

**MEETING SUMMARY, DUPONT CHAMBERS WORKS FUSRAP SITE
RESTORATION ADVISORY BOARD MEETING (RAB)
PENNSVILLE, NEW JERSEY**

To: Interested Parties
 From: George Bock, U.S. Army Corps of Engineers, Philadelphia District -Project Manager
 Sandra Chaloux, CEC, Inc. - RAB Facilitator
 Re: Meeting Summary of October 15, 2003 RAB Meeting

<p>RAB Members Present Janet Agnew George Bock Glen Donelson Mack Lake Charles Morris Paul Morris John Prigger Stephen Rogers James Warner</p> <p>RAB Members Absent Mel Beals Robert Bender John Clemente Frank Faranca Francis Faunt Armando Fernandez Samuel Henderson Andrew Park</p> <p>Facilitator Present Sandra Chaloux</p> <p>Guests Present Paul Bell Al Boettler Mervin Brokke Anne Pavelka Carl Wentzell Kim Nelson Dave Waters</p>	<p>Affiliation Community U.S. Army Corps of Engineers, Govt. Co-Chair Community Co-Chair, Pennsville School District Mayor, Carneys Point Community Mayor, Penns Grove Community DuPont Chambers Works Salem County Representative, Alternate Co-Chair</p> <p>Pennsville Township Community Community NJ Department of Environmental Protection Community American Nuclear Society/Community DuPont Vet EPA Region II</p> <p>CEC, Inc.(RAB Facilitator)</p> <p>Community DuPont Chambers Works USACE, Public Affairs NJDEP Salem County Cabrera Services Cabrera Services</p>
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7:15 p.m. Welcome and Introductions (*Sandra Chaloux, RAB Facilitator*)
 Sandra began the meeting by welcoming meeting participants. Meeting participants then introduced themselves. No corrections were noted for the meeting summary from last time.

7:20 p.m. Army Corps Update (*George Bock, U.S. Army Corps of Engineers*)
 George pointed out that this was the tenth meeting of the Restoration Advisory Board. George reviewed the results of the Preliminary Field Screening data for the subsurface soil sampling effort that was conducted in Operable Unit or OU 2 (Central Drainage Ditch and Building J-26). The Corps has been focusing testing on the four Areas of Concern that they have the most historical information on, including: the Building 845 Area, F Corral Area, Central Drainage Ditch and the Building J-26 area. George showed the Project Map and the Areas of Concern that the Corps is evaluating. Operable Unit 1 includes former Building 845 area and F Corral area. Operable Unit 2 consists of the

Central Drainage Ditch and Building J-26 area. Operable Unit 3 consists of Historical Lagoon A and the East Burial area.

George reviewed the Manhattan Engineer District history at DuPont. Operations involving uranium processing began at DuPont Chambers Works in 1942. DuPont was contracted to convert uranium oxide to uranium tetrafluoride and small quantities of uranium metal. George pointed out that following DuPont's completion of MED research for the Atomic Energy Commission (AEC) in late 1947, the AEC conducted radiological surveys and decontamination of the building surfaces in 1948 and 1949 based on the cleanup criteria of the time and released the buildings back to DuPont in 1949. The cleanup criteria for these sites changed in the 1990's and now the Corps is back taking another look at the site. George said that the Corps has found some low level radiological contamination at the site but not much so far.

What Still Needs to Be Done

George said the Corps is continuing with research of historical information on the site and coordination efforts with NJDEP, EPA, and DuPont. He said more coordination is needed related to the on-site cleanup efforts being conducted under RCRA. The Corps is hoping to have a CD searchable database of all the microfilm records on the site by Spring 2004 to assist the project team in reviewing the historical records.

OU 2 Remedial Investigation (RI) Effort

George showed the aerial photos of both OU2 areas and the initial proposed sampling locations for both. The goal of the Remedial Investigation is to determine the nature and extent of MED-related radiological contamination (Uranium 234, 235, and 238) and to design the appropriate remedial actions (if necessary) for the sites.

