



Technical Experts Review Topic Hubs

Cindy McComas, from the Minnesota Technical Assistance Program and member of the NPPR research and technology work group, provided P2Rx with a list of technical experts who are active in the topic hub areas. Review by the NPPR research workgroup will help ensure that hub content is current and is based on the field experience of technical assistance providers. This will result in greater visibility in the P2 community and more effective distribution of the latest information. As of today, technical reviewers have been identified for 14 topic hubs.

Topic Hubs Expanded and Refined

TOPIC HUBS ARE DESIGNED to provide background and technical information that increases understanding of specific industrial processes or environmental topics. Topic hubs typically provide information on where and how wastes are generated; business implications for waste reduction; and strategies for improving outcomes using pollution prevention techniques and principles. The topic hub format covers environmental “topics” such as mercury or environmental management accounting, as well as industrial “sectors” such as automotive repair or fiberglass fabrication.

Topic Hub Development Standards

Centers differed in their treatment of topic hubs because of their diverse resources and expertise. This is further complicated by the difficulty of applying a single standard format to a wide variety of topics. In order to create a consistent product, P2Rx coordinated an effort to revise and expand topic hub standards. The resulting topic hub quality assurance/quality control standards were recently adopted by all centers.

Centers will use the standards to develop new and review existing topic hubs. Altogether, the new topic hub QA/QC standard is comprised of seven documents, including a flowchart (<http://p2rx.org/AdminInfo/QA-QCflowchart/slide0001.htm>) that diagrams the complete process. A designated editor will conduct a grammar and web function review that will be followed by a final, technical re-

view. As a trial of the editorial review, five hubs were successfully reviewed. New hubs will be reviewed as they are completed and old hubs will be reviewed in accordance with the authoring center’s schedule for updates.

Modularizing Topic Hub Code

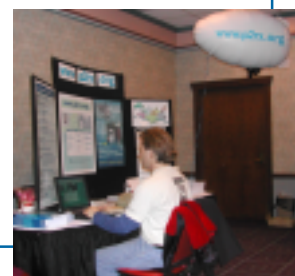
Centers share computer code that allows them to utilize the content of each other’s topic hubs. Work on this code is ongoing as improvements are made and differences among centers are discovered. To make this code user-friendly, it is being broken into modules,

Continued on Page 2

IN THIS ISSUE

- Topic Hubs Expanded and Refined
- Web Measures Standards Ensure Accurate Information
- National Pollution Prevention Roundtable Conference
- P2rx.org Tests Usability
- P2Rx Shares Resources with NPPR
- In Brief

**P2Rx Booth and
Blimp at NPPR
Convention. Story
on page four.**



Topic Hubs Expanded and Refined

cont. from page 1

or small pieces, that can be utilized individually for a specific purpose. This allows centers to format their web pages however they wish, and easily “call” an action by the content sharing code. The bulk of this work is being done by Tim Tompkins at Waste Reduction Resource Center (WRRC). Scott Butner, Battelle contractor, is providing peer review.

In order to assure that all centers have the latest version, the code resides on a continuous versioning software (CVS) server that automatically tracks changes and updates.

Web Workshop in Reno

The web workshop that met in Reno, Nevada on January 9–10, 2003 provided an opportunity for web technical people from each center to work together on various aspects of their topic hub databases and learn how the content sharing software works. Peter Johnsen Western Regional Pollution Prevention Network (WRPPN) provided logistical support for this workshop.

Following up on the effort in Reno, Daeho Kim, Pollution Prevention Regional Information Center (P2RIC), worked with centers individually to keep content sharing operational.

For a complete workshop report see <http://www.p2rx.org/WebCall/getCall.cfm#preMeeting>



