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MEETING MINUTES FROM RESTORATION ADVISORY BOARD MEETING DATED 14  
NOVEMBER 1995 WITH TRANSMITTAL CNC CHARLESTON SC  
11/29/1995  
ENSAFE/ ALLEN AND HOSHALL

## **Community Relations Subcommittee Meeting**

**November 14, 1995**

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

**Attendees:** Daryle Fontenot, Susan Floyd, Wannetta Mallette-Pratt, Arthur Pinckney, Lou Mintz, Diane Cutler

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### **DISCUSSION ITEMS**

**Community Relations Plan** The Installation Restoration Program Community Relations Plan is complete. Daryle will distribute copies to the subcommittee members after the meeting, and to the remainder of the RAB members at tonight's RAB meeting.

**National RAB** Arthur announced that the National RAB will be completing a book within the next month or two that should help local RABs with their planning and activities.

**FOSLs** RAB members would like to be informed when a FOSL is signed. Arthur Pinckney stated that he would like to receive a copy of each of the signed FOSLs.

### **DOCUMENT REVIEW**

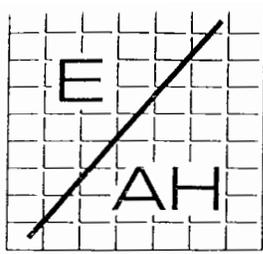
**FOSL Fact Sheet** Completed review of the FOSL Fact Sheet.

### **ACTION ITEMS**

**FOSL Fact Sheet** Diane will make edits and provide a revised version to Daryle for review and distribution before the next meeting.

### **NEXT MEETING**

**Subcommittee Meeting** The time for the next subcommittee has not yet been scheduled due to the modified time of the next RAB meeting (2-4 p.m.).



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November 29, 1995

Commander, Naval Base  
Base Closure Office (Daryle Fontenot)  
1690 Turnbull Ave.  
Suite NH51  
Charleston, SC 29405

**Subject:** Restoration Advisory Board Meeting Minutes (11/14/95)  
CLEAN Contract# N62467-89-D-0318 CTO# 2900

Dear Mr. Fontenot:

Please find enclosed a copy of the November 14, 1995 Restoration Advisory Board Meeting Minutes. If you would also like the original audio tapes, let me know and I will forward those to you.

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

Sincerely,

EnSafe/Allen&Hoshall

By:

Diane Cutler

enclosures (1)

cc: Todd Haverkost (without attachments)  
Contracts File

NAVAL BASE CHARLESTON  
RESTORATION ADVISORY BOARD (RAB)  
Minutes of 14 November 1995 Meeting

1. Call to Order

The meeting was called to order by Captain Jim Augustin, Navy co-chair of the RAB. The Captain welcomed everyone to the new location at the Naval Hospital and asked for any feedback on the new location. Announced absent RAB members and introduced three new visitors in the audience. The Captain explained the basic ground rules: start the meeting on time, end on time, explain acronyms, and make sure everyone's questions get answered either during the meeting or afterwards.

2. RAB Members Attending

Captain Jim Augustin  
Mr. Oliver Addison  
LCDR Nick Cimorrelli  
Mr. Bobby Dearhart  
Mrs. Susan Floyd  
Mr. Daryle Fontenot  
Mr. Wilburn Gilliard

Mr. Virgil Johnston  
Mr. Ralph Laney  
Ms. Wannetta Mallette-Pratt  
Mr. Robert Mikell  
Mr. Louis Mintz  
Ms. Ann Ragan  
Mr. Van Robinson

3. Guests Attending

Mr. Tony Hunt  
Mr. Rick Davis  
Ms. T.B. Fielding  
Ms. Kim Reavis  
Mr. David Pratt  
Lt. Donna Murphy  
Ms. Sally Kuhl  
CAPT W.F. Nold  
Mr. Tom Gerken  
Mr. Joe Bowers  
Ms. Jeannie Olano  
Ms. Jeri Johnson  
Ms. Susan Dunn  
Mr. Gene Eaton  
Mr. Les Birtchet  
Mr. Jim Moore  
Mr. Clyde Anderson  
Mr. Jay Cornelius  
Ms. Ginny Gray  
Mr. Lawson Anderson  
Ms. Diane Cutler  
Mr. Mark Bowers

SOUTHNAVFAC  
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COMNAVBASE PAO  
COMNAVBASE  
CNSY  
CNSY  
SCDHEC  
SCDHEC  
RDA  
Grassroots Conversion Coalition  
Atlantic Drilling Corp.  
NRRO  
Concerned Citizen  
Concerned Citizen  
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### 3. Guests Attending, Continued

Mr. Dave Backus	EnSafe/Allen&Hoshall
Dr. and Mrs. James Speakman	EnSafe/Allen&Hoshall
Mr. Todd Haverkost	EnSafe/Allen&Hoshall
Ms. Lisa Brown	EnSafe/Allen&Hoshall
Mr. S.H. Weatherford	EnSafe/Allen&Hoshall
Mr. Jack Mayfield	EnSafe/Allen&Hoshall

### 4. Comments on Minutes and Administrative Announcements

Captain Augustin asked for comments on last month's meeting minutes which were taken by Barbara Eller of Southern Division. There were no comments, therefore minutes were accepted and will be placed in the Information Repository.

### 5. RAB Member Concerns

Captain Augustin brought up an issue, drawn from the minutes of the last two meetings, which focuses on the RAB's concern that they don't actually advise on anything. So far, there have not been many issues to advise on, however, there are some.

As a review, the RAB Charter states that the RAB is a forum for discussion and information exchange on environmental cleanup issues between the cleanup team and the community. RAB members will review and provide comments on environmental documents. In order to increase the RAB's advisory role, they need to work more closely with the cleanup team. Captain Augustin requested that the cleanup team (Daryle Fontenot, Ann Ragan, Bobby Dearhart, Doyle Brittain) all sit together to make themselves more visible. The Captain also recommended to Admiral Watkins that Daryle Fontenot replace him in the Navy co-chair position since the cleanup team should be emphasized during these meetings.

Captain Augustin asked for suggestions on how to make the RAB a more participatory team. He recommended that the cleanup team should be the focal point for questions and recommendations. In addition, meeting minutes should include an encapsulated summary of the evening's recommendations or ideas, and should highlight the RAB advisory comments to the team.

Mrs. Susan Floyd inquired whether the RAB should address the cleanup team, or the co-chair. Since Daryle Fontenot is part of the cleanup team and has been recommended as co-chair, he can be addressed.

### 6. Subcommittee Reports

Daryle Fontenot reported that the Public Relations Subcommittee met prior to the RAB meeting and all members were present. The Community Relations Plan has been finalized

and was passed out to all RAB members at the beginning of the meeting. Anyone who wants their own copy should contact the Base Closure Office.

Today, the subcommittee worked on Fact Sheet #5, the FOSL process, and may have it ready for RAB review in December, or at the latest, in January.

Captain Augustin reminded Daryle that the Public Relations Subcommittee was charged with deciding on the location for upcoming RAB meetings. Mr. Fontenot responded that the subcommittee did not discuss it at this meeting. The Captain said to keep it on the agenda. The Naval Hospital may be a good place to keep having the meetings since it meets a lot of the criteria. Other suggested locations include the Cherokee Church for daytime meetings, and the Department of Public Services, just down the road. Any other suggestions should be addressed to the Public Relations Subcommittee.

### **7. Environmental Cleanup Progress Report**

Daryle Fontenot introduced the three part Environmental Cleanup Progress Report: Tony Hunt will present the RCRA Facility Investigation (RFI) progress for the month of October, EnSafe/Allen&Hoshall Task Order Managers will provide individual Zone updates, and Mr. Fontenot will discuss expenditures.

Tony Hunt distributed a handout which discussed Zone funding and progress. A copy of this handout can be found in the attachments to these minutes. Funding is available for Zones J and L, but not yet negotiated and awarded. Total funding requirement is \$4.5 million. Until this requirement is met, the Navy still can not begin implementation of Zones D, F, and G or work plans and implementation for Zone K.

Todd Haverkost, Task Order Manger for Zone H, stated that E/A&H will only address the zones where field activities are completed or ongoing. Zone H is the first zone for which all field work has been completed. The draft RCRA Facility Investigation (RFI) Report was submitted on July 31 for review and comment by SCDHEC and EPA. E/A&H has received some draft comments allowing them to address a few of the technical issues.

Mr. Haverkost discussed some of the technical decisions E/A&H and regulators have been discussing. The first issue is groundwater classification, specifically, whether the groundwater is considered a useable source. SCDHEC's policy is that all groundwater in the state is classified as drinking water. Other alternatives are currently being considered.

Cleanup Criteria and Future Land Use are closely related issues also requiring technical decisions. E/A&H has been asked to make recommendations regarding which sites need further investigations and which will fall out. Four of the 31 Zone H sites will fall out, but issues remain with 27 remaining sites, specifically, what is the threshold where cleanup has to take place, and will sites be cleaned up to residential or industrial levels. These are risk-management decisions and must be made by the regulators.

Jeri Johnson asked what the definition is for residential and industrial. Mr. Haverkost responded that housing and playgrounds are examples of residential, industrial is a little

harder to define and come up with cleanup values for. This will be a risk-management decision that has to be made by the regulators.

Susan Floyd asked who makes the final determination on what is clean. Again, the response was that it is a risk management decision.

