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MONITORING WELL REQUEST FOR AREA OF CONCERN 561 (AOC 561) ZONE E CNC
CHARLESTON SC
3/22/2002
SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL



2600 Bull Street
Columbia, SC 29201-1708

22 March 2002

CERTIFIED MAIL

Ms. Amy Daniell
Caretakers Site Office
1895 Avenue F
Charleston Naval Base
North Charleston, SC 29405

RE: Naval Base Charleston (CNAV)
Charleston, South Carolina
SC0-170-022-560

Monitoring Well Request
Zone E, AOC 561
Revision 0, Dated 20 March 2002, Received 21 March 2002

Dear Ms. Daniell:

The above referenced request has been reviewed with respect to R.61-79.264 Subpart F of the South Carolina Hazardous Waste Management Regulations and R.61-71 of the South Carolina Well Standards and Regulations. This request is for the installation of one permanent monitoring well to monitor the surficial aquifer at this AOC. The permanent monitoring well should be completed to a maximum depth of approximately twenty feet.

I have not received or reviewed the associated workplan or EPA comments for this site. Therefore, the monitoring well approval is not to be considered as concurrence or approval of the associated workplan or as fulfillment of the EPA comment. Additional assessment, including additional monitoring wells, may be necessary.

Please direct your attention to Condition 2 of this well approval. Condition 2 states "*That the latitude and longitude, surveyed elevations, boring and/or geologist logs, and actual construction details for each well be submitted to the Department within 30 days after installation of the last well.*" Failure to meet this condition may be considered a violation of the monitoring well approval.

DD020209.PMB

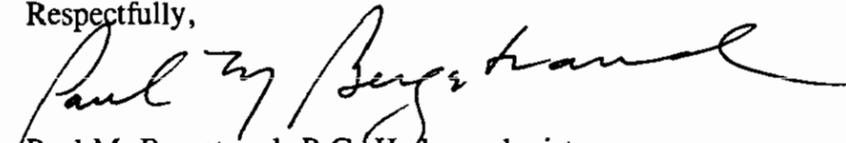
SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

Daniell
Monitoring Well Request
22 March 2002

Condition 2 has not been met with the previous four monitoring well approvals issued for this site. The Navy should provide the data listed in Condition 2 for the previous well installations within the next thirty days. Should the Navy wish to submit this information on a different schedule, the Department will be available to discuss the proposal.

Attached, please find a copy of the proposed well locations. A copy of the well approval form and this letter should be on site during drilling operations. Should there be any questions, please contact me at 803.896.4016 or by e-mail at bergstpm@dhec.state.sc.us.

Respectfully,



Paul M. Bergstrand, P.G. Hydrogeologist
RCRA Hydrogeology Section
Division of Hydrogeology
Bureau of Land and Waste Management

Enclosures
HW-02-026

CC: Cheryl Coleman, Enforcement Section, BLWM
Christine Sanford-Coker, Trident District EQC
Michael Bishop, BOW
Todd Adams, BOW
Joel Padgett, BLWM
David Scaturo, P.E., P.G., Manager Hazardous Waste Permitting Section
Rob Harrell, P.E., Southern Division, Charleston
Dann Spariosu, US EPA, Region 4, 61 Forsyth St. SW, 4WD-FFB, Atlanta GA 30303
Tim Fredrick, Gannett Fleming, Inc., 230 Peachtree St., NW, Suite 2750, Atlanta GA 30303
Tom Beisel, CH2M Hill, 115 Perimeter Center Place NE, Suite 700, Atlanta GA 30346-1278
Dean Williamson, CH2M Hill, 3011 S.W. Williston Road, Gainesville, FL 32608-3928