Promoting P2Rx
Pollution Prevention University T-Shirt

Five New Topic Hubs Introduced Since October, 2002



P2 TOOLS

Environmental Mentoring

www.pprc.org/hubs/toc.cfm?hub=1002&subsec=7&nav=7

Environmental Management Accounting

www.newmoa.org/prevention/topichub/toc.cfm?hub=105&subsec=7&nav=7



PBT AND TOXINS

Mercury Automotive

www.newmoa.org/Newmoa/htdocs/prevention/topichub/toc.cfm?hub=104&subsec=7&nav=7



HOSPITALITY AND TOURISM

Ski Areas

peakstoprairies.org/topichub/toc.cfm?hub=805&subsec=7&nav=7



SERVICES

Marinas and Small Boat Harbors

www.newmoa.org/Newmoa/htdocs/prevention/topichub/toc.cfm?hub=21&subsec=7&nav=7



AGRICULTURE AND FOOD PROCESSING

Meat Processing

wrrc.p2pays.org/p2rx/toc.asp?hub=449&subsec=7&nav=7



All hubs can be quickly accessed from www.p2rx.org

P2rx.org Tests Usability

TO EVALUATE how well information is presented on its website, P2Rx conducted an informal usability test at the National Pollution Prevention Roundtable (NPPR) conference in Louisville, Kentucky. In the test, P2 technical assistance providers were asked to access information that was relevant to their jobs from P2Rx.org.

An important initial conclusion from the test is that users are confused by the portal nature of the site—most links on the P2Rx.org site take users to a regional center's website.

Many users reported that they use a search engine such as Google or Yahoo when they want P2 information. This is consistent with web trends statistics reported by P2Rx centers. Although all testers claimed that they use the internet frequently, many did not recognize subtle clues that would have helped them know where they were. For example, when clicking on a link from the auto repair topic hub, the user was taken to a document on the Colorado DEP site. This user did not recognize that he had moved to another site, even though the appearance and navigation had changed.

Several easy improvements have been considered to clarify any confusion. Options include using an intermediate “exiting site” page when leaving P2Rx for another website; or opening a new window for the off-site page. It may also be helpful to find opportunities to educate users in effective search techniques. Changes will be made after evaluating the degree of difficulty and effectiveness of the solution. Usability testing may be one of the areas covered in the next web workshop since all centers use their websites as primary means of communication with users.

Web Measures Standards Ensure Accurate Information

P2RX CENTERS USE WEB TRENDS software to analyze activity on their websites in accordance with the P2Rx Web Measures Standard. The Standard helps all centers provide consistent data regarding page views and user sessions. P2Rx has adopted a philosophy of conservative reporting and excludes activity from search engine “spiders,” and from their own center. The result is more accurate information about the number of users and what kinds of content they are accessing.

Activity and web measures are reported in July and January. For 2002, P2Rx centers had over 925,000 user sessions and nearly 3 million page views. This compares favorably with GreenBiz.com, that reported 100,000 visitors per month. It’s important to note for comparison that some websites report “hits” in addition to user sessions or page views. Hits include graphics on pages so that viewing a single page may be counted as several hits, depending on the page layout. Using page views as a measure of web activity is more representative of true activity.

Most centers range from 300-600 page views/day, with the exception of one established center that is significantly larger. Two centers range from 5-6 page views/visit. Others are about 2.5 page views/visit. Average centers have about 200-300 visits/month on topic hubs per site. Two centers have 900-1000 visits/month.

It is significant to note that 60-70% of users come to the sites from a search engine. This indicates that the user is connected directly to P2Rx content. About 19-34% of users come to the sites without a referrer, which means the sites are bookmarked. Internal referrals (from within the site) account for 5-15% of users.

The majority of users of P2Rx information are from government, or business and industry. Some top products include the vendor library, industry sectors, and topic hubs. Popular topics include cleaner production and alternative fuels.

In Brief

Pilot Project with EPA Clearinghouse

At a meeting December 5, 2002, Emily Chow and Tracy Back of EPA’s National Compliance Assistance Clearinghouse met with Scott Butner, Battelle, and P2Rx members to discuss partnering with the Clearinghouse. It was decided to try a pilot project involving one P2Rx topic hub. The goal of the project is to link content from the Clearinghouse to the topic hub and vice versa.