Captain Augustin reiterated that this topic, "how clean is clean," is one that has been ongoing and is difficult to determine. The Captain asked if anything new had been decided by the regulators, and added that once the determination is made for Zone H, the rest of the zones will be able to move along more quickly.

Ann Ragan replied that the State's policy is to clean up to residential levels. The national trend is moving toward industrial levels, however, there is no set formula for this. The State would have to look at a cost/benefit analysis to determine the cost savings of cleaning to industrial rather than residential standards.

Virgil Johnston mentioned that Zone H will be used for light industrial purposes as it is now. It will not be used for residential purposes and the decision is holding up the RFI report. Ann Ragan pointed out that leasing is being allowed, and the decision is not holding up leasing. Mr. Johnston responded that it is, however, holding up conveyance which is also being worked on.

Jim Moore asked if anybody knows when the Zone H RFI report will be finalized. Joe Bowers replied that it would be completed by early 1996. Mr. Moore also asked if we know what contaminants are in the ground at Zone H. Mr. Haverkost answered yes, but that we do not know the action levels for cleanup. Mr. Moore asked why this information has not been provided to the RAB. Tony Hunt responded that it has, in fact, been provided.

Mr. Moore also asked that if nothing has been found at some of the parcels in Zone H, why can't the individual parcels be leased or transferred. Tony Hunt said that is exactly what is being done, but background and risk must first be determined. Background concentrations must be determined in the dredge/fill material that makes up Zone H. Background sampling took place at the same time as the other Zone H sampling, and is being reviewed as part of the Zone H RFI report by the regulators. The Navy can not say that a parcel of land is clean until the background is found to be clean.

Captain Augustin asked if background has been established yet. SCDHEC answered not yet, that data is currently being reviewed.

Lou Mintz stated that he requested and received a report from SouthDiv that established that \$439,000 has been spend on sampling and \$2.6 million on laboratory analyses, yet he still doesn't know what's been found at the Base. Mr. Mintz wants to know where the money is going and where to get better information. He also stated that he feels he's not getting his money's worth, and very little has been accomplished for the money spent.

Captain Augustin interjected that Daryle Fontenot will address expenditures later in the presentation.

Captain Augustin recapped the previous discussion about background. Jeri Johnson stated that it seems to be a policy issue that's holding up the process. Ann Ragan explained that SCDHEC is in the middle of re-evaluating its policy, but for now, the directive is to clean up to residential levels.

Lou Mintz questioned Ms. Ragan if she was saying that the State is directing the Navy to clean up the Base to a level acceptable for playgrounds. Ms. Ragan said that until the State can get policy changes approved, they will continue to require cleanup to residential levels. Furthermore, it is in the RAB's best interest to clean to residential levels, since it only costs a little more, and provides greater flexibility in lease and transfer opportunities.

Captain Augustin stated that this is a good issue for the RAB to state their preferences on. Susan Floyd stated that she would like to see the cleanup level remain at residential standards.

Ginny Gray, E/A&H Task Order Manager presented material for Zones C and I. A handout of this material is attached to the minutes. Sampling for Zones C and I ran concurrently and was finished this summer. Zone C has 2 Solid Waste Management Units (SWMUs) and 11 Areas of Concern (AOCs), and 249 soil samples were collected. Zone I has 2 Solid Waste Management Units 15 Areas of Concern, and 176 soil samples were collected. E/A&H has started the report preparation stage for both of these zones. All geotechnical data, chemical analytical data, and engineering parameters data that will be used in the Corrective Measures Study has been received. At the end of the week a final QA/QC check will be completed on the validated data.

QA/QC stands for Quality Assurance/Quality Control. Once laboratory analysis is finished, validators look at the data for completeness and accuracy saying it is valid and useable for the RFI Report. This validated data then goes through a QA/QC check at E/A&H to verify that the data package has no errors.

Lou Mintz asked what the lab does, since E/A&H has to go through all these additional steps, and why doesn't E/A&H just run the analysis. Ms. Gray explained that the lab analyzes the samples and produces analytical results. E/A&H does not have the equipment to analyze these samples. The lab has specialized instrumentation and procedures that they must follow. They have method detection limits, practical quantitation limits, and a system of checks and balances they use to analyze and double check the data they produce.

Susan Floyd requested that someone come up with a step by step diagram or flow chart to describe the data validation process. Ms. Gray confirmed that one of the E/A&H chemists could provide that information.

Ms. Gray gave a quick run down of the non-critical sections of the document that have been produced. The critical sections have not yet been developed because E/A&H must

wait for the Zone H technical issues to be resolved before they can continue with the RFI reports for any of the other zones. E/A&H is completing all the sections of the report that they can so when the technical issues are resolved, they can move ahead quickly to produce the entire document.

Susan Floyd asked if any re-sampling needs to be done and will any areas of concern drop off. Ms. Gray confirmed that all sampling has been completed and that she does not yet know if any areas of concern will drop off.

Jim Moore asked if the Corrective Action Management Plan (CAMP) schedule date of December 18th will be met for these Zones. Ms. Gray answered that no, they will not. Mr. Moore then asked how the State felt about that. Joe Bowers, SCDHEC answered that they realize there are a number of difficult issues that need to be ironed out and they're doing their best to resolve them and minimize delays. Hopefully the reports will be delayed only a few more weeks and available at the January RAB meeting.

Jim Moore asked for clarification on the background issue, specifically, Zone H is comprised of dredge material, but Zones C and I are not, so how can the technical issues for H be the same as for C and I. Ms. Gray explained that the soil type and data may be different in each zone, but the statistical approach for determining background will be the same, and that's what the regulators are working on.

Susan Floyd wanted to verify that once the analytical approach for determining background has been decided upon for H, that the completion of the other Zone's RFI reports will move along at a rapid pace. Captain Augustin, E/A&H, and Joe Bowers all concurred.

Lou Mintz expressed his disappointment that this process has taken so long, and that it seems that in all the years environmental cleanup has been ongoing, that the procedures should be more exact.

Dave Backus provided an update on Zone E, the Controlled Industrial Area (CIA), which comprises 120 acres. Sampling is currently underway at this Zone. Zone E comprises 26 SWMUs, 54 AOCs, and 25 supplemental well locations. In Zone E there are so many sampling points, that a typical grid method didn't work. With approval from the regulatory agencies, E/A&H used a supplemental sampling plan. E/A&H started field work in August 1995.

Lou Mintz asked about the discrepancies in numbers between Tony Hunt's presentations and Mr. Backus' presentation. Mr. Backus stated that it may be due to a change in the work plan.

The question, what is a wipe sample, was asked. Mr. Backus explained that it is a sample from a floor, wall or other surface that is collected with a clean, sterile swab.

Mr. Backus continued by providing statistics on proposed and completed sampling through October 31, 1995. This material can be found in the handout attached to these minutes. Rotosonic drilling will start at Zone E once it is completed at Zones A and B.

Mr. Backus explained that there are 10 different kinds of underground utilities at the CIA which made choosing sampling points very difficult. E/A&H hired a subcontractor to locate these utilities. Out of 430 boring locations, they only had to make one change in sampling locations as established in the workplan.

Susan Floyd inquired about the type of utilities that are underground and Mr. Backus listed electrical, steam, and oxygen as a few. Mr. Backus also explained that experienced shipyard workers were used extensively to collect preliminary information on the utilities.

In response to the concern about using local labor, Mr. Backus offered that the drilling subcontractor being used, Atlantic Drilling, is a local firm, and another local firm was hired to pull cores from the drilled holes.

E/A&H is well ahead of schedule for Zone E. Samples are being sent to the lab and analyzed as they are being collected. The lab analyzes and returns the data in 30 days. Then, 30 days after receipt of data, data is validated. The RFI report is scheduled for November 1996.

A discussion about the lab's 30 day turnaround ensued. The normal turnaround time is 30 days, which is the standard for all Zones. A quicker turnaround can be contracted but it would cost a premium. Typically, the labs analyze the samples within a few days but need the remainder of the time to process the data.

LCDR Nick Cimorrelli stated that most of Zone E is covered in concrete and asphalt, but the sampling plan doesn't show that those materials will be sampled. Mr. Backus explained that the numbers for soil also include some asphalt samples, however, most are soil because they are primarily interested in environmental impact, (what affects the soil and water).

Captain Augustin announced that the presentation for Zones A and B would not be given due to time constraints. The handout material for that presentation is included in the attachments to these minutes.

Tony Hunt mentioned that the rotosonic drill rig will be in the field for the remainder of the week. If anyone wants to see how it works, contact the Base Closure Office.

Lawson Anderson, Task Order Manger for Zones A and B, added that rotosonic drilling is more productive than conventional drilling, allowing for 3 or 4 wells to be completed in one day opposed to only 1 or 2 using conventional methods.

Daryle Fontenot gave a presentation on where the money for the RCRA Facility Investigation is going. \$22 million has been budgeted as of October 31, 1995, \$6.7 million has been spent of which 50% has gone to five laboratories, 30% to E/A&H for labor and

overhead, 5% for drilling and boring subcontractors, and 15% for Other Direct Costs (ODCs) which include document reproduction, mail, freight, supplies, rental equipment and travel. The \$22 million includes funding for the RCRA Facility Investigation as well as the Corrective Measures Study.

