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CNC CHARLESTON
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MONITORING WELL ABANDONMENT REQUEST ZONE I GRID WELLS 03D, 004 04D, 009,
09D, 010, 10D, 019 AND 19D CNC CHARLESTON SC

11/15/2002

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL



2600 Bull Street
Columbia, SC 29201-1708

15 November 2002

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 Abandonment Request
Zones I, Grid Wells 03D, 004, 04D, 009, 09D, 010, 10D, 019 & 19D
Revision 0, Dated 26 October 2002, Received 26 October 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 abandonment of 9 permanent monitoring wells as described in the correspondence referenced above. Zone I Grid Well 03D was omitted from the original request. The Department has approved the abandonment of 26 monitoring wells in correspondence dated 24 October 2002.

The well abandonment request for the four Zone I Grid Well pairs was not approved due to the following concerns:

- Grid well pair GDIGW004 and GDIGW04D consistently reported dioxin congeners in 3 rounds of samples. A source for the contamination has not been identified. The nearest wells, GDIGW005 and GDIGW05D, are approximately 600 feet to the northeast.
- Grid well pair IGDIGW019 and GDIGW19D are more than 730 feet downgradient of Grid Well GDIGW004 and GDIGW04D and display some of the same dioxin compounds.

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- Grid well GDIGW010 has reported dioxin in 2 of three sampling events while grid well pair GDIGW009, GDIGW09D, and grid well GDIGW10D may not have been sampled for dioxins.

The Department noted consistent detections of Dioxins, reported as TEQs, in shallow and deep wells IGDIGW004 and IGDIGW04D. The reported values would indicate a release to the environment. The reported data are below the calculated TEQ screening values, however the Department expresses concern because a source of the Dioxins has never been addressed. The preferred action would be for the Navy to install up and down gradient monitoring wells, sample all monitoring wells for Dioxins, evaluate the data and report the conclusions. However, the receipt of TEQ data tables, Zone H Dioxin data and other related documents indicate the Dioxin detections are all below MCL values and are therefore within an acceptable range

Attached, please find a list of the approved monitoring well abandonment locations. The monitoring well abandonment record shall be submitted to the Department within 30 days after abandonment of the last well. The abandonment record must include applicable information as stated in R.61-71.H.1.f, **and the actual monitoring well abandonment details for each well.**

Abandonment shall be by forced injection of grout or pouring through a tremie pipe starting at the bottom of the well and proceeding to the surface in one continuous operation. The well shall be filled with either neat cement, bentonite-cement, or 20% high solids sodium bentonite grout, from the bottom of the well to the land surface. All well abandonment derived wastes, including but not limited to, drill cuttings, drilling fluids, concrete and well casings, must be managed properly and in accordance with all applicable state and federal requirements.

Ms. Daniell

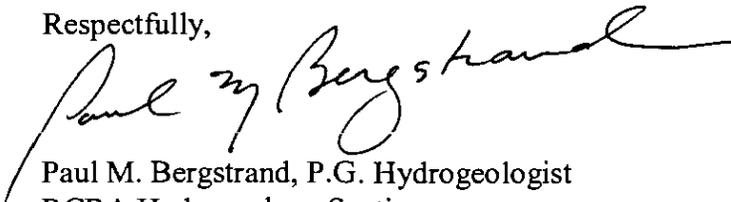
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Please provide a minimum of 48 hours prior notice before the initiation of well abandonment activities to Christine Sanford-Coker, Charleston District EQC Hydrogeologist, at 843.740.1590 and Paul Bergstrand at 803.896.4016.

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

CC:

Christine Sanford-Coker, Trident District EQC

Jerry Stamps, BLWM

Michael Bishop, BOW

Todd Adams, BOW

Joel Padgett, BLWM

Dann Speriosu, USEPA

Rob Harrell, P.E., Southern Division, Charleston

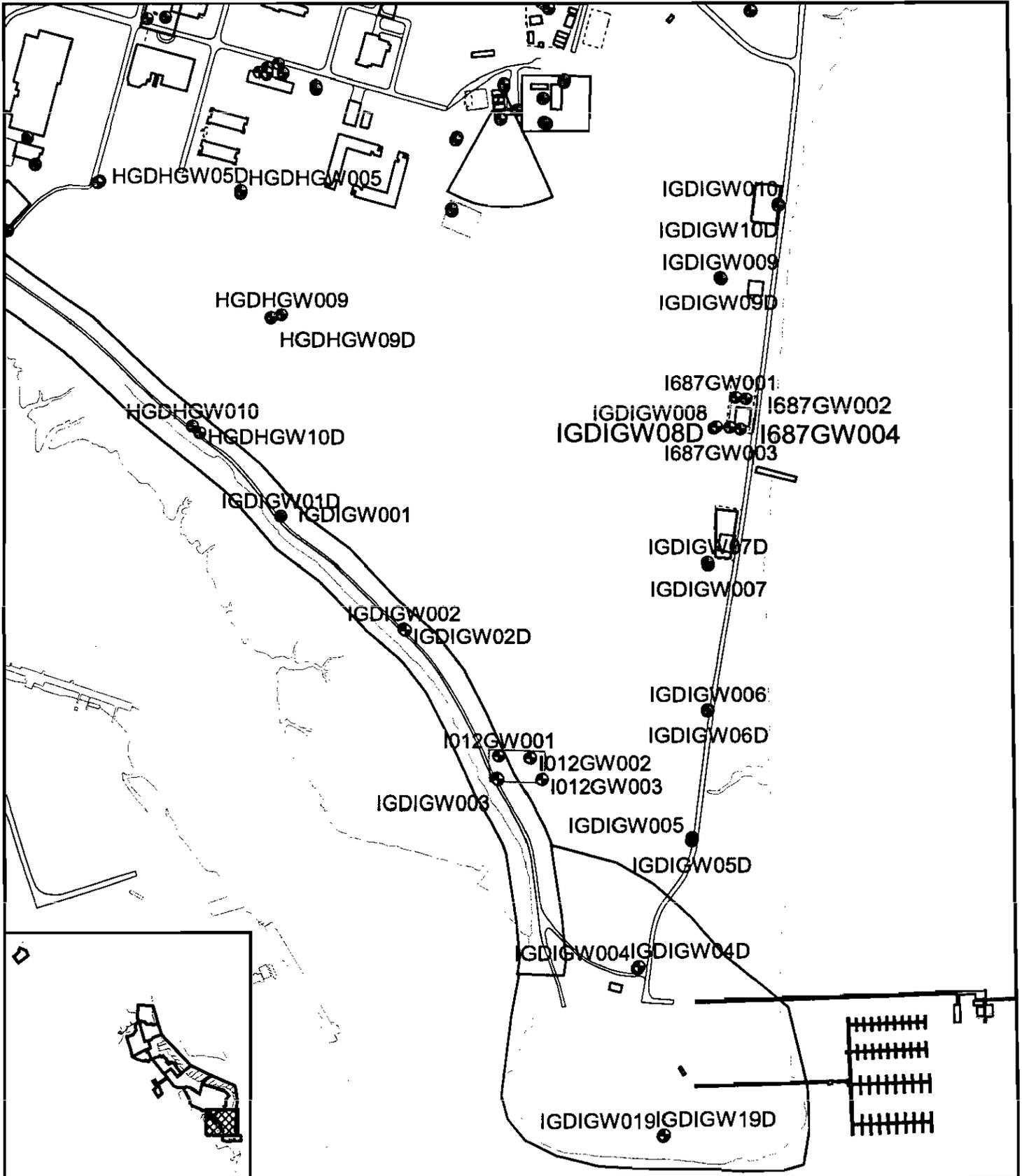
Tom Beisel, CH2M Hill, 115 Perimeter Center Place NE., Suite 700, Atlanta GA 30346-1278

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MONITORING WELLS APPROVED FOR ABANDONMENT
15 November 2002

Well Number	Well Depth (feet)
IGDIGW03D	Not Provided
IGDIGW004	Not Provided
IGDIGW04D	Not Provided
IGDIGW009	Not Provided
I012GW09D	Not Provided
I012GW010	Not Provided
I012GW10D	Not Provided
IGDIGW019	Not Provided
IGDIGW19D	Not Provided

NOTE: Original figure created in color



- Groundwater Well
- - - Fence
- Roads - Lines
- ▭ AOC Boundary
- ▭ SWMU Boundary
- ▭ Buildings
- Zone Boundary

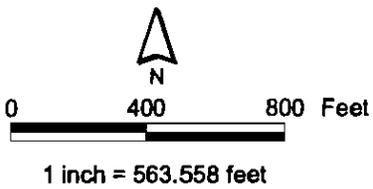


Figure 1
Candidate Wells for Abandonment
Zones H and I
Charleston Naval Complex

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