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CNC CHARLESTON  
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DEWATER PERMITS CNC CHARLESTON SC  
10/11/2001  
CH2MHILL

# DEWATER

# PERMITS

SCAN  
Dewater Permits  
Dig Permits  
Soil Management Record Book  
Compliance

## CH2M-JONES, LLC

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October 11, 2001

To: Charleston Caretaker Site Office (CSO)  
From: CH2M-JONES, LLC

Subject: EXCAVATION PERMIT (034) AND DEWATERING PERMITS (001-024)  
FOR SCE&G UTILITY WORK

CH2M-JONES, LLC, in cooperation with the Navy has reviewed the provided drawing and Dewatering Permits 001 through 024 and Excavation Permit 034. CH2M-JONES, LLC has found several of the proposed work areas are in the vicinity of Solid Waste Management Units (SWMU's) and/or Area's of Concern (AOC's). Even though SCE&G's work is not within the footprint of a known SWMU or AOC, SCE&G should take into consideration that Contaminates of Concern (COC's) could be encountered. Connecting electrical conduits inside areas of contamination (SWMUs/AOCs) may provide migration pathways outside of the SWMU/AOC footprint. This condition has been observed in the industrial area (Zone E) of the Charleston Naval Complex.

Based on the above statement the below information is provided for specific work areas noting the type of work impacted and manholes:

Work performed east of Building 74 is in the vicinity of AOC 550. The Draft RCRA Facility Investigation (RFI) Report identified arsenic in groundwater. There was no soil contaminations identified for an industrial scenario. (Excavation and dewatering MH#10037,10089)

Work performed near the northeast side of Building 46 is in the vicinity of AOC 551. The Draft RFI Report identified lead and Benzo (a) Pyrenes (BEQs) as COC's in soils and thallium, arsenic, and PCE as COC's in groundwater. (Excavation and dewatering MH# 10110, 10111)

Work performed near Buildings 5 and 44 is in the vicinity of AOC 554 and SWMU 25. The Draft RFI Report indicates 5 metals (antimony, cadmium, chromium, copper and lead) and BEQ's as COC's in the soils. Groundwater COC's were identified as antimony, cadmium, chromium, nickel, a-chlordane, g-chlordane, tetrachloroethene and trichloroethene. (Excavation and dewatering MH#10096, 10124, 10128)

Work performed near Buildings 6 and 226 is in the vicinity of SWMU's 23, 63, and, 541, 542. The Draft RFI Report combined the before mentioned sites into one "Combined SWMU 23". Combined SWMU 23 identified 8 COC's in soil: antimony, cadmium, copper, lead, nickel, zinc, Aroclor-1254, and BEQs. No COC's were identified in groundwater. (Dewatering MH#10047, 10042, 10044, 10045)

Work performed near the west end of Building 6 and 35 is in the vicinity of SWMU 70 and AOC's 530 and 531. The Draft RFI Report revealed the following: SWMU 70 at the west end of Building 6 found copper, lead, and BEQ's in the soil. Groundwater analysis identified antimony, chromium, thallium, chloroform, 1,2-dichloroethene, tetrachloroethene, and trichloroethene. AOC 530 located on the west end of Building 35 was found to have arsenic and BEQ's in soil and shallow groundwater showed arsenic and 1,1-dichloroethene present. AOC 531, also at the west end of Building 35, was found to have arsenic and BEQ's in the soil. No groundwater COC's were identified. (Dewatering MH#10048, 10050, 10100, and 10102)

CH2M-JONES, LLC will be addressing groundwater contamination below the west end of Building 5 at the end of 2001 into the summer of 2002. Soil excavation at the west end of Building 226 is planned but no date has been scheduled. None of this work should interfere with SCE&G's work. No other scheduled remedial actions are in place at this time.

Respectfully,  
CH2M-JONES, LLC

A handwritten signature in black ink, appearing to read 'Jed Heames', written over a light gray rectangular background.

Jed Heames  
Site Superintendent

25 April 2003

MEMORANDUM

From: M.A.Hunt, BRAC Environmental Coordinator

To: Amy Daniel, Caretaker Site Officer

Subject: SCE&G Manhole Dewater Permits

Amy,

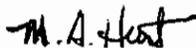
I have reviewed each of the Manhole Permit requests (1 through 24) submitted by SCE&G and have determined, based on location, potential intrusion by Cooper River tidal fluctuations and proximity to known groundwater contamination, the disposition of any water removed from these manholes prior to work. The list of manholes and information with respect to these factors is attached to this memorandum. It should be noted that MH 10050 could not be located on the maps provided by SCE&G. The permit and disposition instructions will be provided once the location is known.

For manholes listed in Column A in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. Sample water and analyze for VOCs and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit the water may be discharged to the sanitary sewer after obtaining approval from North Charleston Sewer District. If results are above these limits contact the CSO for disposition instructions.

For manholes listed in Column B in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. If no visible contamination is present the water can be discharged to the storm sewer system.

If you should have any questions please call me at 820-5607.

Respectfully,



M.A.Hunt  
BRAC Environmental Coordinator  
Charleston Naval Complex

Permit #	Manhole #	Ind Area	Location	Connection to Cooper (Y/N) (Based on tidal fluctuations)	Connection to Cooper (Based on chloride tests)	Proximity to Plume (Y/N)	Disposition of Water	
							Column A	Column B
1	10188	Y	East of Bldg 420	Yes		No		X
2	10096	Y	East of Bldg 5 (Near SY canteen)	No		Yes (SWMU 21/54)	X	
3	10095	Y	Near 10096	No		Yes (SWMU 21/54)	X	
4	10094	Y	3rd St. NE side of Bldg 43	No		No	X	
5	10093	Y	East Side of Bldg 3 (Near plating shop)	No		No	X	
6	10091	Y	Entrance to Bldg 56	No		No	X	
7	10111	Y	East side of Bldg 46	Yes		Yes (AOC 551)	X	
8	10110	Y	Between Bldgs 58 & 46	Yes		Yes (AOC 551)	X	
9	10091	Y	Entrance to Bldg 56	No	8250 ppm	No	X	
10	10090	Y	3rd St. by Bldg 221	Yes	16500ppm	No		X
11	10089	Y	Roe St and 3rd	Yes	16500ppm	No		X
12	10037	Y	Truxtun Ave and Roe	Yes		No		X
13	10039	Y	Truxtun Aven and Bldg 221	Yes		No		X
14	10040	Y	Truxtun Ave and Bldg 56	Yes		No		X
15	10044	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
16	10045	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
17	10042	Y	Truxtun Ave and Ave B	No		No	X	
18	10047	Y	Truxtun Ave near Bldg 6 and Weld shop	Yes		No		X
19	10124	Y	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
20	10128	N	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
21	10102	N	Hobson near Bldg 3	No		No	X	
22	10100	N	Hobson and Truxtun	No		No	X	
24	10050	N	Unable to locate					
	10048	N	Hobson and Truxtun	No		No	X	
	10066	N	Turnbull and North side of Bldg 64	N	54200 ppb	N		

SAMPLE AND  
DISPOSE OF  
TO SAN SEWER  
DISPOSE TO  
STORM SEWER

Permit #	Manhole #	Ind Area	Location	Connection to Cooper (Y/N) (Based on tidal fluctuations)	Connection to Cooper (Based on chloride tests)	Proximity to Plume (Y/N)			
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	10066	N	Turnbull and North side of Bldg 64	N	54200 ppb	N			

Amy,

Believe it or not I have signed the SCE + G permits. I know this is hard to believe, I am more than a little ~~emb~~ embarrassed that RW submitted these 1/1/02 and a year and a half later they are signed by me,

I <sup>still</sup> need to generate the attachment which I couldn't do because of the power failure. It essentially will provide disposition instructions for water removed from each manhole based on whether it is located in the Industrial Area, potential for connection to the Cooper River, and proximity to known contaminated groundwater. I would not suspect that any of this water would be hazardous based on our groundwater sampling and at most it would require disposal to the sanitary sewer. I will provide this attachment to you tomorrow providing power is restored.

Since it has taken such a long time to process these you may want to change the termination date on the permit. I would suggest we make it valid through the end of the year which should be ample time for property transfer to occur and for this issue to belong to the City of N Charleston.

Also, Permit #23 which is Manhole 10050 (I believe) is not included. I could not locate this Manhole on the map so I am still researching.

Thanks Tay

# CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

equ... r: Fill out top portion, Sign and date.

Location:	Contractor:	Date of Request:
<u>CORNER OF PARTRIDGE &amp; REGISTER ST</u>	<u>FLETC</u>	<u>2/2/05</u>
Scope of Work: (Location, manhole number, etc.)		
<u>DIG FOUNDATION FOOTINGS AND TRENCH FOR UNDERGROUND ELECTRICAL SERVICE FOR THREE MODULAR UNITS TO BE RELOCATED TO PARKING LOT ON BACK (WEST) SIDE OF BLDG-28- NEAR INTERSECTION OF REGISTER &amp; PARTRIDGE</u>		

Date Permit Required:	Termination Date of Permit:
<u>2/15/05</u>	<u>3/30/05</u>
Signature of Requesting Official:	Date: Phone Number:
<u>[Signature]</u>	<u>2/2/05 745-2770</u>

### Caretaker Site Office Review

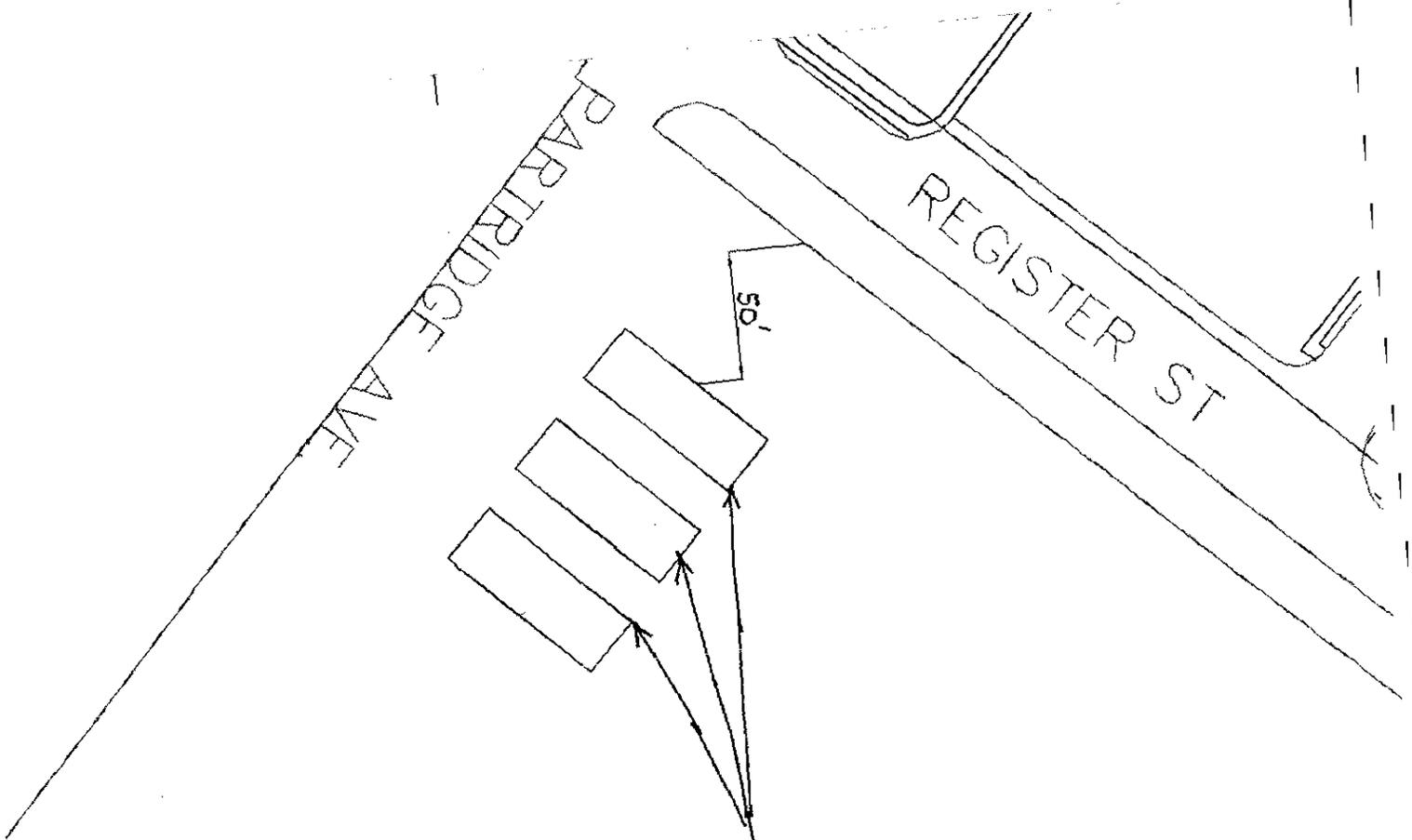
<b>Points of Contact:</b> PW: Robert Sagasser (work) 529-0653 (page) 570-0390  DE&G: R.W. Smith (work) 745-6381  RDA: Gene Knisley Sewer POC: (work) 747-0010	<table style="width: 100%;"> <tr> <td style="width: 50%;">1. Who is the current Land Owner/ Leasee? <u>FLETC</u></td> <td style="width: 5%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 15%;"></td> </tr> <tr> <td>2. Is the Area inside the CIA?</td> <td><input type="checkbox"/> Yes</td> <td><input checked="" type="checkbox"/> No</td> <td></td> <td></td> </tr> <tr> <td>3. Are any SWMU(s) impacted? If yes, list.</td> <td><input type="checkbox"/> Yes</td> <td><input checked="" type="checkbox"/> No ( )</td> <td></td> <td></td> </tr> <tr> <td>4. Are any AOC(s) impacted? If yes, list.</td> <td><input type="checkbox"/> Yes</td> <td><input checked="" type="checkbox"/> No ( )</td> <td></td> <td></td> </tr> <tr> <td>5. Has DHEC been notified?</td> <td><input type="checkbox"/> Yes</td> <td><input checked="" type="checkbox"/> No</td> <td></td> <td></td> </tr> <tr> <td>6. Was water tested for VOC's and metals?</td> <td><input type="checkbox"/> Yes</td> <td><input checked="" type="checkbox"/> No</td> <td></td> <td></td> </tr> <tr> <td>7. Are results greater than NCSD limits?</td> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td></td> <td></td> </tr> <tr> <td>8. Are results greater than TCLP limits?</td> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td></td> <td></td> </tr> <tr> <td>9. Are Chlorides within range of Cooper River water?</td> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td></td> <td></td> </tr> <tr> <td>10. Was NCSD (Kelly Singer) notified?</td> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td></td> <td></td> </tr> <tr> <td>11. What is the serial # of forwarding letter to RDA?</td> <td colspan="4"></td> </tr> </table>	1. Who is the current Land Owner/ Leasee? <u>FLETC</u>					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 type="checkbox"/> Yes	<input checked="" type="checkbox"/> No ( )			4. Are any AOC(s) impacted? If yes, list.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No ( )			5. Has DHEC been notified?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No			6. Was water tested for VOC's and metals?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No			7. Are results greater than NCSD limits?	<input type="checkbox"/> Yes	<input type="checkbox"/> No			8. Are results greater than TCLP limits?	<input type="checkbox"/> Yes	<input type="checkbox"/> No			9. Are Chlorides within range of Cooper River water?	<input type="checkbox"/> Yes	<input type="checkbox"/> No			10. Was NCSD (Kelly Singer) notified?	<input type="checkbox"/> Yes	<input type="checkbox"/> No			11. What is the serial # of forwarding letter to RDA?				
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Authorizing Signature: <u>[Signature]</u>	Date out: <u>2/3/05</u>
J.A. JONES Signature: <u>[Signature]</u> <u>2/03/05</u>	
RDA Signature: <u>[Signature]</u> <u>2/3/05</u>	Serial Number: <u>028</u>
Officer Signature: <u>[Signature]</u>	

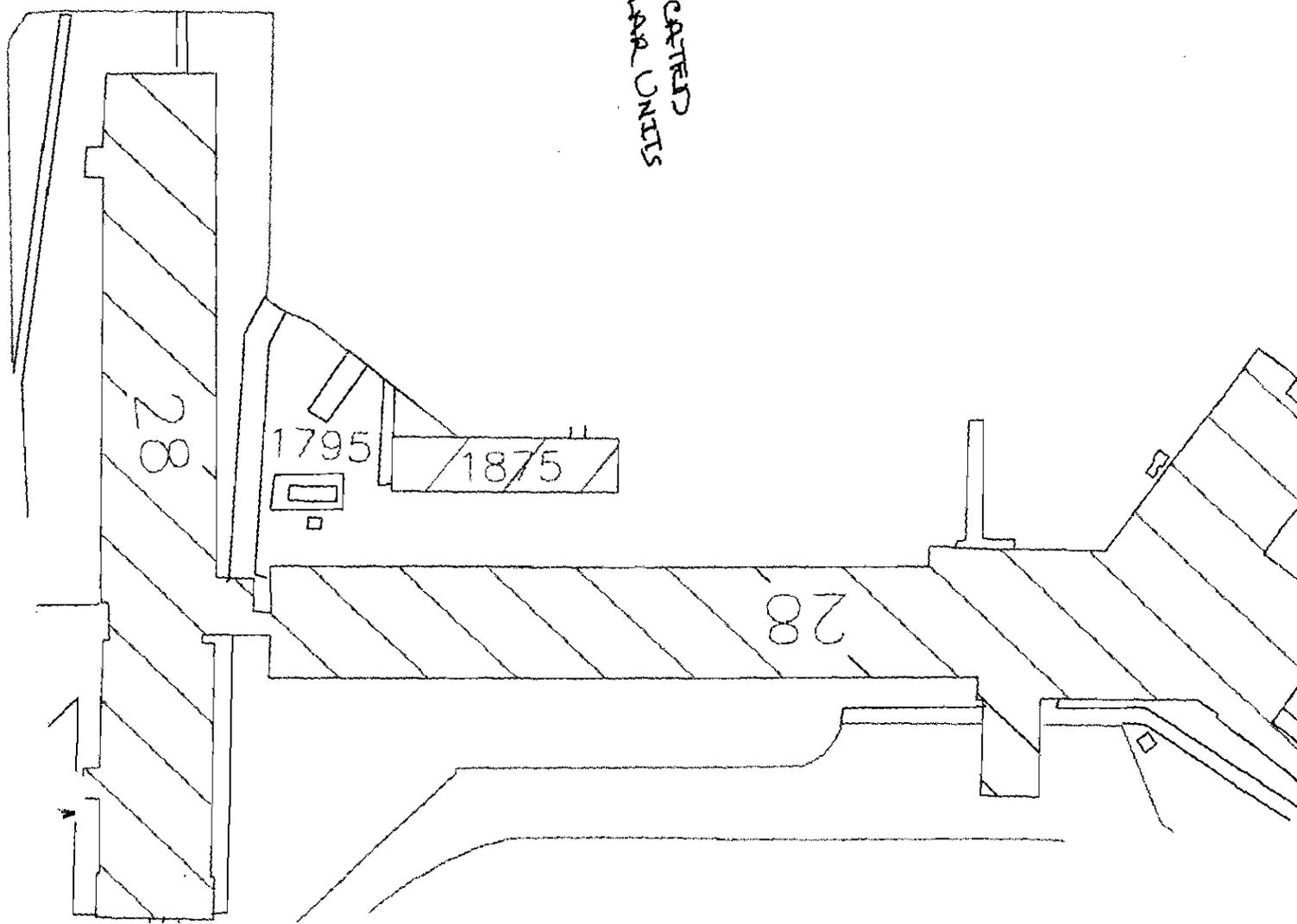
Permit is approved contingent upon the following actions to be taken by permittee:

Test required: \_\_\_\_\_

Discharge Instructions: \_\_\_\_\_



RELOCATED  
MODULAR UNITS



# CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

eq. 10-10-01: Fill out top portion, Sign and date.

Location: <u>Federal Enclave (South End of Naval Complex)</u>	Contractor: <u>FLETC</u>	Date of Request: <u>9/15/04</u>
Scope of Work: (Location, manhole number, etc.) <u>(See Attached Map) Install Duct Bank w/ Fiber Optic Cabling throughout the federal enclave.</u>		

Date Permit Required: <u>ASAP</u>	Termination Date of Permit: <u>JAN 2005</u>
Signature of Requesting Official: <u>P. Williams III</u>	Date: <u>9/15/2004</u> Phone Number: <u>(843)308-0391</u>

## Caretaker Site Office Review

<p><b>Points of Contact:</b>                  PW : Robert Sagasser                  (work) 529-0653                  (page) 570-0390</p> <p>DE&amp;G: R.W. Smith                  (work) 745-6381</p> <p>DA: Gene Knisley                  Sewer POC:                  (work) 747-0010</p>	<p>1. Who is the current Land Owner/ Leasee? <u>FLETC</u></p> <p>2. Is the Area inside the CIA? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>3. Are any SWMU(s) impacted? If yes, list. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (<u>17</u>)</p> <p>4. Are any AOC(s) impacted? If yes, list. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (<u>722</u>)</p> <p>5. Has DHEC been notified? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>6. Was water tested for VOC's and metals? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>7. Are results greater than NCSD limits? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>8. Are results greater than TCLP limits? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>9. Are Chlorides within range of Cooper River water? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>10. Was NCSD (Kelly Singer) notified? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>11. What is the serial # of forwarding letter to RDA? _____</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"><input checked="" type="checkbox"/> Yes</td> <td style="width: 50%;"><input checked="" type="checkbox"/> No</td> </tr> <tr> <td><input checked="" type="checkbox"/> Yes</td> <td><input type="checkbox"/> No (<u>17</u>)</td> </tr> <tr> <td><input checked="" type="checkbox"/> Yes</td> <td><input type="checkbox"/> No (<u>722</u>)</td> </tr> <tr> <td><input type="checkbox"/> Yes</td> <td><input checked="" type="checkbox"/> No</td> </tr> <tr> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> </tr> </table>	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No ( <u>17</u> )	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No ( <u>722</u> )	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No						
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<input type="checkbox"/> Yes	<input type="checkbox"/> No																	
Permit Approved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																		

IO Authorizing Signature: <u><i>Robt Jones</i></u>	Date out: <u>9/17/04</u>
I2MHILL/J.A.JONES Signature: <u><i>[Signature]</i></u>	Serial Number: <u>027</u>
IO Officer Signature: <u><i>Robt Jones</i></u>	

Permit is approved contingent upon the following actions to be taken by permittee:

Test Required: \_\_\_\_\_

Discharge Instructions: \_\_\_\_\_

5090  
ES32RH  
16 Sep 04

**MEMORANDUM**

**From: ES32RH, Rob Harrell**  
**To: CSO Charleston, Rick Nielson**

**Subj: DE-WATERING PERMIT FOR DEPARTMENT OF HOME SECURITY  
NUMBER**

1. I have reviewed the subject dewatering permit application and have the following comments.
2. The Department of Homeland Security (DHS) has been provided with drawings that shows where land use controls (LUCs) have been applied. One of the LUCs is a restriction on the use of groundwater. In these areas, DHS should containerize all of the groundwater, sample for compounds of concern (COCs), and dispose of the water in accordance with the test results. A list of COCs may be found in the environmental studies performed at each site. Disposal methods may include discharging the groundwater to the North Charleston Sewer District (NCSD), disposal as hazardous materials, etc. DHS should inquire to the NCSD as to the terms and conditions for discharging to the NCSD system.
3. In areas where there is not a LUC for groundwater, DHS should visually determine if the water is contaminated. Such determination should include noting staining, discoloration, or odors. If none are present, DHS may dispose of the groundwater in any manner compatible with the site conditions and their Storm Water Construction Permit from the South Carolina Department of Health and Environmental Control (DHEC). This may include discharging the groundwater to an open field (do not discharge to sites with LUCS), into the storm water drainage system, etc.
4. If DHS encounters contaminated groundwater in areas where there are not LUCs, DHS is to contact the CSO immediately for further instructions on sampling, analysis, and disposal. DHS may continue to dewater the site, if DHS containerizes and temporarily stores the groundwater while awaiting disposal instructions.
5. If you have any questions, please contact me at (843) 820-5650 or E-mail at Rob.Harrell@Navy.mil.

  
ROBERT A. HARRELL JR.

**Nielson, Rick CONT EFDSOUTH**

---

**From:** Gary.Foster@CH2M.com  
**Sent:** Wednesday, September 15, 2004 2:58 PM  
**To:** Nielson, Rick CONT EFDSOUTH  
**Cc:** Andrew.O'Conor@CH2M.com; Harrell, Rob A CIV  
**Subject:** Dig permits from FLETC dated 9/15/04

Don't see a problem with the fence post replacements as long as they are not within the landfill area, and then the only comments would be that appropriate H&S measures should be taken.

As for the ground water, we should indicate that containerization and sampling should be performed when groundwater is being collected within a SWMU/AOC where a groundwater LUC has been implemented.

Andrew - Stop by Rick's office and sign

**CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT**

Requester fill out the portion, sign and date.

Location: Hobson AVE Contractor: SCE & G Date of Request: 14 JAN 04

Scope of Work: (Location, manhole number, etc.) MAKING REPAIRS TO PRIMARY CABLE CABLES RUN FROM 451 B (BEHIND POWERHOUSE) TO 451C (VIADUCT STATION) MAY NEED TO PUMP SEVERAL HOLES ALONG HOBSON AVE.

Date Permit Required: 14 JAN 04 Termination Date of Permit: \_\_\_\_\_

Signature of Requesting Official: [Signature] Date: 14 JAN 04 Phone Number: 843-576-8613

**Points of Contact:**  
 CPW : Robert Sagasser  
 (work) 529-0653  
 (page) 570-0390  
 SCE&G: R.W. Smith  
 (work) 745-6384  
576 8613  
mobile 209 4544  
 RDA: Gene Knisley  
 Sewer POC:  
 (work) 747-0010

1. Who is the current Land Owner/ Leasee? \_\_\_\_\_
2. Is the Area inside the CIA?  Yes  No
3. Are any SWMU(s) impacted? If yes, list.  Yes  No ( \_\_\_\_\_ )
4. Are any AOC(s) impacted? If yes, list.  Yes  No ( \_\_\_\_\_ )
5. Has DHEC been notified?  Yes  No
6. Was water tested for VOC's and metals?  Yes  No
7. Are results greater than NCSD limits?  Yes  No
8. Are results greater than TCLP limits?  Yes  No
9. Are Chlorides within range of Cooper River water?  Yes  No
10. Was NCSD (Kelly Singer) notified?  Yes  No
11. What is the serial # of forwarding letter to RDA? \_\_\_\_\_

Permit Approved?  Yes  No

CSO Authorizing Signature: [Signature] Date out: \_\_\_\_\_  
 CH2MHILL/J.A.JONES Signature: [Signature] 2-6-04  
 BEC Signature: [Signature] M.H. Hunt 2/6/04 Serial Number: 027  
 CSO Officer Signature: [Signature]

\*Permit is approved contingent upon the following actions to be taken by permittee:  
 Tests Required: \_\_\_\_\_  
 \_\_\_\_\_  
 Discharge Instructions: \_\_\_\_\_

## CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

CSO Log Number = 027  
Request Date = 14 January 2004  
Comments Date =  
Location = Hobson Ave.

### Environmental Review Comments

This project proposes the following: (a) to repair primary cable

The Navy has identified that in this area a release of hazardous substances has occurred, but corrective actions have not yet been implemented. It is recommended that contractor personnel ensure necessary precautions are taken to minimize dermal exposure to any workers who may come in contact with the water. A visual inspection and examination of water in the manhole shall be performed to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated, contact the Caretaker Site Office for further instruction on sampling, analysis, and disposal. Sample water and analyze for VOC's and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit, the water may be discharged to the sanitary sewer after obtaining approval from the North Charleston Sewer District. If results are above these limits, contact the Caretaker Site Office for disposition instructions.

If you have any questions, please contact Amy Daniel or Rick Nielson at the Caretaker Site Office at 743-2985.

# CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

Requester: Fill out top portion, Sign and date.

<b>Location:</b> <u>Campportation Lane</u>	<b>Contractor:</b> <u>S.C.E 26</u>	<b>Date of Request:</b> <u>10-31-01</u>
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**Scope of Work:** (Location, manhole number, etc.)

