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FINAL

RECORD OF DECISION
FOR OPERABLE UNIT NO. 3
(SITE 48)

MARINE CORPS AIR STATION, NEW RIVER
JACKSONVILLE, NORTH CAROLINA

CONTRACT TASK ORDER 0133

Prepared For:

DEPARTMENT OF THE NAVY
ATLANTIC DIVISION
NAVAL FACILITIES
ENGINEERING COMMAND
Norfolk, Virginia

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LIST OF ACRONYMS AND ABBREVIATIONS

ARARs	Applicable or Relevant and Appropriate Requirements
bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CRDL	Contract Required Detection Unit
DoN	Department of the Navy
EPIC	Environmental Photographic Interpretation Center
FS	Feasibility Study
IAS	Initial Assessment Study
MCAS	Marine Corps Air Station
MCB	Marine Corps Base
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
msl	mean sea level
NC DEHNR	North Carolina Department of Environment, Health and Natural Resources
NCP	National Contingency Plan
NCWQS	North Carolina Water Quality Standard
NPL	National Priorities List
PAH	polynuclear aromatic hydrocarbon
PRAP	Proposed Remedial Action Plan
RA	Risk Assessment
RCRA	Resource Conservation and Recovery Act
RI	Remedial Investigation
ROD	Record of Decision
SARA	Superfund Amendments and Reauthorization Act
TCE	trichloroethene
USEPA	United States Environmental Protection Agency

DECLARATION FOR THE RECORD OF DECISION
REMEDIAL ALTERNATIVE SELECTION

Site Name and Location

Operable Unit No. 3
Site 48, Marine Corps Air Station Mercury Dump
Marine Corps Air Station, New River
Jacksonville, North Carolina

Statement of Basis and Purpose

This decision document presents the selected remedial action for the Marine Corps Air Station (MCAS) Mercury Dump, Site 48, developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA) and, to the extent practicable, the National Contingency Plan (NCP). This decision is based on the administrative record for Site 48.

The Department of the Navy (DoN)/Marine Corps has obtained concurrence from the State of North Carolina and the United States Environmental Protection Agency (USEPA), Region IV on this action.

Description of the Selected Remedy

The remedial investigation (RI) and the risk assessments (RAs) conducted for Site 48 support a no action remedial alternative. The RI and RAs addressed all media at the site, and therefore, no other actions will be considered for Site 48.

Declaration

The selected remedy is protective of human health and the environment, complies with Federal and State requirements that are legally applicable or relevant and appropriate to the remedial action, and is cost-effective. The statutory preference for treatment is not satisfied because no treatment was necessary for the protection of human health and the environment. Contaminant levels detected in the media at the site were found to present no imminent or substantial threat to human health or the environment. A five-year review will not be necessary for this site.

_____ _____

Signature (Commanding General, MCB Camp Lejeune) Date

1.0 INTRODUCTION

Marine Corps Base (MCB) Camp Lejeune was placed on the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) National Priorities List (NPL) on October 4, 1989 (54 Federal Register 41015, October 4, 1989). The United States Environmental Protection Agency (USEPA) Region IV, the North Carolina Department of Environment, Health and Natural Resources (NC DEHNR) and the United States Department of the Navy (DoN) then entered into a Federal Facilities Agreement for MCB Camp Lejeune in February 1991. The primary purpose of the Federal Facilities Agreement was to ensure that environmental impacts associated with past and present activities at the MCB were thoroughly investigated and appropriate CERCLA response/Resource Conservation and Recovery Act (RCRA) corrective action alternatives were developed and implemented as necessary to protect public health and the environment.

Operable Unit No. 3 (Site 48), the Marine Corps Air Station (MCAS) Mercury Dump, has been the subject of a remedial investigation (RI). The feasibility study (FS), which normally develops and examines remedial action alternatives for a site, will not be performed at Site 48 since the results of the RI and risk assessments (RAs) indicated that no remedial action is required at the site.

This Record of Decision (ROD) has been prepared to summarize the remedial alternative selection process and to present the selected remedial alternatives.

