

N60201.AR.000925
NS MAYPORT
5090.3a

LETTER AND U S NAVY RESPONSE TO FLORIDA DEPARTMENT OF ENVIRONMENTAL
PROTECTION COMMENTS REGARDING STATEMENTS OF BASIS FOR SOLID WASTE
MANAGEMENT UNITS 1, 17, 23, 24 AND 25 NS MAYPORT FL
8/8/2008
TETRA TECH NUS



TETRA TECH NUS, INC.

8640 Philips Highway, Suite 16 • Jacksonville, FL 32256
Tel 904.636.6125 • Fax 904.636.6165 • www.tetrattech.com

Document Tracking Number 08JAX0044

August 8, 2008

Project Number 112G00436

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

Reference: CLEAN IV Contract Number N62467-04-D-0055
Contract Task Order Number 0033

Subject: Response to Comments
Statements of Basis for SWMUs 1, 17, 23, 24, and 25
Naval Station Mayport
Mayport, Florida

Dear Mr. Hayworth:

Tetra Tech NUS, Inc. (TtNUS) is pleased to submit this letter responding to the comments on the Statements of Basis for Solid Waste Management Units (SWMUs) 1, 17, 23, 24, and 25 from the various Naval Station (NAVSTA) Mayport Partnering Team members. The Statements of Basis for each SWMU were submitted on February 15, 2008. The questions and/or comments that have been received by TtNUS from the other NAVSTA Mayport Partnering Team members are addressed below.

STATEMENT OF BASIS REVISION 0 COMMENTS

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Comments from John Winters

SWMU 1 – Statement of Basis Comments

- FDEP feels that land use controls (LUCs) to prevent disturbance of subsurface soils be considered along with the surface soil prohibition. Typically, old landfills that are no longer in use are not fully characterized so there may be unknown risks associated with subsurface soils. Summary, Page 1, Column 1: Please discuss the likelihood of contaminants leaching from soils to the groundwater.**

RESPONSE: The language regarding LUCs has been changed to indicate LUC requirements for both surface and subsurface soils. Additional information regarding the likelihood of contaminants leaching from soils to groundwater is more appropriately detailed in the Final Corrective Measures Study for Solid Waste Management Units 1, 23, 24, and 25 (November 2004). This final CMS containing discussion of the leaching from soils to groundwater at SWMU 1 was reviewed and obtained FDEP approval from Jim Cason (November 2005).



- 2. Summary, Page 1, Column 1: The second sentence should read “SWMU 1, the former Landfill A, is located in the vicinity of the Administrative Building of the former Jacksonville Shipyards, Inc., near Bon Homme Richard Avenue.”**

RESPONSE: Will comply.

- 3. Summary, Page 1, Column 1: The seventh sentence should read... “LUCs will restrict the site to non-residential land use only, and will also prohibit any soil disturbance, excavation, or removal activities unless prior written approval is obtained from the NAVSTA Mayport Environmental Department in accordance with the NAVSTA Mayport excavation permit process.”**

RESPONSE: Will comply.

- 4. Summary, Page 1, Column 2: The first sentence of the second paragraph should read... “LUCs for groundwater will prohibit groundwater use/extraction, and will also prohibit any interference with groundwater monitoring systems at SWMU 1”. Please make this same change in the Proposed Corrective Action Section, Column 1, Paragraph 2 (“LUCs for groundwater will prohibit groundwater use/extraction, and will also prohibit any interference with groundwater monitoring systems at the SWMU”).**

RESPONSE: Will comply.

- 5. Proposed Corrective Action, Page 2, Column 1: Please substitute the word “unauthorized” for the word “uncontrolled” when discussing surface soil disturbances. This change should also be made in the Summary of Alternatives and Recommendations sections.**

RESPONSE: Will comply.

- 6. Proposed Corrective Action, Page 2, Column 1: The first sentence of the first paragraph should read...”The proposed corrective measure for surface and subsurface soil includes imposing LUCs to restrict the site to non-residential use only, and it would also prohibit any unauthorized surface and subsurface soil disturbance.”**

RESPONSE: Will comply.

- 7. Proposed Corrective Action Page 2, Column 1: Please review the present worth cost information in this Section. Any corrections in the text should also be reflected in the Evaluation of Alternatives Tables.**

RESPONSE: Per communications with various members of the NAVSTA Mayport Partnering Team, the language regarding the present worth cost information will be changed. The text will be restated as follows: *Soil* – “The total present worth cost of the proposed soil corrective measure is \$84,000 which includes a \$24,000 capital cost and an operation and maintenance cost of \$60,000 over a 30-year period.” *Groundwater* – “The total present worth cost of the proposed groundwater corrective measure is \$259,000 which includes \$47,000 capital cost and an operation and maintenance cost of \$212,000 over a 30-year period.” The text in the Evaluation of Alternatives Tables will reflect this revised language as required.

- 8. Proposed Corrective Action, Page 2, Column 1: When discussing the COCs in groundwater please substitute the word “attenuation” for “degradation”. This correction should also be made in the Summary of Alternatives and Recommendations sections**

RESPONSE: Will comply.



