

**MEETING MINUTES, DUPONT CHAMBERS WORKS FUSRAP SITE  
RESTORATION ADVISORY BOARD MEETING**

**To:** Interested Parties  
**From:** George Bock, U.S. Army Corps of Engineers, Philadelphia District  
**Re:** Minutes of October 23, 2001 RAB Meeting

<p><b>RAB Members Present</b>          Charles Kohler          Francis Faunt          George Bock          Glen Donelson          Armando Fernandez          Steve Rogers          Teruo Sugihana for Frank Faranca</p>	<p><b>Affiliation</b>          Community          Community Co-Chair          USACE, Project Manager &amp; Govt. Co-Chair          Pennsville School District/Community          American Nuclear Society/Community          DuPont Chambers Works Rep          NJ DEP</p>
<p><b>RAB Members Absent</b>          John Clemente, Jr.          Janet Agnew          Douglass Fogg          Robert Bender          Glenn Braswell          Ron Giordano          James Kates          Paul Morris          Catherine Dare          Jim Gant          Andrew Park</p>	<p>Community          Community          Community          Community          Salem County Rep          Community          Carneys Point Rep          Penns Grove Rep          Community          Community          EPA, Region II</p>
<p><b>Guests Present</b>          Al Boettler          James Warner          Robert E. Jack          Sandra Chaloux</p>	<p>DuPont          Salem County Dept. of Health          Mayor of Pennsville          CEC, Inc.</p>

7:10 p.m.      Welcome and Introductions (*Sandra Chaloux, CEC, Inc.*)  
 Sandra welcomed the meeting participants to the RAB meeting. Meeting attendees introduced themselves. The meeting minutes from May 8, 2001 were reviewed. There was a change noted to Glen Donelson's affiliation.

7:12 p.m.      Army Corps/FUSRAP Update (*George Bock, USACE Project Manager*)  
 George reviewed a draft of the work plan for Operable Unit 1. The plan has not yet been given to DuPont or the regulators for review. There may be changes by the next meeting.

George began with a brief history of the site. Operations involving uranium processing took place in 1942. This processing had to do with the war effort and the making of the bomb. The final product and material used for the development of the bomb was never created or stored at the DuPont site. Intermediate processing took place at the DuPont facility. He said that he would bring his Health Physicist and contractor to the next meeting to show the RAB

some of the monitoring equipment that the Corps will be using on site. In 1946, all MED work transferred to the Atomic Energy Commission (AEC). DuPont was conducting limited research for the AEC in 1947. In 1948 and 1949, the AEC was mostly conducting surveys and decontaminating building surfaces to shut down the AEC related activities at the DuPont site. At the time, they cleaned out the buildings using the best technology of that time and released the facilities back to DuPont.

The Corps has reviewed thousands of pages of historical documents (7-8 feet worth of documents) and microfilm (100 rolls of microfilm). The Corps is scanning the material onto CD's to facilitate the search for information. Historical photos have been extremely important on this site. The Corps has reviewed photos from the 1930s and recent photos that have been taken from satellite almost on a weekly basis. Our major concern is what has taken place historically on site. DuPont has provided historical information as well. Since this is an active site, a great deal of cooperation must exist for the Corps to complete its work on the site.

Now, the Corps has its first work plan which has been fully reviewed by the Corps including the Baltimore District, Philadelphia District, and experts in Omaha. The work plan is 6 volumes long with each being about 3 inches thick. It contains everything from health and safety plans to field activities to equipment used onsite.

The Corps has reviewed from 250-300 photographs taken between 1930 and 1995. An extensive search took place. The photographs help the Corps to evaluate MED activity locations, possible building and debris disposal areas, and disposal pathways on site. He showed a photo from 1954, building 845 and the F Corral area, showing the structure of the buildings and how the area has changed from year to year. Now the f corral is a parking lot.

George reviewed the areas known as Operable Unit 1 that include building 845 and F Corral. Operable Unit 2 includes the east burial area and historical building J-16 (now known as Building J-26). Operable Unit 3 is historical Lagoon A and the central drainage ditch area. There will be one Remedial Investigation and Feasibility Study report done for all areas and presented to the state, EPA, DuPont, and the public to review. He said, "At that point, we will know what will need to be done out here –if anything needs to be done."

He showed a short movie showing the progression of the site through photos. He asked the meeting participants to watch what has happened at Historical Lagoon A over time.

George emphasized that the Corps is doing a painstaking investigation to ensure that they find any RAD that may exist. George said the Corps feels pretty sure about what activities have taken place at Operable Units 1 and 2. Operable Unit 2 will be addressed after Operable Unit 1. These areas that will be investigated were selected using historical research. He added that the first work plan is a building block for the other plans. If EPA, the State, and DuPont agree with the methodology that the Corps proposes for Operable Unit 1, then the work plans for Operable 2 and 3 will go much easier.

Operable Unit 1 includes the Former Building 845 area and F Corral Area (which had several buildings involved in the MED activities) and a portion of the central drainage ditch. Some of the RAD materials may have gone down the drainage ditch.

George showed a sampling grid for Operable Unit 1. There is also going to be groundwater monitoring throughout the DuPont Chambers Works site. If the Corps sees that a pathway exists that they didn't expect –they will track it down. The Corps will be doing some groundwater modeling to determine possible pathways for contaminants. George said that the Corps is shooting for 95% accuracy. There are 43 FUSRAP sites throughout the country. MED material was sent to Niagara Falls and Oakridge National Labs. He reiterated that the site is not on the National Priority List (NPL) and that they don't expect to find anything drastically wrong on site.

He commented that Historical Lagoon A has been a problem. Some of this area has already been remediated –so the Corps needs to meet with the state and DuPont to get more details on what remediation has taken place.

