

P2Rx Management FY2004-FY2005
Grant Number 83114701-0
Final Report

Title: P2Rx Management FY2004-FY2005

Grant Number: **83114701-0**

Investigator: Jean S. Waters
Nebraska Business Development Center
University of Nebraska Omaha
6001 Dodge Road; RH308
Omaha, NE 68182-0254
402-554-6259
FAX 402-554-6260
jwaters@mail.unomaha.edu

Institution: University of Nebraska at Omaha

Project Period: October 1, 2003 – December 31, 2005

Executive Summary

EPA Grant 83114701-0 is completed. The Nebraska Business Development Center's Jean Waters served as program manager (PM) for the Pollution Prevention Resource Exchange (P2Rx) during the grant period. P2Rx consists of eight regional pollution prevention (P2) information centers: Northeast Waste Management Officials' Association (NEWMOA), Waste Reduction Resource Center (WRRC), Great Lakes Regional Pollution Prevention Roundtable (GLRPPR), Southwest Network for Zero Waste (Zerowaste), Pollution Prevention Regional Information Center (P2RIC), Peaks to Prairies Pollution Prevention Information Center (Peaks), Western Regional Pollution Prevention Network (WRPPN), and Pacific Northwest Pollution Prevention Resource Center (PPRC). This report summarizes the PM's activities accomplished during the original award year and a one-year no-cost extension.

The combined completed tasks were:

(1) Overall coordination

- a) Arranged for and conducted monthly calls of center directors and Web group, four administrative group meetings, and two Web group meetings.
- b) Completed "user's" guides for the Topic Hubs™, P2 Programs Directory, the Concurrent Versioning System (CVS), Bugzilla, and Web Trends. Web-development personnel at each center use these guides when they use the software applications, enter data or display products on their sites. The guides are posted at <http://www.P2Rx.org/AdminInfo/toc.cfm>.
- c) Coordinated with and contracted professionals for specialized assistance during meetings.
- d) Trained new program manager (Andy Bray of NEWMOA) and Web personnel (Nate Bisbee and Rachael Colella) and helped facilitate transfer of Web function to their internet service provider (ISP).

(2) Coordinate national projects and regional collaborations

- a) Made the P2 Programs Directory into a centralized database residing on the P2Rx server. Centers can display information dynamically and it can be easily shared with external partners.
- b) Assisted centers by providing Topic Hub content-sharing software and other P2Rx software enhancements. Also, consulted with the centers, as requested, on general Information Technology (IT) issues so they could enhance delivery of P2Rx and regional information.
- c) Provided on-site training to WRRC, P2RIC, and Zerowaste, and training via conference call to WRPPN and Peaks.
- d) Supported the addition of ten new Topic Hubs by providing editorial and Web review.
- e) Solved the problem of nonstandard keyword databases among the centers, and implemented a system of automatically adding new keywords.
- f) Maintained Rapid Response service at all centers.
- g) Created a P2 News application, which includes a database and modularized software code. This application was shared with centers, five of which had no capacity for producing news before receiving this application. Implemented the use of Really Simple Syndication (RSS) for sharing and categorizing P2 news among all eight centers and created a Web-based "news box" that is available to centers and external partners.

