

# **Paducah Gaseous Diffusion Plant Site Specific Advisory Board Meeting Minutes**

*August 20, 1998*

The August 20, 1998, Site Specific Advisory Board (SSAB) meeting took place at the Information Age Park Resource Center in Paducah at 5:30 p.m.

The following board members were present: Nola Courtney, Mark Donham, Edward Duff, Vicki Jones, Linda Long, and Bill Tanner. The ex officio members present were Jimmie Hodges, Tuss Taylor, and John Volpe. The facilitator present was Steve Kay. The United States Department of Energy (DOE) federal coordinator present was John Sheppard. Also present were the following members of the public and employees, contractors, and subcontractors of the DOE: Jeannie Brandstetter, Dave Dollins, Shelley Hawkins, Dennis Hill, Debora Jolly, Jimmy Massey, Ross Miller, John Morgan, and Myrna Redfield.

## **Agenda**

Steve Kay called the meeting to order and asked if there were any modifications to the agenda. Dennis Hill proposed adding a discussion on the Northeast Plume and the interaction of the Northwest Plume with the Ohio River under information handouts. John Sheppard proposed adding a discussion on the national SSAB meeting in Colorado. This discussion was placed in administrative plans. The modified agenda was not formally adopted since a quorum was not present; however, it was used as a working agenda.

## **Information — Northwest Plume**

Ross Miller, Bechtel Jacobs Company LLC senior hydrogeologist, gave members a fact sheet of frequently asked questions on the Northwest Plume along with maps of sampled wells and the hydrogeologic profile of the Paducah Gaseous Diffusion Plant to the Ohio River. Miller said assessment and evaluation reports of the plume are done annually. He said the Oak Ridge National Laboratory report on the Northwest Plume concludes that the plume discharge to the Ohio River will not have any detectable effects on river quality. He said all the evidence collected shows the plume is at steady state. As the plume moves downgradient toward the river, it begins to diffuse and becomes diluted by surrounding groundwater. Miller said the pump and treat operation is continued because the plume is subject to regulatory agreements since it has migrated off the DOE site.

## **Information — Northeast Plume**

Debora Jolly, Bechtel Jacobs Company facility operator, gave members a fact sheet on a unique situation this summer concerning the Northeast Plume. Due to the extreme heat this summer, the plant has encountered high power costs and had to cut the power levels back. There was a potential that the building associated with the Northeast Plume cooling tower would have to be shut down. Jolly said the power levels are now coming back up as the costs go down, so the potential no longer exists. Jolly said if the situation did occur, however, the cooling tower would continue to operate in recirculating mode through an 11,000-gallon pump. In the case of this situation, Jolly said extra samples would be taken to

confirm that everything is operating as it should.

### **Environmental Management and Enrichment Facilities (EMEF) Project Updates**

Members received a handout on the updates and there were no questions or comments.

### **Waste Area Group (WAG) 22, Solid Waste Management Units (SWMUs) 2, 7, and 30**

Nola Courtney said the comment resolution meeting between the DOE and the regulators on SWMU 2 took place today. She said there were several issues between the DOE and regulators on characterization and sampling techniques. Courtney said she did not think the regulators were comfortable with the Groundwater Integrator Unit issue and modeling techniques. Miller said the regulators had suggested that additional sampling needed to be done. He said the regulators were correct and the additional sampling has been done and will be included as an addendum to the document. Courtney asked if vertical sampling had been addressed in the comment resolution meeting. Miller said that drilling straight down to the burial grounds is not a preferred alternative from a risk standpoint. He said there are monitoring wells on the sides of the burial grounds that would detect contaminated water. John Volpe said the DOE did go back and do more sampling and used the method the regulators preferred. He said the DOE did what the regulators asked in some regards. Tuss Taylor said the regulators and the DOE agreed to disagree on this subject. Courtney said the modeling issue was not clear. Miller said modeling is a qualitative tool and sampling is quantitative. He said the monitoring wells indicate exactly where the plume is located. Miller said modeling always is controversial; however, the models used by the DOE are recommended by the United States Environmental Protection Agency and are used industry wide. Courtney asked if there were some chemicals of concern (COCs) the DOE had not addressed. Taylor said there were a few risk comments from the regulators. Dave Dollins said that uranium and trichloroethene are on record as being placed in the burial grounds. He said the DOE is in the process of looking at every SWMU and seeing what is there besides common COCs. He said a new strategy is being put together to make sure nothing is being ignored. Courtney asked when the next draft of the Feasibility Study (FS) would be released. Dollins said the D2 version is due to the regulators September 21 and the Proposed Plan (PP) will be submitted October 21. Jimmie Hodges said the issue of disagreement between the regulators and the DOE is probably one of timing or risk factor concerning excavation of the burial grounds. Volpe said he is not sure the cost and the risk of digging up the burial grounds would be justified if they are not creating an immediate risk. Hodges said excavation would be expensive. Dollins said the current estimate is \$36 to \$40 million. Hodges said the DOE is on the path of issuing an FS. He said the PP would lay out the DOE's preferred alternative. Although the DOE does not see an immediate risk with the burial grounds, Hodges said excavation at this point seems to be the better alternative because there is a long-term risk. He said if the site is to become reindustrialized later, it does not make sense to leave the burial grounds. Taylor said the longer the waste is left in the ground, the harder it will be to take it out. Courtney asked if it was likely that the DOE would come up with alternatives other than the four presented in the FS. Hodges said there might be better technology later that would be more cost effective. Volpe said his concern was that once the waste was excavated, something would have to be done with the waste. Hodges said the DOE has considered disposal options and there is a place available to take the waste. Mark Donham said the decision has already been made to cap the burial grounds and asked if this was in the Accelerating Cleanup Plan. Dollins said the whole intent of the cap was to prevent infiltration and leaching, but he does not see capping as an alternative in what is being done now. Volpe said there is probably more