The sampling grid is a statistical approach to examining the area. Each cross section is a sampling point, and the Corps is going to sample to depths anywhere from 18 to 36 feet, unless they need to go deeper to ensure no contaminants are found at those levels. The furthest they have seen any contaminants so far has been around 8 or 9 feet. George estimated up to 100 sampling points for Operable Unit 1. Twenty to thirty percent of these sampling points will be wells. Our goal for the Remedial Investigation/Feasibility Study (RI/FS) is to define the nature and extent of the MED contamination out here. The Corps will do a gamma walk over (to see if there are any hot spots), a geophysical survey, subsurface soil sampling, concrete sampling, and groundwater sampling.

George showed the RAB the type of Level B outfit that is typically worn during a gamma walk over. A RAB member asked what type of RAD has been found on the site. George said that they haven't found much gamma out there mostly alpha. George said that at the next RAB meeting –he would have his health physicist there to explain the type of RAD that has been found on site. The Alpha readings they have found were 2-3 times background levels. They have higher levels at former Building 845. George said based on the data from 20-30 years ago, the foundation of former Building 845 will need to be removed or remediated. Currently, the Corps and DuPont walk over the Building 845 area with no protective clothing and with no concern. DOE has new criteria and the Corps has been tasked with coming out and looking at these areas one more time. The RAB member asked what type of background levels they have found. George said the background levels found on the site are the levels you would find in other areas –very low. George anticipates people in Level B protection for drilling on site but not for the Gamma walkover unless he is told differently. There are organic leads out there that we do need to be concerned about.

A meeting participant expressed concern about the type of reaction that they might get from workers at DuPont and the community about the level B clothing. Steve Rogers echoed the concern. George told the RAB that the Corps already

did a gamma walkover of the site when Building 845 was being removed and didn't find anything.

The RAB discussed the proper communication approach to inform employees at DuPont facility and near neighbors so that there is not a great deal of alarm. The Corps will work with DuPont to get some written communication about the site work and type of protective clothing that the Corps contractors will be wearing to DuPont employees and near neighbors. Steve said on prior occasions they have also done near neighbor meetings to explain what would be going on. The group also discussed a press release to the local paper.

George said that he would have his health physicist attend the next meeting to discuss the RAD data that is currently available but warned that the only data they have was taken by DOE 20-30 years ago. The Corps does not know how good the data is. The upcoming sampling that he discussed earlier in the meeting will give them better and current data.

George said the Corps will be taking some aerial photos of the site. A plane will do 5-6 passes at 1,500-2,000 feet. There will be placards around the Dupont site and just outside. George showed a picture of the geophysical equipment that will be used on site. George also showed a photo of the type of drill rig sampling activity that will be taking place. The Corps will have an onsite lab so that they can screen some of the samples themselves. He said, "Our major focus out here is groundwater." Samples will also be sent off site for analysis. The Corps will install monitoring wells in any areas that are hot. Sampling will begin in the Spring. Field work plans for Operable Units 2 and 3 will be completed while the field work is being completed in Operable Unit 1. Results of the RI field work will be out by the end of the summer. The draft RI report will be to DuPont and regulators for review by the winter of 2002.

The FUSRAP program overall is about \$140-160 million program. George does not know how the recent events will affect funding for the program and the DuPont Chambers Works site. George said he hopes to meet with DuPont in November or December to discuss the work plan. He showed the RAB what the placards look like. All the data collected during the sampling effort will be entered into the GIS database.

A meeting participant asked if the Corps' was looking for anything beyond RAD. This meeting participant expressed a concern that the government's involvement at the site might close DuPont down. George reiterated that at the moment they are only looking for RAD. The DuPont Chambers Works site is being cleaned up by DuPont under the RCRA regulations. The government will help foot the bill on aspects of the site that relate to MED. This should be viewed as advantageous to DuPont. One of the RAB members said if there is no radiation, he is not concerned with the other chemical contamination out there. It will be sticky to determine how to handle waste that is commingled with RAD and DuPont related contamination. Some of the sites are being cleaned up by DuPont anyway under RCRA. The federal government's biggest concern is the possibility of RAD in the groundwater. DuPont has been waiting for the federal government to address the RAD in these areas.

8:00 p.m.

Special Issues/Open Discussion (RAB and Community)

The RAB gave positive feedback about the newsletter that the Corps sent out. Sandra told the RAB that Janet Agnew (RAB member) spoke to people in the community and helped CEC update the project mailing list. DuPont provided a near neighbor mailing list earlier in the project that the newsletter was also sent to. The newsletter went out to 250-300 people this time. George anticipated that the next newsletter would go out prior to the sampling event. Steve Rogers commented that the project web site has not been updated since the last meeting. A RAB member recommended a summary of the work plan to be included on the project web site. George said he would bring copies of the work plan to the next RAB meeting. The regular mailing list is about 80 people. The RAB recommended a larger mailing before the sampling event (several thousand/zip code type mailing). A RAB member also asked if DuPont Veterans were getting the information. Glen Donelson volunteered to get Sandra the DuPont Veterans mailing list. George said we would send copies of this newsletter to them when we get the list. The RAB discussed meeting frequency. George recommended meeting in February and April 2002. This would allow DuPont and the regulators sufficient time to review the work plan. Sandra discussed the advantages of meeting on a regular schedule. The RAB decided to postpone decisions on frequency until the February meeting.

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

Next meeting will be February 12, 2002. George will bring Glen Stephenson (hydrogeologist) and his health physicist and his contractor out to the meeting.

Agenda Items

- Corps Update - Upcoming Field Activities
- RAD Presentation (Hans)

8:35 p.m.

Meeting adjourned

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