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LETTER AND COMMENTS FROM FLORIDA DEPARTMENT OF ENVIRONMENTAL  
PROTECTION REGARDING REVIEW OF DRAFT-FINAL REMEDIAL ACTION PLAN  
REVISION 1 SITE 1586 NS MAYPORT FL  
6/20/2012  
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



# Florida Department of Environmental Protection

Bob Martinez Center  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Rick Scott  
Governor

Jennifer Carroll  
Lt. Governor

Herschel T. Vinyard Jr.  
Secretary

June 20, 2012

Naval Facilities Engineering Command Southeast  
Attn: Mr. Brian Syme (OPC6), Remedial Project Manager  
135 Ajax Street North, Building 903  
Naval Air Station Jacksonville  
Jacksonville, Florida 32212-0030

**RE: Draft-Final Remedial Action Plan, Revision 1, Site 1586, Naval Station  
Mayport, Facility ID# 16-8626008, USEPA ID #FL9 170 024 260, Mayport,  
Florida (Tetra Tech NUS, Inc., January 24, 2012)**

Dear Mr. Syme:

I have reviewed the subject document which was dated January 24, 2012 and was received on January 25, 2012. This report was prepared under Task Order Number 0386. Based upon my and Jeff Lockwood's (Professional Engineer for the Federal Programs Section) review, the enclosed Remedial Action Plan Approval Order was signed by Mr. Doug Jones, Chief, Bureau of Waste Cleanup.

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

cc Tim Bahr, FDEP, Tallahassee

DOD\_8\_1287



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2600 Blair Stone Road  
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June 15, 2012

Naval Facilities Engineering Command Southeast  
Attn: Mr. Brian Syme (OPC6), Remedial Project Manager  
135 Ajax Street North, Building 903  
Naval Air Station Jacksonville  
Jacksonville, Florida 32212-0030

Subject: Remedial Action Plan Approval Order  
Site 1586  
Naval Station Mayport  
Jacksonville, Duval County  
Operating and Corrective Action Permit No. 72442-HO-004  
Facility ID# 16-8626008

Dear Mr. Syme:

The Bureau of Waste Cleanup has reviewed the Remedial Action Plan (RAP) dated January 24, 2012 (received January 25, 2012), submitted by Tetra Tech for the site located at Naval Station Mayport referenced above. We found all the documents submitted to date to be adequate to meet the RAP requirements of rule 62-770.700, Florida Administrative Code (F.A.C.). The Florida Department of Environmental Protection (Department) has determined that the actions proposed in this RAP represent a reasonable strategy toward accomplishing the cleanup objectives of Chapter 62-770, F.A.C. Pursuant to Paragraph 62-770.700(8)(a), F.A.C., the Department approves the RAP as described in this RAP Approval Order (Order).

If it appears during RAP implementation that the remedial strategy is not effective a request for modification of this Order, pursuant to Subsection 62-770.700(15), F.A.C., may be submitted to the Department or the Department may require the preparation and submittal of a RAP Modification to enhance the active remediation. Depending on the nature of the system modification, the Department may revoke this Order.

The operation of the active remediation system must be initiated within 120 days, as required by Subsection 62-770.700(12), F.A.C. You are also required to submit to the Department record drawings (as-built drawings) of the treatment system within 120 days of initiating operation of the active remediation system(s). These drawings must be signed and sealed by a professional engineer.

DOD\_8\_1287

### Legal Issues

The Department's Order shall become final unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, Florida Statutes (F.S.), within 21 days of receipt of this Order. The procedures for petitioning for an administrative hearing are set forth below.

Persons affected by this Order have the following options:

- (A) If you choose to accept the Department's decision regarding the RAP you do not have to do anything. This Order is final and effective as of the date on the top of the first page of this Order.
- (B) If you choose to challenge the decision, you may do the following:
  - (1) File a request for an extension of time to file a petition for an administrative hearing with the Department's Agency Clerk in the Office of General Counsel within 21 days of receipt of this Order; such a request should be made if you wish to meet with the Department in an attempt to informally resolve any disputes without first filing a petition for an administrative hearing; or
  - (2) File a petition for an administrative hearing with the Department's Agency Clerk in the Office of General Counsel within 21 days of receipt of this Order.

