



EnSafe / Allen & Hoshall

a joint venture for professor

32501.011
03.01.11.0032

N00204.AR.001328
NAS PENSACOLA
5090.3a

**Program
Management
Office**

Shelby Oaks Plaza
5909 Shelby Oaks Dr.
Suite 201
Memphis, TN 38134
Phone (901)383-9115
Fax (901) 383-1743

**EnSafe/Allen & Hoshall
Brunch Offices:**

Charleston
935 Houston Northcutt Blvd.
Suite 113
Mt. Pleasant, SC 29464
Phone (803) 884-0029
Fax (803) 856-0107

Cincinnati
400 TechCenter Dr.
Suite 301
Milford, OH 45150
Phone (513) 248-8449
Fax (513) 248-8447

Pensacola
2114 Airport Blvd.
Suite 1150
Pensacola, FL 32504
Phone (904) 479-4595
Fax (904) 479-9120

Norfolk
303 Butler Farm Road
Suite 113
Hampton, VA 23666
Phone (804) 766-9556
Fax (804) 766-9558

Raleigh
5540 Centerview Drive
Suite 205
Raleigh, NC 27606
Phone (919) 851-1886
Fax (919) 851-4043

Nashville
311 Plus Park Blvd
Suite 130
Nashville, TN 37217
Phone (615) 399-8800
Fax (615) 399-7467

Dallas
10000 Dallas Drive
Suite 100
Dallas, TX 75243
Phone (214) 791-3222
Fax (214) 791-0405

March 21, 1997

U.S. EPA
ATTN: **Gena** Townsend
345 Courtland Street, NE
Atlanta, GA 30365

RE: OU-2 Remedial Investigation Report, NAS Pensacola
Contract #N62467-89-D-3 18/0059

Dear Ms. Townsend:

On behalf of the Navy, EnSafe/Allen & Hoshall is pleased to submit one copy of the response to comments for the **OU-2** Remedial Investigation Report at the Naval Air Station Pensacola. If you should have any questions or need any additional information regarding this document, please do not hesitate to call me.

Sincerely,

EnSafe/Allen & Hoshall

Henry H. Beiro, P.G.
Task Order Manager

Enclosure

cc: Bill Hill, SOUTHNAVFACENGCOM - 2 copies
Ron Joyner, NAS Pensacola - 2 copies
John Mitchell, FDEP - 1 copy
Denise Klimas, NOAA - 1 copy
Judeth Walker, NAS Pensacola - 1 copy
EnSafe/Allen & Hoshall File - 1 copy
EnSafe/Allen & Hoshall Library - 1 copy
EnSafe/Allen & Hoshall Pensacola - 1 copy

**Draft Remedial Investigation Report OU-2
Sites 11, 12, 25, 26, 17, 30, and 36
NAS Pensacola, Florida
Response to EPA Region IV Comments**

October 15, 1996 (Gena D. Townsend)

COMMENT TO BE CONVEYED TO THE FEDERAL FACILITY:

Sec. 7.0, pp. 7-1 and 7-5: Clarify that the Preliminary Remediation Goals (PRGs) used in this evaluation are based upon the protection of human health and do not address the protection of ecological receptors.

RESPONSE:

The Navy agrees to include this clarifying statement.

COMMENT:

Secs. 9.1 and 9.1.1, p. 9-1: Again, clarify that the PRGs are based upon the protection of human health.

RESPONSE:

The Navy agrees to include this clarifying statement.