2.0 SITE LOCATION AND DESCRIPTION

The study area, Operable Unit No. 3 (Site 48) is one of 12 operable units located within MCB Camp Lejeune and MCAS New River. Separate investigations are being conducted for the other 11 operable units. Figure 1 shows the location of Site 48. Site 48 is the only site included under Operable Unit No. 3. All media at the site are represented by the operable unit.

In general, Site 48 is bordered by Longstaff Road to the west, an intermittent tributary of the New River to the north, the New River to the east, and Building AS-811 to the south (see Figure 2). The study area covers approximately 4 acres. As shown on Figure 2, the majority of the land within Site 48 is grass covered. The grassed area is maintained and extends to the banks of the New River. At the edge of the New River and the intermittent tributaries, heavy vegetation and young saplings are present. No stressed vegetation has been noted.

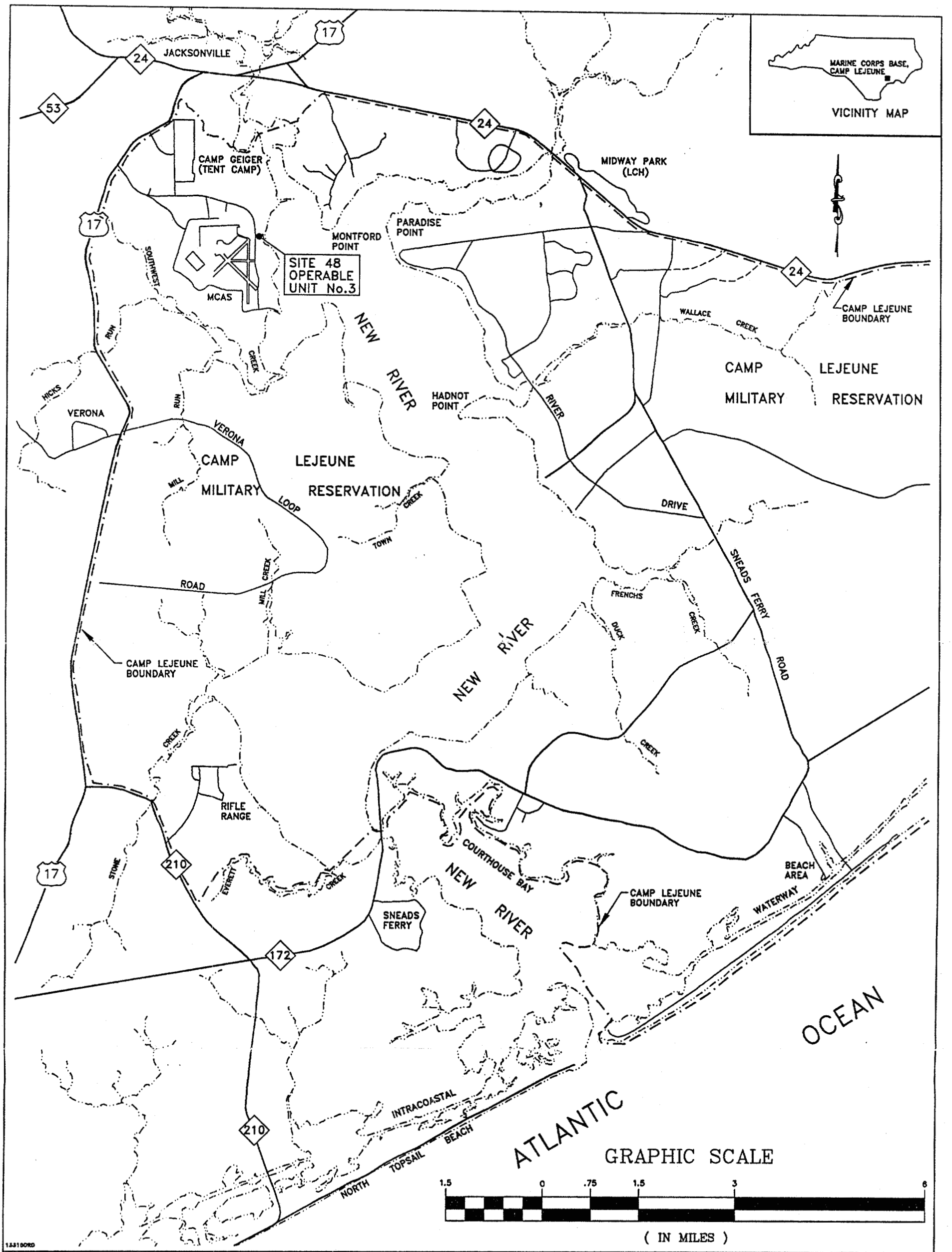

FIGURE 1
LOCATION MAP
OPERABLE UNIT No. 3, SITE 48
RECORD OF DECISION CTO-0133

MARINE CORPS AIR STATION, NEW RIVER
JACKSONVILLE, NORTH CAROLINA

SOURCE: U.S.G.S. WATER-RESOURCES INVESTIGATIONS REPORT 89-4096

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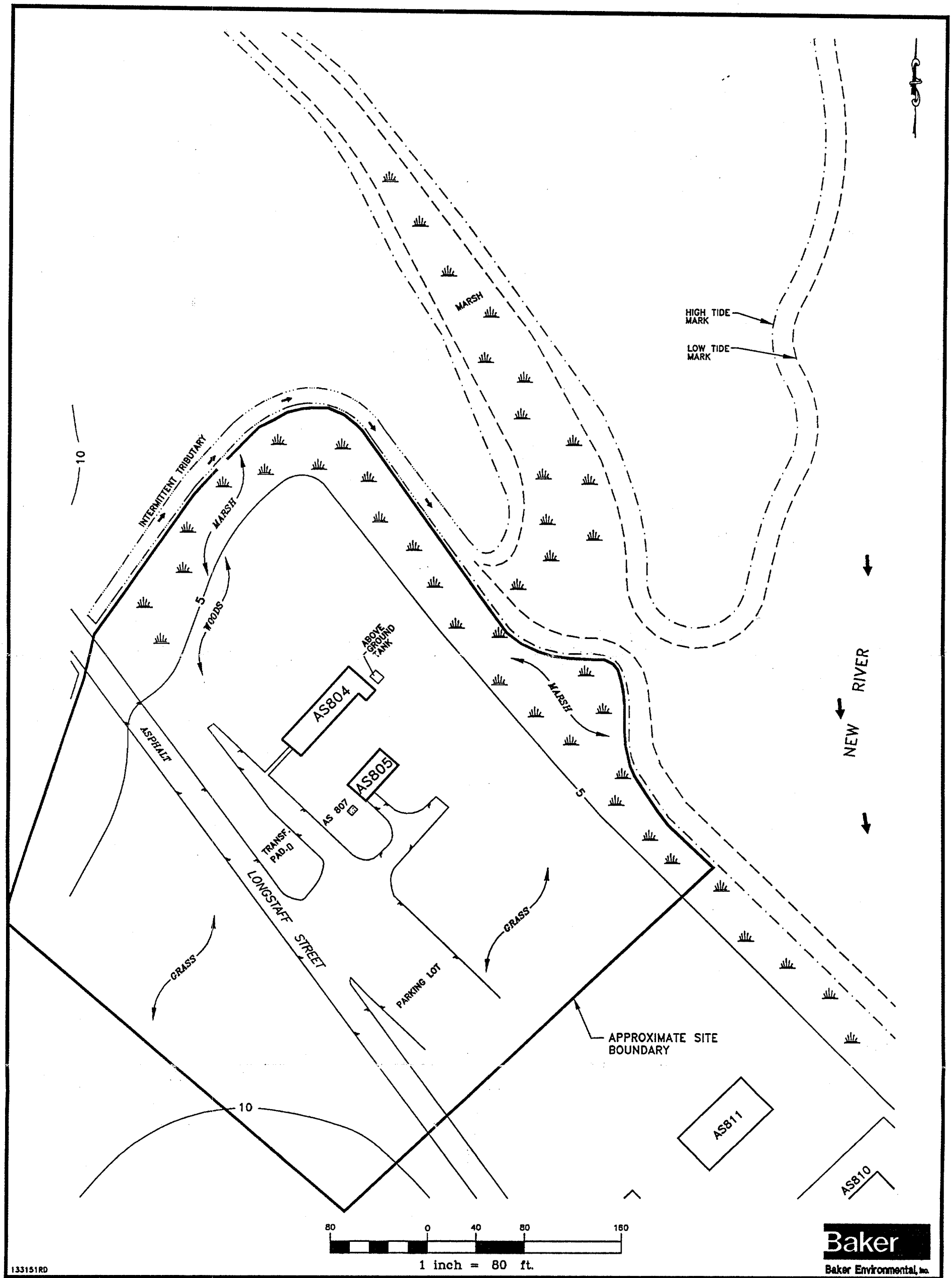


