

## COMMUNICATION TOOLS FOR THE HANFORD ENVIRONMENTAL DOSE RECONSTRUCTION PROJECT

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### ABSTRACT

From 1944 to 1989, the U.S. Department of Energy produced plutonium at the Hanford Site in southeast Washington State. In the early days of operation, large amounts of radioactive materials were released to the environment.

Documents about the releases were made public in 1986. The Hanford Environmental Dose Reconstruction Project began in 1987. The Project will determine how much radioactive material was released, how that material may have exposed people, and what radiation doses people may have received. The Project will be complete in 1995. The federal government pays for the work. The scientific work on the study is done by Battelle's Pacific Northwest Laboratory.

Public credibility and valid science are equally important to those directing the dose reconstruction work. A number of tools are used to inform the public and encourage public participation. These tools are examined in this paper.

### TECHNICAL STEERING PANEL DIRECTS COMMUNICATION PROGRAM

A Technical Steering Panel (TSP) of independent scientists and experts was created in 1988 to direct the Hanford Environmental Dose Reconstruction Project. This extraordinary approach was taken, in large part, to "clear the air" and enable public discussion of past nuclear activities at Hanford. The U.S. Department of Energy, the Northwest's political leaders, and others recognized that only a truly independent and credible study of past Hanford radioactive releases would satisfy the public.

The TSP realized early that it must assume responsibility for the study's public communications for the TSP to meet its mandates for independence and credibility.

The TSP must communicate with different audiences. These include:

- persons who may have been directly affected by past Hanford releases,
- people in the region with a general interest in Hanford and nuclear issues,
- professionals in the fields of radiation, environmental transport, and medicine, and
- potentially affected people who live in other parts of the country.

The level of background information and knowledge varies widely within and between these groups. At the beginning of its work, the TSP agreed to write public information material at a lay reading level. Technical material about dose reconstruction is often very complex. The challenge was to write material that would adequately describe the Project and its findings in an understandable and accurate form. It was clear that making large volumes of difficult-to-understand documents available to the public would not serve these TSP goals:

- public accountability,

- public participation in decisions about the research, and
- ultimate credibility of the results.

One of the TSP's goals, then, is to translate the technical dose reconstruction data into easily understood information. Another goal is to provide descriptive graphics, simple explanations and technically accurate information to the media. Television, radio, and newspapers are the primary sources of information for a majority of people who learn about the study.

### THE PRODUCTS

Communication products for the TSP are developed by a Communications Subcommittee of seven TSP members. Information materials are drafted by TSP members and staff on appropriate topics. Editing, design, printing, and distribution are handled by TSP staff in the Oregon Department of Energy and the Washington Department of Ecology. Communications are clearly represented as being produced by the TSP.

The TSP Communications Subcommittee meets monthly. The group makes decisions on the direction of the communications program and evaluates current public information/involvement methods. The subcommittee uses the information gathered in surveys, focus groups and comment forms to develop annual communications plans and budgets.

The TSP uses a variety of tools to reach different audiences.

- A quarterly newsletter written and edited to be easily understood. The newsletters emphasize current TSP activities and how to get further information and to interact with the TSP.
- Fact sheets written by TSP members cover a variety of topics, from basic radiation and health effects to Hanford history. Members write the fact sheets in clear, lay terms and use simple illustrations. The TSP now has eleven fact sheets, and has printed over 50,000 copies.

- Reports of preliminary results were released in July 1990. Three versions were prepared and made available. A small summary, very graphic and readable, was written for media and the public. A lay summary helped those who wanted more information. Two technical reports on atmospheric and river pathways were provided for technical reviewers.
  - A video, about 15 minutes in length. The video explains how and when radioactive releases occurred from Hanford, introduces the Project, and suggests ways viewers can get more information or be involved in the Project. Several hundred copies went to libraries, hospitals, and community groups throughout the Northwest.
  - A toll-free "hotline" is widely advertised in all the above-mentioned materials. Callers may request copies of printed information, the video, or other resource material, as well as inclusion in the mailing list for the newsletter, meeting notices, and fact sheets. Some callers have specific questions, which are answered by staff or a TSP member. A recorded message also informs callers of upcoming TSP meetings. The hotline receives approximately 50 calls per month when there are no major media releases.
  - A speakers bureau to assure easy public access to technical information about the Project. Members speak to civic groups, the medical community, scientific groups and others on request. Evaluation forms are used to get audience feedback on the effectiveness of the presentations. The forms are also used to obtain mailing list information for those interested.
  - Public meetings were initially conducted in conjunction with each TSP meeting. The informal meetings were conducted with all eighteen TSP members and the public in a "roundtable" format. When audiences began to dwindle, two or three TSP members were sufficient to facilitate the meetings. In an effort to increase audience size, the TSP began to "go to the public." The TSP now conducts public meetings in conjunction with regular TSP meetings. These generally reach small audiences. Larger numbers are reached through presentations to civic groups, schools and professional organizations.
  - A "Q & A" brochure helps the TSP answer the most common questions about the Project. The brochure is included in new mailings and is used at public meetings and presentations.
  - Quarterly and annual reports help keep interested parties up to date on the TSP's work. The Communications Subcommittee provides quarterly reports to assure that the TSP and the public are aware of ongoing public information activities. Public feedback about this report is positive.
- The TSP issued two annual reports. The cost was substantial. The annual reports did not appear to be widely read or used as references. Annual report

information is now condensed and included in a special issue of the quarterly newsletter. Public reaction to this approach is good.