Van Robinson asked if \$22 million is the final figure since more funding is still needed for Zones J, K, and L. Mr. Fontenot responded that the final figure will probably be more like \$27 million.

Lou Mintz asked what the 30% of funds that have gone to E/A&H is for. Mr. Fontenot explained it is for labor including geologists, drillers, engineers, and field technicians. Mr. Mintz also asked if E/A&H's award fee (profit) is included in these numbers, how often is the award fee, and how much. Mr. Fontenot explained that the award fee is not included in these numbers, is administered every six months, and the total dollar amount for the past four years is approximately \$400,000.

Mr. Fontenot continued by providing information on total costs to date by zone. This information can be found in the attachments to these minutes.

Ann Ragan asked if the unspent balance of the \$22 million is in the bank, waiting to be spent. Mr. Fontenot confirmed but clarified that it has already been allocated by Zone. Mrs. Floyd asked who is supervising the money and its allocation. Mr. Fontenot responded that Southern Division is in charge of the money.

Mr. Fontenot presented information on local subcontractors. E/A&H has invested \$628,618 in local subcontractors to date.

Mr. Mintz stated that he received information reporting that \$2 million has been spent on laboratories. Mr. Fontenot explained that the \$628,618 spent on local subcontractors does not encompass all the lab work that is being completed. Dr. Jim Speakman, E/A&H, added that 5 national labs are being used and include Pace, with facilities nation-wide, Savannah, which has facilities in a number of states, and CompuChem, based out of North Carolina. Dr. Speakman also added that the current contracts are expiring and new contracts will be awarded. E/A&H is taking measures to include local labs with the appropriate qualifications.

#### **8. Update on Redevelopment Authority Action**

Virgil Johnston announced that the RDA lost the Border Patrol as a potential tenant but has picked up another group which will provide about the same number of jobs and request the same number of buildings. RDA is negotiating about 85% of the shipyard. Quite a few people have come in and have requested property for the short term, but once they find out how long the process takes, they lose interest.

CMCC is the biggest contender for the shipyard right now but they are getting disillusioned with the length of the process. If the RDA loses CMCC, there isn't anyone else looking to take over the shipyard.

Susan Floyd asked what the problem is with the Finding of Suitability for Lease (FOSL) process. Mr. Johnston answered that there are so many of them and they each take a couple of months. So far, two leases have been finalized, one for the Post Office, and the second for Drydock 5, others are in the works.

A general discussion followed, regarding the amount of time it takes each group to review and approve FOSLs. Ann Ragan stated that SCDHEC has provided comments on over 75 FOSLs and asked if there is any way to track and prioritize them. Mrs. Floyd asked since SCDHEC has moved the FOSLs along, if the holdup is by the Navy.

Captain Nolan responded by reminding everyone that the Naval Base does not officially shut down operations until April 1, 1996. The closure process is supposed to make the property available on that date. Everything that is leased before that time is above and beyond what is required. Captain Nolan expressed his frustration with the length of the process as well, but reminded everyone that they're dealing with a bureaucratic process with lots of paperwork, and there's no way around it. The Navy and Southern Division are dedicated to the process and will continue to do their best in the cleanup and closure process.

Jim Berotti from Southern Division added that he was encouraged by this discussion. He sees the cleanup team as a center hub for the cleanup and closure. The cleanup team is responsible for many of the important technical decisions relating to the RFI, and is also relied on heavily by the RDA in their efforts to lease and convey the property. Perhaps priorities need to be decided regarding the cleanup team's resources.

A discussion regarding priorities followed and concluded with the RDA agreeing to provide a list of their for FOSL priorities.

#### 9. Shipyard Radiological Surveys Update

Tom Gerken provided a progress report on the Shipyard Radiological Surveys. A handout with supporting information is attached to these minutes. Surveys are in the final stages for both the Shipyard and Naval Base. The shipyard has the funding to complete the radiological release by April 1, 1996. As explained previously, they are looking for 2 types of radioactive materials, NNCP RAM and GRAM. Survey and release plans have been prepared and approved by the Navy, EPA, and SCDHEC.

Mr. Gerken explained that they found about 20 sites where very low levels of radioactivity was detected. Remediation has taken place on most of the affected areas. The DRMO is the only areas that will not be remediated because it will still be in use after they close. Another organization will complete the DRMO surveys. Both DHEC and EPA overcheck their results through site visits.

**10. Other Questions and Comments**

Captain Augustin requested that due to time constraints, if there were any additional questions, to contact the appropriate person after the meeting.

**11. Other Business.**

Captain Augustin announced that the hospital will provide anyone who is interested with an escort to their car. Anyone interested in seeing the rotosonic drill rig in action should call the Base Closure Office.

Ann Reagan introduced the new SCDHEC project engineer, Jeannie Olano, who will be assisting with the Charleston project.

The next RAB meeting will be held on Tuesday December 12 in the afternoon. Check the next meeting agenda for specifics on time and location.

**12. Adjournment**

**Review of RAB Recommendations and Suggestions**

- Susan Floyd stated that she would like to see cleanup required at residential standards.
- Multiple RAB members requested that they be presented with Zone H sampling results.
- Lou Mintz requested expenditure information for Other Direct Charges and Laboratories

**Attachments to Minutes**

- (1) November 14, 1995 RAB Meeting Agenda
- (2) RFI Progress Report for October 1995
- (3) Zone H Site Summary
- (4) Zones C and I Site Summary
- (5) Zone E Site Summary
- (6) Zones A and B Site Summary
- (7) RFI Expenditures "Where Does All That Money Go?"
- (8) Radiological Controls Progress Report

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

**J.H. Augustin**  
CAPT, CEC, USN  
Co-Chairman

\_\_\_\_\_  
**Don Harbert**  
Co-Chairman

Tuesday, Nov. 14, 1995

Charleston Naval Base

**RESTORATION ADVISORY BOARD MEETING AGENDA**

**6:00 PM** Location: Naval Hospital Charleston @ corner of Rivers and McMillan Aves. in North Charleston. Meeting will be in the Cafeteria located in the basement of the multistory building on the side toward Rivers Avenue.

RAB members, BRAC Cleanup Team, and interested citizens informally talk about what's going on from 6 p.m.

**7:00 pm RAB Meeting**

- A. Introduction of the RAB Members and Guests
- B. Administrative Remarks, Comments on the minutes of last meeting,
- C. RAB Member Concerns Summary                      **Captain Augustin**
- D. Subcommittee Reports
- E. Environmental Cleanup Progress Report                      **Cleanup Team**
- F. Update on Redevelopment Authority Actions                      **Mr. Virgil Johnston**
- G. Shipyard Radiological Surveys Update                      **Mr. Tommy Gurken**
- H. Remaining Questions and Comments from Visitors
- I. Other Business

**Please mark your calendar:** Our next meeting is Tuesday, December 12. Because of holiday events we will hold the RAB meeting between 2-4 pm. Location to be determined.

Naval Base Charleston  
RCRA Facility Investigation (RFI)  
PROGRESS REPORT FOR OCTOBER 1995

INVESTIGATIVE ZONES

- A. Warehousing and scrap metal yard
- B. Golf course and residential
- C. Office space and warehouse (NH-45, Navbase HQ)
- D. Parking lot, warehouses
- E. Shipyard
- F. Recreational areas and public works shops
- G. Fuel farm and transfer facility
- H. Southern end of the base excluding waterfront
- I. Southern end of the base including waterfront and dredge material area
- J. Ecological study area (waterbodies and certain areas on land)
- K. Non-contiguous areas
- L. Sewer systems and railroad system

