



# ***GROUNDWATER PROTECTION PROGRAM***

## ***Meeting Minutes Cover Sheet***

Please find attached the Open Meeting Minutes from the Groundwater Protection Program of February 3, 2003.

If you have any comments or changes to these minutes, please reply to this email and your comments will be incorporated into the next meeting minutes.



# **GROUNDWATER PROTECTION PROGRAM**

---

## **Meeting Minutes**

---

**SUBJECT** GROUNDWATER PROTECTION PROGRAM MEETING - FEBRUARY 3, 2003

**TO** Distribution

**FROM** Dick Wilde, Groundwater Protection Program Manager

**DATE** February 25, 2003

**ATTENDEES**

See Attached List

**DISTRIBUTION**

Attendees  
Groundwater Protection Program Distribution List

---

**NEXT GROUNDWATER PROTECTION PROGRAM OPEN MEETING:**

Next Meeting: Monday, March 3, 2003 – 1-3 p.m.  
Location: 1200 Jadwin, Conference Room 1C1  
Local Call-In Number: (509) 376-7411  
Toll Free Call-In Number: (800) 664-0771

**MEETING MINUTES**

A Groundwater Protection Program (GPP) Open Meeting was held on February 3, 2003, at 1200 Jadwin, Conference Room 1C1, Richland, Washington.

**Status Report (Dick Wilde)**

Field operations will start in earnest this week or next. We have some field equipment on display in the room and a Cone Penetrometer truck in the parking lot for everyone to view.

**PROGRAM UPDATES**

**Update of Hanford's Groundwater Management Plan: Accelerated Cleanup and Protection (Dick Wilde)** The Groundwater Protection Management Plan is in final draft form. It will be in review with the U.S. Department of Energy-Richland Operations Office (DOE-RL) and the Office of River Protection (ORP) this week. We anticipate final comments and/or endorsements in the next few days. We hope to transmit it to U.S. Department of Energy-Headquarters (DOE-HQ) by the end of next week. We will have disks and hard copies available for those of you who would like one. Let me know if you want a hard copy. It's a living document. We will all be working with it.

### **Central Plateau Comprehensive Area Closure Plan (Dick Wilde)**

During the next seven or eight months, we will work to produce plans for the closure of the Central Plateau. The plans will be based on an optimization strategy that consolidates regions, regulatory requirements and remedial activities. Completed by the end of September, the plan will bring to the forefront critical issues people have voiced about waste site closure. Specifically, there will be a section on regulatory strategies to close sites, as well as a section on TRU disposition. Two areas are on the path to closure during the next three and a half years--U Plant and BC Cribs.

### **Construction of New K-126 Extraction Well (Jane Borghese)**

Well 199-K-126 was connected to the 100-KR-4 Pump and Treat System, which completes the M-16-28A milestone. This work was completed on January 13, 2003. The well is pumping away at about ten gallons per minute.

### **Completion of Potable Water Pipeline Relining (Jerry Davis)**

We have four Groundwater Protection Program projects designed to reduce artificial recharge--1) Decommission unused wells, 2) Fix leaky pipes or remove pipelines from service, 3) Eliminate or reduce septic discharge, and 4) Establish run-on/run-off controls.

When a pipeline develops a leak, the leak progresses rapidly. Earlier this year, we finished relining the second segment of a line going to the Water Treatment Plant. Future plans include relining portions of the raw and potable water lines from the Water Treatment Plant to S Plant.

When "mortar relining", a cable is first pulled through a pipeline to clean its interior surface. Then a grout slinger is pulled through the pipeline to apply a uniform layer of grout. Finally, a trowel is pulled through the pipeline to smooth the grout surface. (Presentation materials are available upon request.)

