UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, Ca. 94105

October 10, 1991

Larry Nuzum
Naval Facilities Engineering Command
Southwest Division
Code 1811
1220 Pacific Highway
San Diego, California 92132

Subject: EPA Review Comments on the Draft Preliminary Review/Visual Site Inspection Report of the RFA for US Marine Corps Air Station El Toro, dated July 3, 1991

EPA Review Comments on Data Management Alternatives Evaluation Technical Memorandum, dated June 21, 1991

EPA Review Comments on Proposed Changes to Testing Requirements Specified in the El Toro MCAS Draft Waste Management Plan, dated September 10, 1991

Dear Mr. Nuzum:

This letter transmits our comments on the Draft Preliminary Review/Visual Site Inspection Report, the Data Management Alternatives Evaluation Technical Memorandum, and Proposed Changes to Testing Requirements Specified in the Draft Waste Management Plan. We will shortly submit comments on the Navy's Response to EPA comments on the Draft PRR for the RFA for MCAS El Toro. In general, we find these documents to be very thorough and which will serve as useful steps to the RI/FS process at the MCAS El Toro site.

While our comments on the PR/VSI are extensive, we are pleased with the approach you have taken and find the document to be of high quality. However, some concerns need resolution prior to the submittal of the draft RFA and determination of the sites to be incorporated into OU 4. Most of our comments request clarification or additional information for some items. You need only to respond to the General Comments, Comment No. 25, and the comments concerning SWMUs with Other Comments, under the section Summary of Comments identified in Page 20.

If you have any questions regarding the attached comments or if you wish to discuss other matters related to the RFA, please contact John Hamill of my staff at (415) 744-2391.

Sincerely,

for

Julie Anderson-Rubin, Chief
Federal Enforcement Section II

cc: Lt. Commander Serafini, USMCAS El Toro
Manny Alonzo, DHS
Ken Williams, RWQCB

TECHNICAL REVIEW OF MCAS EL TORO
RCRA FACILITY ASSESSMENT DRAFT PRELIMINARY REVIEW/
VISUAL SITE INSPECTION REPORT,
3 Volumes, July 3, 1991

GENERAL COMMENTS

1. The draft Preliminary Review/Visual Site Inspection (PR/VSI) report may have been prepared prior to El Toro's receipt of EPA's May 1991 review comments on the preceding draft PR report, thus explaining why most of the EPA comments may have not been incorporated into the July 1991 Draft PR/VSI report. The May 1991 EPA comments on the PR report should be reviewed and incorporated as necessary into the PR/VSI report as well as the comments presented in this document.

2. The **Table of Contents** looks good. All appropriate sections appear to be included in 1.0. More information is needed in **2.0 Environmental Setting** regarding land use and receptors such as location and activity of human population. **3.0 Records Review** appears to be very complete. 4.0 to 6.0 may not be complete. See additional comments.

3. The Executive Summary is a good summary.

4. **Section 1.0-1.5**. Very good discussion and summary of facility activities and wastes managed. An excellent and concise description of previous environmental studies at the facility.

5. **Section 2.2.** <u>Surface Water</u>: Does the station, or any portion of it lie within a floodplain?

6. **Section 2.3.** <u>Climate</u>: Further information is needed on climate, especially prevailing wind directions. Especially with an airfield on-station, there must be more climate information available. Please provide a wind rose based on average or typical conditions. What about flooding; what is the maximum 24-hour rainfall level?

7. Section 2.4. Geology: What about results from specific on-station drilling activities? What soil deposits were encountered? Does this data differ from or support the regional geology information?

8. Section 3. This section does not cross-reference units to SWMU number.

9. Section 3. Nice summary of data but it would be more useful to combine the information or refer to it, as appropriate, into the individual SWMU descriptions.