Please be advised that mediation of this decision pursuant to Section 120.573, F.S., is not available.

### How to Request an Extension of Time to File a Petition for an Administrative Hearing

For good cause shown, pursuant to Subsection 62-110.106(4), F.A.C., the Department may grant a request for an extension of time to file a petition for an administrative hearing. Such a request must be filed (received) by the Department's Agency Clerk in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, within 21 days of receipt of this Order. Petitioner, if different from Brian Syme/Naval Station Mayport, shall mail a copy of the request to Brian Syme/Naval Station Mayport at the time of filing. Timely filing a request for an extension of time tolls the time period within which a petition for an administrative hearing must be made.

### How to File a Petition for an Administrative Hearing

A person whose substantial interests are affected by this Order may petition for an administrative hearing under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) by the

Mr. Brian Syme  
Site 1586, Naval Station Mayport  
Page 3  
June 15, 2012

Department's Agency Clerk in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, within 21 days of receipt of this Order. Petitioner, if different from Brian Syme/Naval Station Mayport, shall mail a copy of the petition to Brian Syme/Naval Station Mayport at the time of filing. Failure to file a petition within this time period shall waive the right of anyone who may request an administrative hearing under Sections 120.569 and 120.57, F.S.

Pursuant to Subsection 120.569(2), F.S. and Rule 28-106.201, F.A.C., a petition for an administrative hearing shall contain the following information:

- (a) The name, address, and telephone number of each petitioner; the name, address, and telephone number of the petitioner's representative, if any; the site owner's name and address, if different from the petitioner; and the name and address of the site;
- (b) A statement of when and how each petitioner received notice of the Department's action or proposed action;
- (c) An explanation of how each petitioner's substantial interests are or will be affected by the Department's action or proposed action;
- (d) A statement of the disputed issues of material fact, or a statement that there are no disputed facts;
- (e) A statement of the ultimate facts alleged, including a statement of the specific facts the petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the Department's action or proposed action; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the Department to take with respect to the Department's action or proposed action.

This Order is final and effective as of the date on the top of the first page of this Order. Timely filing a petition for an administrative hearing postpones the date this Order takes effect until the Department issues either a final order pursuant to an administrative hearing or an Order Responding to Supplemental Information provided to the Department pursuant to meetings with the Department.

#### Judicial Review

Any party to this Order has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the Department's Agency Clerk in the Office of General Counsel at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000, and by

Mr. Brian Syme  
Site 1586, Naval Station Mayport  
Page 4  
June 15, 2012

filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days after this Order is filed with the Department's clerk (see below).

Questions

Any questions regarding the Department's review of your RAP should be directed to John Winters at (850) 245-8999, or John.Winters@dep.state.fl.us. Questions regarding legal issues should be referred to the Department's Office of General Counsel at (850) 245-2242. Contact with any of the above does not constitute a petition for an administrative hearing or a request for an extension of time to file a petition for an administrative hearing.

Sincerely,



Douglas A. Jones, Chief  
Bureau of Waste Cleanup  
Division of Waste Management

DAJ/jdw

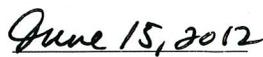
Enclosures

cc: Tim Bahr, FDEP, Tallahassee  
File

FILING AND ACKNOWLEDGMENT  
FILED, on this date, pursuant to  
§120.52 Florida Statutes, with the  
designated Department Clerk, receipt  
of which is hereby acknowledged.



Clerk  
(or Deputy Clerk)



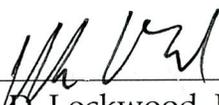
Date

CERTIFICATION OF APPROVAL

March 29, 2012

RE: Draft-Final Remedial Action Plan for Underground Storage Tank Site 1586  
Naval Station Mayport, Jacksonville, Florida

In my professional judgment, the proposed remediation measures contained in the above-referenced document, dated January 2012 (received January 25, 2012) provide reasonable assurance of reducing applicable pollutants that may be potentially harmful or injurious to human health or welfare and animal or plant life in accordance with state requirements described in Chapter 376, F.S.