FUNDING

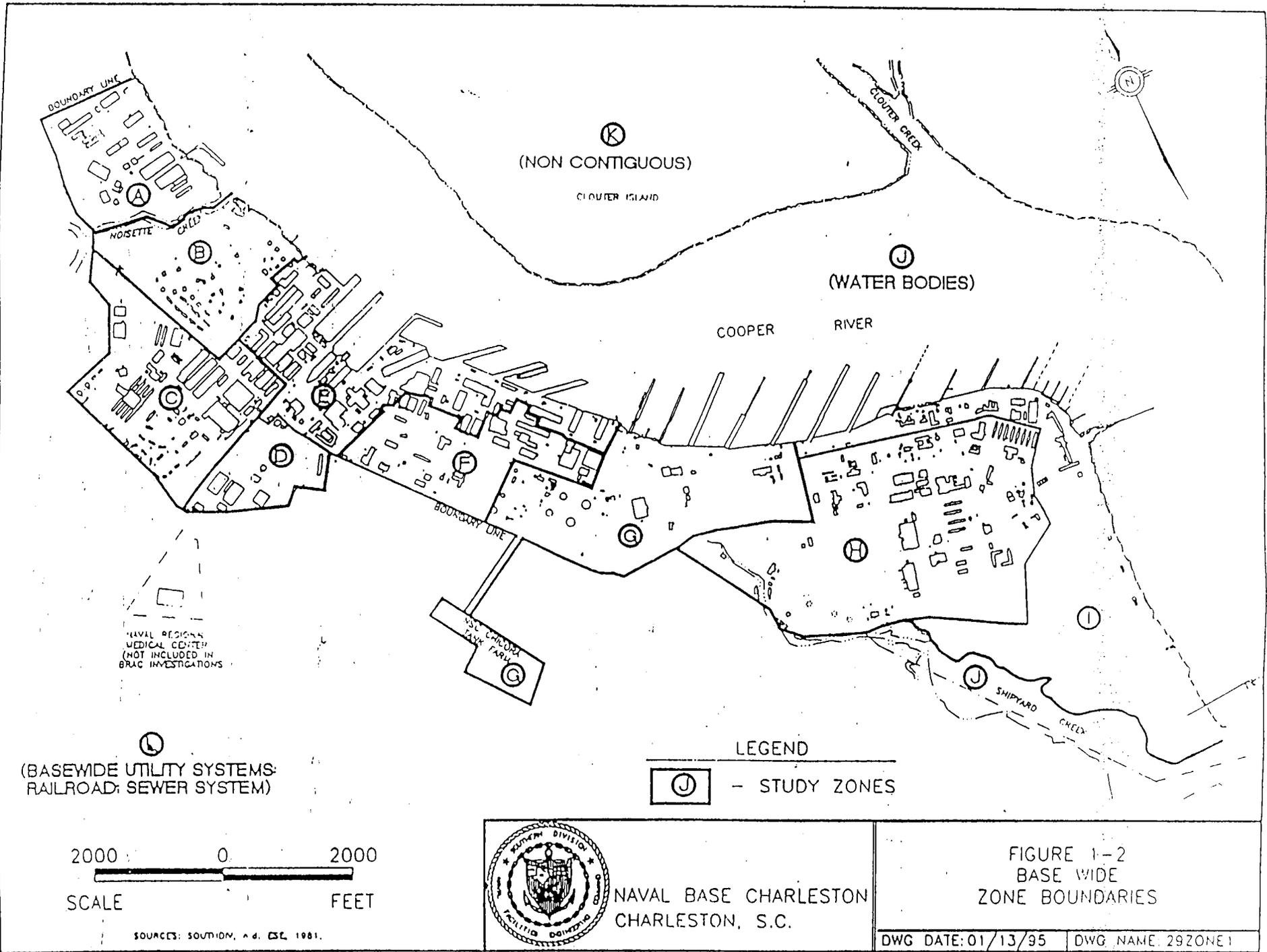
- ◆ Funding status (Based on funds expected to receive in FY 96, available funds as a result of cost savings and alternative sampling methods)
  - Fully funded: Zones A, B, C, E, H, I
  - Funds available, not yet negotiated and awarded: J, L
  - Funded for RFI Work Plans only: Zones D, F, G
- ◆ Remaining to fund for investigation (total requirement of \$4.5 Million)
  - Zones D, F, G implementation
  - Work Plans and implementation for Zone K
- ◆ Cost of the Investigation to Date - To be discussed.

PROGRESS FOR OCTOBER

- ◆ Zone H - Progress report by Todd Haverkost, Task Order Manager for Zone H and Project Task Order Manager, E/A&H.
- ◆ Zones C and I- Progress report by Ginny Gray, Task Order Manager, E/A&H.
- ◆ Zone E - Presentation by David Backus, Task Order Manager, Ensafe/Allen & Hoshall.
- ◆ Zones A and B - Progress report by Lawson Anderson, Task Order Manager, E/A&H.

PROJECTED ACTIVITY FOR NOVEMBER

- ◆ Continue groundwater monitoring well installation in Zone E.
- ◆ Continue groundwater monitoring well installation in Zones A & B.
- ◆ Resolve regulatory comments on Zones J and L work plans submit final documents.
- ◆ Resolve issues with Zone H Draft RFI report and incorporate into Draft RFI reports for subsequent zones (Zones C and I).
- ◆ Continue planning for Interim Measures utilizing Shipyard Detachment as a resource.



(BASEWIDE UTILITY SYSTEMS:  
RAILROAD; SEWER SYSTEM)

LEGEND  
J - STUDY ZONES

2000 0 2000  
 SCALE FEET



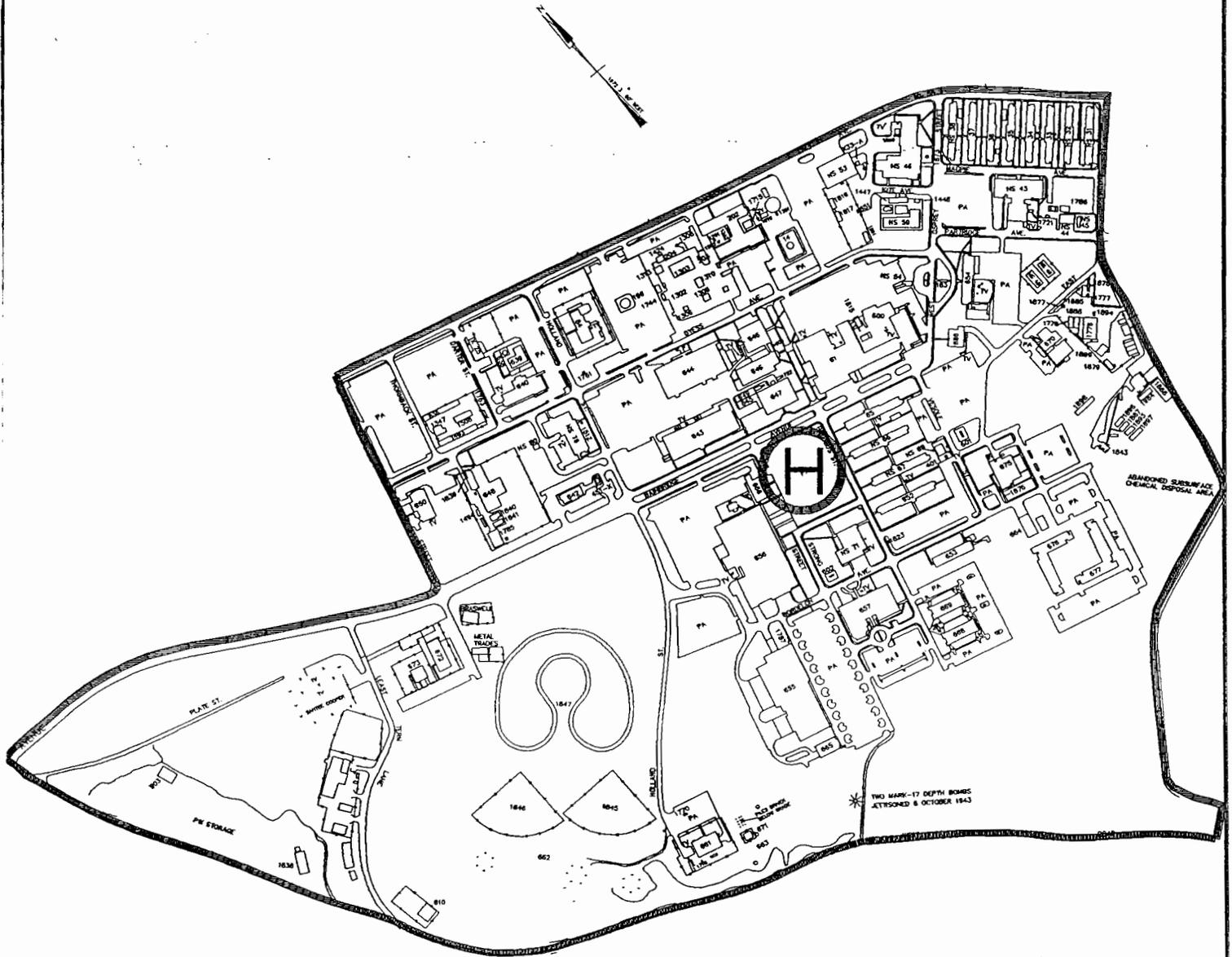
NAVAL BASE CHARLESTON  
 CHARLESTON, S.C.

FIGURE 1-2  
 BASE WIDE  
 ZONE BOUNDARIES

DWG DATE: 01/13/95 | DWG NAME: 29ZONE1

# NAVAL BASE CHARLESTON RFI ZONE H SITE SUMMARY

- \* 12 SWMUs (SOLID WASTE MANAGEMENT UNITS)
- \* 18 AOCs (AREAS OF CONCERN)
- \* 719 SOIL SAMPLES
- \* 73 SHALLOW MONITORING WELLS
- \* 19 DEEP MONITORING WELLS



