# PUBLIC AGENCY PARTNERSHIPS: HANFORD'S HISTORY ARTIFACTS AS A COMMUNICATIONS TOOL

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## ABSTRACT

The Hanford Site in eastern Washington state currently is engaged in the largest waste cleanup in world history. In order to make informed decisions about remediation options, the public throughout the Pacific Northwest and the nation needs to understand the wastes that are present, their sources of generation, their composition, and their behavior in the environment. The fact that Hanford operations were conducted in secret for over four decades presents a unique public information challenge to those who currently are responsible for communicating with the public.

Public meetings held in the Hanford region early in the cleanup period disclosed that even the most rudimentary facts about plutonium production were mysterious to most residents. The fact that most Hanford workers had spent their lives forbidden to talk about their work added to the information chasm. Compounding the challenge were and are the vast range, variety, and number of Hanford buildings, facilities, and waste disposal sites needing remediation. The Site extends over 560 square miles, has been the home to over 10,000 structures, and now is divided into over 1,400 specific waste sites (grouped into 78 "operable units"). The primary task of establishing a common information base for interested sectors of the public constitutes an almost overwhelming effort. Many types of communications efforts are necessary, to reach as many people with as much pertinent information as possible.

One avenue of successful communication with some sectors of the population of the Pacific Northwest is being achieved through a unique partnership between the Hanford Site and responsible public agencies in the field of regional history. The Washington State Historical Society, Washington State University, and the city of Richland (home to the Hanford Site) are in the process of forging a partnership with the Site to retrieve and become joint stewards over historical artifacts being found as the older Hanford facilities undergo decontamination and decommissioning (D&D).

Under the auspices of this partnership, historical models, tools, scales, equipment pieces, vehicles, containers, and other objects used at the Site over the years of defense production, will be given cleaning and curatorship before being placed on exhibit in various places throughout Washington State. Along with the physical care, the artifacts will receive study and interpretation. Public brochures, diagrams, booklets, and flow charts will be prepared for distribution at the exhibit sites. Public programming, featuring scholars who become attracted to the study of Hanford's past also will be part of the communications effort. The very uniqueness of the exhibit material will draw people to read and absorb important information about the workings of the old Hanford facilities.

Additionally, the partnership hopes to integrate Hanford's legacy, and the current debates over how to deal with that legacy, into the mainstream of modern American and regional history. To historians, the Hanford experience, while unique in some ways, is an integral part of many important, broad themes being experienced throughout the American West. Debates over Columbia River usage, the tugs among federal, state and local authorities for jurisdiction over key resources, town building and the struggle for diversification as a large federal presence diminishes, conflicts over the siting of waste repositories and incinerators, as well as many other timely issues, tie the Hanford region to other Pacific Northwest areas undergoing similar debates.

The partnership forged between the Hanford Site and the public agencies interested in the interpretation of Hanford's history also makes tangible a response to some very important values expressed at regional public meetings throughout the past few years. Revelations about Hanford's wastes in the late 1980s stirred powerful and mixed emotions in the region. People expressed anger, disbelief, fear, confusion, and many other feelings. The need for more information about how, why, when, and by what processes the Hanford wastes were generated was obvious and outspoken. Furthermore, the desire to receive that information from credible agencies in addition to the Department of Energy was expressed.

This paper will tell the story of the public's expressed reactions to revelations about Hanford's past, the role that history can play in forging a common sense of heritage and legacy in the region, and of the beginnings of a unique partnership to improve understanding and communication through the use of historical artifacts.

## SECRECY OF THE HANFORD ENGINEER WORKS

During World War II, the Hanford Engineer Works (HEW - earliest name for the current Hanford Site), was created in complete secrecy to produce plutonium "for the war effort." Because it was launched with such a powerful federal mandate, this mission was largely accepted by the public and non-federal entities. Everything about the Hanford Site selection, the construction management, and the operation of the plants during wartime and throughout the early postwar period was mandated by federal decree and federal power, embodied in the War Department and the Army Corps of Engineers.

