]	Table C-1           Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination				
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards	
Site 1 - Blimp Crash Site	In 1931, a blimp crashed at this site and released roughly 1,000 gallons of liquid wastes (fuel and hydraulic fluid). Remnants of the crash and empty drums were also found at this site. In 1981, the empty drums were removed, along with 100 cubic yards of stained soil. Contaminated soils were also excavated in 1991 (7 cubic yards) and 1992 (230 cubic yards).	<ul> <li>Soil: The soil contaminant of greatest concern at this site was total petroleum hydrocarbons (TPHC). After the removal actions were completed, TPHC levels in soil were all lower than 5,760 ppm.</li> <li>Groundwater: Addressed as part of groundwater contamination area G (see Section III.A).</li> </ul>	In 1993, this site's ROD was signed, which required "no action" for the soils contamination. No soil sampling results were found at levels associated with unacceptable human health risks. This finding was based on a military land-use scenario, because the contamination area is far from areas where base residents live and work.	ATSDR finds no public health hazards associated with this site. The site is located in a remote area on base property, and limited (if any) contact with the remaining contamination is expected.	
Site 2 - Recovery Systems Track Sites	Between 1967 and 1970, NAES Lakehurst used this site to operate experimental machinery. At least 200 cubic yards of visually contaminated soils were removed from the site in the early 1980s. The soil contamination was believed to contain jet fuel, hydraulic fluids, and ethylene glycol.	Soil: Soil samples collected during Phase II of the remedial investigation identified only one chemical of concern: alpha-BHC (a component of pesticides) had a soil concentration of 29 ppb. Groundwater: Addressed as part of groundwater contamination Area H (see Section III.A).	In 1993 this site's ROD was signed, which required "no action" for the soils contamination, because levels of contamination were lower than action levels that would trigger further cleanup to protect human health.	ATSDR agrees with the results of the ROD and finds no public health hazards associated with this site. The site is located far from where base residents live in a remote area of the base, where limited contact with remaining contamination is expected.	

Table C-1           Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination				
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards
Site 3 - Drainage Ditch at Runway Arrested Launching Site	From 1958 to 1986, discharges from industrial operations at the Runway Arrested Launching Site released contaminants into a drainage ditch. The discharges were caused when groundwater and rainwater flowed into the underground facility and carried contaminants to the ditch. Wastes mixed with the water include chlorinated solvents, hydraulic fluid, and ethylene glycol.	Soil: Contaminants of concern identified for this site include Aroclor-1254 (0.09 ppm), beta- BHC (0.021 ppm), and mercury (1.2 ppm). Sediment: Prior to site cleanup, the following contaminants were detected at levels greater than preliminary remediation goals: 1,4-dichlorobenzene (0.84 ppm) and several polycyclic aromatic hydrocarbons (PAHs) (highest level detected was for chrysene and benzo[a]anthracene, both at 11 ppm). Groundwater: Addressed as part of groundwater contamination Area J (see Section III.A).	According to the 1993 ROD for this site, "no action" was needed to address soil contamination (based on light industrial land uses), but the most highly contaminated sediments had to be excavated and removed to address potential ecological risks. These sediments were removed in 1993, and EPA now considers actions at this site complete.	ATSDR finds no public health hazard associated with the current conditions of this site. The highest levels of contamination have been removed, and contact with remaining contamination would be limited to those who work at or who visit the Runway Arrested Launching Site, which is located in the more remote western half of the installation.

Table C-1           Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination				
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards
Site 4 - Deadload Maintenance Shop	From 1958 to 1980, Site 4 was used for storing drums of cleaning solvent and lubricants, among other purposes. An unknown amount of these materials leaked from these drums and contaminated soils near the site. In the early 1980s, visibly stained soils were removed and replaced with clean soils.	Soil: The ROD for Area K indicates that soil samples collected from Site 4 during Phase II of the remedial investigation "revealed no contamination." Groundwater: Addressed as part of groundwater contamination Area K (see Section III.A).	A ROD has not been prepared specifically to address human health risks for exposure to soil contamination, if any, at Site 4. The ROD for Area K did not require soil cleanup at Site 4 to prevent future groundwater contamination.	ATSDR finds no public health hazards associated with contacting soils at Site 4. This conclusion is based on the fact that no contamination was detected during the Phase II remedial investigation.
Site 5 - Arresting Engine, Track Number 2	Between 1958 and 1980, this site was reportedly used to store liquid wastes. Limited information is available on the amount and type of wastes stored at the site, and on the extent of spills to the soil; 19 cubic yards of contaminated soils were removed from the site in 1991.	Soil: After the soil excavation, confirmation sampling found the highest level of TPHC to be 26 ppm. Groundwater: Addressed as part of groundwater contamination Area K (see Section III.A).	In 1991, a ROD for this site was signed that required "no action" for the soil contamination at Site 5, because no contaminants were found to exceed state or federal cleanup levels.	ATSDR finds no public health hazard associated with current conditions at Site 5, because confirmation sampling following the soil removal found contamination to be less than state and federal cleanup levels and because few individuals are expected to routinely contact any contaminants that remain.

1	Table C-1           Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination				
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards	
Site 6 - Catapult Test Facility	Multiple industrial operations occurred in this site and released waste to soils. These included: a solvent storage area, where an unknown amount of solvents leaked onto soils; a lift station where more than 1,000 gallons of oil and grease were spilled onto soils; and storage tanks that have had minor leaks.	<ul> <li>Soil: Contaminants of concern in soil were cadmium (1.2 ppm) and lead (20.1 ppm).</li> <li>Sediment: Prior to site cleanup, multiple PAHs were detected at levels greater than preliminary remediation goals. The PAH with the highest detected level was chrysene (47 ppm).</li> <li>Groundwater: Addressed as part of groundwater contamination Area I (see Section III.A).</li> </ul>	According to the 1993 ROD for this site, "no action" was needed to address soil contamination (based on light industrial land uses). Sediments within holding ponds were found to have potential human health risks, but only if the water levels became low enough to expose the sediments. The ROD required sediment excavation to address these risks; the excavation was completed in 1993.	ATSDR finds no public health hazard associated with the current conditions of this site. The highest levels of contamination were removed in 1993. Contact with any remaining contamination would be infrequent and limited to those who work at or who visit the Catapult Test Facility, which is located in the more remote western half of the installation.	
Site 7 - Catapult Test Facility Storage Area	Site 7 is an area (approximately 50 feet by 100 feet) where base personnel reportedly disposed of waste solvents and oil. Disposal occurred between 1958 and 1973, but the exact amount of material disposed of is not known.	<ul> <li>Soil: Multiple rounds of soil sampling during the remedial investigation found only two contaminants of concern: cadmium (5.4 ppm) and lead (22 ppm).</li> <li>Groundwater: Addressed as part of groundwater contamination area I (see Section III.A).</li> </ul>	In 1993, this site's ROD required "no action" for the detected levels of soil contamination. This decision was based on an evaluation of human health risks for a light industrial land use scenario.	ATSDR finds no public health hazards associated with the soil contamination at this site. In short, we concur with the main finding of the ROD: "Site 7 does not pose unacceptable levels of risk to human health."	