9. **Summary of Facility Risks, Page 3, Column 2:** Please reword the *Groundwater* description as follows: A comparison to FDEP Groundwater Cleanup Target Levels (GCTLs) concluded that antimony, arsenic, silver and zinc are COCs in groundwater for SWMUs 1, 23, 24, and 25. The human health risk assessment concluded that there are cancer and non-cancer risks to human health associated with hypothetical future residents.”

RESPONSE: Will comply.

10. **Summary of Alternatives, Page 4, Column 1:** Under *Soil Alternative 2*, the first sentence should read...“This alternative would implement LUCs to restrict the site to non-residential land use only, and it would also prohibit any unauthorized surface and subsurface soil disturbance.” This change should also be made in the Recommendations Section (“Soil Alternative 2 would implement LUCs to restrict the site to non-residential use only, and it would also prohibit any unauthorized surface and subsurface soil disturbance at the SWMU.”).

RESPONSE: Will comply.

SWMU 17 – Statement of Basis Comments

1. **Summary, Page 1, Column 1:** In the first sentence please change “Land Use Control” to “Land Use Controls”.

RESPONSE: Will comply.

2. **Summary, Page 1, Column 1:** The third sentence of the first paragraph should read, “LUCs will restrict the site to non-residential land use only, and will also prohibit any soil disturbance, excavation, or removal activities unless prior written approval is obtained from the NAVSTA Mayport Environmental Department in accordance with the NAVSTA Mayport excavation permit process.”

RESPONSE: Will comply.

3. **Proposed Corrective Action Page 2, Column 1:** The second sentence of the first paragraph should read...“LUCs will be imposed to restrict the site to non-residential use only, and it would also prohibit any unauthorized soil disturbance in the vicinity....”

RESPONSE: Will comply.

4. **Proposed Corrective Action Page 2, Column 1:** Please review the present worth cost information in this Section. Any corrections in the text should also be reflected in the Evaluation of Alternatives Tables.

RESPONSE: Per communications with various members of the NAVSTA Mayport Partnering Team, the language regarding the present worth cost information will be changed. The text will be restated as follows: *Soil* – “The total present worth cost of the proposed soil corrective measure is \$84,000 which includes a \$24,000 capital cost and an operation and maintenance cost of \$60,000 over a 30-year period.” The text in the Evaluation of Alternatives Tables will reflect this revised language as required. Since no action is recommended for groundwater at SWMU 17, no present worth cost data requires any changes with regards to groundwater.

5. **Summary of Facility Risks, Page 3, Column 1:** In the third paragraph under the Human Health Risk Assessment section please add “of 1” after “... FDEP’s target Hazard Index (HI)”.

RESPONSE: Will comply.



6. **Summary of Facility Risks, Page 3, Column 2:** In the second paragraph of the *Groundwater Ecological Risk Assessment* discussion please provide more clarity as to why iron “was not expected to present unacceptable risk to aquatic receptors.”

RESPONSE: The following text will replace the existing text in the “Ecological Assessment” section for groundwater: “The concentrations of iron in groundwater at SWMU 17 (2000 µg/L) exceeded both the State of Florida GCTL of 300 µg/L and the Marine Surface Water Cleanup Target Level of 300 µg/L. Upgradient groundwater monitoring wells have significantly higher iron concentrations (4000 µg/L). The iron concentrations decrease as groundwater flows toward the NAVSTA Mayport Turning Basin. The CFB at the SWMU was fueled by domestic solid waste and burned waste oil collected from various locations at NAVSTA Mayport. This data indicates that iron is not a SWMU-related contaminant.”

7. **Summary of Facility Risks, Page 3, Column 2:** Why is there a section called “Confirmatory Sampling”? Was a remedial action performed? For the soil sampling discussion please revise the first sentence to make this point clear. Please do the same in the groundwater portion of this section.

RESPONSE: “Confirmatory Sampling” has been removed from the title of this section. There was no remedial action performed at this SWMU. The soil sampling discussion and the groundwater portion of this section have been relocated to provide further clarity.

8. **Summary of Alternatives, Page 4, Column 1:** In the *Soil Alternative 2* paragraph the first two sentences should be...”This alternative would implement LUCs to restrict the site to non-residential land use only, and it would also prohibit any unauthorized soil disturbance. Non-residential land use restrictions prohibit residential or residential-like uses including, but not limited to, ...” This change should also be made in the Recommendations Section (“The preferred corrective action involves the implementation of LUCs to restrict the site to non-residential use only, and it would also prohibit any unauthorized soil disturbance at SWMU 17.”).

RESPONSE: Will comply.

9. **Summary of Alternatives, Page 4, Column 2:** Under *Soil Alternative 3* Would LUCs need to be implemented in this alternative after an excavation is completed? Does the evaluation of this soil corrective measure change?

RESPONSE: No, LUCs would not be required after the Excavation and Disposal are completed. Therefore, mention of LUCs in the evaluation of this soil corrective measure has been removed.

