



DEPARTMENT OF THE NAVY
BASE REALIGNMENT AND CLOSURE
PROGRAM MANAGEMENT OFFICE SOUTHEAST
4130 FABER PLACE DRIVE
SUITE 202
NORTH CHARLESTON, SC 29405

11011
Ser BPMOSE jgm/0058
11 Dec 07

Mr. David Smith
South Carolina State Ports Authority
P.O. Box 22287
Charleston, SC 29413-2287

Subj: CHARLESTON NAVAL COMPLEX DIG PERMIT LOG NO. 172

Ref: (a) Final UXO Risk Assessment and Mitigation Measures Report for Sites AOC
501 and AOC 503 at the former Charleston Naval Complex

Dear Mr. Smith:

The Navy hereby modifies Dig Permit 172, previously approved by the Navy on 12 December 2006, by allowing construction in AOC 503. Specifically, the non-disturbance condition for AOC 503 is modified based on agreement between the SC State Ports Authority (SCSPA) and the SC Department of Health and Environmental Control (SCDHEC) on SCSPA's Proposed Minimum Mitigation Measures for AOC 503. This agreement was based, in part, on SCDHEC approval of reference (a).

Attached to this letter is the original dig permit, SCDHEC's letter of 19 November 2007, and SCSPA's letter of 16 November 2007 that contained the aforementioned Proposed Minimum Mitigation Measures. Please note that this does not affect AOC 501, which is not subject to Dig Permit requirements.

Should you have any questions or comments, please do not hesitate to contact me at (843) 743-2134, or at jeffrey.g.meyers@navy.mil.

Sincerely,

JEFFREY G. MEYERS, P. E., CHMM
BRAC Environmental Coordinator
Navy BRAC PMO SE

Copy to:
David Criswell
Meredith Amick, SCDHEC
Gary Foster, CH2MHill
Len Dillinger, PB Americas
Jim Girouard, Moffatt & Nichol



C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

November 19, 2007

Dudley Patrick
BRAC PMO SE
4130 Faber Place Drive
Suite 202
N. Charleston, SC 29405

RE: Approval
Final UXO Risk Assessment and Mitigation Measures Report
AOCs 501 and 503
Charleston Naval Complex (CNC)
SC0 170 022 560

Dear Mr. Patrick:

The South Carolina Department of Health and Environmental Control (the Department) received the Final UXO Risk Assessment and Mitigation Measure Report (RAMMR) for AOC 501 and 503 on June 20, 2007, including Response to Comments (French to Patrick, May 1, 2007). This document was tracked and reviewed as a Corrective Measures Study (CMS) Report. The Department and the South Carolina Ports Authority agreed on minimum mitigation measures, which includes recommendations from the Final UXO RAMMR and does not restrict construction or require additional investigation. This agreement is documented in the attached letter (Smith to Amick date November 19, 2007), which was reviewed along with the Final UXO RAMMR. The Final UXO RAMMR is technically adequate.

The Department understands that the following will happen as documented in comments to the Draft UXO RAMMR (French to Patrick May 1, 2007).

- The Navy will amend the existing dig permit to allow construction in the AOC and will reference the mitigation report and DHEC's approval.
- The SPA will proceed with construction and require the contractor(s) to employ the required mitigation measures.
- Upon completion of the construction work we [SPA] will provide a report to DHEC noting that the mitigation measures were employed and the work is complete. (As required by the SPA Voluntary Clean Up Contract)
- DHEC will then reevaluate the selected remedy (LUCs) for AOCs 501 and 503. It is anticipated that DHEC will then concur with a No Further Action Decision.

Pursuant to condition II.G.3 of the Charleston Naval Complex Hazardous Waste Management Permit (the Permit), the date of this letter will serve as the approval date of the CMS Report (RAMMR) for AOCs 501 and 503. The remedy for these sites is Land Use Controls, which include the Proposed Minimum Mitigation Measures listed in the attached letter. Therefore, AOCs 501 and 503 will be included in the next permit modification in Appendix A-8 as sites requiring Land Use Controls.

The Department's approval is based on information presented by CNC to date. Any information contradictory to this decision may require additional action.

If you have any questions regarding this issue, please contact me at (803) 896-4218.

Sincerely,

A handwritten signature in black ink, reading "Meredith S. Amick". The signature is fluid and cursive, with the first name "Meredith" and last name "Amick" clearly legible.