During World War II itself, when a peak of over 50,000 workers were employed at HEW, less than one-half of one percent of these people knew the purpose or nature of the huge plants that were under construction. Richland, rebuilt as a federally owned and operated city, was filled with people

who, according to one woman, learned to "see no rumor, hear no rumor, speak no rumor." Among such residents was Reva Matthias, wife of the site commander, who learned of the Hanford *mission from* her radio on August 6, 1945, the day that President Harry s. Truman released the story of the Manhattan Project's existence to the world. (1)

Wartime recruiting carried out by the DuPont Corporation for Hanford was vague, consisting only of hints that the assignments involved "important war work" and that they were located "out West." Once on the job, workers encountered a system of strict boundaries that limited their access to many parts of the Site and to information about various parts of the building plans. According to General Leslie R. Groves, head of the entire federal effort to produce atomic weapons, construction drawings were "broken down to disclose as little as possible." (2)

Outside of HEW, it was virtually impossible to learn anything about the hugh project. Everything about the endeavor was placed within the restricted clauses of the wartime Code of Fair Practices. Even the amounts of food and other supplies consumed by workers was classified so that no one could guess the scope of the project by the size of the work force. Newspaper editors and questions...or speculating." (3) Activities at Hanford also were kept secret from local and state Selective Service boards, courts, government agencies, civic leaders and from the stockholders of companies involved in the construction. Officials of the Bonneville Power Administration, supplier of electricity to much of the Pacific Northwest, did not know the nature of the huge "mystery load" draining the power grid.

Even at the highest levels of government the Hanford project was so secret that the Joint Chiefs of Staff, as an organization, was not told about it, and the State Department was not informed until shortly before the Yalta Conference among American, British and Soviet leaders in February 1945. Investigative attempts by Senator Harry S. Truman and others were quashed each time they began, and Truman was not told even after he became Vice President. He first learned of the giant, secret undertaking on the night after President Franklin D. Roosevelt died! (4)

## SECRECY AND FEDERAL CONTROL CONTINUE IN THE POSTWAR ERA

Throughout the subsequent four decades of the Cold War, a strong tradition of secrecy prevailed and was maintained at Hanford. The Atomic Energy Commission (AEC), created by the McMahon Act of 1946, assumed control of the U.S. atomic complex on January 1, 1947, shortening HEW's name to Hanford Works (HW). Under the influence of powerful national expressions of concern over defense preparedness, and in the face of rising international tensions, the Commission decided upon a major expansion of the Pu-239 *production* plants at Hanford. Between 1947 and 1955, three hugh expansions took place at the eastern Washington desert site, without consultation or coordination with local or state officials or with other federal agencies.

Again, like the wartime Hanford project, these giant endeavors had profound effects on the socioeconomic structure of the Hanford area, on land use patterns throughout the region, on state and local budgets, and on natural resources. Protests by Benton County officials that the federal hold over a large portion of county lands eroded the county tax base, and objections by Native Americans that their traditional worship and fishing practices had been dislocated by Hanford were not strong enough to effect change in the powerful federal mandate that steered the huge endeavor. (5)

Throughout the Cold War years, some attempts were made by state and federal agencies to become involved in issues at HW, but few of these attempts brought real decision-making impact. According to public opinion surveys and the observations of visitors, Richland became a town where employees simply never talked about their work. (6) Cold War imperatives kept Hanford a very secretive and closed place, with little public input into site decisions.

## INFANCY OF PUBLIC INVOLVEMENT IN HANFORD SITE WASTE MANAGEMENT DECISIONS

In 1969, the National Environmental Policy Act (NEPA) was passed, mandating, among other things, the development of an Environmental Impact Statement (EIS) for each project involving natural resources and the opportunity for public comment on such statements. At the Hanford site, the first comprehensive draft EIS on defense waste management appeared in early 1975. A multitude of federal, state and local agencies, as well as private groups and individuals, took this opportunity to submit comments and questions on Hanford Site waste management practices and plans. However, it is difficult to determine whether these comments caused significant inroads into site decision-making, because waste management decisions for the next decade were obscured by so many other factors.