COMMENT:

Sec. 11.0, p.11-1:

1. In paragraph 1, add a statement indicating whether or not the existing surface soil contaminants could potentially migrate into Pensacola Bay via surface water runoff.
2. In the last line of paragraph 2, explain "RC."
3. The screening of ground water analytical data is inadequate. The screening focused on data from **only three** wells; no basis was given for the selection of the three wells. The location of monitoring well GS32 is shown in ground water figures in Section 7, but wells GWT3 and GWT18 are shown only in Figure 5-6. The ground water figures in Section 7 show high concentrations of several **contaminants**, more than just those presented in Table 11-1, page 11-2. **Also**, those figures show **only the contaminants** exceeding the human health PRGs. No tables **are** given summarizing all detected ground water contaminant concentrations. To evaluate potential ecological **risks** based upon possible future migration of ground water contaminant plumes, include a table comparing the maximum ground water contaminant concentrations to the surface water screening values. This should be done primarily for the shallow ground water zone but also for any zone with a potential to discharge into the bay.

RESPONSE:

1. The Navy agrees to clarify the text providing a discussion of the surface water pathways observed and the potential receptors to those pathways.
2. The "RC" definition is found in the list of acronyms in the Table of Contents. The usage of "RC" could not be found on page 11-1.
3. The Figure **5-6** and Table 11-1 are not used in this document. Please clarify.

**Draft Remedial Investigation Report OU-2
Sites 11, 12, 25, 26, 17, 30, and 36
NAS Pensacola, Florida
Response to EPA Region IV Comments**

October 17, 1996 (Gena D. Townsend)

INVESTIGATION PROCEDURES:

Sediment and surface water sampling and locations are not discussed. The sampling pattern depicted in Figure 1 does not account for the shifting of soil that happens during construction which may increase the area of contamination.

EPA MCLs are not totally risk-based values for groundwater, but are used in the COPC screening process which may be inappropriate.

RESPONSE:

The Navy will clarify the text indicating why sediment and surface water samples were not discussed. Sediment and surface water **only** exist in street gutters and storm drains at OU-2. Adjacent wetlands are being investigated under the Site 41 investigation. The sampling exhibited in Figure 1 was conducted for the most part prior to construction. The Navy requests clarification as to which construction areas are of concern to the conclusions of this report.

The Navy recognizes MCLs are not risk based. The use of MCLs in the screening process simply suggests a level at which clean-up may be required since these are levels acceptable for public potable water.

DATA PRESENTATION:

There are no tables summarizing the nature and extent of contamination. It should be noted that the section of "nature and the extent of contamination" should mainly address an analysis of data collected which describes contaminant concentration levels found in the media in the study area. The comparisons of the contaminant concentrations with the PRGs should be considered as a

COPC screening process in the risk assessment section (Section 10). When risk-based criteria are used in comparisons, the comparisons should be addressed in the risk assessment section.

There are no figures or maps to identify wetland 5A, 5B, 6 and 7 (near Site 30) where sediment samples were collected. This section does not provide a summary of the sediment results for review. Therefore, concluding that the sediments in these wetlands are contaminated by either a groundwater source or a surface water discharge source does not have adequate support.

The boundary for each site is not identified on the maps presented in Appendix G. Also, in Figures 1 through 23 in Appendix G it is difficult to see the migration of the plume is difficult to see. Isoconcentration maps contouring the horizontal distribution of contamination and the most widely distributed contaminant should be included for clarity. These maps should be developed for groundwater.

Section 10 (**Risk** Assessment) indicates that a FI/FC term of **0.4** based on frequency of detection (7 of 19) was used to adjust the exposure estimates. However, the use of frequency of detection to derive a fractional exposure point factor is not appropriate. Also, application of FI/FC has resulted in lower risk estimates. Therefore, all risk estimates that use this FI/FC factor should be recalculated.

RESPONSE:

The Navy is concerned that “general” comments will get “general” answers resulting in reviewers not getting their concerns dealt with adequately. In the future, the Navy requests comments be directed at specific text with specific guidance as to how the editorial changes can improve the document. These general comments were repetitious when compared to specific comments.