ŀ	Table C-1           Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination				
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards	
Site 8 - Building 529, Arresting End of Track 1	Starting in 1957, multiple maintenance activities occurred at Building 529. An unknown amount of liquid waste was reportedly poured onto soils adjacent to the building, and unknown amounts of solvents leaked from a storage area.	Soil: Multiple soil samples collected during Phase III of the remedial investigation found multiple contaminants, all of which were detected at levels lower than the state's soil cleanup criteria. Groundwater: Addressed as part of groundwater contamination Area K (see Section III.A).	A ROD has not been prepared specifically to address human health risks for exposure to soil contamination, if any, at Site 8. The ROD for Area K did not require soil cleanup at Site 8 to prevent future groundwater contamination.	ATSDR finds no public health hazards associated with exposure to soil contaminants at Site 8. This finding is based on two observations: measured soil concentrations were lower than state cleanup levels, and base residents and base personnel have limited access to this site, which is adjacent to one of the base's high-speed jet test tracks.	
Site 9 - Former Hangar 2 Disposal Area	Interviews with installation personnel suggest that wastes from the installation's hangars were disposed of on soils. In 1981, approximately 200 drums of liquid waste were emptied on these soils. No information is available on the waste contents disposed of at Site 9. In 1981, the Navy removed roughly 40 cubic yards of stained soil and all empty drums from the site.	Soil: Multiple rounds of soil sampling identified the following contaminants of concern: xylenes, PAHs, lead, and mercury. Concentrations of these chemicals were not listed in the ROD. Groundwater: Addressed as part of groundwater contamination area B (see Section III.A).	In 1993, a ROD was signed by EPA and the Navy that required "no action" to address soil contamination at Site 9. This evaluation was based on a light industrial land-use scenario.	ATSDR finds no public health hazards associated with soil contamination at Site 9. Because soil contamination data are not documented in the ROD or the copy of the risk assessment that ATSDR received, our finding is based on EPA's concurrence that contamination levels do not present a significant human health risk.	

Table C-1 Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination				
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards
Site 10 - MOGAS Station	Site 10 includes three distinct areas: (1) Drums were stored in the area of Site 10 between 1960 and 1970, and some drums reportedly leaked liquids containing petroleum hydrocarbons. (2) An area covered by sand and gravel was used by fuel trucks; up to 34,000 gallons of waste oils were sprayed on this area for dust control. (3) A MOGAS station's underground storage tanks were removed from the area in 1988; signs of limited leaking were apparent.	<ul> <li>Soil: Soil contaminants detected at the site include: TPHC (10,819 ppm), toluene (7.8 ppm), ethylbenzene (17 ppm), xylenes (190 ppm), naphthalene (4.3 ppm), 2-methylnaphthalene (8.4 ppm), pyrene (0.27 ppm), and lead (7.5 ppm).</li> <li>Groundwater: Addressed as part of groundwater contamination area C (see Section III.A).</li> </ul>	In 1996, EPA and the Navy signed the ROD for this site, which required "no action" to address soil contamination remaining at Site 10. This decision was based on the fact that no soil concentrations (measured during confirmation samples) were greater than the state's soil cleanup criteria.	ATSDR finds no public health hazards associated with the soil contamination that remains at Site 10. Few base residents and base personnel are expected to contact soils in this part of the installation, because no recreational facilities and limited base support operations are located at this site.

Table C-1           Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination				
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards
Site 11 - Hangar 5 Storage Area	Little information is on the history of this site, other than an area (200 feet by 100 feet) had been used for drum storage. In the early 1980s 350 cubic yards of visually stained soils were removed from this site. An additional 81 cubic yards of contaminated soils were excavated based on the results of confirmation sampling. In 1993 all excavated areas were filled with clean soil.	<ul> <li>Soil: The soil contaminant of greatest concern at this site was TPHC. After the removal actions were completed, TPHC levels in soil were all lower than 3,790 ppm.</li> <li>Groundwater: Addressed as part of groundwater contamination area C (see Section III.A).</li> </ul>	In 1993, this site's ROD was signed, which required "no action" for the soils contamination, because no soil contaminants were found at levels above state and federal clean-up standards. This finding was based on a light industrial land-use scenario.	ATSDR finds no public health hazards associated with this site. The site is located in an industrial area on base property, and only transient contact with the remaining contamination is expected.

Table C-1           Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination				
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards
Site 12 - Abandoned Fuel Storage Facility	Underground storage tanks at Site 12 were used between 1923 and 1980. The tanks held both heating oil and diesel fuel. Fuel spills of unknown magnitudes reportedly occurred at Site 12. In 1988, the Navy removed the underground storage tanks.	Soil: Concentrations of contaminants of concern were: TPHC (4,294 ppm), selected PAHs (up to 850 ppb, for phenanthrene), tetrachloroethylene (34 ppb), xylenes (8 ppb), and 2- methyl naphthalene (2,100 ppb). Sediment: Nickel (234 ppm) and vanadium (1,293 ppm) were found to have localized contamination. Some PAHs were identified, but at levels below their detection limits. Groundwater: Addressed as part of groundwater contamination area A (see Section III.A).	In 1993, the record of decision for Site 12 required "no action" to address contamination in soil and sediment. This decision was based on a risk assessment involving a light industrial land use scenario for contacting soils and a transient scenario for contacting sediments.	ATSDR finds no public health hazards associated with levels of contamination at and near Site 12. The site is located in an industrial part of NAES Lakehurst that is expected to be frequented primarily by military and civilian personnel. Frequent contact with soils in this area are not expected. No contamination extends beyond the site boundary.

