MINUTES
CHARLESTON NAVAL BASE
RESTORATION ADVISORY BOARD MEETING
Tuesday, March 12, 2002
North Charleston Old Town Meeting Place

RAB Members Attending

Tom Fressilli	
Tony Hunt	Navy Co-Chair
Wannetta Mallette	
Lou Mintz	
Dann Spariosu	USEPA
Jerry Stamps	SCDHEC

Guests Attending

Paul Bergstrand	SCDHEC
Gil Rennhack	SCDHEC
Rob Harrell	Navy (SOUTHDIV)
Gary Foster	CH2M-Jones
Richard Garcia	CH2M-Jones
Dean Williamson	CH2M-Jones
Keith Johns	EnSafe
Steve Parker	EnSafe
Charlie Vernoy	EnSafe

Welcome and Administrative Remarks

Tony Hunt began the meeting and introductions were made. He noted that RAB members should have received copies of minutes from both the November 2001 (Revised Version) and January 2002 meetings. There were no comments on the January minutes. Mr. Hunt also informed the group that all the meeting minutes from the last five years, through October 2001, are now on the web site.

Subcommittee Reports

Mr. Hunt reported that there was no community relations subcommittee meeting today. He said that Fact Sheet 15 was held up to get an accurate acreage included for Phase 2 property transfer, which should be done soon. Once that is put in the fact sheet, it can be distributed. There were no other subcommittee reports.

Environmental Cleanup Progress Report

Zone J Sampling

Mr. Charlie Vernoy (EnSafe Inc.) provided an update on Zone J, the investigation of Cooper River, Shipyard Creek and Noisette Creek. He used a large figure of the Cooper River watershed to illustrate his discussion. Mr. Vernoy said that the investigation included looking at how tides and currents of the Cooper and Wando Rivers affect flow around the Navy base. He said they

were looking at how runoff from the base affects adjacent systems but also how flow from other systems can affect water that's adjacent to the Navy base.

He said they had identified a large area of the Cooper River watershed, called an excursion zone, where anything in this area could possibly flow upstream within this zone, depending on tidal flow. Future reports will show how the directions and currents from these systems will interact.

Lou Mintz asked about the relevance and possible duplication of this study when so much has already been studied. Mr. Vernoy explained that there would not be actual sampling or anything like that for this part of the study. They will be using information from an expert (Ivan Chou of Environmental Consulting Technology, Inc.) who has worked in Charleston Harbor. It's work that has already been done. EnSafe will incorporate this data into their project so people have an understanding of how the flow of water in this area is affected by rivers in the Charleston Harbor.

Mr. Mintz asked whose idea this was. Mr. Hunt replied that the members of the project team looked at what information was needed to understand how the sediments adjacent to the Navy base got there, and where they came from. To do that, they need to know the boundaries of tidal influence.

Mr. Mintz asked for clarification on what he understood was no contamination in Zone J. Mr. Hunt replied that they had found TPH (total petroleum hydrocarbons – petroleum by-products) and metals in sediments at levels that exceeded ecological screening values. As a result, the project team felt it important to look at how those contaminants are being deposited there and what portion is a result of the Navy's operation of the base.

Mr. Vernoy then explained the current phase: evaluation of storm water runoff into the sewer system. He listed some of the project milestones:

- 1997 - sampling of sediment and water, which was reported in a technical memo
- April 2000 – the Zone J Draft RFI Part One Report was submitted. The regulators have commented on this.
- September 2000 - the next phase of the project started. The project team decided they needed to understand migration pathway scenarios. They agreed on three possible routes: Storm water discharge from the storm sewer system (which is the current investigation); Surface flow runoff, which is flow directly from the ground surface into the water, and groundwater discharge to water bodies.
- May 2001 - the project team decided that they needed to focus on storm water first, as well as to collect off-site reference locations. The off-site values will be used in future to compare with effluent coming off the Navy base. This information will be used to determine what reference values will be to compare those results to.
- December 2001 - DHEC gave notice to proceed with that work plan.