South East of BLD 241 MH# 10298

<b>Date Permit Required:</b> <u>11-9-01</u>	<b>Termination Date of Permit:</b> <u>12-30-01</u>
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<b>Signature of Requesting Official:</b> <u>Richard W. Smith</u>	<b>Date:</b> <u>10-31-01</u>	<b>Phone Number:</b> <u>745-6381</u>
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### Caretaker Site Office Review

<p><b>Points of Contact:</b></p> <p><b>CPW:</b> Robert Sagasser (work) 529-0653 (page) 570-0390</p> <p><b>SCE&amp;G:</b> R.W. Smith (work) 745-6381</p> <p><b>RDA:</b> Gene Knisley Sewer POC: (work) 747-0010</p>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%; border-bottom: 1px solid black;">1. Who is the current Land Owner/ Leasee? _____</td> <td style="width: 5%;"></td> <td style="width: 10%; text-align: center;"><input checked="" type="checkbox"/></td> <td style="width: 5%;">Yes</td> <td style="width: 5%;"></td> <td style="width: 10%; text-align: center;"><input type="checkbox"/></td> <td style="width: 5%;">No</td> </tr> <tr> <td style="border-bottom: 1px solid black;">2. Is the Area inside the CIA?</td> <td></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Yes</td> <td></td> <td style="text-align: center;"><input type="checkbox"/></td> <td>No</td> </tr> <tr> <td style="border-bottom: 1px solid black;">3. Are any SWMU(s) impacted? If yes, list. _____</td> <td></td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Yes</td> <td></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>No ( _____ )</td> </tr> <tr> <td style="border-bottom: 1px solid black;">4. Are any AOC(s) impacted? If yes, list. _____</td> <td></td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Yes</td> <td></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>No ( _____ )</td> </tr> <tr> <td style="border-bottom: 1px solid black;">5. Has DHEC been notified?</td> <td></td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Yes</td> <td></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>No</td> </tr> <tr> <td style="border-bottom: 1px solid black;">6. Was water tested for VOC's and metals?</td> <td></td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Yes</td> <td></td> <td style="text-align: center;"><input type="checkbox"/></td> <td>No</td> </tr> <tr> <td style="border-bottom: 1px solid black;">7. Are results greater than NCSL limits?</td> <td></td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Yes</td> <td></td> <td style="text-align: center;"><input type="checkbox"/></td> <td>No</td> </tr> <tr> <td style="border-bottom: 1px solid black;">8. Are results greater than TCLP limits?</td> <td></td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Yes</td> <td></td> <td style="text-align: center;"><input type="checkbox"/></td> <td>No</td> </tr> <tr> <td style="border-bottom: 1px solid black;">9. Are Chlorides within range of Cooper River water?</td> <td></td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Yes</td> <td></td> <td style="text-align: center;"><input type="checkbox"/></td> <td>No</td> </tr> <tr> <td style="border-bottom: 1px solid black;">10. Was NCSL (Kelly Singer) notified?</td> <td></td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Yes</td> <td></td> <td style="text-align: center;"><input type="checkbox"/></td> <td>No</td> </tr> <tr> <td style="border-bottom: 1px solid black;">11. What is the serial # of forwarding letter to RDA? _____</td> <td></td> <td style="text-align: center;"><input type="checkbox"/></td> <td>Yes</td> <td></td> <td style="text-align: center;"><input type="checkbox"/></td> <td>No</td> </tr> </table>	1. Who is the current Land Owner/ Leasee? _____		<input checked="" type="checkbox"/>	Yes		<input type="checkbox"/>	No	2. Is the Area inside the CIA?		<input checked="" type="checkbox"/>	Yes		<input type="checkbox"/>	No	3. Are any SWMU(s) impacted? If yes, list. _____		<input type="checkbox"/>	Yes		<input checked="" type="checkbox"/>	No ( _____ )	4. Are any AOC(s) impacted? If yes, list. _____		<input type="checkbox"/>	Yes		<input checked="" type="checkbox"/>	No ( _____ )	5. Has DHEC been notified?		<input type="checkbox"/>	Yes		<input checked="" type="checkbox"/>	No	6. Was water tested for VOC's and metals?		<input type="checkbox"/>	Yes		<input type="checkbox"/>	No	7. Are results greater than NCSL limits?		<input type="checkbox"/>	Yes		<input type="checkbox"/>	No	8. Are results greater than TCLP limits?		<input type="checkbox"/>	Yes		<input type="checkbox"/>	No	9. Are Chlorides within range of Cooper River water?		<input type="checkbox"/>	Yes		<input type="checkbox"/>	No	10. Was NCSL (Kelly Singer) notified?		<input type="checkbox"/>	Yes		<input type="checkbox"/>	No	11. What is the serial # of forwarding letter to RDA? _____		<input type="checkbox"/>	Yes		<input type="checkbox"/>	No
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<b>Permit Approved?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																																																																														

<b>CSO Authorizing Signature:</b> <u>Amy Daniell</u> 11/5/01	<b>Date out:</b> <u>11/5/01</u>
<b>CH2MHILL/J.A.JONES Signature:</b> <u>[Signature]</u>	
<b>BEC Signature:</b> <u>M.A. Blunt</u> 11/5/01	<b>Serial Number:</b> <u>0240</u>
<b>CSO Officer Signature:</b> <u>Thomas F. Fresilli</u> 11/05/01	

**\*Permit is approved contingent upon the following actions to be taken by permittee:**

Tests Required: Chloride test done by CSO - need sample

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Discharge Instructions: Sanitary sewer pending sample results

## CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

CSO Log Number = 026

Request Date = 31 October 2001

Comments Date = 5 November 2001

Location = In between Bldgs. 241 & 242

### Environmental Review Comments

This project proposes the following: (a) to install underground electrical conduit

The Navy has identified that in this area a release of hazardous substances has occurred, but at concentrations that do not require removal or remedial action. It is recommended that contractor personnel ensure necessary precautions are taken to minimize dermal exposure to any workers who may come in contact with the water. If contamination is discovered at any time during the course of dewatering, whether contamination is expected or not, all work shall be stopped immediately and the CSO shall be notified. Any water that exhibits an odor, is visually discolored or has objects in it that would indicate the possibility of a release of chemicals requires notification.

A sample shall be collected at the manhole and given to the CSO to determine the discharge instructions. If you have any questions, please contact Amy Daniell or Rick Nielson at 743-9985.

# CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

Requester: Fill out top portion, Sign and date.

<b>Location:</b> <u>Hobson Ave at N52</u>	<b>Contractor:</b> <u>S.C.E. &amp; G.</u>	<b>Date of Request:</b> <u>10-29-01</u>
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**Scope of Work:** (Location, manhole number, etc.)  
Dewater man Hole #10409 at Hobson ave & Sarzi St.

<b>Date Permit Required:</b> <u>11-3-01</u>	<b>Termination Date of Permit:</b> <u>11-30-01</u>
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<b>Signature of Requesting Official:</b> <u>Richard W. Smith</u>	<b>Date:</b> <u>10-29-01</u>	<b>Phone Number:</b> <u>745-6381</u>
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### Caretaker Site Office Review

<p><b>Points of Contact:</b></p> <p><b>CPW:</b> Robert Sagasser (work) 529-0653 (page) 570-0390</p> <p><b>SCE&amp;G:</b> R.W. Smith (work) 745-6381</p> <p><b>RDA:</b> Gene Knisley Sewer POC: (work) 747-0010</p>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%; padding: 5px;">1. Who is the current Land Owner/ Leasee? <u>Border Patrol</u></td> <td style="width: 10%; text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="width: 10%; text-align: center; padding: 5px;">Yes</td> <td style="width: 10%; text-align: center; padding: 5px;"><input checked="" type="checkbox"/></td> <td style="width: 10%; text-align: center; padding: 5px;">No</td> </tr> <tr> <td style="padding: 5px;">2. Is the Area inside the CIA?</td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;">Yes</td> <td style="text-align: center; padding: 5px;"><input checked="" type="checkbox"/></td> <td style="text-align: center; padding: 5px;">No ( )</td> </tr> <tr> <td style="padding: 5px;">3. Are any SWMU(s) impacted? If yes, list.</td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;">Yes</td> <td style="text-align: center; padding: 5px;"><input checked="" type="checkbox"/></td> <td style="text-align: center; padding: 5px;">No ( )</td> </tr> <tr> <td style="padding: 5px;">4. Are any AOC(s) impacted? 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1. Who is the current Land Owner/ Leasee? <u>Border Patrol</u>	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No																																																				
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<b>CSO Authorizing Signature:</b> <u>Amy Daniell</u> <u>10/30/01</u>	<b>Date out:</b> <u>11/5/01</u>
<b>CH2MHILL/J.A.JONES Signature:</b> <u>[Signature]</u> <u>10-30-01</u>	
<b>BEC Signature:</b> <u>[Signature]</u> <u>11/5/01</u>	<b>Serial Number:</b> <u>025</u>
<b>CSO Officer Signature:</b> <u>Thomas F. Freielli</u> <u>11/05/01</u>	

**\*Permit is approved contingent upon the following actions to be taken by permittee:**

Tests Required: Chloride Test Done By CSO - need sample

Discharge Instructions: Sanitary sewer pending sample results

## CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

CSO Log Number = 025

Request Date = 29 October 2001

Comments Date = 30 October 2001

Location = Hobson Ave. in front of Bldg. NS-1

### Environmental Review Comments

This project proposes the following: (a) to install electrical conduit

The Navy has identified that in this area a release of hazardous substances has occurred, but at concentrations that do not require removal or remedial action. It is recommended that contractor personnel ensure necessary precautions are taken to minimize dermal exposure to any workers who may come in contact with the water. If contamination is discovered at any time during the course of dewatering, whether contamination is expected or not, all work shall be stopped immediately and the CSO shall be notified. Any water that exhibits an odor, is visually discolored or has objects in it that would indicate the possibility of a release of chemicals requires notification.

A sample shall be collected at the manhole and given to the CSO to determine the discharge instructions. If you have any questions, please contact Amy Daniell or Rick Nielson at 743-9985.

SWMU 20

# CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

Requester: Fill out top portion, Sign and date.

<b>Location:</b> <u>Olson Ave &amp; Truxtun</u>	<b>Contractor:</b> <u>S.C.E &amp; G.</u>	<b>Date of Request:</b> <u>9-28-01</u>
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**Scope of Work:** (Location, manhole number, etc.)  
S.C.E & G. MH # 1004d

<b>Date Permit Required:</b> <u>10-5-01</u>	<b>Termination Date of Permit:</b> <u>JAN 1, 2002</u>
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<b>Signature of Requesting Official:</b> <u>Richard W. Smith</u>	<b>Date:</b> <u>9-28-01</u>	<b>Phone Number:</b> <u>745-6381</u>
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### Caretaker Site Office Review

<b>Points of Contact:</b> <b>CPW:</b> Robert Sagasser (work) 529-0653 (page) 570-0390  <b>SCE&amp;G:</b> R.W. Smith (work) 745-6381  <b>RDA:</b> Gene Knisley Sewer POC: (work) 747-0010	1. Who is the current Land Owner/ Leasee? <u>Metal Trades</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	2. Is the Area inside the CIA?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	3. Are any SWMU(s) impacted? If yes, list.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No ( )
	4. Are any AOC(s) impacted? If yes, list. *	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No ( )
	5. Has DHEC been notified?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
	6. Was water tested for VOC's and metals?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	7. Are results greater than NCSD limits?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	8. Are results greater than TCLP limits?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	9. Are Chlorides within range of Cooper River water?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	10. Was NCSD (Kelly Singer) notified?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	11. What is the serial # of forwarding letter to RDA? <u>N/A</u>	<input type="checkbox"/> Yes	<input type="checkbox"/> No

\* see CH2M-JONES attached letter

Permit Approved?  Yes  No

**CSO Authorizing Signature:** Amy Daniell 10/2/01 **Date out:** 21 May 2003

**CH2MHILL/J.A.JONES Signature:** [Signature] 10/2/01

**BEC Signature:** M.A. Hunt 4/24/03 see attached ltr **Serial Number:** 024

**CSO Officer Signature:** Amy Daniell

\*Permit is approved contingent upon the following actions to be taken by permittee:

**Tests Required:** Visual examination, Sample water and analyze for VOC's and metals.

**Discharge Instructions:** If constituents are below NPDES discharge limits - discharge to sanitary sewer after approval from NCSD.

## CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

CSO Log Number = 024

Request Date = 28 September 2001

Comments Date = 19 May 2003

Location = Between Hobson Ave. & Truxton Ave. (Manhole #10048)

### Environmental Review Comments

This project proposes the following: (a) to install electrical conduit

The Navy has identified that in this area a release of hazardous substances has occurred, but corrective actions have not yet been implemented. It is recommended that contractor personnel ensure necessary precautions are taken to minimize dermal exposure to any workers who may come in contact with the water. A visual inspection and examination of water in the manhole shall be performed to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated, contact the Caretaker Site Office for further instruction on sampling, analysis, and disposal. Sample water and analyze for VOC's and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit, the water may be discharged to the sanitary sewer after obtaining approval from the North Charleston Sewer District. If results are above these limits, contact the Caretaker Site Office for disposition instructions.

If you have any questions, please contact Amy Daniell or Rick Nielson at the Caretaker Site Office at 743-2985.

25 April 2003

MEMORANDUM

From: M.A.Hunt, BRAC Environmental Coordinator

To: Amy Daniel, Caretaker Site Officer

Subject: SCE&G Manhole Dewater Permits

Amy,

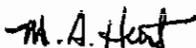
I have reviewed each of the Manhole Permit requests (1 through 24) submitted by SCE&G and have determined, based on location, potential intrusion by Cooper River tidal fluctuations and proximity to known groundwater contamination, the disposition of any water removed from these manholes prior to work. The list of manholes and information with respect to these factors is attached to this memorandum. It should be noted that MH 10050 could not be located on the maps provided by SCE&G. The permit and disposition instructions will be provided once the location is known.

For manholes listed in Column A in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. Sample water and analyze for VOCs and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit the water may be discharged to the sanitary sewer after obtaining approval from North Charleston Sewer District. If results are above these limits contact the CSO for disposition instructions.

For manholes listed in Column B in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. If no visible contamination is present the water can be discharged to the storm sewer system.

If you should have any questions please call me at 820-5607.

Respectfully,



M.A.Hunt  
BRAC Environmental Coordinator  
Charleston Naval Complex

Permit #	Manhole #	Ind Area	Location	Connection to Cooper (Y/N)	Connection to Cooper	Proximity to Plume (Y/N)		Disposition of Water	
				(Based on tidal fluctuations)	(Based on chloride tests)			Column A	Column B
1	10188	Y	East of Bldg 420	Yes		No			X
2	10096	Y	East of Bldg 5 (Near SY canteen)	No		Yes (SWMU 21/54)		X	
3	10095	Y	Near 10096	No		Yes (SWMU 21/54)		X	
4	10094	Y	3rd St. NE side of Bldg 43	No		No		X	
5	10093	Y	East Side of Bldg 3 (Near plating shop)	No		No		X	
6	10091	Y	Entrance to Bldg 56	No		No		X	
7	10111	Y	East side of Bldg 46	Yes		Yes (AOC 551)		X	
8	10110	Y	Between Bldgs 58 & 46	Yes		Yes (AOC 551)		X	
9	10091	Y	Entrance to Bldg 56	No	8250 ppm	No		X	
10	10090	Y	3rd St. by Bldg 221	Yes	16500ppm	No			X
11	10089	Y	Roe St and 3rd	Yes	16500ppm	No			X
12	10037	Y	Truxtun Ave and Roe	Yes		No			X
13	10039	Y	Truxtun Aven and Bldg 221	Yes		No			X
14	10040	Y	Truxtun Ave and Bldg 56	Yes		No			X
15	10044	Y	Ave B and Bldg 3 (near entrance to X31)	No		No		X	
16	10045	Y	Ave B and Bldg 3 (near entrance to X31)	No		No		X	
17	10042	Y	Truxtun Ave and Ave B	No		No		X	
18	10047	Y	Truxtun Ave near Bldg 6 and Weld shop	Yes		No			X
19	10124	Y	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)		X	
20	10128	N	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)		X	
21	10102	N	Hobson near Bldg 3	No		No		X	
22	10100	N	Hobson and Truxtun	No		No		X	
	10050	Unable to locate							
24	10048	N	Hobson and Truxtun	No		No		X	
	10066	N	Turnbull and North side of Bldg 64	N	54200 ppb	N			

## CH2M-JONES, LLC

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October 11, 2001

To: Charleston Caretaker Site Office (CSO)  
From: CH2M-JONES, LLC

Subject: EXCAVATION PERMIT (034) AND DEWATERING PERMITS (001-024)  
FOR SCE&G UTILITY WORK

CH2M-JONES, LLC, in cooperation with the Navy has reviewed the provided drawing and Dewatering Permits 001 through 024 and Excavation Permit 034. CH2M-JONES, LLC has found several of the proposed work areas are in the vicinity of Solid Waste Management Units (SWMU's) and/or Area's of Concern (AOC's). Even though SCE&G's work is not within the footprint of a known SWMU or AOC, SCE&G should take into consideration that Contaminates of Concern (COC's) could be encountered. Connecting electrical conduits inside areas of contamination (SWMUs/AOCs) may provide migration pathways outside of the SWMU/AOC footprint. This condition has been observed in the industrial area (Zone E) of the Charleston Naval Complex.

Based on the above statement the below information is provided for specific work areas noting the type of work impacted and manholes:

Work performed east of Building 74 is in the vicinity of AOC 550. The Draft RCRA Facility Investigation (RFI) Report identified arsenic in groundwater. There was no soil contaminations identified for an industrial scenario. (Excavation and dewatering MH#10037,10089)

Work performed near the northeast side of Building 46 is in the vicinity of AOC 551. The Draft RFI Report identified lead and Benzo (a) Pyrenes (BEQs) as COC's in soils and thallium, arsenic, and PCE as COC's in groundwater. (Excavation and dewatering MH# 10110, 10111)

Work performed near Buildings 5 and 44 is in the vicinity of AOC 554 and SWMU 25. The Draft RFI Report indicates 5 metals (antimony, cadmium, chromium, copper and lead) and BEQ's as COC's in the soils. Groundwater COC's were identified as antimony, cadmium, chromium, nickel, a-chlordane, g-chlordane, tetrachloroethene and trichloroethene. (Excavation and dewatering MH#10096, 10124, 10128)

Work performed near Buildings 6 and 226 is in the vicinity of SWMU's 23, 63, and, 541, 542. The Draft RFI Report combined the before mentioned sites into one "Combined SWMU 23". Combined SWMU 23 identified 8 COC's in soil: antimony, cadmium, copper, lead, nickel, zinc, Aroclor-1254, and BEQs. No COC's were identified in groundwater. (Dewatering MH#10047, 10042, 10044, 10045)

Work performed near the west end of Building 6 and 35 is in the vicinity of SWMU 70 and AOC's 530 and 531. The Draft RFI Report revealed the following: SWMU 70 at the west end of Building 6 found copper, lead, and BEQ's in the soil. Groundwater analysis identified antimony, chromium, thallium, chloroform, 1,2-dichloroethene, tetrachloroethene, and trichloroethene. AOC 530 located on the west end of Building 35 was found to have arsenic and BEQ's in soil and shallow groundwater showed arsenic and 1,1-dichloroethene present. AOC 531, also at the west end of Building 35, was found to have arsenic and BEQ's in the soil. No groundwater COC's were identified. (Dewatering MH#10048, 10050, 10100, and 10102)

CH2M-JONES, LLC will be addressing groundwater contamination below the west end of Building 5 at the end of 2001 into the summer of 2002. Soil excavation at the west end of Building 226 is planned but no date has been scheduled. None of this work should interfere with SCE&G's work. No other scheduled remedial actions are in place at this time.

Respectfully,  
CH2M-JONES, LLC



Ted Heames  
Site Superintendent

SUM-70

# CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

Requester: Fill out top portion, Sign and date.

<b>Location:</b> Hobson Ave & Tryon	<b>Contractor:</b> S.C.E & G.	<b>Date of Request:</b> 9-28-01
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**Scope of Work:** (Location, manhole number, etc.)

S.C.E & G. MH # 10100

<b>Date Permit Required:</b> 10-5-01	<b>Termination Date of Permit:</b> Jan 1, 2002
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<b>Signature of Requesting Official:</b> Richard W. Smith	<b>Date:</b> 9-28-01	<b>Phone Number:</b> 745-6381
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### Caretaker Site Office Review

<b>Points of Contact:</b> <b>CPW:</b> Robert Sagasser (work) 529-0653 (page) 570-0390 <b>SCE&amp;G:</b> R.W. Smith (work) 745-6381 <b>RDA:</b> Gene Knisley Sewer POC: (work) 747-0010	1. Who is the current Land Owner/ Leasee? <u>Metal Trades</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	2. Is the Area inside the CIA?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No ( )
	3. Are any SWMU(s) impacted? If yes, list.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No ( )
	4. Are any AOC(s) impacted? If yes, list. *	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No ( )
	5. Has DHEC been notified?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
	6. Was water tested for VOC's and metals?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	7. Are results greater than NCSD limits?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	8. Are results greater than TCLP limits?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	9. Are Chlorides within range of Cooper River water?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	10. Was NCSD (Kelly Singer) notified?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	11. What is the serial # of forwarding letter to RDA? <u>N/A</u>		

\*see CH2M-hill's attached letter

**Permit Approved?**  Yes  No

<b>CSO Authorizing Signature:</b> <u>Amy Daniell 10/2/01</u>	<b>Date out:</b> <u>21 May 2003</u>
<b>CH2MHILL/J.A.JONES Signature:</b> <u>[Signature] 10/2/01</u>	
<b>BEC Signature:</b> <u>M.A. Hunt 4/24/03 see attached letter</u>	<b>Serial Number:</b> <u>022</u>
<b>CSO Officer Signature:</b> <u>Amy Daniell</u>	

\*Permit is approved contingent upon the following actions to be taken by permittee:

Tests Required: Visual examination, Sample water and analyze for VOC's and metals

Discharge Instructions: If constituents are below NPDES discharge limits - discharge to sanitary sewer after approval from NCSD.

## CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

CSO Log Number = 022

Request Date = 28 September 2001

Comments Date = 19 May 2003

Location = Between Hobson Ave. & Truxton Ave. (Manhole #10100)

### Environmental Review Comments

This project proposes the following: (a) to install electrical conduit

The Navy has identified that in this area a release of hazardous substances has occurred, but corrective actions have not yet been implemented. It is recommended that contractor personnel ensure necessary precautions are taken to minimize dermal exposure to any workers who may come in contact with the water. A visual inspection and examination of water in the manhole shall be performed to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated, contact the Caretaker Site Office for further instruction on sampling, analysis, and disposal. Sample water and analyze for VOC's and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit, the water may be discharged to the sanitary sewer after obtaining approval from the North Charleston Sewer District. If results are above these limits, contact the Caretaker Site Office for disposition instructions.

If you have any questions, please contact Amy Daniell or Rick Nielson at the Caretaker Site Office at 743-2985.

25 April 2003

MEMORANDUM

From: M.A.Hunt, BRAC Environmental Coordinator

To: Amy Daniel, Caretaker Site Officer

Subject: SCE&G Manhole Dewater Permits

Amy,

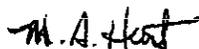
I have reviewed each of the Manhole Permit requests (1 through 24) submitted by SCE&G and have determined, based on location, potential intrusion by Cooper River tidal fluctuations and proximity to known groundwater contamination, the disposition of any water removed from these manholes prior to work. The list of manholes and information with respect to these factors is attached to this memorandum. It should be noted that MH 10050 could not be located on the maps provided by SCE&G. The permit and disposition instructions will be provided once the location is known.

For manholes listed in Column A in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. Sample water and analyze for VOCs and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit the water may be discharged to the sanitary sewer after obtaining approval from North Charleston Sewer District. If results are above these limits contact the CSO for disposition instructions.

For manholes listed in Column B in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. If no visible contamination is present the water can be discharged to the storm sewer system.

If you should have any questions please call me at 820-5607.

Respectfully,



M.A.Hunt  
BRAC Environmental Coordinator  
Charleston Naval Complex

Permit #	Manhole #	Ind Area	Location	Connection to Cooper (Y/N) (Based on tidal fluctuations)	Connection to Cooper (Based on chloride tests)	Proximity to Plume (Y/N)	Disposition of Water	
							Column A	Column B
1	10188	Y	East of Bldg 420	Yes		No		X
2	10096	Y	East of Bldg 5 (Near SY canteen)	No		Yes (SWMU 21/54)	X	
3	10095	Y	Near 10096	No		Yes (SWMU 21/54)	X	
4	10094	Y	3rd St. NE side of Bldg 43	No		No	X	
5	10093	Y	East Side of Bldg 3 (Near plating shop)	No		No	X	
6	10091	Y	Entrance to Bldg 56	No		No	X	
7	10111	Y	East side of Bldg 46	Yes		Yes (AOC 551)	X	
8	10110	Y	Between Bldgs 58 & 46	Yes		Yes (AOC 551)	X	
9	10091	Y	Entrance to Bldg 56	No	8250 ppm	No	X	
10	10090	Y	3rd St. by Bldg 221	Yes	16500ppm	No		X
11	10089	Y	Roe St and 3rd	Yes	16500ppm	No		X
12	10037	Y	Truxtun Ave and Roe	Yes		No		X
13	10039	Y	Truxtun Aven and Bldg 221	Yes		No		X
14	10040	Y	Truxtun Ave and Bldg 56	Yes		No		X
15	10044	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
16	10045	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
17	10042	Y	Truxtun Ave and Ave B	No		No	X	
18	10047	Y	Truxtun Ave near Bldg 6 and Weld shop	Yes		No		X
19	10124	Y	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
20	10128	N	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
21	10102	N	Hobson near Bldg 3	No		No	X	
22	10100	N	Hobson and Truxtun	No		No	X	
	10050	Unable to locate						
24	10048	N	Hobson and Truxtun	No		No	X	
	10066	N	Turnbull and North side of Bldg 64	N	54200 ppb	N		

## CH2M-JONES, LLC

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October 11, 2001

To: Charleston Caretaker Site Office (CSO)  
From: CH2M-JONES, LLC

Subject: EXCAVATION PERMIT (034) AND DEWATERING PERMITS (001-024)  
FOR SCE&G UTILITY WORK

CH2M-JONES, LLC, in cooperation with the Navy has reviewed the provided drawing and Dewatering Permits 001 through 024 and Excavation Permit 034. CH2M-JONES, LLC has found several of the proposed work areas are in the vicinity of Solid Waste Management Units (SWMU's) and/or Area's of Concern (AOC's). Even though SCE&G's work is not within the footprint of a known SWMU or AOC, SCE&G should take into consideration that Contaminates of Concern (COC's) could be encountered. Connecting electrical conduits inside areas of contamination (SWMUs/AOCs) may provide migration pathways outside of the SWMU/AOC footprint. This condition has been observed in the industrial area (Zone E) of the Charleston Naval Complex.

Based on the above statement the below information is provided for specific work areas noting the type of work impacted and manholes:

Work performed east of Building 74 is in the vicinity of AOC 550. The Draft RCRA Facility Investigation (RFI) Report identified arsenic in groundwater. There was no soil contaminations identified for an industrial scenario. (Excavation and dewatering MH#10037,10089)

Work performed near the northeast side of Building 46 is in the vicinity of AOC 551. The Draft RFI Report identified lead and Benzo (a) Pyrenes (BEQs) as COC's in soils and thallium, arsenic, and PCE as COC's in groundwater. (Excavation and dewatering MH# 10110, 10111)

Work performed near Buildings 5 and 44 is in the vicinity of AOC 554 and SWMU 25. The Draft RFI Report indicates 5 metals (antimony, cadmium, chromium, copper and lead) and BEQ's as COC's in the soils. Groundwater COC's were identified as antimony, cadmium, chromium, nickel, a-chlordane, g-chlordane, tetrachloroethene and trichloroethene. (Excavation and dewatering MH#10096, 10124, 10128)

Work performed near Buildings 6 and 226 is in the vicinity of SWMU's 23, 63, and, 541, 542. The Draft RFI Report combined the before mentioned sites into one "Combined SWMU 23". Combined SWMU 23 identified 8 COC's in soil: antimony, cadmium, copper, lead, nickel, zinc, Aroclor-1254, and BEQs. No COC's were identified in groundwater. (Dewatering MH#10047, 10042, 10044, 10045)

Work performed near the west end of Building 6 and 35 is in the vicinity of SWMU 70 and AOC's 530 and 531. The Draft RFI Report revealed the following: SWMU 70 at the west end of Building 6 found copper, lead, and BEQ's in the soil. Groundwater analysis identified antimony, chromium, thallium, chloroform, 1,2-dichloroethene, tetrachloroethene, and trichloroethene. AOC 530 located on the west end of Building 35 was found to have arsenic and BEQ's in soil and shallow groundwater showed arsenic and 1,1-dichloroethene present. AOC 531, also at the west end of Building 35, was found to have arsenic and BEQ's in the soil. No groundwater COC's were identified. (Dewatering MH#10048, 10050, 10100, and 10102)

CH2M-JONES, LLC will be addressing groundwater contamination below the west end of Building 5 at the end of 2001 into the summer of 2002. Soil excavation at the west end of Building 226 is planned but no date has been scheduled. None of this work should interfere with SCE&G's work. No other scheduled remedial actions are in place at this time.

Respectfully,  
CH2M-JONES, LLC



Ted Heames  
Site Superintendent

3000-70

# CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

Requester: Fill out top portion, Sign and date.

<b>Location:</b> Hobson ave by BLD 3	<b>Contractor:</b> S.C.E & G.	<b>Date of Request:</b> 9-28-01
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**Scope of Work:** (Location, manhole number, etc.)  
S.C.E & G. MH # 10102

<b>Date Permit Required:</b> 10-5-01	<b>Termination Date of Permit:</b> Jan 1 2002
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<b>Signature of Requesting Official:</b> Richard W. Smith	<b>Date:</b> 9-28-01	<b>Phone Number:</b> 745-6381
--	-------------------------	----------------------------------

### Caretaker Site Office Review

<b>Points of Contact:</b> <b>CPW:</b> Robert Sagasser (work) 529-0653 (page) 570-0390 <b>SCE&amp;G:</b> R.W. Smith (work) 745-6381 <b>RDA:</b> Gene Knisley Sewer POC: (work) 747-0010	1. Who is the current Land Owner/ Leasee? <u>Metal Trades</u>		
	2. Is the Area inside the CIA?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	3. Are any SWMU(s) impacted? If yes, list.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No ( )
	4. Are any AOC(s) impacted? If yes, list. *	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No ( )
	5. Has DHEC been notified?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
	6. Was water tested for VOC's and metals?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	7. Are results greater than NCSD limits?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	8. Are results greater than TCLP limits?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	9. Are Chlorides within range of Cooper River water?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	10. Was NCSD (Kelly Singer) notified?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	11. What is the serial # of forwarding letter to RDA? <u>N/A</u>		
* See attached CH2M-Jones letter			
<b>Permit Approved?</b>		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

<b>CSO Authorizing Signature:</b> <u>Amy Daniell 10/2/01</u>	<b>Date out:</b> <u>21 May 2003</u>
<b>CH2MHILL/J.A.JONES Signature:</b> <u>[Signature] 10/1/01</u>	
<b>BEC Signature:</b> <u>M.A. Hunt 4/24/03 see attached ltr.</u>	<b>Serial Number:</b> <u>021</u>
<b>CSO Officer Signature:</b> <u>Amy Daniell</u>	

**\*Permit is approved contingent upon the following actions to be taken by permittee:**

**Tests Required:** Visual examination, Sample water and analyze for VOC's and metals.

**Discharge Instructions:** If constituents are below NPDES discharge limits discharge to sanitary sewers after approval from NCSD.

## CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

CSO Log Number = 021

Request Date = 28 September 2001

Comments Date = 19 May 2003

Location = Hobson Ave. by Bldg. 3 (Manhole #10102)

### Environmental Review Comments

This project proposes the following: (a) to install electrical conduit

The Navy has identified that in this area a release of hazardous substances has occurred, but corrective actions have not yet been implemented. It is recommended that contractor personnel ensure necessary precautions are taken to minimize dermal exposure to any workers who may come in contact with the water. A visual inspection and examination of water in the manhole shall be performed to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated, contact the Caretaker Site Office for further instruction on sampling, analysis, and disposal. Sample water and analyze for VOC's and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit, the water may be discharged to the sanitary sewer after obtaining approval from the North Charleston Sewer District. If results are above these limits, contact the Caretaker Site Office for disposition instructions.

If you have any questions, please contact Amy Daniell or Rick Nielson at the Caretaker Site Office at 743-2985.

25 April 2003

MEMORANDUM

From: M.A.Hunt, BRAC Environmental Coordinator

To: Amy Daniel, Caretaker Site Officer

Subject: SCE&G Manhole Dewater Permits

Amy,

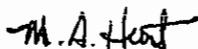
I have reviewed each of the Manhole Permit requests (1 through 24) submitted by SCE&G and have determined, based on location, potential intrusion by Cooper River tidal fluctuations and proximity to known groundwater contamination, the disposition of any water removed from these manholes prior to work. The list of manholes and information with respect to these factors is attached to this memorandum. It should be noted that MH 10050 could not be located on the maps provided by SCE&G. The permit and disposition instructions will be provided once the location is known.