- h) Maintained current regional collaborations: “Homes Across America,” “Request for Proposals Clearinghouse,” and “P2 Innovations.” No new national projects or regional collaborations were proposed during this time period.
- (3) *Maintain and improve P2Rx.org Web site***
- a) Created an “administrative” page for P2Rx.org so all functions could be managed. The administrative section includes Topic Hub, Programs Directory, P2 News, Sector Resources, and Keyword administration forms.
 - b) Created the Topic Hub database on the P2Rx Web site so users are not redirected to a different center when they access a Topic Hub.
 - c) Included sector resources from the centers under the “P2 Information, Topic Hubs and Sectors Resources” page. Wrote and documented software code and created administrative forms so the P2Rx PM could continue to update sector resource lists. The information is contained in a database, so it is dynamically generated on the Web page.
 - d) Reviewed and updated internal P2Rx documents, plans, contacts, and standards to assure documents are accurate and current.
 - e) Measured usability and solicited user feedback. Maintained and improved Web-page functionality based on usability studies and new content requirements.
- (4) *Report P2Rx activities and progress***
- Collected activity information from all centers and semiannually reported P2Rx activities. Reports are found at <http://www.P2Rx.org/AdminInfo/toc.cfm>. User sessions on the Web increased with time.
- (5) *Provide Topic Hub editorial and Web review according to P2Rx standards***
- Reviewed 10 new Topic Hubs for grammar, voice, completeness, consistency and Web function according to the Topic Hub quality assurance and quality control (QA/QC) standard. Assured keywords and meta tags were produced according to the standard as well.
- (6) *Promote P2Rx***
- a) Purchased a professional table-top display and designed the graphics for each center to use with the display.
 - b) Produced 12 promotional items in print and electronic formats.
 - c) Purchased pedometers and post-it pads for giving away as promotions.
 - d) Promoted P2Rx at six regional P2 roundtable meetings, one regional/Canadian P2 roundtable meeting, and two national environmental summits. Presented at two EPA P2 coordinator’s meetings, two meetings with EPA Office of Pollution Prevention and Toxics director, Charlie Auer, and one meeting of the Multi-media Pollution Prevention (M2P2) committee at EPA. Participated on calls with EPA P2 coordinators, the M2P2 committee, the 2004 planning committee for the Environmental Summit, and the P2Rx/NPPR national measurement task force.
- (7) *Pursue partnership opportunities***
- Pursued partnership opportunities with the National Pollution Prevention Roundtable (NPPR), the EPA Office of Compliance Assurance (OECA), the Pollution Prevention World Information Network (P2WIN), GreenBiz.com, and the National Science Digital Library. One partnership was formed with the NPPR on a national measurement task force.

Project Description

1) Overall coordination

a) Calls and meetings

Monthly calls of the administrative group and Web group were held and minutes are posted at <http://www.P2Rx.org/AdminInfo/toc.cfm>. Subcommittee calls were also scheduled and held as needed.

The administrative group met January 10-14, 2005, in Orlando, Florida; April 11, 2005, in Chicago, Illinois (prior to the Environmental Summit); November 3-4, 2005, in Denver, Colorado (after the EPA P2 coordinators meeting); and February 6-9, 2006, in Las Vegas, Nevada. The Web programmers met January 25-27, 2005, in Champaign, Illinois, and the entire Web group met May 10-12, 2005, in Seattle, Washington. Minutes for all meetings are posted at <http://www.P2Rx.org/AdminInfo/toc.cfm>.

b) "User Guides"

User's guides present software code in a "user friendly" format with easy guidance and accurate, thorough technical information. These guides are important for potential external partners who want to share P2Rx information on their Web sites, but also for center personnel. The Web staff at many centers is transient because students do the work. Even with full-time professional staff, a reference guide is necessary until a significant level of familiarity is achieved. Guides also provide "institutional memory" for P2Rx.

Six guides have been produced. All the software code used for the Topic Hubs and "content sharing" has been documented. A user's guide for the Topic Hubs was created and reviewed. This guide goes "step-by-step" through the process of creating a Topic Hub. A special guide also was created to explain the display of the Topic Hubs, and the meaning of the numerical variables used in the database queries.

The Program Directory software code also has been documented and a user's guide created and reviewed. Additionally, a user's guide was created for the Concurrent Versioning System (CVS), which automatically maintains all revisions to software code. Guides for Bugzilla (the software used to track "bugs" in all P2Rx software products) and Web Trends (the program used to track activity on center's Web sites) were also created. All users' guides are posted at <http://www.P2Rx.org/AdminInfo/toc.cfm>.

c) Technical experts

One external technical expert consulted with the programmers in the Web group at the January 25-27 Web workshop in Champaign. Scott Butner of Battelle was a key participant as the centers needed to resolve their inconsistencies in the keyword database. Battelle has a separate contract with EPA and the money for Mr. Butner's assistance did not come from this grant.

