

Meeting Minutes  
U.S. Department of Energy and Oregon Office of Energy  
Bi-Monthly Forum

October 26, 1999  
Comfort Suites, 3420 Leif Erickson, Astoria, Oregon

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Apprvl.: *George H. Sanders* Date: 2/3/00  
George H. Sanders, Program Manager  
Office of Regulatory Liaison  
U.S. Department of Energy

Apprvl.: *Mary Lou Blazek* Date: 4/25/00  
Mary Lou Blazek, Administrator  
Nuclear Safety Division  
Oregon Office of Energy

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Attendees:

W. Ballard DOE-RL  
M. Blazek OOE  
D. Dunning OOE  
M. Graham BHI  
G. McClure DOE-RL  
F. Miera DOE-RL  
R. Morrison FDH  
K. Niles OOE  
K. Randolph DOE-RL  
G. Sanders DOE-RL

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**Meeting Minutes**  
**U.S. Department of Energy and Oregon Office of Energy**  
**Bi-Monthly Forum**

October 26, 1999  
Comfort Suites, 3420 Leif Erickson, Astoria, Oregon

Distribution:

W. W. Ballard	DOE-RL	A5-12
M. L. Blazek	OOE	Oregon
D. Dunning	OOE	Oregon
M. J. Graham	BHI	H0-09
M. Graine	OOE	Oregon
R. I. Greenberg	DOE-HQ	
J. S. Hertz	FDH	H8-67
D. Huston	OOE	Oregon
G. M. McClure	DOE-RL	A7-75
F. R. Miera	DOE-RL	A7-75
R. D. Morrison	FDH	A1-14
N. B. Myers	BHI	H0-14
K. Niles	OOE	Oregon
G. H. Sanders	DOE-RL	A5-15
B. K. Wise	FDH	H8-48
S. H. Wisness	DOE-RL	A7-75

## **AGENDA**

### **DOE/OREGON BI-MONTHLY FORUM**

October 26, 1999, Astoria, OR.

1. Introduction – K. Randolph
2. DOE Headquarters – R. Greenberg (by phone)
3. FFTF – Future Mtgs./Oregon Involvement – M. Blazek/G. McClure
4. Definition of HLW (DOE Order 435.1) USDOE-RL's Position – G. Sanders
5. FY 2000 Budget Update (11:45 – 12:00) – R. Tibbatts (by phone)
6. Oregon Grant for FY 2000/2001 – F. Miera
7. Oregon's 10 Year Retrospective of Hanford Cleanup – M. Blazek
8. Groundwater/Vadose Zone Integration Status – (by Phone)
9. Tri-Party Agreement Status Report – G. Sanders
10. Action Items – R. Morrison
11. Wrap-up & Next Meeting Date

## MEETING MINUTES, October 26, 1999 (Astoria, Oregon)

### 6. Oregon Grant for FY 2000/2001

Discussions were held with Keith Klein, Manager, Richland Operations Office (RL), regarding the Oregon Office of Energy request for an increased level of funding for their fiscal year that runs from November 1, 1999, through October 31, 2000. M. Grainey and M. Blazek stated that the Oregon grant has basically remained at a flat level of funding since 1996, and that the cost of doing business at a sustained level has increased over the years.

Mr. Klein replied that he understood the difficulties that level funding places on all agencies, as the Richland Operations Office has had to operate under the same conditions, and is projected to continue to get flat funding over the next several years. Mr. Klein indicated that he has also had this same concern raised from other groups who have grant monies from RL. However, because RL has not received an increase in funding, they will not likely be able to respond favorably to the Oregon request. However, Mr. Klein noted that a part of the Oregon request might be considered new scope of work, and that perhaps additional funds could be made available on this basis. F. Miera was to work with Bob Tibbatts (Acting RL CFO) and Karen Randolph (Dir., RL Office of External Affairs) to evaluate this option.

