

HANFORD

UPDATE

A quarterly newsletter on the environmental restoration of the Hanford Site

December 1989

Vol. 1, No. 2

Agreement update, revisions proposed

The first annual update to the work schedule contained in the Hanford Federal Facility Agreement and Consent Order (the Agreement) will be accompanied by proposed changes to the Agreement and its Community Relations Plan, the three parties announced.

"The Agreement has been in place for about seven months, and in working with it we've noticed a few areas that need to be enhanced, clarified or corrected," says Roger Stanley, of the Washington State Department of Ecology. The other two parties to the 30-year Hanford cleanup agreement are the U.S. Environmental Protection Agency and the U.S. Department of Energy, which operates Hanford.

The work schedule annual update, along with the proposed changes to the Agreement, and the Community Relations Plan, will be available for public comment from December 22 to January 31. They can be reviewed at the four information repositories listed on Page 4, or obtained by contacting any of the community relations representatives, also listed on Page 4. They will also be

available at public meetings to be held in Pasco January 3 and Vancouver January 4.

Annually, the Agreement's seven-year work schedule is updated to expand the level of detail for the upcoming calendar year and add a year at the end of the schedule, in this case 1996. In addition, Appendix B, identifying Treatment, Storage and Disposal groups, and Appendix C, identifying operable units, are updated to incorporate any approved changes or other

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Quarterly meetings scheduled for January

Quarterly information meetings will be held in January in order to coincide with the public comment period on proposed revisions to the Agreement, its work schedule and the Community

Relations Plan. public an opportunity to learn more about the process and the proposed changes," says Paul Day, the EPA's Hanford Project Manager.

Other topics to be discussed will be an update of recent work completed under the Agreement and work scheduled for the upcoming months. Also to be discussed are current issues such as the assessment of existing liquid disposal operations.

The Washington Nuclear Waste Advisory Council will meet earlier on January 4, also at the Red Lion Inn at the Quay. The Advisory Council meeting will be held from 8:30 a.m. to 4:00 p.m. and is open to the public. ■

PASCO	VANCOUVER
January 3	January 4
7-9 p.m.	7-9 p.m.
Red Lion	Red Lion Inn at the Quay
2525 N. 20th	100 Columbia St.

Relations Plan.

"This is our first round of annual revisions and we felt it was important to give members of the

Hanford research center works to answer cleanup questions

Providing and demonstrating the technology needed to clean up Hanford's 45 years of chemical and nuclear wastes is the role of the Northwest Hazardous Waste Research Development and Demonstration Center, operated by Battelle, Pacific Northwest Laboratories at Hanford.

Terri Stewart, who manages the Center, says her organization was established in 1987 as part of the Superfund Amendments and Reauthorization Act. The goal is to provide technologies for identifying and determining the extent of contamination and for cleaning up waste sites.

The early stages of cleanup at Hanford often involve finding out just what is below the surface of the ground. Records don't always show exactly what was buried during Hanford's early years. Stewart says the Center is working to improve on an existing process which allows radar to penetrate below ground. "This would help us better understand the location of underground drums and pipes. Since the site is not disturbed during these tests, the technique provides a safe working environment to the workers."

Beneath Hanford's surface, large bodies of groundwater have been contaminated from past waste disposal practices. Although none of the water is used for drinking, it will be studied to determine if there is a long term potential threat to the

environment that may require cleanup. One possible solution being developed at Battelle is the use of biological treatment to destroy chemicals such as nitrates and carbon tetrachloride.

Stewart says Battelle is also planning to demonstrate soil washing to remove heavy metals, radionuclides or organic substances. "The technology was tested by the Environmental Protection Agency. It has been used in Europe, but not in the United States on a large scale," she says. "We are trying to adapt it to our needs at Hanford."

Certain types of Hanford waste will remain on site, buried in a variety of forms. To prevent water from getting to the waste, field studies are being conducted to design a protective barrier. It must isolate the waste for long periods of time and will require no maintenance. The protective barrier must also limit the potential for intrusion from plants, animals, or humans.

