by topic. The sections include:

- Compliance and Enforcement
- Water Quality
- Air Quality
- Chemicals
- Climate Information
- Multi-database Sites

Please note that information about the laws and regulations related to the data discussed in this course is not intended to provide the attendee with a full understanding of that regulation, but rather to set the stage for a clearer understanding of the source and potential uses of the data. For further inquiry, the Related Links section has links to USEPA information on the main federal environmental programs. Additionally, the limitations of the information available from each data source are not provided in this course. In most cases, more information on such limitations is provided on the websites.

1. Data Gathering Exercise

This course has a hands-on element. In order to reinforce the lesson and to better demonstrate the differences among the data sources and their interfaces, you are asked to gather information about a facility or community of your choice when you visit the websites.

Before reviewing the remainder of the course content, please print out a copy of Attachment 1 or use a separate sheet of paper to collect similar information. Attachment 2 is an example of a completed data gathering sheet, showing the kinds of information that may be of interest to you. In order to avoid highlighting possible environmental issues about an actual facility, the example is based on a fictitious facility. The environmental information noted in Attachment 2 was actually obtained from the indicated websites, but was related to a number of different facilities in different locations.

Select a facility that interests you. It could be a facility that you have responsibility for, a neighboring manufacturing facility, a client or potential client, a supplier or potential supplier, a competitor, or any type of facility that you have an interest in better understanding.

Then as you proceed through the course, learn how to access the information, and investigate the websites, do searches for your selected facility. Note any information of interest on your Data Gathering Sheet (e.g., permit, environmental violations, types of toxic chemicals used there, quality of the public water supply, and Superfund sites in the area).

Be sure to spend a few minutes poking around the edges of each of these websites. A quick look at the Site Map, First Time User pages, and/or Users' Guides, as available, will give you lots of hints of what the site offers and how to get to the details you are interested in. A wealth of information can be mined from each site.

2. Compliance and Enforcement

This section reviews a USEPA website that provide access to information on the environmental compliance status and enforcement activities associated with facilities.

Enforcement and Compliance History Online (ECHO) –

<http://www.epa-echo.gov/echo/>

The ECHO website is maintained by USEPA, providing facility-specific summary and detailed information on whether compliance inspections have been conducted by the USEPA, state, or local governments; whether violations were detected; and if any enforcement actions were taken and/or

any penalties were assessed in response to environmental law violation. This site provides a snapshot of a facility's environmental record. Information is available for the last three years.

ECHO focuses on violations/actions at Clean Air Act stationary source facilities, Clean Water Act major direct discharge facilities, and Resource Conservation and Recovery Act hazardous waste handlers. USEPA regulates facilities under many other programs and statutes.

The simplest way to access information is to enter a zip code or city/state under the Quick Search feature. A summary report of all of the facilities in the database for that area is provided. From there you can bore down to get more detailed information about any of the summarized facilities.

You can also perform a Multi-ID search page to track a known list of facilities. For instance, a company may want to gather information for all of their facilities in a single query rather than searching on all locations and name permutations.

As with many of the USEPA-provided data sources, in the top right corner of screens containing detailed facility information is a Report Error button. If you observe erroneous information, click that button and follow the instructions. You will need to provide your name and contact information, along with the correction request.

3. Water Quality

This section reviews USEPA websites that provide access to information on the water quality.

Water Where You Live – <http://www.epa.gov/water/states.html>

This website provides links to information available from the USEPA Office of Water about each state. The information is related to regions and water bodies, not to specific facilities. The information includes water quality reports from the state to Congress, information on volunteer monitoring programs, lists of water bodies not meeting water quality standards, and links to database interfaces such as Surf Your Watershed and Local Drinking Water Reports, which are described below.

Surf Your Watershed - <http://cfpub.epa.gov/surf/locate/index.cfm>

Surf Your Watershed is a USEPA website that allows visitors to locate environmental information about a specific watershed. Once you have selected a specific watershed, links direct you to information such as impaired water bodies in this watershed or state, stream flows, water use data, scientific studies, citizen-based groups, and restoration efforts. If you are looking for a bigger picture view, links to lists of water body and watershed information for each state is also available.

Local Drinking Water Information –

<http://www.epa.gov/safewater/dwinfo/index.html>

This website provides access to information about local public water supplies. The site is managed by USEPA and provides links to information from various state and local organizations.