Table C-1           Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination				
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards
Site 13 - Former Fuel Farm Number 125	This site includes two sets of underground storage tanks: (1) five tanks that stored various petroleum products between 1930 and 1989, when they were removed, and (2) five tanks that "were found by accident" in 1984 and subsequently removed.	Soil: The highest levels of soil contamination were found at depths greater than 20 feet below ground surface. Contaminants detected include: 2-hexanone (25 ppm), toluene (23 ppm), ethylbenzene (11 ppm), xylenes (39 ppm), and TPHC (8,700 ppm). Groundwater: Addressed as part of groundwater contamination area B (see Section III.A).	In 1993, the Navy and EPA signed the ROD for Site 13, which found no human health risks associated with contacting soil contamination. This was evaluated for a construction scenario. The ROD required that the Navy implement a soil vapor extraction system to avoid future groundwater contamination from the subsurface soil contamination. The soil vapor extraction system was installed in May 1996.	ATSDR finds that subsurface soil contamination at Site 13 does not pose public health hazards because the most heavily contaminated soils are at depths well below the soils that residents and workers typically encounter.

Table C-1           Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination				
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards
Site 14 - Old Fire Fighting School	Fire fighting training exercises occurred at two pits at Site 14. The year when exercises began at the site is unknown, but may be as early as the 1920s; exercises at Site 14 ended in 1980. The Navy has estimated that no more than 600,000 gallons of flammable wastes were burned at this site.	<ul> <li>Soil: Contaminants with at least one detection higher than state soil cleanup criteria were: trichloroethylene (1.8 ppm), xylenes (58 ppm), and TPHC (85,472 ppm). Many additional chemicals were detected as well.</li> <li>Sediment: Contaminants detected at levels greater than 1 ppm in sediments include: lead (22.7 ppm), nickel (11.5 ppm), and TPHC (88,000 ppm).</li> <li>Groundwater: Addressed as part of groundwater contamination area A (see Section III.A).</li> </ul>	The 1993 ROD concluded that human health risks associated with soil and sediment contamination levels would not require remedial action. This finding was based on a light industrial land-use scenario for soils, and transient exposures to sediments. To protect against future groundwater contamination, however, the ROD required excavation of contaminated soils and sediments. This excavation has already been completed.	ATSDR finds no public health hazards associated with the soil and sediment contamination at Site 14, because the highest levels of contamination have been removed and because few people access this site, which is located in the northeastern corner of NAES Lakehurst.

	Table C-1           Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination				
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards	
Site 15 - Disposal Area Near Building 562 Parking Lot	In 1981, a base employee indicated that machine cuttings were periodically disposed of in an area near the Building 562 parking lot. This disposal reportedly occurred for 20 years. The Navy has not been able to confirm this lone report of waste disposal at Site 15.	Soil: During the second phase of the remedial investigation, three test pits were excavated and a soil sample collected. According to the ROD, "no contamination [was] detected" during this phase of the remedial investigation. Groundwater: Addressed as part of groundwater contamination area B (see Section III.A).	In 1991, the Navy and EPA signed the ROD for Site 15, which required "no action" for addressing potential soil contamination. This conclusion was based on the fact that no contaminants of concern were identified during the field investigations.	ATSDR finds no public health hazards associated with past waste disposal activities, if any, at Site 15. This finding is based on the fact that field investigations revealed no evidence of contamination, both by visual inspection of test pits and by chemical analysis of samples.	

Table C-1 Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination				
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards
Site 16 - NATTC Fire Fighting Training Area	Two fire fighting pits in this area were used for training, during which mixtures of water and fuel were intentionally ignited. Wastes from igniting and extinguishing the fires had the potential to contaminate soils and groundwater. In 1993, roughly 2,000 cubic yards of contaminated soils were removed from the site. A bioventing system was installed in 1994 to further reduce soil contamination levels.	<ul> <li>Soil: Soil contaminants detected at the site include: TPHC (29,000 ppm), toluene (0.009 ppm), 2-methylnaphthalene (220 ppm), and phenanthrene (0.41 ppm).</li> <li>Groundwater: Addressed as part of groundwater contamination area C (see Section III.A).</li> </ul>	The 1996 ROD for this site requires the Navy to continue operating the bioventing system at Site 16. This action was selected to reduce the potential of future groundwater contamination, not because surface soil contamination posed a human health risk.	For two reasons ATSDR finds no public health hazards associated with the soil contamination that remains at Site 16,. First, in 1993 the areas with documented surface soil contamination were remove from Site 16. Second, few base residents and base personnel are expected to contact soils in this part of the installation because no recreational facilities and limited base support operations are located at this site.

Table C-1           Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination				
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards
Site 17 - Fuel Farm 196	The fuel farm at Site 17 contained four underground fuel storage tanks and four dry wells that were installed in the mid- 1940s. For nearly 40 years, condensate and spills from the fuel transfer area poured into dry wells, and overflow from these wells flowed into a nearby unlined lagoon. Multiple fuel spills were documented for this site, and more than 10,000 gallons of fuel have been recovered from the subsurface at this site. A bioventing system and soil vapor extraction system were installed in 1994 to further reduce soil contamination levels.	<ul> <li>Soil: Soil contaminants detected at the site include: TPHC (15,000 ppm), toluene (0.009 ppm), ethylbenzene (0.066 ppm), xylenes (0.98 ppm), naphthalene (30 ppm), 2-methylnaphthalene (52 ppm), and lead (99 ppm).</li> <li>Groundwater: Addressed as part of groundwater contamination area C (see Section III.A).</li> </ul>	The 1996 ROD for this site requires the Navy to continue operating the bioventing system and soil vapor extraction system at Site 17. These actions were selected to reduce the potential of future groundwater contamination, not because surface soil contamination posed a human health risk.	For two reasons ATSDR finds no public health hazards associated with the soil contamination that remains at Site17. First, soil contamination at this site occurs primarily at depth. Second, few base residents and base personnel are expected to contact soils in this part of the installation, because no recreational facilities and limited base support operations are located at this site.