### 3. Fast Flux Test Facility (FFTF) – Future Meetings/Oregon Involvement

Initial planning discussions were conducted on the Programmatic Environmental Impact Statement (PEIS) for Accomplishing Expanded Civilian Nuclear Energy Research and Development and Isotope Production Missions in the U.S., Including the Role of the Fast Flux Test Facility. M. Blazek outlined the following possible Oregon schedule based on U. S. Department of Energy (DOE)'s timeline for the PEIS: Conduct informational meetings in March or April; in June the EIS would be issued with followup meetings held after the EIS is released to receive public comment.

M. Blazek went on to stress the importance of DOE - Headquarters input and participation and that it would be important to have A. Farabee of Richland DOE attend the meetings to answer questions.

It was agreed that FFTF public meetings would be added as an agenda item for the next U. S. DOE/Oregon Forum Meeting.

### 4. Definition of HLW (DOE Order 435.1) USDOE-RL's Position

G. Sanders lead a discussion of Attachment 1, titled "Hanford HLW Definition".

M. Blazek asked, regarding page 3 of Attachment 1, how for instance is it decided what constitutes "fission products in sufficient concentrations" with respect to solid materials described in the presentation. W. Ballard responded that it continues to be a difficult question that RL is addressing, especially given the history of this issue. Discussions continued and other issues raised specific to the attachment were addressed.

G. Sanders stressed, during the presentation, that Spent Nuclear Fuel is not considered High Level Waste.

D. Dunning stated that he was aware of Pacific Northwest National Laboratory studies that had been conducted regarding leach testing on glass waste forms. Dunning stated that "surface organic material in water and affects on vitrified wastes" were not considered and in his view, this poses some concerns for us with the use of glass for disposal at Hanford.

G. Sanders responded that with the Groundwater/Vadose Zone effort integrated under W. Ballard these question have a better chance of being resolved.

#### **8. Groundwater/Vadose Zone Integration Status**

M. Gaham provided a discussion of Attachment #2 entitled "Groundwater/Vadose Zone Integration Project, Department of Energy, Richland Operations Office, Highlights and Outcomes, October 1999".

M. Blazek expressed that she viewed the content/format of attachment #2 as a great improvement from past submittals.

D. Dunning stressed that the integrated plan was also a significant accomplishment. M. Blazek requested M. Graham to attend the March Oregon Hanford Waste Board meeting in Hermiston to discuss Groundwater/Vadose Zone activities with that group.

#### **7. Oregon's 10 Year Retrospective of Hanford Cleanup**

M. Blazek reported that the Oregon Office of Energy is receiving good feedback on the report. The audience has been highly interested groups such as the Oregon Waste Board and organized public interest groups.

#### **9. Tri-Party Agreement Status Report**

G. Sanders reported that the Tri-Party Agreement organization has remained intact through the reorganization and now resides within W. Ballard's organization.

The Office of River Protection waste treatment privatization negotiations have been further extended to November 15, 1999 at the Ecology Director's level. The main difference in the DOE and State of Washington positions is flexibility versus rigid enforceability issues.

Work is continuing on whether R. French will be signatory to the Tri-Party Agreement. The current approach is K. Klein will be signatory to the Tri-Party Agreement with R. French in concurrence on any changes impacting the Office of River Protection.

W. Ballard will become the DOE's chairman of the Inter Agency Management Integration Team.

**Plutonium Finishing Plant (PFP).** An integrated project management plan has been assembled which will help in making waste designations. A decontamination/decommissioning strategy for PFP has been approved by the DOE Headquarters and the DOE will be meeting soon with the State of Washington Department of Ecology to begin negotiation of a transition set of milestones.

**Site Wide RCRA Permit Modifications.** Site Wide Resource Conservation and Recovery Act (RCRA) Permit Modifications may likely result as a contested issue with the State of Washington. One issue that has already surfaced is that the State of Washington Department of Ecology prepared and issued the permit modifications for public review without the DOE's concurrence on the content.

**10. Action Items.**

Action item recap from this Forum:

No new action items were generated in the October 26, 1999 Forum. Action item status, from prior Forums, was discussed and is reflected in Attachment 3 "State of Oregon/U.S. Department of Energy Open Action Items".

