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LETTER REGARDING FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION COMMENTS ON DRAFT SAMPLING AND ANALYSIS REPORT FOR ABANDONED RAILROAD BED SOUTH OF NORMANDY BOULEVARD NAS CECIL FIELD FL
2/17/2003
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

February 17, 2003
OFFICIAL CORRESPONDENCE

Commanding Officer
attn: Mr. Mark Davidson, Code ES339
Southern Division
Naval Facilities Engineering Command
Post Office Box 190010
North Charleston, SC 29419-9010

Dear Mr. Davidson:

I have completed my review of the Draft Sampling and Analysis Report for the Abandoned Railroad Bed South of Normandy Boulevard, Naval Air Station Cecil Field, dated October 2002 (received October 30, 2002), prepared and submitted by Tetra Tech NUS, Inc. The sampling and analysis of PAH contamination conducted by Tetra Tech NUS along the railroad bed south of Normandy Boulevard appears adequate to establish the range of contaminant concentrations to be expected along the railroad bed. However, the methodology used to quantify risks and the risk calculations appear to be in error. I have the following comments on this:

(1) Data from two remediated sites, PSC 50 and Building 98 (located adjacent to each other), were clumped together with data collected from the railroad bed at intervals of 1,000 feet for risk evaluation. Data from PSC 50 and Building 98 comprised 21 data points and data from the railroad bed comprised 7 data points collected along over a mile of railroad bed. These data were put together for the purpose of determining an 95% upper confidence limit on the mean concentration. This was done in order to compare to a residential soil cleanup target level. However, the area over which the data was collected does not comprise a realistic exposure unit, either for residential or industrial. Also, because most of the data collected covered only an extremely small part of the railroad bed, the statistics would be skewed to be more representative of exposure in the PSC 50 and Building 98 area. As such, this is not a correct application of the statistical approach to devising exposure concentrations for the railroad bed. A better methodology would be to apply statistics on the data from PSC 50 and Building 98 and come up with an exposure point concentration for that small part of the railroad track. That calculated exposure point concentration could then be added to the data collected along the railroad bed to calculate an exposure point concentration for exposure along the track. However, it would still not be appropriate to compare this concentration to the residential SCTL, because the area covered by the data does not even approach a typical residential parcel.

(2) I took the data from Table 3-2 and input it into Pro-UCL, a statistical software package developed by Lockheed Martin for EPA. I have attached an Excel spreadsheet printout of the results. As can be seen, most of the statistics calculated (mean, standard deviation, coefficient of variation) came out identical. However, the 95% UCL on the mean listed in Table 3-2 was significantly different from the results when the data was input into Pro-UCL, no matter which non-parametric method is used. Please determine why the differences exist.

(3) Based upon the concentrations detected along the railroad bed, there does not appear to be unacceptable risks for most exposure scenarios other than residential. As has been suggested by the Department in the past, if the City of Jacksonville were to collect samples after they have completed their infrastructure work along the railroad bed and if those samples did not contain concentrations above the Department's residential SCTLs, then the Department would not require land use controls on this property. However, if

resampling were not to occur, the Department would be put in a position where it would have to insist on land use restrictions on the property based upon the information available.

This electronic message is being sent in lieu of regular mail. If you have any questions concerning this review, please contact me at (850)245-8997.

Sincerely,

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