Response to Paragraph 1

Tables of contaminant exceedances were provided in Appendix G as appropriate. Section 7 describes the nature and extent of contaminant exceedances. The use of RBCs or any other risk based criteria for screening has been agreed upon by the Tier I Partnering Team. The Navy agrees it is difficult to “see” plumes or soil contamination source areas. The data does not lend itself to contouring. Contouring implies a relationship between points being contoured, for example; linear. The “hits” are highly variable and often surrounded by areas of no concentration, thereby not allowing the inference of a relationship between the **points**. The Navy will provide shading **to** highlight the exceedances aiding the visualization of the contamination.

Response to Paragraph 2

The Navy agrees to provide discussions concerning contaminant pathways to the adjacent wetlands with maps exhibiting the location of these potential ecological receptors. Samples collected in these areas were part of the investigation for Site 41 and will be provided for review.

Response to Paragraph 3

The Navy agrees to modify Figure 1 to include outlines of site boundaries. As previously stated, the Navy will provide shading to highlight the exceedances aiding the visualization of the contamination.

Response to Paragraph 4

The risk assessment provided risk calculated at each sampling point. To clarify this issue the Navy plans to provide “risk maps” depicting the risk at each ~~point~~ rather than being averaged over an area. The FI/FC usage was on a “as needed” basis and is supported by Region IV supplements to RAGS. The reason for its limited use lies in the result of a **95%** UCL calculation . Sometimes based on a single hit or bulls eye, the 95% UCL calculation would result in a number greater than the maximum concentration for the site. The Navy believes it is unreasonable to assume that ~~an~~ individual would be exposed to a concentration greater than what was measured. The default in those cases was the maximum concentration. The Navy also believes it is unreasonable to assume that an individual would be exposed to 100% of the maximum concentration as ~~an~~ EPC, which is the reasoning behind the use of a FUF~~C~~ modifier. The consultant for the State of Florida, Dr. Roberts at FSU, agreed with the use of the FUF~~C~~ ~~term~~ in these cases but requested the risk to be mapped. The Navy agrees with this position.

RISK ASSESSMENT GENERAL:

The conclusions regarding risk in the risk assessment are not valid because of multiple procedure errors. It is not clear that all COPCs were selected appropriately. There are deviations from guidance in calculation of the groundwater exposure point concentrations. The use of the FUF~~C~~ term to calculate fractional soil exposure is inappropriate. Surface water exposures were not considered. Also, some potential receptors and exposure pathways were not considered. In addition, determination of the EPC is confusing.

The risk assessment does not explain why surface water is not considered as a medium of exposure. Subsurface soils were included in the risk assessment without explanation. Subsurface soils are analyzed for the protectiveness of groundwater.

Usually, the selection of COPCs is performed in Section 10 of the **Risk** Assessment section, not in the Nature and Extent of Contamination section (Section 7). Tables which contain 11 detected compounds for each media, the frequency of detection, the maximum concentration, the screening value (and source of the screening value), the background concentrations are not provided in the text. The COPC selection which uses more **than** one screening value for each contaminant does not follow EPA procedures.

In the risk assessment, there is no mention of potential trespassers or recreational receptor exposure to surface water and/or sediments for either current land use or future land use.

RESPONSE:

Response to Paragraph 1

The procedure errors relative to guidance is unsubstantiated. The guidance itself suggests it is not intended as a rulemaking, further is not a cookbook, requiring substantial expertise and professional judgment (See **RAGS** part A, Preface, pages xv and xvi). The Navy agrees it is confusing to refer the COPC selection to the “Nature and Extent” section of the document and **will** remove any possible reference to Section 7. The COPC section in the risk assessment (page 10-8) simply refers to contaminants found in site samples (CPSS) in Section 7. No COPCs were evaluated in Section 7. The deviations from guidance for calculating exposure point concentration were based on professional judgement. The data did not form nice neat plumes, but rather bull eyes making inference between points difficult. The text does detail how exposure point concentrations were calculated. Surface water exposures at OU-2 are only possible in street gutters and storm water outfalls during rainfall events. The Navy did not consider this a reasonable surface water pathway for humans. The EPC calculations were detailed in the text. The Navy requests clarification as to where in the text the discussion is confusing.