FIGURE 2
SITE PLAN
OPERABLE UNIT No. 3, SITE 48
RECORD OF DECISION CTO-0133

MARINE CORPS AIR STATION, NEW RIVER
JACKSONVILLE, NORTH CAROLINA

SOURCE: LANTDIV, FEB. 1992

Buildings AS-804, AS-805, and AS-807 are located within the Site 48 study area boundary. Building AS-804 was constructed in 1955 and was used as the Administration Office and Photographic Laboratory from 1955 to 1990. The building was vacant for a few months in 1990, but is currently being used as the Nuclear, Biological, and Chemical instruction classroom. The uses of the other two buildings on the site are not known. An above ground storage tank is located behind Building AS-804. This tank replaced an underground storage tank which had contained diesel fuel for a generator inside Building AS-804.

With respect to topography, Site 48 is a predominantly flat area located approximately 5 to 10 feet above mean sea level. The site elevations drop off sharply at the bank of the New River east of the site and at the intermittent tributary north of the site. The terrain of the area around Site 48 indicates that drainage would be towards the New River.

Site 48 lies on the west bank of the New River. The surface waters surrounding Site 48 are tidally influenced. Surface water runoff at Site 48 tends to drain to the New River which discharges to the Atlantic Ocean, and to an intermittent tributary that borders the site on the north. The intermittent tributary flows into the New River. The Atlantic Ocean is approximately 17 miles south of the site. A portion of the surface water runoff is collected in the storm water sewers located along Longstaff Road and Curtis Street.

3.0 SITE HISTORY AND ENFORCEMENT ACTIVITIES

During the ten year period between 1956 and 1966, mercury was reportedly drained from delay lines of radar units and periodically disposed at Site 48. Approximately one gallon of mercury per year was reportedly hand-carried and dumped or buried in small quantities at random areas around Building AS-804. The general disposal area was thought to be a 100- to 200-foot wide corridor extending from the rear of Building AS-804 to the bank of the New River. Review of aerial photographs recently received from the USEPA Environmental Photographic Interpretation Center (EPIC) appear to indicate that the disposal activities may have occurred at other areas within the site (north and west of Building AS-804). The aerial photographs date back to 1956.

In 1983, an Initial Assessment Study (IAS) was conducted at MCB Camp Lejeune and MCAS New River by a consulting firm. The study identified a number of areas within MCB Camp Lejeune and MCAS New River, including Site 48, as potential sources of contamination.

In 1984, a Confirmation Study was conducted at Site 48 which focused on the potential source areas identified in the IAS. The study consisted of collecting a limited number of soil samples and sediment samples which were analyzed for mercury. The results of this sampling indicated that low levels of mercury were detected in both media.