There are links to consumer confidence reports, or drinking water quality reports, for communities across the United States. You can click on “see if your annual drinking water quality report is posted on-line” to get a list of links to individual water systems. The links were provided by public water suppliers; some links take you directly to the water systems water quality report, while others link to the utility’s home page where you have to find the water quality report. On the websites tested, the water quality reports were not difficult to locate.

Other information about the water systems is available by clicking on the state of interest and then selecting a county or a specific water system. The resulting table provides general information about the system, population served, water source, etc. In addition, for each facility is a link to more detailed information, including a violation and enforcement history. In the Violation Report screen, you will notice the Report an Error button that provides a way to request corrections if erroneous information is observed.

4. Air Quality

This section reviews websites that provide access to information on air quality and air permits.

Aerometric Information Retrieval System/AIRS Facility Subsystem Air Releases Database - http://www.epa.gov/enviro/html/airs/airs_query.html

At the Aerometric Information Retrieval System/AIRS Facility Subsystem (AIRS/AFS) website, visitors can use the Air Releases Query Form to

retrieve information from the AIRS/AFS database, which is part of USEPA's Envirofacts program (described in Section 7).

You can search for information on air releases from a facility by using any combination of facility name, geographic location, and standard industrial classification. There are also output options to meet a number of information needs. The air release information provided specifically relates to industrial plants, their components (stacks, points, and segments), and the chemicals they emit into your air. Also available is information on their operating permit application and renewals.

In the query results screens, you will notice the Report an Error button that provides a way to request corrections if erroneous information is observed.

AIRNow - <http://airnow.gov/>

AIRNow is a cross-agency federal government website. The USEPA, National Oceanographic and Atmospheric Administration, National Park Service, as well as various tribal, state, and local agencies developed the AIRNow website to provide easy access to air quality information across the nation. Daily Air Quality Index forecasts can be viewed, as well as real-time Air Quality Index conditions for over 300 cities. Nationwide and regional real-time ozone air quality maps covering 46 states and parts of Canada are also available. The maps are updated every hour.

Additionally, AIRNow provides links to more detailed state and local air quality websites

5. Chemicals

This section reviews websites that provide access to information on the chemical use, chemical releases, and chemical contamination.

Toxic Release Inventory - <http://www.epa.gov/triexplorer/>

The Emergency Planning and Community Right-to-Know Act (EPCRA) was passed by Congress in response to concerns about the environmental and safety hazards associated with the storage and handling of toxic chemicals. The law requires facilities in certain industry categories, which manufacture, process, or use significant amounts of toxic chemicals, to report on their releases of these chemicals each year. The Toxic Release Inventory (TRI) is a publicly-available USEPA database that contains this information on toxic chemical releases and waste management activities.

TRI Explorer provides access to information in the TRI database to help individuals and communities to identify facilities and chemical releases about which they may want more information. Searching the TRI, visitors can find information regarding toxic chemicals that are being used, manufactured, treated, transported, or released into the environment. At TRI Explorer, first select the type of report you are interested in from the options to the left. For instance, if you want information about a specific chemical or group of chemicals, click Chemicals. If you are interested in chemical information about a specific facility or group of facilities, click on Facility. Then simply select the year of interest, a location (selections include all of the U.S., a state, a county, or a zip code), a chemical or chemical group, and the industry type.

Queries result in detailed information about the disposal and release of chemicals. As with many such report tables from USEPA data sources, you can click on a column title for more information about what the information means, and you can click on the arrows in any column to sort the data by the values of the information provided in that column. This ability to sort the information greatly increases its usefulness for many purposes.

Through TRI Explorer, it is also easy to investigate trends in disposal and releases with time by starting with the Trends selection on the left side of the TRI Explorer homepage.

Local Emergency Planning Committee (LEPC) Database -

<http://yosemite.epa.gov/oswer/lepcdb.nsf/HomePage?openForm>

The emergency planning section of EPCRA is designed to help communities prepare for and respond to emergencies involving hazardous substances. Every community in the United States must be part of a comprehensive plan. The states have designated a total of approximately 3,500 local emergency planning districts and appointed a Local Emergency Planning Committee (LEPC) for each district. LEPCs must develop an emergency response plan, review it at least annually, and provide information about chemicals in the community to citizens.

With the LEPC Search Tool, visitors can zoom in on information about a specific LEPC by inputting the LEPC name (generally includes the community or county name), zip code, or state. Or you can view a full list of the LEPCs in the database and sort by state, name, or zip code. Information available through this tool includes the LEPC plan number,

contact information for the plan, and when it was last updated. You can contact the person listed if you want more information about the LEPC or their emergency response plan.