Major changes took place in the structure of the federal management agency, as the Energy Research and Development Administrative (successor to the AEC), was replaced by the U.S. Department of Energy (DOE) in 1977. Vast changes also occurred in the defense planning strategies of the nation, including a major nuclear defense build up that began in the early 1980s, and in national defense waste plans, including the Nuclear Waste Policy Act of 1982. Multiple contractor changes also took place at the Hanford Site, major facilities opened and closed, and the site's mission was defined and redefined many times during this period.

## PUBLIC INVOLVEMENT IN HANFORD SITE WASTE MANAGEMENT DECISIONS COMES OF AGE

With the release of thousands of pages of Hanford historical documents, beginning in February 1986, the mandate for public involvement became stronger that the older mandate of federal authority. Ongoing releases now have brought total document releases to well over 100,000 pages, with new releases occurring almost daily. This total represents more information than is available about any other nuclear defense facility in the world. From the Hanford historical documents, the public began to learn of the nature and extent of Hanford Site wastes.

Initial reactions in the Pacific northwest included all of the roller-coaster emotions of a community grief process: shock and denial, anger, fear, powerlessness, and the need and desire to act. The state of Washington assembled a Hanford Historical Documents Review Committee and began to prepare abstracts of the voluminous and complex documents. Oregon and Washington, the Indian Health Service, and the Yakima, Umatilla and Nez Perce Indian Nations formed the Hanford Health Effects Review Panel. They called in experts from the U.S. Centers for Disease Control and the Washington State Department of Social and Health Services. Meetings were held in schools, city halls and grange halls. Newspaper and other media carried the story for years. Speakers,

editorials, and letters to the editor expressed a sense of betrayal and distrust of the DOE. Eventually, concerned citizens persuaded the DOE and Congress to fund a Hanford Dose Reconstruction Study and a Hanford Thyroid Disease Study, to assess potential and real radiation doses to populations living near hanford during the 1940s through the 1960s.

Additionally, the Hanford Federal Facility Agreement and Consent Order (known as the Tri-Party Agreement or the TPA) was signed in May 1989 between the DOE, the EPA and the Washington State Department of Ecology. The TPA was a historic document in terms of the authority to govern affairs at the Hanford Site that is vested in entities outside the DOE or its predecessors). Furthermore, public involvement at a new and unprecedented level was mandated in the Tri-Party Agreement. (7)

Soon, the Hanford Site was engaged in other endeavors and programs that brought the decision-making process to the public. Throughout 1992, the Hanford Future Site Uses Working Group, consisting of representatives from widely divergent groups of citizen-stakeholders, met to reach agreements on the future uses of Site lands. In 1993, the city of Richland announced plans to annex two large areas of Hanford (the 1100 and 300 Areas), and Benton County reached a precedent-setting agreement with the DOE to collect revenues in lieu of past property taxes that it had not received throughout the years of federal Site occupancy. The DOE also announced major initiates to privatize as much as possible of the business of researching and cleaning Hanford, and to transfer large tracts of Site boarder and buffer lands to other owners. In January 1994, the Hanford Advisory Board, a diverse group with a wide range of regional representatives, began meeting with the DOE and its contractors as a "permanent" body. (8)

## NEED FOR COMMUNICATIONS GROWS EXPONENTIALLY WITH PUBLIC INVOLVEMENT

With each step toward community involvement in Hanford Site affairs, the need for information became more pressing. A summary of public comments received during an early series of public meetings held under the auspices of the TPA revealed that Northwest residents wanted the DOE "to change its culture from one of secrecy and arrogance to one of openness and responsiveness." Furthermore, stated the summary, the DOE "should work with the States, Indian Nations, the EPA and the public to define cleanup...clearly and completely explain to the public its waste problems...present to the public and evaluation of wastes that will be produced in the future...explain to the public how much money is needed for Hanford cleanup...[and] develop new cleanup technologies...[that] provide better long-term protection." (9)