### **Status of Carbon Tetrachloride DNAPL DQO Workshop (Virginia Rohay)**

The issue is that liquid carbon tetrachloride is a DNAPL (dense nonaqueous phase liquid), which is denser than water so it sinks. We are pursuing the Data Quality Objective (DQO) process to consider a strategy to characterize the subsurface for the presence of DNAPL. We are in the process of preparing a draft workbook from the DNAPL DQO process. The results will go into a Sampling and Analysis Plan (SAP). The first investigation is to begin in late May. We've had public comment about DQO process involvement. However, we have not had any public involvement because the DQO process has always been an internal process. The decision makers [DOE-RL and the Environmental Protection Agency (EPA)] were interviewed. The results of the DQO process will be made available, and we intend to present workshops on our overall approach. We will start engaging stakeholders in the process at that point. We want to get the information out to public and let them know what we're doing. That may provide valuable feedback on how we are approaching the investigation.

### **Completion of BX/BY Field Investigation Report (Fred Mann)**

The *BX/BY Field Investigation Report* (RPP-10098) has been sent to Ecology and is publicly available. Using analysis of all the historical documents and field characterization, we did a risk analysis based on the data developed. Based on past-leaks, our conclusion is that we don't estimate that we would be above drinking water standards.

### **Recent Monitoring Results From Tank Farm Well 299-W23-19 (John Morse)**

We received results from sampling at 299-W-2319. There was elevated technetium, 108,000 pc/l. We will begin re-pumping. The well doesn't yield very much. We are monitoring the results to see how extensive the situation is. Time will tell. This activity will be folded into the UP-1 operable unit. We will put another monitoring well in within the next year. There are other monitoring wells, but this is the only well that shows technetium. The leak itself occurred forty years ago. There has not been much lateral movement detected. This well was part of the S-SX field investigation. We pursued the recommended measures. We took out all the water lines, we decommissioned all the wells and holes, and we established run on barriers. We have started investigating a temporary surface barrier. That's ongoing. We believe that it's a sub-surface leak. There is no liquid in the tank; it's been dry for several years now. We started a pump and treat and conducted tests and measurements for a year and a half. Ecology determined that traditional pump and treat wouldn't work here. We are going to observe the well; if the plume gets bigger we'll have to come back with another approach.

#### **Site-wide Composite Analysis Plans (Bob Bryce)**

In preparation for performing the Composite Analysis we have been upgrading the software. Key improvements include adding an air transport capability and a model to represent accumulation of contaminants in the soil. The impacts codes are also being upgraded to use the air contaminant information in calculating impacts.

We have been doing some analysis to support solid waste Environmental Impact Statement (EIS). We have been using the initial assessment capability to provide information on the cumulative impact of Hanford's waste sites to supplement the other analyses in the EIS. This spring, we plan to develop a technical approach to Composite Analysis. The original plan was to have it done by the end of March, but it will be delayed because of the EIS work. As far as scenario selection for the Composite Analysis, we are considering the scenarios used in previous site wide analyses and will look to the kinds of scenarios that other projects have used. We'll use a broad set of scenarios.

We have been working on performing detailed modeling of several sites where we believe it will improve our results. One of those sites is the BC cribs south of 200 East Area. We have been working with Bruce Ford's team to do some two dimensional modeling of this area to improve our representation of the site and to give Bruce's group information as to where to expect contamination which will help them in planning their field work. We will use the results of the modeling and the field work in the Composite Analysis. We are also working with Virginia Rohay on carbon tetrachloride and how to use the results her team is coming up with to improve the System Assessment Capability.

#### **Upcoming Field Activities (Bruce Ford)**

We are working on installing five groundwater monitoring wells--two at K-Basins, one at 618-10, one at Z-9 and one in Jane Borghese's area. Drilling will start February 4, 2003.

We are going to the field to investigate waste sites in three operable units using characterization boreholes. The first operable unit to be investigated is 200-CS-1. Ecology is to send a letter allowing us to drill at the S-10 ditch. The borehole we drill will have a dual purpose. It will let us characterize soil contamination and perform groundwater monitoring. We hope to get to the field by February 24, 2003. Our overall drilling schedule is very aggressive.