Table C-1           Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination				
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards
Site 18 - Naval Exchange Gas Station	A gasoline and service station operated at this site since 1958. Wastes generated at the site (e.g., battery acid, solvents, fuels) were disposed of in a dry well, which was removed in 1988. The underground storage tank at the station was removed in 1990, and showed no signs of leakage at that time.	<ul> <li>Soil: Soils at the base of the dry well contained many metals and semi-volatile organic compounds, as well as TPHC (508,470 ppm). After removal of the dry well, soils were found to contain TPHC only at 226 ppm.</li> <li>Groundwater: Addressed as part of groundwater contamination area A (see Section III.A).</li> </ul>	The 1991 ROD for Site 18 concluded that "no action" was needed to address any soil contamination that remained at Site 18. It concluded that conditions at the time pose no unacceptable risks to human health.	ATSDR concludes that no public health hazards are associated with the soil contamination at Site 18. This conclusion is based on the fact that the major source of contamination (i.e., the dry well) has been removed and that few people routinely contact soils, especially subsurface soils, at this site.
Site 19 - "SATS" Catapult	This site was used to test a catapult device during the 1960s and 1970s, after which it was a storage area for 55-gallon drums of waste, some of which could have leaked. Waste materials stored at the site include oils, hydraulic fluids, and jet fuel. In 1991, 35 cubic yards of contaminated soil was excavated and removed from the site.	<ul> <li>Soil: Prior to the soil excavation, elevated contamination levels were noted for alpha-BHC (11.7 ppb), silver (94 ppm), and TPHC (21,071 ppm). TPHC were not detected after the excavation was completed.</li> <li>Groundwater: Addressed as part of groundwater contamination area J (see Section III.A).</li> </ul>	In 1991 a ROD for this site was signed that required "no action" for the soil contamination, because no contaminants were found to exceed state or federal cleanup levels after the excavation was completed.	ATSDR finds no public health hazard associated witi current conditions at Site 19 because confirmation sampling found contamination to be less than state and federal cleanup levels and because few individuals are expected to routinely contact any contaminants that remain in this remote part of the base.

Table C-1           Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination				
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards
Site 20 - Tetraethyl Lead Disposal Site	Interviews with base personnel indicated that unknown amounts of aviation gasoline, which contains tetraethyl lead, was disposed of at Site 20 during the 1960s, and possibly into the 1970s. Steel and rubber materials buried at the site were removed in 1992.	Soil: Samples collected during the most recent site investigations revealed the following soil contaminants at Site 20: TPHC (2,400 ppm), lead (21.5 ppm), acetone (1.1 ppm), and methyl ethyl ketone (0.71 ppm). Groundwater: Addressed as part of groundwater contamination area G (see Section III.A).	The 1993 ROD for Site 20 indicates that "no action" is needed to address the soil contamination that remains at Site 20. This finding is based on a light industrial land-use exposure scenario.	ATSDR finds no public health hazards associated with soil contamination at Site 20. Debris remaining at the site has been removed and exposure to soils is believed to be extremely limited, because Site 20 is located in the remote, western half of the installation.
Site 21 - Jet-car Maintenance Shop	From 1958 to 1981, base personnel stored solvents and jet fuel in front of this maintenance shop, and some wastes were disposed of on the soils behind the shop. Additionally, the Navy tested jet engines on a concrete pad near the site. Finally, drums containing liquid waste were stored near the maintenance shop. No information is available on the amount of wastes that leaked into the soils. In 1991, 22 cubic yards of contaminated soils were removed from the site.	Soil: The contaminant of concern for this site was TPHC. Levels as high as 26,000 ppm were detected prior to the excavation project, and TPHC were not detected after the removal was complete. Groundwater: Addressed as part of groundwater contamination area H (see Section III.A).	In 1991 a ROD for this site was signed that required "no action" for the soil contamination, because no contaminants were found to exceed state or federal cleanup levels after the excavation was completed.	ATSDR finds no public health hazards associated with the current conditions of this site. This finding is based on the sampling data, which found no levels of contamination greater than state and federal cleanup standards, and on the fact that few people, if any, routinely contact soils at this industrial location in the remote western half of the installation.

Table C-1           Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination				
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards
Site 22 - Jet Blast Deflector	This site is used to test how effectively jet blast deflectors redirect jet engine exhaust. Site investigations in 1981 and 1985 found areas with stained soils, and the 1985 investigation found 15 empty drums, which have since been removed.	<ul><li>Soil: The only contaminant of concern detected for this site was mercury (0.19 ppm).</li><li>Groundwater: Addressed as part of groundwater contamination area J (see Section III.A).</li></ul>	In 1993, the ROD for this site required "no action" to address the trace levels of soil contamination found at the site. The evaluation in the ROD was based on a military land-use scenario.	ATSDR agrees with the finding in the ROD that soil contamination at Site 22 does not pose a health hazard. This finding is based on the levels of contamination detected and the fact that few people would routinely contact soils in this remote part of installation property.
Site 23 - Inactive Disposal Area at Building 524	During a site investigation in 1981, base personnel identified four localized areas of surface soil contamination near Building 524. These included areas with stained soil, an area with nine 55-gallon drums, and an area where boxes of non-hazardous resin "beads" were abandoned. The stained surface soil, drums, and boxes were all removed from the site before 1985.	Soil: Soil sampling at Site 23 occurred during Phase II of the remedial investigation. According to the ROD, "no contamination [was] detected." Groundwater: Addressed as part of groundwater contamination area I (see Section III.A).	The 1991 ROD for Site 23 concluded that "no action" was needed to address any soil contamination that remained at the site. It concluded that conditions at the time pose no unacceptable risks to human health.	ATSDR agrees that Site 23 poses no public health hazard. The Navy has removed solid waste disposed of at Site 23, and visibly stained surface soils. Further, the site is located in the remote, western half of NAES Lakehurst, in an industrial area that few residents routinely access.

Table C-1           Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination				
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards
Site 24 - Catapult Test Site 7419	From the mid-1960s to the early 1970s, the Navy tested a catapult device at Site 24 atop a concrete pad, during which some liquid wastes leaked from the experimental equipment. These wastes included hydraulic fluid, lubricants, and jet fuel, but the amount that leaked is not known. All equipment from this site has been removed.	Soil: Multiple rounds of soil sampling found the following contaminants: acetone (0.13 ppm), bis(2-ethylhexyl)phthalate (3.8 ppm), di-n-octylphthalate (0.46 ppm), isophorone (0.87 ppm), toluene (0.26 ppm), and TPHC (4,600 ppm). Groundwater: Addressed as part of groundwater contamination area I (see Section III.A).	In 1993 the ROD signed for this site required "no action" to address the localized areas with soil contamination. This decision was based on an evaluation of human health risks for a military land-use scenario.	ATSDR finds no public health hazards for this site. Though trace amounts of soil contamination likely remain, the site is located adjacent to an area where high-speed catapult testing is performed and few people access this location. Exposures to soil, if any, are expected to be of short duration.
Site 25 - Test Department Disposal Area	In 1981, environmental staff noted a 450-square-foot area with dark patches of soil. Military personnel indicated that the area had been used to dispose of wastes generated by the "Test Department," but the amount of material disposed of is not known. The wastes poured on the soils are believed to include chlorinated solvents.	Soil: According to the ROD, all soil samples collected at this site during the remedial investigation did not contain volatile organic compounds and concentrations of metals were not elevated, when compared to background levels. Groundwater: Addressed as part of groundwater contamination area I (see Section III.A).	In 1993 the ROD signed for this site required "no action" to address potential soil contamination at Site 25. This finding is based on soil sampling from three pits, and sediment sampling in an area that would have been affected by surface water runoff from the site.	ATSDR finds no public health hazards for this site. Sampling data have provided limited evidence of environmental contamination for the site, which is located in the remote western half of the installation, which few residents routinely access.

