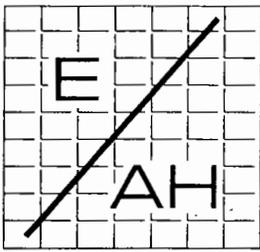


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MEETING MINUTES FROM RESTORATION ADVISORY BOARD MEETING DATED 13 MAY  
1997 WITH TRANSMITTAL CNC CHARLESTON SC  
5/28/1997  
ENSAFE/ ALLEN AND HOSHALL



# EnSafe / Allen & Hoshall

a joint venture for professional services

May 28, 1997

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Naval Base Charleston  
Caretaker Site Office  
Attn: Daryle Fontenot  
2155 Eagle Drive  
N. Charleston, SC 29418

**Subject:** Restoration Advisory Board Meeting Minutes (5/13/97)  
Community Relations Subcommittee Meeting Minutes (5/13/97)  
6/10/97 Meeting Announcement Flyer and Press Release  
(CLEAN Contract #N62467-89-D-0318 CTO# 2900)

Dear Mr. Fontenot:

Please find enclosed a copy of the May 13, 1997 Restoration Advisory Board meeting minutes with all applicable attachments. Also enclosed are the original sign-in sheets, the audio tape of the meeting, and a diskette version with the file saved in WordPerfect 5.1, 6.1, and Microsoft Word for Windows 6.0. The diskette has been scanned for viruses and none were detected.

Also included in this package is a copy of the Community Relations Subcommittee meeting minutes and the 6/10/97 meeting announcement flyer and press release.

If you have any questions regarding the enclosed material, feel free to call me at (919) 851-1886.

Sincerely,

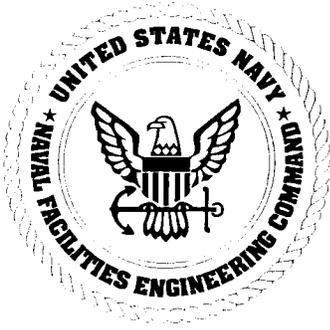
EnSafe/Allen&Hoshall

By:

Diane Cutler

Enclosures

cc: Jim Beltz, NAVFAC- SouthDiv  
Todd Haverkost, E/A&H  
Contracts File



## NAVY NEWS RELEASE

Public Affairs Office  
Naval Facilities Engineering Command, Southern Division  
P.O. Box 190010  
North Charleston, SC 29419

### *RAB Reports on Environmental Progress at Naval Base*

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*For Publication by Tuesday, June 10, 1997*

*For more information, contact:*

Jim Beltz (803) 820-5771

*North Charleston* – The Naval Base Charleston Restoration Advisory Board will hold their next meeting on Tuesday, June 10, 1997 from 6 to 7 p.m. at the Live Oak Community Center, 2012 Success Street, in North Charleston. Agenda topics will include a progress report on environmental activities and an update from the Naval Complex Redevelopment Authority. Navy staff and environmental specialists will be available after the meeting for informal discussion and to answer questions. The meeting is open to the public and everyone is encouraged to attend.

The RAB is a group of community members, Navy representatives, and federal, state, and local organizations and agencies that convene to discuss environmental cleanup progress and property reuse at Naval Base Charleston.

The RAB meeting schedule has recently changed. Starting June 1997, meetings will be held on a bi-monthly basis. Meetings will be held at 6:00 p.m. on the second Tuesday of the scheduled month.

For more information on the upcoming meeting, call Jim Beltz at the Public Affairs Office at Naval Facilities Engineering Command, Southern Division, (803) 820-5771.

###

June 10, 1997

Naval Base Charleston

# RAB Meeting

Restoration Advisory Board

**Date** .....Tuesday, June 10, 1997

**Time** .....6 - 7 p.m.

**Location**...Live Oak Community Center  
2012 Success Street  
North Charleston

The RAB is a forum where community members meet with representatives from the Navy, State and Federal environmental agencies, and other groups to discuss the environmental programs underway at Naval Base Charleston. **All meetings are open to the public and everyone is encouraged to attend.**

For More Information



Call Jim Beltz at the Public Affairs Office  
at Naval Facilities Engineering Command,  
Southern Division: (803) 820-5771.

June 10, 1997

Naval Base Charleston

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For More Information



Call Jim Beltz at the Public Affairs Office  
at Naval Facilities Engineering Command,  
Southern Division: (803) 820-5771.

## **Community Relations Subcommittee Meeting**

**May 13, 1997**

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**Time:** 3:30 p.m. - 4:30 p.m.

**Attendees:** Fouche'na Sheppard, Diane Cutler, Gabriel Magwood

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Mr. Fontenot was at a training session and was unable to attend the meeting. Mr. Gabriel Magwood attended in Mr. Fontenot's place, specifically to respond to questions/discussions related to the Chicora Tank Farm Fact Sheet.