SWMU 23 – Statement of Basis Comments

1. **Summary, Page 1, Column 1:** The seventh sentence should read, “LUCs will restrict the site to non-residential land use only, and will also prohibit any soil disturbance, excavation, or removal activities unless prior written approval is obtained from the NAVSTA Mayport Environmental Department in accordance with the NAVSTA Mayport excavation permit process.”

RESPONSE: Will comply.

2. **Summary, Page 1, Column 2:** The first sentence of the second paragraph should read, “LUCs for groundwater will prohibit groundwater use/extraction, and will also prohibit any interference with groundwater monitoring systems at SWMU 23”. Please make this same change in the Proposed Corrective Action Section (“LUCs for groundwater will prohibit



groundwater use/extraction, and will also prohibit any interference with groundwater monitoring systems at the SWMU.”).

RESPONSE: Will comply.

- 3. Summary, Page 1, Column 2: When discussing the COCs in groundwater please substitute the word “attenuation” for “degradation”. This correction should also be made in the Proposed Corrective Action, Summary of Alternatives, and Recommendations sections.**

RESPONSE: Will comply.

- 4. Introduction, Page 2, Column 1: Please add the CMS as one of the documents where additional details can be found; currently only showing the RFI and CMS Addendum.**

RESPONSE: Will comply.

- 5. Proposed Corrective Action, Page 2, Column 1: Please substitute the word “unauthorized” for the word “uncontrolled” when discussing surface soil disturbances. This change should also be made in the Summary of Alternatives and Recommendations sections.**

RESPONSE: Will comply.

- 6. Proposed Corrective Action, Page 2, Column 1: The first sentence of the first paragraph should read...”The proposed corrective measure for surface and subsurface soil includes imposing LUCs to restrict the site to non-residential use only, and it would also prohibit any unauthorized surface and subsurface soil disturbance.”**

RESPONSE: Will comply.

- 7. Proposed Corrective Action Page 2, Column 1: Please review the present worth cost information in this Section for both soil and groundwater. Any corrections in the text should also be reflected in the Evaluation of Alternatives Tables.**

RESPONSE: Per communications with various members of the NAVSTA Mayport Partnering Team, the language regarding the present worth cost information will be changed. The text will be restated as follows: *Soil* – “The total present worth cost of the proposed soil corrective measure is \$84,000 which includes a \$24,000 capital cost and an operation and maintenance cost of \$60,000 over a 30-year period.” *Groundwater* – “The total present worth cost of the proposed groundwater corrective measure is \$259,000 which includes \$47,000 capital cost and an operation and maintenance cost of \$212,000 over a 30-year period.” The text in the Evaluation of Alternatives Tables will reflect this revised language as required.

- 8. Facility Background Page 2, Column 2: In the first sentence of the second paragraph please add “the” between “is” and “former”.**

RESPONSE: Will comply.

- 9. Facility Background Page 3, Column 1: In the first paragraph it states that two underground storage tanks may exist. This information should be verified so it is known whether or not the tanks exist. Please revise the text accordingly.**

RESPONSE: In an effort to verify whether or not the two underground storage tanks exist at SWMU 23, the data contained in the December 1996 RFI and the November 2004 CMS were reviewed. In the discussions in Chapter 4 of the RFI, the texts states that “two underground storage



tanks with a combined capacity of 3,000 gallons may exist near the location of the machine shop (Building 15). The tanks were used in the 1960s and may have been removed in 1972 during construction of the machine shop (*from the 1989 RFA*). No reports have been found concerning the condition of the tanks at removal or if environmental samples were collected during removal of the tanks.”

Based upon a review of the background information in the RFI, it is inconclusive if the two tanks were abandoned in place or completely removed from this location. Therefore, the text in the Final SB for SWMU 23 will be revised to remove the confusion. The sentence in the draft SB for SWMU 23 that reads “In the vicinity of Building 15, two underground storage tanks with a capacity of 3,000 gallons may exist.” will be changed in the final SB to read “In the vicinity of Building 15, two underground storage tanks with a combined capacity of 3,000 gallons were formerly utilized during the 1960s up through 1972.” Since the construction of the machine shop limits access to verify the presence of these two tanks, then changing the text to clearly indicate the type of tanks, the capacity of the tanks, and time of operation will at least allow the reader to understand at some point in time there were activities that warranted further field investigations in this area of SWMU 23.

10. **Summary of Facility Risks, Page 3, Column 2:** Please reword the *Groundwater* description as follows: A comparison to FDEP Groundwater Cleanup Target Levels (GCTLs) concluded that antimony, arsenic, silver and zinc are COCs in groundwater for SWMUs 1, 23, 24, and 25. The human health risk assessment concluded that there are cancer and non-cancer risks to human health associated with hypothetical future residents.”

RESPONSE: Will comply.

11. **Summary of Facility Risks, Page 4, Column 1:** In the Interim Measures portion of this Section please change the word “the” to “an” in the sentence...” In 1998, Bechtel Environmental, Inc. completed an excavation, removal, and disposal...”

RESPONSE: Will Comply.