## **ENSAFE/ALLEN & HOSHALL CONCLUSIONS**

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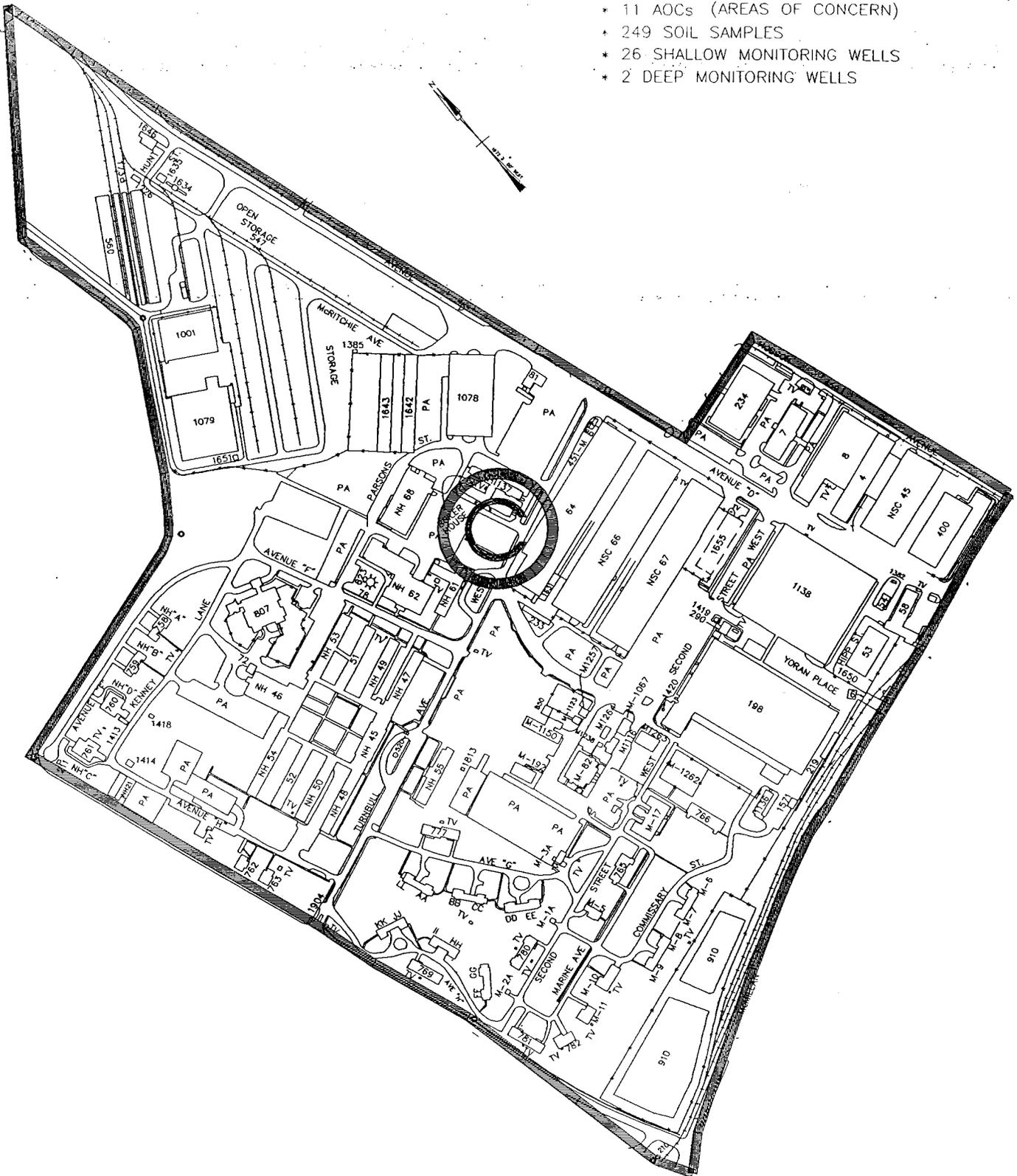
- **No COC's**  
AOC 654  
AOC 659  
AOC 660  
AOC 662
  
  - **Industrial Worker Exposures**  
SWMU [Includes SWMU 19, 20, 121]  
AOC 655
  
  - **Residential Exposure**  
The Remainder
- 
-

## TECHNICAL DECISIONS

TOPIC	ZONE H RFI	COMMENTS
Groundwater Classification	Potable	Saline Conditions Public Supply
Cleanup Criteria Background Conditions vs. Risk-Based	Risk-Based	Lead Agency
Future Land Use Residential vs. Industrial	Both Assessed	No-Action Sites Clean-up Extent
Land Surface Improvements	Bare Soil (Pavements Removed)	Relates to Future Use

# NAVAL BASE CHARLESTON RFI ZONE C SITE SUMMARY

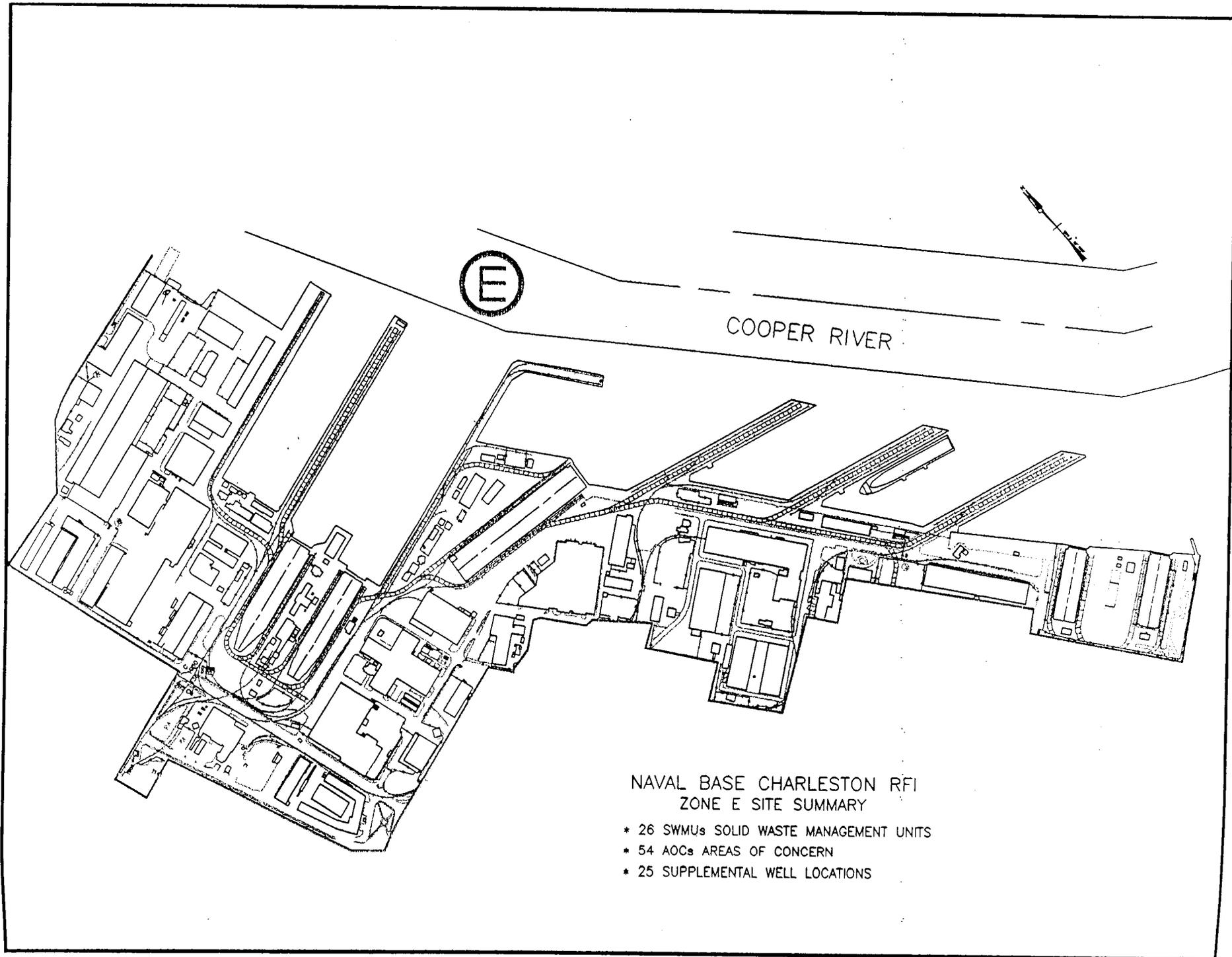
- \* 2 SWMUs (SOLID WASTE MANAGEMENT UNITS)
- \* 11 AOCs (AREAS OF CONCERN)
- \* 249 SOIL SAMPLES
- \* 26 SHALLOW MONITORING WELLS
- \* 2 DEEP MONITORING WELLS