For manholes listed in Column A in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. Sample water and analyze for VOCs and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit the water may be discharged to the sanitary sewer after obtaining approval from North Charleston Sewer District. If results are above these limits contact the CSO for disposition instructions.

For manholes listed in Column B in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. If no visible contamination is present the water can be discharged to the storm sewer system.

If you should have any questions please call me at 820-5607.

Respectfully,



M.A.Hunt  
BRAC Environmental Coordinator  
Charleston Naval Complex

Permit #	Manhole #	Ind Area	Location	Connection to Cooper (Y/N)	Connection to Cooper	Proximity to Plume (Y/N)	Disposition of Water	
				(Based on tidal fluctuations)	(Based on chloride tests)		Column A	Column B
1	10188	Y	East of Bldg 420	Yes		No		X
2	10096	Y	East of Bldg 5 (Near SY canteen)	No		Yes (SWMU 21/54)	X	
3	10095	Y	Near 10096	No		Yes (SWMU 21/54)	X	
4	10094	Y	3rd St. NE side of Bldg 43	No		No	X	
5	10093	Y	East Side of Bldg 3 (Near plating shop)	No		No	X	
6	10091	Y	Entrance to Bldg 56	No		No	X	
7	10111	Y	East side of Bldg 46	Yes		Yes (AOC 551)	X	
8	10110	Y	Between Bldgs 58 & 46	Yes		Yes (AOC 551)	X	
9	10091	Y	Entrance to Bldg 56	No	8250 ppm	No	X	
10	10090	Y	3rd St. by Bldg 221	Yes	16500ppm	No		X
11	10089	Y	Roe St and 3rd	Yes	16500ppm	No		X
12	10037	Y	Truxtun Ave and Roe	Yes		No		X
13	10039	Y	Truxtun Aven and Bldg 221	Yes		No		X
14	10040	Y	Truxtun Ave and Bldg 56	Yes		No		X
15	10044	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
16	10045	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
17	10042	Y	Truxtun Ave and Ave B	No		No	X	
18	10047	Y	Truxtun Ave near Bldg 6 and Weld shop	Yes		No		X
19	10124	Y	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
20	10128	N	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
21	10102	N	Hobson near Bldg 3	No		No	X	
22	10100	N	Hobson and Truxtun	No		No	X	
	10050	N	Unable to locate					
24	10048	N	Hobson and Truxtun	No		No	X	
	10066	N	Turnbull and North side of Bldg 64	N	54200 ppb	N		

## CH2M-JONES, LLC

---

October 11, 2001

To: Charleston Caretaker Site Office (CSO)  
From: CH2M-JONES, LLC

Subject: EXCAVATION PERMIT (034) AND DEWATERING PERMITS (001-024)  
FOR SCE&G UTILITY WORK

CH2M-JONES, LLC, in cooperation with the Navy has reviewed the provided drawing and Dewatering Permits 001 through 024 and Excavation Permit 034. CH2M-JONES, LLC has found several of the proposed work areas are in the vicinity of Solid Waste Management Units (SWMU's) and/or Area's of Concern (AOC's). Even though SCE&G's work is not within the footprint of a known SWMU or AOC, SCE&G should take into consideration that Contaminates of Concern (COC's) could be encountered. Connecting electrical conduits inside areas of contamination (SWMUs/AOCs) may provide migration pathways outside of the SWMU/AOC footprint. This condition has been observed in the industrial area (Zone E) of the Charleston Naval Complex.

Based on the above statement the below information is provided for specific work areas noting the type of work impacted and manholes:

Work performed east of Building 74 is in the vicinity of AOC 550. The Draft RCRA Facility Investigation (RFI) Report identified arsenic in groundwater. There was no soil contaminations identified for an industrial scenario. (Excavation and dewatering MH#10037,10089)

Work performed near the northeast side of Building 46 is in the vicinity of AOC 551. The Draft RFI Report identified lead and Benzo (a) Pyrenes (BEQs) as COC's in soils and thallium, arsenic, and PCE as COC's in groundwater. (Excavation and dewatering MH# 10110, 10111)

Work performed near Buildings 5 and 44 is in the vicinity of AOC 554 and SWMU 25. The Draft RFI Report indicates 5 metals (antimony, cadmium, chromium, copper and lead) and BEQ's as COC's in the soils. Groundwater COC's were identified as antimony, cadmium, chromium, nickel, a-chlordane, g-chlordane, tetrachloroethene and trichloroethene. (Excavation and dewatering MH#10096, 10124, 10128)

Work performed near Buildings 6 and 226 is in the vicinity of SWMU's 23, 63, and, 541, 542. The Draft RFI Report combined the before mentioned sites into one "Combined SWMU 23". Combined SWMU 23 identified 8 COC's in soil: antimony, cadmium, copper, lead, nickel, zinc, Aroclor-1254, and BEQs. No COC's were identified in groundwater. (Dewatering MH#10047, 10042, 10044, 10045)

Work performed near the west end of Building 6 and 35 is in the vicinity of SWMU 70 and AOC's 530 and 531. The Draft RFI Report revealed the following: SWMU 70 at the west end of Building 6 found copper, lead, and BEQ's in the soil. Groundwater analysis identified antimony, chromium, thallium, chloroform, 1,2-dichloroethene, tetrachloroethene, and trichloroethene. AOC 530 located on the west end of Building 35 was found to have arsenic and BEQ's in soil and shallow groundwater showed arsenic and 1,1-dichloroethene present. AOC 531, also at the west end of Building 35, was found to have arsenic and BEQ's in the soil. No groundwater COC's were identified. (Dewatering MH#10048, 10050, 10100, and 10102)

CH2M-JONES, LLC will be addressing groundwater contamination below the west end of Building 5 at the end of 2001 into the summer of 2002. Soil excavation at the west end of Building 226 is planned but no date has been scheduled. None of this work should interfere with SCE&G's work. No other scheduled remedial actions are in place at this time.

Respectfully,  
CH2M-JONES, LLC



Jed Heames  
Site Superintendent

Sum 28

# CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

Requester: Fill out top portion, Sign and date.

<b>Location:</b> <u>Hobson &amp; McMillan Ave</u>	<b>Contractor:</b> <u>S.C.E &amp; G.</u>	<b>Date of Request:</b> <u>9-28-01</u>
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**Scope of Work:** (Location, manhole number, etc.)  
S.C.E & G. MH # 10128

<b>Date Permit Required:</b> <u>10-5-01</u>	<b>Termination Date of Permit:</b> <u>Jan 1, 2002</u>
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<b>Signature of Requesting Official:</b> <u>Richard W. Smith</u>	<b>Date:</b> <u>9-28-01</u>	<b>Phone Number:</b> <u>745-6381</u>
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### Caretaker Site Office Review

<b>Points of Contact:</b> <b>CPW:</b> Robert Sagasser (work) 529-0653 (page) 570-0390 <b>SCE&amp;G:</b> R.W. Smith (work) 745-6381 <b>RDA:</b> Gene Knisley Sewer POC: (work) 747-0010	1. Who is the current Land Owner/ Leasee? <u>Metal Trades</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	2. Is the Area inside the CIA?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	3. Are any SWMU(s) impacted? If yes, list. <u>(SWMU 21454)</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	4. Are any AOC(s) impacted? If yes, list. <u>*</u>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
	5. Has DHEC been notified?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
	6. Was water tested for VOC's and metals?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	7. Are results greater than NCSD limits?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	8. Are results greater than TCLP limits?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	9. Are Chlorides within range of Cooper River water?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	10. Was NCSD (Kelly Singer) notified?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	11. What is the serial # of forwarding letter to RDA? <u>N/A</u>		
<b>Permit Approved?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <u>* See CH2M HILL attached letter</u>			

<b>CSO Authorizing Signature:</b> <u>Amy Daniell 10/12/01</u>	<b>Date out:</b> <u>21 May 2003</u>
<b>CH2MHILL/J.A.JONES Signature:</b> <u>[Signature] 10/11/01</u>	
<b>BEC Signature:</b> <u>M.A. Hunt 4/24/03 see attached ltr</u>	<b>Serial Number:</b> <u>020</u>
<b>CSO Officer Signature:</b> <u>Amy Daniell</u>	

**\*Permit is approved contingent upon the following actions to be taken by permittee:**

Tests Required: Visual examination, Sample water and analyze for VOC's and metals.

Discharge Instructions: If constituents are below NPDES discharge limits - discharge to sanitary sewer after approval from NCSD.

## CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

CSO Log Number = 020

Request Date = 28 September 2001

Comments Date = 19 May 2003

Location = Between Hobson Ave. & McMillan Ave. (Manhole #10128)

### Environmental Review Comments

This project proposes the following: (a) to install electrical conduit

The Navy has identified that in this area a release of hazardous substances has occurred, but corrective actions have not yet been implemented. It is recommended that contractor personnel ensure necessary precautions are taken to minimize dermal exposure to any workers who may come in contact with the water. A visual inspection and examination of water in the manhole shall be performed to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated, contact the Caretaker Site Office for further instruction on sampling, analysis, and disposal. Sample water and analyze for VOC's and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit, the water may be discharged to the sanitary sewer after obtaining approval from the North Charleston Sewer District. If results are above these limits, contact the Caretaker Site Office for disposition instructions.

If you have any questions, please contact Amy Daniell or Rick Nielson at the Caretaker Site Office at 743-2985.

25 April 2003

MEMORANDUM

From: M.A.Hunt, BRAC Environmental Coordinator

To: Amy Daniel, Caretaker Site Officer

Subject: SCE&G Manhole Dewater Permits

Amy,

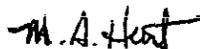
I have reviewed each of the Manhole Permit requests (1 through 24) submitted by SCE&G and have determined, based on location, potential intrusion by Cooper River tidal fluctuations and proximity to known groundwater contamination, the disposition of any water removed from these manholes prior to work. The list of manholes and information with respect to these factors is attached to this memorandum. It should be noted that MH 10050 could not be located on the maps provided by SCE&G. The permit and disposition instructions will be provided once the location is known.

For manholes listed in Column A in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. Sample water and analyze for VOCs and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit the water may be discharged to the sanitary sewer after obtaining approval from North Charleston Sewer District. If results are above these limits contact the CSO for disposition instructions.

For manholes listed in Column B in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. If no visible contamination is present the water can be discharged to the storm sewer system.

If you should have any questions please call me at 820-5607.

Respectfully,



M.A.Hunt  
BRAC Environmental Coordinator  
Charleston Naval Complex

Permit #	Manhole #	Ind Area	Location	Connection to Cooper (Y/N) (Based on tidal fluctuations)	Connection to Cooper (Based on chloride tests)	Proximity to Plume (Y/N)	Disposition of Water	
							Column A	Column B
1	10188	Y	East of Bldg 420	Yes		No		X
2	10096	Y	East of Bldg 5 (Near SY canteen)	No		Yes (SWMU 21/54)	X	
3	10095	Y	Near 10096	No		Yes (SWMU 21/54)	X	
4	10094	Y	3rd St. NE side of Bldg 43	No		No	X	
5	10093	Y	East Side of Bldg 3 (Near plating shop)	No		No	X	
6	10091	Y	Entrance to Bldg 56	No		No	X	
7	10111	Y	East side of Bldg 46	Yes		Yes (AOC 551)	X	
8	10110	Y	Between Bldgs 58 & 46	Yes		Yes (AOC 551)	X	
9	10091	Y	Entrance to Bldg 56	No	8250 ppm	No	X	
10	10090	Y	3rd St. by Bldg 221	Yes	16500ppm	No		X
11	10089	Y	Roe St and 3rd	Yes	16500ppm	No		X
12	10037	Y	Truxtun Ave and Roe	Yes		No		X
13	10039	Y	Truxtun Aven and Bldg 221	Yes		No		X
14	10040	Y	Truxtun Ave and Bldg 56	Yes		No		X
15	10044	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
16	10045	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
17	10042	Y	Truxtun Ave and Ave B	No		No	X	
18	10047	Y	Truxtun Ave near Bldg 6 and Weld shop	Yes		No		X
19	10124	Y	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
20	10128	N	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
21	10102	N	Hobson near Bldg 3	No		No	X	
22	10100	N	Hobson and Truxtun	No		No	X	
	10050		Unable to locate					
24	10048	N	Hobson and Truxtun	No		No	X	
	10066	N	Turnbull and North side of Bldg 64	N	54200 ppb	N		

## CH2M-JONES, LLC

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October 11, 2001

To: Charleston Caretaker Site Office (CSO)  
From: CH2M-JONES, LLC

Subject: EXCAVATION PERMIT (034) AND DEWATERING PERMITS (001-024)  
FOR SCE&G UTILITY WORK

CH2M-JONES, LLC, in cooperation with the Navy has reviewed the provided drawing and Dewatering Permits 001 through 024 and Excavation Permit 034. CH2M-JONES, LLC has found several of the proposed work areas are in the vicinity of Solid Waste Management Units (SWMU's) and/or Area's of Concern (AOC's). Even though SCE&G's work is not within the footprint of a known SWMU or AOC, SCE&G should take into consideration that Contaminates of Concern (COC's) could be encountered. Connecting electrical conduits inside areas of contamination (SWMUs/AOCs) may provide migration pathways outside of the SWMU/AOC footprint. This condition has been observed in the industrial area (Zone E) of the Charleston Naval Complex.

Based on the above statement the below information is provided for specific work areas noting the type of work impacted and manholes:

Work performed east of Building 74 is in the vicinity of AOC 550. The Draft RCRA Facility Investigation (RFI) Report identified arsenic in groundwater. There was no soil contaminations identified for an industrial scenario. (Excavation and dewatering MH#10037,10089)

Work performed near the northeast side of Building 46 is in the vicinity of AOC 551. The Draft RFI Report identified lead and Benzo (a) Pyrenes (BEQs) as COC's in soils and thallium, arsenic, and PCE as COC's in groundwater. (Excavation and dewatering MH# 10110, 10111)

Work performed near Buildings 5 and 44 is in the vicinity of AOC 554 and SWMU 25. The Draft RFI Report indicates 5 metals (antimony, cadmium, chromium, copper and lead) and BEQ's as COC's in the soils. Groundwater COC's were identified as antimony, cadmium, chromium, nickel, a-chlordane, g-chlordane, tetrachloroethene and trichloroethene. (Excavation and dewatering MH#10096, 10124, 10128)

Work performed near Buildings 6 and 226 is in the vicinity of SWMU's 23, 63, and, 541, 542. The Draft RFI Report combined the before mentioned sites into one "Combined SWMU 23". Combined SWMU 23 identified 8 COC's in soil: antimony, cadmium, copper, lead, nickel, zinc, Aroclor-1254, and BEQs. No COC's were identified in groundwater. (Dewatering MH#10047, 10042, 10044, 10045)

Work performed near the west end of Building 6 and 35 is in the vicinity of SWMU 70 and AOC's 530 and 531. The Draft RFI Report revealed the following: SWMU 70 at the west end of Building 6 found copper, lead, and BEQ's in the soil. Groundwater analysis identified antimony, chromium, thallium, chloroform, 1,2-dichloroethene, tetrachloroethene, and trichloroethene. AOC 530 located on the west end of Building 35 was found to have arsenic and BEQ's in soil and shallow groundwater showed arsenic and 1,1-dichloroethene present. AOC 531, also at the west end of Building 35, was found to have arsenic and BEQ's in the soil. No groundwater COC's were identified. (Dewatering MH#10048, 10050, 10100, and 10102)

CH2M-JONES, LLC will be addressing groundwater contamination below the west end of Building 5 at the end of 2001 into the summer of 2002. Soil excavation at the west end of Building 226 is planned but no date has been scheduled. None of this work should interfere with SCE&G's work. No other scheduled remedial actions are in place at this time.

Respectfully,  
CH2M-JONES, LLC



Ted Heames  
Site Superintendent

1 June 25

# CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

Requester: Fill out top portion, Sign and date.

Location: <u>Johnson Ave &amp; McMillan Ave</u>	Contractor: <u>S.C.E &amp; G.</u>	Date of Request: <u>9-28-01</u>
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Scope of Work: (Location, manhole number, etc.)  
S.C.E & G. MH # 10124

Date Permit Required: <u>10-05-01</u>	Termination Date of Permit: <u>Jan 1, 2002</u>
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Signature of Requesting Official: <u>Richard W. Smith</u>	Date: <u>9-28-01</u>	Phone Number: <u>745-6381</u>
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## Caretaker Site Office Review

<b>Points of Contact:</b> <b>CPW:</b> Robert Sagasser (work) 529-0653 (page) 570-0390  <b>SCE&amp;G:</b> R.W. Smith (work) 745-6381  <b>RDA:</b> Gene Krisley Sewer POC: (work) 747-0010	1. Who is the current Land Owner/ Leasee? <u>Metal Trades</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	2. Is the Area inside the CIA?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	3. Are any SWMU(s) impacted? If yes, list. <u>(SWMU 21+54)</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	4. Are any AOC(s) impacted? If yes, list. <u>*</u>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
	5. Has DHEC been notified?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
	6. Was water tested for VOC's and metals?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	7. Are results greater than NCSD limits?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	8. Are results greater than TCLP limits?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	9. Are Chlorides within range of Cooper River water?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	10. Was NCSD (Kelly Singer) notified?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	11. What is the serial # of forwarding letter to RDA? <u>N/A</u>	<input type="checkbox"/> Yes	<input type="checkbox"/> No

\* see CH2M-Jones attached letter

Permit Approved?  Yes  No

CSO Authorizing Signature: <u>Amy Daniell 10/1/01</u>	Date out: <u>21 May 2003</u>
CH2MHILL/J.A.JONES Signature: <u>[Signature] 10/1/01</u>	
BEC Signature: <u>M.A. Hunt 4/24/03 see attached ltr</u>	Serial Number: <u>019</u>
CSO Officer Signature: <u>Amy Daniell</u>	

\*Permit is approved contingent upon the following actions to be taken by permittee:

Tests Required: Visual examination, Sample water and analyze for VOC's and metals.

Discharge Instructions: If constituents are below NPDES discharge limits- discharge to sanitary sewer after approval from NCSD.

## CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

CSO Log Number = 019

Request Date = 28 September 2001

Comments Date = 19 May 2003

Location = Between Hobson Ave. & McMillan Ave. (Manhole #10124)

### Environmental Review Comments

This project proposes the following: (a) to install electrical conduit

The Navy has identified that in this area a release of hazardous substances has occurred, but corrective actions have not yet been implemented. It is recommended that contractor personnel ensure necessary precautions are taken to minimize dermal exposure to any workers who may come in contact with the water. A visual inspection and examination of water in the manhole shall be performed to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated, contact the Caretaker Site Office for further instruction on sampling, analysis, and disposal. Sample water and analyze for VOC's and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit, the water may be discharged to the sanitary sewer after obtaining approval from the North Charleston Sewer District. If results are above these limits, contact the Caretaker Site Office for disposition instructions.

If you have any questions, please contact Amy Daniell or Rick Nielson at the Caretaker Site Office at 743-2985.

25 April 2003

MEMORANDUM

From: M.A.Hunt, BRAC Environmental Coordinator

To: Amy Daniel, Caretaker Site Officer

Subject: SCE&G Manhole Dewater Permits

Amy,

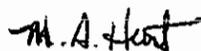
I have reviewed each of the Manhole Permit requests (1 through 24) submitted by SCE&G and have determined, based on location, potential intrusion by Cooper River tidal fluctuations and proximity to known groundwater contamination, the disposition of any water removed from these manholes prior to work. The list of manholes and information with respect to these factors is attached to this memorandum. It should be noted that MH 10050 could not be located on the maps provided by SCE&G. The permit and disposition instructions will be provided once the location is known.

For manholes listed in Column A in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. Sample water and analyze for VOCs and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit the water may be discharged to the sanitary sewer after obtaining approval from North Charleston Sewer District. If results are above these limits contact the CSO for disposition instructions.

For manholes listed in Column B in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. If no visible contamination is present the water can be discharged to the storm sewer system.

If you should have any questions please call me at 820-5607.

Respectfully,



M.A.Hunt  
BRAC Environmental Coordinator  
Charleston Naval Complex

Permit #	Manhole #	Ind Area	Location	Connection to Cooper (Y/N)	Connection to Cooper	Proximity to Plume (Y/N)		Disposition of Water	
				(Based on tidal fluctuations)	(Based on chloride tests)			Column A	Column B
1	10188	Y	East of Bldg 420	Yes		No			X
2	10096	Y	East of Bldg 5 (Near SY canteen)	No		Yes (SWMU 21/54)		X	
3	10095	Y	Near 10096	No		Yes (SWMU 21/54)		X	
4	10094	Y	3rd St. NE side of Bldg 43	No		No		X	
5	10093	Y	East Side of Bldg 3 (Near plating shop)	No		No		X	
6	10091	Y	Entrance to Bldg 56	No		No		X	
7	10111	Y	East side of Bldg 46	Yes		Yes (AOC 551)		X	
8	10110	Y	Between Bldgs 58 & 46	Yes		Yes (AOC 551)		X	
9	10091	Y	Entrance to Bldg 56	No	8250 ppm	No		X	
10	10090	Y	3rd St. by Bldg 221	Yes	16500ppm	No			X
11	10089	Y	Roe St and 3rd	Yes	16500ppm	No			X
12	10037	Y	Truxtun Ave and Roe	Yes		No			X
13	10039	Y	Truxtun Aven and Bldg 221	Yes		No			X
14	10040	Y	Truxtun Ave and Bldg 56	Yes		No			X
15	10044	Y	Ave B and Bldg 3 (near entrance to X31)	No		No		X	
16	10045	Y	Ave B and Bldg 3 (near entrance to X31)	No		No		X	
17	10042	Y	Truxtun Ave and Ave B	No		No		X	
18	10047	Y	Truxtun Ave near Bldg 6 and Weld shop	Yes		No			X
19	10124	Y	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)		X	
20	10128	N	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)		X	
21	10102	N	Hobson near Bldg 3	No		No		X	
22	10100	N	Hobson and Truxtun	No		No		X	
	10050		Unable to locate						
24	10048	N	Hobson and Truxtun	No		No		X	
	10066	N	Turnbull and North side of Bldg 64	N	54200 ppb	N			

## CH2M-JONES, LLC

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October 11, 2001

To: Charleston Caretaker Site Office (CSO)  
From: CH2M-JONES, LLC

Subject: EXCAVATION PERMIT (034) AND DEWATERING PERMITS (001-024)  
FOR SCE&G UTILITY WORK

CH2M-JONES, LLC, in cooperation with the Navy has reviewed the provided drawing and Dewatering Permits 001 through 024 and Excavation Permit 034. CH2M-JONES, LLC has found several of the proposed work areas are in the vicinity of Solid Waste Management Units (SWMU's) and/or Area's of Concern (AOC's). Even though SCE&G's work is not within the footprint of a known SWMU or AOC, SCE&G should take into consideration that Contaminates of Concern (COC's) could be encountered. Connecting electrical conduits inside areas of contamination (SWMUs/AOCs) may provide migration pathways outside of the SWMU/AOC footprint. This condition has been observed in the industrial area (Zone E) of the Charleston Naval Complex.

Based on the above statement the below information is provided for specific work areas noting the type of work impacted and manholes:

Work performed east of Building 74 is in the vicinity of AOC 550. The Draft RCRA Facility Investigation (RFI) Report identified arsenic in groundwater. There was no soil contaminations identified for an industrial scenario. (Excavation and dewatering MH#10037,10089)

Work performed near the northeast side of Building 46 is in the vicinity of AOC 551. The Draft RFI Report identified lead and Benzo (a) Pyrenes (BEQs) as COC's in soils and thallium, arsenic, and PCE as COC's in groundwater. (Excavation and dewatering MH# 10110, 10111)

Work performed near Buildings 5 and 44 is in the vicinity of AOC 554 and SWMU 25. The Draft RFI Report indicates 5 metals (antimony, cadmium, chromium, copper and lead) and BEQ's as COC's in the soils. Groundwater COC's were identified as antimony, cadmium, chromium, nickel, a-chlordane, g-chlordane, tetrachloroethene and trichloroethene. (Excavation and dewatering MH#10096, 10124, 10128)

Work performed near Buildings 6 and 226 is in the vicinity of SWMU's 23, 63, and, 541, 542. The Draft RFI Report combined the before mentioned sites into one "Combined SWMU 23". Combined SWMU 23 identified 8 COC's in soil: antimony, cadmium, copper, lead, nickel, zinc, Aroclor-1254, and BEQs. No COC's were identified in groundwater. (Dewatering MH#10047, 10042, 10044, 10045)

Work performed near the west end of Building 6 and 35 is in the vicinity of SWMU 70 and AOC's 530 and 531. The Draft RFI Report revealed the following: SWMU 70 at the west end of Building 6 found copper, lead, and BEQ's in the soil. Groundwater analysis identified antimony, chromium, thallium, chloroform, 1,2-dichloroethene, tetrachloroethene, and trichloroethene. AOC 530 located on the west end of Building 35 was found to have arsenic and BEQ's in soil and shallow groundwater showed arsenic and 1,1-dichloroethene present. AOC 531, also at the west end of Building 35, was found to have arsenic and BEQ's in the soil. No groundwater COC's were identified. (Dewatering MH#10048, 10050, 10100, and 10102)

CH2M-JONES, LLC will be addressing groundwater contamination below the west end of Building 5 at the end of 2001 into the summer of 2002. Soil excavation at the west end of Building 226 is planned but no date has been scheduled. None of this work should interfere with SCE&G's work. No other scheduled remedial actions are in place at this time.

Respectfully,  
CH2M-JONES, LLC



Ted Heames  
Site Superintendent

# CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

Requester: Fill out top portion, Sign and date.

Location: <u>Truxton North of BLD 6</u>	Contractor: <u>S.C.E &amp; G.</u>	Date of Request: <u>9-28-01</u>
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Scope of Work: (Location, manhole number, etc.)  
S.C.E & G. MH # 10047

Date Permit Required: <u>10-05-01</u>	Termination Date of Permit: <u>JAN 1 2002</u>
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Signature of Requesting Official: <u>Richard W. Smith</u>	Date: <u>9-28-01</u>	Phone Number: <u>745-6381</u>
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### Caretaker Site Office Review

<b>Points of Contact:</b> CPW : Robert Sagasser (work) 529-0653 (page) 570-0390  SCE&G: R.W. Smith (work) 745-6381  RDA: Gene Knisley Sewer POC: (work) 747-0010	1. Who is the current Land Owner/ Lessee? <u>Metal Trades</u> 2. Is the Area inside the CIA? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 3. Are any SWMU(s) impacted? If yes, list. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ( ) 4. Are any AOC(s) impacted? If yes, list. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ( ) 5. Has DHEC been notified? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 6. Was water tested for VOC's and metals? <input type="checkbox"/> Yes <input type="checkbox"/> No 7. Are results greater than NCSD limits? <input type="checkbox"/> Yes <input type="checkbox"/> No 8. Are results greater than TCLP limits? <input type="checkbox"/> Yes <input type="checkbox"/> No 9. Are Chlorides within range of Cooper River water? <input type="checkbox"/> Yes <input type="checkbox"/> No 10. Was NCSD (Kelly Singer) notified? <input type="checkbox"/> Yes <input type="checkbox"/> No 11. What is the serial # of forwarding letter to RDA? <u>N/A</u>
* see attached CH2MHill's letter Permit Approved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

CSO Authorizing Signature: <u>Amy Daniell 10/2/01</u>	Date out: <u>21 May 2003</u>
CH2MHILL/J.A.JONES Signature: <u>[Signature]</u>	Serial Number: <u>018</u>
BEC Signature: <u>[Signature]</u>	
CSO Officer Signature: <u>Amy Daniell</u>	

\*Permit is approved contingent upon the following actions to be taken by permittee:

Tests Required: Perform visual examination for discoloration or odor.

Discharge Instructions: If no visual contamination, discharge to storm sewer.

## CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

CSO Log Number = 018

Request Date = 5 October 2001

Comments Date = 19 May 2003

Location = Truxtun Ave. North of Bldg. 6 (Manhole #10047)

### Environmental Review Comments

This project proposes the following: (a) to install electrical conduit

The Navy has identified that in this area a release of hazardous substances has occurred, but at concentrations that do not require removal or remedial action. It is recommended that contractor personnel ensure necessary precautions are taken to minimize dermal exposure to any workers who may come in contact with the water. A visual inspection and examination of water in the manhole shall be performed to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated, contact the Caretaker Site Office for further instruction on sampling, analysis, and disposal. If no visible contamination is present, the water can be discharged to the storm sewer system.

If you have any questions, please contact Amy Daniell or Rick Nielson at the Caretaker Site Office at 743-2985.

25 April 2003

MEMORANDUM

From: M.A.Hunt, BRAC Environmental Coordinator

To: Amy Daniel, Caretaker Site Officer

Subject: SCE&G Manhole Dewater Permits

Amy,

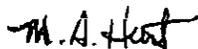
I have reviewed each of the Manhole Permit requests (1 through 24) submitted by SCE&G and have determined, based on location, potential intrusion by Cooper River tidal fluctuations and proximity to known groundwater contamination, the disposition of any water removed from these manholes prior to work. The list of manholes and information with respect to these factors is attached to this memorandum. It should be noted that MH 10050 could not be located on the maps provided by SCE&G. The permit and disposition instructions will be provided once the location is known.

For manholes listed in Column A in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. Sample water and analyze for VOCs and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit the water may be discharged to the sanitary sewer after obtaining approval from North Charleston Sewer District. If results are above these limits contact the CSO for disposition instructions.

For manholes listed in Column B in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. If no visible contamination is present the water can be discharged to the storm sewer system.

If you should have any questions please call me at 820-5607.