**11. Next Oregon/DOE Forum Meeting.**

It was tentatively agreed that the next Forum would take place on January 25, 2000 in Richland, Washington.

**The Forum Was Adjourned.**

# **DOE/Oregon Bi-Monthly Forum Hanford HLW Definition**

**October 26, 1999**



**George H. Sanders  
Office of Regulatory Liaison**

**Attachment 1**

# Background and Status

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- In September 1994, DNFSB issued Recommendation 94-2 addressing issues with DOE's Radioactive Waste Management, DOE began revising DOE Order 5820.2A.
- July 9, 1999, DOE issued DOE Order 435.1, which cancelled the old DOE Order 5820.2A.
- Implementation:
  - An impacts analysis (gap analysis) is being prepared by DOE (RL and ORP) Contractors to determine required changes to operations and costs to implement new requirements.
  - An implementation plan will be prepared and is scheduled for completion no later than July 9, 2000. There will be two plans: one for RL, one for ORP.
  - Order will be incorporated into Hanford contracts based on implementation plan.



# Definition of High-Level Waste (HLW)

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- **HLW is the highly radioactive waste material resulting from the reprocessing of spent nuclear fuel, including liquid waste produced directly in reprocessing and any solid material derived from such liquid waste that contains fission products in sufficient concentrations; and other highly radioactive material that is determined, consistent with existing law, to require permanent isolation.**



# Waste Incidental to Reprocessing

- Waste resulting from reprocessing spent nuclear fuel that is determined to be incidental to reprocessing is not HLW, and shall be managed under DOE's regulatory authority in accordance with the requirements for transuranic waste or low-level waste, as appropriate. When determining whether spent nuclear fuel reprocessing plant wastes shall be managed as another waste type or as HLW, either the citation or evaluation process described below shall be used:
  - Citation - for incidental waste determination, use Notice of proposed Rulemaking (34FR8712) for 10CFR50 (includes lab items, clothing, tools, etc).
  - Evaluation - for incidental waste determinations, use the following:
    - A waste will be managed as low-level that has met the following criteria:
      - 1) As many key radionuclides as is technically and economically practical will have been removed
      - 2) Will meet safety requirements of 10CFR61
      - 3) Waste will be managed under Chapter IV of DOE Order 435.1, provided waste is in a solid form and does not exceed Class C low-level waste classification.
    - Can also be transuranic wastes



# Classification of Hanford Low-Activity Tank Waste Fraction

- In 1990, Washington and Oregon filed a petition for rulemaking with NRC which was denied in 1993 - Grout did not require HLW NRC license.
- November, 1996: DOE added single-shell tanks to tank waste processing plans and requested NRC extend decision to all tank wastes (under conditions described above).
- June, 1997: NRC responded to DOE approving DOE's LAW (Low Activity Waste) definition (residual 2% of total waste) with some reservations:
  - If radionuclide inventories are found to be different, DOE must seek a re-evaluation by the NRC.
  - If waste is not put in solid form, NRC must re-evaluate.
  - Final Performance Assessment (PA) must be evaluated by NRC to confirm LAW performance.



**Groundwater/Vadose Zone Integration Project**  
**Department of Energy, Richland Office**  
Highlights and Outcomes  
October 1999

The Groundwater/Vadose Zone Integration Project (Integration Project) has completed its first full year of existence (Fiscal Year 1999). Planning and program development has been a primary focus, and project outcomes reflect the early stages of improved fieldwork, collection and use of scientific data, and stronger management attention.