Meredith Amick, Environmental Engineer Associate
Corrective Action Engineering Section
Division of Waste Management
Bureau of Land and Waste Management

cc: Dann Spariosu, PhD, EPA Region 4 Gary Foster, PE, CH2M-Jones
 Sommer Barker, Hydrogeology Dean Williamson, PE, CH2M-Jones
 Christine Sanford-Coker, EQC Region 7, Charleston

PORTS AUTHORITY

P.O. Box 22287

CHARLESTON, S.C. 29413-2287 USA

(843) 856-7048

FAX: (843) 856-7067

November 16, 2007

RECEIVED

NOV 19 2007

**S. C. Dept. of Health & Environmental
Control-Bureau of Land & Waste
Management**

Ms. Meredith S. Amick, Environmental Engineer Assoc.
SC Department of Health and Environmental Control
Division of Waste Management
2600 Bull Street
Columbia, SC 29201-1708

Dear Ms. Amick:

Subject: Charleston Naval Base Container Terminal
Voluntary Cleanup Contract #06-5044-NRP

Reference is made to my letter of October 10, 2007, submitting the Proposed Minimum Mitigation Measures for Sites AOC 501 and AOC 503 at the Former Charleston Naval Complex (PMMM). As discussed in our conference call on November 6, 2007, the PMMM has been revised to reflect an additional requirement that a UXO Consultant be on-site during all intrusive activities performed in AOC 501 and AOC 503. Please disregard the referenced submittal and replace it with the attached PMMM.

By copy of this letter (w/ attachment), the Authority is also requesting the Department of the Navy amend Charleston Caretaker Site Office Excavation Permit Log No. 172, to allow the described intrusive activities within AOC 501 and AOC 503 in accordance with the PMMM.

If you have any questions or require any additional information, please let me know.

Sincerely,



David N. Smith, P.E.
Senior Project Engineer

Attachment

cc: Jeffrey Meyers, Navy BRAC PMO SE
Len Dillinger, PB Americas
Jim Girouard, Moffatt & Nichol

- A bar screen of proper size to prevent suspect ordnance from passing through shall be installed over the top of the scows used to transporting dredged material. The Contractor shall cease all dredging operations and notify the Authority's on-site Construction Manager if any object resembling an unexploded ordnance is collected in either of the screening bars. The Construction Manager and the UXO Consultant will assess the situation and contact the law enforcement agency if the object encountered is suspected to be unexploded ordnance. Upon notifying the local law enforcement, the Construction Manager shall also notify the US Navy (BRAC PMO SE Remedial Project Manager), US Air Force (EOD), and SCDHEC (Brownfields VCC Program). Dredging operations shall not continue until the ordnance is removed from the bar screens.

Proposed Mitigation Measures for Site AOC 503 (Wick Drains)

The anticipated intrusive activity in this area is the installation of wick drains on 5 foot centers. The wicks are required to consolidate the underlying soils in preparation for the construction of the new terminal. The following minimum mitigation measures are proposed:

Prior to initiating any intrusive activities within the defined site boundary:

- A copy of the Contractor's proposed mitigation plan shall be submitted to the Authority.
- All field personnel involved with the wick drain installation shall attend a one day Explosives Ordinance Hazards Course.

While performing any intrusive activities within the defined site boundary:

- The number of construction personnel for each wick installation machine shall be limited to an equipment operator and one field assistant.
- The wick installation equipment shall have a 3 inch thick plexiglass or a combination of plexiglass and bar screen windshield.
- The field assistant shall take a location such that the installation equipment is between him and the wick at all times during wick installation.
- If during wick installation an unexpected object is encountered (refusal) the installation of that wick will be discontinued and the Authority's on-site Construction Manager shall be notified. The Construction Manager and the UXO Consultant will assess the situation and contact the law enforcement agency if the object encountered is suspected to be unexploded ordnance and cannot be avoided. Upon notifying the local law enforcement, the Construction Manager shall also notify the US Navy (BRAC PMO SE Remedial Project Manager), US Air Force (EOD), and SCDHEC (Brownfields VCC Program) Wick installation activities shall not continue in that location until the object is investigated and removed (if required).

Proposed Mitigation Measures for Site AOC 503 (Pile Driving)

The anticipated intrusive activity in this area is the installation of piling to support terminal structures (i.e. support buildings, high mast lights, etc.) Piles would expect to be driven through the underlying soft clays and into the Cooper Marl. The following minimum mitigation measures are proposed:

Prior to initiating any intrusive activities within the defined site boundary:

- A copy of the Contractor's proposed mitigation plan shall be submitted to the Authority.
- All field personnel involved with the pile driving operation shall attend a one day Explosives Ordinance Hazards Course.