12. **Summary of Alternatives, Page 4, Column 2:** In the *Soil Alternative 2* paragraph the first sentence should be...”This alternative would implement LUCs to restrict the site to non-residential land use only, and it would also prohibit any unauthorized surface and subsurface soil disturbance.” This change should also be made in the Recommendations Section (“Soil Alternative 2 would implement LUCs to restrict the site to non-residential use only, and it would also prohibit any unauthorized surface and subsurface soil disturbance at the SWMU.”).

RESPONSE: Will comply.

13. **Summary of Alternatives, Page 4, Column 2:** In the *Groundwater Alternative 2* paragraph the first sentence should be, “This alternative would impose LUCs in the form of a groundwater use/extraction prohibition, and it would also prohibit any interference with...”

RESPONSE: Will comply.

SWMU 24 – Statement of Basis Comments

1. **Summary, Page 1, Column 1:** In the second sentence of the first paragraph please insert the words “location of” in between the words “former” and “North”. This change should also be made in the Facility Background Section in the first sentence of the second paragraph. It should read...”SWMU 24 (see Figure 2), the former location of the North Florida Shipyards, Inc., ...”



RESPONSE: This comment will not be incorporated into the document since it has been confirmed that the North Florida Shipyards, Inc. is still in service. The previous mention of the word “former” has been removed from the text in both the Summary and Facility Background sections of the document.

- 2. Summary, Page 1, Column 1: The seventh sentence of the first paragraph should read, “LUCs will restrict the site to non-residential land use only, and will also prohibit any soil disturbance, excavation, or removal activities unless prior written approval is obtained from the NAVSTA Mayport Environmental Department in accordance with the NAVSTA Mayport excavation permit process.”**

RESPONSE: Will comply.

- 3. Summary, Page 1, Column 2: The first sentence of the second paragraph should read “LUCs for groundwater will prohibit groundwater use/extraction, and will also prohibit any interference with groundwater monitoring systems at SWMU 24”. Please make this change in the Propose Corrective Action Section, Column 1, Paragraph 2 (“LUCs for groundwater will prohibit groundwater use/extraction, and will also prohibit any interference with groundwater monitoring systems at the SWMU.”)**

RESPONSE: Will comply.

- 4. Summary, Page 1, Column 2: When discussing the COCs in groundwater please substitute the word “attenuation” for “degradation”. This correction should also be made in the Proposed Corrective Action, Summary of Alternatives, and Recommendations sections.**

RESPONSE: Will comply.

- 5. Proposed Corrective Action, Page 2, Column 1: The first sentence of the first paragraph should read...”The proposed corrective action for surface and subsurface soil includes imposing LUCs to restrict the site to non-residential use only, and it would also prohibit any unauthorized surface and subsurface soil disturbance.”**

RESPONSE: Will comply.

- 6. Proposed Corrective Action Page 2, Column 1: Please review the present worth cost information in this Section for both soil and groundwater. Any corrections in the text should also be reflected in the Evaluation of Alternatives Tables.**

RESPONSE: Per communications with various members of the NAVSTA Mayport Partnering Team, the language regarding the present worth cost information will be changed. The text will be restated as follows: *Soil* – “The total present worth cost of the proposed soil corrective measure is \$84,000 which includes a \$24,000 capital cost and an operation and maintenance cost of \$60,000 over a 30-year period.” *Groundwater* – “The total present worth cost of the proposed groundwater corrective measure is \$259,000 which includes \$47,000 capital cost and an operation and maintenance cost of \$212,000 over a 30-year period.” The text in the Evaluation of Alternatives Tables will reflect this revised language as required.

- 7. Proposed Corrective Action Page 2, Column 1: Please change the second sentence in the second paragraph to read...”LUCs for groundwater will prohibit groundwater use/extraction, and it would also prohibit any interference with...”**

RESPONSE: Will comply.



8. **Facility Background, Page 2, Column 2:** Please substitute the words “the former location of” for “formerly” in the first sentence of the second paragraph.

RESPONSE: This comment will not be incorporated into the document since it has been confirmed that the North Florida Shipyards, Inc. is still in service. The previous mention of the word “former” has been removed from the text in both the Summary and Facility Background sections of the document.

9. **Summary of Facility Risks, Page 3, Column 2:** Please reword the *Groundwater* description as follows: A comparison to FDEP Groundwater Cleanup Target Levels (GCTLs) concluded that antimony, arsenic, silver and zinc are COCs in groundwater for SWMUs 1, 23, 24, and 25. The human health risk assessment concluded that there are cancer and non-cancer risks to human health associated with hypothetical future residents.”

RESPONSE: Will comply.

10. **Summary of Facility Risks, Page 3, Column 2:** Under the Interim Measures portion of this section, in the third sentence, please change the word “the” to “an” between “completed” and “excavation.”

RESPONSE: Will comply.

11. **Summary of Alternatives, Page 4, Column 1:** In the *Soil Alternative 2* paragraph the first sentence should be...”This alternative would implement LUCs to restrict the site to non-residential land use only, and it would also prohibit any unauthorized surface and subsurface soil disturbance.” This change should also be made in the Recommendations Section (“Soil Alternative 2 would implement LUCs to restrict the site to non-residential use only, and it would also prohibit any unauthorized surface and subsurface soil disturbance at the SWMU.”).