A professional facilitator was employed at the P2Rx administrator's meeting in Chicago on April 11, 2005, to help the administrators identify the challenges and opportunities for P2Rx. A marketing consultant, used in the last grant period, was employed an additional time during this grant to report on user satisfaction surveys.

Outside technical experts were also employed on a limited basis to provide editorial review of Topic Hubs.

C) Training of PM

The new program manager, Andy Bray of the Northeast Waste Management Officials' Association (NEWMOA) and his staff, Nate Bisbee and Rachael Colella, were trained in several aspects of the program. Andy was instructed as to regular reports and communications that had been maintained. He was briefed on all aspects of working with the centers. Files and marketing materials were physically and electronically transferred to his office. Several planning calls were held. Time also was spent in person with him in conjunction with the February 7-9, 2006, P2Rx administrative meeting in Las Vegas.

Prabin Kanel, a software specialist in the PM's office, traveled to Boston February 13-17, 2006, to train NEWMOA personnel about P2Rx.org Web functionality, the P2Rx Topic Hub content sharing software, and the Program Directory software. During this grant period, several important changes were made to software operability and that information had to be taught to the new PM.

- Complete **content sharing of Topic Hubs**. The PM's office sent automatic periodic reminders to all centers to update their databases. This function was transferred. Two user's manuals were written for this product. Personal training also was conducted to ensure the new PM understood the function and software code.
- Reconciliation and update of the **keywords database** for all centers, which includes a system of adding and approving new keywords. Software was written in this grant period, and forms were produced so the PM can easily manage new keywords that are proposed. Training on use of this product was accomplished.
- Software was written so the **P2 Programs Directory** is centralized. Forms were created so users can enter their own changes to their information. Centers also can change the information. The directory is dynamically generated and displayed on centers' Web sites, as they choose. A user's manual was written for this product. Personal training was conducted to assure the new PM understands this product's function and software code.
- **Sector resources** from the centers were added to a database on P2Rx.org so they could be dynamically displayed as users browse through resources on P2Rx. To facilitate the collection of these resources, software was written and administrative forms produced for easy addition of data into the database. Training was provided to the new PM so they would understand how this system works and what is required to maintain the information.
- The Concurrent Versioning System (**CVS**) and **Bugzilla** are two tools used to help manage the software code used by the centers. The CVS keeps track of changes made to the software code so centers can be sure they have the latest version of code on their sites. Bugzilla is a management tool that allows centers to "post" a software bug or request an enhancement. Bugzilla automatically routes the request to a designated programmer within P2Rx. Both tools need ultimate oversight by the PM. Training in the use and function of these tools was provided to the PM

Kanel facilitated the transfer of all code and information from the P2Rx.org internet service provider (ISP) to the NEWMOA ISP in October 2006.

2) Coordinate national projects and regional collaborations

a) P2 Programs Directory

One significant step made during this project period was the centralization of the database for the P2 Programs Directory. The National P2 Programs Directory was originally maintained only on the P2Rx.org site. All centers maintained separate databases of regional P2 programs. Centers then shared their information periodically with the PM who compiled it into a single, national directory. During this grant, the centralized database was created on the P2Rx server. It is shared with every center, the National Pollution Prevention Roundtable (NPPR), and the Tribal P2 site (www.tribalP2.org). If desired, it is available to other partners via machine-readable, XML information exchange. Regional centers can choose to display only regional P2 Programs, or can display national and regional P2 programs. This is a significant improvement for all involved because centers now have automatic (dynamic) access to the regional and national information in this database.

b) Software assistance

Assistance was provided to centers in implementation of the Topic Hub content-sharing software. This software allows all centers to seamlessly share on their own Web page every Topic Hub created by all the centers. This feature serves the users well. Users remain on the Web site of their center, while having complete access to all the P2Rx Topic Hubs. Implementation of the software code, however, required some assistance because the expertise among Web personnel at different centers varied. The PM's staff provided assistance to all centers.

