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NSA MID SOUTH
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LETTER TRANSMITTING THE DYE TRACE REGISTRATION APPLICATION FOR AREA OF
CONCERN A MILLINGTON SUPPACT TN
11/11/2003
ENSAFE



ENSAFE INC.

ENVIRONMENTAL AND MANAGEMENT CONSULTANTS

5724 Summer Trees Drive • Memphis, Tennessee 38134 • Telephone 901-372-7962 • Facsimile 901-372-2454 • www.ensafe.com

November 11, 2003

Mr. Bruce Craig
Tennessee Department of Environment and Conservation
Division of Water Supply
401 Church Street, 9th Floor
Nashville, Tennessee 37243-1549

Re: Dye Trace Registration Application
NSA Mid-South, Millington, Tennessee

Dear Mr. Craig,

Enclosed you will find a dye trace registration application for a dye trace study that is proposed as part of the Interim Measures activities to be performed at Area of Concern (AOC) A located at NSA Mid-South in Millington, Tennessee. Details of the dye trace study were provided in the Class V Injection Well Application dated October 30, 2003 that was previously submitted to your office.

If you have any questions or comments, please call John Stedman or me at (901) 372-7962.

Sincerely,

EnSafe, Inc.

by: Todd Haverkost, P.G.

Attachment - Dye Trace Registration Application

cc: Tonya Barker, NSA Mid-South
James Reed, SOUTHDIV



**Tennessee Department of Environment & Conservation
Dye Trace Registration**

Owner/Operator of Facility Necessitating Trace:

Name: Naval Support Activity (NSA) Mid-South
Mailing Address: 7800 Wasp Avenue
City, State, Zip Code: Millington, Tennessee 38054
Phone: (901) 874-5462

Person/Company Performing Trace:

Name: EnSafe, Inc.
Mailing Address: 5724 Summer Trees Drive
City, State, Zip Code: Memphis, Tennessee 38134
Phone: (901)372-7962

Property Owner at Injection Site:

Name: Naval Support Activity (NSA) Mid-South
Mailing Address: 7800 Wasp Avenue
City, State, Zip Code: Millington, Tennessee 38054

Reason for Trace: The objective of the dye trace is to obtain data regarding dispersion and direction of groundwater flow in the fluvial deposits beneath NSA Mid-South. The work is proposed as part of the scope of an enhanced in-situ bioremediation groundwater treatment system.

If State or Federal Agency Oversight, Give Agency: TDEC Division of Solid and Hazardous Waste Management (Roger Donovan) and USEPA Region 4.

Dyes to be Used with Approximate Amounts and Respective Injection Locations:

Approximately 15 pounds of Rhodamine WT will be mixed with water and injected at well 61LF (see attached proposed injection well location figure).

Type Receptors or Visual: Groundwater samples will be collected in vials and analyzed with a spectrofluorophotometer.

Background Test: None proposed. If necessary, upgradient wells are available for sampling.

Describe Injection Point(s) and Include Photocopy of Topographic Map with Locations:

The proposed injection points are 4" diameter PVC wells (a Class V injection well application has been submitted in addition to a variance request to the Memphis and Shelby County Health Department) that will be equipped with 30 foot screens and installed to a maximum depth of 95 feet below ground surface.

Anticipated Injection Date: Between January 12 and January 16, 2004

Public Water Systems: List Surface Water Intakes, Wells or Springs within 2 Miles of the Injection Point(s):

Five potable water production wells that supply water to NSA Mid-South (see attached Figure 1-1) are within a 2 mile radius of the injection point. All of the wells are screened in the Port Pillow aquifer that is not hydraulically connected to the fluvial deposits in which the dye trace is proposed. The closest well, PW-N1 was placed on emergency status and taken out of service in 1994 as a precautionary measure.

Is the Area Served by a Public Water System? Yes

Estimate Percentage of Private Well/Spring Use Versus Public Water Use:

100% of the water is provided by the public water system.

Submitted by: John Stedman, EnSafe on behalf of NSA Mid-South

Phone: (901) 372-7962

Date: October 28, 2003

Mail or Fax the Completed Form to:

Tennessee Division of Water Supply
Ground Water Management Section
Attn: Scotty Sorrells
6th Floor, L & C Tower
401 Church Street
Nashville, Tennessee 37243-1549
Phone: (615) 532-0191; Fax: (615) 532-0503

There are currently no regulations requiring dye trace registration in Tennessee, unless there is the potential to impact a public water system. This registry is designed to avoid cross contamination and re-performing the same or similar trace. The dye tracing registry allows the Department to make informed responses to water pollution inquiries so that dye traces are not mistakenly identified as pollution to waters of the state.