RESPONSE: Will comply.

12. **Summary of Alternatives, Page 4, Column 1:** In the *Groundwater Alternative 2* paragraph the first sentence should be...”This alternative would impose LUCs in the form of a groundwater use/extraction prohibition, and would prohibit any interference with...”

RESPONSE: Will comply.

SWMU 25 – Statement of Basis Comments

1. **SWMU 25 Information, Page 1:** In the listing of the “Corrective Action” under the figure on this page it should read...”Soil – Capping and Land Use Controls; Groundwater – Land Use Controls”.

RESPONSE: Will comply.

2. **Summary, Page 1, Column 1:** In the second sentence of the first paragraph please insert the words “the former location of” before “Atlantic”. This change should also be made in the Facility Background Section in the first sentence of the second paragraph.

RESPONSE: Will comply.



3. **Summary, Page 1, Column 1:** The fifth sentence of the first paragraph should read, “LUCs will restrict the site to non-residential land use only, and will also prohibit any soil disturbance, excavation, or removal activities unless prior written approval is obtained from the NAVSTA Mayport Environmental Department in accordance with the NAVSTA Mayport excavation permit process.”

RESPONSE: Will comply.

4. **Summary, Page 1, Column 2:** The first sentence of the second paragraph should read “LUCs for groundwater will prohibit groundwater use/extraction, and will also prohibit any interference with groundwater monitoring systems at SWMU 25”.

RESPONSE: Will comply.

5. **Summary, Page 1, Column 2:** When discussing the COCs in groundwater please substitute the word “attenuation” for “degradation”. This correction should also be made in the Proposed Corrective Action, Summary of Alternatives, and Recommendations

RESPONSE: Will comply.

6. **Proposed Corrective Action Page 2, Column 1:** The third sentence of the first paragraph should read...”Non-residential land use restrictions prohibit residential or residential like uses which includes, but is not limited to, any form of housing...”

RESPONSE: Will comply.

7. **Proposed Corrective Action Page 2, Column 1:** Please review the present worth cost information in this Section for both soil and groundwater. Any corrections in the text should also be reflected in the Evaluation of Alternatives Tables.

RESPONSE: Per communications with various members of the NAVSTA Mayport Partnering Team, the language regarding the present worth cost information will be changed. The text will be restated as follows: *Soil* – “The total present worth cost of the proposed soil corrective measure is \$155,000 which includes an \$86,000 capital cost and an operation and maintenance cost of \$69,000 over a 30-year period.” *Groundwater* – “The total present worth cost of the proposed groundwater corrective measure is \$259,000 which includes \$47,000 capital cost and an operation and maintenance cost of \$212,000 over a 30-year period.” The text in the Evaluation of Alternatives Tables will reflect this revised language as required.

8. **Proposed Corrective Action Page 2, Column 1:** Please change the second sentence in the second paragraph to read...”LUCs for groundwater will prohibit groundwater use/extraction, and would also prohibit any interference with groundwater...”

RESPONSE: Will comply.

9. **Summary of Facility Risks, Page 3, Column 2:** Under the first full sentence of the second column please identify which concentration of dieldrin is surface and which is subsurface.

RESPONSE: Will comply.

10. **Summary of Facility Risks, Page 3, Column 2:** Please reword the *Groundwater* description as follows: A comparison to FDEP Groundwater Cleanup Target Levels (GCTLs) concluded that antimony, arsenic, silver and zinc are COCs in groundwater for SWMUs 1, 23, 24, and 25. The human health risk assessment concluded that there are cancer and non-cancer risks to human



health associated with hypothetical future residents. However, based on the current use of SWMU1, there is no human health exposure to groundwater, and it is unlikely that there will be any exposure during future use.”

RESPONSE: Will comply.

11. **Summary of Alternatives, Page 4, Column 2:** Under the *Soil Alternative 2* portion of this section the first sentence should read, “This alternative would implement LUCs to restrict the site to non-residential land use only, and it would also prohibit any unauthorized surface and subsurface soil disturbance.”

RESPONSE: Will comply.

12. **Summary of Alternatives, Page 4, Column 2:** Please substitute the word “unauthorized” for the word “uncontrolled” when discussing soil disturbances. This change should also be made in the Recommendations Section.

RESPONSE: Will comply.

13. **Summary of Alternatives, Page 4, Column 2:** Under *Soil Alternative 4* Would LUCs need to be implemented in this alternative after an excavation is completed? Does the evaluation of this soil corrective measure change?

RESPONSE: Mention of LUCs as a component of this alternative has been removed as LUCs would not be required if soil is excavated and disposed. Appropriate changes have also been made in Table 1 in the column summarizing Soil Alternative 4.

14. **Summary of Alternatives, Page 4, Column 2:** In the *Groundwater Alternative 2* paragraph the first sentence should be...”This alternative would impose LUCs in the form of a groundwater use/extraction prohibition, and it would also prohibit any interference with...”

