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LETTER REGARDING SOUTH CAROLINA DEPARTMENT OF HEALTH AND
ENVIRONMENTAL CONTROL REVIEW OF FINAL ASSESSMENT REPORT DATED 30
SEPTEMBER 1999 AND NO FURTHER ACTION (NFA) FOR ZONE H SITE 2 BUILDING NS-
53 CNC CHARLESTON SC
11/12/1999
SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL



12 November 1999

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Underground
Storage Tank Management

2600 Bull Street
Columbia, SC 29201-1708

COMMISSIONER: Department of the Navy
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John H. Burriss Chairman North Charleston, SC 29419-9010
William M. Hull, Jr., MD Attention: Mr. Gabriel Magwood
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Re: Final Assessment Report dated 30 September 1999
Zone H/Site 2-Building NS 53 (Site Identification # 00957)
Charleston Naval Complex/Charleston Naval Base
Charleston, SC
Charleston County

Dear Mr. Magwood:

The author has completed technical review of the referenced document. As submitted, the report provides a narrative and summary of previous assessment activities and analytical results from additional sampling conducted to establish the environmental fate of suspected contamination at the subject property. The analytical results presented and applied interpretations appear to indicate that a reasonable delineation and characterization of the extent and severity of soil and groundwater contamination have been developed for the Building NS 53 site. This information and data were then utilized in evidential discussion(s) for consideration of employing free product source removal (groundwater contamination) and monitored intrinsic remediation (natural attenuation/biodegradation) as the rehabilitation strategy for the referenced site.

The Department considers the goal of groundwater corrective actions as the restoration of impacted waters to a quality consistent with the use associated with the described water class in a reasonable and timely manner. As groundwaters of the State are currently classified as Class GB (underground source of drinking water), the appropriate remedial goal for this site will be the quality standards established in R.61-68 (Water Classifications and Standards), if reasonably and technically attainable, utilizing available technology. Selection of a remedial alternative necessary to attain the above classification must be technically justified and demonstrate appropriate protection of human health and the environment, prevent continued migration of contamination, reduce the mass of contaminants in all affected media and have predictable/measurable parameters sufficient to demonstrate the efficacy of the remedial alternative implemented.

Although the author concurs with the proposed free product remedial endeavors, proposals that incorporate monitored natural attenuation must provide sufficient data to demonstrate the groundwater environment's assimilative capacity to provide for intrinsic biodegradation/natural

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attenuation for the known contaminants through time. Appropriate and reasonable data must be available/developed to demonstrate contaminant plume stability, contaminant stoichiometry and provide site specific information/data on attenuation (retardation and degradation) rates to verify predictive modeling applied to the site. Associated routine monitoring (groundwater and soil, as necessary) should be sufficient to demonstrate the rate and effectiveness (if any) of predicted degradation processes in effect and able to distinguish the effects of nondestructive processes (advection, dispersion, sorption, etc.) and destructive attenuation processes.

With consideration to the above, the facility should evaluate available data and submit an appropriate CAP (corrective action plan) sufficient to address the identified concerns discussed above. A schedule for development of the requested CAP should be submitted to my attention by 31 December 1999. Should you have any questions please contact me at (803) 898-3559.

Sincerely,

Paul L. Bristol, Hydrogeologist
Groundwater Quality Section
Bureau of Water

cc: Trident District EQC