## Status of Zones C & I

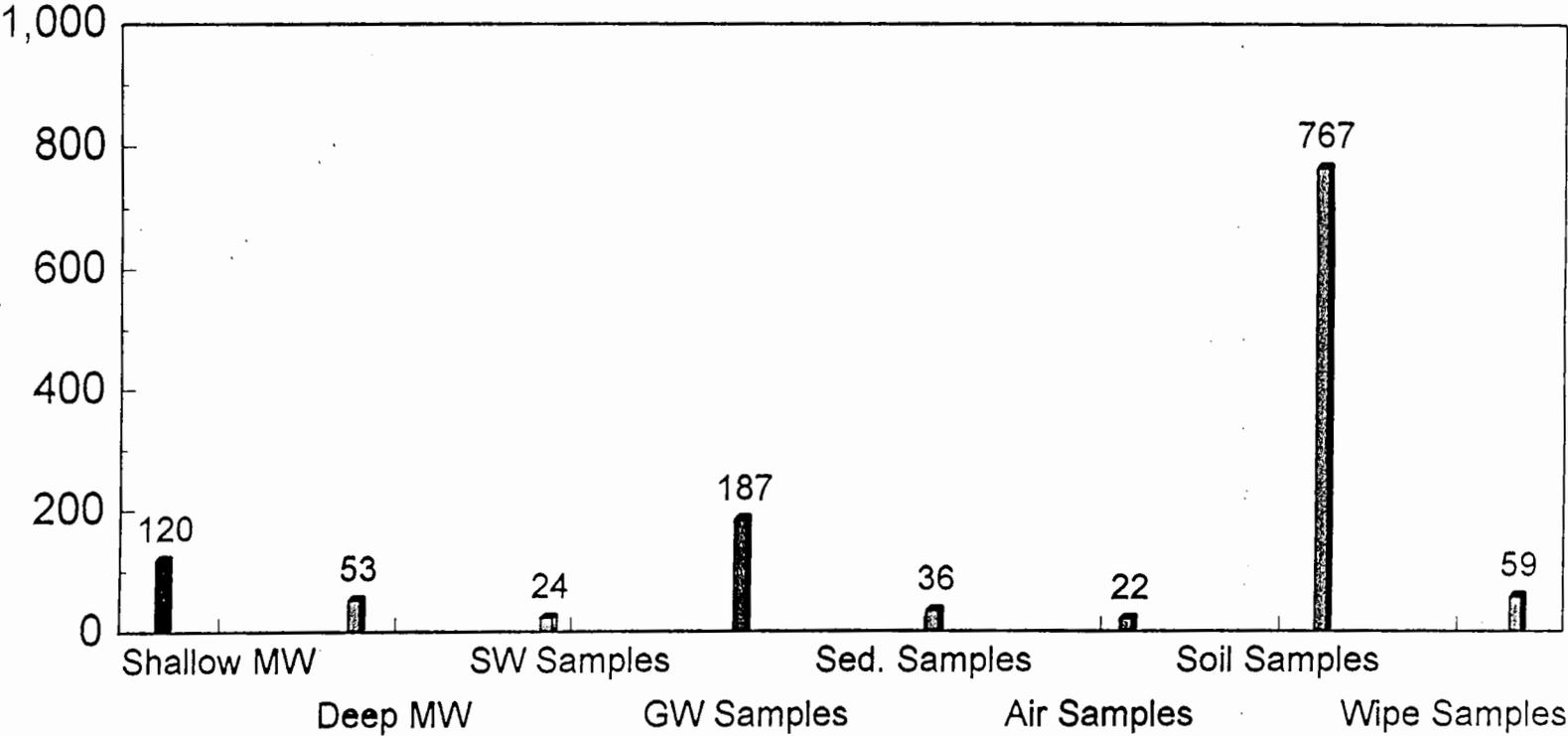
- Analytical data have been received and validated
- Sections 1, 2, & 3 which include the introduction, physical setting, and background information have been prepared, peer reviewed, and tech edited.
- The critical sections (*Nature & Extent of Contamination, Fate & Transport, the Baseline Risk Assessment, and Conclusions*) are on hold pending resolution of the technical issues in Zone H.
- Data evaluation and interpretation will be initiated early next week.



NAVAL BASE CHARLESTON RFI  
ZONE E SITE SUMMARY

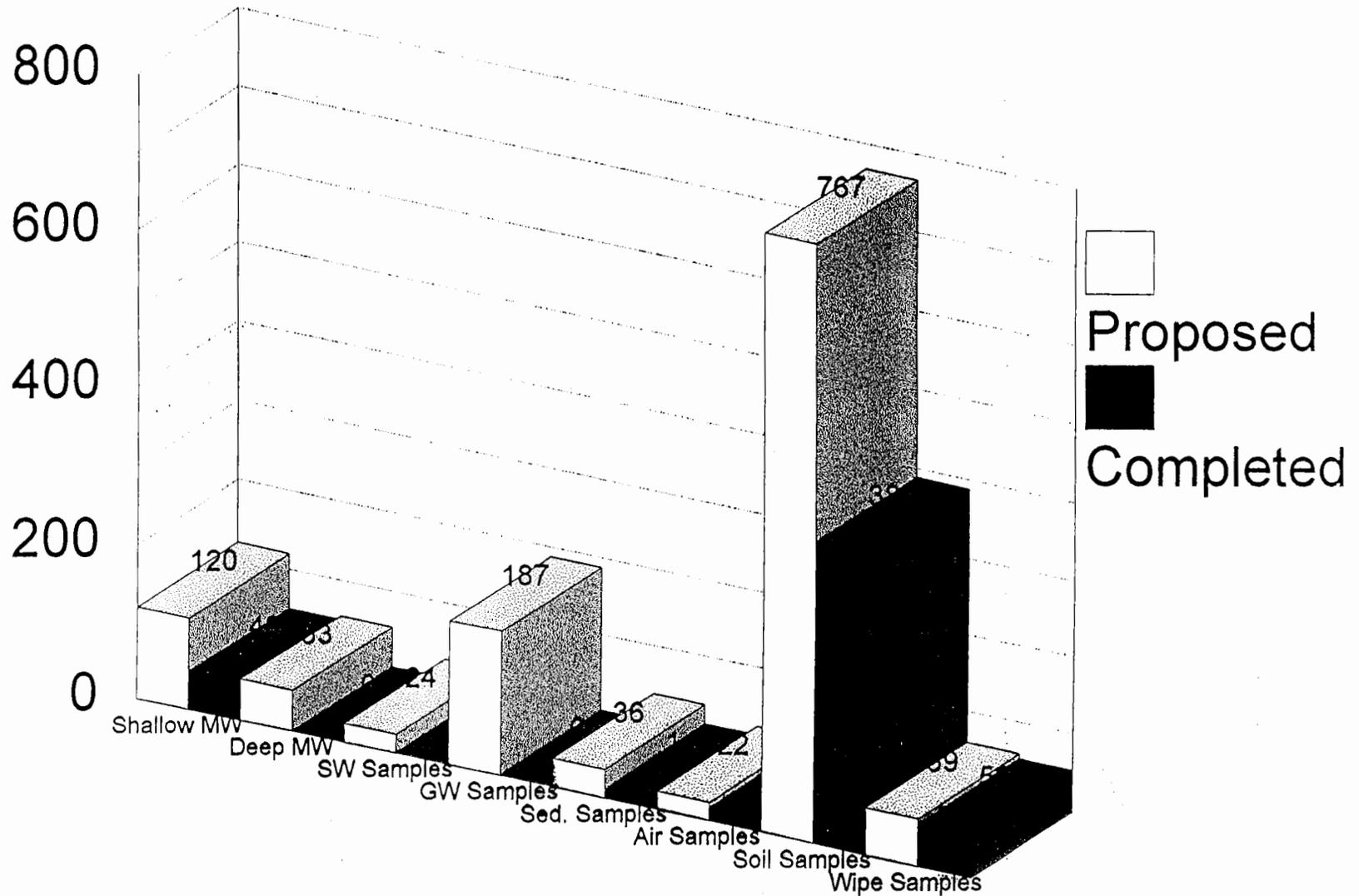
- \* 26 SWMUs SOLID WASTE MANAGEMENT UNITS
- \* 54 AOCs AREAS OF CONCERN
- \* 25 SUPPLEMENTAL WELL LOCATIONS