RESPONSE: Will comply.

15. **Recommendations, Page 5, Column 2:** The second sentence of the second paragraph should read...”LUCs would be implemented to prohibit any unauthorized surface and subsurface soil disturbance. They would also restrict the use of the parcel to non-residential, and would ensure that no unauthorized disturbance of asphalt or concrete covered area occurs.”

RESPONSE: Will comply.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Comments from Craig A. Benedikt

General Comments

1. Please add the EPA ID number to all of the statements of basis.

RESPONSE: USEPA ID #FL9 170 024 260 will be added into the final version of the statements of basis for each SWMU.

2. The statements of basis refer to LUCs which prevent “uncontrolled” surface soil disturbances. Please define the term “uncontrolled” for clarity.



RESPONSE: “Uncontrolled” has been replaced with “unauthorized” and a definition of “unauthorized” has been added to the glossary for clarity.

3. When discussing the groundwater LUCs throughout the statements of basis, the term “degradation” is used to refer to the reduction of metals concentrations in groundwater. Metals do not typically degrade in groundwater; however, natural processes such as dispersion and adsorption do serve to reduce metals concentrations in groundwater. As such, please change the word “degradation” to “attenuation” in each statement of basis to reflect the effect of natural processes on metals concentrations in groundwater.

RESPONSE: Will comply.

4. The “Summary of Facility Risks” section of the statements of basis provides a rationale as to why industrial land use to acceptable’ however, there is no rationale provided as to why residential usage is not acceptable. The text should include a comparison of SWMU investigative data to residential standards and the risk associated with hypothetical future residents.

RESPONSE: The FDEP residential direct exposure SCTL for benzo(a)pyrene equivalents is 0.1 mg/kg and the FDEP industrial direct exposure SCTL for benzo(a)pyrene equivalents is 0.7 mg/kg. A comparison of SWMU investigative data was made to the 0.1 mg/kg residential SCTL. The range mentioned in the text referred to data in excess of the residential SCTL, but below the industrial/commercial standards. Clarification of that fact has been added in the Statements of Basis for the various SWMUs. (This comment was not applicable to SWMU 25.)

5. Please review the present worth cost information in the “Proposed Corrective Action” section of each Statement of Basis. For example, the cost information for the soil corrective measure at SWMU 1 states that a present worth cost including a capital cost of \$24,000 with an annual operation and maintenance cost of \$3,741 over a period of 30 years is \$85,000. However, \$24,000 plus \$3,741 for 30 years is \$136,230. Please correct the cost information in the text as well as the evaluation of alternatives tables.

RESPONSE: Per communications with various members of the NAVSTA Mayport Partnering Team, the language regarding the present worth cost information will be changed. The text will be restated as follows: “The total present worth cost of the proposed soil corrective measure is \$84,000 which includes a \$24,000 capital cost and an operation and maintenance cost of \$60,000 over a 30-year period.” The text in the Evaluation of Alternatives Tables will reflect this revised language and as well.

6. In the “Summary of Alternatives section, please properly reference the RCRA Corrective Action Plan guidance in the first paragraph.

RESPONSE: Will comply.

7. In the third paragraph of the “Public Participation” section, please change the second sentence as follows: “To request a public hearing, to obtain more information about this SB, or to submit written comments, please contact Diane Racine or John Winters (contact information provided below).” Please add the word “Summary” after Response to Comments” in the “Next Steps” paragraph of this section.

RESPONSE: Will comply.



8. Glossary — Add a definition for “Aquifer”. In the definition for “Chemical of Concern”, change “soil or groundwater” to “environmental media”. In the definition of “Information Repository”, add “investigation and” in between the words “SWMU” and “cleanup”.

RESPONSE: Will comply.

SPECIFIC COMMENTS:

SWMU 1 – Statement of Basis

1. Since this SWMU is a former landfill, should a land use control preventing disturbance of subsurface soils be considered along with the surface soil prohibition? Typically, landfills are not fully characterized so there may be unknown risks associated with subsurface soil. Any subsurface soil disturbances may create an exposure pathway to those risks.

RESPONSE: The language regarding LUCs has been changed to indicate LUC requirements for both surface and subsurface soils.

2. **Summary, Page 1, 2nd Column:** In the first sentence of the second column, please add the word “would” in between the words “restrictions” and “prohibit”.

RESPONSE: This change will not be incorporated. Since the FDEP has already approved the language as it is documented in the SB for use at all bases for which it serves at the lead regulatory agency, the preference is to leave the language alone for consistency.

3. **Proposed Corrective Action, Page 2, 2nd Column:** Add the following to the end of the first sentence in the first full paragraph, “...following selection of the final corrective measure.” Change “wit hand” to “with and:” in the fourth sentence. And change “for” to “forth” in the fifth sentence. In the last sentence of this paragraph, delete the word “adequate”.

RESPONSE: Will comply.

