



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
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ATLANTA, GEORGIA 30303-8960

February 24, 2010

4WD-FFB

Ms. Patty Marajh-Whittemore
Remedial Project Manager
SOUTHNAVFACENGCOM
NAS Jacksonville Building 103
Jacksonville, FL 32212

Subject: Site 45 Draft Final Feasibility Study (dated October 30, 2009), Pensacola Naval Air Station, Pensacola, FL

Dear Ms. Marajh-Whittemore:

EPA has reviewed the above referenced document. We do not understand your retention of natural attenuation (section 3.3.2.2) as an acceptable groundwater remedial alternative. Please justify your recommendation concerning this alternative. Also, keep in mind that this site is 40+ years old.

For more guidance on monitored natural attenuation, please refer to the following.

Things to consider before you consider MNA

MNA is a frequently used method of treatment (or avoidance of treatment). The frequency of its use has caused the Agency to take a more critical look at its efficacy. It is the intention of the Agency that MNA not become a fall back approach to the remediation of recalcitrant contaminants. The Agency is in favor of MNA at only those sites where it is appropriate. And MNA is appropriate as a remedial approach only where it can be demonstrated that its use will achieve the remedial objectives within a reasonable time frame and will likely meet the appropriate ARARS.

Moreover, the efficacy of MNA must be demonstrated before it is selected as a remedy. Three types of site-specific information may be required:

1. Historical ground water and/or soil chemistry data demonstrates a trend of declining contaminant concentration.
2. Hydrogeologic and geochemical data that demonstrate natural attenuation processes and rates.
3. Field or microcosm studies.

Be apprised, that unless #1 is of sufficient quality and duration, #2 is generally required.

Also, these requirements generate three obviously valid questions concerning what constitutes a trend. I will attempt to address these questions. The first question is: What sort of historical ground water and/or soil chemistry data can be used needed to demonstrate a trend of declining contaminant concentration?

Answer: There are two rates of decline, the rate of decline in a single well over time, and the rate of decline along a flow path in ground water.

The rate of decline in a well over time determines how long a plume will last. The rate of decline in a well along the flow path will determine how far the plume will extend.

The second question is: How much historical ground water and/or soil chemistry data is needed to demonstrate a trend of declining contaminant concentration over time in well?

Answer: Sites with at least ten years of monitoring data showing at least a ten fold reduction in concentration of the contaminants have a reasonable chance to demonstrate a declining trend.

The third question is: Which sites can be demonstrated to achieve remedial objectives within a reasonable time frame?

Answer: Depends on the attenuation required to reach the goal, and how long we are willing to wait.

If you have any questions or comments, please contact me in writing or at 404.562.8544.

Sincerely,

Senior Remedial Project Manager

Gregory D. Fraley

cc: David Grabka, FDEP