# Naval Base Charleston RFI Zone E - Proposed Samples



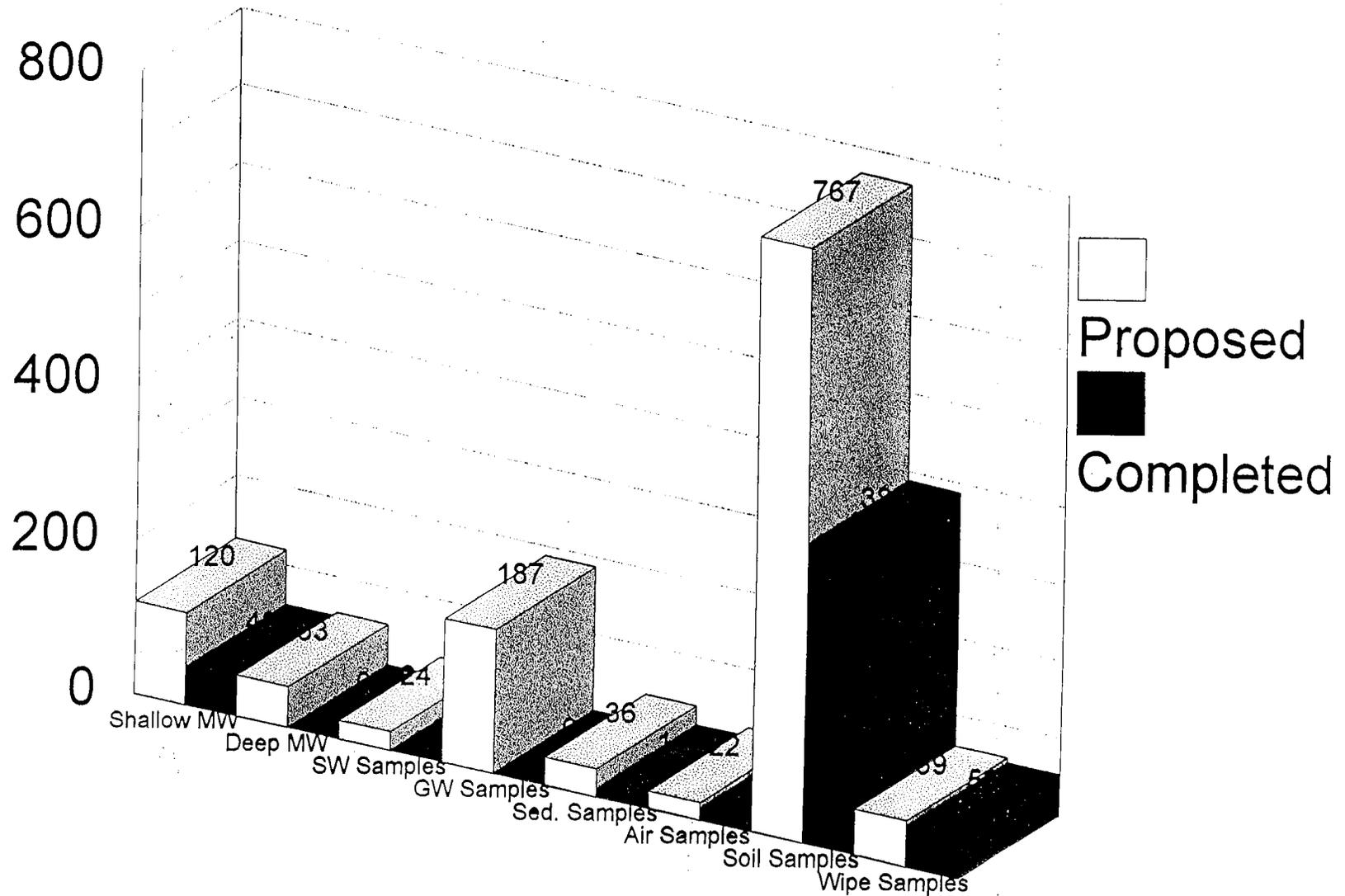
# NAVAL BASE CHARLESTON RFI ZONE E

## PROGRESS THROUGH OCTOBER 31, 1995



# NAVAL BASE CHARLESTON RFI

## PROGRESS THROUGH OCTOBER 31, 1995

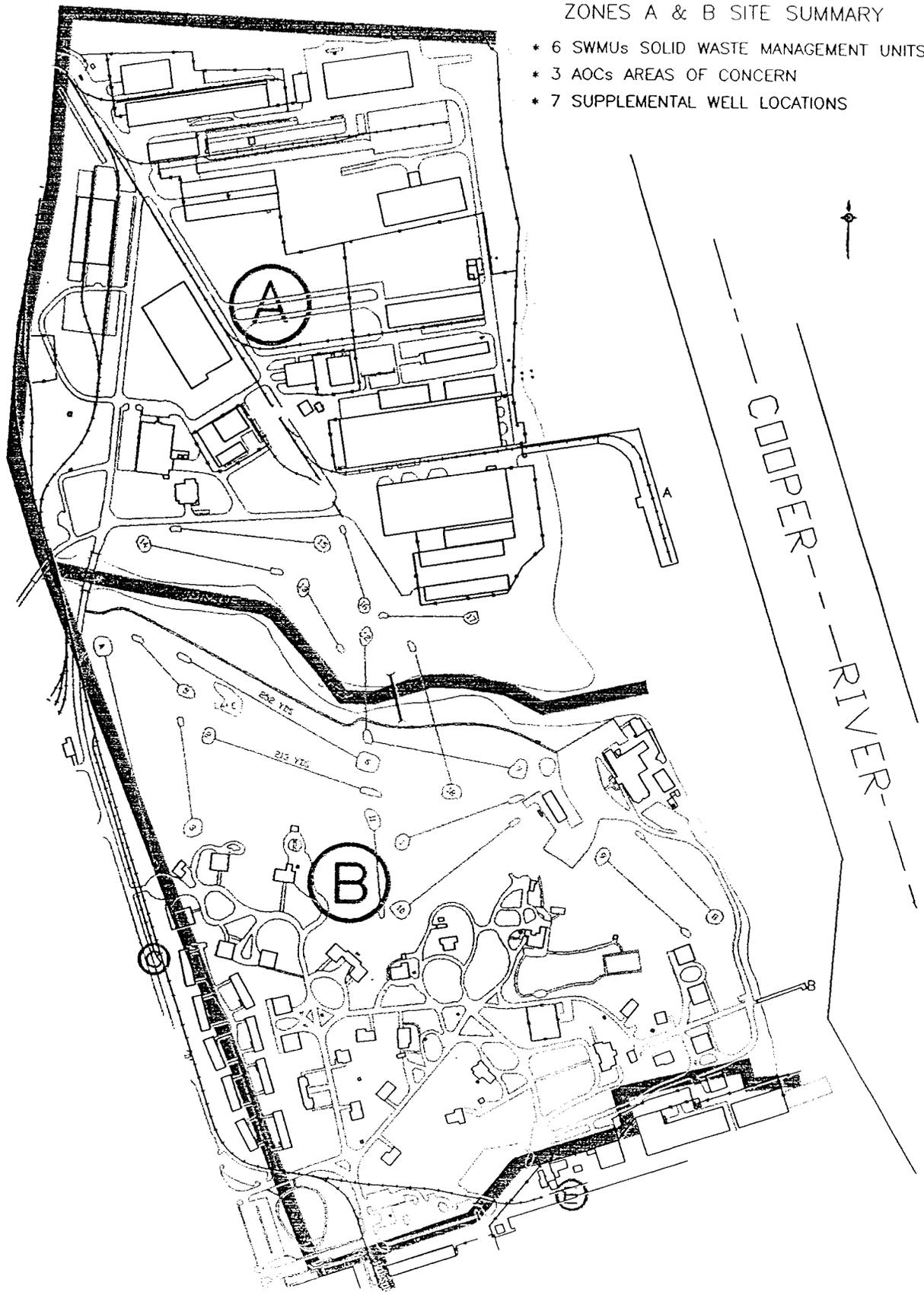


NAVAL BASE CHARLESTON RFI  
 ZONES E - FIELD INVESTIGATION SCHEDULE

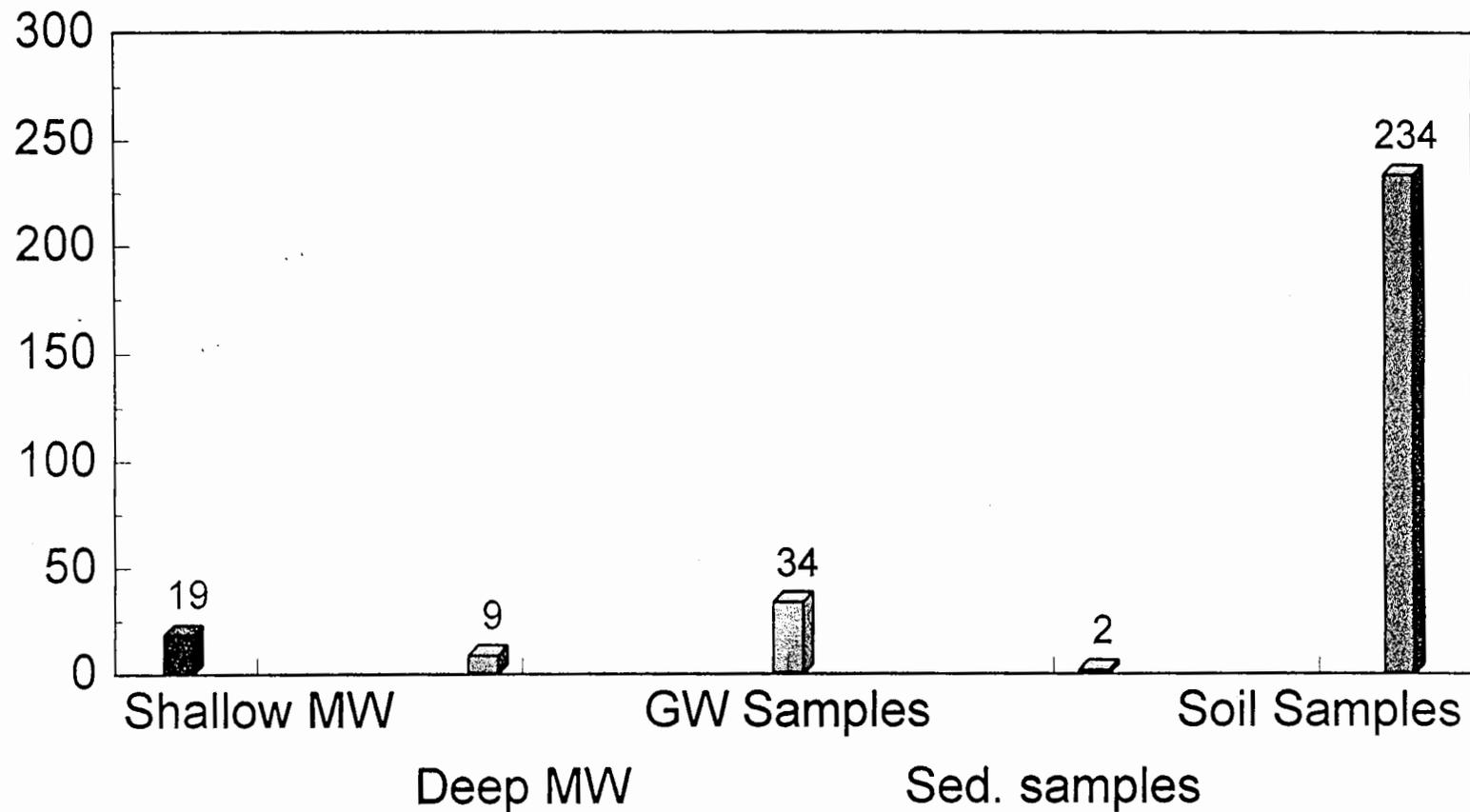
	1995					1996											
	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
INITIAL FIELD WORK	21AUG95 . . . . . 29FEB96																
ANALYTICAL COMPLETION	. . . . . 29FEB96 31MAR96																
VALIDATION COMPLETION	. . . . . 31MAR96 30APR96																
DRAFT REPORT COMPLETION	29FEB96 . . . . . 13NOV96																