10. Provide field log books/notes of the VSI as an attachment or appendix to the PR/VSI Report.

11. Figure 5-1. Good SWMU location map.

12. Section 5.0, Page 5-25:
    - EPA agrees with rationale for sampling visit recommendation for Underground Storage Tanks (USTs) and Oil/Water Separators
    - EPA agrees with rationale for Hazardous Waste Storage Areas (HWSAs)
    - EPA agrees with rationale for Drum Storage Areas
    - EPA agrees with rationale for Wash Rack Areas

13. General recommendation that MCAS institute a routine schedule (annually, for example) for tank testing all active USTs at the station, if such a system is not currently in place. Is any other regulatory agency monitoring a UST program for active, abandoned, or leaking tanks at El Toro MCAS?

FORMAT AND GRAMMATICAL

14. Typically each Solid Waste Management Unit (SWMU) write-up is listed in the Table of Contents. However, due to the size of this facility it is understandable and considered acceptable, not to list each SWMU in the Table of Contents.

15. The PR/VSI report included a list of **Abbreviations and Acronyms**--good, this was not required, but is helpful.

16. In **Section 6.0**, there is inconsistent terminology in reference to *Potential* Migration Pathways, *Possible* Migration Pathways, and sometimes just Migration Pathways.

17. Capitalization of oil/water separator is not consistent throughout document.

18. **Suggestion**: On Figure pockets (pages 2-3, 3-45, and others) add a label to exterior of pocket indicating the figure number and title (Figure 3-1: MCAS El Toro Station Plan Map with RI/FS Site Locations) to make for easier locating.

19. Impressive presentation and quality of photocopies of SWMU photographs.

20. On the second page of the SWMU descriptions it would be helpful to also include the SWMU name underneath the SWMU number.

SECTIONS 1.0 TO 5.0

21. **Page 1-10, Section 1.4.** First paragraph after bullets, "Build petroleum recyclables such as waste oil and fuel are pumped from generator accumulation containers and. . . ." EPA wonders if there is a typing error, perhaps "Build" should read "bulk," or possibly "Building." Please review sentence and correct as necessary.

22. **Page 1-13, Section 1.4.** First paragraph after bullet, "Waste solvents are recycled." EPA assumes this means that the waste solvents are recycled off-site. Please clarify.

23. **Page 1-15, Table 1-1.** Seventh entry, should "Foward Landfill" read "Forward Landfill"? If necessary, please correct.

24. **Table 5-1. SWMUs and Areas of Concern**: In regards to the "Date" column, what date does this refer to? For example, does it identify the date of unit start-up/installation? Please add footnote or explain in the text.

SECTION 6.0 SWMUs

25. The SWMU descriptions are underdeveloped. (a) The PR/VSI report was weak on identifying the source of the various waste streams managed, such as what building functions or activities produced the waste. (b) Likewise, the Waste Characteristics section for each SWMU is weak. Often the wastes identified in the report appear to only be *current* wastes managed. For example, several SWMUs identify PD-680 as the waste solvent used; however, the use of PD-680 has increased in recent years due to the phasing out of other hazardous solvents such as methylene chloride and methyl ethyl ketone and replacement with PD-680. Thus, these other solvents may well be the constituents that have been released to the environment. In the RFA, it is important to know *past* wastes managed, not just current activities. Please check to ensure that sampling parameters selected allow for detection of these other possible former wastes. (c) Usually potential migration/release pathways are more fully developed and specifically discuss all media (air, soil, groundwater, surface water, and subsurface gas). (d) Similar comment for exposure potential (how, what direction, etc.). (e) Dates of start-up are often not included; Period of Operation is often only referred to as "active" or "inactive." The period of operation can be important in assessing release potential.

26. Where another SWMU is referred to in the text please add SWMU number in parenthesis to help cross-reference. This is especially helpful due to the large number of SWMUs at the site. (This has been done already in some sections of the report. See SWMU 57 for example.) Example: SWMU 6 Landfarming Site refers to Bee Canyon Wash. Please add (SWMU 4) after mentioning Bee Canyon Wash.

27. Where do oil/water separators drain? Do all oil/water separators drain to the same system (storm drain or sanitary sewer)?

28. **Page 6-3, SWMU 1.** Location: "17th green." Clarify in terms of: "17th green of station golf course."

29. For many of the SWMUs, the photograph date does not match the Date of Site Visit (example: SWMU 3). EPA assumes this is because the photograph and VSI were on separate days and not just an error. Please double-check this.