### **DISCUSSION ITEMS**

**Chicora Tank Farm Fact Sheet** Ms. Foche'na Sheppard reviewed the draft fact sheet and had no changes.

**Miscellaneous Discussion** Since this was the first subcommittee meeting Ms. Sheppard had attended, Ms. Cutler explained the purpose of the group - 1) to suggest ways to keep the community informed of the ongoing environmental activities at the Naval Base, and 2) to work toward implementing those recommendations. Some subcommittee efforts have included producing various fact sheets, establishing a speakers bureau, creating and distributing an Earth Day flyer and meeting announcement flyers.

Ms. Sheppard suggested another way to get the word out about RAB meetings would be to work with local church leaders. She also recommended making contact with local reporters and setting up booths in conjunction with other local events like the Chamber of Commerce Business Expo.

### **NEXT MEETING**

**Subcommittee Meeting** The next Subcommittee meeting will be held on June 10, 1997 at 3:30 p.m. in building NH-51 in the Caretaker Site Office conference room.

NAVAL BASE CHARLESTON  
RESTORATION ADVISORY BOARD (RAB)  
Minutes of 13 May 1997

LIVE OAK COMMUNITY CENTER, 2012 SUCCESS ST., N. CHARLESTON

1. Introduction of the RAB Members and Guests

Ms. Wannetta Mallette, Community Co-Chair, brought the meeting to order at 6:00 p.m. and commenced with introductions. Mr. Daryle Fontenot, Navy Co-Chair, pointed out that the room was arranged differently and he would like to get feedback from members and the audience at the end of the meeting if it is a preferable set-up.

2. RAB Members Attending

Mr. Jay Bassett  
Mr. James Conner  
Mr. Bobby Dearhart  
Mr. Daryle Fontenot  
Mr. Tom Fressilli  
Mr. Wilburn Gilliard  
Ms. Gussie Greene  
Mr. Don Harbert  
Ms. Jeri Johnson

Mr. Ralph Laney  
Ms. Wannetta Mallette  
Mr. Lou Mintz  
Mr. Arthur Pinckney  
Mr. Johnny Tapia for Ms. Ann Ragan  
Ms. Priscilla Wendt  
Mr. Bob Veronee

3. Guests Attending

Mr. Tony Hunt	NAVFAC, SouthDiv
Mr. Brian Stockmaster	NAVFAC, SouthDiv
Mr. Gabriel Magwood	NAVFAC, SouthDiv
Mr. Paul M. Bergstrand	SCDHEC
Mr. J. Michael Reubish	CEERD
Mr. Kevin Tunstall	Shipyards Detachment
Ms. Myrtle Barnett	Community Member
Mr. Leroy Carr	Chicora/Cherokee
Mr. Joseph M. Land, Sr.	Galileo Quality Institute
Ms. Phyllis L. Breland	BCTO
Ms. Susan K. Dunn	Grassroots Coalition
Mr. George A. Freeman	East Cooper NAACP
Mr. Mel Goodwin	Harmony Project
Ms. Adelaide Leocha	Community Member
Mr. Jay Patel	Chicora/Cherokee
Mr. Benjamin Washington	Liberty Hill
Ms. Diane Cutler	EnSafe/Allen&Hoshall
Mr. Dave Backus	EnSafe/Allen&Hoshall
Mr. Larry Bowers	EnSafe/Allen&Hoshall
Mr. Britton Dotson	EnSafe/Allen&Hoshall

4. Administrative Remarks and Comments on Minutes

Ms. Mallette asked for comments on minutes from last meeting and for any other administrative remarks. None were offered.

5. Subcommittee Reports

Ms. Diane Cutler, Community Relations Specialist with EnSafe/Allen & Hoshall provided a brief report on the Community Relations Subcommittee. Ms. Foche'na Sheppard, Mr. Gabriel Magwood, and Ms. Cutler were in attendance at the meeting and discussed the draft fact sheet on Chicora Tank Farm. The next step is to get input from the members who were unable to attend the subcommittee meeting, and then get final approval from the Project Team. Hopefully, the fact sheet can be distributed by the June RAB meeting, or shortly thereafter.

6. Environmental Cleanup Progress Report

*Status of Environmental Programs*

Mr. Tony Hunt provided the progress report. He announced that a handout is available that discusses the different environmental programs (BRAC, NEPA, UST, RCRA Corrective Action Program and Asbestos) and that everyone can review it at their leisure.

Mr. Hunt presented some new information on the Naval Annex. He began by showing a location map of the Annex which can be accessed by taking Remount Road toward the airport off of I-26. Some of the typical activities conducted at the Annex included radar maintenance and vehicle maintenance. The Navy was sampling the sewer systems and one of the sampling points picked up TCE which is a chlorinated solvent - the same type of contaminant that was found at Solid Waste Management Unit (SWMU) 39. That finding triggered more sampling at the Annex.

Mr. Hunt displayed a map of a groundwater plume of TCE contamination. The Navy has been able to determine that the plume came from an area that was designated on Annex maps as an auto service rack. Soil samples were collected in that area and it was verified that it was the source. Further sampling was done out toward I-26 and at the facility fence line. Analyses found that the contaminants are in a dissolved phase down in the deeper zone. As a result of these findings, the Navy decided to go off-site and do further sampling.

Sampling was conducted along the median of I-26, and the Navy is in the process of evaluating those results.