4. **Summary of Facility Risks, Page 3, 2nd Column:** Please reword the Groundwater description as follows: “A comparison to FDEP Groundwater Cleanup Target Levels (GCTLs) concluded that antimony, arsenic, silver, and zinc are COCs in groundwater for SWMUs 1, 23, 24, and 25. The human health risk assessment concluded that there are cancer and non-cancer risks to human health associated with hypothetical future residents. However, based on the current use of SWMU 1, there is no human health exposure to groundwater; and it is unlikely that there will be any exposure during future use.” In the description of the “Ecological Assessment”, change “RFI” to “ecological risk assessment (ERA) in the first sentence and change “RFI” to “ERA” in the remainder of the paragraph.

RESPONSE: Will comply.

5. **Evaluation of the Proposed Corrective Action and Alternatives, Page 4:** In the first sentence of the first paragraph, please add the word “Guidance” after the word “Plan”.

RESPONSE: Will comply.

6. **Recommendations, Page 6:** Change the word “prevent” to “prohibit” in the first sentence of the second paragraph.

RESPONSE: Will comply.



SWMU 17 – Statement of Basis

1. **Summary, Page 1:** In the first sentence of the first paragraph, change “Land Use Control” to “Land Use Controls (LUCs)”.

RESPONSE: Will comply.

2. **Proposed Corrective Action, Page 2, 1st Column:** Add the following to the end of the first sentence in the first full paragraph, “...following selection of the final corrective measure.” Change “wit hand” to “with and” in the fourth sentence. And change “for” to “forth” in the fifth sentence. In the last sentence of this paragraph, delete the word “adequate”.

RESPONSE: Will comply.

3. **Facility Background, Page 2, 2nd Column:** In the last sentence of the last paragraph on this page, please change the word “were” to “was”.

RESPONSE: Will comply.

4. **Summary of Facility Risks, Page 3, 1st Column:** In the first sentence of the “Soil” description, change “chemicals of potential concern (COPCs)” to “chemicals of concern (COCs)”.

RESPONSE: Will comply.

5. **Scope of Corrective Action, Page 4, 1st Column:** Delete the following in the second sentence: “that does not achieve unrestricted future use of the SWMU”.

RESPONSE: Will comply.

6. **Table 1, Page 5:** In the description of the “Protect Human Health and the Environment” column for Soil Alternative 2, please add the word “usage” after “industrial”. In the description of the “Attain MCS” column for Soil alternative 2, please dele “allow you to” in the second sentence.

RESPONSE: Will comply.

7. **Glossary, Page 6:** Please use a larger font size for the glossary in order to make it more readable.

RESPONSE: Will comply.

SWMU 23 – Statement of Basis

1. **Proposed Corrective Action, Page 2, 1st and 2nd Column:** Add the following to the end of the first sentence in the first full paragraph, “...following selection of the final corrective measure.” Change “wit hand” to “with and” in the fourth sentence. And change “for” to “forth” in the fifth sentence. In the last sentence of this paragraph, delete the word “adequate”.

RESPONSE: Will comply.

2. **Facility Background, Page 2, 2nd Column:** In the first sentence of the second paragraph, please add “the” between “is” and “former”.

RESPONSE: Will comply.



3. **Facility Background, Page 3, 1st Column:** The first full sentence on this page under Figure 2 states that two underground storage tanks may exist. This information should be verified so it is known whether or not the tanks exist. Please revise the text accordingly.

RESPONSE: In an effort to verify whether or not the two underground storage tanks exist at SWMU 23, the data contained in the December 1996 RFI and the November 2004 CMS was reviewed. In the discussions in Chapter 4 of the RFI, the texts states that “two underground storage tanks with a combined capacity of 3,000 gallons may exist near the location of the machine shop (Building 15). The tanks were used in the 1960s and may have been removed in 1972 during construction of the machine shop (*from the 1989 RFA*). No reports have been found concerning the condition of the tanks at removal or if environmental samples were collected during removal of the tanks.”

Based upon a review of the background information in the RFI, it is inconclusive if the two tanks were abandoned in place or completely removed from this location. Therefore, the text in the Final SB for SWMU 23 will be revised to remove the confusion. The sentence in the draft SB for SWMU 23 that reads “In the vicinity of Building 15, two underground storage tanks with a capacity of 3,000 gallons may exist.” will be changed in the final SB to read “In the vicinity of Building 15, two underground storage tanks with a combined capacity of 3,000 gallons were formerly utilized during the 1960s up through 1972.” Since the construction of the machine shop limits access to verify the presence of these two tanks, then changing the text to clearly indicate the type of tanks, the capacity of the tanks, and time of operation will at least allow the reader to understand at some point in time there were activities that warranted further field investigations in this area of SWMU 23.

4. **Scope of Corrective Action, Page 4, 1st Column:** In the third sentence of the first paragraph, change “SWMUs” to “SWMU”.

RESPONSE: Will comply.

5. **Summary of Alternatives, Page 4, 2nd Column:** In the description of “Groundwater Alternative 2” please change “SWMUs” to “SWMU”.

RESPONSE: Will comply.

6. **Tables 1 and 2, Page 5:** Please enlarge both tables to enhance their readability.

RESPONSE: Will comply.

