



Brown & Root Environmental

(508) 658-7899
FAX: (508) 658-7870

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July 8, 1997

Project Number 5278

Mr. James X. Shafer
Remedial Project Manager
Northern Division, Naval Facilities Engineering Command
10 Industrial Highway, Mail Stop 82
Lester, Pennsylvania 19113

Reference: CLEAN Contract No. N62472-90-D-1298
Contract Task Order 218

Subject: RAB Meeting Minutes

Dear Mr. Shafer:

Enclosed is a copy of the minutes from the June 18, 1997 RAB meeting.

If you have any questions about this matter, please contact me at 508-658-7899.

Very truly yours,

Betsy Horne
Community Relations Specialist

BH:ib

Enclosure

c: Dr. D. K. Abbass (w/enc.)
Mr. Alfred Arruda, Jr. (w/enc.)
Ms. Mary A. Blake (w/enc.)
Dr. David W. Brown (w/enc.)
Mr. Paul M. Cormier (w/enc.)
Mr. Anthony D'Agnew (w/enc.)
Mr. Francis J. Flanagan (w/enc.)
Mr. Mike Foley (w/enc.)
Mr. Byron J. Hall (w/enc.)
Mr. Dennis F. Klodner (w/enc.)

Mr. James X. Shafer
July 8, 1997
Page 2

c: Ms. Elizabeth Mathinos (w/enc.)
Mr. Joseph McEnness (w/enc.)
Mr. Thomas McGrath (w/enc.)
Mr. T. R. McGrath, Jr. (w/enc.)
Mr. Howard L. Porter (w/enc.)
Mr. Paul D. Russell (w/enc.)
Mr. Charles Salmond (w/enc.)
Mr. Keith Stokes (w/enc.)
Mr. John Torgan (w/enc.)
Ms. Claudette Weissinger (w. enc.)
Ms. Mary Philcox (w/enc.)
Mr. David Egan (w/enc.)
Mr. Paul Kulpa, DEM (w/enc.)
Ms. Kymberlee Keckler, EPA (w/enc.)
Capt. Jon Wyman, NETC (w/enc.)
Mr. David Sanders, NETC (w/enc.)
Mr. Brad Wheeler, NETC (w/enc.)
Ms. Sarah White, EPA (w/enc.)
Ms. Jennifer Hayes, Gannett Fleming (w/enc.)
Mr. Tim Prior, USF&WS (w/enc.)
Mr. Ken Finkelstein, NOAA (w/enc.)
Capt. Bogle, NETC (w/enc.)
Mr. James Barden (w/enc.)
Hon. Paul W. Crowley (w/enc.)
Hon. June Gibbs (w/enc.)
Councilman Dennis McCoy (w/enc.)
Mr. Vincent Arnold (w/enc.)
Captain Norman Pattarozzi (w/enc.)
Dr. David Kim (w/enc.)
Sister Annie Marie Walsh (w/enc.)
Brother Joseph (w/enc.)
Newport Public Library (w/enc.)
Ms. Joanne Gorman, Middletown Free Library (w/enc.)
Portsmouth Free Public Library (w/enc.)
Mr. R. Boucher, NORTHDIV (w/o enc.)
Mr. Liyang Chu, B&RE, Wilmington (w/enc.)
Mr. John Trepanowski, B&RE, Philadelphia (w/enc.)
Ms. Meg Price, B&RE, Philadelphia (w/o enc.)
File 5278-3.2 w/o enc./9.4 w/enc.

**NAVAL EDUCATION AND TRAINING CENTER
RESTORATION ADVISORY BOARD MEETING
JUNE 18, 1997**

MINUTES

On Wednesday, June 18, 1997, the NETC Newport Installation Restoration Program Restoration Advisory Board (RAB) gathered at the NETC Officers' Club for its monthly meeting. The meeting began at 7:01 pm and ended at 9:25 pm.