Response to Paragraph 2

Again, Surface water exposures at OU-2 are only possible in street gutters and storm water outfalls during rainfall events. The Navy did not consider this an active surface water pathway for humans. The Navy used only surface soils in risk assessment calculations as detailed in tables H-2, H-37, H-60, H-92, H-112 **and** H-145.

Response to Paragraph 3

Again the Navy did not conduct COPC selection in Section 7, but referenced Section 7 in the risk assessment (see page 10-8). The missing data in question was provided in tables (Appendix H) rather than lengthy text. The Navy disagrees that COPC selection did not follow the intent of

EPA guidance. The comment is vague not providing specifics as to which procedure was not followed.

Response to Paragraph 4

Surface water **and** sediment exposures at **OU-2** are only possible in street gutters and storm water outfalls during rainfall events. The Navy did not consider this **an** active surface water pathway for humans.

GENERAL COMMENTS:

1. Page 1-2, First sentence: Remove “To Make it easier”.

RESPONSE:

The Navy agrees to the editorial change.

COMMENT:

2. Page 5-2, Section 5.2.2: Remove the sentence “Therefore, it was presumed that the radiation .”

RESPONSE:

The Navy agrees to the editorial change.

COMMENT:

3. Page 7-13, First sentence: Remove “appears to have formed an immobile slug”, unless there is sufficient justification for this statement.

RESPONSE:

The Navy agrees to this editorial change.

COMMENT:

4. Page 7-28, Section 7.3.1: Reword the last sentence. If the VOCs were detected in groundwater at concentrations above the MCLs **and** in the soils above the leachability values additional information will be needed to support a no action (i.e., leachability modeling. ..).

RESPONSE:

The Navy agrees to reword the last sentence.

COMMENT:

5. Page 7-28, Section 7.3.2, first paragraph: Remove the last, “No relationship can be ...”. This is an invalid point, if there is soil contamination this area must be addressed. However, if the discussion is to justify that the soils are not leaching into the groundwater based on actual data, then the sentence should be rewritten.

RESPONSE:

The Navy agrees to make the editorial change.

COMMENT:

6. Page 9-17, Second paragraph: the Site **41** investigation will assess the Ecological impacts. What about human health effects.

RESPONSE:

The Navy agrees rewrite the sentence to include human health.

COMMENT:

7. Page 9-17, Fourth paragraph: The last sentence leaves a question. "Direct evidence is not presently available", will it become available" Please explain.

RESPONSE:

The Navy believes the last sentence to be vague and speculative and should be removed.

COMMENT:

8. Page 11-3, Section 11.2, Second paragraph: Remove the last sentence, "The feasibility study should always...".

RESPONSE:

The Navy agrees to the editorial change.

1.0 GENERAL COMMENTS

COMMENT:

1. Section 1.0, Page 1-1 and 1-2, states that the objectives of the RI are "to characterize the surface soil and groundwater at various **points** within the site", **and** "to determine source, nature, and, to the 'degree practicable for an acceptable FS', the extent of soil and groundwater contamination, as well as to 'make it easier to evaluate risk' to human health and the environment **from** onsite contaminated media." However, this statement is unclear and confusing because phrases such as, "the degree practicable for an acceptable FS" and "easier to evaluate risk" is not appropriate for a presentation of RI objectives. EPA

guidance clearly states the objectives of an RI, so this section of the report should be revised accordingly.

RESPONSE:

This is the second time this comment **has been** made. The Navy for the second time agrees to edit the text for clarity. The Navy disagrees that the text fails to follow **EPA** guidance. Please provide specific reference as to how the intent of **EPA** guidance was not met.