Mr. Lou Mintz asked what will be done if contamination is found under I-26. Mr. Hunt replied that the Navy has not discussed that yet, but there are a number of things that can be done depending on the findings, such as pump and treat, or leave in place if it is attenuating (breaking down). The Navy will have to take a look at the factors before they decide on what to do.

A guest asked why all this is being done, because the property is just going to be used for putting up buildings, not used for something like gardens. Mr. Hunt concurred that it was a good point, and that groundwater in that area is not used as a drinking water source. However, it is regulated as a drinking water source, so if a contaminant exceeds the maximum contaminant level, then it has to be addressed. The question was asked, where does the money come from to pay for the

investigations. Mr. Hunt replied that it is Base Realignment and Closure (BRAC) money which ultimately comes from taxpayers.

A guest asked if the Navy expects to have someone occupy the Annex property. Ms. Jeri Johnson replied that the Annex itself would convey to the Redevelopment Authority (RDA), and they in turn are considering it for industrial and commercial development. The guest pressed the issue that if industrial development is going to be pursued, why does all this investigation and cleanup have to happen. Mr. Paul Bergstrand from the South Carolina Department of Health and Environmental Control stated that the premise of the maximum contaminant level regulations is that it is the right of the citizens of the state to put in a well on their property and get safe drinking water. To this end, there are a number of different methods to get there such as pump and treat or letting the contaminant naturally attenuate (break down). Right now, however, the Navy is trying to find out the extent of what is out there.

The question was asked, what was the property previously used for. Mr. Hunt answered that the marines had a vehicle maintenance area, and there was a radar annex where they maintained radar systems. Mr. Conner asked if the housing is affected. Mr Hunt answered that the housing is part of the Annex, but is not affected by this issue.

#### *Tank Closure Presentation*

Mr. Bergstrand introduced himself as a hydrogeologist that works for the state of South Carolina. If there are any questions about his presentation, his number is (803) 896-4016.

The Chicora tank farm issue has been coming up regularly since Mr. Bergstrand began attending meetings in April 1996, so what he will do is briefly go over the regulations that address tank closure issues and try to tie it into what is going on at the Chicora tank farm.

The first question is, how do you close down a regulated tank? What are the rules and regulations that you have to follow? Tank closure is covered under the Underground Storage Tank (UST) Control Regulations which is a South Carolina law passed in March 1990 and is very similar to the federal underground storage tank control regulations with only some minor differences. On the very first page of the regulations, exclusions are listed which include wastewater process tanks, hydraulic lift tanks, tanks under 110 gallons, and field constructed tanks, which include the Chicora tanks. Although the Chicora tanks are excluded from the regulations, the Navy has made a policy decision to follow the tank closure regulations.

The requirements for closing underground storage tanks is basically comprised of three elements: empty and clean the tanks and piping; remove the tanks from the ground, or fill the tanks with a clean, inert solid like sand; and assess the site. Every underground storage tank system is unique so the state has come up with a set of guidelines called the UST Assessment Guidelines that cover how to close a tank. The guidelines require you to a) sample where you are most likely to find contamination, b) send the samples to a SC certified laboratory, and c) report the findings to DHEC's UST program where they will review the results.

The next issue is where do you sample for contamination? Soil samples from an excavation or an in-place closure should be taken at the ends of the tank and along the piping. If there is groundwater around the tanks, groundwater samples must be taken to look for petroleum floating on the water. Once the samples are collected, they must be sent to a certified laboratory, then the report must be submitted to the state.

The possible outcomes of an assessment may include:

- *No contamination* which would result in a no further action ruling.
- *Heavy contamination* which would require immediate action to remove any free product and clean up the contamination.
- *Some contamination*. This is a more difficult scenario and may result in different closure methods including no further action, incremental monitoring, or conducting further assessments to try to determine the extent of the contamination.

How does all of this fit in with the Chicora tank farm? On May 17, 1994 the UST program issued a no further action decision based on the environmental assessment report that was submitted to DHEC. That report included soil and water samples from 1986, a fuel tracer survey and a soil-gas survey done in March 1990, soil borings and groundwater taken in June 1990, and four quarters of groundwater samples from all the wells on the property done in 1993. A report of findings was generated in April 1994. A copy of that document is available in the Information Repository. The environmental assessment resulted in a no further action in May 1994 - there was no contamination that required remediation.

As for the tanks themselves, the Navy is planning on closing out the tanks following the regulations by emptying the tank residue, steam-cleaning all the tanks, then flushing and filling the piping with a clean inert solid. Following those steps, the preferred method of closure is the partial demolition of the tanks where the tops and part of the side walls are knocked in and the tanks are filled with an inert material.

Mr. Bergstrand continued by trying to address some RAB member concerns from previous meetings:

Concern: *Oil is in the tank and it is embedded in the concrete*. Yes, that is true. However, the tanks will be cleaned and the residue will be removed. The tanks and piping will be closed and filled with an inert solid.

Concern: *Breaking up the concrete will mobilize the oil that is embedded in the tanks*. The top and sides of the tank will be knocked into the bottom half of the tank then filled in place with the inert solid. Then the ground surface will be graded to prevent water from ponding.

