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REGULATORY COMMITTEE RESPONSE TO FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION COMMENTS ON DRAFT FINAL GROUNDWATER
BACKGROUND STUDY FOR METALS NS MAYPORT FL
10/13/2014
TETRA TECH



Document Tracking Number 15JAX0002

October 13, 2014

Project Number 112G03797

Naval Facilities Engineering Command, Southeast
ATTN: Mr. Dana Hayworth (OPDE3)
Remedial Project Manager
135 Ajax Street North, Building 135
Naval Air Station Jacksonville
Jacksonville, FL 32212-0030

Reference: CLEAN Contract Number N62470-08-D-1001
Contract Task Order Number JM71

Subject: Response to Comments, Draft-Final Groundwater Background Study for Metals, Naval Station Mayport, Jacksonville, Florida

Dear Mr. Hayworth:

Tetra Tech, Inc. is pleased to submit this Response to Comments (RTC) Letter for the Draft-Final Groundwater Background Study for Metals (Background Study) at Naval Station (NAVSTA) Mayport, Jacksonville, Florida. The questions and/or comments received by Tetra Tech are addressed below. The RTC letter from the FDEP is attached for reference.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, Mr. John Winters

Comment 1: Assuming that the well locations selected for the study are in areas that are truly representative of non-impacted background groundwater conditions, the 15 wells provide good coverage for groundwater quality across the study area.

Response: Tetra Tech agrees the 15 wells provide good coverage for groundwater quality across the study area since the well locations were selected to be representative of non-impacted areas. No modifications to the Background Study will be made regarding this comment.

Comment 2: The screening for data usability resulted in the deletion of six of the original thirteen constituents in the analytes data set. The well sampling for the remaining seven target analytes comprise the updated background data set that was subjected to further analysis for selective deletion of values determined to be outliers, and to establish statistical parameters for future use. Although not determined to be outliers by the analysis that was performed, the anomalously high values for iron detected in well MW-171 should be considered outliers by virtue of being greater than three times the standard deviation above the mean of the uncensored data set for this metal. Censoring results from this one well from the data set reduces the standard deviation to less than one-third that of the uncensored data set indicating that a very significant reduction in variance in the data set is achieved, and this supports the outlier designation for iron results from well MW-171.

Tetra Tech, Inc.

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Response: The high values for iron detected in MW-171 were treated as outliers and removed from the final data set. The Background Study text, tables, and appendices were updated to reflect this change.

Comment 3: The use of the maximum value in a background data set for screening of potential COCs at a site is not recommended unless it happens to be less than twice the mean of the site-specific background data set. Department guidance recommends the use of twice the mean or the maximum background value, **whichever is lower**, for comparisons of site data to local background. In the case of the Mayport background data set, all twice the mean values for the seven background analytes are less than the maximum value and should be used for comparisons in initial screening of groundwater sampling results for potential COCs.

Response: Tetra Tech recognizes that FDEP guidance **recommends** the use of twice the mean or the maximum background value, whichever is lower. There is a great amount of dialogue in the national environmental community relative to selecting a single concentration that best characterizes the background concentration for a metal. In order to expedite the completion of the Background Study and build consensus among the stakeholders; the text, tables and appendices of the Background Study were updated to reflect the FDEP's recommendation.

If you have any questions with regard to this submittal, please contact me at (904) 730-4669, extension 220, or via e-mail at Ben.Marshall@tetrattech.com.

Sincerely,

A handwritten signature in blue ink that reads "Ben Marshall".

Ben Marshall, P.E.
Project Manager

Enclosure (1)

c: John Winters, FDEP (electronic only)
Paul Malewicki, NAVSTA Mayport (1 hardcopy, 1 CD)
John King, Resolution Consultants (electronic only)
RDM, Tetra Tech (1 unbound, 1 CD)
CTO JM71 Project File



**FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION**

BOB MARTINEZ CENTER
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TALLAHASSEE, FLORIDA 32399-2400

RICK SCOTT
GOVERNOR
HERSCHEL T. VINYARD JR.
SECRETARY

December 17, 2013

Naval Facilities Engineering Command Southeast
Attn: Mr. Dana Hayworth OPUE3, Remedial Project Manager
135 Ajax Street North, Building 903
Naval Air Station Jacksonville
Jacksonville, Florida 32212-0030

**RE: Draft Final Groundwater Background Study for Metals, Naval Station Mayport, USEPA
ID #FL9 170 024 260, Mayport, Florida (Tetra Tech, August 21, 2013)**

Dear Mr. Hayworth:

I have reviewed the subject document dated August 21, 2013. It was received on August 22, 2013. The document was completed under Contract Task Order JM71.

The Introduction section of the report states that *"This Background Study Data Evaluation Report presents a statistical summary evaluation of the groundwater concentrations of target analytes naturally occurring in the surficial aquifer at NAVSTA (Naval Station) Mayport, located in Jacksonville, Florida."* In the Purpose and Scope of the Background Study section of the report it states that *"The Background Study of the shallow aquifer is being conducted to determine if naturally occurring geochemical reactions were producing the elevated results of the target analytes."*

The Department's comments on this document are attached.

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
Federal Programs Section

KAW

cc Tim Bahr, FDEP, Tallahassee

DOD_8_3337



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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MEMORANDUM

TO: John Winters, P.G.
DoD & Brownfields Partnerships, WCP

THROUGH: Brian Dougherty, Administrator
Office of District & Business Support, DWM

FROM: Mark Stuckey, P.G.
Office of District & Business Support, DWM

SUBJECT: Mayport Naval Air Station
Jacksonville, Duval County
Draft-Final Groundwater Background Study for Metals, dated August 2013
Site ID#: DOD_8_3337

DATE: October 25, 2013

10/25/2013

X 

Signed by: Dougherty, B

10/25/2013

X 

The subject document has been reviewed, and the following comments are provided to assist other Department staff in their evaluation of this submittal.

- Assuming that the well locations selected for the study are in areas that are truly representative of non-impacted background groundwater conditions, the 15 wells provide good coverage for groundwater quality across the study area.
- The screening for data usability resulted in the deletion of six of the original thirteen constituents in the analytes data set. The well sampling data for the remaining seven target analytes comprise the updated background data set that was subjected to further analysis for selective deletion of values determined to be outliers, and to establish statistical parameters for future use. Although not determined to be outliers by the analysis that was performed, the anomalously high values for iron detected in well MW-17I should be considered outliers by virtue of being greater than three times the standard deviation above the mean of the uncensored data set for this metal. Censoring results from this one well from the data set reduces the standard deviation to less than one-third that of the uncensored data set indicating that a very significant reduction in variance in the data set is achieved, and this supports the outlier designation for iron results from well MW-17I.
- The use of the maximum value in a background data set for screening of potential COCs at a site is not recommended unless it happens to be less than twice the mean of the site-specific background data set. Department guidance recommends the use of twice the mean or the maximum background value, **whichever is lower**, for comparisons of site data to local background. In the case of the Mayport background data set, all twice the mean values for the seven background analytes are less than the maximum value and should be used for comparisons in initial screening of groundwater sampling results for potential COCs.

If you have any questions, please contact me at 5-8991.