Thirteen of the 20 RAB community members attended: Kathy Abbass, Al Arruda, Mary Blake, Paul Cormier, Byron Hall, Liz Mathinos, Joe McEnness, Tom McGrath, T. R. McGrath, Howard Porter, Chuck Salmond, John Torgan, and Claudette Weissinger. Other RAB members attending were: Paul Kulpa, the RIDEM Remedial Project Manager; Kymberlee Keckler, EPA Remedial Project Manager; and Jim Shafer, the Northern Division Remedial Project Manager. Mary Philcox from the Aquidneck Island Citizens Advisory Board was present, along with the TAG recipient's technical advisor, David Egan. David Brown, Tony D'Agnew, Frank Flanagan, and Dennis Klodner provided notice of their absence. Mike Foley, Keith Stokes, and Paul Russell were not present.

Agenda items are denoted in the minutes by the underscored headings.

CALL TO ORDER

Chuck Salmond, the Community Co-Chair, called the meeting to order and asked the non-RAB members to introduce themselves.

UNFINISHED BUSINESS

Comment: At the last meeting the Navy said it expected to receive a letter from the state the following week identifying the outstanding issues holding up work at Tank Farm Four. What has happened?

Response: The state's letter indicates it wants chip samples taken from six tanks. RIDEM will compare the results to the state's regulatory levels, and either approve the demolition or ask the Navy to reclean the tanks.

Comment: How long will it take to complete the chip sampling task?

Response: The work will take approximately 2 weeks to collect the samples and 2 to 4 weeks to analyze them. Then we will make a decision about how to proceed.

Jim Shafer indicated that it is still the Navy's plan to implode the tanks, then follow up next year with an investigation of the area outside the tanks, in accordance with the schedule provided in the Federal Facilities Agreement.

COMMITTEE REPORTS

Public Information Committee - The committee has not met since the last meeting. However, Chuck reported that all the school superintendents he has spoken with about the IR/schools project are supportive. What they need to know now is who will pay for the different components of the effort.

Membership Committee - Paul Russell was not present.

Planning Committee - Jim Shafer stated that the field work to search for underground storage tanks and piping under the Old Fire Fighting Training Area has been moved back to begin the week of June 30. The following week sampling will occur. There is a limited window of opportunity to conduct field work because of the recreational nature of the site.

Copies of several documents are available for RAB review. Contact Brad Wheeler if you wish to review the draft work plans for the Gould Island remedial investigation or the NUSC SASE. Copies of the first quarterly groundwater monitoring report from McAllister Point Landfill can also be obtained by contacting Brad.

Project Committee - Kathy Abbass and Tony D'Agneica want to add more members to the Project Committee. She asked who they should use as a liaison to the Navy. Jim suggested they contact Brad.

Comment: When will work on the McAllister Point Landfill feasibility study begin?

Response: The FS for the off-shore component will begin very soon, probably in August.

Chuck mentioned he and others are anxious to figure out what all these projects mean and how they fit together.

Chuck polled the RAB community members about their preferences for committee assignments:

Al Arruda	Project Committee
Paul Cormier	Project Committee
Byron Hall	Project Committee
Kymerlee Keckler	Public Information
Tom McGrath	Planning Committee
T. R. McGrath	Project Committee
John Torgan	Public Information

[A new listing of committee membership is enclosed with the draft minutes].

PRESENTATION ON THE HUMAN HEALTH RISK ASSESSMENT FOR MCALLISTER POINT LANDFILL

Liyang Chu from Brown & Root reminded the RAB he had given a presentation at the April meeting on the draft final McAllister Point Landfill RI report, which included a human health risk assessment (HHRA). At the last RAB meeting, Sarah Levinson from EPA explained EPA's HHRA process, setting the stage for Liyang to discuss the McAllister-specific HHRA. He used a series of overhead graphics to illustrate his presentation.

Much of the data on which the assessment is based was derived from off-shore sampling (1996) conducted because of erosion into the bay the winter following the cap construction. Liyang referred to a map of the landfill area to show the near-shore zones (1, 2, 3, 3A, and 4) that were impacted by the erosion.