7. **Recommendations, Page 6, 1st Column:** In the first sentence of the second paragraph, change “would provide” to “includes”.

RESPONSE: This change will not be made as FDEP comments included revisions that replaced “would provide” with “...would implement LUCs to restrict the site to non-residential land use only, and it would also prohibit any unauthorized surface and subsurface soil disturbance at the SWMU”. The FDEP language used is changed in various places throughout the SB and has been used for consistency.

SWMU 24 – Statement of Basis

1. **Summary, Page 1, 1st Column:** Please insert the words “location of” in between the words “former” and “North” in the first sentence.

RESPONSE: This comment will not be incorporated into the document since it has been confirmed that the North Florida Shipyards, Inc. is still in service. The previous mention of the word “former” has been removed from the text in both the Summary and Facility Background sections of the document.



- 2. Proposed Corrective Action, Page 2, 1st and 2nd Column: Add the following to the end of the first sentence in the first full paragraph, "...following selection of the final corrective measure." Change "wit hand" to "with and" in the fourth sentence. And change "for" to "forth" in the fifth sentence. In the last sentence of this paragraph, delete the word "adequate".**

RESPONSE: Will comply

- 3. Facility Background, Page 2, 2nd Column: In the first sentence of the second paragraph, please change the word "formerly" to "the former location of".**

RESPONSE: See previous response to SWMU 24 Comment #1.

- 4. Summary of Facility risks, Page 3, 2nd Column: Please reword the Groundwater description as follows: "A comparison to FDEP Groundwater Cleanup Target Levels (GCTLs) concluded that antimony, arsenic, silver, and zinc are COCs in groundwater for SWMUs 1, 23, 24, and 25. The human health risk assessment concluded that there are cancer and non-cancer risks to human health associated with hypothetical future residents. However, based on the current use of SWMU 24, there is no human health exposure to groundwater; and it is unlikely that there will be any exposure during future use." In the description of the "Ecological Assessment", change "RFI" to "ecological risk assessment (ERA)" in the first sentence and change "RFI" to "ERA" in the remainder of the paragraph.**

RESPONSE: Will comply.

- 5. Summary of Alternative, Page 4, 2nd Column: Groundwater Alternative 3 includes LUCs; however, it is not clear why LUCs would still be required if the groundwater undergoes extraction, ex-situ treatment and discharge.**

RESPONSE: Mention of LUCs as a component of this alternative has been removed as LUCs would not be required if the groundwater undergoes extraction, ex-situ treatment and discharge. Appropriate changes have also been made in Table 2 in the column summarizing Groundwater Alternative 3.

SWMU 25 – Statement of Basis

- 1. Facility Information, Page 1: In the listing of the "Corrective Action" under the figure on this page, please add "Groundwater – Land Use Controls".**

RESPONSE: Will comply.

- 2. Proposed Corrective Action, Page 2, 1st and 2nd Column: Add the following to the end of the first sentence in the first full paragraph, "...following selection of the final corrective measure." Change "wit hand" to "with and" in the fourth sentence. And change "for" to "forth" in the fifth sentence. In the last sentence of this paragraph, delete the word "adequate".**

RESPONSE: Will comply.

- 3. Summary of Facility Risks, Page 3, 2nd Column: Please reword the Groundwater description as follows: "A comparison to FDEP Groundwater Cleanup Target Levels (GCTLs) concluded that antimony, arsenic, silver, and zinc are COCs in groundwater for SWMUs 1, 23, 24, and 25. The human health risk assessment concluded that there are cancer and non-cancer risks to human health associated with hypothetical future residents. However, based on the current use of SWMU 25, there is no human health exposure to groundwater; and it is unlikely that there will**



be any exposure during future use.” In the description of the “Ecological Assessment”, change “RFI” to “ecological risk assessment (ERA) in the first sentence and change “RFI to “ERA” in the remainder of the paragraph.

RESPONSE: Will comply

4. **Summary of Alternative, Page 5, 1st Column:** Groundwater Alternative 3 includes LUCs; however, it is not clear why LUCs would still be required if the groundwater undergoes extraction, ex-situ treatment and discharge.

RESPONSE: Mention of LUCs as a component of this alternative has been removed as LUCs would not be required if the groundwater undergoes extraction, ex-situ treatment and discharge. Appropriate changes have also been made in Table 2 in the column summarizing Groundwater Alternative 3.

If you have any questions regarding this correspondence or if I can be of assistance, please feel free to contact me at Shina.Ballard@ttnus.com or (904) 730-4669, extension 217.

Sincerely,

A handwritten signature in black ink that reads "Shina A. Ballard".

Shina A. Ballard
Task Order Manager

- c: Ms. A. Wilson, NAVFAC SE
Mr. J. Winters, FDEP
Mr. C. Benedikt, USEPA
Ms. D. Racine, NAVSTA Mayport
Mr. M. Halil, CH2M Hill
Mr. C. Hudson, CH2M Hill
Mr. M. Perry, Tetra Tech NUS (unbound)
Ms. D. Humbert, Tetra Tech NUS (w/o enclosure)
CTO 0033 Project File