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MCRD PARRIS ISLAND
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SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
APPROVAL OF GEOTHERMAL WELL REQUEST FOR CHILD DEVELOPMENT CENTER
WITH ATTACHMENTS MCRD PARRIS ISLAND SC
10/12/2010
SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

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October 12, 2010

Commanding Officer
NAVFAC Southeast
ATTN: Mr. Charles Cook, P.E.
PO Box 30
Ajax Street North, Bldg 135
Jacksonville, Florida 32212

RE: Approval of Geothermal Well Request for the Child Development Center
Marine Corp Recruit Depot (MCRD)
Parris Island
SC6 170 022 762

Dear Mr. Cook:

The Corrective Action Engineering and the Hydrogeology Sections of the South Carolina Department of Health and Environmental Control (Department) received the Geothermal Well Request for the Child Development Center on September 10, 2010. The Department reviewed the document with respect to applicable sections of the South Carolina Hazardous Waste Management Regulations (SCHWMR). Based on this review, the Department approves this request. Please refer to the attached hydrogeology memoranda.

The Department's concurrence is based on information presented by MCRD to date; any information found to be contradictory may require further action. If you have any questions regarding this issue, please contact me at (803) 896-4218.

Sincerely,

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

cc:

Tim Harrington, MCRD Parris Island
Annie Gerry, Hydrogeology
Priscilla Wendt, SCDNR
Russell Berry, EQC Region 8, Beaufort

Lila Llamas, EPA Region 4
Tom Dillon, NOAA (via email)
Mark Sladic, P.E., TtNUS
Lisa Donohoe, MCRD Parris Island



C. Earl Hunter, Commissioner

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

MEMORANDUM

TO: Meredith Amick, Engineering Associate
Corrective Action Engineering Section
Division of Waste Management
Bureau of Land and Waste Management

FROM: Annie May Gerry, Hydrogeologist
Federal Facilities Groundwater Section
Division of Waste Management
Bureau of Land and Waste Management

DATE: October 12, 2010

RE: Marine Corps Recruit Depot
SC6 170 022 762

Geothermal Well Request for at the Child Development Center
Dated September 10, 2010

The MCRD requested to install 75 geothermal wells near the Child Development Center. The geothermal well system at the CDC will be used to heat and cool the building as well as provide domestic hot water. The Federal Facilities Groundwater Section reviewed the proposal to ensure that the wells are not installed in or near areas of known contamination. In addition, the MCRD requested a variance from the South Carolina Well Standards (R.61-71) to use SuperGrout, in lieu of the grouts allowed in the regulations.

Based on the information provided, the Department approves the use of SuperGrout for well installation of the geothermal wells.

Please find the geothermal well approval forms attached with the approval for the use of SuperGrout.

Should you have any questions regarding this request feel free to contact me at (803) 896-4194 or at GerryAM@DHEC.SC.GOV

DD100399.AMG

Geothermal Well Approval

Date of Issuance: October 12, 2010

Approval #: HW-10-046

Approval is hereby granted to: Mr. Tim Harrington

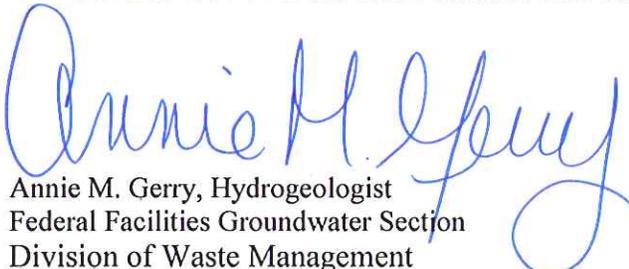
Facility: Marine Corp Recruit Depot
Beaufort, South Carolina
SC6 170 022 762
Beaufort County

This approval is for the installation of seventy-five (75) wells located in three (3) well fields. The geothermal wells are to be installed in the locations as illustrated on the attached figures and per the proposed construction details provided in the September 10, 2010 (Harrington to Bowers) correspondence with the use of the approved SuperGrout. The geothermal wells are to be installed following all of the applicable requirements of R.61-71 of the South Carolina Well Standards.

R.61-71 requires the following:

1. All wells shall be drilled, constructed, and abandoned by a South Carolina certified well driller per R.61-71.D.1.
2. A Water Well Record Form (1903) or other form provided or approved by the Department shall be completed and submitted to **Annie Gerry, South Carolina Department of Health and Environmental Control, Bureau of Land & Waste Management, 2600 Bull Street, Columbia, SC, 29201**, within 30 days after completion of field work as requested. The form should contain the "as-built" construction details and all other information required by R.61-71.J.4.
3. All geothermal wells shall be grouted within five days after borehole completion using the thermal grout mixture (SuperGrout) proposed in the September 10, 2010 correspondence in lieu of bentonite-cement as required by R.61-71.J.2.e.
4. All geothermal wells shall be labeled as required by R.61-71.J.3.

This approval is pursuant to the provisions of Section 44-55-40 of the 1976 South Carolina Code of Laws and R.61-71 of the South Carolina Well Standards, dated April 26, 2002.


Annie M. Gerry, Hydrogeologist
Federal Facilities Groundwater Section
Division of Waste Management
Bureau of Land and Waste Management