COMMENT:

2. Section 2.2.2, Page 2-13, Paragraph 2, Sentence 9, states that the Radiological Affairs Support Office (RASO) recommended that the drain pipe outfall from Building 709 (Site 27) be located and checked for radiation contamination. However, the building and the outfall are not shown on Figure 2-2 (site map). The outfall and Building 709 should be identified on the site map.

RESPONSE:

Building 709 and the outfall no longer exist having been demolished years prior to the investigation. The outline to former Building 709 will be placed on Figure 2-2 for reference.

COMMENT:

3. Section 2.2.2, Page 2-14, Paragraph 3, Sentence 3, discusses Phase I inspections performed on the sites. However, the text does not indicate that a Phase I inspection was performed on Site 11. The text should indicate why a **Phase I** inspection was not done on Site 11. The text should indicate why a Phase I inspection was not done on Site 11.

RESPONSE:

The **Navy** agrees to add the explanation requested.

COMMENT:

4. Section 5.0 discusses the field investigation methods at OU-2. However, the text does not discuss why background samples were not collected for OU-2. The text should explain why no background samples were collected at this site. "Background" should be discussed. Also, a discussion should be included explaining where the reference values in the **COPC** Table of the risk assessment.

RESPONSE:

Simultaneous to this investigation, the Site 1 investigation installed 4 borings converted to monitoring wells to be used as background for NAS Pensacola. The text should be revised to reflect this information and data included in the appendices. The collection of background samples was not required by the sampling and analysis plan, an oversight by all parties involved.

COMMENT:

5. Section 5.0 discusses the investigation of OU-2 but does not indicate that surface water and sediment samples were collected. However, the site history and description state that a wetland is present at the site along with water bodies. The EPA **SOPQAM** recommends that when there is a wetland and surface water as receptors, surface water and sediment should be sampled at OU-2. The text should be revised accordingly.

RESPONSE:

The wetlands 5A, 5B, 6 and 7 are adjacent to OU-2. However, the Navy agrees to include Site 41 data to exhibit any pathway connection between the site and potential ecological receptors.

COMMENT:

6. Section 5.2.1, Page 5-2, Paragraph 1, states that due to the potential presence of heterogeneous wastes at Site 11, and lack of knowledge regarding their distribution, trenching was performed instead of soil borings. However, there are no analytical results regarding the trenching in the following sections. There is no explanation why the trenching samples are not presented. The text should give the explanation regarding the results from trenching on Site 11.

RESPONSE:

The Navy disagrees with adding the results of trenching in a “methods” section. The Navy will provide a formal addition to the Nature and Extent section, Chapter 7.

COMMENT:

7. Section 5.2.3, Page 5-2, Paragraph 3, refers to Appendix G, Figure 1, for soil borings and monitoring well locations. Section 2 states that there has been a large amount of construction, and as such, surface soil **has** been shifted around. However, the sampling pattern depicted in Figure 1 does not account for the shifting of soil that happens during construction. The sampling pattern depicted in Figure 1, Appendix G, is more of a random pattern. Add an explanation that the sampling pattern addresses surface soil distribution.

RESPONSE:

Sampling patterns were biased based a gridded soil **gas** survey and historical evidence, not random sampling. The reference to construction at OU-2 from Section 2 cannot be found. Recent BRAC construction around Buildings 3220 and 3450 has occurred since the completion of fieldwork.

COMMENT:

8. Section 7.0 addresses the nature and the extent of contamination. In addition, the text only indicates the number of contaminants above the PRGs but does not mention the detected concentrations which are above the PRGs. Although the tables showing the investigation results are presented in appendices, they are not well organized for review. The appendices should be revised accordingly.

RESPONSE:

The comment is not clear. The Navy did present all contaminants detected that were above a PRG. The Navy provided tables of exceedances on the maps and highlighted the locations so that reviewers could find them.