While performing any intrusive activities within the defined site boundary:

- The number of construction personnel for each pile driving operation shall be limited to an equipment operator and only essential field assistants.
- The pile driving equipment shall have a 3 inch thick plexiglass or a combination of plexiglass and bar screen windshield.
- The field assistants shall take a location such that the pile driving equipment is between him and the wick at all times during wick installation. If during pile installation an unexpected object is encountered (refusal) the installation of that pile will be discontinued and the Authority's on-site Construction Manager shall be notified. The Construction Manager and the UXO Consultant will assess the situation and contact the law enforcement agency if the object encountered is suspected to be unexploded ordnance and cannot be avoided. Upon notifying the local law enforcement, the Construction Manager shall also notify the US Navy (BRAC PMO SE Remedial Project Manager), US Air Force (EOD), and SCDHEC (Brownfields VCC Program). Pile installation activities shall not continue in that location until the object is investigated and removed (if required).

Proposed Mitigation Measures for Site AOC 503 (Pond Excavation)

The anticipated intrusive activity in this area is the excavation for the storm water detention pond and related piping that will serve the new terminal. The following minimum mitigation measures are proposed when excavating at depths greater than 6 feet below existing grade:

Prior to initiating any intrusive activities within the defined site boundary:

- A copy of the Contractor's proposed mitigation plan shall be submitted to the Authority.
- All field personnel involved with the excavation of the pond and associated piping shall attend a one day Explosives Ordinance Hazards Course.

While performing any intrusive activities within the defined site boundary:

- The number of construction personnel shall be limited to an equipment operator only during excavation.
- Prior to excavation an electromagnetic screening of the area to be excavated shall be performed by personnel trained to detect and handle unexploded ordnance. Only when it is determined by the screening that no ordnance is in the area shall incremental excavation begin. Upon excavation of 2 feet of material excavation shall cease and the screening process repeated. This process will continue every 2 feet until excavation is complete.
- If the electromagnetic screening detects an object and the object is suspected by the screening technician to be an unexploded ordnance excavation operations will cease in the area and the Authority's on-site Construction Manager shall be notified. The Construction Manager will notify the local law enforcement to coordinate the necessary investigation and removal of the ordinance. Upon notifying the local law enforcement the Construction Manager shall also notify the US Navy (BRAC PMO SE Remedial Project Manager), US Air Force (EOD), and SCDHEC (Brownfields VCC Program). Excavation activities shall not continue in the area until the object is investigated and removed (if required)



DEPARTMENT OF THE NAVY
BASE REALIGNMENT AND CLOSURE
PROGRAM MANAGEMENT OFFICE SOUTHEAST
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SUITE 202
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Ser BPMOSE dp/0031
12 Dec 06

Mr. Gene Knisley, Operations Director
Charleston Naval Complex Redevelopment Authority
1360 Truxtun Ave, Suite 300
N. Charleston, SC 29405-2005

Mr. David Smith, Senior Project Engineer
South Carolina State Ports Authority
P. O. Box 22287
Charleston, SC 29413-2287

Subj: CHARLESTON CARETAKER SITE OFFICE EXCAVATION PERMIT LOG NO. 172

Ref: (a) SCSPA letter to CNCRDA dated October 13, 2006
(b) Charleston Caretaker Site Office Excavation Permit request dated October 13, 2006

Encl: (1) CSO Excavation Permit Log No. 172, approved with terms and conditions

Dear Mr. Knisley and Mr. Smith:

The subject excavation permit request, submitted via references (a) and (b), is hereby approved, subject to terms and conditions, as contained in enclosure (1).

If you have any questions or concerns about the approved permit request, please contact the undersigned at 843-743-2136 or via email at dudley.patrick@navy.mil.

Sincerely,



DUDLEY PATRICK
Remedial Project Manager
Navy BRAC PMO SE

Copy to:
David Scaturo, SC DHEC

CHARLESTON CARETAKER SITE OFFICE EXCAVATION PERMIT

Requester: Fill out top portion, Sign and date.