## HISTORICAL RESEARCH AND DISCOVERY FILLS MANY NEEDS

At the Hanford Site, in-depth research began to discover, organize and interpret the long and complex history. Much of this research was goal-directed: Where were certain types of wastes? What processes had taken place in various buildings? What chemical and other components had been used? What was buried in the solid waste burial grounds? Which buildings had significance as cultural resources and why? What construction standards and methods were used in WWII and in other bygone eras? Which components and equipment were replaced in facilities over the years? What non-defense programs were carried out at the site and what wastes resulted from them? these and many more *specific* engineering questions, it was found, could be answered by historical research in a cost-effective and safe manner. In fact, millions of dollars in physical characterization costs were saved through the use of historical research. (10)

Beyond the technical uses of history at the Hanford Site, however, an additional and very broad value emerged. It was discovered that demand for historical information was extremely high, among both employees and the general public throughout the region. Presentations, publications and exhibits on Hanford's history were well received, and were followed by many additional requests. Perhaps the rapid government expansion of Richland in the years beginning in 1943, bringing so many newcomers, had grown a sense among residents that they had no shared past.

When the common tie of living through Hanford's history and its impacts became open and available to them, regional residents found that they had much in common. they also found that they shared a great deal with residents of other sectors of the American West, in terms of economic, ecological, demographic and other impacts of rapid growth and then retrenchment. The history and current legacy of the Hanford region, it turned out, was similar in many ways to those of regions around large military bases, large reclamation and development projects, and other federal projects that boomed in the 1940s and 1950s, and then were cut in the 1990s.

## PUBLIC AGENCY PARTNERSHIPS OPEN MANY DOORS TO NEW COMMUNICATIONS

Hanford's operating contractor, Westinghouse Hanford Company (WHC) was challenged by tidal wave of regional demand for historical information, for discovery, for explanation, and for guidance. WHC chose to reach out to other public agencies responsible for, knowledgeable about, and interested in regional history. Today, a new partnership is being forged between the City of Richland, the Washington State Historical Society, and potentially Washington State University and other public entities. Just in its infancy, this partnership has identified its first task as identifying, retrieving, cleaning, and displaying unique historical artifacts from Hanford's older buildings. The task is urgent, as many of these buildings are scheduled for rapid D&D.

It has been said that Hanford's machinery and equipment is an art form, because it is so different and unparalleled. Often developed in on-Site fabrication shops for a specific ans singular purpose, each equipment piece served the need of a special apparatus to operate in a new manner, reach a different power level, hold a different amount of solution, or maintain criticality control for a different product stream. Thus, each performed a unique role. Additionally, entire mock-ups of reactor control *rooms exist*, as do large and precise models of many of the buildings and key equipment pieces. However, many of these items do not qualify for compliance-driven protection under the National Historic Preservation Act.

Recognizing immediately the communications value of such matchless equipment pieces, WHC and its partners intend to place the items in both traveling, stationary and rotating exhibits. The unique visual impact of these artifacts, it is believed, will draw the curious, especially in this age of multi-dimensional communication. Videos and informational brochures and packets will be prepared for many levels of audiences, stratified by age, level of interest and previous knowledge, and other criteria. The artifacts then will become the vehicles from which to communicate all aspects of the

Hanford defense production mission: fuel fabrication, reactor irradiation, chemical processing, waste disposal, transportation, and others.

Through further partnerships with historical museums in other states, other DOE sites, and some parts of the Department of Defense, the Hanford story can be integrated into the mainstream of twentieth century American history. This project, in more concrete terms than most endeavors, reveals that at Hanford today, secrecy and federal sovereignty have been supplanted by openness and public involvement. The yield will be a heritage and a Site returned to its people.

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