

N60201.AR.000461
NS MAYPORT
5090.3a

LETTER AND COMMENTS FROM FLORIDA DEPARTMENT OF ENVIRONMENTAL
PROTECTION REGARDING REMEDIAL ACTION PLAN FOR BUILDINGS 460 AND 1587 NS
MAYPORT FL
5/6/1999
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



Department of Environmental Protection

2504-379
592
~~608~~

Job Bush
Governor

Twin Towers Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

May 6, 1999

Ms. Beverly Washington
Department of the Navy, Petroleum Program
Southern Division - Naval Facilities Engineering Command
PO Box 190010
2155 Eagle Drive
North Charleston, SC 29419-9010

file: 460rap1.doc

RE: Remedial Action Plan, Buildings 460 and 1587, Naval Station Mayport, Mayport, FL

Dear Ms. Washington:

Mr. Greg Brown, P.E., has completed his review of the above document dated March 1999 (received February 12, 1999). His engineering certification and RAP Approval Order are attached. Please note that although Mr. Brown has approved the document, he has made several comments which you should consider in pursuing this project. I have also attached his comments in this regard. If further clarification is required or if you have any questions, please contact Mr. Brown or me at 850-488-3935.

Sincerely,

James H. Cason, P.G.
Remedial Project Manager

Attachments (3)

CC: Randy Bishop, NAVSTA Mayport
Brian Cheary, FDEP Northeast District
Jerry Young, City of Jacksonville
Frank Lesesne, HLA, Tallahassee

TJB ~~B~~ JJC ~~JE~~ ESN ~~JE~~

Memorandum**Florida Department of
Environmental Protection**

TO: Jim Cason, P.G., Remedial Project Manager, Technical Review Section

Through: Tim Bahr, P.G., Supervisor, Technical Review Section *J.P.C.*
TB

FROM: Greg Brown, P.E., Professional Engineer II, *GB*
Technical Review Section

DATE: April 27, 1999

SUBJECT: Remedial Action Plan, Buildings 460 and 1587, Credit Union and Bachelor Enlisted Quarters, Naval Station Mayport, FL.

I reviewed the subject document dated March, 1999 (received February 12, 1999). It is generally adequate for its intent. The engineering certification and RAP Approval Order are attached. Although I do not believe the RAP design is optimal for the reported site conditions, it nonetheless is likely to obtain remedial objectives. I have the following comments, however, for the record and for your consideration:

1. Page 3-3, Section 3.4.1. The report states, "... vacuum enhanced SVE of volatilized petroleum hydrocarbons in soil, along with monitored natural attenuation for groundwater, is the most appropriate remedial action for Building 460." It subsequently states, "COCs in soil are TRPH and benzo(a)anthracene (constituents of Number 2 fuel oil)." Benzo(a)anthracene has a Henry's Constant (dimensionless) of $1.37E-4$ (as a comparison, benzene, a volatile organic compound, has a Henry's Constant [dimensionless] of $2.28E-1$). The time-to-cleanup estimate assumes using professional judgment a mass removal rate 10 percent of what would be expected for gasoline. Using magnitude differences between the Henry's Constants above as an alternative benchmark, 0.1 percent may be a better estimate if volatilization is the principal remediation mode of action. This would change the time-to-cleanup estimate from 5 months to 500 months, all other things equal.
2. The purpose of the previous comment is to raise the suspicion that volatilization is not likely to be the principal mode of remedial action. Rather, the likely mode of action will probably be aerobic soil bioremediation via bioventing. The proposed SVE may therefore be excessively specified if this suspicion is true. The SVE is designed to extract vapors at about 200 cubic feet per minute (CFM) from about 846 cubic yards bank volume of soil. Assuming 35 percent

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

MEMORANDUM**Jim Cason, P.G.****April 27, 1999****Page two**

effective porosity, the proposed system will have a pore volume turnover about every 39 minutes on average. Rounding this up conservatively to an hour, the system can expect to have at least 24 pore volume turnovers per day. Typical bioventing systems have much lower pore volume turnover rates. An EPA bioventing design guide noted, "[s]ome literature suggests that one pore volume of soil vapor should be extracted at least weekly for effective remedial progress" (EPA 510-B-95-007, May 1995). This suggested rate may be too low, but stands as a contrast to the proposed RAP design rate of 24 turnovers or more per day. A rationally designed bioventing system would be based on delivering an optimum amount of oxygen to the vadose zone to enhance aerobic bioremediation. A design on this basis would likely result in a much smaller and more cost-effective system than the one specified in the subject RAP.

Please call me at (850) 488-3935 if you have any questions.

NR



Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

April 27, 1999

CERTIFICATION OF APPROVAL

RE: Remedial Action Plan - Building 460 and 1587, Credit Union
and Bachelor Enlisted Quarters, Naval Station Mayport, FL.

FDEP Facility ID 16862008.
EPA Facility ID FL9 170 024 260.

