



Pennsylvania Department of Environmental Protection

Lee Park, Suite 6010  
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Conshohocken, PA 19428  
December 31, 2003

**Southeast Regional Office**

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Mr. Edward J. Boyle  
Remedial Project Manager  
Department of the Navy  
Engineering Field Activity, Northeast  
Naval Facilities Engineering Command  
10 Industrial Highway  
Mail Stop, No. 82  
Lester, PA 19113-2090

Re: ECP - Land Recycling Program  
IR Site 10 - Navy Fuel Farm  
EFACTS No. 594686  
NASJRB Willow Grove  
Horsham Township  
Montgomery County

Dear Mr. Boyle:

The Department of Environmental Protection (Department) has finished review of the December 16, 2003 report titled "IR Site 10 Soil Letter Report to Support No Further Investigation at This Time - Final." The Department believes that the data presented in the report are sufficient to support a "no further investigation at this time" decision for the following regulated substances in soil: benzene; toluene; ethyl benzene; xylenes (total); 1,2-dichloroethane (EDC); 1,2-dibromoethane (EDB); cumene; naphthalene; lead (total); fluorene; pyrene; phenanthrene; benzo(g,h,i)perylene; and chrysene. This decision is based on current and historical groundwater and soil data supporting the premise that any areas of impact above the relevant Act 2 soil standards remaining at IR Site 10 are likely limited and not representative of unacceptable exposures based on current and presumed future land uses. Collecting present-day soil attainment samples at all known areas of concern (AOCs) was not feasible in consideration of the current land use, which limited access according to the Department of the Navy (Navy). The Department suggests it may be appropriate to seek closure under the technical requirements of Act 2 for known releases to IR Site 10 soil if base closure or significant changes in land use occur at IR Site 10 in the future. At least one additional comprehensive groundwater sampling event is proposed at IR Site 10 in the future. If data for that sampling event or future sampling events contradict historical data, additional remedial actions may be required.



The Department does not agree that soil and groundwater data currently available for benzo(a)anthracene; benzo(a)pyrene; benzo(b)fluoranthene; and indeno(1,2,3-cd)pyrene support the idea that potential remaining impacts in soil with respect to these compounds are limited in extent. The analytical sensitivity achieved for these compounds during the 2003 sampling event was in excess of the groundwater medium specific concentrations (MSCs) for a non-residential used aquifer at all sampling locations. Even though the limit related to the practical quantitation limit (PQL) was achieved at some of the monitoring well locations for benzo(a)anthracene; benzo(g,h,i)perylene; and indeno(1,2,3-cd)pyrene; the direct contact MSC, not the soil-to-groundwater MSC, drives the risk for these polycyclic aromatic hydrocarbons (PAHs) in soil media. Therefore, the objective of supporting limited soil impacts using contaminant distribution in groundwater requires greater analytical sensitivity than attaining the Statewide Health Standard for groundwater. It is recommended that analytical method 610 by HPLC be used during future sampling events to achieve the necessary sensitivity.

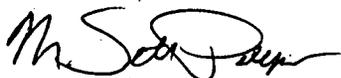
Because the PAHs discussed above are not very mobile (i.e., they are characterized by low solubilities coupled with high partition coefficients) and the risks associated with them are driven by direct contact, the logic applied to this investigation is questionable. Therefore, in lieu of groundwater sampling using analytical techniques with lower method detection limits, limited soil sampling for the waste oil shortlist parameters may be considered in the vicinity of the former waste oil underground storage tank (UST), the known AOC for these compounds at IR Site 10.

Finally, it is important to mention that demonstrating attainment of the Statewide Health Standard for groundwater does require that the limit related to the PQL or the appropriate Statewide Health Standard MSC be achieved at point of compliance wells, or be met at and beyond the property boundary as demonstrated using quantitative fate and transport modeling. Several exceedances of the limit related to the PQL or applicable Statewide Health Standard MSCs for benzo(a)anthracene; benzo(a)pyrene; benzo(b)fluoranthene; indeno(1,2,3-cd)pyrene; benzo(g,h,i)perylene; and chrysene were noted in the 2003 groundwater data. The Department recommends that caution be exercised to achieve the appropriate levels of sensitivity during future groundwater sampling events if a Statewide Health Standard attainment demonstration is being considered. Please note that the Department does accept "J-qualified" or estimated analytical data for attainment demonstration purposes.

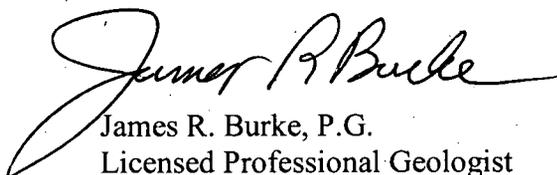
The Department does not intend to render a final decision for all IR Site 10 compounds of concern (COCs) in soil until the supplemental data discussed in this letter are received. This letter does not waive any rights of the Commonwealth of Pennsylvania to take enforcement action under applicable law for the conditions discussed.

Please be aware that Mr. Yuriy Neboga will be the Department Project Officer assigned to this case effective January 5, 2004. His telephone number is 610-832-5924. Please feel free to contact Mr. James R. Burke at 610-832-6151 if you have any questions prior to that date.

Sincerely,



M. Seth Pelepko  
Geologic Specialist  
Environmental Cleanup



James R. Burke, P.G.  
Licensed Professional Geologist  
Environmental Cleanup

Enclosure

cc: Ms. Magilton - EA Engineering, Science, and Technology (w/enclosure)  
Mr. Day-Lewis  
Mr. Neboga  
Ms. Flipse  
Horsham Township  
Montgomery County Health Department  
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