30. Many of the wash racks mention only oily waste under the Waste Characteristics. Are soaps or cleaning solvents used for cleaning tools, equipment, or vehicles (including aircraft)? The items being cleaned may contribute other hazardous constituents to the rinsewater, for example, cleaning of paint brushes or spray guns. Please add other possible waste constituents. Evaluate not only current but also previous operations.

31. **Section 6.0.** No distinction was made between SWMUs and AOCs.

32. **Section 6.0.** It appears that releases to air, and the potential for, have been overlooked in the migration pathways evaluation for each SWMU.

33. **Section 6.0** Evidence of Release: This subheading should also address "history of release" for those cases where known releases have occurred or where sampling activities suggest releases have occurred.

34. For many SWMUs (examples: SWMU 40 and 43), no recommendation was provided. Presumably no action was suggested. Most of the SWMUs lacking recommendations were for units that could not be located during the VSI.

35. **Page 6-4, SWMU 1.** Inadequate for potential Migration Pathways. EPA does not agree with recommendation. Insufficient information has been provided to conclude that sampling is not necessary.

36. **Page 6-6, SWMU 2.** Is there any evidence to suggest that either excavated soil or pesticide/herbicide materials were part of the vegetation pile?

Exposure Potential. If any release at the golf course, the exposure potential would include guests and users of the station golf course (slightly different than on-base personnel which implies active workers). Golf course users often included retired (and consequently older) military personnel.

EPA does not agree with recommendation. Insufficient information has been provided to conclude that sampling is not necessary.

37. **Page 6-8, SWMU 3.** The description does not mention what most of the unit is constructed of (concrete), nor when it was lined. Was it an earthen, natural drainage channel prior to construction of the concrete-lined channel? This would increase the past potential for release to soil if the channel was unlined in 1940-1970. Are there any outfalls or routinely sampled or monitored locations along Marshburn Channel?

38. **Page 6-10, SWMU 4.** Note that Oil/Water Separator 676 (SWMU 189) was not constructed until 1982, so prior to that time, there was a greater potential for hazardous constituents to have been released to Bee Canyon Wash and the unlined section of Bee Canyon Wash.

From the description of Bee Canyon Wash it is uncertain if the Wash is wholly contained within the station boundary or if it continues outside the boundary. Identify if it drains to or connects with another body of water downstream.

A photo of the unlined section of the wash would be beneficial since it is the area that appears to have the greatest potential for release to soil.

Has any sampling and analysis of sediments or water been conducted at this unit?

In the PR report, PCB and fuel spills were mentioned on page 3-48, Section 3.5.2.1. In El Toro's response to EPA's review comments, it was stated that the fuel spills reached Bee Canyon Wash. This

information has not been addressed in the text. Waste characteristics may include PCBs.

Mention the historical systematic and routine dumping and spillage of chemicals under Evidence of Release or Unit Characteristics.

39. **Page 6-13, SWMU 5.** Under Unit Characteristics: Some indication of when prior operations (approximate dates) may have impacted the unit should be provided.

40. **Page 6-15, SWMU 6.** Unit Characteristics. Please identify the recent dates that the unit was used for remediation of petroleum-contaminated soil.

As part of the remediation activities, was sampling for hazardous constituents and petroleum hydrocarbons done either before or after remediation?

Waste Characteristics. Please be more specific than "petroleum wastes." Does this mean waste oil, gasoline, JP-4, petroleum solvents, PCB-contaminated oil, etc.?

How close (distance) to Bee Canyon Wash is this unit? (10 ft., 50 ft., 300 yds., etc.)

Exposure Potential. Was there physical evidence to suggest that runoff could have entered Bee Canyon Wash? (i.e., a slight topographic depression leading from the unit to the Wash, or a storm drain grate adjacent or downgradient of the unit).

EPA agrees with the Recommendation for SWMU 6, however, if sampling analysis is available for the soil remediation activity the sampling visit may not be necessary.

41. **Page 6-17, SWMU 7.** Unit Characteristics. Define "recently" in terms of period of unit operation.

