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DEPARTMENT OF THE NAVY

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IN REPLY REFER TO:

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From: Commanding Officer, Naval Amphibious Base Little Creek
To: Commander, Atlantic Division, Naval Facilities Engineering
Command (Code 18223)

Subj: COMMENTS ON THE DRAFT FINAL FEASIBILITY STUDY, SITE 7

Encl: (1) Comments on the Draft Final Feasibility Study, Site 7

1. Enclosure (1) is forwarded for inclusion in the final comments list for the Draft Final Feasibility Study, Site 7 prepared by Foster Wheeler Environmental Services, Inc.

2. For additional information, my point of contact for this matter is Kelly Greaser at 363-4571.

A handwritten signature in black ink, appearing to read "W. L. Niven".

W. L. NIVEN
By direction

NAB LITTLE CREEK

COMMENTS ON THE DRAFT FINAL FEASIBILITY STUDY, SITE 7

Page 1-1 - Capitalize "program" in the very first sentence at the top. Change "seventeen" to "17" in the first sentence of the fourth paragraph.

Page 1-7 - The very top paragraph refers to Appendix A and B. These references should be changed to the corresponding appendices in the RI/FS.

Page 1-25 - Why are all the bullets in the entire document so light? They are hard to see. Either bold them or make them bigger. Under Future Scenario the exceedence of HI for resident child from surface soil ingestion of 2.35 and subsurface soil ingestion of 1.15 should be discussed. Also, resident adult ICR was not exceeded. Also, the exceedence of HI (3.33) for resident child for ingestion of groundwater should be discussed.

Page 1-26 - Add the following to the end of the bullet: "If future assessments indicate ecological risks, additional evaluations and/or actions will be taken as appropriate."

Section 2 Tables - Why aren't the ARAR columns completely filled out? If this will be determined in the RD/RA document, then state that in the document. Currently, it seems like these are questions that should be answered that haven't been, so just state when/where they will be addressed.

Page 2-9 and 2-17 - Why is there a second Solid Waste Disposal entry and an extra line on the table? I see no apparent purpose for it. If it is not required, simply delete the second occurrence and make it one entry. If there is a purpose, make it clearer.

Page 3-2 - Change the first sentence after the set of bullets to: "The remediation efforts for surface water is driven by the fact that Little Creek Cove ...".

Page 3-7 - Under Access Restrictions, add the following after the second sentence: "Although the western border of the landfill is not fenced, it is heavily wooded and adjacent to the ammunitions magazine area and an equipment storage area. These areas are fenced and highly secured." Make this change throughout the rest of the document when discussing the current fencing. Under Land-use Restrictions, change the last sentence to: "Also, no new well development in the deeper Yorktown aquifer is anticipated in the vicinity of the site." Please fix this similar sentence throughout the rest of the document.

Page 3-9 - Capitalize the words of TCLP in the third to last sentence in the first paragraph.

Page 3-23 - Change the first full sentence at the top to: "... volume; and it won't be effective ...". Change Land-use Restriction to: "... surface water for consumption, irrigation, or fishing from site shorelines." **Section 3.6** - The second sentence in the second paragraph is confusing. Shouldn't the limit be 10⁻⁴?

Page 3-24 Section 3.7 - Change the first sentence to: "... evaluation of remedial technologies for the three media, the following five remedial alternatives have been identified for detailed analysis for the site:". Change Alternative 3 to: "... surface water quality, implementing institutional controls such as land use restrictions and posting warning signs, and implementing a public awareness program." For the entire document, do not specify that warning signs will prohibit fishing, groundwater usage, state that the site is a former landfill, or anything else. We will determine what the signs will state later.

Page 4-5 Section 4.1 - Capitalize "no further action" in the first sentence of the second paragraph. Change the second sentence of the fourth paragraph to: "The human health risks, described in the risk assessment, from groundwater, surface water and soil at the site would remain unmitigated." Delete the fourth sentence entirely.

Page 4-6 - Change the last sentence of the second paragraph to: "... preserve and enhance the beneficial uses of wetlands." Make this same deletion throughout the document. Delete the last two sentences of the following paragraph.

Page 4-7 Section 4.2.1 - Insert the following before the last sentence of the first paragraph: "Additional soil cover and topsoil will be added to portions of the landfill to prevent erosion and ensure the stability of the vegetative layer." Change the last sentence of the fourth paragraph to: "Warning signs will be placed along the fence." Make this change throughout the document.

Page 4-8 - The second sentence of the first full paragraph states that monitoring data will be compared to ARARs. Shouldn't this be changed to trigger/action levels? For Overall Protection of Human Health and the Environment for Alternatives 2-5, it is stated that the RAOs are met. However, one RAO is the reduction of migration of contaminants in groundwater to surface water. NONE of the alternatives explains how this reduction is achieved. Please expand these sections for ALL of the alternatives to include how that RAO is met. For Compliance with ARARs, why isn't the installation of the fence and warning signs discussed as it is in the other alternatives? Also, the installation of soil and topsoil will trigger ARARs as well. Please include this in the discussion.