Mr. Vernoy said that the current phase is evaluating storm water runoff into the storm sewer system. Before beginning that, they needed to determine how often it rained in the area to come up with time frame for the study. One obstacle for sampling is that several locations are so close

to the water, there is a high tide influence on manhole locations. Therefore, EnSafe planned to sample during low tide to get a pure runoff, with no mixing of tidal water. EnSafe reviewed the past five years of data and determined it would take approximately six months of low tide rainfall events to complete the sampling. Right now, they are about 60 percent complete - a little ahead of schedule - because there has been a little more rain than expected during this time of year.

To complete the task, collecting as many samples during a rain event as possible, they decided to use automatic storm water samplers. These have rain gauge sensors to detect if there is enough rainfall, plus a flow gauge to detect if there is flow going through the sewer line. In some locations, technicians must take grab samples, using buckets. Mr. Vernoy showed some photos of those locations, as well as a picture of an automatic storm water sampler.

Mr. Vernoy said there were two main strategies to the work plan: reference locations and locations on the former base.

For reference locations, EnSafe got help from the cities of Charleston, North Charleston, and Mount Pleasant and Berkeley County Public Works. These agencies helped locate drainage basin areas similar to the Navy base. Similar, in terms of the same kind of land use: industrial, commercial or residential. He said EnSafe would provide these departments with results from their areas so those cities can use the data for future storm water management.

The first samples to be selected were reference locations because they need to develop background values. Then, they will need to get concurrence on these values from regulators before proceeding with evaluation of on-base samples.

Before setting up sampling installations, EnSafe contacted all the RDA tenants near sampler locations, 25 in all. All locations are posted with a sign saying “automatic sampling station” with DHEC emblem.

Mr. Vernoy explained the sampling stations. Inside the silver trashcan is an automatic sampler. It's covered, chained and locked so it won’t be easy to tamper with. Rain gauge and flow gauge sensors are hooked to the sampler. When rain comes through, the sensor picks up the flow and, with enough rainfall, it will automatically turn on and gather a sample. Most of these locations are at manholes. A few more are at different locations.

Mr. Vernoy showed the locations of two grab samples:
- Zone A catch basin, an area that's always influenced by the tides.
- Remount Road

At the Zone A location, they had to come up with a way to collect storm water runoff before it got mixed with river water. They attached a chain to the handle of a plastic bucket, attached the chain to the storm grate, put plastic sheeting over the grate, made a hole in the center of the plastic and created a funnel into the bucket. When it rains, rain runs off the site from all angles and goes through the grate and into the bucket. Technicians are able to haul the bucket out and fill sample containers.

Before EnSafe can prepare the runoff report, questions need to be answered.

- Is there any contamination migrating to river and creeks? If so, what kinds of chemicals are present?
- Can the storm water runoff contamination be linked to chemicals that have already been identified in the areas of concern on base?
- How do the tides, currents and dredging activities affect chemical identification?

Once these have been answered, then they can begin preparing the storm water evaluation report.

When the report is turned in, the project team is at a decision point that EPA has labeled "Scientific Management Decision Point." The project team will then decide if the data is sufficient to make a decision on whether an ecological risk assessment is needed or not.

In summary, Mr. Vernoy reported that they are on schedule to complete this current phase by May 2002. Approximately 60 percent of locations have been sampled. He said that they should still be able to reach the December 2002 submittal date for the final storm water runoff report.

Mr. Hunt then asked Gary Foster (CH2M-Jones) to provide an update on two topics: the underground storage tank (UST) program and the progress of Zone E sites.

UST Program

Mr. Foster said they are responsible for 80 UST sites under their contract. Of the 80, they have closure - no further action status - on 52 sites. Another 22 sites, where sampling and investigative work was done, received corrective action plans. Of those 22, 17 require groundwater monitoring. Five other sites will probably have excavation operations or remedial efforts such as the oxygen release compound performed on another site.

That leaves just six sites that still require further investigation or development of a Corrective Action Plan. These may become "no further action" sites or they may require some sort of investigation, depending on the results. Mr. Foster pointed out that the program is moving along very well.

Mr. Mintz asked if the excavation mentioned is for a tank or the surrounding soil. Mr. Foster replied that almost all the tanks have been pulled already. There is one site where the tanks are filled with sand but they still have some heavy product in them. CH2M-Jones is going to go in and take the tanks and surrounding soil out to clean up the site.