42. **Page 6-19, SWMU 8.** Unit Characteristics. Is there any other information about this unit? From the write-up it appears to be a former oil producing well. This might be an area to investigate by using historical aerial photographs to obtain information on date of operation and any associated activities such as piping, tanks, ponds or possible spillage. In addition, if there is uncertainty whether the abandoned well was an oil production well, perhaps a call to the California Department of Conservation, Division of Oil and Gas could provide additional information.

Waste Characteristics. The way this section is written is ambiguous. It could imply that the unit managed waste oil, when it more likely was an oil production well. Please clarify the text to indicate either what is known or what remains unknown.

43. **Page 6-21, SWMU 9.** Unit Characteristics. What was the fuel bladder constructed of? What were the dates of operation? It appears that the unit has been used recently, or is still in use. Does the rack structure with drip pan look as though it has been abandoned and left in place, or does it appear to still be in use? If in use, who or what operation is using it?

Migration Pathways. Add surface water as a migration pathway. The Exposure Potential section mentions the possibility for spill runoff to reach Agua Chinon Wash approximately 100 feet east of the unit.

Evidence of Release. This section mentions excavation of contaminated soil. Is it ***known*** that soil was removed? When, how much, and was a sampling performed?

44. **Page 6-25, SWMU 11.** In the PR report, PCB and fuel spills were mentioned on page 3-48, Section 3.5.2.1. In El Toro's response to EPA's review comments, it was stated that the fuel spills reached Agua Chinon Wash. This information has not been addressed in the text. Waste characteristics may include PCBs.

45. **Page 6-27, SWMU 12.** Unit and Waste Characteristics. Do any wash racks, oil/water separators, or other rinse areas drain to the *sanitary* sewer lines? If so, additional wastes may be managed in addition to those mentioned under Waste Characteristics.

46. **Page 6-28, SWMU 12.** Recommendations. EPA agrees with the recommendations as presented. It is possible however, to check the physical integrity of the piping systems. MCAS, in the future, may want to conduct pipe integrity testing of the system. At this time, however, integrity testing does not appear to be warranted.

47. **Page 6-3, SWMU 13.** Evidence of Release. Although physical evidence of release may not have been observed during the VSI, the text states that there were several incidents where fuel was drained into the ground or in a storm sewer. This should be referred to under Evidence of Release.

48. **Page 6-40, SWMU 17.** Unit Characteristics. Since this was a recently installed unit, does the tank have any leak-detection or monitoring systems? Is it fit-tested annually? This comment also applies to other recently installed tanks (SWMUs 18-24).

49. **Page 6-41, SWMU 17.** Recommendations. Typographical error: ". . . PI or the VSI . . ." should read "PR or the VSI. . . ."

50. **Page 6-47, SWMU 19.** Recommendations. Typographical error. ". . . no further actin . . ." should read ". . . no further action. . . ."

51. **Page 6-49, SWMU 20.** Recommendations. EPA agrees with the recommendation, but wonders if existing sampling data is available on the recently excavated contaminated soil. Existing data may be useful in further sampling and evaluation of this unit. In addition, if spills are reoccurring, MCAS may want to reevaluate its operating procedures for this unit.

52. **Page 6-65, SWMU 28.** What was the approximate date of the fuel spill? Is there any indication of the quantity of spilled fuel (for example: 5

gallons or 2,000 gallons)? Could the spill have been on any adjacent bare ground? Is the storm drain system that is referred to constructed of concrete at this area or bare culverts?

EPA does not necessarily agree with the Recommendation for this unit. Although it does appear to be a lower priority, sampling may be warranted.

53. **Page 6-69, SWMU 31.** EPA generally agrees with the recommendation. However, is there any evidence that wastes managed at this unit are different than the RI/FS Site wastes? Different wastes managed may affect the parameters selected for chemical analysis. In addition, does the RI/FS investigation address surface soils?

54. **Page 6-92, SWMU 45.** Recommendations. EPA disagrees with the recommendation. The text states that stains were shown in a 1980 photograph; the area is bare soil, and even though the area now is used for storage of empty drums, past practices may have been different. EPA suggests sampling.