Six steps are used to create an HHRA. These include identifying the chemicals from the landfill that present the most potential risk; determining what ways the contamination can migrate from the landfill to pose a threat; assessing the toxicity of the contaminants of concern; assessing possible ways humans can be exposed to the contaminants; and characterizing the risks that these steps represent. The risk is expressed as a numerical value that represents the potential for a negative health effect from the exposure.

Three principal exposure categories were identified: 1. adult and child recreational visitors who might wade off-shore of the landfill fence; 2. people who frequently dig and consume shellfish from the area off shore of the landfill; and 3. children who eat the shellfish collected from off shore of the landfill.

For people in the first category, exposure factors that need to be considered include their weight; how long they are exposed; the contaminant levels to which they are exposed; and how they are exposed (skin contact, accidental ingestion, inhalation, etc.). For those who eat the shellfish (categories 2 and 3), exposure factors that need to be considered include: weight; how long they are exposed; estimated contaminant levels; meal size (5 to 6 ounces); and number of meals eaten each year (36.5 for adults and 2.9 for children) over a 70-year life span. EPA provided the Navy with the meal size, and the number of annual meals consumed by adults and children to use in the HHRA.

The CERCLA law established goals to limit cancer and non-cancer risks over and above health risks to which people are exposed every day. For cancer, the excess potential lifetime risks should be in the 1 in 10,000 to 1 in 1 million range. For non-cancer effects (when internal organs could be affected), the excess potential lifetime risk should be less than 1.

To put these numbers in a context most people can understand, Liyang shared some statistics from a 1987 study on causes of death related to cancer from every day activities. These include smoking and drinking, and exposure to radon and sea level background radiation.

For the recreating adult and child mentioned above, the HHRA found minimal consequence; the numbers fall within CERCLA's acceptable range. As an aside, Liyang mentioned that the state and EPA have commented on the HHRA numerical values but these comments should

not change the HHRA results. For people who consume shellfish collected from the area off the landfill, potential health risks do exist. For adults, the potential excess lifetime risk exceeds the CERCLA goals [based on a lifetime exposure and 36.5 meals a year]. The potential excess lifetime risk for children who consume these shellfish is very close to the CERCLA goal [based on their lower body weights, averaged over 6 years, and 2.9 meals per year]. Most risk stems from exposure to arsenic and PCBs; some derives from PAHs and metals.

Once the HHRA is finalized, the next step is to determine how best to manage the risk. That issue will be discussed in the off-shore feasibility study Jim mentioned earlier.

Comment: At the McAllister Point Landfill ribbon cutting ceremony last fall, I remember hearing that the landfill gas vents that dot the mound were going to be monitored. Is that still the case?

Response: Yes. Monitoring is underway for gas and for groundwater.

Comment: Does that graphic of the off-shore zones depict the outside limits of locations where contaminants of concern were found?

Response: Steve Parker responded that contaminants were indeed found off shore but because of the distance of many locations from the landfill, contaminant presence cannot necessarily be attributed to the landfill.

Comment: Did you find comparable contaminant levels at the Potters Cove background site?

Response: Steve did not have a copy of the Ecological Risk Assessment with him but promised to respond through the minutes. [Most organics and metals sediment concentrations are comparable between the stations in zone 5 and the background stations located at Jamestown Cranston Cove; PAH and arsenic concentrations were slightly higher in zone 5 than at the reference location. The ecological risks were determined to be low for both areas.]

Data from zone 5 is comprised of samples collected by Battelle in 1993. The highest contaminant concentrations were found at the shore line but some contaminants are naturally found in sediments.

Comment: Did the HHRA include swimming fish as well as shellfish?

Response: No, it did not. Because swimming fish are mobile, it is difficult to estimate their exposure levels for inclusion in an HHRA; shellfish are not mobile.

Comment: Will a separate risk assessment be conducted to establish a risk level for the on-site gas vents?