COMMENT:

9. Section 7.0 discusses the comparisons of contaminant concentrations with PRGs. However, this section should mainly address an analysis of data collected which describes contaminant concentration levels found in the media in the study area. The comparisons of the contaminant concentrations with the PRGs should be considered as a COPC screening process in Section 10, the risk assessment. It should be noted that when risk-based criteria are used in comparisons, the comparisons should be addressed in the risk assessment section, but not in the nature and extent of contamination section. The report should be revised accordingly.

RESPONSE:

The comment is unclear failing to detail what analysis of the data is missing. Section 7 details the nature and extent of detected contaminants exceeding a PRG.

COMMENT:

10. Section 7.0, Page 7-1, Paragraph 1, Sentence 4, states that analytical results were compared to general and site-specific PRGs. However, it is unclear what distinguishes the general from the site-specific PRGs. According to this section, PRGs are the screening criteria set by EPA and the State of Florida, but there is no mention of which one should be general or specific. The text should present clear definitions of the general and site-specific PRGs.

RESPONSE:

The Navy is unclear as to the added value this type of comment provides for this document. The Navy will replace the words “general and site-specific” with the word “established”.

COMMENT:

11. Section 7.1.1.2, Page 7-3, Paragraph 2, Sentences 4 and 5, indicate that methylene chloride and a number of compounds are likely false positive and are difficult to assess because they are so common in the laboratory. However, this statement is inappropriate because EPA guidance specifically states that the 10x rule should be used to determine

positive detections when common laboratory contaminants are found in samples. Using such a rule with the results of blanks makes it possible to determine positive detections. The text should be revised accordingly.

RESPONSE:

The Navy agrees to provide a more detailed discussion in the data validation section.

COMMENT:

12. Section 7.4, Pages 7-31 and 7-32, address the sediment study which assesses impact to wetlands adjacent to OU-2. However, there are no figures or maps to identify wetlands 5A, 5B, 6 and 7 (near Site 30) where sediment samples were collected. This section does not provide a *summary* of the sediment results for review. Therefore, it cannot be concluded that the sediments in these wetlands are contaminated by either a groundwater source or a surface water discharge source due to lack of reference data. This section should be revised to provide all required references and the results in order to draw a conclusion about sediments.

RESPONSE:

As previously requested stated, the Navy agrees to provide Site 41 data for review in this section.

COMMENT:

13. Appendix D presents groundwater contamination PRGs which include EPA MCLs, FPDWS, etc. However, normally risk-based concentrations should be used as screening criteria to screen COPCs for further risk assessment. Since EPA MCLs are not totally risk-based values for groundwater, use of EPA MCLs in this screening process may be inappropriate. For further risk assessment, the Region 3 RBC tap water values should be used because they are the risk-based values. For example, Appendix D shows EPA MCL and FPDWS for vinyl chloride as 2 µg/L and 1 µg/L, respectively. If the Region 3 RBC tap water value is used, the screening value for vinyl chloride should be 0.019 µg/L. For vinyl chloride, the difference between the PRG values in Appendix D and the Region 3 RBC tap water value is significant. Therefore, the most conservative value for screening vinyl chloride is the Region 3 RBC tap water value, and the risk-based value instead of the

MCL value should be used. The report should be revised to use the risk-based values for screening purposes because the screening process is for further risk assessment. Review this information. If the review comment is correct, the calculations should be revised.

RESPONSE:

The Navy disagrees with screening at a lower level than would be acceptable in public drinking water. For the reviewer's information vinyl chloride at these levels is subject to false positive and false negative statistical errors. ~~SW-846~~ publishes the method detection limits for vinyl chloride as follows.

Method 8260 MDL 0.17 ppb (A gas chromatography method with confirmation by mass spectroscopy. Specific ion monitoring could be researched by the lab by **running** a battery of **tests** to get lower results. This battery of tests would be extremely expensive.)

Method 8010 MDL 0.006 ppb (a gas chromatography method that **has** poor precision, but good accuracy.)