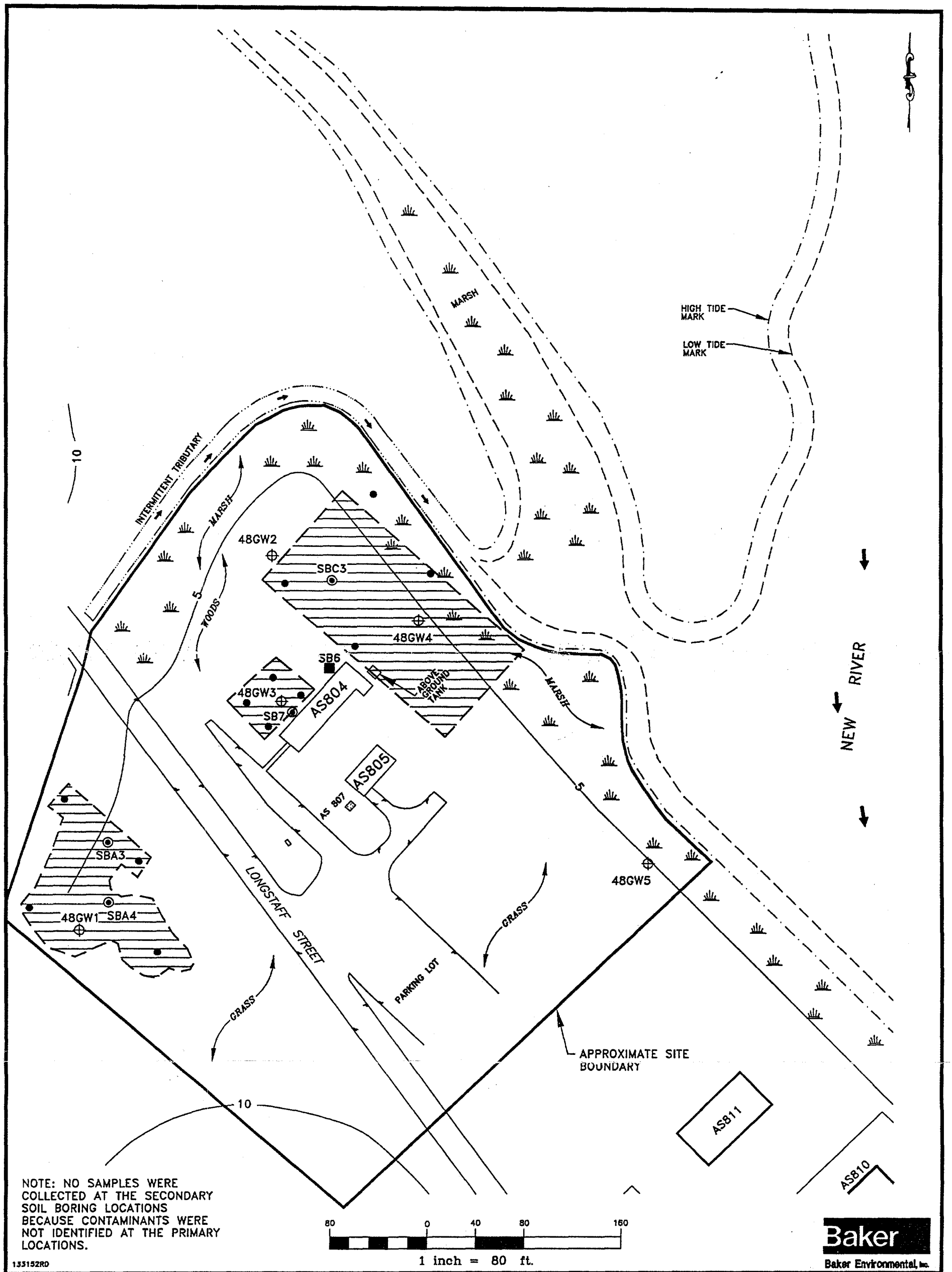
On October 4, 1989, Camp Lejeune was placed on the NPL. The DoN, the USEPA, and the NC DEHNR entered into a Federal Facilities Agreement on February 13, 1991.

A Supplemental Characterization Investigation was conducted at Site 48 in January 1991. This investigation consisted of surface water and sediment sampling and analysis. Mercury, the primary contaminant of concern, was not detected in any sample collected during this investigation.