Response: Paul Kulpa indicated that the state will establish the levels based on what the monitoring data tell them. A risk assessment may be required. Children are kept away from the vents by the chain-link fence.

Comment: I don't see any contaminant of concern levels on your graphics. What are they?

Response: If you will see me after the meeting, I can show you the data in the HHRA document.

PRESENTATION ON THE DRAFT FINAL SASE FOR DERECKTOR SHIPYARD

Steve Parker discussed some changes to the draft SASE (which he talked about with the RAB at the February meeting), based on comments from EPA and the state. (Four copies will be available to RAB members tomorrow; a copy will be placed in each of the information repositories at the three local public libraries.) Major comments involved performing a quality control check on the data; substituting local ecological reference points for those established by EPA's Region III office; comparing soil and groundwater data to state ecological standards; and using EPA's New England office lead exposure model. These comments have been adopted and incorporated into the SASE.

Two other comments have not been adopted. These include revising the report format and including historical information that was reported in the Preliminary Assessment report.

Less major comments made and addressed in the draft final SASE are revising maps to show potential release areas; clarifying the quality of the natural habitat; describing underground storage tanks, above-ground storage tanks, and private wells as they relate to the site; clarifying which areas of the site are unpaved and/or vegetated; and addressing secondary and tertiary changes that stem from these comments. The state submitted a second set of comments to the Navy's responses to the first set of comments.

None of the comments have affected the summary or conclusions that were discussed in the draft SASE. Brown & Root recommended that no RI or FS was necessary; that soil be removed from under Building 42 and northeast of Building 6; and that soil might need to be removed from south of Building 234. These conclusions are being discussed with EPA and the state. Jim indicated that a work plan to conduct any removal would be submitted to EPA and the state. Removals would be followed by confirmatory sampling to ensure that the objectives of the remedial action have been attained.

Jim Shafer stated that subsequent to the on-shore removal actions, the Navy would prepare an off-shore FS in fiscal year 1998 when funds become available. Kymberlee Keckler stated she would need to review and approve a post-removal report after the removals are completed.

Comment: Where would the material excavated in the removals be disposed?

Response: That depends on what contaminants are in the soil and at what levels. Sometimes contaminated soil is delivered to permitted facilities in Michigan or in Canada.

PRESENTATION ON THE OLD FIRE FIGHTING TRAINING AREA (OFFTA) LIMITED SOURCE EVALUATION INVESTIGATION

Liyang mentioned that this area at the northern end of Coasters' Harbor Island was used for fire fighting training operations from World War II to 1972, when it was relocated to another part of the base. He passed around a 1944 aerial photograph of the area that showed many of the former site features. These included above-ground structures that simulated air craft carrier compartments. It is assumed that tanks below ground contained fuel that was piped into the compartments, mixed with sea water, and set afire to simulate real conditions. Another set of pipes conveyed the used liquid to an oil-water separator; water was discharged to the bay, while the recovered oil and fuel were reused in subsequent training exercises.

When the OFFTA facility was relocated, it is suspected that the above-ground structures were demolished and pushed into at least one of the two mounds presently on the site. However, little information has been found about the fate of the underground tanks and piping.

The Phase I and II RI conducted in 1992 and 1994 focused on investigating soil and water contamination. The RI found low levels of surface soil contamination; higher levels were found in the subsurface. PAHs, SVOCs, and metals were discovered in groundwater. PAHs and PCBs were discovered in off-shore sediments. PAHs were located in storm drains.

The current study has targeted looking for abandoned underground structures that may be continuing sources of contamination. It also will help determine whether contaminants are migrating in groundwater and assess whether asphalt that is eroding at the shore line is the source of PAH contamination in off-shore sediments. Tasks that will be conducted include reviewing files, reports, and other drawings, and conducting interviews with people who were associated with the facility when it was active; performing a magnetic survey to find underground tanks and pipes; excavating test pits and sampling them; drilling borings and sampling the soil; installing monitoring wells; and sampling the wells, sediments, and storm drains.