55. **Page 6-125, SWMU 64.** Was this unit used prior to the recent addition of concrete, if so, prior releases to soil may have occurred. Because the past history is uncertain, EPA does not agree with the recommendation of no further action. Please provide additional information.

56. **Page 6-136, SWMU 71.** See comment for Page 6-69, SWMU 31.

57. **Page 6-140, SWMU 73.** Under either Unit Characteristics or Recommendations refer to SWMU 78, a former drum area with staining that appears to be located near SWMU 73.

58. **Page 6-142, SWMU 74.** Potential Migration Pathways. Add Soil. (Based on the widespread discoloration and apparent age of the concrete there is a potential for rinse water from washing activities to seep through the concrete.)

Recommendations. EPA accepts the recommendation for no further action *at this time*; however, future activities involving modifications, upgrades, or construction at this unit should evaluate potential contamination of soil beneath the concrete and drainage system.

59. **Page 6-151, SWMU 80.** No recommendations have been provided. What wastes were managed? Is the area south of Building 388 still unpaved? Was there evidence of staining in the general area during the VSI? Did personnel working in the area have any information on where wastes were stored at this area?

60. **Page 6-152, SWMU 81.** See comments for Page 6-151, SWMU 80.

61. **Page 6-153, SWMU 82.** See comments for Page 6-151, SWMU 80.

62. **Page 6-164, SWMU 88.** Waste Characteristics. Waste Solvents or paint strippers may also have been managed at this unit. Electrical yard storage of transformers and insulation oil indicates the possibility/probability of PCBs.

Recommendations. EPA suggests sampling of the western yard as well as of the eastern storage area due to the storage of electrical transformers and oil on unpaved ground. In addition, are there other areas at Building 306 where these wastes may have been stored? What is the past history of this unit and surrounding area?

63. **Page 6-165, SWMU 89.** See comment for Page 6-151, SWMU 80. In addition, is it possible that this unit could be the same as SWMU 88?

64. **Page 6-167, SWMU 90.** Unit Characteristics. What details are known about the former sewage treatment facility? For example, were there any surface impoundments or unlined drying beds associated with the system (RI/FS Site 12 for example)?

The PR mentioned an RWQCB citation for "inferior quality effluent" (page 3-49, Section 3.5.2.1). El Toro responded that details were not available, but that typical effluent data was for parameters such as pH, sodium, nitrates, etc. This information was not included in the unit description.

Possible Migration Pathways. What about Surface Water as a possible migration pathway? Where was the effluent discharge from the sewage treatment system? There is likely to have been a past potential for release to surface water. Did the system have any water discharge or operating permits?

65. **Page 6-171, SWMU 92.** Recommendations. If this tank is full of an unknown waste liquid, as is suggested, then it may be advantageous to pump out the contents to prevent future releases, and analyze the contents.

66. **Page 6-173, SWMU 93.** Insufficient information regarding past operations and chemical content of the detergent and any other wastes managed. Based on the available data, EPA cannot agree with the recommendation of no further action.

67. **Page 6-174, SWMU 94.** See comment for Page 6-69, SWMU 31.

68. **Page 6-179, SWMU 97.** Unit Characteristics. Is information known regarding what type drums were cleaned? Was it just drums of caustic soda, chlorine, hydrochloric acid or were drums from throughout MCAS El Toro brought here? Was there any other evidence, other than the oil/water separator, regarding the location of drum cleaning? Would drum cleaning wash water go to the oil/water separator (SWMU 296) or to the storm drain shown on right of photo near the entrance gate?

Recommendations. EPA suggests collecting a sample of any residue found in the storm drain and analyzing for appropriate trace chemicals. If fungicides were used in cooling towers or related structures then chromates or chromium compounds may have been used. Chromium and copper should be analyzed for, and added to Waste

Characteristics if appropriate. (Chromium and copper, however, are not used as anti-scaling compounds.)

69. **Page 6-182, SWMU 98.** Unit Characteristics. What type of tools, parts, equipment, or vehicles were washed at this wash rack? What is Building 359 used for? Could the rinse water contain hazardous constituents other than oily water? The description for SWMU 98 should reference SWMU 254, the Chemical Storage Area south of Building 359, since chemicals managed there may have been released to this wash rack.

