



# Florida Department of Environmental Protection

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April 16, 2008

Mr. William Gates  
OPG6  
Department of the Navy  
Naval Facilities Engineering Command Southeast  
2155 Eagle Drive, P.O. Box 190010  
North Charleston, South Carolina 29419-9010

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5090.3a

**RE: Quarterly Groundwater Monitoring Report at SWMU 10 & AOC 1, Naval Support Activity Panama City, Panama City Beach, Florida (OHC Environmental Engineering, November 9, 2007)**

Dear Mr. Gates:

I have reviewed the subject document dated November 9, 2007 (received November 13, 2007). My comments concerning each section are below.

## **Solid Waste Management Unit 10**

1. The figure pertaining to this section is inadequate. OHC Environmental Engineering's (OHC) site map (Figure 1), which also depicts groundwater sampling locations, is difficult to read and poorly labeled. Other supporting figures would be appreciated as well. For instance, a groundwater flow map would be useful. Please revise in the future.
2. Turbidity data needs to be collected during the purging process of these monitoring wells. The Scope of Work states that field parameters were recorded (which should include turbidity). However, the Groundwater Sampling Logs in Appendix F clearly show that turbidity was not recorded. Please correct this during future sampling events. If certain parameters cannot be collected, then an explanation should be provided.
3. In the future, several tables need to be added to the groundwater monitoring reports. These tables would make the report more complete and much easier to assess. This list would include, but is not limited to, a groundwater parameters table, monitor well construction table, and an all inclusive analytical results table for each media. These tables would be updated as needed after each sampling event. The "Depth to water and Groundwater Elevation" table should show past information as well.
4. Contaminants of Concern (CoC) need to be defined more effectively (which contaminants and why were they chosen as such) in the Previous Investigations Section and/or the Results Section. After a lengthy search, I located this information in the CMS Addendum for Area of Concern (AOC) 1 and Solid Waste Management Unit (SWMU) 10 (NAVFAC Southeast, January 2004). All or a portion of page 4-2 could have been included in this Report for better clarity.

5. I agree with the recommendations presented in this Report. The contaminants 1,2,4-trimethylbenzene, 1-methylnaphthalene, 2-methylnaphthalene, 4-methylphenol, and naphthalene may be deleted from the monitoring program due to lack of Groundwater Cleanup Target Level (GCTL) exceedances for these compounds in the last four consecutive sampling events. Please be sure that all monitoring wells located at the site meet the No Further Action (NFA) criteria set forth in F.A.C. 62.780.680. Also, be prepared in the future to present to the Florida Department of Environmental Protection (FDEP) a Site Rehabilitation Completion Report (SRCR) for this site. Presentation of an SRCR will occur after the arsenic and manganese situation in groundwater gets resolved. Arsenic and manganese should still be sampled for at this site until the Base wide metals background study has been completed and assessed. An annual sampling frequency for these compounds is approved.

### **Area of Concern 1**

1. The figure pertaining to this section is inadequate. OHC's site map (Figure 2), which also depicts groundwater sampling locations, is difficult to read and poorly labeled. Other supporting figures would be appreciated as well. For instance, a groundwater flow map would be useful. Please revise in the future.
2. Turbidity data needs to be collected during the purging process of these monitoring wells. The Scope of Work states that field parameters were recorded (which should include turbidity). However, the Groundwater Sampling Logs in Appendix F clearly show that turbidity was not recorded. Please correct this during future sampling events. If certain parameters cannot be collected, then an explanation should be provided.
3. In the future, several tables need to be added to the groundwater monitoring reports. These tables would make the report more complete and much easier to assess. This list would include, but is not limited to, a groundwater parameters table, monitor well construction table, and an all inclusive analytical results table for each media. These tables would be updated as needed after each sampling event. The "Depth to water and Groundwater Elevation" table should show past information as well.
4. Groundwater elevation data should be collected on the same day for all monitoring wells (MWs) per F.A.C 62-780.690. It was noted that six MWs were evaluated on 8/13/07 and three were evaluated on 8/14/07.
5. CoCs need to be defined more effectively (which contaminants and why were they chosen as such) in the Previous Investigations Section and/or the Results Section. After a lengthy search, I could not locate this information in the CMS Addendum for AOC 1 and SWMU 10 (NAVFAC Southeast, January 2004).
6. Annual sampling of the MWs is approved.
7. Not only do I approve of removing DIC, chloride, and nitrate from the sampling program, I also recommend we remove all of the monitor natural attenuation (MNA) parameters from the sampling list.
8. In the April 2007 sampling event monitoring well PCY-13-10S was shown to contain 3 & 4-methylphenol (reported together) at a concentration of 34 ug/L. These two compounds have different GCTLs. 3-methylphenol's is 35 ug/L and 4-methylphenol's is 3.5 ug/L. Which GCTL are you comparing this result to and why?
9. The table below shows the MWs that should be sampled during the next sampling event (sample date open to discussion) and the analytes for each well. Please choose an EPA Method appropriate for the VOC compounds that include, but not limited to, BTEX, PCE,

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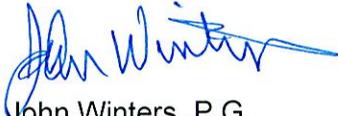
TCE, cis and trans-1,2-DCE, 1,1-DCE, and VC. The SVOC list should be at least as extensive as the list in the Report, and the metals list should include those compounds that haven't reached two consecutive events "clean" in the past (I was looking in the table in Appendix K of the RFI Addendum Rev. 2).

<i>MW ID (* new MW)</i>	<i>VOCs</i>	<i>SVOCs / Metals</i>	<i>Comment</i>
PCY-13-10S	Yes	Yes / No	Need two consecutive events clean; 3,4-methylphenol?
PCY-13-12I	Yes	No / No	Need two consecutive events clean
PCY-13-14I	Yes	No / No	Need two consecutive events clean
PCY-13-17I	Yes	No / No	Check movement to SW
PCY-13-18I	Yes	No / No	Check movement to SW
*PCY-13-9S	Yes	Yes / No	VOCs+SVOCs above GCTLs in 2004
*PCY-13-9I	Yes	No / No	Check lateral extent of source
*PCY-13-3S	Yes	Yes / Yes	Check lateral extent of source
*PCY-13-4I	Yes	No / No	VOC SW exceedence in 2004
*PCY-13-5I	Yes	No / No	Check lateral extent of plume
*PCY-13-18S	No	No / Yes	Need two consecutive events clean
*PCY-13-13I	Yes	Yes / Yes	Exceedences in 2003
*PCY-13-15I	Yes	No / No	Check lateral extent of plume
*PCY-13-16I	Yes	No / No	Check movement to SW
*PCY-13-6I	Yes	No / No	Check plume migration
*PCY-13-13I	Yes	No / No	Check lateral extent of plume

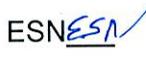
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Thank you for the opportunity to review this document. If you require additional clarification, or other assistance, please feel free to contact me at 850/245-8999.

Sincerely,



John Winters, P.G.  
Remedial Project Manager

JJC  ESNE 

cc Tim Bahr, FDEP, Tallahassee