Method 8021 MDL 0.02 ppb PID (**A** gas chromatography method that has poor precision, but good accuracy.)

All gas chromatography methods are often qualified by dual column confirmation, however the same false positive ion often shows up on the second column. In short lower detection limits are achievable, but not without sacrificing precision.

COMMENT:

14. Appendix G presents OU-2 figures. However, the boundary for each site is not identified on these maps. Because the operable unit contains multiple sites and different work is performed at each site, the site boundaries should be clearly marked.

RESPONSE:

The Navy agrees to add site boundaries to some of these figures as appropriate.

COMMENT:

15. Appendix G, Figures **1-23**, show positive detections of constituents of concern at OU-2. However, the migration of the plume is not shown clearly on the figures. Isoconcentration maps contouring the horizontal distribution of contamination and the most widely distributed contaminant should be included for clarity. Maps should be developed for groundwater.

RESPONSE:

Contaminant detections were often isolated ~~hits~~ both in soil and groundwater not allowing an inference to be drawn between points for contouring. The Navy agrees to provide shading to illustrate the isolated nature of the exceedances.

COMMENT:

16. Appendix G, Figure 5, identifies **14** VOCs that exceeded PRGs at Sites **11, 12, 27, and 30**. However, Section **11** does not discuss these VOC exceedances in the subsurface soil at these sites. Section **11** should reference Figure **5** and discuss the origin and the dispersion of these constituents within the media.

RESPONSE:

Section **11** will be revised to include and reference the VOC contaminants detailed in Figure **5**.

COMMENT:

17. Appendix G, Figure 6, identifies seven **SVOCs** that exceeded PRGs at Sites **11, 12, 25, 26, 27** and **30**. Section **11** lists conclusions based on the results of the RI, but it does not address the seven SVOC exceedances in the surface and subsurface soil at these sites. Section **11** should present a conclusion that references Figure 6 and the origin and dispersion of the constituents within the media.

RESPONSE:

Section 11 will be revised to include and reference the SVOC contaminants detailed in Figure 6.

COMMENT:

18. Appendix G, Figures 13 and 14, show **VOCs** exceeding FSDWS. However, the text does not explain how these **VOCs** migrated to the intermediate groundwater. The text should explain how the VOCs migrated to the intermediate wells in the fate and transport section or the conclusion.

RESPONSE:

The Fate and Transport Section will be revised to include this discussion.

2.0 SPECIFIC COMMENTS

COMMENT:

1. Table of Contents, Page v.

There are no appendices listed in the Table of Contents. All appendices should be added to the contents page.

RESPONSE:

The Navy agrees to this editorial change.

COMMENT:

2. Section 1.0, Page 1-1, Paragraph 2, Sentence 2.

The text give the location of OU-2 in relation to the golf course and yacht basin. However, the yacht basin and the golf course are not depicted on Figure 2-1, the site map. The site map should show the locations of the golf course and yacht basin.

RESPONSE:

The Navy agrees to add these features to Figure 2-1 and other figures as appropriate.

COMMENT:

3. Section 2.1, Page 2-1, Paragraph 2.

The text states that Building 3445 is at the southwestern corner of Site 11. However, the text should indicate that Building 3445 is located at the southeastern corner of the site.

The text also refers to two prefabricated buildings (Buildings 3727 and 3628) and Pat Bellinger Road. However, these buildings are not shown on the site area map. Buildings 3727 and 3628 as well as Pat Bellinger Road should be added to the site **area** map and the site map, respectively.

RESPONSE:

The Navy agrees to make the editorial corrections.

COMMENT:

4. Figure 2-1.

Figure 2-1 is the site location **map**. However, there is no boundary line for Site 26. Also, the legend does not show roads or highways. The map should be revised to show roads and highways on the legend as well as a boundary line for Site 26.

RESPONSE:

The Navy agrees to make the appropriate editorial additions.