In 1991, a Site Assessment Report was prepared for the site. The assessment was based on the results of the IAS, the Confirmation Study, and the Supplemental Characterization Investigation. No additional sampling was conducted. A preliminary risk evaluation for the site was also included in the Site Assessment. The risk evaluation did not indicate that mercury was a contaminant of concern at the site. The risk evaluation results indicated that the only potential contaminants of concern appeared to be cadmium, copper, nickel, and silver in surface water. The risk evaluation indicated that the detected concentrations of these four metals of concern may be representative of background levels for the area.

Baker Environmental, Inc. conducted an RI for Site 48 during 1992 and 1993 in accordance with the requirements of the Federal Facilities Agreement. The field program at Site 48 was initiated to characterize potential environmental impacts and threats to human health resulting from previous mercury disposal activities. Soil, groundwater, surface water, and sediment samples were collected during the RI. Figure 3 identifies the soil boring and groundwater sampling locations. Figure 4 identifies the surface water and sediment sampling locations. A summary of the contaminants detected per media and their concentration ranges are presented on Table 1.

As shown on Table 1, the primary suspected contaminant of concern, mercury, was not detected in any media sampled. The parameters detected in the surface soil samples included pesticides and inorganics. These parameters do not appear to be related to disposal activities. In addition, the detected concentrations do not pose a threat to human health or the



LEGEND

- 48GW1 — SHALLOW GROUNDWATER MONITORING WELL
- SBC3 — SOIL BORING (PRIMARY LOCATION)
- SB6 — SHELBY-TUBE/GRAIN SIZE SAMPLE BORING
- SOIL BORING (SECONDARY LOCATION)
- SUSPECTED DISPOSAL AREA