Concern: *Assessment samples were not taken under the tanks*. Groundwater is very shallow at the tank farm. Four rounds of water samples were taken. One sample had a hit of benzene at the maximum contaminant level, the other three quarters didn't turn up anything. Mr. Bergstrand added that the sample locations would have detected petroleum products if they were released.

Concern: *The new property owner will have to pay for future cleanup.* The Navy retains the responsibility for doing the cleanup if any contamination relating to their operations is found.

Questions/Answers: Mr. Tom Fressilli asked why was the assessment done in 1990? Mr. Gabriel Magwood answered that the assessment was done because petroleum staining was found in the pump room and a determination needed to be made if it spread to the soil or groundwater.

Mr. Arthur Pinckney asked since the Chicora tanks are not covered under the UST standards, is there another standard that the tanks are covered under, and if so, what is that standard? Mr. Bergstrand answered that it would be the Pollution Control Act which would be a standard of last resort. The Navy made a policy decision to follow the UST regulations and they are complying with those. Mr. Pinckney continued by asking if the Pollution Control Act is a more strict guideline. Mr. Bergstrand stated that he was unsure how they compare but said that the UST regulations are better suited to petroleum issues.

Mr. Fontenot added that Navy procedures are being following for the closure of the tank farm. The reason for the assessment was that there was a potential for a release to the soil or water, and whenever that happens, the UST regulations kick-in, requiring an assessment.

Mr. Pinckney asked if the Navy procedures are circumventing the Pollution Control Act regulations? Mr. Fontenot answered no. Mr. Pinckney also asked that since breaking the tanks could potentially release the embedded petroleum product, and since the tanks will be left in the ground, wouldn't any future owner who tried to remove the tanks take the chance of releasing the material? Mr. Bergstrand stated that if a new owner wanted to remove the tanks, they would have to remove everything and dispose of the remains according to regulation. A guest from the audience asked if the Navy would be responsible for such a removal. Mr. Fontenot clarified that after the Navy closes the tanks, controls will be put in place that limit what the property can be used for. If the future property owner wants to undertake removal, that is a voluntary action and it must be done at the owner's expense. However, if during normal use, the property owner finds contamination that the Navy missed, the Navy will be responsible for addressing that. But if the owner intentionally disturbs what was appropriately closed, it will be the owner's responsibility.

A guest from the audience expressed her opinion that the investigations have been going on for a long time. Cleanup was accomplished in 1990, yet nothing has been done with the property. It seems that new things are being raked up to investigate. Mr. Fontenot clarified that the investigation of the tank farm has been over since 1994. What the Navy is trying to now is to properly close the previously used tanks. They are not investigating any more - they are simply working on the process to close the tanks. In response to the question "why is this being done," Mr. Bergstrand stated that congress requires it.

The guest continued by stating that the Navy is doing a good job and they're doing what they're supposed to. But then the community wants to be sure the Navy is doing what they're supposed to, and sends people in to check up on them which costs more money. Mr. Pinckney interjected that he is on the national RAB committee and that he does not trust the military, that he is a stakeholder, a citizen trying to make sure the job is done right.

A discussion ensued among multiple parties regarding the status of the tanks now and what condition they need to be in for future use. RAB members provided a review of the events that have taken place regarding Chicora in order to bring the new guest up to speed on the issue of the tank farm. Ms. Mallette informed the guest that minutes from all the meetings are available for public review in the Information Repository at the Dorchester Road Regional Library. Ms. Mallette also added that many of the questions and issues the guest has raised have been visited in previous meetings and that someone will be happy to personally answer all of her questions at the close of the meeting.

Ms. Phyllis Breland with DOE tried to provide a clarification for the RAB regarding petroleum products. She said because petroleum products are so prevalent in our society, they are regulated under the RCRA's UST program rather than being considered a hazardous waste and controlled under other regulations. The problem with the tanks is not the contamination within those tanks because the contamination is minimal, and state regulations require that they be cleaned out so they're protective of human health and the environment. The problem with the tanks is how they will be closed so the property can be used. She also added that no state law can be less stringent than the federal laws.

Ms. Gussie Greene pointed out that the Chicora issue is very important to the local community. She also inquired what was going on out there because shrubs were being planted inside the fence. Mr. Fontenot stated that he did not know anything about it.

Ms. Susan Dunn stated that the role of the community is not to ensure that the Navy follows regulations. In this case, their role is to make sure the Chicora property is put to good use. The piece that is missing is the community's interest in the property. Neither the RDA, the City of North Charleston or the School Board has shown any interest in the property. Therefore it is up to the community to show some initiative to find a good use for the property. Mr. Fontenot reminded Ms. Dunn that the RAB's responsibility is to address environmental issues. Reuse issues fall under the jurisdiction of the Redevelopment Authority.

#### 7. Environmental Justice Presentation

Dr. Mel Goodwin provided a presentation on environmental justice. He began by stating that the notion of environmental justice was developed early in the 1990s when people began to put together several sources of data such as census data, community right-to-know act, and toxic release inventory information. What was discovered was that the facilities that were required to register under the Toxic Release Inventory, because they were using substantial quantities of potentially dangerous chemicals, were disproportionately located near minority communities or low-income communities. At first, it was called environmental racism, then changed to environmental equity, and today's term is environmental justice.

