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Ms. Peggy Smith
Maryland Department of the Environment (MDE)
CHS Enforcement / Fund Lead Site Assessment Division
1800 Washington Blvd., Suite 265
Baltimore, MD 21230-1719

Subject: **Additional Soil and Sediment Sampling Letter Report**

On behalf of Lockheed Martin Corporation (LMC), Tetra Tech has prepared the following letter report summaring the results of the additional soil and sediment sampling conducted on May 24, 2005 at Martin State Airport located in Middle River, Maryland. The additional soil and

Site Description and Location

Martin State Airport is located at 701 Wilson Point Road in Middle River, Maryland, and is

Appendix A). Therefore, the speciated samples consistently showed that hexavalent chromium was not present. In order to address MDE's comment regarding hexavalent chromium speciation, Tetra Tech collected additional samples for analysis of both total and hexavalent chromium.

Field Activites

Prior to conducting soil sampling activities, a geophysical survey was conducted to clear all boring locations proposed in the Taxiway Tango Median Area. A geophysical survey was conducted by Enviroscan, Inc. to locate and mark all underground utility lines at the proposed soil boring locations. A combination of electromagnetic resistivity / conductivity and line locating, and ground penetrating radar (GPR) were used to assure that all proposed sampling locations did not encounter underground utilities, metallic objects, and other anomalies. Due to the presence of an electrical line and subsurface obstructions/

Soil Analyical Data Results

The concentrations of chromium that were detected in the 12 additional soil samples are presented in Table 1 with laboratory analytical data reports included in Appendix C. Total chromium was analyzed using EPA Method 6010B, and hexavalent chromium was analyzed usiing EPA Method 7196A. The analytical data from the 12 samples will be incorporated into the revised human health risk assessment, and data from the six surface samples will be incorporated into the revised ecological risk assessment. Among the six surface soil (i.e., 1-foot

propose that hexavalent chromium and total chromium be evaluated separately in the revised human health risk assessment. In cases where speciated data are not available, Tetra Tech would like to propose that the detected concentrations be evaluated as total chromium in the revised human health risk assessment.

Sediment Sampling Program

To address MDE's ecological risk assessment general comment #1, sediment sampling was conducted in Pond #1 to supplement sediment sample EP1-SD2 and further evaluate potential ecological risks associated with sediment chemical concentrations. MDE did not require additional sediment or surface water sampling at Pond #2 or Frog Mortar Creek.

Field Activities

A total of four sediment samples (EP1-SD3 through EP1-SD6) were collected from Pond #1 – *see Figure 2 in Appendix A*. The sampling was conducted using a boat. Sediment samples were collected from the water sediment interface using a stainless steel

Sediment Analyical Data Results

The concentrations of VOCs, SVOCs, priority pollutant metals, hexavalent chromium, and PCBs

Table 2 - Continued
Results of Chemical Analyses for Sediment Samples Collected in Pond #1

[redacted]

Table 3

[redacted]

[redacted]

Sincerely,

Nisha Bansal