"We don't have all the answers to the cleanup effort yet," acknowledges Stewart. "In keeping with the Department of Energy's mandate of cleaning up Hanford, we will do so by developing and demonstrating technology that will help us reduce cost, improve performance, and accelerate the schedule while ensuring public health and safety." ■

Work on schedule

Characterization of the first Hanford area to undergo the Superfund cleanup process is proceeding on schedule.

Soil samples are being analyzed from six waste sites in Hanford's 1100 Area, the site's equipment maintenance area which also houses a landfill. Groundwater monitoring wells are being drilled. Ground-penetrating radar and other geophysical techniques have been used to pinpoint the location of debris in the landfill that may contain hazardous wastes. Characterization of the 1100 Area is expected to take about three years. ■



Meet Steve Wisness

Effective January 3, 1990, Steve Wisness will be the Department of Energy's Tri-Party Agreement project manager, announced Ron Izatt, DOE's Environmental Restoration division director. Wisness succeeds Roger Freeberg, who will continue to manage the DOE Environmental Restoration Branch.

His responsibility will be to manage Tri-Party Agreement implementation and intergration, including the tracking of Agreement milestones to ensure they are completed on schedule. He also will serve as the focal point for all DOE internal and external inquiries related to the agreement.

Prior to his new assignment, Wisness was the strategic planner for DOE-Richland where he facilitated the integration of long-range planning functions.

"Steve's hands-on experience with Hanford projects permits him to be effective right away," says Izatt. "His knowledge of planning and engineering will be important as we progress on the cleanup," noted Izatt.

"The Tri-Party Agreement is, and will be for many years, a significant influence on environmental restoration efforts at Hanford and across the country. I'm looking forward to helping it become a reality," says Wisness.

Wisness has a bachelor's degree in civil engineering from North Dakota State University. He has been employed by DOE since 1979.

Wisness, who is married and has two children, is an avid outdoorsman and active in several sports. ■

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UPDATE

The *Hanford Update* is a quarterly publication discussing the cleanup of the Hanford Site.

Editorial material is prepared by the Washington State Department of Ecology, the U.S. Environmental Protection Agency Region 10, and the U.S. Department of Energy, Richland Operations Office.

Comments, suggestions and questions are welcome and can be sent to: *Hanford Update*, Department of Ecology, MS PV-11, Olympia, WA 98504.

U.S. Department of Energy Environmental Restoration and Waste Management

Five-Year Plan

Special Hanford Update Insert

Compliance, cleanup goals of DOE national plan

Shortly after his confirmation as Secretary of Energy in March 1989, James Watkins quickly assessed one of the Department of Energy's most pressing problems and took steps to correct it.

The result was the first annual Environmental Restoration and Waste Management Five-Year Plan, a comprehensive approach designed to bring DOE nuclear facilities into compliance with applicable regulations as quickly as possible, and to clean up existing waste sites in 30 years.

It was made available for public comment from September 1 through November 30.

The plan calls for each DOE site to develop specific implementation plans. At Hanford, that process began in early July. As it did with the national plan, DOE has involved representatives of state and tribal

governments, the U.S. Environmental Protection Agency and members of the public in developing its plan for Hanford.

Much groundwork for the Hanford Five-Year Plan has already been laid by the three party cleanup and compliance agreement signed last May by DOE, the state of Washington and EPA. All elements of that agreement are supported by the Five-Year Plan, which also addresses ongoing waste management, research and development and the decommissioning of surplus facilities in greater detail.

The Hanford plan will be broken into four sections:

1. **A vision statement.** This short statement will summarize where Hanford plans to be in five years in terms of cleanup, compliance and in how it deals with the public.

2. **A summary.** This section will state in non-technical language the current status of Hanford waste issues, how the plan will work and what it is designed to do.

3. **A technical section.** This section will expand greatly on the first two, adding technical detail.

4. **Detailed budgetary data.** Each activity to be conducted during the upcoming five years will be itemized and the estimated cost will be included.