Although USEPA provides the database and the website, they rely on the LEPCs to provide them with current information. The website provides an email address to direct any changes or corrections.

Vulnerable Zone Indicator System (VZIS) -

<http://yosemite.epa.gov/oswer/ceppoweb.nsf/frmVZIS?OpenForm>

Two federal laws, the Emergency Planning and Community Right-to-Know Act (EPCRA, discussed above) and the Clean Air Act's chemical accident prevention provisions (also known as the Risk Management Program) were enacted to allow citizens to have access to information on very hazardous chemicals at businesses and other facilities in their community. Much of this information is available on the Internet (See the Right-To-Know information earlier in this section); other information is available from state and local governments that receive annual reports from facilities.

Sometimes this publicly available information is not sufficient to determine whether a specific location could be affected by a chemical accident. This information can be requested via the VZIS website. The request must include the address or location of concern and the requester's email address. Information on the potential for chemical accidents in that area will then be sent to the requester via email.

National Superfund Sites -

<http://www.epa.gov/superfund/sites/siteinfo.htm>

Superfund is USEPA's program to clean up uncontrolled hazardous waste sites. Abandoned, accidentally spilled, or illegally dumped hazardous waste that pose a current or future threat to human health or the environment are cleaned up under the Superfund program.

You can get information about Superfund sites in your community from the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database. CERCLIS contains the official inventory of Superfund sites and supports USEPA's site planning and tracking functions. It displays site information in a standardized Site Progress Profile format. The profile includes information such as the current status of cleanup efforts, what cleanup milestones have been reached, and how much liquid and solid media have been treated.

So see a list of all Superfund sites, click on “view a list of all NPL sites.” Alternatively, you can search for information in your area based on as specific location information as desired (e.g., site name, location, action start or completion dates, NPL status, and contaminants). You can generate a list of all the sites in your state, county, or city. Visitors can sort the resulting list by any of the column headings, including by city, county, or state.

If you click on the name of a site of interest, you can view a Superfund Site Progress Profile for that site. The profile contains information about the site’s location, cleanup progress, and whether or not the potential or actual exposure is under control. Additionally, the profiles include links to information on the USEPA regional websites.

6. Climate Information

SunWise UV Index - <http://www.epa.gov/sunwise/>

USEPA’s SunWise Program is an environmental and health education program to teach the public how to protect themselves from overexposure to the sun. From the SunWise website, click on Where You Live for a page to look up the calculated ultraviolet index in your area. The ultraviolet index predicts the next day's ultraviolet radiation levels on a 1-11+ scale, helping people determine appropriate sun protection. From this website, you can also sign up to receive ultraviolet alerts via email. Note that this information is not available for Alaska and Hawaii.

Global Warming Where You Live -

<http://yosemite.epa.gov/oar/globalwarming.nsf/content/GeographicPortal.html>

At this website you will find clickable maps of the World, United States, and Natural Places. Each has links to the Intergovernmental Panel on Climate Change's reports on the impacts of climate change for that region, as well as reports submitted by other organizations. Visitors can also view materials organized by the states. State-specific information includes a USEPA summary sheet on the potential impacts of global warming or climate change on that state, legislative initiatives, state greenhouse gas inventories, and more.

Also available from this website is information on how specific ecotypes might be impacted by climate change.

7. Multi-database Sites

Envirofacts - <http://www.epa.gov/enviro/>

The Envirofacts website provides access to a number of USEPA databases that have been discussed in previous sections and more. The site is billed as “your one-stop source for environmental information.” This website leads you to information about environmental activities that may affect air, water, and land in the United States. Maps of environmental information can also be generated.

Click on EF Overview on the left side of the webpage for instructions of how to use the various search options, such as Quick Start, Topics searches, and Multisystem Queries.

With Quick Start, you simply need to enter the zip code, city and state, or county and state of the area investigated.

The Envirofacts Multisystem Query option is a powerful tool, allowing searches of multiple environmental databases for facility information, such as toxic chemical releases, water discharge permit compliance, hazardous waste handling processes, Superfund status, and air emission estimates. The Envirofacts database can be searched using any combination of the following: facility name, geography, Standard Industrial Classification Code, and/or pollutant of interest. The resulting report is a list of facilities that meet the specified criteria. Individual site reports are retrievable by clicking on the facility names.