Table C-1           Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination				
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards
Site 26 - Contractor Disposal Area	This site is a drainage swale near the northern property boundary. For an unspecified time frame, contractors disposed of waste oil, roofing materials, and other building debris at the site. The total amount of materials disposed of is not known. In 1981, all debris visible at the site was removed.	Soil: Contaminants detected in the surface soil samples included: multiple PAHs (highest level detected was 320 ppb, for pyrene); benzoic acid (130 ppb); DDE (635 ppb); DDT (4,700 ppb); DDD (360 ppb); and TPHC (474.5 ppm). Groundwater: Addressed as part of groundwater contamination area A (see Section III.A).	The 1991 ROD for Site 26 concluded that exposure to soil contamination did not pose unacceptable human health risks. The levels of pesticides detected in the soils were below state and federal cleanup levels at the time. Accordingly, "no action" was required to address levels of soil contamination.	ATSDR finds no public health hazard associated with levels of soil contamination at Site 26. The site is located near the northern site boundary of NAES Lakehurst, where residents and employees rarely access. There is no evidence of off- site contamination.
Site 27 - Recovery System Test Site Scrap Dump	From 1958 to 1990, solid waste from the Recovery System Test Site was disposed of on this site, which is approximately 400 feet by 700 feet. The waste was primarily scrap steel cable. There are no reports of liquid waste having been disposed of at Site 27.	<ul> <li>Soil: An EPA contractor conducted a field survey using an organic vapor analyzer and found no evidence of soil contamination in 25 analyses. An additional soil gas screening survey found no evidence of surface soil contamination.</li> <li>Groundwater: Addressed as part of groundwater contamination area K (see Section III.A).</li> </ul>	In 1991 the ROD for Site 27 required "no action" to address potential soil contamination. Although no surface soils were subject to chemical analyses, the field surveys and chemical analyses of groundwater samples at the site suggest that soil contamination is limited.	ATSDR finds no public health hazard associated with levels of soil contamination at Site 27. The site is located along a recovery system track in an area where people (including base personnel) rarely access.

Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination				
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards
Site 28 - Westfield Hangar Area	Site 28 includes several operations near the Westfield Hangar. In August 1990 the Navy discovered a leak in subsurface piping that was releasing gasoline into the soils. More than 65 cubic yards of visually stained soils were removed from the site late that year.	<ul> <li>Soil: The ROD identifies the following contaminants of concern but does not present measured concentrations: benzene, ethylbenzene, toluene, xylenes, 2-methylnaphthalene, and naphthalene.</li> <li>Groundwater: Addressed as part of groundwater contamination area E (see Section III.A).</li> </ul>	The 1997 ROD for Site 28 found that levels of groundwater contamination might pose health concerns if people were to use it for drinking water. The ROD required installation of a soil vapor extraction system to reduce levels of soil contaminants that might affect groundwater in the future. The soil vapor extraction system was installed in March 1998. Based on the success of the system in treating the site, the system was turned off in June 2001.	ATSDR finds no public health hazards associated with soil contamination at Site 28. Contamination apparently is limited to subsurface soils, where the original gasoline leak occurred. Base residents an personnel are expected to contact these subsurface soils rarely, if ever.

Table C-1           Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination				
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards
Site 29 - Original Base Landfill	The unlined landfill at Site 29 spans roughly 20 acres and received wastes from the early 1920s until 1960. Municipal and industrial wastes were disposed of at Site 29, including metal scrap, asbestos, light bulbs, ash, and contaminated fuels. After closing the landfill, the Navy covered it with clean fill, which is now partially covered with vegetation. Between 1992 and 1993, approximately 500 waste drums and more than 1,000 cubic yards of soil were removed from the landfill.	Soil: Numerous soil samples were collected during the drum removal activities at Site 29, but these all reflect contamination levels within the landfill, which is completely covered with clean soils. Sediment: Sediment contamination near Site 29 was attributed primarily to wastes from Site 14. The ROD for Site 14 addresses this issue. Groundwater: Addressed as part of groundwater contamination area A (see Section III.A).	In 1994 the ROD for Site 29 concluded that "no action" is needed to address levels of soil contamination in the former landfill. The ROD found no unacceptable human health risks, based on a light industrial land-use scenario.	ATSDR concludes that contaminated soils at Site 29 do not present public health hazards. This conclusion is based on the following observations: soil contamination was detected only in the subsurface samples, where one would expect to encounter waste material at a landfill site; the surface soil at the landfill is reportedly clean fill; and fey base residents or personnel are expected to come into contact with any soils at the former landfill.

Table C-1           Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination				
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards
Site 30 - Recovery System Track Number 4	The Navy intentionally crashed four aircraft at this site to test how effectively certain fuel additives prevent fires. The aircraft were crashed in an area approximately 75 feet by 800 feet. Crashes occurred on a mound of soil, which was removed before 1985. The four aircraft each held approximately 1,000 gallons of fuel during the crashes.	Sediment: Sediment samples were collected from a ditch that drains runoff from Site 30. The samples were analyzed for organic and inorganic contamination. Only chromium (110 ppm) exceeded a "State action level," but this level of contamination was not consistently detected. Groundwater: Addressed as part of groundwater contamination area K (see Section III.A).	The 1991 ROD for Site 30 concluded that exposure to soil contamination did not pose unacceptable human health risks. Accordingly, "no action" was required to address levels of soil contamination.	ATSDR agrees that potential exposures to soils at Site 30 do not present public health hazards. This finding is based on the limited evidence of contamination, as well as the fact that the site is located in an area of the base visited primarily by employees (civilian and military), and rarely by residents.
Site 31 - Former Sanitary Landfill	From 1960 through 1980 the unlined landfill at Site 31 received primarily household wastes, but also small quantities of industrial wastes, including oils, hydraulic fluids, solvents, and scrap metal. In 1980 the Navy covered the 34-acre landfill with at least 6 inches of clean topsoil during closure. The landfill area is now covered with grass and other vegetation.	Soil: Soils from Site 31 were not sampled during the remedial investigation for several reasons, but largely because the landfill is covered with enough clean topsoil to prevent exposures to the waste material within the landfill. Groundwater: Addressed as part of groundwater contamination area D (see Section III.A).	The 1993 ROD for Site 31 required continued monitoring to assess groundwater contamination, but "no action" to address contaminated soils.	ATSDR finds no public health hazards associated with contaminated soils at Site 31. Because previously disposed wastes are covered with at least 6 inches of clean topsoil, base personnel and residents are not expected to contact contamination at this site.