Report to P2 Coordinators

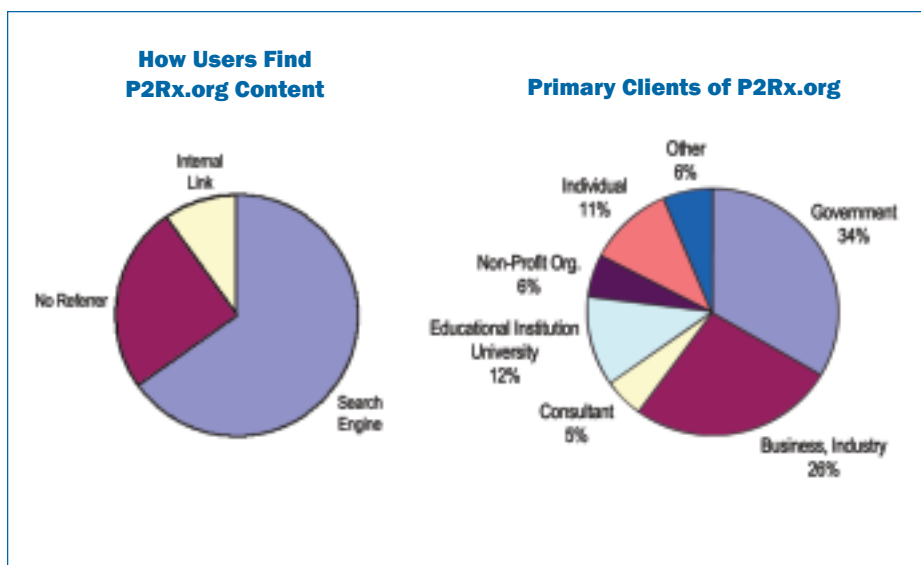
P2Rx demonstrated topic hubs and content sharing at the meeting of P2 coordinators in Louisville on April 8, 2003. Other topics covered included: the search function; EPA search engine on P2Rx sites; topic hub quality assurance/quality control standards; the national P2 programs directory and proposed changes; regional programs that have expanded to national in scope; and partnerships P2Rx is pursuing. A regional program with potential to expand (P2 Planner) was presented. P2 coordinators asked P2Rx to explore working with Native American tribes. In order to ascertain tribal needs, arrangements were begun to have some center directors attend the FOSTTA meeting at a tribal casino in Connecticut this June.

Download presentation at
<http://www.p2rx.org/AdminInfo/MTPPPresent.cfm>

Administrative Group Meeting

Partnerships and P2Rx projects were the focus of the spring semiannual meeting of the administrative group, held in Austin, Texas, February 19-21, 2003. Potential collaborative projects were identified in discussions with Ken Zarker, NPPR. After prioritizing projects, center directors agreed to seek additional funding for—news content sharing, P2 thesaurus, further development of innovative technology profiles and incorporation of existing innovative technology resources from other groups, and production of a P2Rx bi-annual report.

For a full report of the meeting, see
<http://www.p2rx.org/WebCall/getAdminGroup.cfm#preMeeting>



National Pollution Prevention Roundtable Conference

P2RX CONTRIBUTED to the success of the National Pollution Prevention Roundtable (NPPR) Conference in Kentucky this spring by sponsoring and organizing a unique event for participants. A “fun walk” held in an urban park provided attendees with a great opportunity for networking as well as contributing to a good cause. Those participating in the walk were able to donate to the local school district in Louisville, Kentucky, to help them fund a pollution prevention assessment. The walk was not only perceived as healthy and fun, but since it was held in recently reclaimed park space, was an appropriate location. The Kentucky Pollution Prevention Center (KPPC) worked with P2Rx to organize this event.

Regional Baskets Promote Centers

In addition to providing participants with P2Rx tee shirts, most centers contributed promotional items from P2 programs in their region to fill “bluegrass” baskets provided by KPPC. These baskets were given away as door prizes to people that attended the free reception at the Kentucky Derby Museum, Thursday night of the conference. These “regional baskets” promoted recognition of P2Rx and its centers, P2 programs in each region, and the connection of P2Rx to these programs.



P2Rx Shares Resources with NPPR

NPPR OFFERS A “yellow pages” directory of individuals and programs involved with P2. Since each P2Rx Center is funded to maintain a directory of regional P2 programs, P2Rx has offered to share its national directory (comprising all the regional P2 program directories) with NPPR.

A shared directory will be mutually beneficial. P2Rx will gain additional exposure by having its program directory on NPPR’s website. NPPR will acquire a no-maintenance, up-to-date product with information on all P2 programs, not just those that are NPPR members. In the future, it may be desirable to expand the database so that NPPR can use it as a member directory or experts directory.

P2Rx and NPPR are currently exploring the possibility of a cooperative effort to develop news sharing software. Seven of eight P2Rx centers provide P2 news via list serve, newsletter, or on their web page. NPPR also has a news service, and they get stories from a few partners, including two P2Rx centers.

At the NPPR board meeting in Louisville, April 8, 2003, the board voted to proceed with a memorandum of understanding (MOU) by September 30, 2003, formalizing the cooperative relationship with P2Rx.