



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Division of Solid Waste Management
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401 Church Street
Nashville, Tennessee 37243-1535

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RETURN RECEIPT REQUESTED

August 13, 2009

Naval Facilities Engineering Command, Mid-West
201 Decatur Ave
Building 1A, Floor B, Room 25
Great Lakes, IL 60088-2801

Attention: Mr. Howard Hickey

Re: 2009 Interim Measures Progress Report (IM), July 10, 2009
Solid Waste Management Units (SWMU) 39, Revision 1
Naval Support Activity Mid-South (NSA Mid-South), Millington, TN
Tennessee Hazardous Waste Permit Number TNHW-094, TN2 17 002 2600

Dear Sir

The Division of Solid Waste Management (Division) has reviewed the IM Progress Report (Report) for SWMU 39, prepared by EnSafe Inc. and Spetra Tech, Inc. Historically, the fluvial deposits aquifer at SWMU 39 has been slightly to moderately aerobic and has had generally low concentrations of natural carbon. The goal of the enhanced bioremediation system was to convert the redox state of the aquifer to that of predominantly reducing conditions.

Results from the groundwater samples indicates that trichloroethylene (TCE) is being converted to cis-1,2-Dichloroethylene (cis-1,2-DCE), with cis-1,2-DCE rising to historically high concentrations. Traces of vinyl chloride (VC) have been detected in two wells, which have historically shown VC less than the laboratory method detection limit. The oxidation-reduction potential, hydrogen, and methane data all indicate the aquifer is anaerobic. However total organic carbon remains low. The 2008 annual progress report previously recommended several field modifications to assess system optimization, including installing additional injection wells, assessing the vertical distribution of contaminants, and evaluating microbial populations. Given the shifts in the chlorinated solvent concentrations observed in the February 2009 data, the report recommends that these recommendations be suspended and substrate injections are recommended to continue monthly.

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The Division agrees with the recommendations contained in the report. If there are any questions or comments regarding this review, please contact me at (615) 532-0864 or e-mail at roger.donovan@tn.gov.

Sincerely,



Roger Donovan, P.G.
Corrective Action Section

cc: Greg Fraley, Federal Facilities Branch, EPA Region IV
Ben Brantly, EnSafe
Rob Unger, SpectraTech
William Krispin, Manager, Permitting Section, Division
Charlie Burroughs, Manager, Corrective Action Section, Division
Herb Nicholson, Acting Manager, Memphis Environmental Field Office
HWPU File 56