The Corps used the same field investigation methods in OU2 as were used in OU1 including the Gamma walkover survey, geophysical survey, subsurface soil sampling (down to 12 feet), and groundwater sampling. George said that the field team was sampling along the building foundations and drainage ditches that were used at the time. The field crew used an onsite lab for preliminary screening prior to sending the samples to an offsite certified lab for analysis. The onsite lab allows the Corps' field team to make real time decisions on the extent of sampling needed horizontally and vertically.

George showed photos of the field work that was conducted including a crew working at the site at night in Level C protection. George explained that they were working at night over the summer to avoid the heat. He said Level C protection is the standard protective gear used for sampling at industrial sites. He showed multiple photos of the field equipment that was used and the field crew in action.

The Gamma walkover survey helped the field crew determine the appropriate soil and groundwater sampling locations. George showed photos of the Geophysical survey that was conducted to locate subsurface utilities prior to the soil sampling efforts, photos of the subsurface sampling effort at Building J-26, and the on-site soil sampling screening and lab.

The subsurface soil samples were collected and screened on site and then sent offsite to a certified laboratory for analysis. George showed a site map of the more extensive sampling that was performed in the Central Drainage Ditch and said that the field crew also did some additional soil and groundwater sampling in the OU1 area.

George said that the Corps has completed extensive groundwater sampling out at the site and will do more as needed. The Corps took groundwater samples from the same boreholes that the soil samples were collected from. The Corps has not received the soil

or groundwater sampling results from the offsite lab yet. He explained that the Corps did **not** have the capability to do field screening of the groundwater samples on site. Groundwater monitoring wells may be installed in FY 05 depending on the data received from the offsite lab from the first round of sampling. The field crew also tested the groundwater for pH at a number of locations to better understand how mobile potential radiological contamination could be at the site. The project team is also preparing a groundwater model to help determine groundwater flow directions at the site.

Preliminary Field Data for Soil Sampling in OU2

Central Drainage Ditch (AOC 3) - Of the 164 soil samples collected at the Central Drainage Ditch, 153 of them were below the Investigative Screening Value of 7pCi/g for Uranium 238. The one sample with the highest reading at this site was 30 pCi/g. This is a level that may not even require any remediation. George said that the Corps will coordinate with the regulatory agencies, DuPont, and the RAB and propose no further action for the site. George feels that the Corps did an extensive investigation but that there is no Radiological problem evident there in OU 2. The Investigative Screening Value was established by the federal government (Nuclear Regulatory Commission) based on very conservative exposure assumptions such as that of the exposure of a farmer who would be drinking from a well and subsisting on vegetables and livestock on a site that contains the contamination. The Investigative Screening Value is the criteria that the government uses to determine whether the site is clean or poses a risk to human health. The team also took into account background levels found throughout the state. The former cleanup standard established by the federal government for Uranium was 30 pCi/g. There have been a number of sites across the country that have completed cleanups at or above this 30 pCi/g limit. Uranium is naturally occurring. Hans Honerlah, Corps Health Physicist, pointed out that products like Fiestaware dinnerware can contain even more than 30 pCi/g.

Building J-26 Area (AOC 5) – No Uranium was found in the J-26 area preliminary field data. The soil and foundation in this area were previously removed. Once the lab data is received, assuming that it confirms the field screening data, this sampling event confirms that the previous soil and foundation removal was completed thoroughly.

Questions/Comments by RAB members

Pennsville is really hurting now that DuPont is downscaling. Will this site ever be cleaned up enough to bring in new industries into the DuPont site? George said that there would not be any concern with new industries occupying the two areas in OU2.

Where did the soil and foundation from the J-26 area go? George said that this is a very good question. Some sources have told the Corps that it was disposed of either in Lagoon A or the East Burial area but the Corps currently doesn't have any more specific information than that. These areas (OU3) require a lot more research. The Corps is considering satellite to determine the locations of radiological contamination at the site but George said he wasn't sure about the full capability of the technology yet. The Corps will be interviewing former employees to get more information. George said that he received a letter from a woman who was 92 years old who lives in Carney's Point and worked in Building 845 at the time during MED activities. The Corps is trying to piece together the information on the sites and their disposal practices. Unfortunately record keeping practices 50 years ago were sketchy.