Respectfully,



M.A.Hunt  
BRAC Environmental Coordinator  
Charleston Naval Complex

Permit #	Manhole #	Ind Area	Location	Connection to Cooper (Y/N) (Based on tidal fluctuations)	Connection to Cooper (Based on chloride tests)	Proximity to Plume (Y/N)	Disposition of Water	
							Column A	Column B
1	10188	Y	East of Bldg 420	Yes		No		X
2	10096	Y	East of Bldg 5 (Near SY canteen)	No		Yes (SWMU 21/54)	X	
3	10095	Y	Near 10096	No		Yes (SWMU 21/54)	X	
4	10094	Y	3rd St. NE side of Bldg 43	No		No	X	
5	10093	Y	East Side of Bldg 3 (Near plating shop)	No		No	X	
6	10091	Y	Entrance to Bldg 56	No		No	X	
7	10111	Y	East side of Bldg 46	Yes		Yes (AOC 551)	X	
8	10110	Y	Between Bldgs 58 & 46	Yes		Yes (AOC 551)	X	
9	10091	Y	Entrance to Bldg 56	No	8250 ppm	No	X	
10	10090	Y	3rd St. by Bldg 221	Yes	16500ppm	No		X
11	10089	Y	Roe St and 3rd	Yes	16500ppm	No		X
12	10037	Y	Truxtun Ave and Roe	Yes		No		X
13	10039	Y	Truxtun Aven and Bldg 221	Yes		No		X
14	10040	Y	Truxtun Ave and Bldg 56	Yes		No		X
15	10044	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
16	10045	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
17	10042	Y	Truxtun Ave and Ave B	No		No	X	
18	10047	Y	Truxtun Ave near Bldg 6 and Weld shop	Yes		No		X
19	10124	Y	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
20	10128	N	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
21	10102	N	Hobson near Bldg 3	No		No	X	
22	10100	N	Hobson and Truxtun	No		No	X	
	10050	Unable to locate						
24	10048	N	Hobson and Truxtun	No		No	X	
	10066	N	Tumbull and North side of Bldg 64	N	54200 ppb	N		

## CH2M-JONES, LLC

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October 11, 2001

To: Charleston Caretaker Site Office (CSO)  
From: CH2M-JONES, LLC

Subject: EXCAVATION PERMIT (034) AND DEWATERING PERMITS (001-024)  
FOR SCE&G UTILITY WORK

CH2M-JONES, LLC, in cooperation with the Navy has reviewed the provided drawing and Dewatering Permits 001 through 024 and Excavation Permit 034. CH2M-JONES, LLC has found several of the proposed work areas are in the vicinity of Solid Waste Management Units (SWMU's) and/or Area's of Concern (AOC's). Even though SCE&G's work is not within the footprint of a known SWMU or AOC, SCE&G should take into consideration that Contaminates of Concern (COC's) could be encountered. Connecting electrical conduits inside areas of contamination (SWMUs/AOCs) may provide migration pathways outside of the SWMU/AOC footprint. This condition has been observed in the industrial area (Zone E) of the Charleston Naval Complex.

Based on the above statement the below information is provided for specific work areas noting the type of work impacted and manholes:

Work performed east of Building 74 is in the vicinity of AOC 550. The Draft RCRA Facility Investigation (RFI) Report identified arsenic in groundwater. There was no soil contaminations identified for an industrial scenario. (Excavation and dewatering MH#10037,10089)

Work performed near the northeast side of Building 46 is in the vicinity of AOC 551. The Draft RFI Report identified lead and Benzo (a) Pyrenes (BEQs) as COC's in soils and thallium, arsenic, and PCE as COC's in groundwater. (Excavation and dewatering MH# 10110, 10111)

Work performed near Buildings 5 and 44 is in the vicinity of AOC 554 and SWMU 25. The Draft RFI Report indicates 5 metals (antimony, cadmium, chromium, copper and lead) and BEQ's as COC's in the soils. Groundwater COC's were identified as antimony, cadmium, chromium, nickel, a-chlordane, g-chlordane, tetrachloroethene and trichloroethene. (Excavation and dewatering MH#10096, 10124, 10128)

Work performed near Buildings 6 and 226 is in the vicinity of SWMU's 23, 63, and, 541, 542. The Draft RFI Report combined the before mentioned sites into one "Combined SWMU 23". Combined SWMU 23 identified 8 COC's in soil: antimony, cadmium, copper, lead, nickel, zinc, Aroclor-1254, and BEQs. No COC's were identified in groundwater. (Dewatering MH#10047, 10042, 10044, 10045)

Work performed near the west end of Building 6 and 35 is in the vicinity of SWMU 70 and AOC's 530 and 531. The Draft RFI Report revealed the following: SWMU 70 at the west end of Building 6 found copper, lead, and BEQ's in the soil. Groundwater analysis identified antimony, chromium, thallium, chloroform, 1,2-dichloroethene, tetrachloroethene, and trichloroethene. AOC 530 located on the west end of Building 35 was found to have arsenic and BEQ's in soil and shallow groundwater showed arsenic and 1,1-dichloroethene present. AOC 531, also at the west end of Building 35, was found to have arsenic and BEQ's in the soil. No groundwater COC's were identified. (Dewatering MH#10048, 10050, 10100, and 10102)

CH2M-JONES, LLC will be addressing groundwater contamination below the west end of Building 5 at the end of 2001 into the summer of 2002. Soil excavation at the west end of Building 226 is planned but no date has been scheduled. None of this work should interfere with SCE&G's work. No other scheduled remedial actions are in place at this time.

Respectfully,  
CH2M-JONES, LLC

A handwritten signature in black ink, appearing to read 'Ted Heames', written over a horizontal line.

Ted Heames  
Site Superintendent

# CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

Requester: Fill out top portion, Sign and date.

Location: <u>Truxton &amp; Ave "B"</u>	Contractor: <u>S.C.E &amp; G.</u>	Date of Request: <u>9-28-01</u>
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Scope of Work: (Location, manhole number, etc.)  
S.C.E & G. MH # 10042

Date Permit Required: <u>10-05-01</u>	Termination Date of Permit: <u>Jan 1, 2002</u>
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Signature of Requesting Official: <u>Richard W. Smith</u>	Date: <u>9-28-01</u>	Phone Number: <u>745-6381</u>
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### Caretaker Site Office Review

<b>Points of Contact:</b> CPW : Robert Sagasser (work) 529-0653 (page) 570-0390  SCE&G: R.W. Smith (work) 745-6381  RDA: Gene Knisley Sewer POC: (work) 747-0010	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%; padding: 5px;">1. Who is the current Land Owner/ Leasee? <u>Metal Trades</u></td> <td style="width: 10%; padding: 5px;"><input checked="" type="checkbox"/> Yes</td> <td style="width: 10%; padding: 5px;"><input type="checkbox"/> No</td> <td style="width: 20%; padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">2. Is the Area inside the CIA?</td> <td style="padding: 5px;"><input checked="" type="checkbox"/> Yes</td> <td style="padding: 5px;"><input type="checkbox"/> No</td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">3. Are any SWMU(s) impacted? If yes, list. <u>X</u></td> <td style="padding: 5px;"><input type="checkbox"/> Yes</td> <td style="padding: 5px;"><input checked="" type="checkbox"/> No</td> <td style="padding: 5px;">( )</td> </tr> <tr> <td style="padding: 5px;">4. Are any AOC(s) impacted? If yes, list. <u>X</u></td> <td style="padding: 5px;"><input type="checkbox"/> Yes</td> <td style="padding: 5px;"><input checked="" type="checkbox"/> No</td> <td style="padding: 5px;">( )</td> </tr> <tr> <td style="padding: 5px;">5. Has DHEC been notified?</td> <td style="padding: 5px;"><input type="checkbox"/> Yes</td> <td style="padding: 5px;"><input checked="" type="checkbox"/> No</td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">6. Was water tested for VOC's and metals?</td> <td style="padding: 5px;"><input type="checkbox"/> Yes</td> <td style="padding: 5px;"><input type="checkbox"/> No</td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">7. Are results greater than NCSD limits?</td> <td style="padding: 5px;"><input type="checkbox"/> Yes</td> <td style="padding: 5px;"><input type="checkbox"/> No</td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">8. Are results greater than TCLP limits?</td> <td style="padding: 5px;"><input type="checkbox"/> Yes</td> <td style="padding: 5px;"><input type="checkbox"/> No</td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">9. Are Chlorides within range of Cooper River water?</td> <td style="padding: 5px;"><input type="checkbox"/> Yes</td> <td style="padding: 5px;"><input type="checkbox"/> No</td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">10. Was NCSD (Kelly Singer) notified?</td> <td style="padding: 5px;"><input type="checkbox"/> Yes</td> <td style="padding: 5px;"><input type="checkbox"/> No</td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">11. What is the serial # of forwarding letter to RDA? <u>N/A</u></td> <td colspan="3" style="padding: 5px;"><u>X see attached CH2M-Jones letter</u></td> </tr> </table> <p style="text-align: center; margin-top: 10px;">Permit Approved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	1. Who is the current Land Owner/ Leasee? <u>Metal Trades</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		2. Is the Area inside the CIA?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		3. Are any SWMU(s) impacted? If yes, list. <u>X</u>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	( )	4. Are any AOC(s) impacted? If yes, list. <u>X</u>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	( )	5. Has DHEC been notified?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		6. Was water tested for VOC's and metals?	<input type="checkbox"/> Yes	<input type="checkbox"/> No		7. Are results greater than NCSD limits?	<input type="checkbox"/> Yes	<input type="checkbox"/> No		8. Are results greater than TCLP limits?	<input type="checkbox"/> Yes	<input type="checkbox"/> No		9. Are Chlorides within range of Cooper River water?	<input type="checkbox"/> Yes	<input type="checkbox"/> No		10. Was NCSD (Kelly Singer) notified?	<input type="checkbox"/> Yes	<input type="checkbox"/> No		11. What is the serial # of forwarding letter to RDA? <u>N/A</u>	<u>X see attached CH2M-Jones letter</u>		
1. Who is the current Land Owner/ Leasee? <u>Metal Trades</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No																																											
2. Is the Area inside the CIA?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No																																											
3. Are any SWMU(s) impacted? If yes, list. <u>X</u>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	( )																																										
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6. Was water tested for VOC's and metals?	<input type="checkbox"/> Yes	<input type="checkbox"/> No																																											
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11. What is the serial # of forwarding letter to RDA? <u>N/A</u>	<u>X see attached CH2M-Jones letter</u>																																												

CSO Authorizing Signature: <u>Amy Daniell 10/12/01</u>	Date out: <u>21 May 2003</u>
CH2MHILL/J.A.JONES Signature: <u>[Signature]</u>	
BEC Signature: <u>M.A. Hunt 4/24/03 see attached ltr</u>	Serial Number: <u>017</u>
CSO Officer Signature: <u>Amy Daniell</u>	

**\*Permit is approved contingent upon the following actions to be taken by permittee:**

Tests Required: Visual examination, Sample water and analyze for VOC's and metals.

Discharge Instructions: If constituents are below NPDES discharge limits discharge to sanitary sewers after approval from NCSD.

## CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

CSO Log Number = 017

Request Date = 28 September 2001

Comments Date = 16 May 2003

Location = Between Truxton Ave. & Ave. 'B' (Manhole #10042)

### Environmental Review Comments

This project proposes the following: (a) to install electrical conduit

The Navy has identified that in this area a release of hazardous substances has occurred, but corrective actions have not yet been implemented. It is recommended that contractor personnel ensure necessary precautions are taken to minimize dermal exposure to any workers who may come in contact with the water. A visual inspection and examination of water in the manhole shall be performed to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated, contact the Caretaker Site Office for further instruction on sampling, analysis, and disposal. Sample water and analyze for VOC's and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit, the water may be discharged to the sanitary sewer after obtaining approval from the North Charleston Sewer District. If results are above these limits, contact the Caretaker Site Office for disposition instructions.

If you have any questions, please contact Amy Daniell or Rick Nielson at the Caretaker Site Office at 743-2985.

25 April 2003

MEMORANDUM

From: M.A.Hunt, BRAC Environmental Coordinator

To: Amy Daniel, Caretaker Site Officer

Subject: SCE&G Manhole Dewater Permits

Amy,

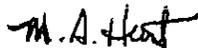
I have reviewed each of the Manhole Permit requests (1 through 24) submitted by SCE&G and have determined, based on location, potential intrusion by Cooper River tidal fluctuations and proximity to known groundwater contamination, the disposition of any water removed from these manholes prior to work. The list of manholes and information with respect to these factors is attached to this memorandum. It should be noted that MH 10050 could not be located on the maps provided by SCE&G. The permit and disposition instructions will be provided once the location is known.

For manholes listed in Column A in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. Sample water and analyze for VOCs and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit the water may be discharged to the sanitary sewer after obtaining approval from North Charleston Sewer District. If results are above these limits contact the CSO for disposition instructions.

For manholes listed in Column B in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. If no visible contamination is present the water can be discharged to the storm sewer system.

If you should have any questions please call me at 820-5607.

Respectfully,



M.A.Hunt  
BRAC Environmental Coordinator  
Charleston Naval Complex

Permit #	Manhole #	Ind Area	Location	Connection to Cooper (Y/N) (Based on tidal fluctuations)	Connection to Cooper (Based on chloride tests)	Proximity to Plume (Y/N)	Disposition of Water	
							Column A	Column B
1	10188	Y	East of Bldg 420	Yes		No		X
2	10096	Y	East of Bldg 5 (Near SY canteen)	No		Yes (SWMU 21/54)	X	
3	10095	Y	Near 10096	No		Yes (SWMU 21/54)	X	
4	10094	Y	3rd St. NE side of Bldg 43	No		No	X	
5	10093	Y	East Side of Bldg 3 (Near plating shop)	No		No	X	
6	10091	Y	Entrance to Bldg 56	No		No	X	
7	10111	Y	East side of Bldg 46	Yes		Yes (AOC 551)	X	
8	10110	Y	Between Bldgs 58 & 46	Yes		Yes (AOC 551)	X	
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11	10089	Y	Roe St and 3rd	Yes	16500ppm	No		X
12	10037	Y	Truxtun Ave and Roe	Yes		No		X
13	10039	Y	Truxtun Aven and Bldg 221	Yes		No		X
14	10040	Y	Truxtun Ave and Bldg 56	Yes		No		X
15	10044	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
16	10045	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
17	10042	Y	Truxtun Ave and Ave B	No		No	X	
18	10047	Y	Truxtun Ave near Bldg 6 and Weld shop	Yes		No		X
19	10124	Y	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
20	10128	N	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
21	10102	N	Hobson near Bldg 3	No		No	X	
22	10100	N	Hobson and Truxtun	No		No	X	
	10050		Unable to locate					
24	10048	N	Hobson and Truxtun	No		No	X	
	10066	N	Turnbull and North side of Bldg 64	N	54200 ppb	N		

## CH2M-JONES, LLC

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October 11, 2001

To: Charleston Caretaker Site Office (CSO)  
From: CH2M-JONES, LLC

Subject: EXCAVATION PERMIT (034) AND DEWATERING PERMITS (001-024)  
FOR SCE&G UTILITY WORK

CH2M-JONES, LLC, in cooperation with the Navy has reviewed the provided drawing and Dewatering Permits 001 through 024 and Excavation Permit 034. CH2M-JONES, LLC has found several of the proposed work areas are in the vicinity of Solid Waste Management Units (SWMU's) and/or Area's of Concern (AOC's). Even though SCE&G's work is not within the footprint of a known SWMU or AOC, SCE&G should take into consideration that Contaminates of Concern (COC's) could be encountered. Connecting electrical conduits inside areas of contamination (SWMUs/AOCs) may provide migration pathways outside of the SWMU/AOC footprint. This condition has been observed in the industrial area (Zone E) of the Charleston Naval Complex.

Based on the above statement the below information is provided for specific work areas noting the type of work impacted and manholes:

Work performed east of Building 74 is in the vicinity of AOC 550. The Draft RCRA Facility Investigation (RFI) Report identified arsenic in groundwater. There was no soil contaminations identified for an industrial scenario. (Excavation and dewatering MH#10037,10089)

Work performed near the northeast side of Building 46 is in the vicinity of AOC 551. The Draft RFI Report identified lead and Benzo (a) Pyrenes (BEQs) as COC's in soils and thallium, arsenic, and PCE as COC's in groundwater. (Excavation and dewatering MH# 10110, 10111)

Work performed near Buildings 5 and 44 is in the vicinity of AOC 554 and SWMU 25. The Draft RFI Report indicates 5 metals (antimony, cadmium, chromium, copper and lead) and BEQ's as COC's in the soils. Groundwater COC's were identified as antimony, cadmium, chromium, nickel, a-chlordane, g-chlordane, tetrachloroethene and trichloroethene. (Excavation and dewatering MH#10096, 10124, 10128)

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Work performed near the west end of Building 6 and 35 is in the vicinity of SWMU 70 and AOC's 530 and 531. The Draft RFI Report revealed the following: SWMU 70 at the west end of Building 6 found copper, lead, and BEQ's in the soil. Groundwater analysis identified antimony, chromium, thallium, chloroform, 1,2-dichloroethene, tetrachloroethene, and trichloroethene. AOC 530 located on the west end of Building 35 was found to have arsenic and BEQ's in soil and shallow groundwater showed arsenic and 1,1-dichloroethene present. AOC 531, also at the west end of Building 35, was found to have arsenic and BEQ's in the soil. No groundwater COC's were identified. (Dewatering MH#10048, 10050, 10100, and 10102)

CH2M-JONES, LLC will be addressing groundwater contamination below the west end of Building 5 at the end of 2001 into the summer of 2002. Soil excavation at the west end of Building 226 is planned but no date has been scheduled. None of this work should interfere with SCE&G's work. No other scheduled remedial actions are in place at this time.

Respectfully,  
CH2M-JONES, LLC



Ted Heames  
Site Superintendent

# CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

Requester: Fill out top portion, Sign and date.

Location: <u>Ave "B" By BLD #3</u>	Contractor: <u>S.C.E &amp; G.</u>	Date of Request: <u>9-28-01</u>
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Scope of Work: (Location, manhole number, etc.)  
S.C.E & G. MH # 10045

Date Permit Required: <u>10-05-01</u>	Termination Date of Permit: <u>JAN 1, 2002</u>
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Signature of Requesting Official: <u>Richard W. Smith</u>	Date: <u>9-28-01</u> Phone Number: <u>745-6381</u>
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### Caretaker Site Office Review

<b>Points of Contact:</b> CPW : Robert Sagasser (work) 529-0653 (page) 570-0390  SCE&G: R.W. Smith (work) 745-6381  RDA: Gene Krisley Sewer POC: (work) 747-0010	<ol style="list-style-type: none"> <li>1. Who is the current Land Owner/ Leasee? <u>Metal Trades</u></li> <li>2. Is the Area inside the CIA? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</li> <li>3. Are any SWMU(s) impacted? If yes, list. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ( )</li> <li>4. Are any AOC(s) impacted? If yes, list. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ( )</li> <li>5. Has DHEC been notified? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</li> <li>6. Was water tested for VOC's and metals? <input type="checkbox"/> Yes <input type="checkbox"/> No</li> <li>7. Are results greater than NCSD limits? <input type="checkbox"/> Yes <input type="checkbox"/> No</li> <li>8. Are results greater than TCLP limits? <input type="checkbox"/> Yes <input type="checkbox"/> No</li> <li>9. Are Chlorides within range of Cooper River water? <input type="checkbox"/> Yes <input type="checkbox"/> No</li> <li>10. Was NCSD (Kelly Singer) notified? <input type="checkbox"/> Yes <input type="checkbox"/> No</li> <li>11. What is the serial # of forwarding letter to RDA? <u>N/A</u></li> </ol> <p style="margin-top: 10px;"><i>* see attached letter to RDA</i></p>
Permit Approved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

CSO Authorizing Signature: <u>Amy Daniell 10/2/01</u>	Date out: <u>21 May 2003</u>
CH2MHILL/J.A.JONES Signature: <u>[Signature]</u>	Serial Number: <u>016</u>
BEC Signature: <u>M.A. Hunt 4/24/03 see attached ltr</u>	
CSO Officer Signature: <u>Amy Daniell</u>	

**\*Permit is approved contingent upon the following actions to be taken by permittee:**

Tests Required: Visual examination. Sample water and analyze for VOC's and metals.

Discharge Instructions: If constituents are below NPDES discharge limits - discharge to sanitary sewer after approval from NCSD.

## CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

CSO Log Number = 016

Request Date = 28 September 2001

Comments Date = 16 May 2003

Location = Ave. 'B' by Bldg. 3 (Manhole #10045)

### Environmental Review Comments

This project proposes the following: (a) to install electrical conduit

The Navy has identified that in this area a release of hazardous substances has occurred, but corrective actions have not yet been implemented. It is recommended that contractor personnel ensure necessary precautions are taken to minimize dermal exposure to any workers who may come in contact with the water. A visual inspection and examination of water in the manhole shall be performed to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated, contact the Caretaker Site Office for further instruction on sampling, analysis, and disposal. Sample water and analyze for VOC's and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit, the water may be discharged to the sanitary sewer after obtaining approval from the North Charleston Sewer District. If results are above these limits, contact the Caretaker Site Office for disposition instructions.

If you have any questions, please contact Amy Daniell or Rick Nielson at the Caretaker Site Office at 743-2985.

25 April 2003

MEMORANDUM

From: M.A.Hunt, BRAC Environmental Coordinator

To: Amy Daniel, Caretaker Site Officer

Subject: SCE&G Manhole Dewater Permits

Amy,

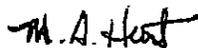
I have reviewed each of the Manhole Permit requests (1 through 24) submitted by SCE&G and have determined, based on location, potential intrusion by Cooper River tidal fluctuations and proximity to known groundwater contamination, the disposition of any water removed from these manholes prior to work. The list of manholes and information with respect to these factors is attached to this memorandum. It should be noted that MH 10050 could not be located on the maps provided by SCE&G. The permit and disposition instructions will be provided once the location is known.

For manholes listed in Column A in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. Sample water and analyze for VOCs and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit the water may be discharged to the sanitary sewer after obtaining approval from North Charleston Sewer District. If results are above these limits contact the CSO for disposition instructions.

For manholes listed in Column B in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. If no visible contamination is present the water can be discharged to the storm sewer system.

If you should have any questions please call me at 820-5607.

Respectfully,



M.A.Hunt  
BRAC Environmental Coordinator  
Charleston Naval Complex

Permit #	Manhole #	Ind Area	Location	Connection to Cooper (Y/N) (Based on tidal fluctuations)	Connection to Cooper (Based on chloride tests)	Proximity to Plume (Y/N)	Disposition of Water	
							Column A	Column B
1	10188	Y	East of Bldg 420	Yes		No		X
2	10096	Y	East of Bldg 5 (Near SY canteen)	No		Yes (SWMU 21/54)	X	
3	10095	Y	Near 10096	No		Yes (SWMU 21/54)	X	
4	10094	Y	3rd St. NE side of Bldg 43	No		No	X	
5	10093	Y	East Side of Bldg 3 (Near plating shop)	No		No	X	
6	10091	Y	Entrance to Bldg 56	No		No	X	
7	10111	Y	East side of Bldg 46	Yes		Yes (AOC 551)	X	
8	10110	Y	Between Bldgs 58 & 46	Yes		Yes (AOC 551)	X	
9	10091	Y	Entrance to Bldg 56	No	8250 ppm	No	X	
10	10090	Y	3rd St. by Bldg 221	Yes	16500ppm	No		X
11	10089	Y	Roe St and 3rd	Yes	16500ppm	No		X
12	10037	Y	Truxtun Ave and Roe	Yes		No		X
13	10039	Y	Truxtun Aven and Bldg 221	Yes		No		X
14	10040	Y	Truxtun Ave and Bldg 56	Yes		No		X
15	10044	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
16	10045	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
17	10042	Y	Truxtun Ave and Ave B	No		No	X	
18	10047	Y	Truxtun Ave near Bldg 6 and Weld shop	Yes		No		X
19	10124	Y	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
20	10128	N	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
21	10102	N	Hobson near Bldg 3	No		No	X	
22	10100	N	Hobson and Truxtun	No		No	X	
	10050	N	Unable to locate					
24	10048	N	Hobson and Truxtun	No		No	X	
	10066	N	Turnbull and North side of Bldg 64	N	54200 ppb	N		

## CH2M-JONES, LLC

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October 11, 2001

To: Charleston Caretaker Site Office (CSO)  
From: CH2M-JONES, LLC

Subject: EXCAVATION PERMIT (034) AND DEWATERING PERMITS (001-024)  
FOR SCE&G UTILITY WORK

CH2M-JONES, LLC, in cooperation with the Navy has reviewed the provided drawing and Dewatering Permits 001 through 024 and Excavation Permit 034. CH2M-JONES, LLC has found several of the proposed work areas are in the vicinity of Solid Waste Management Units (SWMU's) and/or Area's of Concern (AOC's). Even though SCE&G's work is not within the footprint of a known SWMU or AOC, SCE&G should take into consideration that Contaminates of Concern (COC's) could be encountered. Connecting electrical conduits inside areas of contamination (SWMUs/AOCs) may provide migration pathways outside of the SWMU/AOC footprint. This condition has been observed in the industrial area (Zone E) of the Charleston Naval Complex.

Based on the above statement the below information is provided for specific work areas noting the type of work impacted and manholes:

Work performed east of Building 74 is in the vicinity of AOC 550. The Draft RCRA Facility Investigation (RFI) Report identified arsenic in groundwater. There was no soil contaminations identified for an industrial scenario. (Excavation and dewatering MH#10037,10089)

Work performed near the northeast side of Building 46 is in the vicinity of AOC 551. The Draft RFI Report identified lead and Benzo (a) Pyrenes (BEQs) as COC's in soils and thallium, arsenic, and PCE as COC's in groundwater. (Excavation and dewatering MH# 10110, 10111)

Work performed near Buildings 5 and 44 is in the vicinity of AOC 554 and SWMU 25. The Draft RFI Report indicates 5 metals (antimony, cadmium, chromium, copper and lead) and BEQ's as COC's in the soils. Groundwater COC's were identified as antimony, cadmium, chromium, nickel, a-chlordane, g-chlordane, tetrachloroethene and trichloroethene. (Excavation and dewatering MH#10096, 10124, 10128)

Work performed near Buildings 6 and 226 is in the vicinity of SWMU's 23, 63, and, 541, 542. The Draft RFI Report combined the before mentioned sites into one "Combined SWMU 23". Combined SWMU 23 identified 8 COC's in soil: antimony, cadmium, copper, lead, nickel, zinc, Aroclor-1254, and BEQs. No COC's were identified in groundwater. (Dewatering MH#10047, 10042, 10044, 10045)

Work performed near the west end of Building 6 and 35 is in the vicinity of SWMU 70 and AOC's 530 and 531. The Draft RFI Report revealed the following: SWMU 70 at the west end of Building 6 found copper, lead, and BEQ's in the soil. Groundwater analysis identified antimony, chromium, thallium, chloroform, 1,2-dichloroethene, tetrachloroethene, and trichloroethene. AOC 530 located on the west end of Building 35 was found to have arsenic and BEQ's in soil and shallow groundwater showed arsenic and 1,1-dichloroethene present. AOC 531, also at the west end of Building 35, was found to have arsenic and BEQ's in the soil. No groundwater COC's were identified. (Dewatering MH#10048, 10050, 10100, and 10102)

CH2M-JONES, LLC will be addressing groundwater contamination below the west end of Building 5 at the end of 2001 into the summer of 2002. Soil excavation at the west end of Building 226 is planned but no date has been scheduled. None of this work should interfere with SCE&G's work. No other scheduled remedial actions are in place at this time.

Respectfully,  
CH2M-JONES, LLC



Jed Heames  
Site Superintendent

# CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

Requester: Fill out top portion, Sign and date.

<b>Location:</b> Ave "B" by BLD #3	<b>Contractor:</b> S.C.E+G.	<b>Date of Request:</b> 9-28-01
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**Scope of Work:** (Location, manhole number, etc.)

S.C.E+G. MH # 10044

<b>Date Permit Required:</b> 10-05-01	<b>Termination Date of Permit:</b> Jan 1, 2002
<b>Signature of Requesting Official:</b> <i>Richard W. Smith</i>	<b>Date:</b> 9-28-01 <b>Phone Number:</b> 745-6381

## Caretaker Site Office Review

<b>Points of Contact:</b> CPW : Robert Sagasser (work) 529-0653 (page) 570-0390 SCE&G: R.W. Smith (work) 745-6381 RDA: Gene Knisley Sewer POC: (work) 747-0010	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%; padding: 2px;">1. Who is the current Land Owner/ Leasee? <u>Metal Trades</u></td> <td style="width: 10%; text-align: center; padding: 2px;"><input checked="" type="checkbox"/></td> <td style="width: 10%; text-align: center; padding: 2px;">Yes</td> <td style="width: 10%; text-align: center; padding: 2px;"><input type="checkbox"/></td> <td style="width: 10%; text-align: center; padding: 2px;">No</td> </tr> <tr> <td style="padding: 2px;">2. Is the Area inside the CIA?</td> <td style="text-align: center; padding: 2px;"><input checked="" type="checkbox"/></td> <td style="text-align: center; padding: 2px;">Yes</td> <td style="text-align: center; padding: 2px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 2px;">No</td> </tr> <tr> <td style="padding: 2px;">3. Are any SWMU(s) impacted? If yes, list.</td> <td style="text-align: center; padding: 2px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 2px;">Yes</td> <td style="text-align: center; padding: 2px;"><input checked="" type="checkbox"/></td> <td style="text-align: center; padding: 2px;">No ( )</td> </tr> <tr> <td style="padding: 2px;">4. Are any AOC(s) impacted? If yes, list. *</td> <td style="text-align: center; padding: 2px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 2px;">Yes</td> <td style="text-align: center; padding: 2px;"><input checked="" type="checkbox"/></td> <td style="text-align: center; padding: 2px;">No ( )</td> </tr> <tr> <td style="padding: 2px;">5. Has DHEC been notified?</td> <td style="text-align: center; padding: 2px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 2px;">Yes</td> <td style="text-align: center; padding: 2px;"><input checked="" type="checkbox"/></td> <td style="text-align: center; padding: 2px;">No</td> </tr> <tr> <td style="padding: 2px;">6. 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Are results greater than TCLP limits?</td> <td style="text-align: center; padding: 2px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 2px;">Yes</td> <td style="text-align: center; padding: 2px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 2px;">No</td> </tr> <tr> <td style="padding: 2px;">9. Are Chlorides within range of Cooper River water?</td> <td style="text-align: center; padding: 2px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 2px;">Yes</td> <td style="text-align: center; padding: 2px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 2px;">No</td> </tr> <tr> <td style="padding: 2px;">10. 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Has DHEC been notified?	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No	6. Was water tested for VOC's and metals?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	7. Are results greater than NCSD limits?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	8. Are results greater than TCLP limits?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	9. Are Chlorides within range of Cooper River water?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	10. Was NCSD (Kelly Singer) notified?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	11. What is the serial # of forwarding letter to RDA? <u>N/A</u>				
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<b>CSO Authorizing Signature:</b> <u>Amy Daniell 10/2/01</u>	<b>Date out:</b> <u>21 May 2003</u>
<b>CH2MHILL/J.A.JONES Signature:</b> <u>[Signature] 10/1/01</u>	
<b>BEC Signature:</b> <u>M.A. Hunt 4/24/03 see attached ltr.</u>	<b>Serial Number:</b> <u>015</u>
<b>CSO Officer Signature:</b> <u>Amy Daniell</u>	

\*Permit is approved contingent upon the following actions to be taken by permittee:

Tests Required: Visual examination, Sample water and analyze for VOC's and metals.

Discharge Instructions: If constituents are below NPDES discharge limits - may discharge to sanitary sewer after approval from NCSD.

## CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

CSO Log Number = 015

Request Date = 28 September 2001

Comments Date = 16 May 2003

Location = Ave. 'B' by Bldg. 3 (Manhole #10044)

### Environmental Review Comments

This project proposes the following: (a) to install electrical conduit

The Navy has identified that in this area a release of hazardous substances has occurred, but corrective actions have not yet been implemented. It is recommended that contractor personnel ensure necessary precautions are taken to minimize dermal exposure to any workers who may come in contact with the water. A visual inspection and examination of water in the manhole shall be performed to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated, contact the Caretaker Site Office for further instruction on sampling, analysis, and disposal. Sample water and analyze for VOC's and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit, the water may be discharged to the sanitary sewer after obtaining approval from the North Charleston Sewer District. If results are above these limits, contact the Caretaker Site Office for disposition instructions.

If you have any questions, please contact Amy Daniell or Rick Nielson at the Caretaker Site Office at 743-2985.

25 April 2003

MEMORANDUM

From: M.A.Hunt, BRAC Environmental Coordinator

To: Amy Daniel, Caretaker Site Officer

Subject: SCE&G Manhole Dewater Permits

Amy,

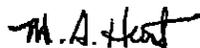
I have reviewed each of the Manhole Permit requests (1 through 24) submitted by SCE&G and have determined, based on location, potential intrusion by Cooper River tidal fluctuations and proximity to known groundwater contamination, the disposition of any water removed from these manholes prior to work. The list of manholes and information with respect to these factors is attached to this memorandum. It should be noted that MH 10050 could not be located on the maps provided by SCE&G. The permit and disposition instructions will be provided once the location is known.

For manholes listed in Column A in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. Sample water and analyze for VOCs and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit the water may be discharged to the sanitary sewer after obtaining approval from North Charleston Sewer District. If results are above these limits contact the CSO for disposition instructions.

For manholes listed in Column B in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. If no visible contamination is present the water can be discharged to the storm sewer system.

If you should have any questions please call me at 820-5607.

Respectfully,



M.A.Hunt  
BRAC Environmental Coordinator  
Charleston Naval Complex

Permit #	Manhole #	Ind Area	Location	Connection to Cooper (Y/N) (Based on tidal fluctuations)	Connection to Cooper (Based on chloride tests)	Proximity to Plume (Y/N)	Disposition of Water	
							Column A	Column B
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2	10096	Y	East of Bldg 5 (Near SY canteen)	No		Yes (SWMU 21/54)	X	
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21	10102	N	Hobson near Bldg 3	No		No	X	
22	10100	N	Hobson and Truxtun	No		No	X	
	10050		Unable to locate					
24	10048	N	Hobson and Truxtun	No		No	X	
	10066	N	Turnbull and North side of Bldg 64	N	54200 ppb	N		

## CH2M-JONES, LLC

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October 11, 2001

To: Charleston Caretaker Site Office (CSO)  
From: CH2M-JONES, LLC

Subject: EXCAVATION PERMIT (034) AND DEWATERING PERMITS (001-024)  
FOR SCE&G UTILITY WORK

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Based on the above statement the below information is provided for specific work areas noting the type of work impacted and manholes:

Work performed east of Building 74 is in the vicinity of AOC 550. The Draft RCRA Facility Investigation (RFI) Report identified arsenic in groundwater. There was no soil contaminations identified for an industrial scenario. (Excavation and dewatering MH#10037,10089)

Work performed near the northeast side of Building 46 is in the vicinity of AOC 551. The Draft RFI Report identified lead and Benzo (a) Pyrenes (BEQs) as COC's in soils and thallium, arsenic, and PCE as COC's in groundwater. (Excavation and dewatering MH# 10110, 10111)

Work performed near Buildings 5 and 44 is in the vicinity of AOC 554 and SWMU 25. The Draft RFI Report indicates 5 metals (antimony, cadmium, chromium, copper and lead) and BEQ's as COC's in the soils. Groundwater COC's were identified as antimony, cadmium, chromium, nickel, a-chlordane, g-chlordane, tetrachloroethene and trichloroethene. (Excavation and dewatering MH#10096, 10124, 10128)

Work performed near Buildings 6 and 226 is in the vicinity of SWMU's 23, 63, and, 541, 542. The Draft RFI Report combined the before mentioned sites into one "Combined SWMU 23". Combined SWMU 23 identified 8 COC's in soil: antimony, cadmium, copper, lead, nickel, zinc, Aroclor-1254, and BEQs. No COC's were identified in groundwater. (Dewatering MH#10047, 10042, 10044, 10045)

Work performed near the west end of Building 6 and 35 is in the vicinity of SWMU 70 and AOC's 530 and 531. The Draft RFI Report revealed the following: SWMU 70 at the west end of Building 6 found copper, lead, and BEQ's in the soil. Groundwater analysis identified antimony, chromium, thallium, chloroform, 1,2-dichloroethene, tetrachloroethene, and trichloroethene. AOC 530 located on the west end of Building 35 was found to have arsenic and BEQ's in soil and shallow groundwater showed arsenic and 1,1-dichloroethene present. AOC 531, also at the west end of Building 35, was found to have arsenic and BEQ's in the soil. No groundwater COC's were identified. (Dewatering MH#10048, 10050, 10100, and 10102)

CH2M-JONES, LLC will be addressing groundwater contamination below the west end of Building 5 at the end of 2001 into the summer of 2002. Soil excavation at the west end of Building 226 is planned but no date has been scheduled. None of this work should interfere with SCE&G's work. No other scheduled remedial actions are in place at this time.

Respectfully,  
CH2M-JONES, LLC



Jed Heames  
Site Superintendent

# CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

Requester: Fill out top portion, Sign and date.

Location: <u>Trux Ton Ave By BLD 56</u>	Contractor: <u>S.C.E+G.</u>	Date of Request: <u>9-28-01</u>
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Scope of Work: (Location, manhole number, etc.)

S.C.E+G. MH # 10040

Date Permit Required: <u>10-05-01</u>	Termination Date of Permit: <u>Jan 1, 2002</u>
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Signature of Requesting Official: <u>Richard W. Smith</u>	Date: <u>9-28-01</u>	Phone Number: <u>745-6381</u>
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### Caretaker Site Office Review

<p><b>Points of Contact:</b></p> <p><b>CPW:</b> Robert Sagasser (work) 529-0653 (page) 570-0390</p> <p><b>SCE&amp;G:</b> R.W. Smith (work) 745-6381</p> <p><b>RDA:</b> Gene Knisley Sewer POC: (work) 747-0010</p>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%; padding: 2px;">1. Who is the current Land Owner/ Leasee? <u>Metal Trades</u></td> <td style="width: 5%;"></td> <td style="width: 10%; text-align: center;"><input checked="" type="checkbox"/> Yes</td> <td style="width: 10%; text-align: center;"><input type="checkbox"/> No</td> <td style="width: 15%;"></td> </tr> <tr> <td style="padding: 2px;">2. Is the Area inside the CIA?</td> <td></td> <td style="text-align: center;"><input checked="" type="checkbox"/> Yes</td> <td style="text-align: center;"><input type="checkbox"/> No</td> <td></td> </tr> <tr> <td style="padding: 2px;">3. Are any SWMU(s) impacted? If yes, list.</td> <td></td> <td style="text-align: center;"><input type="checkbox"/> Yes</td> <td style="text-align: center;"><input checked="" type="checkbox"/> No</td> <td style="text-align: center;">( )</td> </tr> <tr> <td style="padding: 2px;">4. Are any AOC(s) impacted? If yes, list.</td> <td></td> <td style="text-align: center;"><input type="checkbox"/> Yes</td> <td style="text-align: center;"><input checked="" type="checkbox"/> No</td> <td style="text-align: center;">( )</td> </tr> <tr> <td style="padding: 2px;">5. Has DHEC been notified?</td> <td></td> <td style="text-align: center;"><input type="checkbox"/> Yes</td> <td style="text-align: center;"><input checked="" type="checkbox"/> No</td> <td></td> </tr> <tr> <td style="padding: 2px;">6. Was water tested for VOC's and metals?</td> <td></td> <td style="text-align: center;"><input type="checkbox"/> Yes</td> <td style="text-align: center;"><input type="checkbox"/> No</td> <td></td> </tr> <tr> <td style="padding: 2px;">7. Are results greater than NCSD limits?</td> <td></td> <td style="text-align: center;"><input type="checkbox"/> Yes</td> <td style="text-align: center;"><input type="checkbox"/> No</td> <td></td> </tr> <tr> <td style="padding: 2px;">8. Are results greater than TCLP limits?</td> <td></td> <td style="text-align: center;"><input type="checkbox"/> Yes</td> <td style="text-align: center;"><input type="checkbox"/> No</td> <td></td> </tr> <tr> <td style="padding: 2px;">9. Are Chlorides within range of Cooper River water?</td> <td></td> <td style="text-align: center;"><input type="checkbox"/> Yes</td> <td style="text-align: center;"><input type="checkbox"/> No</td> <td></td> </tr> <tr> <td style="padding: 2px;">10. Was NCSD (Kelly Singer) notified?</td> <td></td> <td style="text-align: center;"><input type="checkbox"/> Yes</td> <td style="text-align: center;"><input type="checkbox"/> No</td> <td></td> </tr> <tr> <td style="padding: 2px;">11. What is the serial # of forwarding letter to RDA? <u>N/A</u></td> <td colspan="4"></td> </tr> </table>	1. Who is the current Land Owner/ Leasee? <u>Metal Trades</u>		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		2. Is the Area inside the CIA?		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		3. Are any SWMU(s) impacted? If yes, list.		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	( )	4. Are any AOC(s) impacted? If yes, list.		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	( )	5. Has DHEC been notified?		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		6. Was water tested for VOC's and metals?		<input type="checkbox"/> Yes	<input type="checkbox"/> No		7. Are results greater than NCSD limits?		<input type="checkbox"/> Yes	<input type="checkbox"/> No		8. Are results greater than TCLP limits?		<input type="checkbox"/> Yes	<input type="checkbox"/> No		9. Are Chlorides within range of Cooper River water?		<input type="checkbox"/> Yes	<input type="checkbox"/> No		10. Was NCSD (Kelly Singer) notified?		<input type="checkbox"/> Yes	<input type="checkbox"/> No		11. What is the serial # of forwarding letter to RDA? <u>N/A</u>				
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Permit Approved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																																																								

CSO Authorizing Signature: <u>Amy Daniell 10/2/01</u>	Date out: <u>20 May 2003</u>
CH2MHILL/J.A.JONES Signature: <u>[Signature] 10/11/01</u>	
BEC Signature: <u>M.A. Hunt 4/24/03 see attached ltr</u>	Serial Number: <u>014</u>
CSO Officer Signature: <u>Amy Daniell</u>	

**\*Permit is approved contingent upon the following actions to be taken by permittee:**

Tests Required: Perform visual examination for discoloration or odor.

Discharge Instructions: no visual contamination, discharge to storm sewer.

## CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

CSO Log Number = 014

Request Date = 28 September 2001

Comments Date = 15 May 2003

Location = Truxtun Ave. by Bldg. 56 (Manhole #10040)

### Environmental Review Comments

This project proposes the following: (a) to install electrical conduit

The Navy has identified that in this area a release of hazardous substances has occurred, but at concentrations that do not require removal or remedial action. It is recommended that contractor personnel ensure necessary precautions are taken to minimize dermal exposure to any workers who may come in contact with the water. A visual inspection and examination of water in the manhole shall be performed to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated, contact the Caretaker Site Office for further instruction on sampling, analysis, and disposal. If no visible contamination is present, the water can be discharged to the storm sewer system.

If you have any questions, please contact Amy Daniell or Rick Nielson at the Caretaker Site Office at 743-2985.

25 April 2003

MEMORANDUM

From: M.A.Hunt, BRAC Environmental Coordinator

To: Amy Daniel, Caretaker Site Officer

Subject: SCE&G Manhole Dewater Permits

Amy,

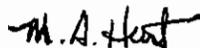
I have reviewed each of the Manhole Permit requests (1 through 24) submitted by SCE&G and have determined, based on location, potential intrusion by Cooper River tidal fluctuations and proximity to known groundwater contamination, the disposition of any water removed from these manholes prior to work. The list of manholes and information with respect to these factors is attached to this memorandum. It should be noted that MH 10050 could not be located on the maps provided by SCE&G. The permit and disposition instructions will be provided once the location is known.

For manholes listed in Column A in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. Sample water and analyze for VOCs and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit the water may be discharged to the sanitary sewer after obtaining approval from North Charleston Sewer District. If results are above these limits contact the CSO for disposition instructions.

For manholes listed in Column B in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. If no visible contamination is present the water can be discharged to the storm sewer system.

If you should have any questions please call me at 820-5607.

Respectfully,



M.A.Hunt  
BRAC Environmental Coordinator  
Charleston Naval Complex

Permit #	Manhole #	Ind Area	Location	Connection to Cooper (Y/N)	Connection to Cooper	Proximity to Plume (Y/N)		Disposition of Water	
				(Based on tidal fluctuations)	(Based on chloride tests)			Column A	Column B
1	10188	Y	East of Bldg 420	Yes		No			X
2	10096	Y	East of Bldg 5 (Near SY canteen)	No		Yes (SWMU 21/54)		X	
3	10095	Y	Near 10096	No		Yes (SWMU 21/54)		X	
4	10094	Y	3rd St. NE side of Bldg 43	No		No		X	
5	10093	Y	East Side of Bldg 3 (Near plating shop)	No		No		X	
6	10091	Y	Entrance to Bldg 56	No		No		X	
7	10111	Y	East side of Bldg 46	Yes		Yes (AOC 551)		X	
8	10110	Y	Between Bldgs 58 & 46	Yes		Yes (AOC 551)		X	
9	10091	Y	Entrance to Bldg 56	No	8250 ppm	No		X	
10	10090	Y	3rd St. by Bldg 221	Yes	16500ppm	No			X
11	10089	Y	Roe St and 3rd	Yes	16500ppm	No			X
12	10037	Y	Truxtun Ave and Roe	Yes		No			X
13	10039	Y	Truxtun Aven and Bldg 221	Yes		No			X
14	10040	Y	Truxtun Ave and Bldg 56	Yes		No			X
15	10044	Y	Ave B and Bldg 3 (near entrance to X31)	No		No		X	
16	10045	Y	Ave B and Bldg 3 (near entrance to X31)	No		No		X	
17	10042	Y	Truxtun Ave and Ave B	No		No		X	
18	10047	Y	Truxtun Ave near Bldg 6 and Weld shop	Yes		No			X
19	10124	Y	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)		X	
20	10128	N	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)		X	
21	10102	N	Hobson near Bldg 3	No		No		X	
22	10100	N	Hobson and Truxtun	No		No		X	
	10050		Unable to locate						
24	10048	N	Hobson and Truxtun	No		No		X	
	10066	N	Turnbull and North side of Bldg 64	N	54200 ppb	N			

# CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

Requester: Fill out top portion, Sign and date.

<b>Location:</b> <u>STUYTAN AVE By BLD 221 #</u>	<b>Contractor:</b> <u>S.C.E+G.</u>	<b>Date of Request:</b> <u>9-28-01</u>
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**Scope of Work:** (Location, manhole number, etc.)

S.C.E+G. MH # 10039

<b>Date Permit Required:</b> <u>10-05-01</u>	<b>Termination Date of Permit:</b> <u>JAN 1, 2002</u>
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**Signature of Requesting Official:** Richard W. Smith

**Date:** 9-28-01      **Phone Number:** 745-6381

### Caretaker Site Office Review

<b>Points of Contact:</b> CPW : Robert Sagasser (work) 529-0653 (page) 570-0390 SCE&G: R.W. Smith (work) 745-6381 RDA: Gene Krisley Sewer POC: (work) 747-0010	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">1. Who is the current Land Owner/ Leasee? <u>Metal Trades</u></td> <td style="width: 10%;"><input checked="" type="checkbox"/> Yes</td> <td style="width: 10%;"><input type="checkbox"/> No</td> <td style="width: 20%;"></td> </tr> <tr> <td>2. Is the Area inside the CIA?</td> <td><input checked="" type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td></td> </tr> <tr> <td>3. Are any SWMU(s) impacted? If yes, list.</td> <td><input type="checkbox"/> Yes</td> <td><input checked="" type="checkbox"/> No</td> <td>( )</td> </tr> <tr> <td>4. Are any AOC(s) impacted? If yes, list.</td> <td><input type="checkbox"/> Yes</td> <td><input checked="" type="checkbox"/> No</td> <td>( )</td> </tr> <tr> <td>5. Has DHEC been notified?</td> <td><input type="checkbox"/> Yes</td> <td><input checked="" type="checkbox"/> No</td> <td></td> </tr> <tr> <td>6. Was water tested for VOC's and metals?</td> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td></td> </tr> <tr> <td>7. Are results greater than NCSD limits?</td> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td></td> </tr> <tr> <td>8. Are results greater than TCLP limits?</td> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td></td> </tr> <tr> <td>9. Are Chlorides within range of Cooper River water?</td> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td></td> </tr> <tr> <td>10. Was NCSD (Kelly Singer) notified?</td> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td></td> </tr> <tr> <td>11. What is the serial # of forwarding letter to RDA? <u>N/A</u></td> <td><input type="checkbox"/> Yes</td> <td><input type="checkbox"/> No</td> <td></td> </tr> </table>	1. Who is the current Land Owner/ Leasee? <u>Metal Trades</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		2. Is the Area inside the CIA?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		3. Are any SWMU(s) impacted? If yes, list.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	( )	4. Are any AOC(s) impacted? If yes, list.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	( )	5. Has DHEC been notified?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		6. Was water tested for VOC's and metals?	<input type="checkbox"/> Yes	<input type="checkbox"/> No		7. Are results greater than NCSD limits?	<input type="checkbox"/> Yes	<input type="checkbox"/> No		8. Are results greater than TCLP limits?	<input type="checkbox"/> Yes	<input type="checkbox"/> No		9. Are Chlorides within range of Cooper River water?	<input type="checkbox"/> Yes	<input type="checkbox"/> No		10. Was NCSD (Kelly Singer) notified?	<input type="checkbox"/> Yes	<input type="checkbox"/> No		11. What is the serial # of forwarding letter to RDA? <u>N/A</u>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
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<b>Permit Approved?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																																													

<b>CSO Authorizing Signature:</b> <u>Amy Daniell 10/2/01</u>	<b>Date out:</b> <u>20 May 2003</u>
<b>CH2MHILL/J.A.JONES Signature:</b> <u>[Signature] 10/1/01</u>	
<b>BEC Signature:</b> <u>M.A. Hunt 4/24/03 see attached ltr</u>	<b>Serial Number:</b> <u>013</u>
<b>CSO Officer Signature:</b> <u>Amy Daniell</u>	

**\*Permit is approved contingent upon the following actions to be taken by permittee:**

**Tests Required:** Perform visual examination for discoloration or odor.

**Discharge Instructions:** If no visual contamination, discharge to storm sewer.

## CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

CSO Log Number = 013

Request Date = 28 September 2001

Comments Date = 15 May 2003

Location = Truxtun Ave. by Bldg. 221 (Manhole #10039)

### Environmental Review Comments

This project proposes the following: (a) to install electrical conduit

The Navy has identified that in this area a release of hazardous substances has occurred, but at concentrations that do not require removal or remedial action. It is recommended that contractor personnel ensure necessary precautions are taken to minimize dermal exposure to any workers who may come in contact with the water. A visual inspection and examination of water in the manhole shall be performed to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated, contact the Caretaker Site Office for further instruction on sampling, analysis, and disposal. If no visible contamination is present, the water can be discharged to the storm sewer system.

If you have any questions, please contact Amy Daniell or Rick Nielson at the Caretaker Site Office at 743-2985.

Permit #	Manhole #	Ind Area	Location	Connection to Cooper (Y/N)	Connection to Cooper	Proximity to Plume (Y/N)		Disposition of Water	
				(Based on tidal fluctuations)	(Based on chloride tests)			Column A	Column B
1	10188	Y	East of Bldg 420	Yes		No			X
2	10096	Y	East of Bldg 5 (Near SY canteen)	No		Yes (SWMU 21/54)		X	
3	10095	Y	Near 10096	No		Yes (SWMU 21/54)		X	
4	10094	Y	3rd St. NE side of Bldg 43	No		No		X	
5	10093	Y	East Side of Bldg 3 (Near plating shop)	No		No		X	
6	10091	Y	Entrance to Bldg 56	No		No		X	
7	10111	Y	East side of Bldg 46	Yes		Yes (AOC 551)		X	
8	10110	Y	Between Bldgs 58 & 46	Yes		Yes (AOC 551)		X	
9	10091	Y	Entrance to Bldg 56	No	8250 ppm	No		X	
10	10090	Y	3rd St. by Bldg 221	Yes	16500ppm	No			X
11	10089	Y	Roe St and 3rd	Yes	16500ppm	No			X
12	10037	Y	Truxtun Ave and Roe	Yes		No			X
13	10039	Y	Truxtun Aven and Bldg 221	Yes		No			X
14	10040	Y	Truxtun Ave and Bldg 56	Yes		No			X
15	10044	Y	Ave B and Bldg 3 (near entrance to X31)	No		No		X	
16	10045	Y	Ave B and Bldg 3 (near entrance to X31)	No		No		X	
17	10042	Y	Truxtun Ave and Ave B	No		No		X	
18	10047	Y	Truxtun Ave near Bldg 6 and Weld shop	Yes		No			X
19	10124	Y	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)		X	
20	10128	N	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)		X	
21	10102	N	Hobson near Bldg 3	No		No		X	
22	10100	N	Hobson and Truxtun	No		No		X	
	10050		Unable to locate						
24	10048	N	Hobson and Truxtun	No		No		X	
	10066	N	Turnbull and North side of Bldg 64	N	54200 ppb	N			

AOC 550

# CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

Requester: Fill out top portion, Sign and date.

Location: <u>Tryx Tan Ave + Roe ST.</u>	Contractor: <u>S.C.E + G.</u>	Date of Request: <u>9-28-01</u>
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Scope of Work: (Location, manhole number, etc.)

S.C.E + G. MH # 10037

Date Permit Required: <u>10-05-01</u>	Termination Date of Permit: <u>JAN 1, 2002</u>
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Signature of Requesting Official: <u>Richard W. Smith</u>	Date: <u>9-28-01</u>	Phone Number: <u>745-6381</u>
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### Caretaker Site Office Review

<b>Points of Contact:</b> <b>CPW :</b> Robert Sagasser (work) 529-0653 (page) 570-0390  <b>SCE&amp;G:</b> R.W. Smith (work) 745-6381  <b>RDA:</b> Gene Knisley Sewer POC: (work) 747-0010	1. Who is the current Land Owner/ Leasee? <u>Metal Trades</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	2. Is the Area inside the CIA?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	3. Are any SWMU(s) impacted? If yes, list.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No ( )
	4. Are any AOC(s) impacted? If yes, list. <u>*</u>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No ( )
	5. Has DHEC been notified?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
	6. Was water tested for VOC's and metals?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	7. Are results greater than NCSD limits?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	8. Are results greater than TCLP limits?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	9. Are Chlorides within range of Cooper River water?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	10. Was NCSD (Kelly Singer) notified?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	11. What is the serial # of forwarding letter to RDA? <u>N/A</u>		
* See CH2M-HILL's attached letter			
Permit Approved?		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

CSO Authorizing Signature: <u>Amy Daniell 10/2/01</u>	Date out: <u>20 May 2003</u>
CH2MHILL/J.A.JONES Signature: <u>[Signature]</u>	
BEC Signature: <u>M.A. [Signature] 4/24/03 see attached ltr</u>	Serial Number: <u>012</u>
CSO Officer Signature: <u>Amy Daniell</u>	

\*Permit is approved contingent upon the following actions to be taken by permittee:

Tests Required: Perform visual examination for discoloration or odor.

Discharge Instructions: If no visual contamination, discharge to storm sewer.

## CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

CSO Log Number = 012

Request Date = 28 September 2001

Comments Date = 14 May 2003

Location = Between Truxtun Ave. & Roe St. (Manhole #10037)

### Environmental Review Comments

This project proposes the following: (a) to install electrical conduit

The Navy has identified that in this area a release of hazardous substances has occurred, but at concentrations that do not require removal or remedial action. It is recommended that contractor personnel ensure necessary precautions are taken to minimize dermal exposure to any workers who may come in contact with the water. A visual inspection and examination of water in the manhole shall be performed to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated, contact the Caretaker Site Office for further instruction on sampling, analysis, and disposal. If no visible contamination is present, the water can be discharged to the storm sewer system.

If you have any questions, please contact Amy Daniell or Rick Nielson at the Caretaker Site Office at 743-2985.

25 April 2003

MEMORANDUM

From: M.A.Hunt, BRAC Environmental Coordinator

To: Amy Daniel, Caretaker Site Officer

Subject: SCE&G Manhole Dewater Permits

Amy,

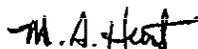
I have reviewed each of the Manhole Permit requests (1 through 24) submitted by SCE&G and have determined, based on location, potential intrusion by Cooper River tidal fluctuations and proximity to known groundwater contamination, the disposition of any water removed from these manholes prior to work. The list of manholes and information with respect to these factors is attached to this memorandum. It should be noted that MH 10050 could not be located on the maps provided by SCE&G. The permit and disposition instructions will be provided once the location is known.

For manholes listed in Column A in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. Sample water and analyze for VOCs and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit the water may be discharged to the sanitary sewer after obtaining approval from North Charleston Sewer District. If results are above these limits contact the CSO for disposition instructions.

For manholes listed in Column B in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. If no visible contamination is present the water can be discharged to the storm sewer system.

If you should have any questions please call me at 820-5607.

Respectfully,



M.A.Hunt  
BRAC Environmental Coordinator  
Charleston Naval Complex

Permit #	Manhole #	Ind Area	Location	Connection to Cooper (Y/N)	Connection to Cooper	Proximity to Plume (Y/N)	Disposition of Water	
				(Based on tidal fluctuations)	(Based on chloride tests)		Column A	Column B
1	10188	Y	East of Bldg 420	Yes		No		X
2	10096	Y	East of Bldg 5 (Near SY canteen)	No		Yes (SWMU 21/54)	X	
3	10095	Y	Near 10096	No		Yes (SWMU 21/54)	X	
4	10094	Y	3rd St. NE side of Bldg 43	No		No	X	
5	10093	Y	East Side of Bldg 3 (Near plating shop)	No		No	X	
6	10091	Y	Entrance to Bldg 56	No		No	X	
7	10111	Y	East side of Bldg 46	Yes		Yes (AOC 551)	X	
8	10110	Y	Between Bldgs 58 & 46	Yes		Yes (AOC 551)	X	
9	10091	Y	Entrance to Bldg 56	No	8250 ppm	No	X	
10	10090	Y	3rd St. by Bldg 221	Yes	16500ppm	No		X
11	10089	Y	Roe St and 3rd	Yes	16500ppm	No		X
12	10037	Y	Truxtun Ave and Roe	Yes		No		X
13	10039	Y	Truxtun Aven and Bldg 221	Yes		No		X
14	10040	Y	Truxtun Ave and Bldg 56	Yes		No		X
15	10044	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
16	10045	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
17	10042	Y	Truxtun Ave and Ave B	No		No	X	
18	10047	Y	Truxtun Ave near Bldg 6 and Weld shop	Yes		No		X
19	10124	Y	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
20	10128	N	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
21	10102	N	Hobson near Bldg 3	No		No	X	
22	10100	N	Hobson and Truxtun	No		No	X	
	10050		Unable to locate					
24	10048	N	Hobson and Truxtun	No		No	X	
	10066	N	Turnbull and North side of Bldg 64	N	54200 ppb	N		

## CH2M-JONES, LLC

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October 11, 2001

To: Charleston Caretaker Site Office (CSO)  
From: CH2M-JONES, LLC

Subject: EXCAVATION PERMIT (034) AND DEWATERING PERMITS (001-024)  
FOR SCE&G UTILITY WORK

CH2M-JONES, LLC, in cooperation with the Navy has reviewed the provided drawing and Dewatering Permits 001 through 024 and Excavation Permit 034. CH2M-JONES, LLC has found several of the proposed work areas are in the vicinity of Solid Waste Management Units (SWMU's) and/or Area's of Concern (AOC's). Even though SCE&G's work is not within the footprint of a known SWMU or AOC, SCE&G should take into consideration that Contaminates of Concern (COC's) could be encountered. Connecting electrical conduits inside areas of contamination (SWMUs/AOCs) may provide migration pathways outside of the SWMU/AOC footprint. This condition has been observed in the industrial area (Zone E) of the Charleston Naval Complex.

Based on the above statement the below information is provided for specific work areas noting the type of work impacted and manholes:

Work performed east of Building 74 is in the vicinity of AOC 550. The Draft RCRA Facility Investigation (RFI) Report identified arsenic in groundwater. There was no soil contaminations identified for an industrial scenario. (Excavation and dewatering MH#10037,10089)

Work performed near the northeast side of Building 46 is in the vicinity of AOC 551. The Draft RFI Report identified lead and Benzo (a) Pyrenes (BEQs) as COC's in soils and thallium, arsenic, and PCE as COC's in groundwater. (Excavation and dewatering MH# 10110, 10111)

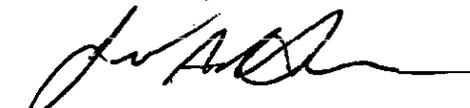
Work performed near Buildings 5 and 44 is in the vicinity of AOC 554 and SWMU 25. The Draft RFI Report indicates 5 metals (antimony, cadmium, chromium, copper and lead) and BEQ's as COC's in the soils. Groundwater COC's were identified as antimony, cadmium, chromium, nickel, a-chlordane, g-chlordane, tetrachloroethene and trichloroethene. (Excavation and dewatering MH#10096, 10124, 10128)

Work performed near Buildings 6 and 226 is in the vicinity of SWMU's 23, 63, and, 541, 542. The Draft RFI Report combined the before mentioned sites into one "Combined SWMU 23". Combined SWMU 23 identified 8 COC's in soil: antimony, cadmium, copper, lead, nickel, zinc, Aroclor-1254, and BEQs. No COC's were identified in groundwater. (Dewatering MH#10047, 10042, 10044, 10045)

Work performed near the west end of Building 6 and 35 is in the vicinity of SWMU 70 and AOC's 530 and 531. The Draft RFI Report revealed the following: SWMU 70 at the west end of Building 6 found copper, lead, and BEQ's in the soil. Groundwater analysis identified antimony, chromium, thallium, chloroform, 1,2-dichloroethene, tetrachloroethene, and trichloroethene. AOC 530 located on the west end of Building 35 was found to have arsenic and BEQ's in soil and shallow groundwater showed arsenic and 1,1-dichloroethene present. AOC 531, also at the west end of Building 35, was found to have arsenic and BEQ's in the soil. No groundwater COC's were identified. (Dewatering MH#10048, 10050, 10100, and 10102)

CH2M-JONES, LLC will be addressing groundwater contamination below the west end of Building 5 at the end of 2001 into the summer of 2002. Soil excavation at the west end of Building 226 is planned but no date has been scheduled. None of this work should interfere with SCE&G's work. No other scheduled remedial actions are in place at this time.