70. **Page 6-186, SWMU 100.** Waste Characteristics. Has TCE always been the type of degreasing solvent used at this unit or were other solvents previously used?

71. **Page 6-188, SWMU 101.** Unit Characteristics and Waste Characteristics. What is the source of waste stream to this unit? Could the waste stream contain traces of chemicals managed at SWMUs 98-102 and SWMU 254 or other nearby units?

72. **Page 6-192, SWMU 104.** See comment for Page 6-69, SWMU 31.

73. **Page 6-193, SWMU 105.** See comment for Page 6-69, SWMU 31.

74. **Page 6-194, SWMU 106.** See comment for Page 6-69, SWMU 31. How do SWMUs 104, 105, and 106 differ by wastes managed, source of waste, location, etc.?

75. **Page 6-196, SWMU 107.** Unit Characteristics and Possible Migration Pathways. Where is the nearest storm drain; where would spills and runoff drain?

76. **Page 6-209, SWMU 108.** Please discuss the white foaming-liquid that is shown in the photograph. Although not related to the Drum Storage Area, the white foaming liquid release to bare soil appears to be an area of concern. Evidence indicates regular or routine ponding of water at this location.

The recommendation for sampling may need to be reevaluated.

77. **Page 6-224, SWMU 122.** Insufficient information has been provided in the Unit Characteristics and Waste Characteristics to support the recommendation. An estimate of what chemicals may have been managed can be made by evaluating activities at Building 390 and surrounding buildings. Interviews with personnel can help to determine either what wastes or products were stored here and approximately when the pavement was added. Is it known if this area managed wastes routinely for a number of years or was it an infrequent activity?

78. **Page 6-235, SWMU 128.** Waste Characteristics. Add drums, transformers, and bagged asbestos (as mentioned in the Unit Characteristics). What types of material did the drums contain?

79. **Page 6-236, SWMU 128.** Recommendation. Typographical error. Change ". . . further action *mary* be required." to read ". . . further action *may* be required."

80. **Page 6-240, SWMU 130.** Unit Characteristics and Waste Characteristics. Is there any indication of what wastes were likely to have been managed? (Based on activities in the area or recollection of personnel)

81. **Page 6-242, SWMU 131.** Unit Characteristics. What is the SWMU here--spillage from above ground jet fuel (JP-5) storage, USTS, or associated test cell operations?

82. **Page 6-244, SWMU 132.** Was this unit associated with a wash rack or other activities? What was the source of the waste stream to this unit?

83. **Page 6-247 and 6-248, SWMU 135.** What is the correct building number? Page 6-247 says Building 359 and the text on Page 6-248 mentions only Building 456. Please address and clarify/correct as necessary.

Waste Characteristics. A good list of materials is presented. Please clarify if battery acid means storage of new and/or spent

batteries or storage of containers (i.e., drums) of battery acid/sulfuric acid.

Possible migration pathway could include air if transfer of materials occurs at this area or if containers are not adequately sealed.

84. **Page 6-250, SWMU 136.** Waste Characteristics. Are soaps or cleaning solvents used for cleaning aircraft at this and other wash racks?

85. **Page 6-252, SWMU 137.** Unit Characteristics. What is the waste stream (i.e., what type of activities) of the four drains that lead to this unit? In the photograph, there is a rectangular stained patch of asphalt, almost the size of the oil/water separator cover, that was not discussed. Was a portable bowser, aboveground tank, or other equipment stored here? Were there releases or a potential for release from that object?

86. **Page 6-256, SWMU 139.** Unit Characteristics. What is the waste stream (i.e., what type of activities) of the four drains that lead to this unit?

87. **Page 6-258, SWMU 140.** Evidence of Release. Specify if stain is on the concrete or soil.

88. **Page 6-271, SWMU 147.** Similar comment to Page 6-224, SWMU 122.

89. **Page 6-286, SWMU 156.** See comment Page 6-69, SWMU 31.