Some people have said that there hasn't been enough information from DuPont to employees about whether the plant is closing down or about the Corps' activities. Steve Rogers said that to his knowledge information was provided to employees about the Corps' efforts. George said that he would start putting press releases out after RAB meetings to keep the broader community informed of the Corps' activities at the site. George said that he has put out several press releases on this project in the past that were

not picked up by the newspapers. George said that he anticipated a great deal of public involvement efforts on this project in the upcoming year. He wants to get the press and elected officials fully engaged and comfortable with the work the Corps is doing at the site.

What is the turnaround time for water and soil lab results? The sampling was completed at the end of September. The lab usually takes 60 days to complete their analysis and provide results. George expects the results by the end of November and then the project team needs time to review the data. This is a standard turn around time for the lab. The analysis requires a 21-day hold time on the samples before they are analyzed. The draft RI characterization report for OU2 will be out in January 2004. George said the Corps will be able to present the results to the RAB in February.

Public Information Tools

George provided the address for the project web site (<http://www.usace.army.mil/fusrap/>) and pointed out that there were hard copies of the executive summary of the work plan for the Remedial Investigation in OU2. The Corps will be posting executive summaries of the reports and studies on the web site throughout the project. Information on the project can also be found in the Salem College library.

Summary of the Investigation & Site Cleanup Process

The following is description of the process that the Army Corps will follow to finish its work for each of the Operable Units.

- Remedial Investigation (RI) Report
 - Draft
 - Final
- Feasibility Study (FS)
 - Draft
 - Final
- Proposed Plan
 - Draft
 - Final
- Record of Decision
 - Draft
 - Final

The Remedial Investigation (also referred to as RI) includes the site characterization, field work, and data collection efforts to define the nature and extent of contamination. During this phase, the Corps will work with the regulatory agencies to determine the federal and state applicable or relevant and appropriate requirements that apply to the site. The RI also involves a human health and ecological risk assessment based on the site conditions.

The Feasibility Study (also referred to as the FS) identifies the treatment technologies that may apply, provides information on the team's efforts to screen the technologies, and provides a description of the preferred alternative for addressing the site.

The Proposed Plan (PP) presents the proposed cleanup alternative, the rationale for the selection of the alternative, and requires public input on the proposed alternative.

The Record of Decision (ROD) is the legal public document that presents the selected remedy, the basis for the selection of the remedy, a summary of the community involvement efforts as required by the Comprehensive Environmental Response

Compensation & Liability Act (CERCLA), performance standards of the selected remedy, and a summary of the responses made by the Corps to public comments received about the remedy.

Input From the RAB & Local Jurisdictions

Hans Honerlah (a Corps Representative) asked if the RAB members and local jurisdictions could provide the Corps information on future land use plans for the DuPont site. This is one of the assumptions that the project team uses in the Risk Assessment process. Mack Lake (Mayor of Carney's Point) said that the portion of the DuPont site that is in Carney's Point has already be rezoned for industrial and light industrial land use. George said that the Corps encourages input from the RAB on the reports and work plans and from the local jurisdictions at the meetings.

Project Schedule

Complete Final RI Report for OU1 – November 2003

Site Characterization for OU2 – January 2004

Proposed Plan of No Further Action for OU2 – July 2004

Draft Feasibility Study for OU1 – July 2004

Proposed Plan for OU1 – January 2005

Initiate Remediation for OU1 – Fall 2005

Work Plan for OU3 to regulators and Dupont for Review – Winter 2004

(note: OU3 will primarily be the East Burial Area. Lagoon A will probably be addressed as its own OU).

Complete Remediation Design for OU 1 – Spring 2004

Complete Remediation for OU1 – Fall 2005

8:15 p.m.

RAB Business

None.

Public Comments

None.

Establish Action Items/Set Agenda and Date for Next RAB Meeting

The next RAB meeting will be held Wednesday, February 18, 2004 at the Hampton Inn from 7-9 p.m.

Agenda Items for next meeting:

- OU 2 soil & groundwater sample results
- Risk Assessment
- Local Jurisdiction Future Land Use Plans for DuPont

Action Items:

- Sandra to remind local jurisdiction reps about reporting on land use plans

8:30 p.m.

Meeting Adjourned