soluble uranium in Burial Ground 404. He asked if 404 would be excavated. Hodges said this has been considered and would be addressed later in this meeting. Donham said the DOE should consider preparing a place for waste storage that is environmentally sound. Donham said transportation has to be weighed and we may be responsible for taking care of some of our own material here. Volpe said Paducah is acceptable for storage, but not for in-ground disposal because there is groundwater.

### **Accelerating Cleanup Plan**

A fact sheet on the proposed Accelerating Cleanup Plan revision was distributed. Hodges said the DOE has looked at the total paths to closure program pursuant to SSAB and regulator comments. With a new contractor in place, Hodges said he asked the contractor to look at the strategy to see if any revisions need to be made. The contractor did an independent assessment and is doing a major revision to the proposed strategy. Hodges said there are excavation options in the new plan for burial grounds that contain large volumes of radioactive wastes. Hodges said the new plan will be shared with the SSAB once it has received regulatory acceptance. Myrna Redfield said the Accelerating Cleanup Plan came out before the revisions were considered necessary and that the DOE is considering all comments and trying to make changes accordingly. Donham referred to a map of the current state of environmental remediation in the plan and asked if it was possible for all remediation to be completed by 2006. John Morgan said the maps were under revision in the new plan and did not think the maps were a good depiction of Paducah. Hodges said decontamination and decommissioning was not included in this particular plan. He said the site would not be remediated by the year 2006. Sheppard said that in many cases, the plan indicates remedial action that will be in place, but maybe not completed, by 2006. Donham asked if the prioritization table would change. Hodges said the priority list for the site will change. He said the new schedule has not been rolled up yet and that how Paducah rates against Oak Ridge on the list probably would still be a concern for Donham. Hodges said that when looking for ways to cut the budget, it is often easier to target a smaller project. He said in the new plan, some of the projects in Paducah are being rolled together to make them more significant according to the budget. Jimmy Massey, Bechtel Jacobs Company manager of projects, said this strategy has proved successful so far for the projects at Paducah. Donham asked if he could have a list of the projects for which funding was requested. Massey said the list is due to the DOE September 1, 1998. Hill said he would provide this list for Donham. Donham said he was curious that Portsmouth ranked number one for groundwater protection and asked if there was a serious groundwater problem at Portsmouth. Sheppard said Portsmouth does not have an off-site plume like Paducah and has installed containment mechanisms for the on-site plumes. He said Portsmouth does have a significant dense nonaqueous phase liquid plume with known quantities that can be pumped from wells. Subsequently, the key is to take action so the plume does not get worse. Miller said the Portsmouth groundwater protection plan includes pump and treat and numerous things that Paducah does not categorize together.

### **Depleted Uranium Hexafluoride (UF<sub>6</sub>) Programmatic Environmental Impact Statement (PEIS) Budget**

Hill said that this item under the agenda referred to the Senate bill the SSAB was going to address concerning the budget for cylinders at Paducah. Since then, the bill has been passed requiring the DOE to submit to Congress a plan to ensure all amounts accrued on the books of the United States Enrichment Corporation (USEC) for the disposition of depleted uranium hexafluoride will be used to treat and recycle depleted UF<sub>6</sub>. Hodges said the DOE also must present a facility plan no later than March

1999 to be built by 2004. Hill said the PEIS meeting tentatively is scheduled for October 3, 1998, in Lexington at the Sheraton Suites. The regulator's meeting is scheduled for October 4, 1998. The release date for the PEIS is March 1999 and the Record of Decision is scheduled for May or June. Donham asked if a factory would have to be built to defluorinate the uranium and if new tanks for the hydrogen fluoride would have to be brought in. Hodges said, yes, and that there would have to be something available to contain the oxygen hydrochloride. Donham asked if there would be any discharges associated with this process. Hodges said all the processes have not been reviewed, but it will be done before construction begins. Hodges said the facility must be in compliance with the National Environmental Policy Act. He said he was sure there would be some emission, but he is not familiar with all the processes available. Donham asked if waste-water treatment would be needed. Hodges said, yes, and that a cylinder wash treatment facility is on site, but it is probably not capable of handling this load. Donham said he was curious about how much of the \$385 million would be left after building all the facilities. Hodges said several options still need to be considered; however, the money would probably not cover the cost of two facilities. Hodges said the USEC still will be generating depleted UF<sub>6</sub>, but whether it will be converted in the DOE facilities is open for discussion. Donham asked if mixed oxide fuel would be created or used in the conversion process. Hodges and Volpe said they did not think so. Hodges said the DOE would like to see some public input in the planning of this project. He suggested this issue be kept as an agenda item for the next few months to provide members with an update.