Table C-1           Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination				
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards
Site 32 - Launch End of the Test Tracks	In 1958 the Navy constructed the facilities at the launching end of the recovery system test tracks. The tracks have drainage swales that collect waste liquids, such as oils and fuels. Prior to 1986, these wastes flowed from the swales into multiple dry wells. The amount of waste material that overflowed from the dry wells is not known. The dry wells were excavated and removed in 1988. Also at Site 32 was an underground fuel storage tank, which was removed in 1989. Some soil adjacent to the tank removal site were found to contain fuel contamination.	Soil: Multiple site investigations showed that soils at Site 32 were contaminated with various chemicals associated with petroleum hydrocarbons. The 1993 ROD reported only two of these contaminants having soil concentrations greater than NJDEP's soil cleanup criteria: xylenes (210 ppm) and TPHC (84,000 ppm). Groundwater: Addressed as part of groundwater contamination area H (see Section III.A).	The 1993 ROD for Site 32 concluded that levels of soil contamination do not pose a health risk for a light industrial land-use scenario. The ROD required, however, that areas with elevated soil contamination be excavated and removed to avoid future groundwater contamination. Confirmation sampling following this removal action, and the sampling found that soil concentrations were below designated cleanup levels.	ATSDR finds no public health hazards associated with the contamination that might remain at Site 32. Thi finding is based largely on two observations: the highes levels of soil contamination have been removed, and the areas that may still be contaminated are drainage swales along the recovery tracks—areas that base residents and personnel are not expected to frequent.

Table C-1           Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination				
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards
Site 33 - Former Refueler Repair Shop	Site 33 was an unlined dry well that was located adjacent to a refueler repair shop, which was first constructed in 1959. An unknown amount of wastes from this shop—including solvents, lubricants, and oils—were disposed of in the dry well. The well, which was about 8 feet deep, was excavated in 1988.	Soil: Multiple contaminants have been detected in the soil at Site 33, including: methyl ethyl ketone (470 ppb), TPHC (5,700 ppm), benzene (22 ppb), toluene (4 ppb), ethylbenzene (100 ppb), xylenes (990 ppb), naphthalene (980 ppb), and 2-methylnaphthalene (4,100 ppb). Groundwater: Addressed as part of groundwater contamination area A (see Section III.A).	The 1993 ROD for Site 33 required "no action" to address levels of soil contamination at the site. This decision was based on an evaluation of human health risks for a light industrial land-use scenario.	ATSDR finds no public health hazards associated with contaminated soils at Site 33. Exposure to contaminated soils is believed to be extremely low because the site is located in an industrial area and because soil contamination is believed to be limited to subsurface soils, which people do not routinely contact.

Table C-1           Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination				
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards
Site 34 - Parachute Jump Circle	The parachute jump circle is 4,000 feet in diameter, currently used to practice parachute landings. In the past, fuel trucks disposed of used fuel oil on surface soils throughout the jump circle. As much as 2,000,000 gallons of fuel oil were disposed of on the site. The area may have unexploded ordnance and associated munition compounds or their breakdown products.	<ul> <li>Soil: Surface soils and subsurface soils were sampled at selected locations in the jump circle. The ROD reports contamination for one analyte (TPHC, 2,264 ppm).</li> <li>Groundwater: Addressed as part of groundwater contamination area G (see Section III.A).</li> </ul>	The 1991 ROD for this site required "no action" to address levels of soil contamination. This was based on the limited evidence of contamination from limited soil sampling and extensive groundwater sampling. The Navy suspects that much of the fuel disposed of at Site 34 evaporated before seeping into soils and groundwater.	ATSDR finds no public health hazards associated with soil contamination from fuel oil at this site. The parachute jump circle is used for training activities and no for recreational purposes. Accordingly, exposures to soil contaminants, if any are present, would be of extremely limited duration. However, there is a possibility that UXO/CWM can be encountered in this area.

Table C-1           Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination					
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards	
Site 35 - Helicopter Defueling Area	Site interviews conducted during the IRP indicated that some helicopters and aircraft could have discharged fuels onto the grassy surface in this area. The amount of fuel potentially released is not known, and in the early 1980s fuel discharge from aircraft to ground surfaces ceased at NAES Lakehurst. An unspecified volume of contaminated soils was removed in the early 1990s and replaced with clean soil.	<ul> <li>Soil: The soil contaminant of greatest concern at this site was TPHC. After the removal actions were completed, TPHC levels in soil were all lower than 4,360 ppm.</li> <li>Groundwater: Addressed as part of groundwater contamination area C (see Section III.A).</li> </ul>	In 1993 this site's ROD was signed, which required "no action" for the soils contamination, because no soil contaminants were found at levels above state and federal clean-up standards. This finding was based on a light industrial land-use scenario.	ATSDR finds no public health hazards associated with this site. The site is located in an industrial area on base property, and only transient contact with the remaining contamination is expected.	