90. **Page 6-287, SWMU 157.** See comment Page 6-69, SWMU 31.

91. **Page 6-288, SWMU 158.** See comment Page 6-69, SWMU 31.

92. **Page 6-289, SWMU 159.** See comment Page 6-69, SWMU 31.

93. **Page 6-323, SWMU 177.** Recommendations. EPA disagrees with the recommendation. Yes, the unit appears to be new, but this indicates that

drums were likely previously stored in this area without bermed protection. EPA suggests collecting shallow soil samples at this unit.

94. **Page 6-332, SWMU 181.** Does any existing sampling data exist on the remediation of petroleum-contaminated soil? What about records of where the excavated soils came from or spill source?

95. **Page 6-351, SWMU 194.** When was the former incinerator used (approximate dates)? Did it have an air permit or exemption? Were all municipal wastes incinerated prior to landfilling or just certain types? Presumably the original incinerator managed some wastes that were hazardous. Provide additional details. What *was* observed during the VSI? Even though the exact location may not be known, is there a concrete pad or metal foundation markings? Since sampling is recommended, and there is no evidence of the former incinerator site, what basis was used to determine sampling locations.

96. **Page 6-369 and 6-371, SWMU 202 and 203.** Is the ground surface paved at these areas, especially at fill/empty ports; it is difficult to determine from the photograph and text.

97. **Page 6-390, SWMU 213.** Unit Characteristics and Waste Characteristics. Did this unit manage other types of solvents prior to use of PD-680? Mention the unknown corrosive in Waste Characteristics.

98. **Page 6-404 to 407, SWMU 220 and SWMU 221.** Unit Characteristics. The description does not mention what is shown in the photograph; the photographs show the same interior. Is the photograph of SWMU 220 or SWMU 221. Provide clarification.

99. **Page 6-409, SWMU 222.** Waste Characteristics. Provide information about wastes managed at this unit. If it had a DHS permit there must be some record of wastes managed. Likewise, provide more information on Period of Operation. *When* was it in operation?

Refer to the Building/Shed number (769) in the text. Mention the area surrounding the 12 ft. x 12 ft. pad is bare soil.

100. **Page 6-410, SWMU 223.** Refer to the Building/Shed number (770) in the unit title and text. Do the same for SWMUs 224-227. Double check photograph and description. Are the drums actually outside the fenced storage area?

101. **Page 6-413, SWMU 224.** See comment for Page 6-409, SWMU 222.

102. **Page 6-415, SWMU 225.** See comment for Page 6-409, SWMU 222.

103. **Page 6-417, SWMU 226.** See comment for Page 6-409, SWMU 222.

104. **Page 6-419, SWMU 227.** See comment for Page 6-409, SWMU 222.

105. **Page 6-421, SWMU 228.** Unit Characteristics. What is the source of the waste stream for this unit? What is the material of construction (concrete, steel, fiberglass) of the tank?

Recommendations. Has this tank been fit-tested, or are there future plans for fit-testing of the tank? EPA disagrees with the recommendation based on the information presented. Although it is true that a newer tank is less likely to leak, just because a tank was recently installed does not mean that it is free from leakage. Problems with piping and valve connections may cause leaks even with a new tank. In addition, many tanks are reutilized, thus a recently installed tank may not be new.

106. **Page 6-453, SWMU 234.** Waste Characteristics. Does the electrical insulating oil contain PCBs or has it in the past?

From the photograph, the concrete berm and asphalt ramp appear to be of recent construction. Was this area used for drum storage previously?

107. **Page 6-435, SWMU 236.** See comment for page 6-69, SWMU 31.

108. **Page 6-440, SWMU 240.** Waste Characteristics: What other wastes, besides asphalt emulsion, are or may have been managed at the unit? How long has this unit been used?

Recommendations: EPA does not agree with the recommendations based on the information presented.

109. **Page 6-444, SWMU 242.** Possible Migration Pathways: Add Surface Water as a migration pathway. The text states that two drums were present between the unit and the Agua Chinon Channel. From the photograph, it appears that the channel is relatively near the unpaved, unbermed Hazardous Waste Storage Area.