### **Training Options**

Vicki Jones checked into training options for the SSAB members through the Government Institutes' Environmental, Health & Safety Training Opportunities Catalog. Jones said a one-day course would cost about \$6,000 if the meeting room was provided by the SSAB. Jones said the SSAB also has the option to purchase some videos to put in the SSAB office. Donham asked if the instructors were college professors. Jones said she thought most were people who worked in industries. Sheppard said there are government institutes that have training options available on the budget process. Donham asked how much it would cost to get someone from the program to come and explain the options of the program. Jones said she was not sure but would check. Kay asked that members who are not present receive a copy of the training catalog to review before the next meeting.

### **DOE Responses to SSAB Recommendations**

Hodges said the only comments without responses are on the status of the Environmental Assessment for Vortec and it is still being reviewed by Headquarters and the Oak Ridge legal staff. He said some of the other things recommended included the DOE adopting the polychlorinated biphenyl cleanup levels the states has proposed. He said some of these comments have been addressed in the fact sheet on the proposed Accelerating Cleanup Plan revision.

### **Administrative Issues**

The SSAB Work Plan was updated. Donham said he would like to discuss what the Federal Facility Agreement holds for next year. Hodges said a meeting was held today to tie down baselines and October might be a good timeframe for this discussion. Bill Tanner said he was interested in the topic of groundwater and the impact of pump and treat. He said he would like to hear a presentation by people

who are affected by the Water Policy. Tanner said it would be interesting to hear opposing views on the subject. Tanner agreed to check on who might want to discuss the Water Policy and said he would discuss this with the board next month. Courtney suggested SSAB membership be discussed at the next meeting.

### **Financial Update**

Hill distributed a detailed spreadsheet that provided a complete breakdown of costs. He said the total spent in Fiscal Year 1998 has been a little more than \$28,000. Hill said the money in parentheses for July is money which was projected, but not spent. In addition, money was subtracted from the month of June under Roberts & Kay, Inc., due to a bookkeeping error in allocation. The \$15,000 under Jacobs Engineering Group in June is an amount which was accrued over several months.

### **Information on SSAB National Meeting**

Sheppard said the meeting is scheduled for all day September 16 and through 11:00 a.m. September 17 in Boulder, Colorado. He said two members, usually the chairs, typically attend the meeting. The travel cost would be around \$1,000 for each attendee. Hill said there was designated money for travel in the budget. Jones said she would possibly go and Donham said he would not. Donham said he was not happy with the SSAB chairs committee. He said it was becoming a regular committee itself and does not seem to be accountable. He felt it was not balanced and he was not pleased with the conference calls as far as scheduling and reimbursement. Courtney asked what the topics of the discussions were. Donham said the topics include coordinating transportation plans, planning conferences, etc. Sheppard provided Donham with minutes from the last conference call. Donham said the conference call goes further than the DOE informing the chairs of what is happening and this made him feel uncomfortable with the format of the conference calls. Sheppard asked Donham if he felt the issues were moving beyond organizational into what was happening at the sites. Sheppard said the agenda for the national conference appeared to be informational and a chance for chairs to discuss lessons learned. Donham said in order for the charter to cover all of the boards, the boards should all be meeting together. He said he felt there is an attempt to get a narrower committee of chairs to be utilized as representing all the boards. Kay said it would be helpful for members from Paducah to attend and bring back information on how the board functions and see if these issues would be a concern for the rest of the board. Sheppard said he was also planning on attending the conference if the DOE budget allows his travel. Tanner said he also might be interested in attending the conference. Sheppard said he would need to know who was attending the conference by next week if possible.

The next meeting will be held September 17, 1998, at the Information Age Park Resource Center at 5:30 p.m. The meeting was adjourned.

### **Tentative agenda for the September 17, 1998, meeting:**

- Minutes
- Information (Handouts)
- EMEF Project Updates
- Vortec Update
- Depleted UF<sub>6</sub> PEIS Update

- Northeast and Northwest Plumes Pump and Treat Facilities, Water Policy
- WAG 22, SWMUs 7 and 30
- Training Options for SSAB
- DOE Response to SSAB Recommendations
- Administrative Plans for the Board
- Review of the SSAB Draft Work Plan
- Financial Update
- SSAB Membership

### **Action Items**

- Dennis Hill provide Mark Donham with list of projects in Paducah for which funding has been requested in the Accelerating Cleanup Plan.
- Vicki Jones check on how much it would cost for someone from the Government Institutes' Environmental, Health & Safety training program to come to Paducah to describe training options to the SSAB.
- Send members not present at this meeting a training catalog so they can review training options before the next meeting.
- Bill Tanner check with people who are affected by the Water Policy and see who would like to present information to the SSAB on this topic.