Respectfully,  
CH2M-JONES, LLC



Jed Heames  
Site Superintendent

# CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

Requester: Fill out top portion, Sign and date.

<b>Location:</b> <u>Boe ST &amp; Third ST.</u>	<b>Contractor:</b> <u>S.C.E &amp; G.</u>	<b>Date of Request:</b> <u>9-28-01</u>
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**Scope of Work:** (Location, manhole number, etc.)

S.C.E & G. MH # 10089

<b>Date Permit Required:</b> <u>10-05-01</u>	<b>Termination Date of Permit:</b> <u>JAN 1, 2002</u>
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<b>Signature of Requesting Official:</b> <u>Richard W. Smith</u>	<b>Date:</b> <u>9-28-01</u>	<b>Phone Number:</b> <u>745-6381</u>
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### Caretaker Site Office Review

<b>Points of Contact:</b> <b>CPW :</b> Robert Sagasser (work) 529-0653 (page) 570-0390  <b>SCE&amp;G:</b> R.W. Smith (work) 745-6381  <b>RDA:</b> Gene Knisley Sewer POC: (work) 747-0010	<ol style="list-style-type: none"> <li>1. Who is the current Land Owner/ Leasee? <u>Metal Trades</u></li> <li>2. Is the Area inside the CIA? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</li> <li>3. Are any SWMU(s) impacted? If yes, list. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ( )</li> <li>4. Are any AOC(s) impacted? If yes, list. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ( )</li> <li>5. Has DHEC been notified? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</li> <li>6. Was water tested for VOC's and metals? <input type="checkbox"/> Yes <input type="checkbox"/> No</li> <li>7. Are results greater than NCSD limits? <input type="checkbox"/> Yes <input type="checkbox"/> No</li> <li>8. Are results greater than TCLP limits? <input type="checkbox"/> Yes <input type="checkbox"/> No</li> <li>9. Are Chlorides within range of Cooper River water? <input type="checkbox"/> Yes <input type="checkbox"/> No</li> <li>10. Was NCSD (Kelly Singer) notified? <input type="checkbox"/> Yes <input type="checkbox"/> No</li> <li>11. What is the serial # of forwarding letter to RDA? <u>N/A</u></li> </ol> <p style="margin-left: 20px;"><i>* See attached CH2M JONES letter</i></p> <p style="text-align: right;"> <b>Permit Approved?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No                 </p>
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<b>CSO Authorizing Signature:</b> <u>Amy Daniell 10/2/01</u>	<b>Date out:</b> <u>20 May 2003</u>
<b>CH2MHILL/J.A.JONES Signature:</b> <u>[Signature] 10/1/01</u>	<b>Serial Number:</b> <u>011</u>
<b>BEC Signature:</b> <u>[Signature] 4/24/03 see attached ltr.</u>	
<b>CSO Officer Signature:</b> <u>Amy Daniell</u>	

**\*Permit is approved contingent upon the following actions to be taken by permittee:**

Tests Required: Perform visual examination for discoloration or odor.

Discharge Instructions: If no visual contamination, discharge to storm sewer.

## CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

CSO Log Number = 011

Request Date = 28 September 2001

Comments Date = 14 May 2003

Location = Between Roe St. & Third St. (Manhole #10089)

### Environmental Review Comments

This project proposes the following: (a) to install electrical conduit

The Navy has identified that in this area a release of hazardous substances has occurred, but at concentrations that do not require removal or remedial action. It is recommended that contractor personnel ensure necessary precautions are taken to minimize dermal exposure to any workers who may come in contact with the water. A visual inspection and examination of water in the manhole shall be performed to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated, contact the Caretaker Site Office for further instruction on sampling, analysis, and disposal. If no visible contamination is present, the water can be discharged to the storm sewer system.

If you have any questions, please contact Amy Daniell or Rick Nielson at the Caretaker Site Office at 743-2985.

25 April 2003

MEMORANDUM

From: M.A.Hunt, BRAC Environmental Coordinator

To: Amy Daniel, Caretaker Site Officer

Subject: SCE&G Manhole Dewater Permits

Amy,

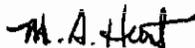
I have reviewed each of the Manhole Permit requests (1 through 24) submitted by SCE&G and have determined, based on location, potential intrusion by Cooper River tidal fluctuations and proximity to known groundwater contamination, the disposition of any water removed from these manholes prior to work. The list of manholes and information with respect to these factors is attached to this memorandum. It should be noted that MH 10050 could not be located on the maps provided by SCE&G. The permit and disposition instructions will be provided once the location is known.

For manholes listed in Column A in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. Sample water and analyze for VOCs and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit the water may be discharged to the sanitary sewer after obtaining approval from North Charleston Sewer District. If results are above these limits contact the CSO for disposition instructions.

For manholes listed in Column B in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. If no visible contamination is present the water can be discharged to the storm sewer system.

If you should have any questions please call me at 820-5607.

Respectfully,



M.A.Hunt  
BRAC Environmental Coordinator  
Charleston Naval Complex

Permit #	Manhole #	Ind Area	Location	Connection to Cooper (Y/N)	Connection to Cooper	Proximity to Plume (Y/N)	Disposition of Water	
				(Based on tidal fluctuations)	(Based on chloride tests)		Column A	Column B
1	10188	Y	East of Bldg 420	Yes		No		X
2	10096	Y	East of Bldg 5 (Near SY canteen)	No		Yes (SWMU 21/54)	X	
3	10095	Y	Near 10096	No		Yes (SWMU 21/54)	X	
4	10094	Y	3rd St. NE side of Bldg 43	No		No	X	
5	10093	Y	East Side of Bldg 3 (Near plating shop)	No		No	X	
6	10091	Y	Entrance to Bldg 56	No		No	X	
7	10111	Y	East side of Bldg 46	Yes		Yes (AOC 551)	X	
8	10110	Y	Between Bldgs 58 & 46	Yes		Yes (AOC 551)	X	
9	10091	Y	Entrance to Bldg 56	No	8250 ppm	No	X	
10	10090	Y	3rd St. by Bldg 221	Yes	16500ppm	No		X
11	10089	Y	Roe St and 3rd	Yes	16500ppm	No		X
12	10037	Y	Truxtun Ave and Roe	Yes		No		X
13	10039	Y	Truxtun Aven and Bldg 221	Yes		No		X
14	10040	Y	Truxtun Ave and Bldg 56	Yes		No		X
15	10044	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
16	10045	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
17	10042	Y	Truxtun Ave and Ave B	No		No	X	
18	10047	Y	Truxtun Ave near Bldg 6 and Weld shop	Yes		No		X
19	10124	Y	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
20	10128	N	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
21	10102	N	Hobson near Bldg 3	No		No	X	
22	10100	N	Hobson and Truxtun	No		No	X	
	10050		Unable to locate					
24	10048	N	Hobson and Truxtun	No		No	X	
	10066	N	Tumbull and North side of Bldg 64	N	54200 ppb	N		

## CH2M-JONES, LLC

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October 11, 2001

To: Charleston Caretaker Site Office (CSO)  
From: CH2M-JONES, LLC

Subject: EXCAVATION PERMIT (034) AND DEWATERING PERMITS (001-024)  
FOR SCE&G UTILITY WORK

CH2M-JONES, LLC, in cooperation with the Navy has reviewed the provided drawing and Dewatering Permits 001 through 024 and Excavation Permit 034. CH2M-JONES, LLC has found several of the proposed work areas are in the vicinity of Solid Waste Management Units (SWMU's) and/or Area's of Concern (AOC's). Even though SCE&G's work is not within the footprint of a known SWMU or AOC, SCE&G should take into consideration that Contaminates of Concern (COC's) could be encountered. Connecting electrical conduits inside areas of contamination (SWMUs/AOCs) may provide migration pathways outside of the SWMU/AOC footprint. This condition has been observed in the industrial area (Zone E) of the Charleston Naval Complex.

Based on the above statement the below information is provided for specific work areas noting the type of work impacted and manholes:

Work performed east of Building 74 is in the vicinity of AOC 550. The Draft RCRA Facility Investigation (RFI) Report identified arsenic in groundwater. There was no soil contaminations identified for an industrial scenario. (Excavation and dewatering MH#10037,10089)

Work performed near the northeast side of Building 46 is in the vicinity of AOC 551. The Draft RFI Report identified lead and Benzo (a) Pyrenes (BEQs) as COC's in soils and thallium, arsenic, and PCE as COC's in groundwater. (Excavation and dewatering MH# 10110, 10111)

Work performed near Buildings 5 and 44 is in the vicinity of AOC 554 and SWMU 25. The Draft RFI Report indicates 5 metals (antimony, cadmium, chromium, copper and lead) and BEQ's as COC's in the soils. Groundwater COC's were identified as antimony, cadmium, chromium, nickel, a-chlordane, g-chlordane, tetrachloroethene and trichloroethene. (Excavation and dewatering MH#10096, 10124, 10128)

Work performed near Buildings 6 and 226 is in the vicinity of SWMU's 23, 63, and, 541, 542. The Draft RFI Report combined the before mentioned sites into one "Combined SWMU 23". Combined SWMU 23 identified 8 COC's in soil: antimony, cadmium, copper, lead, nickel, zinc, Aroclor-1254, and BEQs. No COC's were identified in groundwater. (Dewatering MH#10047, 10042, 10044, 10045)

Work performed near the west end of Building 6 and 35 is in the vicinity of SWMU 70 and AOC's 530 and 531. The Draft RFI Report revealed the following: SWMU 70 at the west end of Building 6 found copper, lead, and BEQ's in the soil. Groundwater analysis identified antimony, chromium, thallium, chloroform, 1,2-dichloroethene, tetrachloroethene, and trichloroethene. AOC 530 located on the west end of Building 35 was found to have arsenic and BEQ's in soil and shallow groundwater showed arsenic and 1,1-dichloroethene present. AOC 531, also at the west end of Building 35, was found to have arsenic and BEQ's in the soil. No groundwater COC's were identified. (Dewatering MH#10048, 10050, 10100, and 10102)

CH2M-JONES, LLC will be addressing groundwater contamination below the west end of Building 5 at the end of 2001 into the summer of 2002. Soil excavation at the west end of Building 226 is planned but no date has been scheduled. None of this work should interfere with SCE&G's work. No other scheduled remedial actions are in place at this time.

Respectfully,  
CH2M-JONES, LLC



Jed Heames  
Site Superintendent

# CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

Requester: Fill out top portion, Sign and date.

Location: <u>Third ST By Bld 221</u>	Contractor: <u>S.C.E+G.</u>	Date of Request: <u>9-28-01</u>
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Scope of Work: (Location, manhole number, etc.)  
S.C.E+G. MH # 10090

Date Permit Required: <u>10-05-01</u>	Termination Date of Permit: <u>JAN 1, 2002</u>
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Signature of Requesting Official: <u>Richard W. Smith</u>	Date: <u>9-28-01</u> Phone Number: <u>745-6381</u>
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### Caretaker Site Office Review

<b>Points of Contact:</b> CPW : Robert Sagasser (work) 529-0653 (page) 570-0390  SCE&G: R.W. Smith (work) 745-6381  RDA: Gene Knisley Sewer POC: (work) 747-0010	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">1. Who is the current Land Owner/ Leasee? <u>Metal Trades</u></td> <td style="width: 10%;"><input checked="" type="checkbox"/></td> <td style="width: 10%;">Yes</td> <td style="width: 10%;"><input type="checkbox"/></td> <td style="width: 10%;">No</td> </tr> <tr> <td>2. Is the Area inside the CIA?</td> <td><input checked="" type="checkbox"/></td> <td>Yes</td> <td><input checked="" type="checkbox"/></td> <td>No ( )</td> </tr> <tr> <td>3. Are any SWMU(s) impacted? If yes, list.</td> <td><input type="checkbox"/></td> <td>Yes</td> <td><input checked="" type="checkbox"/></td> <td>No ( )</td> </tr> <tr> <td>4. Are any AOC(s) impacted? If yes, list.</td> <td><input type="checkbox"/></td> <td>Yes</td> <td><input checked="" type="checkbox"/></td> <td>No ( )</td> </tr> <tr> <td>5. Has DHEC been notified?</td> <td><input type="checkbox"/></td> <td>Yes</td> <td><input checked="" type="checkbox"/></td> <td>No</td> </tr> <tr> <td>6. Was water tested for VOC's and metals?</td> <td><input type="checkbox"/></td> <td>Yes</td> <td><input type="checkbox"/></td> <td>No</td> </tr> <tr> <td>7. Are results greater than NCSD limits?</td> <td><input type="checkbox"/></td> <td>Yes</td> <td><input type="checkbox"/></td> <td>No</td> </tr> <tr> <td>8. Are results greater than TCLP limits?</td> <td><input type="checkbox"/></td> <td>Yes</td> <td><input type="checkbox"/></td> <td>No</td> </tr> <tr> <td>9. Are Chlorides within range of Cooper River water?</td> <td><input type="checkbox"/></td> <td>Yes</td> <td><input type="checkbox"/></td> <td>No</td> </tr> <tr> <td>10. Was NCSD (Kelly Singer) notified?</td> <td><input type="checkbox"/></td> <td>Yes</td> <td><input type="checkbox"/></td> <td>No</td> </tr> <tr> <td>11. What is the serial # of forwarding letter to RDA? <u>N/A</u></td> <td><input type="checkbox"/></td> <td>Yes</td> <td><input type="checkbox"/></td> <td>No</td> </tr> </table>	1. Who is the current Land Owner/ Leasee? <u>Metal Trades</u>	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	2. Is the Area inside the CIA?	<input checked="" type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No ( )	3. Are any SWMU(s) impacted? If yes, list.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No ( )	4. Are any AOC(s) impacted? If yes, list.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No ( )	5. Has DHEC been notified?	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No	6. Was water tested for VOC's and metals?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	7. Are results greater than NCSD limits?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	8. Are results greater than TCLP limits?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	9. Are Chlorides within range of Cooper River water?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	10. Was NCSD (Kelly Singer) notified?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	11. What is the serial # of forwarding letter to RDA? <u>N/A</u>	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
1. Who is the current Land Owner/ Leasee? <u>Metal Trades</u>	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No																																																				
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7. Are results greater than NCSD limits?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No																																																				
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9. Are Chlorides within range of Cooper River water?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No																																																				
10. Was NCSD (Kelly Singer) notified?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No																																																				
11. What is the serial # of forwarding letter to RDA? <u>N/A</u>	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No																																																				
Permit Approved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																																																								

CSO Authorizing Signature: <u>Amy Daniell 10/12/01</u>	Date out: <u>20 May 2003</u>
CH2MHILL/J.A.JONES Signature: <u>[Signature]</u>	Serial Number: <u>010</u>
BEC Signature: <u>M. [Signature] 4/24/03 see attached let</u>	
CSO Officer Signature: <u>Amy Daniell</u>	

\*Permit is approved contingent upon the following actions to be taken by permittee:

Tests Required: Perform visual examination for discoloration or odor.

Discharge Instructions: If no visual contamination, discharge to storm sewer.

## CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

CSO Log Number = 010

Request Date = 28 October 2001

Comments Date = 14 May 2003

Location = Third St. by Bldg. 221 (Manhole #10090)

### Environmental Review Comments

This project proposes the following: (a) to install electrical conduit

The Navy has identified that in this area a release of hazardous substances has occurred, but at concentrations that do not require removal or remedial action. It is recommended that contractor personnel ensure necessary precautions are taken to minimize dermal exposure to any workers who may come in contact with the water. A visual inspection and examination of water in the manhole shall be performed to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated, contact the Caretaker Site Office for further instruction on sampling, analysis, and disposal. If no visible contamination is present, the water can be discharged to the storm sewer system.

If you have any questions, please contact Amy Daniell or Rick Nielson at the Caretaker Site Office at 743-2985.

25 April 2003

MEMORANDUM

From: M.A.Hunt, BRAC Environmental Coordinator

To: Amy Daniel, Caretaker Site Officer

Subject: SCE&G Manhole Dewater Permits

Amy,

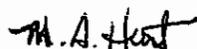
I have reviewed each of the Manhole Permit requests (1 through 24) submitted by SCE&G and have determined, based on location, potential intrusion by Cooper River tidal fluctuations and proximity to known groundwater contamination, the disposition of any water removed from these manholes prior to work. The list of manholes and information with respect to these factors is attached to this memorandum. It should be noted that MH 10050 could not be located on the maps provided by SCE&G. The permit and disposition instructions will be provided once the location is known.

For manholes listed in Column A in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. Sample water and analyze for VOCs and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit the water may be discharged to the sanitary sewer after obtaining approval from North Charleston Sewer District. If results are above these limits contact the CSO for disposition instructions.

For manholes listed in Column B in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. If no visible contamination is present the water can be discharged to the storm sewer system.

If you should have any questions please call me at 820-5607.

Respectfully,



M.A.Hunt  
BRAC Environmental Coordinator  
Charleston Naval Complex

Permit #	Manhole #	Ind Area	Location	Connection to Cooper (Y/N)	Connection to Cooper	Proximity to Plume (Y/N)	Disposition of Water	
				(Based on tidal fluctuations)	(Based on chloride tests)		Column A	Column B
1	10188	Y	East of Bldg 420	Yes		No		X
2	10096	Y	East of Bldg 5 (Near SY canteen)	No		Yes (SWMU 21/54)	X	
3	10095	Y	Near 10096	No		Yes (SWMU 21/54)	X	
4	10094	Y	3rd St. NE side of Bldg 43	No		No	X	
5	10093	Y	East Side of Bldg 3 (Near plating shop)	No		No	X	
6	10091	Y	Entrance to Bldg 56	No		No	X	
7	10111	Y	East side of Bldg 46	Yes		Yes (AOC 551)	X	
8	10110	Y	Between Bldgs 58 & 46	Yes		Yes (AOC 551)	X	
9	10091	Y	Entrance to Bldg 56	No	8250 ppm	No	X	
10	10090	Y	3rd St. by Bldg 221	Yes	16500ppm	No		X
11	10089	Y	Roe St and 3rd	Yes	16500ppm	No		X
12	10037	Y	Truxtun Ave and Roe	Yes		No		X
13	10039	Y	Truxtun Aven and Bldg 221	Yes		No		X
14	10040	Y	Truxtun Ave and Bldg 56	Yes		No		X
15	10044	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
16	10045	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
17	10042	Y	Truxtun Ave and Ave B	No		No	X	
18	10047	Y	Truxtun Ave near Bldg 6 and Weld shop	Yes		No		X
19	10124	Y	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
20	10128	N	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
21	10102	N	Hobson near Bldg 3	No		No	X	
22	10100	N	Hobson and Truxtun	No		No	X	
	10050	Unable to locate						
24	10048	N	Hobson and Truxtun	No		No	X	
	10066	N	Turnbull and North side of Bldg 64	N	54200 ppb	N		

100551

## CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

Requester: Fill out top portion, Sign and date.

<b>Location:</b> <u>Third ST By BLD 56</u>	<b>Contractor:</b> <u>S.C.E &amp; G.</u>	<b>Date of Request:</b> <u>9-28-01</u>
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**Scope of Work:** (Location, manhole number, etc.)  
S.C.E & G. MH # 10091

<b>Date Permit Required:</b> <u>10-05-01</u>	<b>Termination Date of Permit:</b> <u>JAN 1 2002</u>
---	---

<b>Signature of Requesting Official:</b> <u>Richard W. Smith</u>	<b>Date:</b> <u>9-28-01</u> <b>Phone Number:</b> <u>745-6381</u>
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### Caretaker Site Office Review

<p><b>Points of Contact:</b> CPW : Robert Sagasser (work) 529-0653 (page) 570-0390</p> <p>SCE&amp;G: R.W. Smith (work) 745-6381</p> <p>RDA: Gene Krisley Sewer POC: (work) 747-0010</p>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">1. Who is the current Land Owner/ Leasee? <u>Metal Trades</u></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>2. Is the Area inside the CIA?</td> <td><input checked="" type="checkbox"/></td> <td>Yes</td> <td><input type="checkbox"/></td> <td>No</td> </tr> <tr> <td>3. Are any SWMU(s) impacted? If yes, list.</td> <td><input type="checkbox"/></td> <td>Yes</td> <td><input checked="" type="checkbox"/></td> <td>No ( _____ )</td> </tr> <tr> <td>4. Are any AOC(s) impacted? If yes, list.</td> <td><input type="checkbox"/></td> <td>Yes</td> <td><input checked="" type="checkbox"/></td> <td>No ( _____ )</td> </tr> <tr> <td>5. Has DHEC been notified?</td> <td><input type="checkbox"/></td> <td>Yes</td> <td><input checked="" type="checkbox"/></td> <td>No</td> </tr> <tr> <td>6. Was water tested for VOC's and metals?</td> <td><input type="checkbox"/></td> <td>Yes</td> <td><input type="checkbox"/></td> <td>No</td> </tr> <tr> <td>7. Are results greater than NCSD limits?</td> <td><input type="checkbox"/></td> <td>Yes</td> <td><input type="checkbox"/></td> <td>No</td> </tr> <tr> <td>8. Are results greater than TCLP limits?</td> <td><input type="checkbox"/></td> <td>Yes</td> <td><input type="checkbox"/></td> <td>No</td> </tr> <tr> <td>9. Are Chlorides within range of Cooper River water?</td> <td><input type="checkbox"/></td> <td>Yes</td> <td><input type="checkbox"/></td> <td>No</td> </tr> <tr> <td>10. Was NCSD (Kelly Singer) notified?</td> <td><input type="checkbox"/></td> <td>Yes</td> <td><input type="checkbox"/></td> <td>No</td> </tr> <tr> <td>11. What is the serial # of forwarding letter to RDA? <u>N/A</u></td> <td colspan="4"></td> </tr> </table>	1. Who is the current Land Owner/ Leasee? <u>Metal Trades</u>					2. Is the Area inside the CIA?	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	3. Are any SWMU(s) impacted? If yes, list.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No ( _____ )	4. Are any AOC(s) impacted? If yes, list.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No ( _____ )	5. Has DHEC been notified?	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No	6. Was water tested for VOC's and metals?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	7. Are results greater than NCSD limits?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	8. Are results greater than TCLP limits?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	9. Are Chlorides within range of Cooper River water?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	10. Was NCSD (Kelly Singer) notified?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	11. What is the serial # of forwarding letter to RDA? <u>N/A</u>				
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<b>CSO Authorizing Signature:</b> <u>Amy Daniell 10/12/01</u>	<b>Date out:</b> <u>20 May 2003</u>
<b>CH2MHILL/J.A.JONES Signature:</b> <u>[Signature]</u>	<b>Serial Number:</b> <u>009</u>
<b>BEC Signature:</b> <u>M.A. Hunt 4/24/03 see attached ltr</u>	
<b>CSO Officer Signature:</b> <u>Amy Daniell</u>	

\*Permit is approved contingent upon the following actions to be taken by permittee:

Tests Required: Visual examination. Sample water and analyze for VOC's and metals.

Discharge Instructions: If constituents are below NPDES discharge limits - discharge to sanitary sewer after approval from NCSD.

## CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

CSO Log Number = 009

Request Date = 28 September 2001

Comments Date = 12 May 2003

Location = Third St. by Bldg. 56 (Manhole #10091)

### Environmental Review Comments

This project proposes the following: (a) to install electrical conduit

The Navy has identified that in this area a release of hazardous substances has occurred, but corrective actions have not yet been implemented. It is recommended that contractor personnel ensure necessary precautions are taken to minimize dermal exposure to any workers who may come in contact with the water. A visual inspection and examination of water in the manhole shall be performed to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated, contact the Caretaker Site Office for further instruction on sampling, analysis, and disposal. Sample water and analyze for VOC's and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit, the water may be discharged to the sanitary sewer after obtaining approval from the North Charleston Sewer District. If results are above these limits, contact the Caretaker Site Office for disposition instructions.

If you have any questions, please contact Amy Daniell or Rick Nielson at the Caretaker Site Office at 743-2985.

25 April 2003

MEMORANDUM

From: M.A.Hunt, BRAC Environmental Coordinator

To: Amy Daniel, Caretaker Site Officer

Subject: SCE&G Manhole Dewater Permits

Amy,

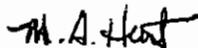
I have reviewed each of the Manhole Permit requests (1 through 24) submitted by SCE&G and have determined, based on location, potential intrusion by Cooper River tidal fluctuations and proximity to known groundwater contamination, the disposition of any water removed from these manholes prior to work. The list of manholes and information with respect to these factors is attached to this memorandum. It should be noted that MH 10050 could not be located on the maps provided by SCE&G. The permit and disposition instructions will be provided once the location is known.

For manholes listed in Column A in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. Sample water and analyze for VOCs and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit the water may be discharged to the sanitary sewer after obtaining approval from North Charleston Sewer District. If results are above these limits contact the CSO for disposition instructions.

For manholes listed in Column B in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. If no visible contamination is present the water can be discharged to the storm sewer system.

If you should have any questions please call me at 820-5607.

Respectfully,



M.A.Hunt  
BRAC Environmental Coordinator  
Charleston Naval Complex

Permit #	Manhole #	Ind Area	Location	Connection to Cooper (Y/N)	Connection to Cooper	Proximity to Plume (Y/N)	Disposition of Water	
				(Based on tidal fluctuations)	(Based on chloride tests)		Column A	Column B
1	10188	Y	East of Bldg 420	Yes		No		X
2	10096	Y	East of Bldg 5 (Near SY canteen)	No		Yes (SWMU 21/54)	X	
3	10095	Y	Near 10096	No		Yes (SWMU 21/54)	X	
4	10094	Y	3rd St. NE side of Bldg 43	No		No	X	
5	10093	Y	East Side of Bldg 3 (Near plating shop)	No		No	X	
6	10091	Y	Entrance to Bldg 56	No		No	X	
7	10111	Y	East side of Bldg 46	Yes		Yes (AOC 551)	X	
8	10110	Y	Between Bldgs 58 & 46	Yes		Yes (AOC 551)	X	
9	10091	Y	Entrance to Bldg 56	No	8250 ppm	No	X	
10	10090	Y	3rd St. by Bldg 221	Yes	16500ppm	No		X
11	10089	Y	Roe St and 3rd	Yes	16500ppm	No		X
12	10037	Y	Truxtun Ave and Roe	Yes		No		X
13	10039	Y	Truxtun Aven and Bldg 221	Yes		No		X
14	10040	Y	Truxtun Ave and Bldg 56	Yes		No		X
15	10044	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
16	10045	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
17	10042	Y	Truxtun Ave and Ave B	No		No	X	
18	10047	Y	Truxtun Ave near Bldg 6 and Weld shop	Yes		No		X
19	10124	Y	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
20	10128	N	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
21	10102	N	Hobson near Bldg 3	No		No	X	
22	10100	N	Hobson and Truxtun	No		No	X	
	10050	N	Unable to locate					
24	10048	N	Hobson and Truxtun	No		No	X	
	10066	N	Tumbull and North side of Bldg 64	N	54200 ppb	N		

AOC 587

# CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

Requester: Fill out top portion, Sign and date.

<b>Location:</b> <u>Between BLD 58 &amp; 46</u>	<b>Contractor:</b> <u>S.C.E &amp; G.</u>	<b>Date of Request:</b> <u>9-28-01</u>
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**Scope of Work:** (Location, manhole number, etc.)

S.C.E & G. MH # 10110

**Date Permit Required:**  
10-05-01

**Termination Date of Permit:**  
Jan 1, 2002

**Signature of Requesting Official:**  
Richard W. Smith

**Date:** 9-28-01 **Phone Number:** 745-6381

### 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 Knisley  
 Sewer POC:  
 (work) 747-0010

1. Who is the current Land Owner/ Leasee? <u>Metal Trades</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
2. Is the Area inside the CIA?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
3. Are any SWMU(s) impacted? If yes, list.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No ( )
4. Are any AOC(s) impacted? If yes, list. <u>*</u>	<input type="checkbox"/> Yes	<input type="checkbox"/> No ( <u>AOC 551</u> )
5. Has DHEC been notified?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
6. Was water tested for VOC's and metals?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
7. Are results greater than NCSD limits?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
8. Are results greater than TCLP limits?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
9. Are Chlorides within range of Cooper River water?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
10. Was NCSD (Kelly Singer) notified?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
11. What is the serial # of forwarding letter to RDA? <u>N/A</u>	<input type="checkbox"/> Yes	<input type="checkbox"/> No

\* see CH2M HILL's attached letter

**Permit Approved?**  Yes  No

**CSO Authorizing Signature:** Amy Daniell 9/2/01 **Date out:** 20 May 2003

**CH2MHILL/J.A.JONES Signature:** [Signature]

**BEC Signature:** M. A. Hunt 4/24/03 see attached ltr **Serial Number:** 008

**CSO Officer Signature:** Amy Daniell

\*Permit is approved contingent upon the following actions to be taken by permittee:

**Tests Required:** Visual examination. Sample water and analyze for VOC's and metals

**Discharge Instructions:** If constituents are below NPDES discharge limits - discharge to sanitary sewer after approval from NCSD.

## CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

CSO Log Number = 008

Request Date = 28 September 2001

Comments Date = 12 May 2003

Location = Between Bldg. 58 & Bldg. 46 (Manhole #10110)

### Environmental Review Comments

This project proposes the following: (a) to install electrical conduit

The Navy has identified that in this area a release of hazardous substances has occurred, but corrective actions have not yet been implemented. It is recommended that contractor personnel ensure necessary precautions are taken to minimize dermal exposure to any workers who may come in contact with the water. A visual inspection and examination of water in the manhole shall be performed to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated, contact the Caretaker Site Office for further instruction on sampling, analysis, and disposal. Sample water and analyze for VOC's and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit, the water may be discharged to the sanitary sewer after obtaining approval from the North Charleston Sewer District. If results are above these limits, contact the Caretaker Site Office for disposition instructions.

If you have any questions, please contact Amy Daniell or Rick Nielson at the Caretaker Site Office at 743-2985.

25 April 2003

MEMORANDUM

From: M.A.Hunt, BRAC Environmental Coordinator

To: Amy Daniel, Caretaker Site Officer

Subject: SCE&G Manhole Dewater Permits

Amy,

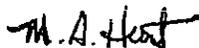
I have reviewed each of the Manhole Permit requests (1 through 24) submitted by SCE&G and have determined, based on location, potential intrusion by Cooper River tidal fluctuations and proximity to known groundwater contamination, the disposition of any water removed from these manholes prior to work. The list of manholes and information with respect to these factors is attached to this memorandum. It should be noted that MH 10050 could not be located on the maps provided by SCE&G. The permit and disposition instructions will be provided once the location is known.

