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NAS PENSACOLA
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U S NAVY RESPONSES TO U S EPA REGION IV COMMENTS ON REMEDIAL
INVESTIGATION FOR SITE 44 NAS PENSACOLA FL
11/27/2007
NAVFAC SOUTHERN

**NAVAL AIR STATION PENSACOLA
PENSACOLA, FLORIDA
REMEDIAL INVESTIGATION REPORT FOR SITE 44
(FORMER UST SITE 3221 SW)**

RESPONSE TO EPA COMMENTS DATED NOVEMBER 27, 2007

COMMENTS

“In the report in two different sections (4.2 and 8.2), it is stated that the arsenic is within the background range determined by statistical analysis of arsenic and iron distribution at Pensacola NAS. Please explain the basis for this “statistical analysis”.

Response:

A detailed discussion of the basis and methods for the “statistical analysis” is attached to the Remedial Investigation Report as Appendix B and is referenced in Section 4.2.2.6. Later discussions of the statistical analysis, including those in Sections 4.2 and 8.2, do not call out the location of the detailed statistical analysis in Appendix B. The report text will be modified to refer the reader to the full statistical basis and method discussion presented in Appendix B at all occurrences in the document text.

As indicated in Appendix B, the basis for the statistical analysis is to “present a geochemical methodology that can be simply applied to site-specific data to identify “outliers” for a given inorganic (those samples that fall outside of expected natural concentrations) at NASP. Inherent to this is the use of the methodology to define the naturally occurring range of the inorganic. In this document, using the available data from base-wide investigations, the geochemical method of identifying the range of naturally-occurring inorganics has been used for arsenic in soil at NASP, and the consequent model can be applied to determine if site samples contain arsenic outside of the naturally occurring range. The geochemical method is relatively new (US Navy, 1999; US Navy, 2002; Gannett Fleming 2005; Caldwell, et. al, 2005a&2005b), but is based on robust statistical methods and has been used successfully to define inorganic outliers (Caldwell, et al 2005a, Gannett Fleming 2005). A significant programmatic approach utilizing this method has been performed at Avon Park Air Force Range (APAFR; Gannett Fleming 2005), and similar statistical procedures have been followed for NASP. Because the work performed at Avon Park has been extensively reviewed and accepted by both Florida Department of Environmental Protection (FDEP) and the EPA, relevant language is either paraphrased or excerpted in this technical brief.”