- Advertising for TSP meetings, community meetings, and video marketing varies. *Less expensive advertising* in weekly or limited circulation daily papers works well in small communities. Advertising in costly, large circulation newspapers is under consideration to promote the TSP "hotline" and video.
- A poster for stand alone use in libraries, meeting places and other locations, when complete, will also help advertise meetings. The poster is designed to get public attention and inform about how to find out more about the Project.
- Direct mail quarterly meeting agenda packages are sent to more than 4000 citizens and the region's media. These include the TSP meeting agendas, notice of committee meetings, a summary of the previous meeting, and a request form for printed materials. Thirty-five recipients returned the most recent request form. Responses have ranged as high as 75 from a single meeting.
- News releases are sent to over 100 media when there is something important to communicate. Key TSP members are available to respond to media inquiries resulting from these releases.
- Repository libraries in ten Northwest cities receive all TSP documents and key background documents and reports from Battelle Pacific Northwest Laboratory. This allows citizens in those communities ready access to technical materials.

### EVALUATION

The TSP Communications Subcommittee used two random telephone surveys and focus groups to help identify its audiences and evaluate communication tools.

Washington State University administered the most recent telephone survey in the summer of 1991.\* The TSP commissioned this survey to determine the attitudes, opinions, and level of knowledge that Washington and Oregon residents have about the Hanford Environmental Dose Reconstruction Project.

Three groups of people were surveyed: (1) residents of Washington State, (2) residents of Benton and Franklin counties in Washington (the two counties closest to the Hanford Site), and (3) residents of 12 Oregon counties (nine that border the Columbia River, plus three counties in the Portland area). Respondents were chosen by random methods. The Research Center completed a total of 1,129 surveys, roughly 380 completed surveys for each group.

Analyses of the data indicated that people are interested in the Project; that the TSP's public information efforts are well targeted; and that the TSP needs to continue to communicate with the public in a variety of ways. The survey also found that:

\* "Public Opinions and Attitudes about the Hanford Environmental Dose Reconstruction Project: A Telephone survey of Washington and Oregon Residents," August, 1991. Social and Economic Sciences Research Center, Washington State University, Pullman, Washington.

- people are aware of the study -- but don't necessarily know the name of the Project. Only 13% of the Washington (WA) respondents, 31% of Benton/Franklin (B/F) respondents, and 8% of the Oregon (OR) respondents said they had heard of the Dose Reconstruction Project by name. However, after the Project was described to the respondents, the numbers of positive responses increased to 37% for WA, 61% for B/F, and 32% for OR.
- there is concern about past Hanford releases and the resulting exposures which may have occurred. 49% of the WA respondents, 39% B/F, and 51% OR said they were very or somewhat concerned about the possible exposures they may have received from Hanford.
- there is a lot of interest in receiving public information materials about the Project. About three quarters of all respondents said they were very or somewhat interested in receiving more information about the Project.
- among those who are familiar with the Project, the news media is currently their primary source of information about the Project. 75% of the WA respondents, 50% B/F, and 65% OR listed newspapers and television news as their top two sources of information about the Project.
- fact sheets and newsletters mailed to the home were the top choices for how we should inform people about the Project. About 86% of all respondents felt newsletters were very or somewhat useful, and about 84% of all respondents felt the same about fact sheets.

Displays at public libraries ranked next (about 70%), followed by: a video (64%), an information hotline (63%), information displays at shopping centers (56%), public meetings in local communities (55%), and presentations to local civic groups (55%). A computer bulletin board received less support (about 35%).

The survey results confirmed the TSP's strategy to communicate with the public in a variety of ways. Newsletters and fact sheets have been a primary focus of our public information efforts. A poster display for libraries and shopping centers is being developed. More than 250 copies of the video were distributed to libraries, hospitals, schools, and organizations late in 1991. The hotline has been available for nearly two years. The survey results suggest that TSP members and staff need to devote more time and effort to media contact.

TSP staff are presently arranging for more detailed evaluation of communications products by focus groups. We plan to recruit two small groups from those who receive TSP materials by direct mail. We will also introduce the products to two other groups selected from civic organizations that have not been directly involved in Hanford issues.

We feel strongly that the communications program must be dynamic. Activities and products are continuously reviewed and evaluated. Those that do not meet the TSP's public information needs are discontinued or replaced. We found that public meetings alone are not adequate for effective public communication. Although they have proven useful at times, and we still want to make ourselves available to the public through evening meetings, we have de-emphasized our use of public meetings.

#### PIONEERING IN PUBLIC SCIENCE

The work of the Technical Steering Panel and the Communications Subcommittee was critical in the development of one of the first publicly open scientific studies. The Public Information and Involvement Program took creative and innovative approaches to address myriad concerns and a skeptical public. The success of the program thus far is based on obtaining the public's help in designing the program.

The TSP has attempted to be accountable in its scientific activities by providing adequate and understandable information to the public to enable them to evaluate its work. The TSP also attempted to get basic information to those who might have been affected by Hanford releases, wherever they now live. This has meant--and continues to mean--designing, changing, and refining a variety of public outreach products.