110. **Page 6-446, SWMU 243.** EPA agrees with the recommendation for sampling but would also like to know what equipment was washed at this unit and where these pipes lead to. If this is unknown, it could be an area for further investigation.

111. **Page 6-450, SWMU 245.** Recommendations: What is the relationship of the golf course to the RI/FS wells? What water depths or zones do the RI/FS wells monitor? Considering the probable monitoring depths of those wells, there is a potential that contamination may exist at ground level but not at the underlying aquifers. Thus, EPA does not agree with the recommendation for no further action. EPA suggests shallow soil sampling of the golf course. Refer to SWMUs 246 and 247 in text.

112. **Page 6-453, SWMU 247.** See comment for page 6-450, SWMU 245. If existing pipeline is removed from the golf course in the future, the surrounding soil should be sampled and analyzed for potential hazardous constituents.

113. **Page 6-464, SWMU 252.** Unit Characteristics: The text description mentions two inches of water present, but in the May 30, 1991, photograph, there appears to be no liquid in the bottom of the HWSA. Please clarify the description.

114. **Page 6-472, SWMU 256.** Waste Characteristics: It is likely that in the past waste solvents other than PD-680 were used.

Evidence of Release: Specify if stain was on concrete or unpaved soil.

115. **Page 6-480, SWMU 259.** Recommendations: Insufficient information has been provided to support the recommendation made for this unit. More information is needed about the wastes managed. Because the area is unbermed and stains are evident on the concrete pad, there is the possibility for release to adjacent soil.

116. **Page 6-490, SWMU 260.** Waste Characteristics: It is likely that this unit managed materials with additional hazardous constituents including gasoline, diesel and other petroleum hydrocarbons, refrigeration coolant, paints and metals, PCBs, various solvents, and used batteries.

117. **Page 6-491, SWMU 265.** Unit Characteristics: Are any piping diagrams available showing location of the abandoned piping?

118. **Page 6-511, SWMU 274.** EPA disagrees with the Recommendation that no further action is needed. Although sampling may not be required, it is suggested that the source and status of this soil pile be investigated.

119. **Page 6-534, SWMU 288.** See comment for page 6-69, SWMU 31.

120. **Page 6-535, SWMU 289.** See comment for page 6-69, SWMU 31.

121. **Page 6-536, SWMU 290.** See comment for page 6-69, SWMU 31.

122. **Page 6-544, SWMU 294.** Unit Characteristics and Waste Characteristics: In the photograph the drums are marked "Paint with solvents," this information was not stated in the text. The text does mention some hazardous constituents but does not state that the source, or wastestream, is waste paint with solvents. Please add this to the text.

123. **Page 6-548, SWMU 296.** Unit Characteristics. The text should refer to SWMU 97 and former drum cleaning operations. Based on the information presented, it appears as though drum wash and chemical residues would flow to this oil/water separator.

124. **Page 6-549, SWMU 297.** EPA does not like the statement "Asphalt is a petroleum-based product which is a solid at ambient air temperatures. Therefore, there is no potential for migration in the subsurface." Please rephrase or delete.

Is there any additional information, such as what units (tanks, kettles, etc.) were associated with the asphalt pavement plant?

SUMMARY OF COMMENTS

EPA Agrees with Recommendations for the Following SWMUs

5, 7-9, 11-19, 21-27, 29-30, 32-39, 41-42, 44, 46-63, 65-70, 72-73, 75-79, 83-87, 91-92, 95-96, 98-106, 108-113, 115-121, 123-127, 129-134, 136, 138-155, 160-176, 178-193, 195-227, 229-235, 237-239, 241-242, 244, 246, 248-258, 260-273, 275-287, 291-296, and 298-299.

EPA Agrees but Also Has Comments

4, 6, 10, 20, 90, 92, 107, 128, 135, 137, 194, 236, 243.

SWMUs with Other Comments

1-4, 6, 12, 28, 31, 40, 43, 45, 64, 71, 74, 80-82, 88-89, 93, 97, 108, 114, 122, 156-159, 177, 228, 240, 245, 247, 259, 274, 288-290, and 297.