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LETTER REGARDING FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
APPROVAL OF TECHNICAL MEMORANDUM PILOT STUDY WORK PLAN PHASE II  
UPDATE OPERABLE UNIT 4 (OU 4) HAWTHORN ZONE EOS PRO INJECTIONS NTC  
ORLANDO FL  
05/29/2015  
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



**FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION**

BOB MARTINEZ CENTER  
2600 BLAIRSTONE ROAD  
TALLAHASSEE, FLORIDA 32399-2400

RICK SCOTT  
GOVERNOR

CARLOS LOPEZ-CANTERA  
LT. GOVERNOR

JONATHAN P. STEVERSON  
SECRETARY

May 29, 2015

David Barney  
BRAC Environmental Coordinator  
Naval Facilities Engineering Command  
BRAC Program Management Office East  
571 Shea Memorial Drive  
South Weymouth, Massachusetts 02190

RE: Technical Memorandum, Pilot Study Work Plan Phase II Update, OU 4 Hawthorn Zone EOS®  
Injections, Former Naval Training Center, Orlando, Florida

Dear Mr. Barney:

The Department has reviewed the Technical Memorandum, Pilot Study Work Plan Phase II Update, OU 4 Hawthorn Zone EOS® Injections, Former Naval Training Center, Orlando, dated May 18, 2015 (received May 19, 2015), prepared by Resolution Consultants. The Pilot Study Work Plan Phase II Update proposes to modify the previously approved Underground Injection Control Approval Order to include a sodium sulfite additive. In accordance with Chapter 62-528, Florida Administrative Code, an Underground Injection Control (UIC) Approval Order has been attached to this letter authorizing the injection of the chemicals proposed in the Pilot Study Work Plan Phase II Update into the intermediate aquifer at Operable Unit 4 for the purpose of stimulating biological activity in the aquifer in order to enhance the natural attenuation of chlorinated solvent contamination. The injection of the chemicals shall only be done in accordance with the proposal contained in the Pilot Study Work Plan Phase II Update. Any additional injections into the aquifer will require a separate approval from the Department. I have attached Jeff Lockwood's Professional Engineers Certification of Approval to this letter.

If you have any questions regarding this letter, please contact me at (850) 245-8997.

Sincerely,

A handwritten signature in blue ink that reads 'David P. Grabka'. The signature is fluid and cursive, with a long horizontal line extending to the right.

David P. Grabka, P.G.  
Remedial Project Manager  
DoD and Brownfields Partnerships  
Waste Cleanup Program

KAW

Handwritten initials 'KAW' in blue ink, written in a cursive style.



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SECRETARY

May 29, 2015

Commanding Officer  
Naval Facilities Engineering Command  
BRAC Program Management Office East  
4911 South Broad Street  
Building 679  
Philadelphia, Pennsylvania 19112

In care of:

David Barney  
BRAC Environmental Coordinator  
Naval Facilities Engineering Command  
BRAC Program Management Office East  
571 Shea Memorial Drive  
South Weymouth, Massachusetts 02190

Subject: Underground Injection Control Approval Order  
Operable Unit 4  
Pilot Study Work Plan Phase II Update  
Hawthorn Zone EOS<sup>®</sup> Injections  
Former Orlando Naval Training Center, Area "C"  
Orlando, Orange County, Florida

Dear Mr. Barney:

The Waste Cleanup Program has reviewed the Technical Memorandum, Pilot Study Work Plan for Operable Unit 4, Former Naval Training Center, Orlando, Florida dated May 18, 2015 (received May 19, 2015), prepared by Resolution Consultants. The Pilot Study Work Plan Phase II Update is a modification to the Navy's plan to address chlorinated solvent contamination that has been detected in the Hawthorn Water Bearing Zone (WBZ), also known as the Intermediate