COMMENT:

5. Figure 2-2.

Figure 2-2 presents the site area map. However, unlike other sites, the boundary of Site **36** is not shown on this map. The boundary of Site **36** should be shown in Figure 2-2. In addition, the legend does not **show** roads. The site map should have roads included in the legend.

RESPONSE:

Site 36 is a sewer line **as** depicted in the legend and exhibited on Figure 2-2. The Navy agrees to add roads to the legend.

COMMENT:

6. Section 2.1, Page 2-4, Paragraph 2, Sentence 2.

The text gives the location for Site **25 as** north of Farrar Road. However, Farrar Road is not on the site map. Farrar Road should be identified on the site map.

RESPONSE:

The Navy agrees to this editorial change.

COMMENT:

7. Section 2.1, Page 2-5, Paragraph 2, Sentence 2.

The text refers to a wetland that drains surface runoff into the yacht basin. However, the wetland is not shown on the site map. These two areas should be identified on the site map.

RESPONSE:

The Navy agrees to this editorial change.

COMMENT:

8. Section 2.1, Page 2-5, Paragraph 3, Sentence 4.

The text discusses a segment of the sewer line joining the main line running to the IWTP. However, the IWTP is not identified on Figure 2-2, the site map. The site map should identify the IWTP.

RESPONSE:

The Navy disagrees. The subject of this report is not the IWTP and is far removed from the operable unit.

COMMENT:

9. Section 2.1, Page 2-7, Paragraph 1, Sentence 1

The text states: "Site 26 - From 1956 until 1964, supply department Site 26 to store incoming paint strippers and acids." However, the meaning of the text is not clear. The text should be clarified.

RESPONSE:

The Navy agrees to edit the text for clarity.

COMMENT:

10. Section 2.2, Page 2-9, Paragraph 3, Sentence 1.

The text states that in 1973 minor painting operations started in Building 3450 “(near Sites 27 and 30)”. However, the text should read: “near Sites 25 and 27“. The text should be revised accordingly.

RESPONSE:

The Navy agrees to edit the text appropriately.

COMMENT:

11. Table 2-1.

The table shows hazardous wastes generated, disposed of, or spilled near the study area. However, the table does not include Building 755 which was **used** as a plating shop at Site 30. Building 755 should be added to the table.

RESPONSE:

Building 755 is considered part of the 648/649 complex. The text and footnote to the table needs to be edited to clarify this point.

COMMENT:

12. Table 2-1.

The title of Table 2-1 indicates that the table contains information on hazardous waste handled near the study area. However, according to the site map, Building 648 and 649 complex and Building 741 shown in the table are actually within the study area (Sites 30 and 27) instead of near the area. The title of the table should be revised accordingly.

RESPONSE:

The Navy agrees to the editorial changes.

COMMENT:

13. Section 2.2.2, Page 2-13, Paragraph 1, Sentence 1.

The text summarizes work related to the different sites at **OU-2**. However, Site 11 is omitted. This text should be revised accordingly.

RESPONSE:

The Navy agrees to the editorial changes.

COMMENT:

14. Section 2.2.2, Page 2-13, Paragraph 3, Sentence 5.

The text indicates that both Sites 11 and 27 were recommended for confirmation studies of suspected contaminants. However, only Site 11 is addressed. Thus, the text should be revised to also address Site 27.

RESPONSE:

The Navy agrees to the editorial changes.

COMMENT:

15. Section 2.2.2, Page 2-17, Paragraph 3.

The text indicates that an investigation was performed on the south side of Building 3450 (Site 30). However, the title refers to "Site 3450S". The title should be corrected.

RESPONSE:

The Navy agrees to the editorial changes.

COMMENT:

16. Figure 4-2.

The legend of Figure 4-2 shows the Ra 226 level as pC/g. However, for consistency the radiation level should be written as pCi/g (picocuries per gram). The text should be revised accordingly.

RESPONSE:

The Navy agrees to the editorial changes.