The second operable unit (200-PW-1) will attempt to identify carbon tetrachloride release sites within the Plutonium Finishing Plant protected area. It will be accomplished this spring using a guzzler (to a depth of ten feet) and a Geoprobe (to drive down deeper).

For the final operable unit (200-PW-2 and 200-PW-4), we will characterize soil contamination down to the water table at five sites. The first waste site to be investigated is the 216-A-10 trench. We will go in with a Cone Penetrometer and evaluate five locations along the trench, so we will be able to select a location for a deep characterization borehole.

**Hands-on Field Equipment Demonstrations (Russ Fabre)**

If anyone would like to visit the field, please contact Dick Wilde. He makes weekly trips.

I have brought some equipment we use in the field for you to look at today. Some is protective equipment.

We use an Integrated Safety Management System to assure worker protection. This includes early involvement in the DQO Process, characterization work and planning documentation. We try to identify potential contaminants of concern, based on process knowledge and historical characterization. When possible, we use engineering controls. We start conservatively. Once we've established a baseline, we downgrade the level of personal protection, as appropriate. We provide continual field supervision and seek the assistance of other functional support groups. Project management assessments and surveillances are conducted on a regular basis. Areas of interest include environmental, radiological and worker safety. A very important aspect of our processes is the ability to include continuous improvement in our work planning.

**NOTES:**

The Groundwater Protection Program web site is operational and the URL is <http://www.hanford.gov/cp/gpp>

Please contact Barbara Howard (509-373-3871), Alison Bryan (509-373-4456), or Shelley Tallent (509 373-3847) if you have questions or comments.

**ATTACHMENTS:**

- 1) Groundwater Protection Program February Open Meeting Agenda and Groundwater Protection Program Four-Month Look Ahead Calendar

**ATTENDEES:**

Marty Bensky – HAB  
Jane Borghese – FH  
Bob Brackett – FH  
Bob Bryce – PNNL  
Alison Bryan - FH  
Don Clark – DEC Enterprises  
Carl Connell – FH  
Jerry Davis – FH  
Russ Fabre – FH  
Dennis Faulk – EPA  
Tom Fogwell – DFHS  
Bruce Ford – FH  
Mark Freshley – PNNL  
Paul Henwood – Stoller  
Sandra Lilligren – Nez Perce  
Stuart Luttrell – PNNL  
Fred Mann – CHG  
Rick McCain – Stoller  
John Morse – DOE-RL  
Wade Riggsbee – Yakama Nation  
Gordon Rogers – HAB  
Virginia Rohay – CHG  
Sue Safford – Oregon Office of Energy (by phone)  
John Silko – DOE/RL  
Craig Swanson – FH  
Les Walker – FH  
Dick Wilde – DFSH

**GROUNDWATER PROTECTION PROGRAM CALENDAR – Feb/Mar 2003**

<b>February 3</b>	Groundwater Protection Program Open Meeting (1:00 – 3:00 PM, 1200 Jadwin Building, Richland, WA)
<b>February 6-7</b>	HAB Meeting (February 6 <sup>th</sup> 9:00 AM – 5:00 PM, February 7 <sup>th</sup> 8:30 AM – 3:00 PM, Hanford House, Richland, WA)
<b>February 12</b>	River & Plateau Committee Meeting (9:00 AM – 4:00 PM, Federal Building, Richland, WA)
<b>February 19</b>	Ecology Groundwater Meeting (1:30 PM, Department of Ecology Building, Kennewick, WA)
<b>March 3</b>	Groundwater Protection Program Open Meeting (1:00 – 3:00 PM, 1200 Jadwin Building, Richland, WA)
<b>March 19</b>	Ecology Groundwater Meeting (1:30 PM, Department of Ecology Building, Kennewick, WA)