Page 4-8 Section 4.2.4 - Change the second sentence to: "The

non-carcinogenic risk from dermal ...". Change the fourth sentence to: "The carcinogenic and non-carcinogenic risks for ingestion of surface water and groundwater by trespassers and future residents is reduced to ...". Change the next sentence to: "The residual risks should meet the criteria for carcinogenic and non-carcinogenic risks." Make this same change to the similar sentences in sections 4.3.4, 4.4.4 and 4.5.4.

Page 4-9 - In all cases throughout the document, make sure that all references to a review are for a five-year review. **Section 4.2.6** - This section should reflect that additional soil and topsoil will be added. Also, short-term habitat impacts due to remedial activities WILL occur. For the remaining alternatives, the short-term habitat destruction is not discussed. Please include this discussion for the other alternatives. **Section 4.2.7** - This section should reflect the addition of soil and topsoil. Change the last sentence of the first paragraph to: "The sampling, analysis of the samples, and the five year site status ...". Make this same change for similar sentences in the remaining alternatives. Under Administrative Feasibility change the second sentence to: "The land use restrictions on the property would require the attention of Navy Planning personnel to be enacted and enforced." Make this change to the similar sentence for the remaining alternatives.

Page 4-10 - The Cost for alternative 2 should include additional soil and topsoil. Change the title of section 4.3 to: "... institutional controls such as warning signs and prohibition of intrusive activities." In the fourth bullet, use () instead of "" around GCL. **Section 4.3.1** - Change "insure" to "ensure" in the last sentence of the second paragraph. Make this change for the remaining alternatives.

Page 4-12 - Delete the first sentence at the top. Also delete the similar sentences for the remaining alternatives. **Section 4.3.2** - Change the second sentence to: "... installation of the liner; prevention of contact with ... signs cautioning the public; prevention of contact with surface water; and implementation of institutional controls ...". **Section 4.3.3** - Change the first sentence to: "... fence construction, posting warning signs, and installation ...".

Page 4-13 - Change the last sentence of the second paragraph at the top to: "... water levels is not considered a remedial action objective." Delete the fourth sentence of the fourth paragraph since we are not doing recreational enhancement. Also delete the similar sentence in the remaining alternatives. **Section 4.3.5** - This section should reflect the fact that the installation of the liner will reduce the mobility of contaminants. The discussion in alternative 4 is more clear.

Page 4-14 Section 4.3.7 - This section should include a discussion of the difficulty of technical and construction activities around the wetlands and the administrative

difficulties of getting required permits. Make this change for the remaining alternatives.

Page 4-15 - Change the third bullet to: "Implementation of a public ...". Change the fifth bullet to: "Construction of a slurry ...". Change the sixth bullet to: "Performance of semi-annual ...". Change the seventh bullet to: "Conduction of periodic, ...".

Page 4-17 - Change the second sentence at the top to: "... and keyed into an underlying clay layer ...". Change the last sentence of the first paragraph to: "In the event that Alternative 4 is selected, further evaluation will be conducted to determine the boundaries of the landfill, because currently they are only estimated." Delete the "s" from "provides" in the first sentence of the third paragraph. Change the form of the second sentence of the fourth paragraph to the same form of the similar sentence in section 4.3.2. Change the third sentence to: "Installation of the slurry wall will reduce infiltration and therefore reduce migration and leaching of contaminants from the landfill, although the source of the contamination is not removed." The fifth paragraph should discuss how installation of the liner and slurry wall will reduce risks.

Page 4-18 - Change "then" to "than" in the second to last sentence of the third paragraph.

Page 4-20 - Change the third bullet to: "Implementation of a public ...". Change the third sentence in the first paragraph after the bullets to: "Therefore, additional investigations would be ...". Calling it a "pre-remedial" investigation is confusing. Therefore, just refer to it as an investigation. Change the last complete sentence on the page to: "... it is difficult to estimate the amount of excavation, treatment or disposal required."

Page 4-23 Section 4.5.3 - Delete the first "of" in the first sentence of the first paragraph. Change the last sentence of the third paragraph to: "... is not considered a remedial action objective." Change "then" to "than" in the second to last sentence of the fourth paragraph.

Page 5-1 - Change the second sentence of the fifth paragraph to: "... enhance the beneficial uses of wetlands." Delete the next sentence. Change the second sentence of the seventh paragraph to: "The non-carcinogenic risk ...". Change the third sentence to: "... single-layer cap, or excavation and removal ...". Change the fourth sentence to: "The carcinogenic and non-carcinogenic risks for ingestion of surface water and groundwater by trespassers and future residents is reduced ...".

Page 5-6 - Delete the very top sentence. Change the second sentence of the next paragraph to: "... is proposed for a possible period of 30 years." Change the first sentence of the

fourth paragraph to: "Alternatives 2 through 4, which involve the installation of a soil cover, cap or slurry wall, ...". Add a "w" to "ork" in the second sentence of the seventh paragraph. Short-term impacts should include a discussion of the habitat destruction for alternatives 2 through 5.

Page 5-7 - This section should include a discussion of the technical and construction difficulties of the wetlands and the cap and slurry wall. Also, the last sentence of the first paragraph and the third sentence of the third paragraph should be changed according to previous comments.

Page 6-1 - Change the last sentence of the second bullet to: "... levels is not considered a remedial action objective." Change the third bullet of the second SET of bullets to: "Installation, maintenance, and monitoring of ...".