SOURCE: LANTDIV, FEB. 1992

FIGURE 3
SOIL BORING AND MONITORING WELL SAMPLING LOCATION MAP
RECORD OF DECISION CTO-0133

MARINE CORPS AIR STATION, NEW RIVER
JACKSONVILLE, NORTH CAROLINA

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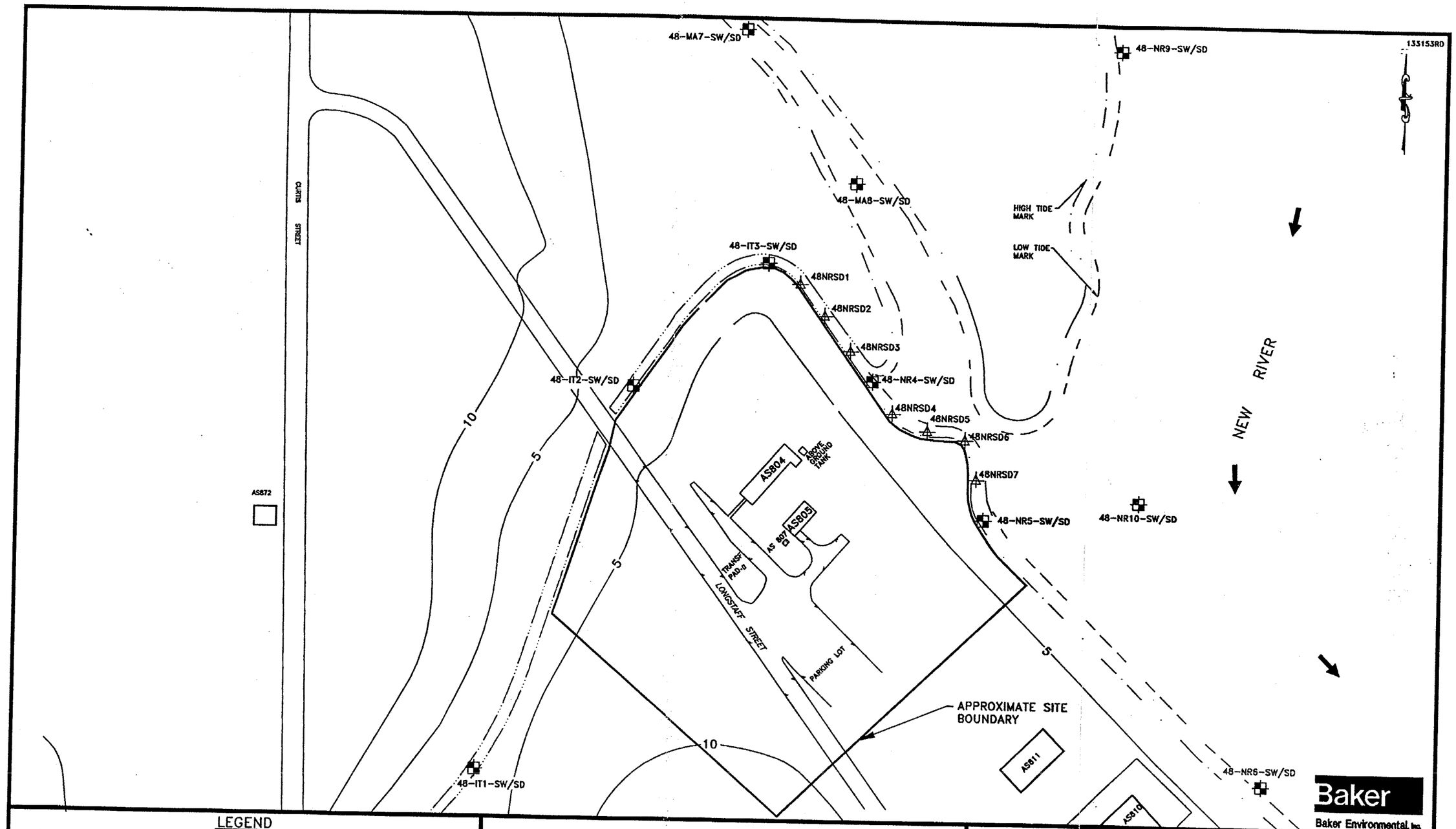

LEGEND

SEDIMENT SAMPLING STATION

SURFACE WATER/SEDIMENT SAMPLING LOCATION

SOURCE: LANTDIV, FEB. 1992

120 0 60 120 240

1 inch = 120 ft.

FIGURE 4
SURFACE WATER AND SEDIMENT SAMPLING LOCATIONS
RECORD OF DECISION CTO-0133

MARINE CORPS AIR STATION, NEW RIVER
JACKSONVILLE, NORTH CAROLINA

TABLE 1

SUMMARY OF DETECTED PARAMETERS PER MEDIA
SITE 48
RECORD OF DECISION CTO-0133
MCAS NEW RIVER, JACKSONVILLE, NORTH CAROLINA

Detected Parameter	DETECTED CONCENTRATION RANGE				
	Surface Soils	Subsurface Soils	Groundwater	Surface Water	Sediments
Organics:	(µg/kg)	(µg/kg)	(µg/L)	(µg/L)	(µg/kg)
4,4'-DDE	12	ND	ND	ND	4.7J - 149
4,4'-DDD	3.6	ND	ND	ND	17J - 32
4,4'-DDT	7.4J	ND	ND	ND	8.3J
Acetone	6J - 9J	10J - 220J	ND	ND	ND
Methylene Chloride	ND	ND	12J	ND	ND
Trichloroethene	ND	ND	1.0	ND	ND
Phenol	ND	ND	1J - 3J	ND	ND
Acenaphthene	ND	ND	2J	ND	ND
Bis (2-ethylhexyl) Phthalate	ND	ND	1J - 2J	ND	ND
Toluene	ND	ND	ND	3J	ND
Total Xylenes	ND	ND	ND	2J - 4J	ND
Carbon Disulfide	ND	ND	ND	ND	3J
Phenanthrene	ND	ND	ND	ND	100J
Fluoranthene	ND	ND	ND	ND	57J - 160J
Pyrene	ND	ND	ND	ND	56J - 120J
Benzo (a) Anthracene	ND	ND	ND	ND	72J
Chrysene	ND	ND	ND	ND	62J
Benzo (b) Fluoranthene	ND	ND	ND	ND	73J
Benzo (a) Pyrene	ND	ND	ND	ND	65J - 180J
Indeno (1,2,3-cd) Pyrene	ND	ND	ND	ND	44J
Benzo (g,h,i) Perylene	ND	ND	ND	ND	46J