The field work should begin the week of June 30, with excavating, drilling, and installing monitoring wells. Sampling will occur the following week. Laboratory data analytical results should be back four weeks from then.

The RI report should be finalized in 1998 but the Navy wanted to conduct an interim action to begin the cleanup process as soon as possible.

Comment: What are SVOCs?

Response: SVOC is an acronym for semi-volatile organic compound. For this site, SVOCs include chemicals such as oil, and other petroleum derivatives.

Comment: Have you found any evidence of burned tire residue?

Response: We have not yet begun the field work but it could be there. The 1944 drawings only showed oil tanks. Please talk to me after the meeting. I would like to know more about what you know.

Comment: Is a search for these USTs considered a part of the CERCLA process?
Response: Yes, it is. Although CERCLA has a petroleum exclusion provision directing most UST work to be conducted under state law, chemicals other than petroleum products were found on site. Their presence is sufficient to allow the CERCLA process to direct this task.

Comment: Why is there concern about ground-up asphalt?
Response: Weathering and wave action erode the shore line asphalt. Pieces drift into the bay and enter the food chain as they adhere to sediments. We want to verify the RI report findings.

Comment: During the filming of The Amistad [a movie], crews used ground-up asphalt to make the roads look like period roads. Could this have an impact on the bay?
Response: The Navy is looking into this as a possible explanation for contamination.

Comment: Could the PAHs have originated from outboard motors on pleasure boats?
Response: Yes. They could have come from any petroleum products. The Navy will compare the upstream numbers to those in the site area. If they are significantly worse, the contamination may be attributable to the site.

Comment: Wasn't there a child care center at the site? Why did it move?
Response: Yes, the child care center was located at OFFTA until 1994, when a more modern facility was constructed in a quieter, more convenient location elsewhere on the base. Before then, the area was vegetated and surface soil did not present an unacceptable human health risk.

PRESENTATION ON SEWAGE TREATMENT PROCESSES AND LOCAL SHELLFISH BED MAPS

Paul Kulpa from RIDEM repeated an issue that has concerned several RAB members: whether fecal coliform was being discharged by the Newport sewage treatment plant (POTW) and how its presence effects local shellfish beds. [Paul's 3-page handout is attached to the draft minutes.]

Paul explained how a typical POTW works. Two-inch screens filter out large material; what remains is ground up in a comminutor. A tank into which the liquid flows allows grit and sand to sink to the bottom. From there, the liquid enters a primary tank. These large tanks allow the liquid to slow so heavy material (fecal matter) falls to the tank bottom; this physical removal process eliminates 50 to 60 percent of the solids in the waste stream. Facilities that also have secondary treatment (all Rhode Island POTWs, except Burrillville, which has tertiary treatment) are subject to a biological process that removes 80 to 90 percent of solids. Secondary treatment mimics a natural degradation process by supercharging the solids with oxygen, which helps bacteria to break them down. This bacteria-enhanced sludge itself works on newly added sludge. Tertiary plants add a polishing step to remove phosphorus and nitrogen. Some secondary and tertiary plants also contain an end-of-treatment micro-screen or carbon filter to removal any additional solids. Throughout this entire process, attempts are made to reduce or eliminate fecal matter entirely.

A related issue involves combined sewer overflows (CSOs). Paul used the design of the Newport (Fields Point) POTW to illustrate how a CSO works. Most sewage systems in the northeast have combined sewage/storm water runoff systems because they are so old. Separating them is very expensive but is important to do for the following reason: the Fields Point POTW is designed to handle 76 million gallons a day. When it rains, however, all the sheet flow from paved areas floods the combined system; the flow volume exceeds the plant's design. If some method of relief is not employed, manhole covers pop open and/or the plant has to allow the flow to move straight through the system without any treatment. During these precipitation episodes, Newport's two CSOs relieve the stress on the plant and discharge along the route to the bay. When a minor rain event occurs, the plant may be able to by-pass just the secondary treatment stage. A microscreen is present at one CSO; a settling tank is featured at the other. Both provide chlorination before discharge to the bay. The CSOs are designed to handle one-hundred-year storms. Any matter that goes through the system is very fine.