Table C-1           Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination				
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards
Site 36 - Former Hangar 1 Waste Disposal Area	From 1921 to 1974, personnel working in Hangar 1 reportedly disposed of approximately 6 gallons of liquid waste per day onto soils outside the structure. The wastes likely included kerosene, various volatile organic compounds, and some inorganic acids. The total amount of liquid wastes disposed of at this site could be as high as 83,000 gallons. The site also includes a tank and a dry well, both of which were removed in 1988.	Soil: Soil sampling at Site 36 detected various chemicals, including: multiple PAHs (highest level observed was 708 ppb, for fluoranthene); Aroclor 1254 (360 ppb); chromium (275 ppm); nickel (119 ppm); TPHC (57 ppm); and multiple pesticides (highest level observed was 66 ppb, for DDT). Groundwater: Addressed as part of groundwater contamination area B (see Section III.A).	The 1993 ROD for Site 36 concluded that "no action" was required to address contaminated soils. This decision was based on a human health risk evaluation for a light industrial land-use scenario. None of the contaminants found in the soils exceeded state cleanup levels.	ATSDR finds no public health hazards associated with this site. The levels of contamination are limited to the areas immediately surrounding Hangar 1, where few people frequent. Moreover, the highest levels of PAHs were detected in subsurface soils (i.e., at the bottom of the former dry well) which people do not contact.
Site 37 - Former Fuel Disposal and Drum Storage Area	From 1957 to 1967, personnel at the plumbing shop routinely drained gasoline and jet fuel from trucks before servicing them. Base records suggest that up to 48,000 gallons of fuel were disposed of at the site, which might have included 512 pounds of elemental lead.	<ul> <li>Soil: Soil samples were collected during different investigations of the site. No contaminants were detected above cleanup levels, and the only contaminant with a concentration reported was TPHC (25 ppm).</li> <li>Groundwater: Addressed as part of groundwater contamination area A (see Section III.A).</li> </ul>	The 1993 ROD indicates that "no significant organic or inorganic contamination" was detected at Site 37 and that no human health risks are apparent. The ROD reports that "no action" is required to address soil contamination.	ATSDR finds no public health hazards associated with soil contamination at Site 37. The site is located near the eastern fenceline of NAES Lakehurst, where few people access. Levels of soil contamination at the site are reportedly not significant.

Table C-1 Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination					
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards	
Site 38 - Oil Skimming Pond and Sewage Disposal Area	Site 38 is a remote, wooded area of NAES Lakehurst. Between 1966 and 1974, contractors reportedly poured as much as 40,000 gallons of liquid wastes directly onto the soil at Site 38. The wastes included septic sewage and oily wastes from Site 6 (see listing earlier in this table).	<ul> <li>Soil: Sampling during phase III of the remedial investigation contained trace amounts of semi-volatile organic compounds and two pesticides, but these contaminants were not detected in split samples analyzed by EPA.</li> <li>Groundwater: Addressed as part of groundwater contamination area F (see Section III.A).</li> </ul>	In 1993, the ROD for this site required "no action" to address the soil contamination. This action was based on the most recent soil sampling from pits, which found no evidence of contamination that would require cleanup to protect human health.	ATSDR finds no public health hazards associated with this site. Not only is there limited evidence of soil contamination, but the site is also located amid a heavily wooded area far from structures and paved roads. Thus, contact with soils at Site 38 is believed to be limited.	
Site 39 - Former Petroleum Oils and Lubricants Disposal Site	In the 1950s and 1960s, this site was used to steam clean aircraft and equipment. The cleaning was believed to release waste mixtures onto soils, including fuels, solvents, lubricants, and oils. The site has since largely been covered with asphalt or seeded with grass.	<ul> <li>Soil: The primary contaminants of concern at the site were PAHs.</li> <li>Concentrations of individual PAHs varied from sample to sample, with the highest detected level being 106,390 ppb total PAHs.</li> <li>Groundwater: Addressed as part of groundwater contamination area B (see Section III.A).</li> </ul>	The 1993 ROD for this site required "no action" to address the soil contamination. This conclusion was based on a light industrial land-use scenario, and considered the fact that most of the elevated levels of contamination were detected in subsurface soils.	ATSDR finds no public health hazards associated with this site. PAHs were found at elevated levels, but only in a sample collected at a depth of 2 feet and not at concentrations exceeding state cleanup levels for subsurface soils.	

Table C-1 Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination					
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards	
Site 40 - Soil Stabilization Field Test Site	In 1969 the Navy conducted a test at Site 40 to determine if a chemical mixture could stabilize soils and inhibit dust formation. During the test, aniline, ferric chloride, and furfural were applied to, and mixed into, the surface soils of an area that spans 4,000 square feet. No vegetation was observed growing at the site for nearly 20 years after the tests were completed.	Soil: Soils from Site 40 were sampled during Phases I and II of the remedial investigation. Chemicals detected at levels requiring further review included 1,2,4-trichlorobenzene (218 ppb) iron (4,280 ppb). Soil samples were analyzed for aniline and furfural, but these contaminants were never detected. Groundwater: Addressed as part of groundwater contamination area J (see Section III.A).	The 1991 ROD for Site 40 concluded that "no action" was needed to address any soil contamination that remained. It concluded that site conditions at the time pose no unacceptable risks to human health.	ATSDR finds no public health hazards associated with soil contamination at Site 40. Though trace amounts of soil contamination likely remain, the site is located adjacent to an area where high-speed catapult testing is performed and few people access this location. Exposures to soil, i any, are expected to be of short duration.	
Site 41 - Ordnance Impact Area	This site address past uses of high detail in Section III.B of this public	explosive ordnance and chemical war ic health assessment.	fare materiel. ATSDR's evaluation	of this site is described in	

Table C-1           Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination					
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards	
Site 42 - Former Base Land fill	This site was reportedly used as a landfill from the late 1920s until the late 1930s. Both residential and industrial wastes were believed to be disposed of at the site. Materials that are likely in the landfill include metal scrap, asbestos, paint thinner, and ash. Most of the land covering the landfill has since been developed.	<ul> <li>Soil: Elevated levels of soil contamination were detected in several subsurface borings, as is common for landfill sites.</li> <li>Sediment: Nickel (151 ppm) and vanadium (935 ppm) were detected in sediments adjacent to the landfill.</li> <li>Groundwater: Addressed as part of groundwater contamination area A (see Section III.A).</li> </ul>	The 1993 ROD evaluated human health risks assuming light industrial land use for contacting soils and transient exposures for contacting sediments. "No action" was required to address the levels of soil contamination found at the site.	ATSDR finds no public health hazards associated with soil contamination at Site 42. Because soil contamination data are not documented in the ROD or the copy of the risk assessment that ATSDR received, our finding is based on EPA's concurrence that contamination levels do not present a significant human health risk.	
Site 43 - Advanced Underwater Weapons Storage Site	From 1960 to 1976 the Navy used this site to store, maintain, and transport weapons. The site documents do not specify the type of weapons that were stored at this location.	A 1985 survey of the working area found no radiological hazard in the buildings where weapons were stored. Conducted by the Naval Sea Systems Command Detachment Radiological Affairs Support Office, the survey examined levels of alpha, beta, and gamma radiation in two buildings. The Navy neither confirms nor denies that any radiological material was stored here.	This site is not addressed by any ROD and has no reported corrective actions.	ATSDR finds no public health hazards associated with Site 43. This conclusion is based on the understanding that the building where weapons were stored does not contain levels of radiation at public health concern. (ATSDR was not provided a copy of the 1985 survey of radiological hazards conducted for this site.)	