Environmental justice is the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no groups of people should bear a greater share of the negative environmental effects from industrial,

municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies.

In 1994, President Clinton issued an executive order stating that each federal agency shall make achieving environmental justice a part of its mission by essentially identifying disproportionately high impacts on minority groups that stem from various activities.

Dr. Goodwin then talked about a place in the local area that a lot of folks feel is a candidate for environmental justice issues. That place is the neck area between the City of Charleston and North Charleston.

The earliest use of the neck area in the 1700 and 1800s was for agriculture. The next usage in the mid 1800s was for cemeteries. Then in the 1860s, the first phosphate fertilizer plant began operation in the area and over the next 20 years over a dozen plants were developed on the Ashley and Cooper rivers because there was good ocean access and a lot of available land. Other industry began to come into that area in the 1900s. In the early 1900s a wood treatment facility was established - now known as the Coppers site.

Because these industries were labor intensive, there was a need to create little villages, and that is what happened in the neck area. Dr. Goodwin displayed an early 1900s map that showed the location of the fertilizer plants and lumber mills. He also pointed out that the area was not clear like it is today, it was heavily wooded. Although there was a lot of industry by the early and mid 1900s, most of it was along the shoreline.

In the 1890s the consolidated railroad had a trolley line that ran from the city limits on Mount Pleasant Street up to an amusement park called Chicora Park. On Sundays, people would take the trolley up to the park and travel through the forested area of the neck. The reason Dr. Goodwin provided that background was because he often hears the comment that industry was there first, and the communities developed with full knowledge of what they were getting into. Although that statement is true, he added that the buffer zones were much different back then, and no-one was really thinking about environmental contamination or health impacts in the early 1900s.

To look at what's happening in that area now, demographic data shows a little under 5000 people, mostly black, mostly families. Median income is around \$10,000. Dr. Goodwin presented another map which depicted current-day land use including residential, industrial, and commercial areas. The map showed small areas of residential housing among (and sometimes surrounded by) large area of industrial and commercial development.

Dr. Goodwin moved on to the area of "perception." In 1976, the City of Charleston annexed most of the neck area primarily to develop an industrial tax base. In 1978, the city prepared and released their land use and housing plan. Some of the comments from the plan were:

- This is the only area in the city to consistently suffer from poor air quality. Even after restricting the amount of discharges, the air is not good.
- ...one of the most blighted areas in the city.
- Residents are predominately black and elderly.

- Residential land uses exist immediately adjacent to large industrial and commercial establishments in the neck area with few buffer zones to mitigate any adverse impacts on the neighborhoods. Residents are most concerned with this situation and wish to determine ways to co-exist with nearby businesses.

Dr. Goodwin continued by noting that these villages were no closer to industry than the downtown residential neighborhoods were to the lumber mills on the peninsula. So, locating that closely was not an unreasonable thing for people to do, but the situation changed. The buffers disappeared, industry expanded, and the nature of industry changed.

The land use and housing plan continued by stating "the neck, as the location of most of the City's industrial tax base must be considered as a major industrial area." And "the area's infrastructure (streets, drainage facilities, etc.) are in need of repair and will be very expensive to bring up to standards. Thus it would be very difficult to rehabilitate these neighborhoods. In the future, gradual transition to the partial industrial use will better serve the needs of all segments of the neighborhoods. This will make it possible to combine several lots for larger business establishments allowing improved design and traffic control. It will also enable present residents to sell their property for a higher price."

So, the 1978 plan encouraged the gradual voluntary transition of the residential areas of Silver Hill, Four Mile Hiburion Heights, and Magnolia for commercial or industrial uses within 20 years through zoning changes. The neck area is zoned primarily for heavy industrial activities. There is some general business zoning, and a little bit of white commercial zoning. The only areas that are zoned for residential activities are the portions of Silver Hill that are actually occupied, and Rosemont. Four Mile Hiburion is zoned entirely for general business and industry.

Dr. Goodwin asked if this was a conscious determination to create environmental racism or to ignore environmental justice? Probably not. In Dr. Goodwin's opinion, most of these issues are not deliberate, they emerge from a number of other factors. But, 20 years after the proposal was made, the folks in those areas are still black, still old, and still there. So whether it's deliberate or circumstantial, it is an environmental justice issue.

Dr. Goodwin then shared a story about another kind of environmental justice. The story is about a bank in the Netherlands who wanted to change their image from a stave Dutch bank to a world leader. They commissioned a new corporate headquarters where they oriented the buildings so they took advantage of natural light, took advantage of passive solar technology, collected rain water on the roofs brought it down through handrails into atria where they had organic gardens and grew organic vegetables that they served in the cafeteria. They commissioned original art work, every employee had a natural wood desk, all windows opened, every employee was within 23 feet of a window, and the hallways wound through the work areas to make interesting areas for people to walk. They spent \$4 million over normal construction to do all those extras. However, they saved \$ 2.4 million in energy costs per year, making up for those costs in less than two years. The big surprise was not the energy cost savings, but the fact that the people showed up for work more, they didn't get sick as often. They showed a 15% rise in productivity. This was done in

1983. Not many buildings like that are built today. And, not many buildings are built in low income communities today, even as part of affordable housing, new construction, or rehabilitation.