The PM's staff also served as a resource when center Web personnel wanted to undertake other tasks. By their involvement with center Web personnel, the PM staff was able to significantly shorten the learning curve for new center Web personnel. Also, when any Web person implemented a feature that might be useful to other centers, the PM staff was able to help facilitate the transfer of that knowledge.

c) Training

The PM staff actually went on-site to three centers for intensive, hands-on training of their personnel. Prabin Kanel worked with the new center, Zerowaste, in May 2004. He traveled to North Carolina to work with WRRC when they hired a new Webmaster in October 2004. He also worked with two different new programmers at P2RIC.

In addition to on-site training, Kanel spent several hours training new Web personnel at Peaks and WRPPN via conference call.

d) Topic Hubs

Centers continued to produce and share Topic Hubs. Ten new Topic Hubs were added to all center Web sites during the reporting period. The PM provided editorial and Web review for the new Topic Hubs, in accordance with the P2Rx QA/QC standard.

e) Keywords

Centers use keywords to describe publications and resources associated with the Topic Hubs. Initially, every center started with the same database of about 2025 keywords. As work on the Topic Hubs progressed, some centers needed keywords that were not in the original list. Each center added keywords as needed. Essentially, this meant that there were eight different keyword databases: one at each center. This created a problem when sharing Topic Hubs. The programmer in the PM's office took the lead, along with contractor Scott Butner of Battelle, to resolve this issue. It was not trivial to fix, but they devised a system to update every center's database and, more importantly, to provide a mechanism for new keywords to be added and

approved to keep all databases current and consistent. This system of updating keywords is functioning and the PM has administrative access to accept or reject any proposed keywords.

f) Rapid Response

Centers continued to cooperate in the national Rapid Response service. This service provides an e-mail form on each center's Web site that users complete and send, and is answered by center staff. If the center could not answer the question, the question was sent via e-mail to other centers for a response. This effectively utilizes the various expertise found at all centers.

g) P2 News

All centers are producing P2 News. An application was written by PM staff to facilitate publication and sharing of news. The software code was modularized, so it could be easily and discretely modified, and a database was created. This news application software was shared with the centers.

Centers can categorize each story as national, mercury, tribal, or funding news. All other stories would be considered regional P2 news and only displayed on that particular center's Web site. Stories categorized as national, mercury, tribal, or funding, are automatically displayed in those categories on P2Rx.org at <http://www.P2Rx.org/services/news.cfm>. The default display is "national" P2 news; the other categories can be displayed by clicking on the "browse by" button of choice.

The news is displayed for 14 days and then goes into an archive. In this way, news is kept current, but users can find a story they had seen in the past. The news is also provided via Really Simple Syndication (RSS) format. This machine-readable format is used by most major news publications and many offices at EPA. The advantage of RSS format is that news is easily shared, and users can set up their own "news reader" page to receive news of interest via the Internet. Yahoo and Google both provide this "news reader" service for free.

A "news box" is on the homepage of P2Rx, <http://www.P2Rx.org/>. This news box displays current national news stories. Users can import this box to their own Web sites, if desired. All centers display the national P2 news, in addition to their regional P2 news.

h) Coordination & Regional Collaboration Products

In addition to national projects, there are three regional collaborations. These are the "Request for Proposals" database, hosted by PPRC; the "Homes Across America" directory of environmentally friendly homes and home-builders hosted by Peaks; and the directory of "Mercury Prevention Programs" hosted by NEWMOA. For each regional collaboration, the hosting center is primarily responsible for the product, but each center must contribute to it by providing information from their region. The PM provided some oversight and encouragement for all centers to participate fully in these collaborations.