Location: Former Charleston Naval Complex	Contractor: Owner: SCSPA / Contractor: TBD	Date of Request: October 13, 2006
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Has the proposed work been staked out? ☐ Yes ☒ No

Facility/ Work involved (Please check below)

Excavation <input checked="" type="checkbox"/> Pavements <input checked="" type="checkbox"/> Overhead Lines : Underground Lines : Method of Excavation:	Drainage Ditches <input checked="" type="checkbox"/> Other: see attached <input checked="" type="checkbox"/> Utilities <input checked="" type="checkbox"/> Utilities <input checked="" type="checkbox"/> Hand <input checked="" type="checkbox"/> Ditcher <input checked="" type="checkbox"/>	Railroad Tracks <input type="checkbox"/> Communications <input checked="" type="checkbox"/> Communications <input checked="" type="checkbox"/> Power Shovel <input checked="" type="checkbox"/> Auger <input checked="" type="checkbox"/>
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☒ Other: see attached

Scope Of Work: (Depth, width, length, location & sketch as applicable, road closure, service interruption, etc.)

The scope of work includes the complete construction of a marine container terminal as described in the attached documents.

Excavator(s) must establish locations and depths of utilities in work area prior to digging. Locations of utilities as shown on drawing(s), are approximate and must be field verified by hand digging, cable/pipe locators or other approved methods

Date Permit Required: November 30, 2006	Termination Date of Permit: NA
Signature of Requesting Official: 	Date: October 13, 2006 Phone Number: (843) 884-5114

Caretaker Site Office Review

Points of Contact: CPW : Robert Sagasser (work) 529-0653 (page) 570-0390 SCE&G: R.W. Smith (work) 745-6381 RDA: Gene Kniesley Sewer POC: (work) 747-0010	<table style="width: 100%;"> <tr> <td style="width: 60%;"> <ol style="list-style-type: none"> 1. Who is the current Land Owner/ Leasee? SC State Ports Authority 2. Is the Area inside the CIA? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 3. Are any SWMU(s) impacted? If yes, list. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (SWMU 9) 4. Are any AOC(s) impacted? If yes, list. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (AOC 503, AST 601, & UST 661) 5. Has DHEC been notified? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 6. Will soil need to be temporarily stockpiled? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 7. What constituents will soil be tested for? _____ 8. Soil Test results above residential background? <input type="checkbox"/> Yes <input type="checkbox"/> No 9. Soil Test results above industrial background? <input type="checkbox"/> Yes <input type="checkbox"/> No 10. Area where soil is to be stockpiled? (See Attached Map) 11. What is the serial # of forwarding letter to RDA? _____ </td> <td style="width: 40%; vertical-align: top;"> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Permit approved subject to terms & conditions, pages 2-5. </div> Permit Approved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No </td> </tr> </table>	<ol style="list-style-type: none"> 1. Who is the current Land Owner/ Leasee? SC State Ports Authority 2. Is the Area inside the CIA? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 3. Are any SWMU(s) impacted? If yes, list. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (SWMU 9) 4. Are any AOC(s) impacted? If yes, list. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (AOC 503, AST 601, & UST 661) 5. Has DHEC been notified? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 6. Will soil need to be temporarily stockpiled? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 7. What constituents will soil be tested for? _____ 8. Soil Test results above residential background? <input type="checkbox"/> Yes <input type="checkbox"/> No 9. Soil Test results above industrial background? <input type="checkbox"/> Yes <input type="checkbox"/> No 10. Area where soil is to be stockpiled? (See Attached Map) 11. What is the serial # of forwarding letter to RDA? _____ 	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Permit approved subject to terms & conditions, pages 2-5. </div> Permit Approved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
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CSO Authorizing Signature: Dudley Patrick, RPM	Date out: December 12, 2006
CH2MHILL/J.A. Jones Signature: N/A	
Signature: N/A	Serial Number: 172
CSO Officer Signature: N/A	

CHARLESTON CARETAKER SITE OFFICE
EXCAVATION PERMIT - TERMS & CONDITIONS

CSO Log Number: 172

Request Date: October 13, 2006

Requestor: SCSPA

Permit Approval: December 12, 2006 (With Conditions)

Location: Proposed Charleston Naval Base Container Terminal

Ref: (a) "Charleston Caretaker Site Excavation Permit, Charleston Naval Base Container Terminal", SCSPA letter to CNCRDA dated October 13, 2006

(b) Meeting with SCSPA, Navy BRAC PMO, SCDHEC, and S&ME held on October 3, 2006

(c) Meeting with SCSPA, Navy BRAC PMO, SCDHEC, S&ME, and CH2MHill held on November 14, 2006