Dr. Goodwin asked, what would happen if the productivity in schools, homes, and businesses could be increased by 15%? Things might look very different. So why isn't it being done? He provided two reasons for why buildings are not built that way, which are the same two reasons that there are environmental issues out there. 1) Ignorance - people don't know that there's an issue. 2) Habit - people get used to doing things the way they've always done them.

A final example is the Coppers site where the primary cleanup strategies are removal and capping. The capping material is proposed to be crushed limestone with a view toward future industrial use or container services. When corporate campuses are built on sites like this, they provide amenities for the community. That area could be changed around, and then it wouldn't be necessary to move Silver Hill. That activity could be compatible with many types of modern industry if people thought that way. So, in terms of discussions of reuse and cleanup goals, people need to break out of the mold. Dr. Goodwin said he realized that the RAB deals with environmental issues and the RDA deals with reuse, but it's just that kind of compartmentalization that keeps society making the same choices. Maybe the RAB can't do anything formally, but they can engage the environmental justice issue. Perhaps the RAB can move this whole thing forward a little more.

Mr. Pinckney asked if environmental justice encompasses the revitalization of an area in addition to the health aspects. Dr. Goodwin responded that yes, it is more than just about health, it is about economic reuse and social impact as well.

Dr. Goodwin added that the Navy is getting there, but there are a lot of processes that are set up with conventional models within the Navy's Base Closure program and the EPA's Superfund program.

A guest asked if Dr. Goodwin has spoken with any city council or county council members about environmental justice. Dr. Goodwin replied that they are now in the final stages of developing a series of land use plans for the 19 neighborhoods in the Enterprise community. When those land use plans are finished, they will have a lot to say about environmental justice. They will also have a lot to say about responsibility. It is not only the government's responsibility to do something, it is just as much the responsibility of neighborhoods and residents to engage in these issues themselves.

Mr. Pinckney asked if Dr. Goodwin would consider the Chicora area an environmental justice issue. He replied, probably, but based on what he heard at the meeting, he thinks it's probably less of a concern now than when the tanks were in operation. The point, however, is not why was it done, but rather what will/can be done about it now. Dr. Goodwin agrees with Ms. Dunn's point that a vision needs to be formulated, then the community can work toward what they want. And that in turn makes it easier to determine what kind of cleanup is necessary.

8. RAB Meeting Frequency Discussion

Ms. Mallette shared the suggestion from a RAB member that meetings be switched to bi-monthly or quarterly. She asked for comments or discussion about the issue. Mr. Fontenot added that he was the one who made the suggestion. He added that Charleston was the only RAB within the Southern Division area that meets monthly. Also, the last meeting would have only been about 15 minutes long had it not been for a reuse discussion. Mr. Fontenot said he thought the RAB would best be served if meetings were less frequent, then environmental issues could fill the agenda. In addition, bi-monthly meetings might encourage better attendance since meetings would be held only 6 times a year rather than 12.

RAB members debated the issue which was then taken to a vote. The majority of members voted to switch to bimonthly meetings. The next meeting will be held in June, followed by August.

9. Remaining Questions and Comments

Mr. Pinckney said he read an article in the newspaper about a company that did some testing and filed some false information with EPA. He asked if that involved the investigations at the Naval Base? The answer was no, that issue occurred at the Naval Weapons Station.

Mr. Conner said that some people he knows don't think the odor of gas in the Chicora area is coming from the trucking depot as stated in a previous meeting. Mr. Conner stated that he feels the people deserve an explanation that makes sense.

10. Adjournment

Meeting was adjourned at 7:30 p.m.

**Summary of Action Items**

- Meeting frequency will be changed to bi-monthly starting in June, 1997.

Attachments to Minutes

- (1) Tuesday May 13, 1997 RAB Meeting Agenda
- (2) RCRA Facility Investigation Progress Update - 5/2/97
- (3) Presentation - How To Close Down a Regulated Tank? - Paul Bergstrand

Minutes recorded by: Diane Cutler, EnSafe/Allen&Hoshall

Minutes approved by: \_\_\_\_\_

Daryle Fontenot  
Navy Co-Chair

\_\_\_\_\_  
Wannetta Mallette  
Community Co-Chair

Tuesday, May 13, 1997

Charleston Naval Complex

RESTORATION ADVISORY BOARD MEETING AGENDA

6:00 P.M. Location: *Live Oak Community Center*  
*2012 Success Street, North Charleston, SC*

6:00 P.M. RAB MEETING

- A. Introduction of the RAB Members and Guests
- B. Administrative Remarks, comments on the minutes of the last meeting
- C. Subcommittee Reports
- D. Environmental Cleanup Progress Report - Cleanup Team
  - Status of the Environmental Programs
  - Tank Closure Presentation
- E. Environmental Justice Presentation Dr. Goodwin
- F. RAB Meeting Frequency Discussion
- G. Remaining Questions and Comments from RAB Members and Visitors
- H. Agenda for next meeting.