The Hanford plan will be available for public comment from mid-January through mid-April 1990. Public meetings and briefings will be held during the comment period, but the schedule has not yet been determined. Comments will be considered for the first annual update, due in August 1990.

States, tribes, EPA take part in Hanford planning process

A "working group" of various state, federal and tribal officials is helping the Department of Energy develop Hanford's Five-Year Plan.

Since early August, the group has met four times to review and comment on drafts of the plan. Its next meeting is scheduled for December 19. Group members include Terry Husseman and Roger Stanley from Washington State Department of Ecology; William Sanderson and David Stewart Smith, both from the Oregon Department of Energy; and Jeff Breckel, who represents both Washington and Oregon on Congressional issues. Representatives from affected Indian nations include Delano Saluskin, Clifford Moses and Brian Barry, from the Yakima Indian Nation, and Bill Burke, from the Confederated Tribes of the Umatilla Reservation, and Ray Latham of the Nez Perce tribe.

The U.S. Environmental Protection Agency is represented by George Hofer, from the hazardous waste policy branch of the EPA's federal facilities section, and Paul Day, Hanford project manager. Feed-

back from working group members has been positive. Breckel, who said he's most interested in "getting a clearer picture" of the tasks associated with



Bill Sanderson,
Oregon Department of Energy

Hanford cleanup, thinks the DOE's approach toward developing the Five-Year Plan is right on target. "Perhaps the most important thing is that it's a much more open and public process," he says.

Breckel added that his involvement in the development of the plan should help him in his work with Congress.

Not only can he look ahead to see what the upcoming fiscal needs are, Breckel said, but he'll also be able to explain how much progress has been made which could help build a strong case for the continued funding of Hanford cleanup. The protection of tribal treaty rights is Saluskin's greatest concern, and he said the Yakima Indian Nation appreciates that the Energy Department has recognized the role of tribes in the planning of Hanford cleanup.

"We want to make sure that everything is cleaned up in a manner acceptable to the tribe as well as society," says Saluskin, adding that he also hopes to see a program which would teach Indians the skills they need to get involved in the cleanup work itself. Sanderson said the Five-Year Plan needs to build public support for the cleanup of Hanford so that Congress will provide enough funding for cleanup. The working group's involvement should help DOE come up with a plan that the public can get behind, he said.

Getting funding a top priority

The following are excerpts from an interview with Jeff Breckel, Oregon and Washington Liaison, Hanford Defense Waste Project.

What's the price tag to implement the Five-Year plan at Handord?

The best estimate to date is about \$5 billion, 1989-1995. It's important to remember that much of the cleanup is still in the investigatory stage. There will be a direct correlation between the projected cost and the findings from site characterization work. In other words, the accuracy of the projected cost improves as we move from investigative phase to the remediation phase.

How will the cleanup be funded?

Being a federal facility, the entire cost will be underwritten by the federal government. However, the way in which such funds are appropriated is cumbersome and in no way ensures ongoing funding. It is complicated by national deficit reduction efforts, fiscal constraints, and competing federal programs.

Is multi-year funding a solution?

Perhaps. The obvious problem is trying to carry out multi-year mandates without having multi-year funding. Because multi-year projects are typically subject to annual review and renewal, funding reductions and/or delays are not uncommon. The national Five-Year Plan addresses this issue by suggesting the Administration and Congress jointly develop funding strategies to support the Department of Energy's goal of a

30-year cleanup. The need for stable, long-term funding is also an issue of vital concern to Oregon and Washington.

What's the connection between the public's support of the cleanup and the funding of the project?

Public support of the cleanup is absolutely crucial. While Oregon and Washington delegations are very supportive, Congress, in general, is under extreme pressure to fund many conflicting priorities. Those projects which garner the most public support are often the ones funded.

What's the current status of the funding?

Nationally, funding for defense waste management and environmental restoration was increased by \$350 million over the President's initial request of \$1.3 billion, bring the total for fiscal year 1990 to \$1.658 billion. This includes money for all DOE sites. At this point we're not sure what will be Hanford's portion. Similar, if not larger, increases will be necessary next year if DOE is to be able to meet cleanup schedules at Hanford and other DOE facilities.