3) Maintain and improve P2Rx.org Web site

The P2Rx.org Web site is a portal to the services provided by all regional centers. The program manager was responsible for keeping the site current and for evaluating the usefulness and usability of the site.

a) Administrative content management

The P2Rx.org Web site now contains databases for the Topic Hubs, P2 Programs Directory, P2 News, Sector Resources, and Keywords. Prior to this grant period, none of these databases were on P2Rx.org. In order for the PM to manage these databases, administrative forms needed to be created. Forms allow data to be managed without directly opening the actual databases, which would create a high risk of unintentional corruption. Therefore, to allow for

content management, a new administrative section (protected by user name and password) was added to P2Rx.org, complete with forms for every database.

b) Topic Hub database on P2Rx.org

Centers were interested in Topic Hubs “content sharing” since their inception. The goal was for users to view all the content available without being redirected away from their center’s Web site. Centers could display Topic Hubs they authored, plus those authored by other centers. This framework allows every center to provide a broader service to its users. During this grant period, it was decided to “content share” the Topic Hubs on the P2Rx.org Web site. The database of Topic Hub information had to be added to the P2Rx.org site. This has been done and is operating effectively.

c) Centers’ Sector Resources incorporated on P2Rx.org

In order to try and make information easier for users to locate, it is organized in multiple ways on the Web sites. Centers have excellent publications on their Web sites, organized as “sector resources.” Sector resources are essentially collections of publications specific to an industrial sector, much like the “references” section of a Topic Hub. Sector resources do not have the context of a Topic Hub, nor are they necessarily peer reviewed. Still, it is valuable to users to have these publications gathered in one spot. With this in mind, the PM added the sector resources from every center to the “Topic Hubs and Sector Resources” section of the P2Rx.org Web site. This provides users with a comprehensive list of all information resources available through P2Rx centers.

The software code that was written and the database that was created to facilitate this incorporation of content were documented and modularized for future portability and improved functionality. Administrative forms were created for easy content management by the PM.

In the future, if centers migrate to a national library that contains all publications, sector resources could be dynamically displayed from the library database. Meanwhile, display of the sector resources along with the Topic Hubs is a significant improvement from the user’s perspective, because it shows all the resources that centers have collected on all topics.

d) Internal updates

Documents on the P2Rx.org Web site were checked annually for correctness. The list of “spiders” that are filtered out of the user session counts on the Web pages was updated semiannually. Additionally, contact information for the centers was kept current as center personnel changed.

e) Usability

Usability of the P2Rx Web site was measured at the May 11, 2005, Web meeting in Seattle. In response to the test, several things were changed. First, continued effort was placed on making sure information on P2Rx is indexed by Google. It was observed that users don’t look for information very long at the site before they simply go to Google and search for it. Scott Butner provided customized reports for every center so they would know what changes needed to be made to their information, especially their metadata, in order to have a higher rank in the Google search engine. These search engine “triage” reports are posted at <http://www.P2Rx.org/AdminInfo/toc.cfm>. The PM followed up with every center regarding their progress in this area.

The “essential links” title was dropped. In each Topic Hub, some references (links) may be primary references for a particular subsection. The links to these two or three references are displayed on the same page as the text for that subsection. These were called “essential links.” This title was confusing, however. Now these references are just displayed, and called “links.”

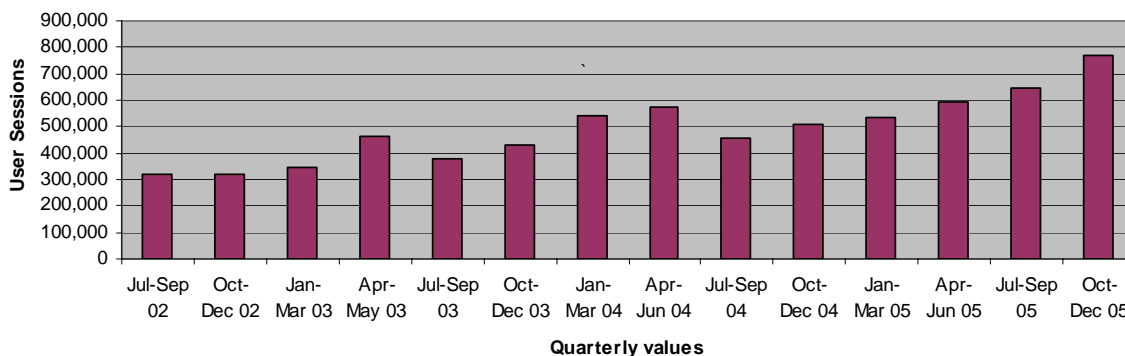
The section of the Topic Hubs called “complete list of links” was renamed “reference documents” because it is more descriptive of the content of that section and more intuitive to the user. The Topic Hub and Sector resource page was reorganized in order to make it clearer. A “Print Friendly Page” button was added to the Topic Hub pages. Other suggestions for changes are documented and can be implemented in the future.

