



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Division of Solid Waste Management
Fifth Floor, L & C Tower
401 Church Street
Nashville, Tennessee 37243-1535

RETURN RECEIPT REQUESTED
7002 2030 0004 2446 1168

July 22, 2003

Jim Reed
SOUTHNAVFACENGCOM
2155 Eagle Drive
P.O. Box 190010
North Charleston, SC 29419-9010

Re: Corrective Measures Study (CMS) Report
Solid Waste Management Unit (SWMU) 39 – Building S-74, Revision 1, June 6, 2003
Naval Support Activity Mid-South, Millington, TN
Tennessee Hazardous Waste Permit Number: TNHW-094
EPA I.D. Number: TN2 17 002 2600

Dear Sir:

The Division of Solid Waste Management (the Division) has reviewed the CMS Report submitted by Ensafe, Inc. In the CMS Report, preliminary analytical results regarding Monitored Natural Attenuation (MNA) were presented.

The conclusions of the CMS Report are listed below:

1. Anaerobic conditions are conducive to TEC degradation by reductive dechlorination. Low dissolved oxygen concentrations in groundwater samples along with low redox values coupled with the presence of the 1,1,1-Trichloroethylene (TCE) degradation product 1,2-DCE indicate that anaerobic conditions are present at this site.
2. Petroleum hydrocarbons present in low concentrations will facilitate the degradation process.
3. Vinyl chloride is not accumulating in the aquifer.
4. The CMS Report proposes a 30-year monitoring program at a total cost of \$726,000.

Mr. Jim Reed
July 22, 2003
Page 2

The DSWM concludes from the review of this report that Monitored Natural Attenuation is not an appropriate final remedy at SWMU 39. Limited MNA is occurring at SWMU 39, however, evidence of biodegradation is marginal at best. MNA Screening and Ranking Evaluations contained in Table A-3, A-5, A-7 and A-9 indicate that there is inadequate or limited evidence of on-going increasing biodegradation of TCE. Only in August 2002 was there a slight indication that biodegradation was occurring. MNA alone will not, in a reasonable amount of time, achieve the 5 ug/L Maximum Contaminant Level.

Naval Support Activity should evaluate enhanced biodegradation as a final remedy. Naval Support Activity will respond to the comments and/or submit a CMS Work Plan to evaluate enhanced biodegradation within 30-days of receipt of this letter. If there are any questions or comments regarding this review, please contact Roger Donovan of TDEC by phone (615) 532-0859 or by e-mail at roger.donovan@state.tn.us.

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Sincerely,



Roger Donovan, P.G.
Corrective Action Section

cc: Jennifer Herndon, EPA, Region 4, Federal Facilities Branch
Ben Brantley, Ensafe
William Krispin, Manager, Permitting Section,
Charlie Burroughs, Manager, Corrective Action Section
Philip Davis, Manager, Memphis EAC
Jocelyn Bates, Corrective Action Section
HWPU File # 57