What are the big ticket items in the first phase?

In addition to the initial site characterization work, the Waste Vitrification plant must be built. The estimated cost of the plant is about \$1 billion. Construction should be about half complete in 1995 with a projected startup in December of 1999.

restrictions on using the land will remain when the job is finished?

People also wanted to know what types and amount of waste could be coming to Hanford, and what impact those wastes would have. Concern was expressed about how DOE will get the money to do the job.

"What we heard were some tough, legitimate questions that get to the heart of the problems," says DOE's Ken Morgan, who conducted the meetings. "They will help us write a better plan."

DOE's vision of Hanford in 1995

One section of Hanford's Five-Year Plan will be a vision statement. "We wanted to look ahead to 1995 and state how we intend to be conducting business and what we plan to have accomplished," says Bill Dixon, a Westinghouse Hanford Company engineer who drafted the plan for the Department of Energy.

Members of the public were asked about the first draft of the vision during workshops held in September. Most thought it was a good first step, while some expressed skepticism at DOE's ability to develop public confidence and do a good cleanup job. "That's something that will be accomplished only if all of us at Hanford do the job right," says Dixon.

Dixon said the vision will give Hanford employees something to work toward and measure progress against.

Some excerpts from the draft:

Five years from now, Hanford will be the flagship for the DOE's waste cleanup programs. We will be cleaning up Hanford and showing other people how to clean up their waste sites. We will have made major progress to achieve the goal of complete cleanup of inactive facilities and waste sites by 2018 with public confidence if:

We always put protection of the environment, and human health and safety first;

Some of our waste is being cleaned up and put in safe, permanent disposal at Hanford;

Other waste is being retrieved and sent elsewhere for safe, permanent disposal;

We are developing new and better ways to clean up Hanford at lower costs;

We have productive relationships with our regulators;

We listen to our critics and learn from them and others.

A second section of the vision contains more details, such as:

Liquid low-level wastes from the double-shell tanks are being solidified in grout. This grout is disposed of in underground concrete vaults. Forty percent of the grout vaults needed for this waste are built and filled;

All facilities meet minimum requirements to avoid near-term hazards;

About one-third of the old contaminated buildings and facilities have been removed and the sites cleaned up.

DOE seeks public's advice at four meetings

The Department of Energy asked for some early public advice in September on developing the Hanford Five-Year Plan at workshops in Portland, Seattle, Richland, and Spokane. About 80 members of the public attended. A draft five-year cleanup vision statement was the focus of many comments.

A frequent comment was that DOE needed to do a better job of defining what cleanup really means. How clean is clean? How should we balance risks, social values and fiscal realities? And, what

State to study tank explosion potential

Several issues have arisen since the last Hanford Update, the most major being a state investigation of the explosive potential of certain underground chemical and radioactive waste storage tanks at Hanford.

Governor Booth Gardner announced the investigation by the Departments of Health and Ecology. He said that a preliminary look at tank records indicate little risk of an explosion. But a recently released report did raise questions about potential cyanide explosions in some single-shell tanks.

Mike Lawrence, U.S. Department of Energy Richland office manager, has pledged his cooperation with the investigation. Lawrence said recorded temperatures in the tanks are well below the heat level necessary for a possible cyanide explosion. The investigation is expected to be completed in about three months.

Another major issue regarding Hanford wastes came when the U.S. Navy revealed that old nuclear submarine reactor compartments being disposed of at Hanford contained PCBs. The Navy agreed to halt further shipments until they were cleared of the cancer-causing materials and to clean up the compartments already at Hanford.

Meanwhile, Ecology, EPA and DOE officials are still working to find a solution to dispose of contaminated "purge" water produced from groundwater testing wells. Currently, the water is being stored in tanks. ■

Public comment period begins in January for 300-FF-1 operable unit work plan

The work plan for characterizing Hanford's 300-FF-1 operable unit, which includes the major waste sites in the 300 Area, is scheduled for a 30-day public comment period beginning in January. "Initially we had hoped to have it ready by October, but because information was added, we put it through an additional review cycle," says EPA Hanford Project Manager Paul Day.