**Fieldwork (Characterization, Assessment, Monitoring) Has Been Accelerated and Improved**

- Hanford's well and borehole drilling work is now managed under an integrated planning process to improve overall quality, efficiency and consistency of work.
- For the first time in years, a *new* borehole was drilled inside the tank farms to monitor the vadose zone (the soil above the groundwater) and the groundwater. The recent data from this borehole showed an unexpectedly high level of technetium-99 in the groundwater. This data will help target additional monitoring work, and will assist in the comprehensive, cumulative effects assessment being conducted by the Integration Project.
- Following extensive planning and coordination efforts, vadose zone characterization in the 200 Areas is now underway. Important information about the extent and nature of vadose zone contamination is being generated to guide and tailor the next steps in cleanup actions. This data will also be used to enhance the overall understanding of Hanford's subsurface and the way contaminants move in the soil.

**Find New and Better Ways to Cleanup the Subsurface**

- Long-term, more effective groundwater remediation solutions are being supported by the Integration Project. Interim cleanup solutions, such as groundwater pump-and-treat systems, are being challenged by new state-of-the-art cleanup technologies. "In Situ Redox" is a chromium subsurface barrier wall that is being installed along portions of the river. When this innovative project is completed, salmon will be protected from exposure to toxic chromium.

**Science and Technology is Being Applied to Hanford's Cleanup Projects**

- Scientific data collection has been combined with the required fieldwork to generate useful data, saving time and resources. At B-Pond and Gable Mountain Pond, the required groundwater monitoring and well drilling has been expanded to collect important scientific data at the same time.

- The Department of Energy-Headquarters has awarded \$25 million to assist Hanford in resolving its most pressing gaps in scientific understanding about the subsurface and Columbia River systems. The projects being funded under this new program explore the way in which contaminants move through the vadose zone and into the groundwater. This will help scientists understand and predict contaminant transport times from the vadose zone to groundwater and toward the river environments.

### **Hanford Decisions That Impact the Subsurface and River Have Been Influenced and Improved**

- Keith Klein, Department of Energy, Richland Office (DOE-RL) Manager has realigned his organization to give the Integration Project a stronger role in Hanford's strategic planning and decision making. The Integration Project provides a link to all of the Department of Energy, Office of River Protection (DOE-ORP) and DOE-RL related workscope to ensure that cleanup decisions are made in full consideration of the vadose zone, groundwater and river.
- The Integration Project is assembling the information and tools needed to inform and influence decisions about significant Hanford cleanup options, such as Single Shell Tank Retrieval and related leak loss potential, and the final endstates for the Hanford cleanup mission. This comprehensive, scientific assessment capability has not existed before.
- Sitewide priority has been established for repairing the leaking water lines in the 200 Areas. These water leaks add to the problem of contaminant movement through the soil and toward the groundwater. Before the Integration Project was formed, infrastructure repairs such as these were not viewed as important to the environmental protection mission of Hanford.

### **Single Point-Of-Contact for Vadose Zone, Groundwater, River Documents and Public Comment Periods**

- The Integration Project has convened an "open process" to provide a single point-of-contact which provides opportunities for involvement by stakeholders, regulators, and Tribal Nations. Documents relative to Hanford groundwater, vadose zone, and river issues are now available for public review and comment through the Integration Project. A Project website lists public comment periods and provides access to documents available for review and comment (<http://www.bhi-erc.com/vadose>).

### Attachment 3

#### State of Oregon/ U.S. Department of Energy Open Action Items. October 26, 1999

**Action:** A public involvement plan (for the Groundwater Vadose Zone Integration Project) was discussed with a copy to be provided by G. McClure to M. Blazek

**Status: OPEN**

**Action:** M. Blazek requested the names of Oregon recipients of the HRA/EIS and copies of comment sheets.

**Status: OPEN**

**Action:** R. Greenberg to check on status of summit meeting and provide a response to a letter from Governor Kitzhaber expressing interest in attending a summit meeting.

**Status: OPEN**

**Action:** The Oregon 10 Year Report will be added to the agenda for the next Forum meeting.

**Status: Complete**

**Action:** The DOE agreed to add a link from the Tri-Party Agreement Internet Homepage to the Oregon Office of Energy Homepage.

**Status: Complete**

**Action:** F. Miera to provide copy of Tri-Party Agreement video to M. Blazek.

**Status: Complete**