RAB Members, Project Team, and interested citizens informally talk about what's going on after the meeting from 7:00 p.m. to 8:00 p.m.

Please mark your calendar. Our next meeting is **Tuesday, June 10, 1997, 6:00 p.m.** at the Live Oak Community Center, 2012 Success Street, North Charleston, SC.

# NAVAL BASE CHARLESTON RCRA FACILITY INVESTIGATION PROGRESS UPDATE

ZONES	CURRENT PHASE	CURRENT	PLANNED	NEXT PHASE	OVERALL	OVERALL	NOTES
		RFI COMPLETION PERCENTAGE	COMPLETION DATE OF		RFI COMPLETION DATE	RFI COMPLETION PERCENTAGE	
A	Report Review	98	5/15/97	CMS Work Plan	5/15/97	95	
B	Report Review	100	12/20/96	COMPLETE	1/8/97	100	No CMS or CMI required in Zone.
C	Report Review	80	6/20/97	CMS Work Plan	6/20/97	90	
D	Report Review	50	6/6/97	CMS Work Plan	6/6/97	85	
E	RFI Report Prep	50	5/24/97	Report Review	8/19/97	65	
F	Field Work	95	5/2/97	RFI Report Prep	9/16/97	48	
G	RFI Report Prep	10	6/15/97	Report Review	9/26/97	50	
H	Report Review	95	5/15/97	CMS Work Plan	5/15/97	95	
I	Report Review	50	6/20/97	CMS Work Plan	6/20/97	80	
J	Field Work	5	9/9/97	RFI Report Prep	4/21/98	11	
K	RFI Report Prep	5	6/16/97	Report Review	9/30/97	50	
L	Field Work	5	10/10/97	RFI Report Prep	4/21/98	11	
<b>All Zones</b>					<b>4/21/98</b>	<b>65</b>	

## LEGEND

Phase	Description
RFI	RCRA Facility Investigation
CMS	Corrective Measures Study
Work Plan Preparation	Work Plan being prepared by Navy Contractor
Work Plan Review	Regulators (DHEC & EPA) reviewing work plan
Field Work	Navy contractor performing field work as outlined in the Work Plan
RFI Report Preparation	Navy contractor preparing the RFI Report
Report Review	Regulators (DHEC & EPA) reviewing report
CMS Work Plan	CMS Work Plan being prepared by Navy Contractor

Naval Base Charleston  
Project Status  
5/13/97

PROGRA	PROJECT DESCRIPTION	ACTION REQUIRED	ECD
BRAC - Property Lease/Transfer	None		
NEPA	Environmental Assessment of Naval Annex	Environmental Assessment to complete after receipt of Reuse plan. Reuse plan anticipated 6/30/97	
RCRA Compliance	Part B permit application	Part B application submitted, SCDHEC reviewing	6/30/97
RCRA Corrective Action	Zone A RFI report	Comments received, Scoping meeting to be scheduled next	6/9/97
	Zone A field work	Field work complete, supplements to Zone A report being prepared	6/30/97
	Zone B RFI report	Zone B letter addressing changes to background mailed 5/12/97, includes request for change to NFA for AOC 507	complete
	Zone C RFI report	In SCDHEC review, background discussed 5/12/97. Expect comments by 5/30/97	
	Zone D RFI report	Background discussed 5/12/97	
	Zone E RFI field work	Field work complete 2/24/97, surface and subsurface soil background resolved, groundwater to be discussed by 6	6/16/97
	Zone F RFI report	Field work complete 5/5/97 (first sample new wells), waiting on background discussion (Barry has info)	
	Zone G RFI report	Field work complete, waiting on background discussion (contingent on Fuel Distribution System)	
	Zone H RFI report	Comments resolved, sites categorized (NFA, CMS, etc.) need information on Interim Measures to complete	5/16/97
	Zone I RFI report	In SCDHEC review	
	Zone J RFI field work	Field work to begin in two weeks, met with NOAA and resolved issues	5/26/97
	Zone K Field Work	Field work in progress on SWMU 166	6/30/97
	Zone L RFI field work	Field work to begin 5/19/97	
	DPT	Field work to complete 7/31/97	7/31/97
	Dye Tracer	Field work to complete 6/12/97	6/12/97
	Permanent Wells	Field work to complete 6/19/97, Need well permits	6/19/97
	Soil Sampling	Field work to complete 6/19/97	6/19/97
	Miscellaneous issues		
	Groundwater Model	Second layer added, in calibration. Additional round of groundwater level measurements determined not necessary	6/30/97
	Transfer of IR sites to UST program	SWMU 13 is approved for transfer, remaining sites require further discussion, investigation or CMS	
	Support services		
	Groundwater Monitoring	Zones D, F & G second quarter started 4/20/97, Zone K 2nd quarter finished 4/18/97	
Underground Storage Tank	Bioremediation demonstration project	In operation	
	Removals	FY 96 - 54 tanks authorized for removal, all but two tanks removed	
		FY 97 - 43 tanks authorized for removal, thirty one have been removed	
	Chicora Tank Farm	Waiting on funding authorization and decision of the City of North Charleston	
Asbestos	Building 32 remediation	In progress	6/30/97