4) Report P2Rx activities and progress

P2Rx uses standards for recording and reporting Web site activity and outreach and networking activities. The activities are provided to the PM twice per year, in July (covering January – June) and January (covering July – December). The PM interpreted and aggregated the information and reported it to EPA within thirty days of the end of each six-month period. These reports are posted at <http://www.p2rx.org/AdminInfo/toc.cfm>.

As can be seen from the activity reports, Web usage of P2Rx centers and products continually grew. In 2002, there were about 300,000 user sessions in three months. In 2005, there were about 750,000 user sessions in three months.

**Sum for All Centers
14 Quarters of Filtered Web Data
July 2002 - Dec. 2005**



5) Provide Topic Hub editorial and Web review according to P2Rx standards

P2Rx standards for Topic Hub QA/QC include an editorial review for grammar and consistency within the narrative of the Topic Hub and a review to assure that all Web links and functions operate properly.

Using a single editor for review of all hubs is efficient and affords the best possibility of overall consistency among Topic Hubs; therefore, the PM office provides this review. Likewise, the review of Web-related functions is provided by the PM. Web function is reviewed “in person” to assure that the links not only work, but take the user to the intended resource. During the grant period, ten new Topic Hubs were reviewed for editorial and Web function prior to being published.

6) Promote P2Rx

a) Professional display

A professional, table-top display that can be used by the PM or any center at meetings or events was purchased. P2Rx and every center have their own set of graphics, all of which were designed by the PM's office. The display has two panels and two "end caps." One panel is a graphic panel, "Pollution Solutions at your fingertips," that contains a collage of environmental and industrial pictures. A keyboard and hands at the bottom of the collage indicates that information is accessible via the computer. The end cap is the Web address, www.p2rx.org. The other big panel is carpet. Every center has a smaller, graphic panel they can place on this carpet panel. By having one carpet panel, information can be easily changed or customized as a center's needs change. This display will be useful for several years and in several venues. A professional display provides a level of user confidence in the quality of the product being offered. Photos of panels may be viewed at <http://www.P2Rx.org/adminInfo/display.htm>.

b) Promotional publications

Six promotional items were produced; the P2Rx annual report and calendar, a handout that detailed the results of the user surveys, a handout showing the P2Rx response to user surveys, a handout showing the collaboration among P2Rx and various other P2 and environmental programs, and brochures on P2Rx, and a "Topic Hub User's Guide." All promotional items are available at <http://www.P2Rx.org/adminInfo/TOC.cfm>.

The calendar/annual report was produced in an environmentally friendly manner, using 30% post-consumer, 100% recycled-content paper and no flood finish wash. The appearance of the product is different from a typical glossy calendar. Every month features a different P2Rx Topic Hub, and the center that authored it. Many of the dates are marked with significant environmental events or anniversaries. The calendar serves as a tangible reminder of P2Rx at the desk of our target users. Calendars are distributed by the centers to their P2 roundtables and other user groups. Much positive feedback has been received about this product.