  
\_\_\_\_\_  
Jeffrey D. Lockwood, P.E., BCEE  
Professional Engineer No. 39554  
Expires February 28, 2013

3-29-12  
Date

Florida Department of  
**Environmental Protection**

**Memorandum**

TO: Cathy McCarty, P.G.  
Bureau of Water Facilities Regulation  
Underground Injection Control Section – MS 3530

FROM: Jeff Lockwood  
Federal Programs Group  
Bureau of Waste Cleanup

DATE: 3-20-12

SUBJECT: **Proposed Injection Well(s) for In Situ Aquifer  
Remediation at a Petroleum Remedial Action Site**

Pursuant to paragraph 62-528.630(2)(c), F.A.C., inventory information is hereby provided regarding the proposed construction of temporary injection well(s) for the purpose of in situ aquifer remediation at a petroleum-contaminated site.

Facility name: NAS Mayport - VST Site 15466  
Facility address: NAS Jacksonville  
City/County: Duval  
Latitude/Longitude: 30.392 N 81.400 W  
FDEP Facility Number: \_\_\_\_\_

Facility owner's name: Naval Facilities Engineering Command Southeast  
Facility owner's address: NAS Jacksonville  
Jacksonville 32212-0030

Well contractor's name: Tetra Tech NUS  
Well contractor's address: 661 Anderson Drive  
Egerton Plaza 7  
Pittsburgh PA 15220

Cathy McCarty, P.G.  
Page 2 of 4  
Date: \_\_\_\_\_

Facility name: \_\_\_\_\_  
FDEP facility no.: \_\_\_\_\_

### AFFECTED AQUIFER

Name of aquifer: Surface  
Depth to groundwater (feet): 1  
Aquifer thickness (feet): 19  
Areal extent of contamination (square feet): 1256 (to be treated)

### INJECTION WELLS

A site map showing the location and spacing of injection wells, the areal extent of the groundwater contamination plume, and associated monitoring wells is attached. The injection well(s) features are summarized below, and/or a schematic of the injection well(s) is attached.

Direct-push or HSA/Mud rotary (circle the appropriate well type)  
Diameter of well(s) (i.e., riser pipe & screen) (inches): \_\_\_\_\_  
Total depth of well(s) (feet): \_\_\_\_\_  
Screened interval: \_\_\_\_\_ to \_\_\_\_\_ feet below land surface  
Grouted interval: \_\_\_\_\_ to \_\_\_\_\_ feet below land surface  
Casing diameter, if applicable (inches): \_\_\_\_\_  
Cased depth, if applicable: \_\_\_\_\_ to \_\_\_\_\_ feet below land surface  
Casing material, if applicable: \_\_\_\_\_

(See attached Project Specs)

### PROJECT DESCRIPTION

The in situ, injection-type aquifer remediation product/process remediates petroleum by:  
(check those that apply)

- bioremediation,
- chemical oxidation, or
- other (describe) \_\_\_\_\_

Brief description of the project: Biox injection; ongoing free product removal

Summary of major design considerations and features of the project:

Number of injection wells: 79  
Injection volume per well (gallons): 55  
Single or multiple injection events: single  
Injection volume total (all wells, all events): 4419

### FLUID TO BE INJECTED

Composition of injected fluid (ingredient, wt. %): Biox

Cathy McCarty, P.G.  
Page 3 of 4  
Date: \_\_\_\_\_

Facility name: \_\_\_\_\_  
FDEP facility no.: \_\_\_\_\_

**TEMPORARY INJECTION ZONE OF DISCHARGE (ZOD)**

(check those that apply)

- No ZOD needed. The fluid to be injected meets the primary and secondary drinking water standards set forth in Chapter 62-550, F.A.C., and the minimum groundwater quality criteria set forth in Chapters 62-520 and 62-777, F.A.C.
- ZOD permission by paragraph 62-522.300(2)(c), F.A.C., for reagent chemical species and/or parameter(s) in the fluid to be injected (or re-injected) that exceed secondary groundwater standards. ZOD permission by this paragraph also applies to chemical species in the fluid to be injected that exceed primary groundwater standards or minimum groundwater criteria, provided those species are prime constituents of the reagents used to remediate site contaminants. The list of chemical species and parameters for which the approved remediation plan identifies zone size, duration and groundwater monitoring are as follows:

Fe, Mn, TDS, SO<sub>4</sub>, NH<sub>3</sub>-N

- ZOD permission by paragraph 62-522.300(2)(c), F.A.C., for the following petroleum products' contaminants of concern that exceed their groundwater standards in the fluid to be re-injected as part of a closed-loop re-injection system for which the approved remediation plan identifies zone size, duration and groundwater monitoring:

- ZOD permission by variance because the fluid to be injected contains the following impurities that are not prime constituents of the reagents used to remediate the site's contaminants, and the concentrations of those impurities in the fluid to be injected are in excess of their primary groundwater standards:

A variance needs to be granted before the remediation can be conducted.

A variance has already been granted for the impurities listed above:

Date variance granted: \_\_\_\_\_

Zone size (square feet): \_\_\_\_\_

Duration (months): \_\_\_\_\_

If ZOD permission by paragraph 62-522.300(2)(c), F.A.C., or by variance is checked above, then a figure that delineates the ZOD is attached, or

The ZOD is described as follows: 10' ZOD for 1 year

Cathy McCarty, P.G.

Page 4 of 4

Date: \_\_\_\_\_

Facility name: \_\_\_\_\_

FDEP facility no.: \_\_\_\_\_

### CLEANUP CRITERIA AND ENFORCEABLE APPROVAL ORDER

The in situ injection-type aquifer remediation plan for this petroleum contaminated site is intended to meet the groundwater petroleum cleanup criteria referenced in Chapter 62-770, F.A.C. Additionally, all other groundwater standards will be met at the time of project completion for any residuals associated with the ingredients of the injected remediation products, and any by-products or intermediates produced as a result of the chemical or biochemical transformation of those ingredients or the contaminating petroleum product during their use. Applicable primary and secondary drinking water standards are set forth in Chapter 62-550, F.A.C., and additional groundwater quality criteria are set forth in Chapters 62-520 and 62-777, F.A.C.

The remediation plan estimates that site remediation will take 12 months. We will notify you if there are any modifications to the remediation strategy which will affect the injection well design or the chemical composition and volume of the injected remediation product(s).

The proposed remediation plan was approved on pending by an enforceable approval order. A copy is attached. The remediation system installation is expected to commence within 60 days. Please call me at 7504 if you require additional information.

## Project Specifications

Proposal Number: 986-REV  
Date: 18-Oct-10

Client: Tetra Tech  
8640 Phillips Highway, Suite 16  
Jacksonville, FL 32256

Project: Site 1586  
Mayport Naval Station

Attn: Ben Marshall

Contaminant of Concern:
LNAPL

### Treatment Area

Length:	0	Feet
Width:	0	Feet
Surface Area:	1256	Sq. Ft.

### Vertical Interval

From:	1	feet below ground surface
To:	20	feet below ground surface
Total Vertical:	19	feet

Volume of Treatment Zone:	884 Cubic yards
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Injection Point Spacing:	4 Feet
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Number of Injection Points:	79
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Estimated Gallons of BIOX:	4,419
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Estimated Days to Complete:	6
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Includes Direct Push Unit:	YES
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Lump Sum Price: \$	47,122
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Project specifications are subject to modification during field operations at the discretion of BMS, Inc.  
Field modifications will not decrease the scope of work.