Aquifer. The Pilot Study Work Plan Phase II Update proposes to inject Emulsified Oil Substrate (EOS<sup>®</sup> Pro) into the Intermediate Aquifer as previously approved by the Department with the addition of sodium sulfite. The EOS<sup>®</sup> Pro is expected to act as an organic substrate that will quickly stimulate microbial activity and provide long-term nourishment to microbes expected to anaerobically degrade chlorinated solvent contamination that has been detected in groundwater. EOS<sup>®</sup> has been previously injected into the shallow surficial aquifer at this site and has been successful in reducing chlorinated solvent contaminant concentrations. The sodium sulfite additive will be used to reduce oxygen concentrations in the injection fluids. The Florida Department of Environmental Protection (Department) approves the document as described in this Approval Order (Order). Since the proposed action involves injection into an aquifer, the criteria for Class V, Group 4 aquifer remediation wells set forth in Chapter 62-528, Florida Administrative Code (F.A.C.), apply, as well as the minimum criteria for groundwater set forth in Chapters 62-520 and 62-777, F.A.C., and the general provisions for groundwater permitting and monitoring in Chapter 62-522, F.A.C.

#### 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 Interim Measures Work Plan you do not have to do anything. This Order is final and effective on the date filed with the Clerk of the Department, which is indicated on the last 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 Mr. David Barney, BRAC PMO Office East, shall mail a copy of the request to Mr. David Barney, BRAC PMO Office, East, 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 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 Mr. David Barney, BRAC PMO Office East, shall mail a copy of the petition to Mr. David Barney, BRAC PMO Office East, 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 facility owner's name and address, if different from the petitioner; the FDEP facility number, and the name and address of the facility;
- (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 on the date filed with the Clerk of the Department, which is indicated on the last 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 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 Pilot Study Work Plan should be directed to David Grabka at (850) 245-8997 or Jeff Lockwood at (850) 245-7504. Questions regarding legal issues should be referred to the Department's Office of General Counsel at

Mr. David Barney  
Pilot Study Work Plan Phase II Update  
Operable Unit 4  
Former Orlando Naval Training Center  
Page 5 of 5  
May 29, 2015

(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,



Peter Cornais, Program Administrator  
Waste Cleanup Program

PC/dpg

ec: David Grabka, FDEP, DoD and Brownfields Partnerships – [david.grabka@dep.state.fl.us](mailto:david.grabka@dep.state.fl.us)  
Cathy McCarty, Division of Water Resource Management, MS 3530 –  
[Cathleen.McCarty@dep.state.fl.us](mailto:Cathleen.McCarty@dep.state.fl.us)  
Marianne Sweeney, AECOM, Orlando, Florida – [Marianne.Sweeney@aecom.com](mailto:Marianne.Sweeney@aecom.com)

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)

05/29/2015  
Date

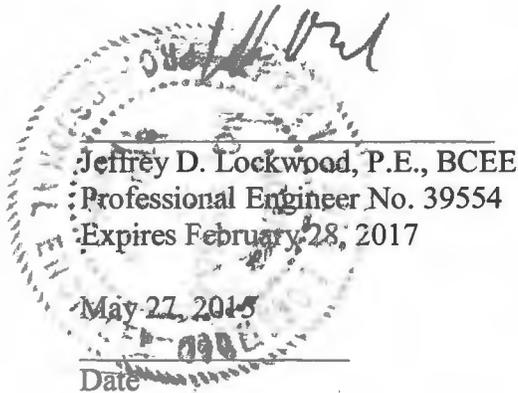
May 27, 2015

**CERTIFICATION OF APPROVAL**

RE: Pilot Study Work Plan Phase II Update  
OU4 Hawthorn Zone EOS Injections  
Former Naval Training Center, Orlando, Florida

In my professional judgment, the above-referenced Pilot Study Work Plan Phase II Update dated May 18, 2015 is supportive of a site remediation which provides 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. Ms. Marianne Sweeny, Florida Registered Professional Engineer No. 44784, of Resolution Consultants, is the engineer of record for this project.

I have not evaluated and do not certify aspects of this plan that are outside the limits of my review responsibilities and outside of my area of expertise, including but not limited to electrical, mechanical, and structural features.



Jeffrey D. Lockwood, P.E., BCEE  
Professional Engineer No. 39554  
Expires February 28, 2017  
May 27, 2015  
Date