P2Rx in the past produced brochure "folders" designed to be used for years. The small folders were professionally printed with individual centers' contact information on the back. Unfortunately, the contact information (including Web addresses and phone numbers) changed for several centers. Initially, labels were simply printed and placed on the folders. The labels covered the incorrect information and provided correct information. After several centers had information changes, though, the back of the folders were covered with labels and didn't look very professional. Also, the inside of the folders contained "loose leaf" information sheets on various P2Rx products. Originally, centers expected to produce their own inserts as appropriate for various meetings. Unfortunately, it was difficult for individual centers to do this. Also, it was observed at meetings, that people wouldn't pick up the folders because they thought they already had seen it, even if the internal contents had changed. For these reasons, it was decided to produce fewer marketing pieces at a time, and to keep them brief. Rather than professionally printing the pieces, they now are produced on a color laser printer as needed.

Two tri-fold brochures were produced. One is a "general" P2Rx brochure which lists all contact information for each center, and the four main products produced by the centers, Topic Hubs, P2 News, P2 Programs Directory, and Rapid Response, http://www.p2rx.org/adminInfo/p2rx_brochure.pdf. The other brochure focuses on Topic Hubs and specifically points out the features of these valuable, online resources, http://www.p2rx.org/adminInfo/topichub_brochure.pdf.

Some “one-page” promotional sheets were also created. These were designed to introduce new products. The four “Topic Hub Promos” produced under this grant were for Dry Cleaning, Semiconductor Manufacturing, Electronic Waste, and Food Service. These marketing pieces can be viewed at <http://www.P2Rx.org/adminInfo/TOC.cfm>.

Other documents produced include:

- “Newsletter April 2004,” which announced new P2Rx resources and providing Center updates;
- “User Survey Results,” which outlined the results of online surveys and the demographics of our users;
- “P2Rx Responds to You,” which listed changes made as a result of the online survey results;
- “Collaboration Handout,” which highlighted the networking opportunities facilitated by P2Rx centers plus the efficiency of information retrieval via p2rx.org; and
- “P2Rx Fun Walk Map,” which showed the route for the Fun Walk at the 2005 Environmental Summit on one side of the quarter-sheet of paper, and a schematic map of the area around the hotel on the other, with Summit venues highlighted.

All these marketing pieces served specific audiences. They were printed for meetings and also e-mailed as appropriate.

c) Promotional gifts

A P2Rx pedometer was purchased to be given away for participants in the Summit Fun Walk in Chicago. P2Rx post-it pads, which proved to be popular items at the display booth, were purchased again.

d) Promotion at meetings

P2Rx.org’s primary users are the professionals within P2 programs and compliance assistance programs in the states. These people typically attend regional P2 roundtables. Attendance at these roundtables is very useful, both to promote P2Rx and to interact with the users to learn of their information needs. During this grant period, the PM attended six P2 Regional Roundtables: two in Region 7, two in Region 9, and one each in Regions 5 and 8. The PM also attended the Region 10/Canadian P2 Roundtable.

Two national environmental summits were attended and P2Rx-sponsored Fun Walks were held at each meeting. The Fun Walk promotes alternative networking and health, and provides a philanthropic opportunity to participants, who can contribute to a local environmental charity via their participation. The Fun Walks provide a high degree of visibility for P2Rx. The P2Rx display also was featured at all of these meetings and events.

Presentations on P2Rx were made at two different meetings of the EPA Regional P2 coordinators. One of the presentations was a general update; the other was a significant program evaluation. Updates were also provided in meetings with Charlie Auer and the M2P2 committee. Copies of the presentations are available at <http://www.P2Rx.org/AdminInfo/toc.cfm>

The PM participated on several calls, including significant participation on the planning committee for the 2004 Environmental Summit and the P2Rx/NPPR national measurement task force.

7) Pursue partnership opportunities

A partnership with NPPR was developed and formalized with the signing of a Memorandum of Understanding (M.O.U.). NPPR displays P2Rx’s P2 Programs Directory on its

Web site. NPPR and P2Rx cooperated on a task force for P2 measurement. This included NPPR funding for P2Rx to write some software code.

The PM held talks with several other organizations about forming partnerships. These include the EPA Office of Compliance Assurance (OECA), the Pollution Prevention World Information Network (P2WIN), and GreenBiz.com. Without exception, these groups were open to the possibility of partnering but no formal agreements were concluded. The new PM can continue discussions with these and other groups.