With Envirofacts, a variety of maps can be generated using data from the Envirofacts Data Warehouse, as well as from select other data sources. One of those mapping tools is Window to My Environment (<http://www.epa.gov/enviro/wme/>), which is designed to provide useful community-based environmental information. Interactive maps and tools can help answer questions about environmental conditions that may affect air, land, and water in their community, as well as learn more about what is being done locally to protect the environment.

At Window to My Environment, you can pull up a map using either a zip code or city and state. Then, select the map features that you would like to see displayed, and select Redraw Map. Features include regulated sites, places (such as schools and hospitals), water bodies, water and air monitoring points, flood areas, and more.

Search Your Community - <http://www.epa.gov/epahome/commsearch.htm>

Enter your zip code and choose from four databases to retrieve environmental information about your community. From this website, information from Envirofacts, EnviroMapper, Surf Your Watershed, and UV Index can be accessed.

The Right-To-Know Network- <http://www.rtknet.org/>

Most of the other data sources discussed in this course are populated by or hosted by the USEPA. The Right-to-Know Network (RTK NET), however, is a project of OMB Watch, a nonprofit government watchdog organization whose mission is to promote open government, accountability and citizen participation.

RTK NET provides independent access to numerous databases and resources on the environment. With the information available on RTK NET, you can find information on specific facilities and their environmental effects; identify environmental permits issued and associated compliance status; and identify civil cases filed.

To access TRI information about your community, simply type your city and state in the form at the bottom of the RTK NET home page. The result is a summary table showing the facility name, total onsite disposal, and total releases. To obtain more information on any facility, click on the facility name.

From the RTK NET home page, click on Databases to get access to about a dozen different databases, several of which are discussed in this report. As with any database, when using the information, be sure to understand its source. Many of the data sources available through the RTK NET are USEPA databases that are also available via the USEPA website. For each database, RTK NET provides information about the sources and limitations of the data under the About The Data button.

Course Summary

Many environmental regulatory agencies and other organizations have made a significant amount of environmental information readily available to the public. This course provided direction to many of the Internet-accessible sources of such information, summarized what information was available at each site, and provided guidance on how to request corrections, if needed.

Engineers and managers should be aware of the environmental information about their facilities that is readily available to the public.

The items discussed in this course included: website addresses, summary of the information contained there, how to access the information for a specific facility or community, and guidance on requesting corrections, where needed.

The types of environmental information explored included:

- Compliance and Enforcement
- Water Quality
- Air Quality
- Chemicals
- Climate Information
- Multi-database Sites

To reinforce the lessons, the course included an exercise to gather environmental information about a facility of the attendee's choice as the websites were investigated.

Attachment 1

Data Gathering Sheet

Facility Name: _____

Facility Address: _____

Dates of Internet Research: _____

[illegible]

Attachment 2

Example Data Gathering Sheet

Facility Name: LMNOP Metal Plating, Inc.

Facility Address: 1234 Main Street, Anytown, OH, 45999

Dates of Internet Research: July 15, 2006

Topic / Environmental Media	Data of Interest	Information Source
Enforcement	Three inspections in last 3 years; 1 violation; fine of \$25,000.	www.epa.gov/echo
Water quality	Bad Creek is on list of impaired water bodies.	www.epa.gov/surf
Drinking water	Local water supply meets water quality standards. No violations.	www.epa.gov/safewater/dwinfo
Climate change	With changes in climate, forested areas in Ohio could change little or decline by as much as 30-50%. Types of trees dominating are likely to change.	yosemite.epa.gov/oar/globalwarming.nsf/content/GeographicPortal.html
UV exposure	Tomorrow's ultraviolet radiation levels in our area are predicted to be moderate.	www.epa.gov/sunwise/
Superfund sites	Twelve Superfund sites in our county, none within 1 mile of our facility, our facility is not on NPL.	www.epa.gov/superfund/sites/siteinfo.htm
Chemicals	Our county's LECP was last updated January 26, 2006.	yosemite.epa.gov/oswer/lepcb.nsf/HomePage?openForm
Chemicals	In our county, 309,000 lbs of chromium were disposed via other surface compounds, all from two power and light facilities	www.epa.gov/ttriexplorer/
Chemicals	Facilities in our area with Risk Management Plans are the resin manufacturing plant, city wastewater treatment plant, and brewery.	www.rtknet.org/ , RMP database
Miscellaneous	Our facility is two blocks outside the boundary of the river's special flood hazard area. The new hospital is 2 miles away.	www.epa.gov/enviro/wme/