Background

Requestor proposes to construct a marine container terminal at the south end of the former Charleston Naval Complex as described in reference (a) and discussed during references (b) and (c). The Navy has determined that except for those sites designated under the RCRA permit for the CNC as AOC 503, SWMU 9, AST 601 and UST 661, all remaining upland areas of the proposed terminal location have no known contaminated areas which should preclude the types of intrusive soils disturbance and/or construction activities described in reference (a). Accordingly, the Navy hereby approves reference (a) subject to the following specific terms and conditions:

Terms & Conditions

Non-disturbance of Sites: AOC 503; SWMU 9; AST 601 and UST 661

The Navy has determined that site AOC 503, depicted on the conceptual terminal layout included with reference (a), is an area with potential explosive safety concerns as discussed during references (b) and (c), and will be the subject of a Navy-directed and funded Explosive Hazard Assessment planned for the first quarter of 2007. No intrusive activities may be undertaken in this area until this assessment is completed and conditions agreed upon between the Navy, SCDHEC and the SCSPA for safe intrusive and/or construction activities within this AOC.

The Navy has determined that sites SWMU 9, AST-601, and UST-661 are within or closely adjacent to the proposed container location, as depicted on the conceptual terminal layout. SWMU 9 is a closed landfill site adjacent and directly west of the proposed terminal location. Two SWMU 9 groundwater monitoring wells, identified as H009GW005 and H009GW05D on Figure 1, appear to be within the footprint of the proposed terminal location. These two active wells must either be avoided during intrusive and/or construction activities or they may be relocated just outside the proposed

CHARLESTON CARETAKER SITE OFFICE EXCAVATION PERMIT - TERMS & CONDITIONS

terminal location with the concurrence of the Navy and SC DHEC and at the expense of SC SPA. AST-601 is a former aboveground storage tank site near Building 601 east of Vesole Street. Nine active AST-601 groundwater monitoring wells, identified as HU44GW001, HU44GW002, HU44GW003, HU44GW009, HU44GW004, HU44GW006, HU44GW008, HU44GW005, and HU44GW07D on Figure 1, are all within the footprint of the proposed terminal location. During reference (c), SCDHEC was asked if they would evaluate data trends from these nine wells to determine if any or all might be abandoned in the near future. The Navy shall pursue that question with SCDHEC and will abandon those wells which it may be determined are no longer necessary and need not be replaced. All nine wells must be avoided during intrusive and/or construction activities until such time as SCDHEC determines that they may be abandoned. UST-661 is a former underground storage tank site near Building 661 adjacent and directly west of the proposed terminal location. During reference (c), SCSPA noted that other intrusive and/or construction activities may be planned for this area, and that a separate excavation permit request would be submitted to cover this desired work.

Proper Handling of Soils and Groundwater

Although there are no known releases of contaminants of concern to human health or the environment in the areas approved for intrusive and/or construction activities, it is nevertheless incumbent upon the SCSPA and its consultants, contractors, and subcontractors to limit dermal contact with soils and groundwater to the extent practicable. If during intrusive (e.g., digging, boring, excavating, trenching, probing, dewatering etc.) or other construction activities soils and/or groundwater exhibiting an unexpected odor, visible discoloration, or other evidence of possible hazardous substance or petroleum contamination is discovered, all on-site work shall cease and the discovery immediately reported to the Navy BRAC PMO. Clean soils excavated during intrusive or other construction activities shall be stockpiled then re-deposited within the area of excavation to the extent practicable. Excess soils not evidencing signs of contamination may be redistributed on-site but any potential adverse impacts to off-site surface water(s) must be prevented. Any excess soils which Requestor elects to transport off of the CNC (as described in latest RCRA permit) shall be sampled and appropriate precautions taken to ensure its lawful transport and disposal at Requestor's expense. Prior to any off-site disposal of soils or groundwater, the Navy BRAC PMO must be notified.

Reservations

The Navy reserves the right to revise, reissue or terminate this excavation permit approval should conditions change and/or additional information become available indicating that additional or different restrictions must be imposed to ensure protection of human health and/or the environment. Nothing in this authorization shall be construed to release the Requestor from compliance with any and all federal and state laws and regulations applicable to its intrusive and/or other construction activities nor to sanction any activity inconsistent with requirements contained in the Navy's RCRA Permit to the extent it may apply to the property where such activities will take place.