2600 Bull Street
Columbia, SC 29201-1708

Well Installation Approval

Approval is hereby granted to: Ms. Daniell of the Naval Base Charleston for

Monitoring Well at AOC 561
Naval Base Charleston
Charleston County

Date of Issue: 21 March 2002
Approval Number: HW-02-026

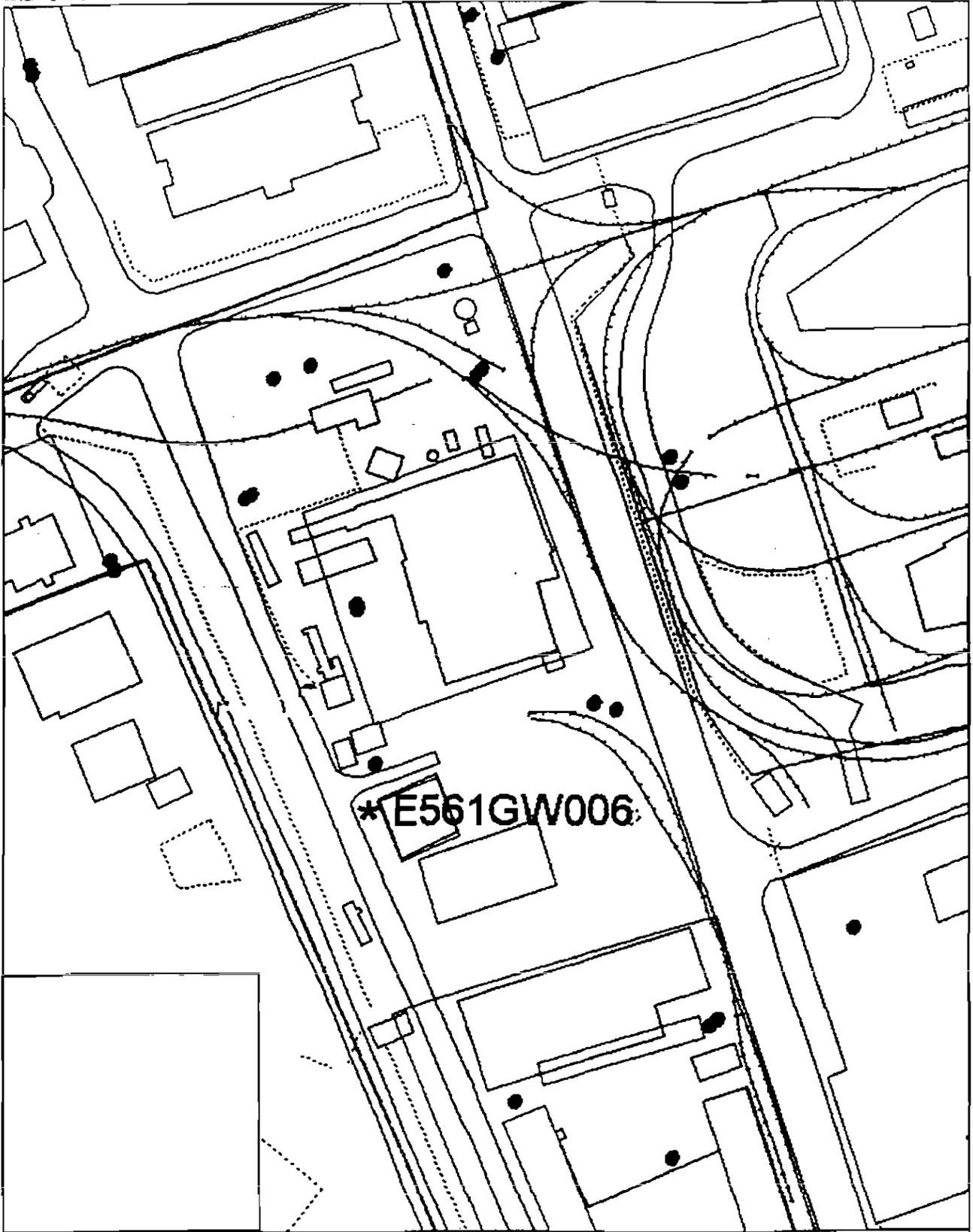
for the construction of one permanent monitoring well designated in accordance with the construction plans and specifications submitted to the Department on 20 March 2002, (Beisel to Bergstrand). The well will be constructed within the surficial aquifer to a maximum depth twenty feet below the surface to monitor aquifer conditions.

Conditions:

1. A driller certified to operate in the State of South Carolina must install the wells.
2. That the latitude and longitude, surveyed elevations, boring and/or geologist logs, and actual construction details for each well be submitted to the Department within 30 days after installation of the last well. The collection of GPS data is encouraged.
3. All well construction and sampling derived wastes, including but not limited to, drill cuttings and fluids, development and purge water, must be managed properly and in accordance with all applicable state and federal requirements. If containerized, each vessel shall be clearly labeled with regard to contents, source, and date of activity.
4. That the wells are labeled with an identification plate constructed of a durable material affixed to the casing or surface pad where it is readily visible. The plate shall provide the monitoring well identification number, date of construction, static water level and driller name and state certification number.
5. Field equipment, including sampling probes, must be decontaminated by steam cleaning or other suitable methods before use and between sampling locations. Well screens and casing must be decontaminated before installation.
6. That notice be given to Christine Sanford-Coker, Charleston District EQC Hydrogeologist, during normal business hours at (843) 740-1590 a minimum of 48 hours before the initiation of drilling activities.

This approval is pursuant to the provisions of Section 44-55-40 of the 1976 South Carolina Code of Laws and the Department of Health and Environmental Control Well Standards and Regulations, R.61-71.

Paul M. Bergstrand, P.G. Hydrogeologist
RCRA Hydrogeology Section
Division of Hydrogeology
Bureau of Land and Waste Management



- Groundwater Well
- ~ Railroads
- - - Fence
- ~ Roads - Lines
- AOC Boundary
- SWMU Boundary

* Proposed Well

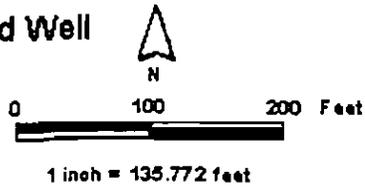


Figure 1
Proposed New Well Location
AOC 561
Charleston Naval Complex

CH2MHILL

TABLE 1
Monitoring Well Installation Information Summary
AOC 561, Zone E, Charleston Naval Complex

Well Identification	Well Diameter (Inner & Outer)	Method of Drilling	Screen Depth (ft bbs)	Screen Length (ft)	Screen Mesh/Slot Size	Expected Total Depth of Well (ft bbs)	Material of Well Construction	Analysis Parameters	Development (e.g., low flow, baller, etc.)	Grout (Type, Mixture Ratio, etc.)	Finish Type	Purpose for Well	Other/ Comments
E561GW006	2-inch (inner)	Hollow Stem Auger	5 to 15	10-feet	0.01	10 to 18	Schedule 40 PVC	VOC/SVOC	Low Flow Pump with surge block	Portland Type II with 5% Bentonite	flush-mount	Groundwater monitoring	