I hereby certify that in my professional judgment, the components of this remedial action plan satisfy the requirements set forth in Chapter 62-770, F.A.C., and that the engineering design features incorporated in this plan provide reasonable assurances of achieving the objectives stated in Chapter 62-770, F.A.C., for remedial action. However, I have not evaluated and do not certify aspects of this plan that are outside the limits of my review responsibilities and outside my area of expertise (including but not limited to electrical, mechanical, and structural features). I personally completed this review.


Gregory M. Brown, P.E.
Professional Engineer No. 42194
Expires February 28, 2001

Apr 27, 1999
Date

Enclosure (1)

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Printed on recycled paper.



Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Department of the Navy
Commanding Officer
Naval Station
Mayport, Florida 32228-0067
Duval County, Florida

Subject: Remedial Action Plan
Approval Order

Remedial Action Plan, Buildings 460 and 1587, Credit Union
and Bachelor Enlisted Quarters, Naval Station Mayport, FL.

Dear Commanding Officer:

The Bureau of Waste Cleanup has reviewed the Remedial Action Plan (RAP) dated March 1999 (received February 12, 1999) submitted for this site. 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 Department has determined that the actions proposed in this RAP provide reasonable assurance that the concentrations of petroleum products' chemicals of concern at the site will be reduced to the levels set forth in Chapter 62-770, F.A.C. Pursuant to Rule 62-770.700(8), F.A.C., the Department approves the RAP as described in this RAP Approval Order (Order). The operation of the active remediation system should be initiated within 120 days, as required by Rule 62-770.700(9), F.A.C., or in accordance with the approved Site Management Plan.

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 certified by a professional engineer.

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Printed on recycled paper.

Commanding Officer
Naval Station Mayport
Buildings 460 and 1587
Page 2 of 4

Persons affected by this Order have the following options:

If you choose to accept the above decision by the Department about this Order you do not have to do anything. This Order is final as of the date on the top of the first page of this Order.

If you disagree with the decision, you may do one of the following within 21-days after receipt of this Order:

1. File a petition for administrative hearing with the Office of the General Counsel of the Department within 21 days after receipt of this Order;

OR

2. File a request for an extension of time to file a petition for hearing with the Office of the General Counsel of the Department within 21 days after 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 hearing.

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

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

A request for an extension of time to file a petition for hearing must be filed (received) in the Office of the General Counsel of the Department at 3900 Commonwealth Boulevard, MS 35, Tallahassee, Florida 32399-3000, within 21 days after receipt of this Order. Pursuant to Rule 28-106.111(3), F.A.C., a request for extension of time shall contain a certificate that the moving party has consulted with all other parties, if any, concerning the extension and that the Department and any other parties agree to said extension. Petitioner, if different from the Commanding Officer, Naval Station Mayport, shall mail a copy of the petition to the Commanding Officer, 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 administrative hearing must be filed until the request is acted upon.

Commanding Officer
Naval Station Mayport
Buildings 460 and 1587
Page 3 of 4

How to File a Petition for Administrative Hearing

A person whose substantial interests are affected by this Order may petition for administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of the General Counsel of the Department at 3900 Commonwealth Boulevard, MS 35, Tallahassee, Florida 32399-3000, within 21 days after receipt of this Order. Petitioner, if different from the Commanding Officer, Naval Station Mayport, shall mail a copy of the petition to the Commanding Officer, 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 Rules 62-103.155 and 28-106.201, F.A.C., a petition for 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, the FDEP facility number, and the name and address of the facility;
- b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- d) A statement of the material facts disputed by the petitioner, if any;
- e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- f) A statement of which rules or statutes petitioner contends requires reversal or modification of the Department's action or proposed action; and
- g) A statement of the relief petitioner seeks, stating precisely what petitioner wants the Department to do regarding 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

Commanding Officer
Naval Station Mayport
Buildings 460 and 1587
Page 4 of 4

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 pursuant to meetings with the Department.

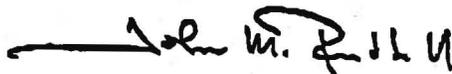
Judicial Review

Any party to this Order has the right to seek judicial review of this Order pursuant to Section 120.68, F.S., by filing a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Department clerk in the Office of the General Counsel, 3900 Commonwealth Boulevard, MS 35, Tallahassee, Florida 32399-3000. Simultaneously with filing a Notice of Appeal with the Department, petitioner must file a copy of the Notice of Appeal with the applicable filing fees, with the appropriate District Court of Appeal. The Notice of Appeal must be received by the Department clerk within 30 days from the date this Order was signed by the Department clerk (see below).

Questions

Should you have any questions regarding the legal processes, please contact the Office of the General Counsel at (850) 488-9730. Any questions regarding the Department's review of your Remedial Action Plan should be directed to Mr. Gregory M. Brown, P.E., at (850) (488-3935). Contact with any of the above does not constitute a petition for administrative hearing.

Sincerely,

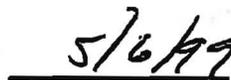


John M. Ruddell, Director
Division of Waste Management

JMR/gb

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