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If you should have any questions please call me at 820-5607.

Respectfully,



M.A.Hunt  
BRAC Environmental Coordinator  
Charleston Naval Complex

Permit #	Manhole #	Ind Area	Location	Connection to Cooper (Y/N)	Connection to Cooper	Proximity to Plume (Y/N)	Disposition of Water	
				(Based on tidal fluctuations)	(Based on chloride tests)		Column A	Column B
1	10188	Y	East of Bldg 420	Yes		No		X
2	10096	Y	East of Bldg 5 (Near SY canteen)	No		Yes (SWMU 21/54)	X	
3	10095	Y	Near 10096	No		Yes (SWMU 21/54)	X	
4	10094	Y	3rd St. NE side of Bldg 43	No		No	X	
5	10093	Y	East Side of Bldg 3 (Near plating shop)	No		No	X	
6	10091	Y	Entrance to Bldg 56	No		No	X	
7	10111	Y	East side of Bldg 46	Yes		Yes (AOC 551)	X	
8	10110	Y	Between Bldgs 58 & 46	Yes		Yes (AOC 551)	X	
9	10091	Y	Entrance to Bldg 56	No	8250 ppm	No	X	
10	10090	Y	3rd St. by Bldg 221	Yes	16500ppm	No		X
11	10089	Y	Roe St and 3rd	Yes	16500ppm	No		X
12	10037	Y	Truxtun Ave and Roe	Yes		No		X
13	10039	Y	Truxtun Aven and Bldg 221	Yes		No		X
14	10040	Y	Truxtun Ave and Bldg 56	Yes		No		X
15	10044	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
16	10045	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
17	10042	Y	Truxtun Ave and Ave B	No		No	X	
18	10047	Y	Truxtun Ave near Bldg 6 and Weld shop	Yes		No		X
19	10124	Y	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
20	10128	N	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
21	10102	N	Hobson near Bldg 3	No		No	X	
22	10100	N	Hobson and Truxtun	No		No	X	
	10050		Unable to locate					
24	10048	N	Hobson and Truxtun	No		No	X	
	10066	N	Turnbull and North side of Bldg 64	N	54200 ppb	N		

## CH2M-JONES, LLC

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October 11, 2001

To: Charleston Caretaker Site Office (CSO)  
From: CH2M-JONES, LLC

Subject: EXCAVATION PERMIT (034) AND DEWATERING PERMITS (001-024)  
FOR SCE&G UTILITY WORK

CH2M-JONES, LLC, in cooperation with the Navy has reviewed the provided drawing and Dewatering Permits 001 through 024 and Excavation Permit 034. CH2M-JONES, LLC has found several of the proposed work areas are in the vicinity of Solid Waste Management Units (SWMU's) and/or Area's of Concern (AOC's). Even though SCE&G's work is not within the footprint of a known SWMU or AOC, SCE&G should take into consideration that Contaminates of Concern (COC's) could be encountered. Connecting electrical conduits inside areas of contamination (SWMUs/AOCs) may provide migration pathways outside of the SWMU/AOC footprint. This condition has been observed in the industrial area (Zone E) of the Charleston Naval Complex.

Based on the above statement the below information is provided for specific work areas noting the type of work impacted and manholes:

Work performed east of Building 74 is in the vicinity of AOC 550. The Draft RCRA Facility Investigation (RFI) Report identified arsenic in groundwater. There was no soil contaminations identified for an industrial scenario. (Excavation and dewatering MH#10037,10089)

Work performed near the northeast side of Building 46 is in the vicinity of AOC 551. The Draft RFI Report identified lead and Benzo (a) Pyrenes (BEQs) as COC's in soils and thallium, arsenic, and PCE as COC's in groundwater. (Excavation and dewatering MH# 10110, 10111)

Work performed near Buildings 5 and 44 is in the vicinity of AOC 554 and SWMU 25. The Draft RFI Report indicates 5 metals (antimony, cadmium, chromium, copper and lead) and BEQ's as COC's in the soils. Groundwater COC's were identified as antimony, cadmium, chromium, nickel, a-chlordane, g-chlordane, tetrachloroethene and trichloroethene. (Excavation and dewatering MH#10096, 10124, 10128)

Work performed near Buildings 6 and 226 is in the vicinity of SWMU's 23, 63, and, 541, 542. The Draft RFI Report combined the before mentioned sites into one "Combined SWMU 23". Combined SWMU 23 identified 8 COC's in soil: antimony, cadmium, copper, lead, nickel, zinc, Aroclor-1254, and BEQs. No COC's were identified in groundwater. (Dewatering MH#10047, 10042, 10044, 10045)

Work performed near the west end of Building 6 and 35 is in the vicinity of SWMU 70 and AOC's 530 and 531. The Draft RFI Report revealed the following: SWMU 70 at the west end of Building 6 found copper, lead, and BEQ's in the soil. Groundwater analysis identified antimony, chromium, thallium, chloroform, 1,2-dichloroethene, tetrachloroethene, and trichloroethene. AOC 530 located on the west end of Building 35 was found to have arsenic and BEQ's in soil and shallow groundwater showed arsenic and 1,1-dichloroethene present. AOC 531, also at the west end of Building 35, was found to have arsenic and BEQ's in the soil. No groundwater COC's were identified. (Dewatering MH#10048, 10050, 10100, and 10102)

CH2M-JONES, LLC will be addressing groundwater contamination below the west end of Building 5 at the end of 2001 into the summer of 2002. Soil excavation at the west end of Building 226 is planned but no date has been scheduled. None of this work should interfere with SCE&G's work. No other scheduled remedial actions are in place at this time.

Respectfully,  
CH2M-JONES, LLC



Jed Heames  
Site Superintendent

AOC 551

# CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

Requester: Fill out top portion, Sign and date.

<b>Location:</b> <u>East side of BLD 46</u>	<b>Contractor:</b> <u>S.C.E+G.</u>	<b>Date of Request:</b> <u>9-28-01</u>
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**Scope of Work:** (Location, manhole number, etc.)

S.C.E+G. MH # 10111

<b>Date Permit Required:</b> <u>10-05-01</u>	<b>Termination Date of Permit:</b> <u>JAN 1, 2002</u>
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<b>Signature of Requesting Official:</b> <u>Richard W. Smith</u>	<b>Date:</b> <u>9-28-01</u>	<b>Phone Number:</b> <u>745-6381</u>
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### Caretaker Site Office Review

<b>Points of Contact:</b> <b>CPW :</b> Robert Sagasser (work) 529-0653 (page) 570-0390  <b>SCE&amp;G:</b> R.W. Smith (work) 745-6381  <b>RDA:</b> Gene Krisley Sewer POC: (work) 747-0010	1. Who is the current Land Owner/ Leasee? <u>Metal Trads</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	2. Is the Area inside the CIA?	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No ( )
	3. Are any SWMU(s) impacted? If yes, list. <u>*</u>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No ( )
	4. Are any AOC(s) impacted? If yes, list.	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No ( <u>AOC 551</u> )
	5. Has DHEC been notified?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
	6. Was water tested for VOC's and metals?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	7. Are results greater than NCSD limits?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	8. Are results greater than TCLP limits?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	9. Are Chlorides within range of Cooper River water?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	10. Was NCSD (Kelly Singer) notified?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	11. What is the serial # of forwarding letter to RDA? <u>N/A</u>	<u>* see CH2M-Jones attached letter</u>	
<b>Permit Approved?</b>		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

<b>CSO Authorizing Signature:</b> <u>Amy Daniell 10/2/01</u>	<b>Date out:</b> <u>20 May 2003</u>
<b>CH2MHILL/J.A.JONES Signature:</b> <u>[Signature]</u>	
<b>BEC Signature:</b> <u>M.A. Hunt 4/24/03 see attached ltr.</u>	<b>Serial Number:</b> <u>007</u>
<b>CSO Officer Signature:</b> <u>Amy Daniell</u>	

**\*Permit is approved contingent upon the following actions to be taken by permittee:**

Tests Required: Visual examination, Sample water and analyze for VOC's and metals.

Discharge Instructions: If constituents are below NPDES discharge limits - discharge to sanitary sewer after approval from NCSD.

## CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

CSO Log Number = 007

Request Date = 28 September 2001

Comments Date = 12 May 2003

Location = East side of Bldg. 46 (Manhole #10111)

### Environmental Review Comments

This project proposes the following: (a) to install electrical conduit

The Navy has identified that in this area a release of hazardous substances has occurred, but corrective actions have not yet been implemented. It is recommended that contractor personnel ensure necessary precautions are taken to minimize dermal exposure to any workers who may come in contact with the water. A visual inspection and examination of water in the manhole shall be performed to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated, contact the Caretaker Site Office for further instruction on sampling, analysis, and disposal. Sample water and analyze for VOC's and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit, the water may be discharged to the sanitary sewer after obtaining approval from the North Charleston Sewer District. If results are above these limits, contact the Caretaker Site Office for disposition instructions.

If you have any questions, please contact Amy Daniell or Rick Nielson at the Caretaker Site Office at 743-2985.

25 April 2003

MEMORANDUM

From: M.A.Hunt, BRAC Environmental Coordinator

To: Amy Daniel, Caretaker Site Officer

Subject: SCE&G Manhole Dewater Permits

Amy,

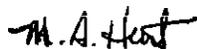
I have reviewed each of the Manhole Permit requests (1 through 24) submitted by SCE&G and have determined, based on location, potential intrusion by Cooper River tidal fluctuations and proximity to known groundwater contamination, the disposition of any water removed from these manholes prior to work. The list of manholes and information with respect to these factors is attached to this memorandum. It should be noted that MH 10050 could not be located on the maps provided by SCE&G. The permit and disposition instructions will be provided once the location is known.

For manholes listed in Column A in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. Sample water and analyze for VOCs and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit the water may be discharged to the sanitary sewer after obtaining approval from North Charleston Sewer District. If results are above these limits contact the CSO for disposition instructions.

For manholes listed in Column B in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. If no visible contamination is present the water can be discharged to the storm sewer system.

If you should have any questions please call me at 820-5607.

Respectfully,



M.A.Hunt  
BRAC Environmental Coordinator  
Charleston Naval Complex

Permit #	Manhole #	Ind Area	Location	Connection to Cooper (Y/N) (Based on tidal fluctuations)	Connection to Cooper (Based on chloride tests)	Proximity to Plume (Y/N)	Disposition of Water	
							Column A	Column B
1	10188	Y	East of Bldg 420	Yes		No		X
2	10096	Y	East of Bldg 5 (Near SY canteen)	No		Yes (SWMU 21/54)	X	
3	10095	Y	Near 10096	No		Yes (SWMU 21/54)	X	
4	10094	Y	3rd St. NE side of Bldg 43	No		No	X	
5	10093	Y	East Side of Bldg 3 (Near plating shop)	No		No	X	
6	10091	Y	Entrance to Bldg 56	No		No	X	
7	10111	Y	East side of Bldg 46	Yes		Yes (AOC 551)	X	
8	10110	Y	Between Bldgs 58 & 46	Yes		Yes (AOC 551)	X	
9	10091	Y	Entrance to Bldg 56	No	8250 ppm	No	X	
10	10090	Y	3rd St. by Bldg 221	Yes	16500ppm	No		X
11	10089	Y	Roe St and 3rd	Yes	16500ppm	No		X
12	10037	Y	Truxtun Ave and Roe	Yes		No		X
13	10039	Y	Truxtun Aven and Bldg 221	Yes		No		X
14	10040	Y	Truxtun Ave and Bldg 56	Yes		No		X
15	10044	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
16	10045	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
17	10042	Y	Truxtun Ave and Ave B	No		No	X	
18	10047	Y	Truxtun Ave near Bldg 6 and Weld shop	Yes		No		X
19	10124	Y	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
20	10128	N	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
21	10102	N	Hobson near Bldg 3	No		No	X	
22	10100	N	Hobson and Truxtun	No		No	X	
	10050		Unable to locate					
24	10048	N	Hobson and Truxtun	No		No	X	
	10066	N	Turnbull and North side of Bldg 64	N	54200 ppb	N		

## CH2M-JONES, LLC

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October 11, 2001

To: Charleston Caretaker Site Office (CSO)

From: CH2M-JONES, LLC

Subject: EXCAVATION PERMIT (034) AND DEWATERING PERMITS (001-024)  
FOR SCE&G UTILITY WORK

CH2M-JONES, LLC, in cooperation with the Navy has reviewed the provided drawing and Dewatering Permits 001 through 024 and Excavation Permit 034. CH2M-JONES, LLC has found several of the proposed work areas are in the vicinity of Solid Waste Management Units (SWMU's) and/or Area's of Concern (AOC's). Even though SCE&G's work is not within the footprint of a known SWMU or AOC, SCE&G should take into consideration that Contaminates of Concern (COC's) could be encountered. Connecting electrical conduits inside areas of contamination (SWMUs/AOCs) may provide migration pathways outside of the SWMU/AOC footprint. This condition has been observed in the industrial area (Zone E) of the Charleston Naval Complex.

Based on the above statement the below information is provided for specific work areas noting the type of work impacted and manholes:

Work performed east of Building 74 is in the vicinity of AOC 550. The Draft RCRA Facility Investigation (RFI) Report identified arsenic in groundwater. There was no soil contaminations identified for an industrial scenario. (Excavation and dewatering MH#10037,10089)

Work performed near the northeast side of Building 46 is in the vicinity of AOC 551. The Draft RFI Report identified lead and Benzo (a) Pyrenes (BEQs) as COC's in soils and thallium, arsenic, and PCE as COC's in groundwater. (Excavation and dewatering MH# 10110, 10111)

Work performed near Buildings 5 and 44 is in the vicinity of AOC 554 and SWMU 25. The Draft RFI Report indicates 5 metals (antimony, cadmium, chromium, copper and lead) and BEQ's as COC's in the soils. Groundwater COC's were identified as antimony, cadmium, chromium, nickel, a-chlordane, g-chlordane, tetrachloroethene and trichloroethene. (Excavation and dewatering MH#10096, 10124, 10128)

Work performed near Buildings 6 and 226 is in the vicinity of SWMU's 23, 63, and, 541, 542. The Draft RFI Report combined the before mentioned sites into one "Combined SWMU 23". Combined SWMU 23 identified 8 COC's in soil: antimony, cadmium, copper, lead, nickel, zinc, Aroclor-1254, and BEQs. No COC's were identified in groundwater. (Dewatering MH#10047, 10042, 10044, 10045)

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CH2M-JONES, LLC will be addressing groundwater contamination below the west end of Building 5 at the end of 2001 into the summer of 2002. Soil excavation at the west end of Building 226 is planned but no date has been scheduled. None of this work should interfere with SCE&G's work. No other scheduled remedial actions are in place at this time.

Respectfully,  
CH2M-JONES, LLC



Jed Heames  
Site Superintendent

# CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

Requester: Fill out top portion, Sign and date.

<b>Location:</b> East Side of BLD #3	<b>Contractor:</b> S.C.E & G.	<b>Date of Request:</b> 9-28-01
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**Scope of Work:** (Location, manhole number, etc.)

S.C.E & G. MH # 10091

<b>Date Permit Required:</b> 10-05-01	<b>Termination Date of Permit:</b> Jan 1, 2002
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<b>Signature of Requesting Official:</b> Richard W. Smith	<b>Date:</b> 9-28-01 <b>Phone Number:</b> 745-6381
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### Caretaker Site Office Review

<b>Points of Contact:</b> CPW : Robert Sagasser (work) 529-0653 (page) 570-0390  SCE&G: R.W. Smith (work) 745-6381  RDA: Gene Knisley Sewer POC: (work) 747-0010	1. Who is the current Land Owner/ Leasee? <u>Metal Trades</u> 2. Is the Area inside the CIA? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 3. Are any SWMU(s) impacted? If yes, list. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ( ) 4. Are any AOC(s) impacted? If yes, list. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ( ) 5. Has DHEC been notified? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 6. Was water tested for VOC's and metals? <input type="checkbox"/> Yes <input type="checkbox"/> No 7. Are results greater than NCSD limits? <input type="checkbox"/> Yes <input type="checkbox"/> No 8. Are results greater than TCLP limits? <input type="checkbox"/> Yes <input type="checkbox"/> No 9. Are Chlorides within range of Cooper River water? <input type="checkbox"/> Yes <input type="checkbox"/> No 10. Was NCSD (Kelly Singer) notified? <input type="checkbox"/> Yes <input type="checkbox"/> No 11. What is the serial # of forwarding letter to RDA? <u>N/A</u>
<b>Permit Approved?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

<b>CSO Authorizing Signature:</b> <u>Amy Daniell 10/2/01</u>	<b>Date out:</b> <u>20 May 2003</u>
<b>CH2MHILL/J.A.JONES Signature:</b> <u>[Signature] 10/1/01</u>	<b>Serial Number:</b> <u>0006</u>
<b>BEC Signature:</b> <u>[Signature] M.A. Best see attached ltr</u>	
<b>CSO Officer Signature:</b> <u>Amy Daniell</u>	

**\*Permit is approved contingent upon the following actions to be taken by permittee:**

Tests Required: Visual examination. Sample water and analyze for VOC's and metals.

Discharge Instructions: If constituents are below NPDES discharge limits - discharge to sanitary sewer after approval from NCSD

## CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

CSO Log Number = 006

Request Date = 28 September 2001

Comments Date = 9 May 2003

Location = East side of Bldg. 3 (Manhole #10091)

### Environmental Review Comments

This project proposes the following: (a) to install electrical conduit

The Navy has identified that in this area a release of hazardous substances has occurred, but corrective actions have not yet been implemented. It is recommended that contractor personnel ensure necessary precautions are taken to minimize dermal exposure to any workers who may come in contact with the water. A visual inspection and examination of water in the manhole shall be performed to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated, contact the Caretaker Site Office for further instruction on sampling, analysis, and disposal. Sample water and analyze for VOC's and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit, the water may be discharged to the sanitary sewer after obtaining approval from the North Charleston Sewer District. If results are above these limits, contact the Caretaker Site Office for disposition instructions.

If you have any questions, please contact Amy Daniell or Rick Nielson at the Caretaker Site Office at 743-2985.

25 April 2003

MEMORANDUM

From: M.A.Hunt, BRAC Environmental Coordinator

To: Amy Daniel, Caretaker Site Officer

Subject: SCE&G Manhole Dewater Permits

Amy,

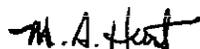
I have reviewed each of the Manhole Permit requests (1 through 24) submitted by SCE&G and have determined, based on location, potential intrusion by Cooper River tidal fluctuations and proximity to known groundwater contamination, the disposition of any water removed from these manholes prior to work. The list of manholes and information with respect to these factors is attached to this memorandum. It should be noted that MH 10050 could not be located on the maps provided by SCE&G. The permit and disposition instructions will be provided once the location is known.

For manholes listed in Column A in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. Sample water and analyze for VOCs and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit the water may be discharged to the sanitary sewer after obtaining approval from North Charleston Sewer District. If results are above these limits contact the CSO for disposition instructions.

For manholes listed in Column B in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. If no visible contamination is present the water can be discharged to the storm sewer system.

If you should have any questions please call me at 820-5607.

Respectfully,



M.A.Hunt  
BRAC Environmental Coordinator  
Charleston Naval Complex

Permit #	Manhole #	Ind Area	Location	Connection to Cooper (Y/N) (Based on tidal fluctuations)	Connection to Cooper (Based on chloride tests)	Proximity to Plume (Y/N)		Disposition of Water	
								Column A	Column B
1	10188	Y	East of Bldg 420	Yes		No			X
2	10096	Y	East of Bldg 5 (Near SY canteen)	No		Yes (SWMU 21/54)		X	
3	10095	Y	Near 10096	No		Yes (SWMU 21/54)		X	
4	10094	Y	3rd St. NE side of Bldg 43	No		No		X	
5	10093	Y	East Side of Bldg 3 (Near plating shop)	No		No		X	
6	10091	Y	Entrance to Bldg 56	No		No		X	
7	10111	Y	East side of Bldg 46	Yes		Yes (AOC 551)		X	
8	10110	Y	Between Bldgs 58 & 46	Yes		Yes (AOC 551)		X	
9	10091	Y	Entrance to Bldg 56	No	8250 ppm	No		X	
10	10090	Y	3rd St. by Bldg 221	Yes	16500ppm	No			X
11	10089	Y	Roe St and 3rd	Yes	16500ppm	No			X
12	10037	Y	Truxtun Ave and Roe	Yes		No			X
13	10039	Y	Truxtun Aven and Bldg 221	Yes		No			X
14	10040	Y	Truxtun Ave and Bldg 56	Yes		No			X
15	10044	Y	Ave B and Bldg 3 (near entrance to X31)	No		No		X	
16	10045	Y	Ave B and Bldg 3 (near entrance to X31)	No		No		X	
17	10042	Y	Truxtun Ave and Ave B	No		No		X	
18	10047	Y	Truxtun Ave near Bldg 6 and Weld shop	Yes		No			X
19	10124	Y	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)		X	
20	10128	N	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)		X	
21	10102	N	Hobson near Bldg 3	No		No		X	
22	10100	N	Hobson and Truxtun	No		No		X	
	10050		Unable to locate						
24	10048	N	Hobson and Truxtun	No		No		X	
	10066	N	Turnbull and North side of Bldg 64	N	54200 ppb	N			

# CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

Requester: Fill out top portion, Sign and date.

<b>Location:</b> <u>East Side of BLD # 3</u>	<b>Contractor:</b> <u>S.C.E &amp; G.</u>	<b>Date of Request:</b> <u>9-28-01</u>
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**Scope of Work:** (Location, manhole number, etc.)

S.C.E & G. MH # 10093

<b>Date Permit Required:</b> <u>10-05-01</u>	<b>Termination Date of Permit:</b> <u>JAN 1, 2002</u>
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<b>Signature of Requesting Official:</b> <u>Richard W. Smith</u>	<b>Date:</b> <u>9-28-01</u> <b>Phone Number:</b> <u>745-6381</u>
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### Caretaker Site Office Review

<b>Points of Contact:</b> <b>CPW :</b> Robert Sagasser (work) 529-0653 (page) 570-0390  <b>SCE&amp;G:</b> R.W. Smith (work) 745-6381  <b>RDA:</b> Gene Knisley Sewer POC: (work) 747-0010	<ol style="list-style-type: none"> <li>1. Who is the current Land Owner/ Leasee? <u>Metal Trades</u></li> <li>2. Is the Area inside the CIA? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</li> <li>3. Are any SWMU(s) impacted? If yes, list. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ( )</li> <li>4. Are any AOC(s) impacted? If yes, list. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ( )</li> <li>5. Has DHEC been notified? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</li> <li>6. Was water tested for VOC's and metals? <input type="checkbox"/> Yes <input type="checkbox"/> No</li> <li>7. Are results greater than NCSD limits? <input type="checkbox"/> Yes <input type="checkbox"/> No</li> <li>8. Are results greater than TCLP limits? <input type="checkbox"/> Yes <input type="checkbox"/> No</li> <li>9. Are Chlorides within range of Cooper River water? <input type="checkbox"/> Yes <input type="checkbox"/> No</li> <li>10. Was NCSD (Kelly Singer) notified? <input type="checkbox"/> Yes <input type="checkbox"/> No</li> <li>11. What is the serial # of forwarding letter to RDA? <u>N/A</u></li> </ol>
<b>Permit Approved?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

<b>CSO Authorizing Signature:</b> <u>Amy Daniell 10/12/01</u>	<b>Date out:</b> <u>20 May 2003</u>
<b>CH2MHILL/J.A. JONES Signature:</b> <u>[Signature] 10/1/01</u>	
<b>BEC Signature:</b> <u>[Signature] 4/24/03 see attached ltr</u>	<b>Serial Number:</b> <u>005</u>
<b>CSO Officer Signature:</b> <u>Amy Daniell</u>	

**\*Permit is approved contingent upon the following actions to be taken by permittee:**

Tests Required: Visual examination. Sample water and analyze for VOC's and metals.

Discharge Instructions: If constituents are below NPDES discharge limits - discharge to sanitary sewer after approval from NCSD

## CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

CSO Log Number = 005  
Request Date = 28 September 2001  
Comments Date = 9 May 2003  
Location = East side of Bldg. 3 (Manhole #10093)

### Environmental Review Comments

This project proposes the following: (a) to install electrical conduit

The Navy has identified that in this area a release of hazardous substances has occurred, but corrective actions have not yet been implemented. It is recommended that contractor personnel ensure necessary precautions are taken to minimize dermal exposure to any workers who may come in contact with the water. A visual inspection and examination of water in the manhole shall be performed to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated, contact the Caretaker Site Office for further instruction on sampling, analysis, and disposal. Sample water and analyze for VOC's and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit, the water may be discharged to the sanitary sewer after obtaining approval from the North Charleston Sewer District. If results are above these limits, contact the Caretaker Site Office for disposition instructions.

If you have any questions, please contact Amy Daniell or Rick Nielson at the Caretaker Site Office at 743-2985.

25 April 2003

MEMORANDUM

From: M.A.Hunt, BRAC Environmental Coordinator

To: Amy Daniel, Caretaker Site Officer

Subject: SCE&G Manhole Dewater Permits

Amy,

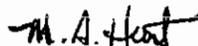
I have reviewed each of the Manhole Permit requests (1 through 24) submitted by SCE&G and have determined, based on location, potential intrusion by Cooper River tidal fluctuations and proximity to known groundwater contamination, the disposition of any water removed from these manholes prior to work. The list of manholes and information with respect to these factors is attached to this memorandum. It should be noted that MH 10050 could not be located on the maps provided by SCE&G. The permit and disposition instructions will be provided once the location is known.

For manholes listed in Column A in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. Sample water and analyze for VOCs and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit the water may be discharged to the sanitary sewer after obtaining approval from North Charleston Sewer District. If results are above these limits contact the CSO for disposition instructions.

For manholes listed in Column B in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. If no visible contamination is present the water can be discharged to the storm sewer system.

If you should have any questions please call me at 820-5607.

Respectfully,



M.A.Hunt  
BRAC Environmental Coordinator  
Charleston Naval Complex

Permit #	Manhole #	Ind Area	Location	Connection to Cooper (Y/N) (Based on tidal fluctuations)	Connection to Cooper (Based on chloride tests)	Proximity to Plume (Y/N)	Disposition of Water	
							Column A	Column B
1	10188	Y	East of Bldg 420	Yes		No		X
2	10096	Y	East of Bldg 5 (Near SY canteen)	No		Yes (SWMU 21/54)	X	
3	10095	Y	Near 10096	No		Yes (SWMU 21/54)	X	
4	10094	Y	3rd St. NE side of Bldg 43	No		No	X	
5	10093	Y	East Side of Bldg 3 (Near plating shop)	No		No	X	
6	10091	Y	Entrance to Bldg 56	No		No	X	
7	10111	Y	East side of Bldg 46	Yes		Yes (AOC 551)	X	
8	10110	Y	Between Bldgs 58 & 46	Yes		Yes (AOC 551)	X	
9	10091	Y	Entrance to Bldg 56	No	8250 ppm	No	X	
10	10090	Y	3rd St. by Bldg 221	Yes	16500ppm	No		X
11	10089	Y	Roe St and 3rd	Yes	16500ppm	No		X
12	10037	Y	Truxtun Ave and Roe	Yes		No		X
13	10039	Y	Truxtun Aven and Bldg 221	Yes		No		X
14	10040	Y	Truxtun Ave and Bldg 56	Yes		No		X
15	10044	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
16	10045	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
17	10042	Y	Truxtun Ave and Ave B	No		No	X	
18	10047	Y	Truxtun Ave near Bldg 6 and Weld shop	Yes		No		X
19	10124	Y	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
20	10128	N	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
21	10102	N	Hobson near Bldg 3	No		No	X	
22	10100	N	Hobson and Truxtun	No		No	X	
	10050	Unable to locate						
24	10048	N	Hobson and Truxtun	No		No	X	
	10066	N	Turnbull and North side of Bldg 64	N	54200 ppb	N		

# CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

Requester: Fill out top portion, Sign and date.

<b>Location:</b> <u>THIRD ST.</u> <u>North East side of BLD 43</u>	<b>Contractor:</b> <u>S.C.E &amp; G.</u>	<b>Date of Request:</b> <u>9-28-01</u>
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**Scope of Work:** (Location, manhole number, etc.)

S.C.E & G. MH # 10094

<b>Date Permit Required:</b> <u>10-05-01</u>	<b>Termination Date of Permit:</b> <u>JAN 1, 2002</u>
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<b>Signature of Requesting Official:</b> <u>Richard W. Smith</u>	<b>Date:</b> <u>9-28-01</u> <b>Phone Number:</b> <u>745-6381</u>
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## Caretaker Site Office Review

<b>Points of Contact:</b> <b>CPW :</b> Robert Sagasser (work) 529-0653 (page) 570-0390  <b>SCE&amp;G:</b> R.W. Smith (work) 745-6381  <b>RDA:</b> Gene Krisley Sewer POC: (work) 747-0010	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%; padding: 5px;">1. Who is the current Land Owner/ Leasee? <u>Metal Trades</u></td> <td style="width: 10%; text-align: center; padding: 5px;"><input checked="" type="checkbox"/></td> <td style="width: 10%; text-align: center; padding: 5px;">Yes</td> <td style="width: 10%; text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="width: 10%; text-align: center; padding: 5px;">No</td> </tr> <tr> <td style="padding: 5px;">2. Is the Area inside the CIA?</td> <td style="text-align: center; padding: 5px;"><input checked="" type="checkbox"/></td> <td style="text-align: center; padding: 5px;">Yes</td> <td style="text-align: center; padding: 5px;"><input checked="" type="checkbox"/></td> <td style="text-align: center; padding: 5px;">No ( )</td> </tr> <tr> <td style="padding: 5px;">3. Are any SWMU(s) impacted? If yes, list.</td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;">Yes</td> <td style="text-align: center; padding: 5px;"><input checked="" type="checkbox"/></td> <td style="text-align: center; padding: 5px;">No ( )</td> </tr> <tr> <td style="padding: 5px;">4. Are any AOC(s) impacted? If yes, list.</td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;">Yes</td> <td style="text-align: center; padding: 5px;"><input checked="" type="checkbox"/></td> <td style="text-align: center; padding: 5px;">No ( )</td> </tr> <tr> <td style="padding: 5px;">5. Has DHEC been notified?</td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;">Yes</td> <td style="text-align: center; padding: 5px;"><input checked="" type="checkbox"/></td> <td style="text-align: center; padding: 5px;">No</td> </tr> <tr> <td style="padding: 5px;">6. Was water tested for VOC's and metals?</td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;">Yes</td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;">No</td> </tr> <tr> <td style="padding: 5px;">7. Are results greater than NCSD limits?</td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;">Yes</td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;">No</td> </tr> <tr> <td style="padding: 5px;">8. Are results greater than TCLP limits?</td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;">Yes</td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;">No</td> </tr> <tr> <td style="padding: 5px;">9. Are Chlorides within range of Cooper River water?</td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;">Yes</td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;">No</td> </tr> <tr> <td style="padding: 5px;">10. Was NCSD (Kelly Singer) notified?</td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;">Yes</td> <td style="text-align: center; padding: 5px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 5px;">No</td> </tr> <tr> <td style="padding: 5px;">11. What is the serial # of forwarding letter to RDA? <u>N/A</u></td> <td colspan="4"></td> </tr> </table>	1. Who is the current Land Owner/ Leasee? <u>Metal Trades</u>	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	2. Is the Area inside the CIA?	<input checked="" type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No ( )	3. Are any SWMU(s) impacted? If yes, list.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No ( )	4. Are any AOC(s) impacted? If yes, list.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No ( )	5. Has DHEC been notified?	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No	6. Was water tested for VOC's and metals?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	7. Are results greater than NCSD limits?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	8. Are results greater than TCLP limits?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	9. Are Chlorides within range of Cooper River water?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	10. Was NCSD (Kelly Singer) notified?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	11. What is the serial # of forwarding letter to RDA? <u>N/A</u>				
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**Permit Approved?**      Yes      No

<b>CSO Authorizing Signature:</b> <u>Amy Daniell 10/12/01</u>	<b>Date out:</b> <u>20 May 2003</u>
<b>CH2MHILL/J.A.JONES Signature:</b> <u>[Signature]</u>	
<b>BEC Signature:</b> <u>M.A. Hunt 4/23/03 see attached ltr</u>	<b>Serial Number:</b> <u>004</u>
<b>CSO Officer Signature:</b> <u>Amy Daniell</u>	

**\*Permit is approved contingent upon the following actions to be taken by permittee:**

Tests Required: Visual examination. Sample water and analyze for VOC's and metals.