NAVAL BASE CHARLESTON RFI  
ZONES A & B SITE SUMMARY

- \* 6 SWMUs SOLID WASTE MANAGEMENT UNITS
- \* 3 AOCs AREAS OF CONCERN
- \* 7 SUPPLEMENTAL WELL LOCATIONS

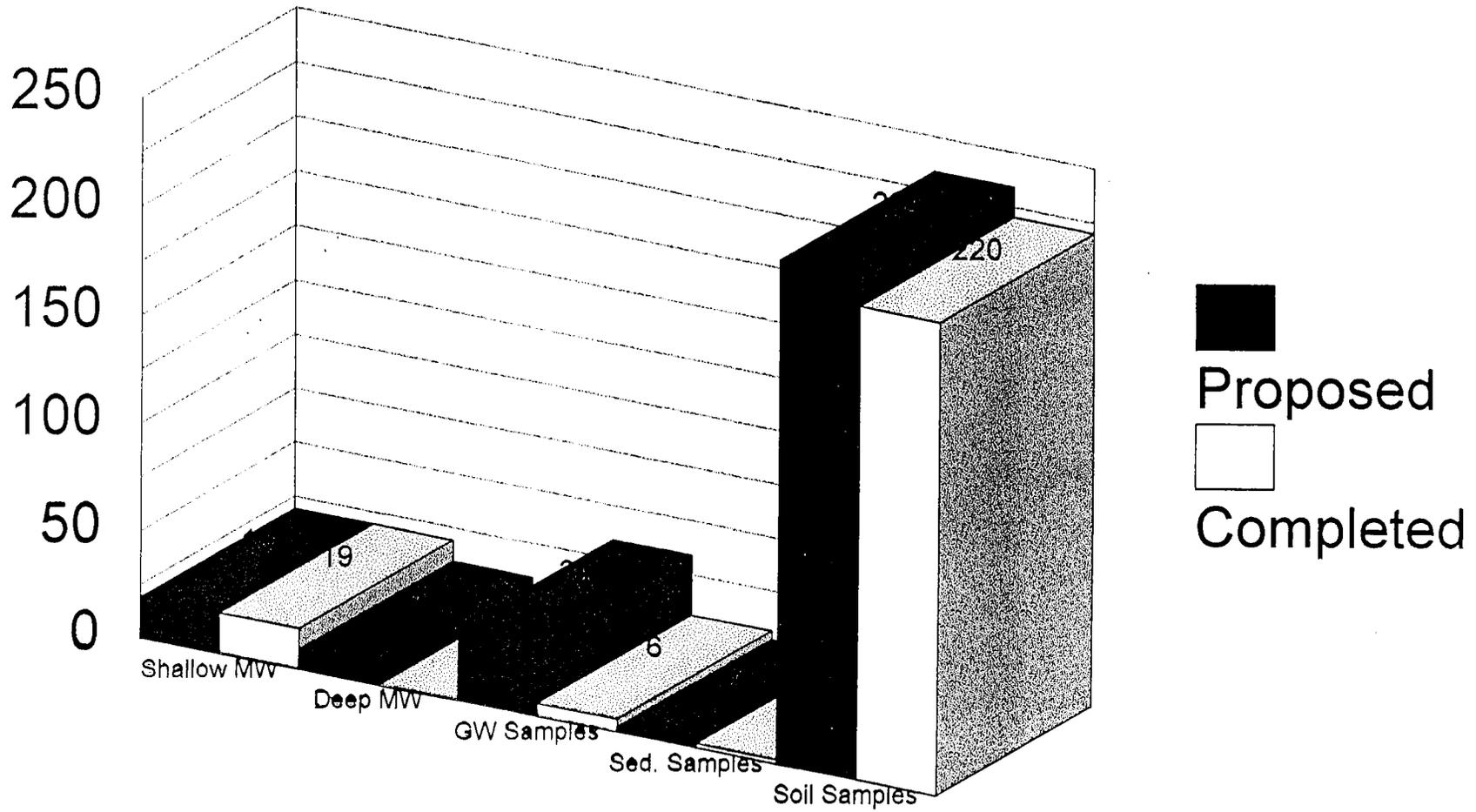


# Naval Base Charleston RFI Zones A & B - Proposed Samples



# NAVAL BASE CHARLESTON RFI ZONES A & B

## PROGRESS THROUGH OCTOBER 31, 1995







# E/A&H Total Costs To Date - By Zone



	\$ Budgeted	Expended by 10/1/95	% RFI Complete
Pre-BRAC Costs	1,867,526	1,313,661	99%
Base Wide	2,615,925	450,873	16.5%
Zone A	1,000,385	54,443	20.4%
Zone B	611,503	33,672	18.1%
Zone C	1,581,445	580,094	69.3%
Zone E (CIA area)	7,650,932	341,078	17.7%
Zone D (WP only)	13,470	} 12,415 }	} 21%
Zone F (WP only)	28,253		
Zone G (WP only)	37,563		
Zone H	4,202,234	2,733,195	92.8%
Zone I	2,469,197	1,052,013	55.9%
Zone J (WP only)	73,741	81,326	100%
Zone K	Not Yet Budgeted	0	0.0%
Zone L (WP only)	73,741	85,002	85.6%



## Local E/A&H Subcontractors

Subcontractor	\$ Invoiced	\$ Budgeted
3R	3,612.20	
Alliance	154,321.78	
Alpine	627.57	
Atlantic Drilling	0.00	236,844.21
Burris	206.38	
Butler	1300.00	
Caber	132.50	
Culligan	1885.04	
Depco	3062.62	
Duncan	37.10	
Fennell	1,835.57	
Fennvac	14,080.12	
Forsberg	6,875.90	
GEL	71,854.83	15,000.00
Hutto	1,531.70	
Metro	1,509.44	
Moore	1,250.00	
NatWeld	1,058.37	
Prime	1,156.64	
SafeCo	2,535.33	
Seigels	773.63	
Sharp	50.91	
Soilcons	31,850.00	
Sunbelt	3,046.19	
Wright/Padget	44,990.00	27,190.00

**Total = 628,618.03**

# PROGRESS REPORT

## RELEASE OF THE CHARLESTON NAVAL SHIPYARD AND CHARLESTON NAVAL BASE FROM RADIOLOGICAL CONTROLS

14 NOVEMBER 1995

*OVERALL STATUS* - The final release surveys for both the Shipyard and Naval Base for radioactivity associated with the Naval Nuclear Propulsion Program (NNPP RAM) and for general radioactivity (GRAM) are nearing completion. The shipyard has the manpower and funding to complete the radiological release of the Shipyard and Naval Base by 1 April 1996.

*NNPP RAM & GRAM* - As was explained in prior RAB briefings, there are two types of radioactive materials involved in our release surveys. NNPP RAM consists of radioactivity produced as a result of our maintenance work on nuclear submarines. The radioisotope of concern is Cobalt 60. GRAM is radioactivity associated with activities such as painting luminous dial instruments or use of some non-consumable welding rods. The two primary radioisotopes associated with GRAM surveys are Radium 226 and Thorium 232.

*RELEASE PLANS* - Survey and release plans have been prepared and approved by the Navy. In addition, the South Carolina Department of Health and Environmental Control (DHEC) and The United States Environmental Protection Agency (EPA) have reviewed our plans and agree with them.

## *WHAT WE HAD TO SURVEY*

### 1. NNPP RAM

- 5 fixed dry-docks & 1 floating dry-dock.
- 17 piers
- 2 radiological repair facilities
- Numerous permanent and portable buildings, and other facilities

### 2. GRAM

- Numerous permanent buildings
- Landfill
- DRMO (Defense Reutilization and Marketing Organization)

*WHERE WE STAND* - NNPP surveys are progressing well. 94% of production work is complete. We are preparing detailed reports on each area which is surveyed and released. To date we have completed 63% of the final reports. GRAM surveys are also progressing well with 75 % of the production work complete. 55% of the final GRAM reports have been completed.

*RESULTS OF OUR SURVEYS* - We have found about 20 sites where we detected very low levels of radioactivity. These were areas where we did significant work involving radioactive materials. With rare exceptions, the radioactivity levels found were so low that they could not be detected with sensitive field survey instruments, but could only be detected in solid material samples analyzed by ultra-sensitive laboratory instrumentation. We have already remediated most of the affected areas, and are working to remediate the few remaining ones.

*DRMO* - We will not complete the survey of the DRMO area prior to closure. This is because DRMO will not close until September 1996, some months after we close. We have conducted preliminary surveys of DRMO and found no abnormal levels. The final surveys of the DRMO area will be done by a successor organization under the technical direction of the Naval Sea Systems Command.

*INDEPENDENT OVERCHECKS* - Both DHEC and EPA have been at the base conducting overchecks to verify our results. Often this involves weekly visits due to the size and number of the areas requiring survey. In all cases to date, overchecks have confirmed shipyard results. Cooperation by DHEC/EPA in the overcheck surveys has been excellent, particularly in the area of "hot turnover" where facilities are quickly turned over for reuse. An example of such a turnover is the Dry-dock 5 complex.