



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

**REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303**

April 4, 2011

Mr. John Deback
Program Manager
OACSIM, BRAC Division
NC/3 Taylor Building
2530 Crystal Drive
Room 5000, Cubicle 66
Arlington Virginia 22202

Re: EPA Approval of the 2010 Long-Term Monitoring Reports for the Main Installation at the Defense Depot, Memphis Tennessee

Dear Mr. Deback:

The U.S. Environmental Protection Agency, Region 4 (EPA) has reviewed the referenced document and concurs with the recommendations, which include changing the status and increasing frequency of sampling for MW 143 and abandoning PZ-06 as redundant. EPA continues to appreciate the quality of the reporting provided at the Former Memphis Depot. It is well-presented, not over-interpreted, and recommendations are typically well-supported within the document.

EPA notes in its review that there are a number of wells (identified below) in which the overall trend in contaminant concentrations does not appear favorable. The wells in question include:

Treatment Area 1

- PMW 21-05 – Increasing trend in tetrachloroethene (PCE) since 2006 from under 10 ppb to over 40 ppb.
- DR1-6 – Increasing PCE concentrations since 2005 from approximately 12 ppb to 240 ppb
- PMW 101-04A&B, and MW 101 - Increasing PCE and decreasing cis-DCE since December, 2008, suggesting loss of anaerobic treatment function and re-contamination from overlying residual source material may be occurring.

Treatment Area 2

- DR2-1, Increasing PCE and decreasing cis-DCE since March 2008, suggesting loss of anaerobic treatment function and re-contamination from overlying residual source material may be occurring
- DR2-3, DR2-4 (since October 2007), and MW-26 and MW 88, (Since April 2008) – Increasing PCE concentration

- MW 85 - Increasing PCE and decreasing cis-DCE since June 2008, suggesting loss of anaerobic treatment function and re-contamination from overlying residual source material may be occurring
- MW 113 - Increasing PCE and decreasing cis-DCE since November 2004, suggesting loss of anaerobic treatment function and re-contamination from overlying residual source material may be occurring. Also, carbon tetrachloride (CT) has been increasing since May 2004.
- PMW 92-03 and PMW 92-06 - Increasing PCE and decreasing cis-DCE since March 2009, suggesting loss of anaerobic treatment function and re-contamination from overlying residual source material may be occurring. Also, CT and trichlorethene (TCE) have increase since then. CT has risen from below MCL to over 100ppb (MCL is 5 ppb).

West Central Plume

- MW 203A – PCE increasing since April 2007
- MW 197B (October 2009), MW 203B (April 2009), MW 205A&B(April 2010) - Increasing PCE and decreasing cis-DCE, suggesting loss of anaerobic treatment function and re-contamination from overlying residual source material may be occurring
- MW 208B – Increase in TCE and PCE since January 2008

Building 835 Plume

- MW 209B – TCE increasing since April 2007

In addition there are several wells where short-term trend data suggest an increasing concentration trend may be starting. These trends need to be specifically evaluated in future monitoring reports, and should they continue then the Army may need to evaluate additional active response measures. If you have any questions, please contact me at 404/562-8553.

Sincerely yours,

Wm. Turpin Ballard, RPM
Federal Facilities Branch

Cc: Jamie Woods, DOR/TDEC/Memphis