Progress of Zone E sites

Mr. Foster said there are 60 sites in Zone E. They have received closure – no further action status - on six sites. Another 24 sites are expected to receive no further action status, or "no further action with land use controls." The land use control in most sites would probably be limiting use to industrial uses. There are still 15 sites in that particular area of Zone E that we have to address with investigation.

Mr. Hunt noted that the industrial area, Zone E, is proposed for industrial zoning, although he didn't think the City of North Charleston had zoned it yet.

Mr. Foster continued, saying that they have completed some interim measures in Zone E. In particular, they addressed chromium-contaminated groundwater. He said they used a patented process called fracturing where the contractor created fissures underground at certain elevations, and forced a slurry of zero-valent iron into those cracks, from where it went out into the soil. He said they've had from 75 to 90 percent reduction in the chromium in the first three to four weeks. Mr. Foster pointed out that they had to work inside one of the buildings, where a gentleman makes furniture. They were able to work around his operation and drill holes, put wells and inject around his operation. They were able to coordinate between the two operations and neither company lost hours or productivity. The three-week period was quite successful. They will have to go back and do monitoring off and on.

Mr. Foster provided an update on AOC 607/Dry Cleaner. He said the remedy is “perking away.” At a presentation two months ago they showed a temperature profile. At that time they weren't completely satisfied with the way the clay level was heating up. He said the contractor has worked on his system and doing quite a bit better. The temperature of the groundwater is more uniformly at the boiling point and is showing continued improvement. They continue to be optimistic that this will remedy the dry cleaning solvent.

Mr. Mintz pointed out that the Step Ahead program had folded, due to a lack of funding and there was no longer a need to rush. Mr. Hunt noted it appears that the cleanup is still going to meet its projected six- to eight-month time frame.

Redevelopment Update

Mr. Mintz spoke about leases and future development. He said they had just recently published an annual report for 2001. Copies are available at the RDA office. He said they are very informative about Charleston Naval Shipyard.

Mr. Mintz told the group that the Noisette project is waiting for some appraisers. He said the general assembly, particularly the Charleston delegation, is very interested in the plan to put the Port Authority at the southern end of the base, but he didn’t have any idea where that will go.

Mr. Mintz said that he did not think security is adequate at the facility and is going to try to make adjustments with help of North Charleston.

Someone asked Mr. Mintz how his role on the Redevelopment Authority board has affected his perception of the overall process. Mr. Mintz replied that he was surprised at how separated or divorced board members are from the day-to-day activities of closing the Navy yard. He noted that they have been very receptive to his input after his long-term participation in the RAB. He said he enjoys being on the RDA as well as the RAB, although there is more pressure on the RDA because people are always trying to tell you what to do.

There was a brief discussion on tax increment funding for redevelopment projects and other redevelopment-related issues.

Wannetta Mallette said that project team members have changed over the last few years. She asked for an updated list so she can refer people to the right person, based on expertise. She attends a lot of community meetings. Mr. Hunt agreed to provide that list.

Mr. Mintz then quickly discussed the upcoming conference of the National Association of Installation Developers. Their conference is in August, in Charleston. It's a national meeting on base closure and realignment. A number of companies that are involved in base restoration work will attend this meeting. In addition to that, they have at least four, five or six seminars every day. They cover every area of base closure and restoration. In addition, people from Washington who are involved in base closure and base realignment attend, including someone from the Secretary of Navy's office. He said that one or two orientation trips to the Navy base would be organized, to present the site as a flagship of restoration. He also pointed out that the Director of the local RDA is president of NAID this year.

Mr. Hunt told the group that they can find information on the NAID web site: www.NAID.org. Organizers are calling for people to present at the conference. There is certainly an opportunity for RAB members.

Agenda for next meeting

Mr. Hunt asked for suggestions for the next meeting. Mr. Mintz asked about the progress of Phase 2 property transfer. Mr. Hunt said they are finalizing the last few details with survey. Everything else is ready.

With no further comments, the meeting adjourned at 6:30.