**Paul M. Bergstrand, P. G.**

**803-896-4016**

*How to close down a Regulated Tank?*

## *How to close down a Regulated Tank?*

### UNDERGROUND STORAGE TANK CONTROL

REGULATIONS R.61-92, Part 280 March 1990

#### Subpart G -- Out of Service UST Systems and Closure

- A) Empty and clean tanks and piping.
- B-1) Remove the tank from the ground, or
- B-2) Fill the tank with a clean inert solid.
- C) Assess the site \*

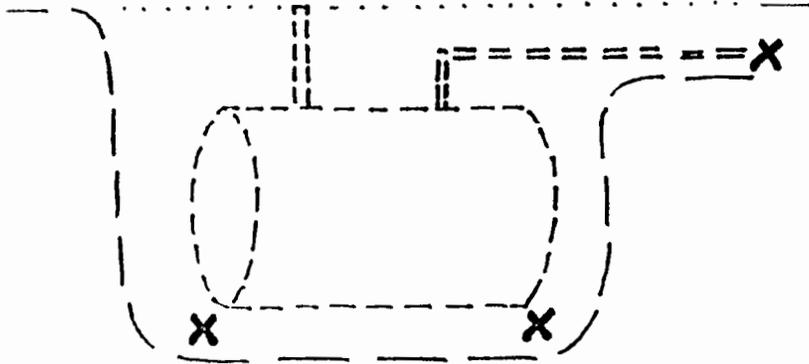
*How to Assess the site?*

UNDERGROUND STORAGE TANK ASSESSMENT  
GUIDELINES

- A) Sample where most likely to find contamination.
- B) Samples must be sent to a SC Certified Laboratory.
- C) A report of findings must be sent to the SC DHEC UST Program for review.

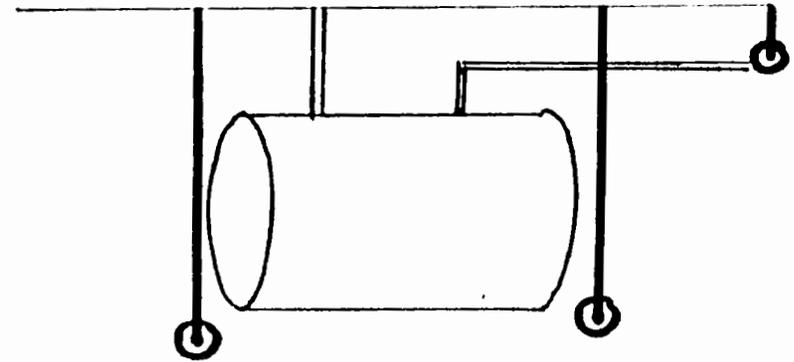
*Sample where most likely to find contamination.*

Excavation



X = SOIL SAMPLE LOCATION

In Place Closure



⊙ = SOIL BORING  
SAMPLE LOCATION

NOTE! Sample Ground Water if encountered in excavation or soil boring.

*Possible results of an Assessment.*

- A) No Contamination = NFA (No Further Action)
- B) Heavy Contamination = Must clean up.
- C) Some Fuel Components =
  - 1) NFA (No Further Action)
  - 2) Monitoring (sample wells for 6 to 12 months)
  - 3) More Assessment =
    - a) NFA
    - b) Risk-Based Corrective Action
    - c) Clean up

*What is the status of the Chicora Tank Farm?*

- Environmental Assessment = NFA on 17 May 1994
  - Soil Borings and water samples, 1986
  - Fuel tracer survey, March 1990
  - Soil gas survey, March 1990
  - Soil Borings, June 1990
  - Monitoring wells, June 1990
  - Ground Water samples, 4 quarters March 1993
  - Report of findings, April 1994

*What is the status of the Chicora Tank Farm?*

- NAVY planning to close out tanks and piping by:
  - A)
    - 1) Emptying tank residues,
    - 2) Steam cleaning all tanks,
    - 3) Flushing and filling piping, and
  - B)
    - Option 1 Fill tanks with Sand
    - ~~Option 2 Demo tank tops only~~
    - Option 3 Partial Demo of tanks (Preferred)
    - ~~Option 4 Total Demo of tanks~~

## Concerns expressed by RAB members:

*“Oil is in the tank and embedded in the concrete.”*

- Tank residues will be removed
- Tanks will be steam cleaned
- Piping will be flushed and filled with inert solid.

*“Breaking the concrete will mobilize the oil.”*

- Inert solids to fill and cap the bottom half of the tank
- Surface soils graded to prevent water from ponding.

Concerns expressed by RAB members:

*“Assessment samples were not taken under the tanks.”*

- Assessment sample locations would detect released petroleum products.

*“The new property owner will pay for future clean up.”*

- If clean up is needed the NAVY retains responsibility.

**Paul M. Bergstrand, P. G.**

**803-896-4016**