Separating these systems is a very expensive proposition but if they are not fixed, downstream shellfish beds are closed.

Comment: Lots of places around the country do not have this problem.

Response: Some locations can afford to separate their systems. Others have drilled enormous, long rock tunnels, or a series of tanks to temporarily hold the heavy flow until the rain ends and the plant can return to normal operation.

Comment: What happens to the POTW plant solids?

Response: They can be broken down in a sludge digester, incinerated, or landfilled.

Paul's final topic involves Narragansett Bay shellfish bed maps. The entire area along NETC is closed for shellfishing because a tidal action model predicted this area would be affected by the Newport POTW effluent, not because of the presence of NETC sites. The northern tip of Gould Island is closed because the Army Corps of Engineers is concerned about chemical levels in shellfish; an area around Melville is closed because of an historic discharge from Raytheon.

Comment: Why are we spending so much money to clean up McAllister Point Landfill when the shellfish beds are closed because of the POTW tidal model?

Response: The fishing ban does not apply to lobsters. In addition, EPA and RIDEM are charged with protecting both human health and the environment. Besides, just because the area is "closed" does not mean that no one fishes or harvests shellfish there.

Comment: Doesn't the Newport POTW pose ecological and human health risks?

Response: The plant is designed to address fecal matter only; it does not remove chemicals. To deal with those problems, the state has established a pretreatment program that all commercial establishments connected to the POTW must participate in. They receive a permit limiting the type and amount of chemicals the establishment can send to the plant. Permit levels are

designed to protect the bacteria that break down the POTW solids. In addition, fish are particularly sensitive to chemical contamination.

Comment: The plant sometimes breaks down because of human error, not just because of rain events.

Response: Pipes often break at Fields Point.

Comment: What about regular household solvents and chemicals? Are they discharged directly into the bay during a rain event?

Response: The state's program looks at what comes out of the pipe at the end of the treatment process. It is the POTW's responsibility to ensure that the plant is protected.

Comment: How often are CSOs used?

Response: It depends on each plant's design. Rhode Island towns are planning to separate their systems.

Comment: The black areas on the shellfish beds map are closed permanently but they aren't all downstream of the POTW.

Response: Computer modeling was performed to estimate areas that could be affected by the treatment plant discharges

Comment: Are you saying that no matter what happens to clean up McAllister Point landfill, the area will never be open to shellfishing?

Response: As long as the POTW is operating, that is correct. However, if tertiary treatment were added later, the shellfish beds could be reopened.

Comment: Are any signs posted to warn people that these beds are closed?

Response: I haven't seen any signs.

Comment: It appears that the health concerns we have been discussing are only a small part of a much larger, area-wide issue. Should we be focussing on just the larger issues now and tackle the smaller ones later?

Response: EPA and RIDEM are charged with working on all issues simultaneously.

Chuck Salmond asked if any RAB members had changes that should be made to the minutes from the last meeting. When no response was heard, a motion to adopt the draft minutes was made, seconded, and carried.

NEXT RAB MEETING

The next RAB meeting is scheduled for Wednesday, July 16. [No recommendations were made for agenda topics. RAB committees will convene for the first portion of the meeting to identify issues and goals. Members will reassemble as the whole RAB to report on their deliberations.]

Handouts: McAllister Point Landfill Human Health Risk Assessment presentation overheads
McAllister Point Landfill Draft Final RI fact sheet
Derecktor Shipyard Draft Final SASE presentation overheads
Old Fire Fighting Training Area Source Evaluation presentation overheads
Old Fire Fighting Training Area Source Evaluation Investigation fact sheet
RAB Review Dates Calendar

Enclosures with draft minutes:

Paul Kulpa's presentation on sewage treatment processes and shellfish bed closure map
Committee membership roster