### Proposal Acceptance

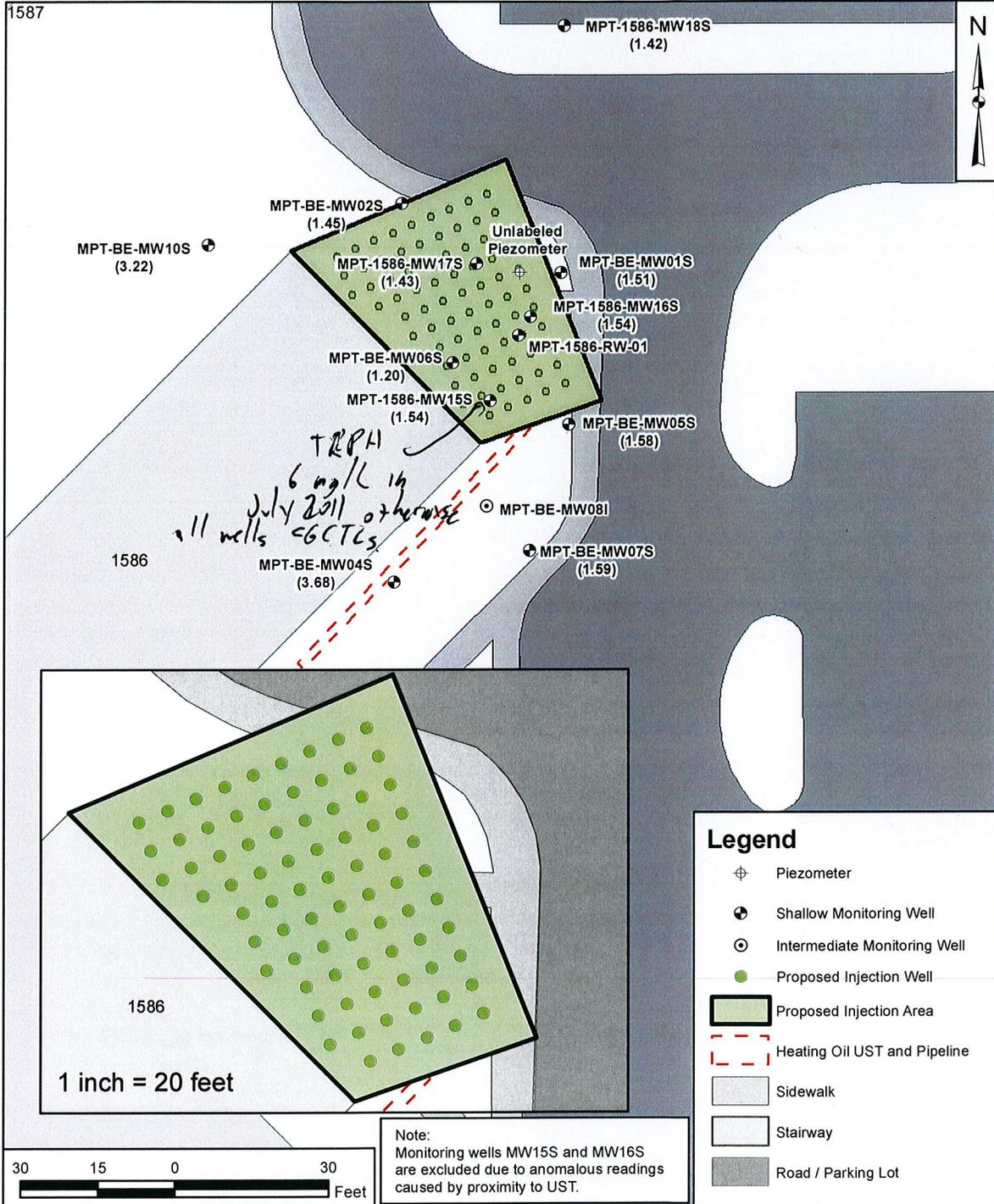
Printed Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

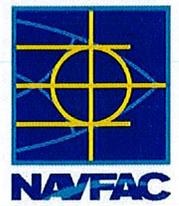
Date: \_\_\_\_\_

Purchase Order No: \_\_\_\_\_



Note:  
Monitoring wells MW15S and MW16S  
are excluded due to anomalous readings  
caused by proximity to UST.

DRAWN BY	DATE
S. STROZ	10/21/11
CHECKED BY	DATE
D. SIEFKEN	10/21/11
REVISED BY	DATE
C. TULLEY	03/15/12
SCALE AS NOTED	



PROPOSED INJECTION AREA  
SITE 1586  
NAVAL STATION MAYPORT  
JACKSONVILLE, FLORIDA

CONTRACT NUMBER CTO JM33	
OWNER NUMBER —	
APPROVED BY	DATE
—	—
FIGURE NO. FIGURE 7-1	REV 0