CHARLESTON CARETAKER SITE OFFICE
EXCAVATION PERMIT - TERMS & CONDITIONS

Information related to environmental conditions at and adjacent to the proposed project location is available in the CNC RDA Environmental Archive Room, 3rd floor, Building 7 located at 1360 Truxtun Ave., North Charleston, SC. If you have questions or concerns about the above comments and/or would like to gain access to the Archive Room, please contact the Navy BRAC PMO. The Navy BRAC PMO point of contact is Mr. Dudley Patrick, Remedial Project Manager, at 843-743-2136 or email at dudley.patrick@navy.mil.

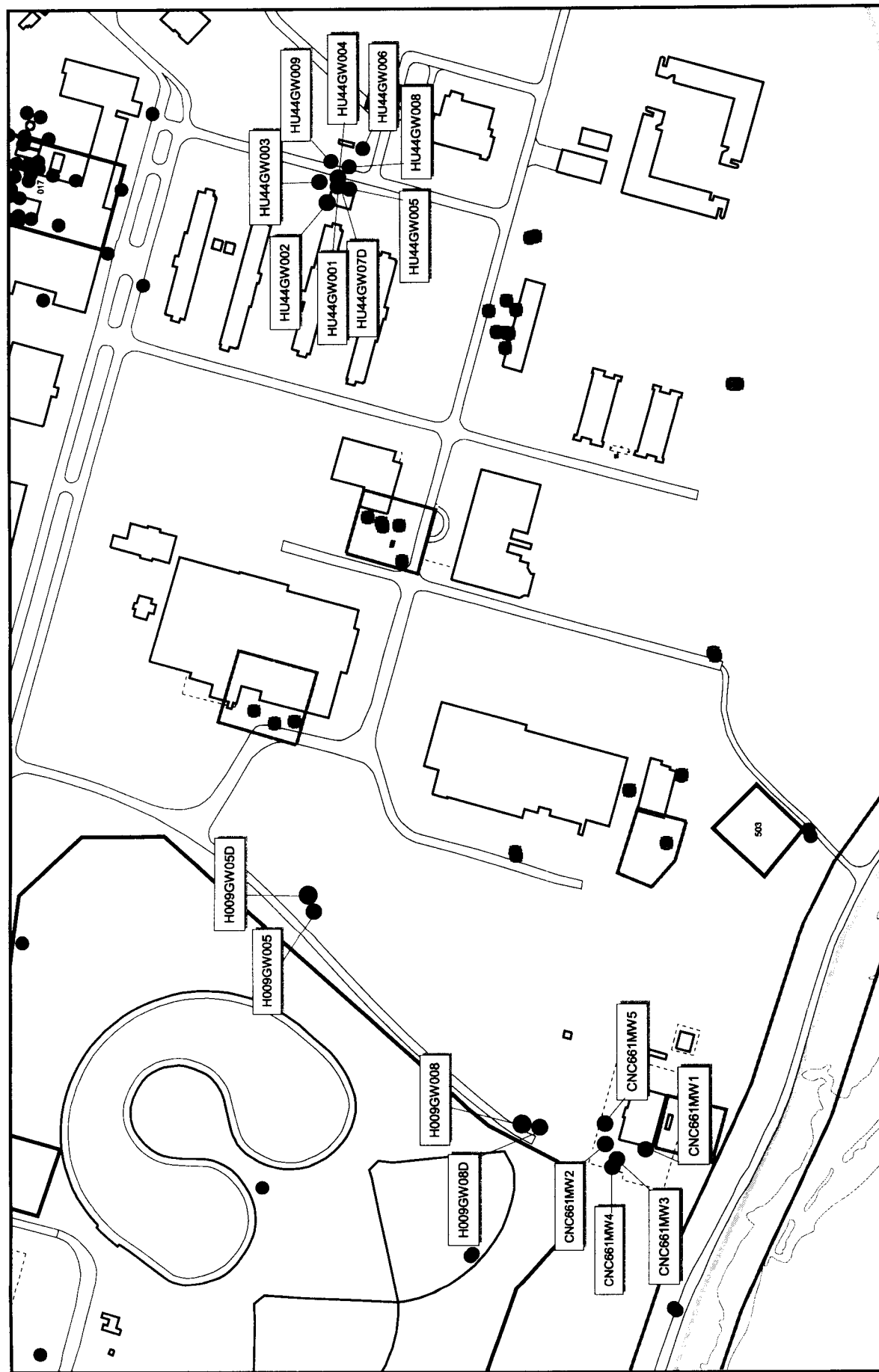


Figure 1
Wells Within Container Terminal Boundaries
Charleston Naval Complex

- Abandoned
- Active
- Wells To Remain Active