NO COMMENTS YET — Two operable unit work plans that preceded 300-FF-1 into the public arena drew no comments, according to Day. "Our goal is to give the public a chance to be involved from the outset in the cleanup process and we will continue to do that," he says. Approval of the 200-BP-1 Work Plan by EPA is expected in the next few weeks, Day says. Formal characterization work would then begin on the area that contains inactive cribs near Hanford's B Plant.

Hanford Briefs

MILESTONES BEING MET — The DOE had committed to meet 21 Agreement milestones by the end of November. By that date, 24 had been completed. Three milestones for installing a total of eight groundwater monitoring wells in the 200 Area were met ahead of time. Two of them were not due until December 1989 and one was due December 1990.

STAFFING UPDATE — The addition of Doug Sherwood, David Einan and Audrey Dove to EPA's Hanford Project office brings to four the number of EPA personnel working in Richland. Einan is a chemical engineer, Sherwood a chemist and Dove the office secretary. Day said his office is planning to hire one more person.

GLASSIFICATION DEMONSTRATION PLANNED — A demonstration of how contaminated soil may be immobilized at Hanford by turning it into glass will be conducted in early 1990. A crib containing mixed waste (strontium, cesium, lead, chromium) located at an inactive waste site in the 100 B Area will undergo a process called in situ vitrification. High voltage electricity is used to turn the soil to liquid. The goal is to demonstrate that after cooling, contaminants are bound, therefore minimizing the potential for the spread of contamination. Extensive sampling will be done to determine the effectiveness of the demonstration. ■

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Conference scheduled for private businesses

The Department of Energy is sponsoring a "Business Opportunities Conference" January 17. The one-day conference is designed to acquaint large and small businesses with contracting opportunities related to the Hanford Site cleanup.

Conference organizers indicate the session will provide private industry with specific information about the kinds of goods and services needed in the

implementation of the 30-year Hanford cleanup. There will also be a briefing on DOE procurement procedures.

The conference will be held at Cavanaugh's Inn in Kennewick, Wash., from 8 a.m. to 5 p.m. For more information phone Tina Baumgartner at (509) 376-1543 or write: Westinghouse Hanford Company, P.O. Box 1970, MSIN B2-15, Richland, Wash. 99352.

Stanley likened the proposed changes to a minor tuneup for an automobile. "They hardly constitute an overhaul," he says.

None of the proposed changes result in delayed dates for the original milestones. Some involve changing telephone numbers, addresses or the names of individuals involved with the project. Other changes address regulatory issues, such as inserting an agreed upon policy for the handling of contaminated water that is drawn from monitoring wells.

One proposed change would move the Spokane information repository from the Spokane Public Library to Gonzaga University's Crosby Library which has a special section for government documents. Another would incorporate the role of the Washington Nuclear Waste Advisory Council. The newly-formed Advisory Council met for the first time in October to discuss how it would be involved in the Hanford cleanup. n

Agreement Update

Continued from Page 1

revisions agreed to by the parties. The work schedule shows a step-by-step progression of how the three parties will meet the Agreement's milestones for cleanup and compliance activities. Any milestone changes approved by the three parties during the prior 12 months are also incorporated. A summary of any milestone changes is included with the annual update. Changes in the legal portion of the Agreement, the Action Plan and the Community Relations Plan are not specifically tied to the annual update, and can be made at any time if all three parties agree. Any such changes are subject to public comment.

Stanley explains, "We felt the annual update period would be the best time to look at improving the Agreement. Because there is a scheduled public comment period, this will give the public an opportunity to comment on all proposed revisions."

To review Hanford compliance and cleanup documents:

Spokane Public Library
906 Main Ave., Spokane

University of Washington
Suzzalo Library, Seattle

Department of Energy Reading Room
Federal Building
825 Jadwin Ave., Richland

Portland State University
Corner of SW Harrison and SW Park
Portland, Oregon

Who to contact:

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