Discharge Instructions: If constituents are below NPDES discharge limits— discharge to sanitary sewer after approval from NCSD.

## CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

CSO Log Number = 004

Request Date = 28 September 2001

Comments Date = 9 May 2003

Location = Third St. northeast side of Bldg. 43 (Manhole #10094)

### Environmental Review Comments

This project proposes the following: (a) to install electrical conduit

The Navy has identified that in this area a release of hazardous substances has occurred, but corrective actions have not yet been implemented. It is recommended that contractor personnel ensure necessary precautions are taken to minimize dermal exposure to any workers who may come in contact with the water. A visual inspection and examination of water in the manhole shall be performed to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated, contact the Caretaker Site Office for further instruction on sampling, analysis, and disposal. Sample water and analyze for VOC's and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit, the water may be discharged to the sanitary sewer after obtaining approval from the North Charleston Sewer District. If results are above these limits, contact the Caretaker Site Office for disposition instructions.

If you have any questions, please contact Amy Daniell or Rick Nielson at the Caretaker Site Office at 743-2985.

25 April 2003

MEMORANDUM

From: M.A.Hunt, BRAC Environmental Coordinator

To: Amy Daniel, Caretaker Site Officer

Subject: SCE&G Manhole Dewater Permits

Amy,

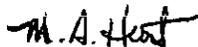
I have reviewed each of the Manhole Permit requests (1 through 24) submitted by SCE&G and have determined, based on location, potential intrusion by Cooper River tidal fluctuations and proximity to known groundwater contamination, the disposition of any water removed from these manholes prior to work. The list of manholes and information with respect to these factors is attached to this memorandum. It should be noted that MH 10050 could not be located on the maps provided by SCE&G. The permit and disposition instructions will be provided once the location is known.

For manholes listed in Column A in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. Sample water and analyze for VOCs and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit the water may be discharged to the sanitary sewer after obtaining approval from North Charleston Sewer District. If results are above these limits contact the CSO for disposition instructions.

For manholes listed in Column B in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. If no visible contamination is present the water can be discharged to the storm sewer system.

If you should have any questions please call me at 820-5607.

Respectfully,



M.A.Hunt  
BRAC Environmental Coordinator  
Charleston Naval Complex

Permit #	Manhole #	Ind Area	Location	Connection to Cooper (Y/N)	Connection to Cooper	Proximity to Plume (Y/N)	Disposition of Water	
				(Based on tidal fluctuations)	(Based on chloride tests)		Column A	Column B
1	10188	Y	East of Bldg 420	Yes		No		X
2	10096	Y	East of Bldg 5 (Near SY canteen)	No		Yes (SWMU 21/54)	X	
3	10095	Y	Near 10096	No		Yes (SWMU 21/54)	X	
4	10094	Y	3rd St. NE side of Bldg 43	No		No	X	
5	10093	Y	East Side of Bldg 3 (Near plating shop)	No		No	X	
6	10091	Y	Entrance to Bldg 56	No		No	X	
7	10111	Y	East side of Bldg 46	Yes		Yes (AOC 551)	X	
8	10110	Y	Between Bldgs 58 & 46	Yes		Yes (AOC 551)	X	
9	10091	Y	Entrance to Bldg 56	No	8250 ppm	No	X	
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12	10037	Y	Truxtun Ave and Roe	Yes		No		X
13	10039	Y	Truxtun Aven and Bldg 221	Yes		No		X
14	10040	Y	Truxtun Ave and Bldg 56	Yes		No		X
15	10044	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
16	10045	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
17	10042	Y	Truxtun Ave and Ave B	No		No	X	
18	10047	Y	Truxtun Ave near Bldg 6 and Weld shop	Yes		No		X
19	10124	Y	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
20	10128	N	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
21	10102	N	Hobson near Bldg 3	No		No	X	
22	10100	N	Hobson and Truxtun	No		No	X	
	10050	Unable to locate						
24	10048	N	Hobson and Truxtun	No		No	X	
	10066	N	Tumbull and North side of Bldg 64	N	54200 ppb	N		

# CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

Requester: Fill out top portion, Sign and date.

<b>Location:</b> 5th ST South Side of BLD #3	<b>Contractor:</b> S.C.E & G.	<b>Date of Request:</b> 9-28-01
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**Scope of Work:** (Location, manhole number, etc.)

S.C.E & G. MH #10095

<b>Date Permit Required:</b> 10-05-01	<b>Termination Date of Permit:</b> Jan 1, 2002
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<b>Signature of Requesting Official:</b> <i>Richard W. Smith</i>	<b>Date:</b> 9-28-01 <b>Phone Number:</b> 745-6381
---	--

### Caretaker Site Office Review

<b>Points of Contact:</b> CPW : Robert Sagasser (work) 529-0653 (page) 570-0390 SCE&G: R.W. Smith (work) 745-6381 RDA: Gene Knisley Sewer POC: (work) 747-0010	<table border="0" style="width: 100%;"> <tr> <td style="width: 20px;">1.</td> <td style="width: 50%;">Who is the current Land Owner/ Leasee? <u>Metal Trades</u></td> <td style="width: 10%;"><input checked="" type="checkbox"/></td> <td style="width: 10%;">Yes</td> <td style="width: 10%;"><input type="checkbox"/></td> <td style="width: 10%;">No</td> </tr> <tr> <td>2.</td> <td>Is the Area inside the CIA?</td> <td><input checked="" type="checkbox"/></td> <td>Yes</td> <td><input type="checkbox"/></td> <td>No</td> </tr> <tr> <td>3.</td> <td>Are any SWMU(s) impacted? If yes, list.</td> <td><input checked="" type="checkbox"/></td> <td>Yes</td> <td><input type="checkbox"/></td> <td>No (SWMU 21+54)</td> </tr> <tr> <td>4.</td> <td>Are any AOC(s) impacted? If yes, list.</td> <td><input type="checkbox"/></td> <td>Yes</td> <td><input checked="" type="checkbox"/></td> <td>No</td> </tr> <tr> <td>5.</td> <td>Has DHEC been notified?</td> <td><input type="checkbox"/></td> <td>Yes</td> <td><input checked="" type="checkbox"/></td> <td>No</td> </tr> <tr> <td>6.</td> <td>Was water tested for VOC's and metals?</td> <td><input type="checkbox"/></td> <td>Yes</td> <td><input type="checkbox"/></td> <td>No</td> </tr> <tr> <td>7.</td> <td>Are results greater than NCSD limits?</td> <td><input type="checkbox"/></td> <td>Yes</td> <td><input type="checkbox"/></td> <td>No</td> </tr> <tr> <td>8.</td> <td>Are results greater than TCLP limits?</td> <td><input type="checkbox"/></td> <td>Yes</td> <td><input type="checkbox"/></td> <td>No</td> </tr> <tr> <td>9.</td> <td>Are Chlorides within range of Cooper River water?</td> <td><input type="checkbox"/></td> <td>Yes</td> <td><input type="checkbox"/></td> <td>No</td> </tr> <tr> <td>10.</td> <td>Was NCSD (Kelly Singer) notified?</td> <td><input type="checkbox"/></td> <td>Yes</td> <td><input type="checkbox"/></td> <td>No</td> </tr> <tr> <td>11.</td> <td>What is the serial # of forwarding letter to RDA? <u>N/A</u></td> <td colspan="4"></td> </tr> </table>	1.	Who is the current Land Owner/ Leasee? <u>Metal Trades</u>	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	2.	Is the Area inside the CIA?	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	3.	Are any SWMU(s) impacted? If yes, list.	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No (SWMU 21+54)	4.	Are any AOC(s) impacted? If yes, list.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No	5.	Has DHEC been notified?	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No	6.	Was water tested for VOC's and metals?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	7.	Are results greater than NCSD limits?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	8.	Are results greater than TCLP limits?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	9.	Are Chlorides within range of Cooper River water?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	10.	Was NCSD (Kelly Singer) notified?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	11.	What is the serial # of forwarding letter to RDA? <u>N/A</u>				
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Permit Approved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																																																																			

<b>CSO Authorizing Signature:</b> <u><i>Amy Daniell</i></u> 10/12/01	<b>Date out:</b> <u>20 May 2003</u>
<b>CH2MHILL/J.A.JONES Signature:</b> <u><i>J.A. Jones</i></u> 10/11/01	
<b>BEC Signature:</b> <u><i>M.A. Hunt</i></u> 4/24/03 see attached ltr	<b>Serial Number:</b> <u>003</u>
<b>CSO Officer Signature:</b> <u><i>Amy Daniell</i></u>	

**\*Permit is approved contingent upon the following actions to be taken by permittee:**

Tests Required: Visual examination, Sample water and analyze for VOC's and metals.

Discharge Instructions: If constituents are below NPDES discharge limits - discharge to sanitary sewer after approval from NCSD.

## CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

CSO Log Number = 003

Request Date = 28 September 2001

Comments Date = 9 May 2003

Location = Third St. southside of Bldg. 3 (Manhole #10095)

### Environmental Review Comments

This project proposes the following: (a) to install electrical conduit

The Navy has identified that in this area a release of hazardous substances has occurred, but corrective actions have not yet been implemented. It is recommended that contractor personnel ensure necessary precautions are taken to minimize dermal exposure to any workers who may come in contact with the water. A visual inspection and examination of water in the manhole shall be performed to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated, contact the Caretaker Site Office for further instruction on sampling, analysis, and disposal. Sample water and analyze for VOC's and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit, the water may be discharged to the sanitary sewer after obtaining approval from the North Charleston Sewer District. If results are above these limits, contact the Caretaker Site Office for disposition instructions.

If you have any questions, please contact Amy Daniell or Rick Nielson at the Caretaker Site Office at 743-2985.

25 April 2003

MEMORANDUM

From: M.A.Hunt, BRAC Environmental Coordinator

To: Amy Daniel, Caretaker Site Officer

Subject: SCE&G Manhole Dewater Permits

Amy,

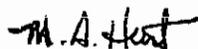
I have reviewed each of the Manhole Permit requests (1 through 24) submitted by SCE&G and have determined, based on location, potential intrusion by Cooper River tidal fluctuations and proximity to known groundwater contamination, the disposition of any water removed from these manholes prior to work. The list of manholes and information with respect to these factors is attached to this memorandum. It should be noted that MH 10050 could not be located on the maps provided by SCE&G. The permit and disposition instructions will be provided once the location is known.

For manholes listed in Column A in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. Sample water and analyze for VOCs and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit the water may be discharged to the sanitary sewer after obtaining approval from North Charleston Sewer District. If results are above these limits contact the CSO for disposition instructions.

For manholes listed in Column B in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. If no visible contamination is present the water can be discharged to the storm sewer system.

If you should have any questions please call me at 820-5607.

Respectfully,



M.A.Hunt  
BRAC Environmental Coordinator  
Charleston Naval Complex

Permit #	Manhole #	Ind Area	Location	Connection to Cooper (Y/N) (Based on tidal fluctuations)	Connection to Cooper (Based on chloride tests)	Proximity to Plume (Y/N)	Disposition of Water	
							Column A	Column B
1	10188	Y	East of Bldg 420	Yes		No		X
2	10096	Y	East of Bldg 5 (Near SY canteen)	No		Yes (SWMU 21/54)	X	
3	10095	Y	Near 10096	No		Yes (SWMU 21/54)	X	
4	10094	Y	3rd St. NE side of Bldg 43	No		No	X	
5	10093	Y	East Side of Bldg 3 (Near plating shop)	No		No	X	
6	10091	Y	Entrance to Bldg 56	No		No	X	
7	10111	Y	East side of Bldg 46	Yes		Yes (AOC 551)	X	
8	10110	Y	Between Bldgs 58 & 46	Yes		Yes (AOC 551)	X	
9	10091	Y	Entrance to Bldg 56	No	8250 ppm	No	X	
10	10090	Y	3rd St. by Bldg 221	Yes	16500ppm	No		X
11	10089	Y	Roe St and 3rd	Yes	16500ppm	No		X
12	10037	Y	Truxtun Ave and Roe	Yes		No		X
13	10039	Y	Truxtun Aven and Bldg 221	Yes		No		X
14	10040	Y	Truxtun Ave and Bldg 56	Yes		No		X
15	10044	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
16	10045	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
17	10042	Y	Truxtun Ave and Ave B	No		No	X	
18	10047	Y	Truxtun Ave near Bldg 6 and Weld shop	Yes		No		X
19	10124	Y	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
20	10128	N	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
21	10102	N	Hobson near Bldg 3	No		No	X	
22	10100	N	Hobson and Truxtun	No		No	X	
	10050		Unable to locate					
24	10048	N	Hobson and Truxtun	No		No	X	
	10066	N	Tumbull and North side of Bldg 64	N	54200 ppb	N		

AOL 554

# CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

Requester: Fill out top portion, Sign and date.

<b>Location:</b> <u>Third St. East of BLD #5</u>	<b>Contractor:</b> <u>S.C.E &amp; G.</u>	<b>Date of Request:</b> <u>9-28-01</u>
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**Scope of Work:** (Location, manhole number, etc.)

S.C.E & G. MH # 10096

<b>Date Permit Required:</b>	<b>Termination Date of Permit:</b> <u>JAN 1, 2002</u>
------------------------------	--

<b>Signature of Requesting Official:</b> <u>Richard W. Smith</u>	<b>Date:</b> <u>9-28-01</u>	<b>Phone Number:</b> <u>745-6381</u>
---	-----------------------------	--------------------------------------

### Caretaker Site Office Review

<b>Points of Contact:</b> <b>CPW:</b> Robert Sagasser (work) 529-0653 (page) 570-0390  <b>SCE&amp;G:</b> R.W. Smith (work) 745-6381  <b>RDA:</b> Gene Knisley Sewer POC: (work) 747-0010	1. Who is the current Land Owner/ Leasee? <u>Metal Trades</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	2. Is the Area inside the CIA?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	3. Are any SWMU(s) impacted? If yes, list. <u>(SWMU 2105A)</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
	4. Are any AOC(s) impacted? If yes, list. <u>*</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No <u>(AOC 55A)</u>
	5. Has DHEC been notified?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
	6. Was water tested for VOC's and metals?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	7. Are results greater than NCSD limits?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	8. Are results greater than TCLP limits?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	9. Are Chlorides within range of Cooper River water?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	10. Was NCSD (Kelly Singer) notified?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	11. What is the serial # of forwarding letter to RDA? <u>N/A</u>		

*\* see exam done attached letter*

**Permit Approved?**  Yes  No

**CSO Authorizing Signature:** Amy Daniell 10/12/01 **Date out:** 20 May 2003

**CH2MHILL/J.A.JONES Signature:** [Signature]

**BEC Signature:** M.A. Hunt 4/24/03 see attached ltr **Serial Number:** 002

**CSO Officer Signature:** Amy Daniell

**\*Permit is approved contingent upon the following actions to be taken by permittee:**

**Tests Required:** Visual examination. Sample water and analyze for VOC's & metals.

**Discharge Instructions:** If constituents are below NPDES discharge limits - may discharge to sanitary sewer after approval from NCSD.

## CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

CSO Log Number = 002

Request Date = 9 September 2001

Comments Date = 6 May 2003

Location = Third St. east of Bldg. 5 (Manhole #10096)

### Environmental Review Comments

This project proposes the following: (a) to install electrical conduit

The Navy has identified that in this area a release of hazardous substances has occurred, but corrective actions have not yet been implemented. It is recommended that contractor personnel ensure necessary precautions are taken to minimize dermal exposure to any workers who may come in contact with the water. A visual inspection and examination of water in the manhole shall be performed to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated, contact the Caretaker Site Office for further instruction on sampling, analysis, and disposal. Sample water and analyze for VOC's and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit, the water may be discharged to the sanitary sewer after obtaining approval from the North Charleston Sewer District. If results are above these limits, contact the Caretaker Site Office for disposition instructions.

If you have any questions, please contact Amy Daniell or Rick Nielson at the Caretaker Site Office at 743-2985.

25 April 2003

MEMORANDUM

From: M.A.Hunt, BRAC Environmental Coordinator

To: Amy Daniel, Caretaker Site Officer

Subject: SCE&G Manhole Dewater Permits

Amy,

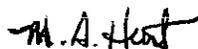
I have reviewed each of the Manhole Permit requests (1 through 24) submitted by SCE&G and have determined, based on location, potential intrusion by Cooper River tidal fluctuations and proximity to known groundwater contamination, the disposition of any water removed from these manholes prior to work. The list of manholes and information with respect to these factors is attached to this memorandum. It should be noted that MH 10050 could not be located on the maps provided by SCE&G. The permit and disposition instructions will be provided once the location is known.

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If you should have any questions please call me at 820-5607.

Respectfully,



M.A.Hunt  
BRAC Environmental Coordinator  
Charleston Naval Complex

Permit #	Manhole #	Ind Area	Location	Connection to Cooper (Y/N)	Connection to Cooper	Proximity to Plume (Y/N)		Disposition of Water	
				(Based on tidal fluctuations)	(Based on chloride tests)			Column A	Column B
1	10188	Y	East of Bldg 420	Yes		No			X
2	10096	Y	East of Bldg 5 (Near SY canteen)	No		Yes (SWMU 21/54)		X	
3	10095	Y	Near 10096	No		Yes (SWMU 21/54)		X	
4	10094	Y	3rd St. NE side of Bldg 43	No		No		X	
5	10093	Y	East Side of Bldg 3 (Near plating shop)	No		No		X	
6	10091	Y	Entrance to Bldg 56	No		No		X	
7	10111	Y	East side of Bldg 46	Yes		Yes (AOC 551)		X	
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12	10037	Y	Truxtun Ave and Roe	Yes		No			X
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20	10128	N	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)		X	
21	10102	N	Hobson near Bldg 3	No		No		X	
22	10100	N	Hobson and Truxtun	No		No		X	
	10050	Unable to locate							
24	10048	N	Hobson and Truxtun	No		No		X	
	10066	N	Turnbull and North side of Bldg 64	N	54200 ppb	N			

## CH2M-JONES, LLC

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October 11, 2001

To: Charleston Caretaker Site Office (CSO)  
From: CH2M-JONES, LLC

Subject: EXCAVATION PERMIT (034) AND DEWATERING PERMITS (001-024)  
FOR SCE&G UTILITY WORK

CH2M-JONES, LLC, in cooperation with the Navy has reviewed the provided drawing and Dewatering Permits 001 through 024 and Excavation Permit 034. CH2M-JONES, LLC has found several of the proposed work areas are in the vicinity of Solid Waste Management Units (SWMU's) and/or Area's of Concern (AOC's). Even though SCE&G's work is not within the footprint of a known SWMU or AOC, SCE&G should take into consideration that Contaminates of Concern (COC's) could be encountered. Connecting electrical conduits inside areas of contamination (SWMUs/AOCs) may provide migration pathways outside of the SWMU/AOC footprint. This condition has been observed in the industrial area (Zone E) of the Charleston Naval Complex.

Based on the above statement the below information is provided for specific work areas noting the type of work impacted and manholes:

Work performed east of Building 74 is in the vicinity of AOC 550. The Draft RCRA Facility Investigation (RFI) Report identified arsenic in groundwater. There was no soil contaminations identified for an industrial scenario. (Excavation and dewatering MH#10037,10089)

Work performed near the northeast side of Building 46 is in the vicinity of AOC 551. The Draft RFI Report identified lead and Benzo (a) Pyrenes (BEQs) as COC's in soils and thallium, arsenic, and PCE as COC's in groundwater. (Excavation and dewatering MH# 10110, 10111)

Work performed near Buildings 5 and 44 is in the vicinity of AOC 554 and SWMU 25. The Draft RFI Report indicates 5 metals (antimony, cadmium, chromium, copper and lead) and BEQ's as COC's in the soils. Groundwater COC's were identified as antimony, cadmium, chromium, nickel, a-chlordane, g-chlordane, tetrachloroethene and trichloroethene. (Excavation and dewatering MH#10096, 10124, 10128)

Work performed near Buildings 6 and 226 is in the vicinity of SWMU's 23, 63, and, 541, 542. The Draft RFI Report combined the before mentioned sites into one "Combined SWMU 23". Combined SWMU 23 identified 8 COC's in soil: antimony, cadmium, copper, lead, nickel, zinc, Aroclor-1254, and BEQs. No COC's were identified in groundwater. (Dewatering MH#10047, 10042, 10044, 10045)

Work performed near the west end of Building 6 and 35 is in the vicinity of SWMU 70 and AOC's 530 and 531. The Draft RFI Report revealed the following: SWMU 70 at the west end of Building 6 found copper, lead, and BEQ's in the soil. Groundwater analysis identified antimony, chromium, thallium, chloroform, 1,2-dichloroethene, tetrachloroethene, and trichloroethene. AOC 530 located on the west end of Building 35 was found to have arsenic and BEQ's in soil and shallow groundwater showed arsenic and 1,1-dichloroethene present. AOC 531, also at the west end of Building 35, was found to have arsenic and BEQ's in the soil. No groundwater COC's were identified. (Dewatering MH#10048, 10050, 10100, and 10102)

CH2M-JONES, LLC will be addressing groundwater contamination below the west end of Building 5 at the end of 2001 into the summer of 2002. Soil excavation at the west end of Building 226 is planned but no date has been scheduled. None of this work should interfere with SCE&G's work. No other scheduled remedial actions are in place at this time.

Respectfully,  
CH2M-JONES, LLC



Jed Heames  
Site Superintendent

# CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

Requester: Fill out top portion, Sign and date.

<b>Location:</b> Wilson Ave East side of DLD 420	<b>Contractor:</b> S.C.E & G.	<b>Date of Request:</b> 9-28-01
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**Scope of Work:** (Location, manhole number, etc.)

S.C.E & G. MH # 10188

<b>Date Permit Required:</b> 10-5-01	<b>Termination Date of Permit:</b> Jan 1, 2002
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<b>Signature of Requesting Official:</b> Richard W. Smith	<b>Date:</b> 9-28-01 <b>Phone Number:</b> 745-6381
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### Caretaker Site Office Review

<b>Points of Contact:</b> CPW : Robert Sagasser (work) 529-0653 (page) 570-0390  SCE&G: R.W. Smith (work) 745-6381  RDA: Gene Knisley Sewer POC: (work) 747-0010	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%; padding: 2px;">1. Who is the current Land Owner/ Leasee? <u>Metal Trades</u></td> <td style="width: 10%; text-align: center; padding: 2px;"><input checked="" type="checkbox"/></td> <td style="width: 10%; text-align: center; padding: 2px;">Yes</td> <td style="width: 10%; text-align: center; padding: 2px;"><input type="checkbox"/></td> <td style="width: 10%; text-align: center; padding: 2px;">No</td> </tr> <tr> <td style="padding: 2px;">2. Is the Area inside the CIA?</td> <td style="text-align: center; padding: 2px;"><input checked="" type="checkbox"/></td> <td style="text-align: center; padding: 2px;">Yes</td> <td style="text-align: center; padding: 2px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 2px;">No</td> </tr> <tr> <td style="padding: 2px;">3. Are any SWMU(s) impacted? If yes, list.</td> <td style="text-align: center; padding: 2px;"><input type="checkbox"/></td> <td style="text-align: center; padding: 2px;">Yes</td> <td style="text-align: center; padding: 2px;"><input checked="" type="checkbox"/></td> <td style="text-align: center; padding: 2px;">No ( )</td> </tr> <tr> <td style="padding: 2px;">4. Are any AOC(s) impacted? 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Was water tested for VOC's and metals?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	7. Are results greater than NCSD limits?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	8. Are results greater than TCLP limits?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	9. Are Chlorides within range of Cooper River water?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	10. Was NCSD (Kelly Singer) notified?	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	11. What is the serial # of forwarding letter to RDA? <u>NA</u>				
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**Permit Approved?**      Yes      No

<b>CSO Authorizing Signature:</b> <u>Amy Daniell 10/12/01</u>	<b>Date out:</b> <u>20 May 2003</u>
<b>CH2MHILL/J.A.JONES Signature:</b> <u>[Signature] 10/11/01</u>	
<b>BEC Signature:</b> <u>M.A. Hunt 4/23/03</u>	<b>Serial Number:</b> <u>001</u>
<b>CSO Officer Signature:</b> <u>Amy Daniell</u>	

**\*Permit is approved contingent upon the following actions to be taken by permittee:**

Tests Required: Perform visual inspection for discoloration or odor.

Discharge Instructions: If no visible contamination, discharge to storm sewer.

## CHARLESTON CARETAKER SITE OFFICE DEWATERING PERMIT

CSO Log Number = 001

Request Date = 5 October 2001

Comments Date = 6 May 2003

Location = Hobson Ave. on east side of Bldg. 420 (Manhole #10188)

### Environmental Review Comments

This project proposes the following: (a) to install electrical conduit

The Navy has identified that in this area a release of hazardous substances has occurred, but at concentrations that do not require removal or remedial action. It is recommended that contractor personnel ensure necessary precautions are taken to minimize dermal exposure to any workers who may come in contact with the water. A visual inspection and examination of water in the manhole shall be performed to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated, contact the Caretaker Site Office for further instruction on sampling, analysis, and disposal. If no visible contamination is present, the water can be discharged to the storm sewer system.

If you have any questions, please contact Amy Daniell or Rick Nielson at the Caretaker Site Office at 743-2985.

25 April 2003

MEMORANDUM

From: M.A.Hunt, BRAC Environmental Coordinator

To: Amy Daniel, Caretaker Site Officer

Subject: SCE&G Manhole Dewater Permits

Amy,

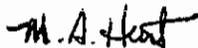
I have reviewed each of the Manhole Permit requests (1 through 24) submitted by SCE&G and have determined, based on location, potential intrusion by Cooper River tidal fluctuations and proximity to known groundwater contamination, the disposition of any water removed from these manholes prior to work. The list of manholes and information with respect to these factors is attached to this memorandum. It should be noted that MH 10050 could not be located on the maps provided by SCE&G. The permit and disposition instructions will be provided once the location is known.

For manholes listed in Column A in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. Sample water and analyze for VOCs and metals. The manhole may be dewatered and the water containerized and stored temporarily adjacent to the manhole while awaiting disposition instructions. If analysis shows that any constituents present are below NPDES discharge limits as specified in the Charleston Naval Base permit the water may be discharged to the sanitary sewer after obtaining approval from North Charleston Sewer District. If results are above these limits contact the CSO for disposition instructions.

For manholes listed in Column B in the attachment the following disposition is provided; Perform visual inspection and examination of water in manhole to determine if there is any discoloration or odor that would indicate contamination. If visibly contaminated contact Caretaker Site Officer for further instruction on sampling, analysis and disposal. If no visible contamination is present the water can be discharged to the storm sewer system.

If you should have any questions please call me at 820-5607.

Respectfully,



M.A.Hunt  
BRAC Environmental Coordinator  
Charleston Naval Complex

Permit #	Manhole #	Ind Area	Location	Connection to Cooper (Y/N) (Based on tidal fluctuations)	Connection to Cooper (Based on chloride tests)	Proximity to Plume (Y/N)	Disposition of Water	
							Column A	Column B
1	10188	Y	East of Bldg 420	Yes		No		X
2	10096	Y	East of Bldg 5 (Near SY canteen)	No		Yes (SWMU 21/54)	X	
3	10095	Y	Near 10096	No		Yes (SWMU 21/54)	X	
4	10094	Y	3rd St. NE side of Bldg 43	No		No	X	
5	10093	Y	East Side of Bldg 3 (Near plating shop)	No		No	X	
6	10091	Y	Entrance to Bldg 56	No		No	X	
7	10111	Y	East side of Bldg 46	Yes		Yes (AOC 551)	X	
8	10110	Y	Between Bldgs 58 & 46	Yes		Yes (AOC 551)	X	
9	10091	Y	Entrance to Bldg 56	No	8250 ppm	No	X	
10	10090	Y	3rd St. by Bldg 221	Yes	16500ppm	No		X
11	10089	Y	Roe St and 3rd	Yes	16500ppm	No		X
12	10037	Y	Truxtun Ave and Roe	Yes		No		X
13	10039	Y	Truxtun Aven and Bldg 221	Yes		No		X
14	10040	Y	Truxtun Ave and Bldg 56	Yes		No		X
15	10044	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
16	10045	Y	Ave B and Bldg 3 (near entrance to X31)	No		No	X	
17	10042	Y	Truxtun Ave and Ave B	No		No	X	
18	10047	Y	Truxtun Ave near Bldg 6 and Weld shop	Yes		No		X
19	10124	Y	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
20	10128	N	Hobson and McMillan near Rigger shop	No		Yes (SWMU 21/54)	X	
21	10102	N	Hobson near Bldg 3	No		No	X	
22	10100	N	Hobson and Truxtun	No		No	X	
	10050		Unable to locate					
24	10048	N	Hobson and Truxtun	No		No	X	
	10066	N	Turnbull and North side of Bldg 64	N	54200 ppb	N		