Table C-1 Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination					
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards	
Site 44 - PCB Storage and Test Areas	Site 44 comprises two areas where electrical transformers were stored and tested over a 34-year period. Testing involved collecting a sample of the transformer fluid, which was eventually disposed of on the soil. Much of the transformer fluids contained polychlorinated biphenyls (PCBs). The Navy estimates that up to 26 gallons of oils containing PCBs were disposed of at Site 44. In 1991, 13 cubic yards of contaminated soil were removed from the site.	<ul> <li>Soil: The primary contaminant of concern at this site was PCBs.</li> <li>Prior to the soil removal action, PCBs were detected in the surface soil at concentrations as high as 2,000 ppm. After the removal action, however, the highest measured PCB concentration was 0.22 ppm.</li> <li>Groundwater: Addressed as part of groundwater contamination area A (see Section III.A).</li> </ul>	The 1992 ROD concluded that soil contamination at Site 44 poses "no unacceptable risks to human health and the environment," and therefore required "no action" to address any soil contamination remaining at the site.	Based on the results of the confirmation sampling, which found limited evidence of PCBs remaining in surface soils, ATSDR finds no public health hazards associated with soil contamination at Site 44.	

Table C-1           Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination				
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards
Potential fish contamination	According to the installation's Fish and Wildlife Management Plan, base personnel and residents are known to fish in several surface water bodies on site, but primarily in Bass Lake, Clubhouse Lake, Pickerel Lake, Island Pond, and Rainbow Pond. NAES Lakehurst annually stocks most of these surface water bodies with fish.	No fish tissue samples have been collected or analyzed at NAES Lakehurst.	None.	ATSDR believes potential hazards from eating fish caught on base property are minimal because: (1) Most on site fishing occurs in ponds annually stocked with fish. These fish likely do not live in base waters long enough to accumulate unhealthy levels of chemicals, even if such chemicals were present in the base's surface waters or sediment. (2) Fishing appears to be limited to recreational users, who consume much smaller amounts of fish than do subsistence fishers. (3) The base waters where most fishing occurs (e.g., Bass Lake, Clubhouse Lake, Pickerel Pond) are not downstream from surface water discharges or areas of significant contamination. (4) There is no evidence of widespread or elevated sediment contamination with chemicals known to bioaccumulate in fish.

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Table C-1           Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination					
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards	
Small arms range	The Navy operated a small arms firing range near the western border of the base property. Limited information is available on the activities that occurred at this site, other than the fact that it was used to train military personnel on firing small arms. The top 1 foot of soils was excavated from a large area on the range. To recover residual lead, soils were seived and more than 21 tons of lead materials were collected for recycling.	Soil: Multiple rounds of confirmation soil sampling followed the excavation. Overall, more than 70 confirmation samples were collected. Only one of these samples had a lead concentration greater than EPA's soil-screening level (400 ppm). Because follow-up sampling at this location (6 samples collected) did not find the same contamination levels that were reported previously, site investigators concluded that the one elevated result was an anomalous detection.	The site was not addressed under the NPL actions.	Based on the information provided by NAES Lakehurst, the levels of lead contamination at the former small arms firing range are not a public health hazard under current use. ATSDR notes that this site is located near the western boundary of the installation, where base residents and base personnel rarely frequent.	

Table C-1           Evaluation of Sites at NAES Lakehurst with Known or Suspected Environmental Contamination					
Site	Site Description and History	Environmental Sampling Results	Corrective Action Status	Evaluation of Public Health Hazards	
Cranberry bogs	Commercial cranberry bogs are adjacent to the southern boundary of the base. The Manapaqua Brook flows from the base into the cranberry bogs. There is a wastewater outfall from NAES Lakehurst at a point upstream of the bogs and the Manapaqua Brook flows back on base after exiting the bogs.	NAES Lakehurst routinely samples the wastewater outfall that flows into Manapaqua Brook at a point upstream from cranberry bogs. Those samples are within the NJDEP standards for their permit. There is no surface water sampling information for the Manapaqua Brook after it re-enters the base. Therefore, it is unknown whether the brook picks up chemicals from bog operations (i.e., agricultural chemicals).	None.	Evaluation is based on the information about surface water sampling for the wastewater outfall into Manapaqua Brook There is no indications that elevated levels of agricultural chemicals or metals would exist in the surface water that runs to the cranberry bogs.	

## **References for Appendix C:**

Naval Air Engineering Station, New Jersey. Superfund update published by EPA. March 2002. Record of Decision for Sites 1, 11, and 35. NAES Lakehurst. March 17, 1993. Record of Decision for Sites 2 and 38. NAES Lakehurst. March 17, 1993. Record of Decision for Sites 3 and 6. NAES Lakehurst. September 14, 1993. Record of Decision for Sites 5, 19, and 21. NAES Lakehurst. December 30, 1991. Record of Decision for Sites 7, 22, 24, and 25. NAES Lakehurst. September 14, 1993. Record of Decision for Sites 9, 12, 33, 36, 37, 39, and 42. NAES Lakehurst. September 14, 1993. Record of Decision for Sites 15, 18, 23, 26, 27, 30, 34, 40, and Area L. NAES Lakehurst. September 16, 1991. Record of Decision for Site 13. NAES Lakehurst. September 14, 1993. Record of Decision for Site 14. NAES Lakehurst. September 14, 1993. Record of Decision for Site 20. NAES Lakehurst. September 14, 1993. Record of Decision for Site 28 Soil and Groundwater. NAES Lakehurst. May 7, 1997. Record of Decision for Site 29 Soil. NAES Lakehurst. August 9, 1994. Record of Decision for Site 31. NAES Lakehurst. September 14, 1993. Record of Decision for Site 32. NAES Lakehurst. September 14, 1993. Proposed Plan for Site 41. NAES Lakehurst. January 15, 1997. Record of Decision for Site 44. NAES Lakehurst. January 3, 1992. Record of Decision for Area K Groundwater. NAES Lakehurst. May 7, 1997. Record of Decision for Area C Soil and Groundwater. NAES Lakehurst. January 10, 1996. Letter from Thomas Lewis (Louis Berger and Associates) to NAES Lakehurst. November 13, 1998.