Notes: ND = Not Detected above the Contract Required Detection Limit (CRDL)
µg/kg = microgram per kilogram
mg/kg = milligram per kilogram
µg/L = microgram per liter
J = value is estimated

TABLE 1 (Continued)

SUMMARY OF DETECTED PARAMETERS PER MEDIA
SITE 48
RECORD OF DECISION CTO-0133
MCAS NEW RIVER, JACKSONVILLE, NORTH CAROLINA

Detected Parameter	DETECTED CONCENTRATION RANGE				
	Surface Soils	Subsurface Soils	Groundwater	Surface Water	Sediments
Inorganics:	(mg/kg)	(mg/kg)	(µg/L)	(µg/L)	(mg/kg)
Aluminum	3,560 - 28,000	730 - 24,400	382J - 6830J	365 - 2,070J	502J - 17,200
Arsenic	2.5J - 3.4J	2.4J - 4.6J	ND	ND	4.2 - 19.3
Cadmium	1.1J - 3.6J	1.1J - 4.4J	ND	ND	1.4J - 5.6J
Calcium	1190J - 26,800J	ND	30,600 - 115,000	40,000J - 69,700J	1320 - 7910
Chromium	7.3 - 37.3	3.2 - 32.8	17.5	ND	6.1 - 23.5
Copper	5.6J	31.5	ND	ND	5.9J - 42.5
Iron	2,320 - 24,200	371 - 37,400J	1,900 - 11,900	298 - 3,650	801 - 40,100
Lead	8.7J - 23.7J	2.7 - 32.3	ND	3J	2.2 - 86.2
Magnesium	1,200	ND	ND	55,800 - 173,000J	1030 - 4,330
Manganese	5.4J - 14.9J	5.7J - 15.6J	38.1J - 585	15.5J - 48J	4J - 69.4
Mercury*	ND	ND	ND	ND	ND
Potassium	1,240	ND	ND	19,300 - 66,000	ND
Sodium	ND	64.3J - 75.6J	5,750 - 8,760	485,000	1740J - 7,390
Vanadium	18.8J - 53.9J	15.4J - 44.3J	ND	ND	15.4 - 104
Zinc	9.8 - 24.8	5.6 - 7.7	30.3	ND	13.4 - 73.2

Notes: ND = Not Detected above the Contract Required Detection Limit (CRDL)
µg/kg = microgram per kilogram
mg/kg = milligram per kilogram
µg/L = microgram per liter
J = value is estimated

* Listed since it is the primary contaminant of concern at Site 48.

environment. The detected parameters in the subsurface soil samples were inorganics. The contaminant levels of the inorganics detected in both the surface and subsurface soil samples were generally similar. The contaminant levels detected in the soil samples were either similar to background levels or else were detected infrequently and at low levels. In addition, these compounds are not a result from previous disposal activities at the site.

In general, the groundwater samples contained low levels of organics including trichloroethene (TCE), phenol, acenaphthalene, and two common laboratory contaminants: methylene chloride and bis-(2-ethylhexyl) phthalate. In addition, groundwater samples contained inorganics such as aluminum, calcium, chromium, iron, manganese, sodium and zinc. Table 2 presents a comparison of the parameters detected in the groundwater samples to Federal Maximum Contaminant Levels (MCLs) and Maximum Contaminant Level Goals (MCLGs) and to North Carolina Water Quality Standards (NCWQS) for groundwater. As shown on Table 2, one detection of methylene chloride exceeded both the MCL and NCWQS. This detection of methylene chloride is most probably the result of laboratory contamination and not a site-related contaminant. The detected concentrations of TCE, phenol, acenaphthalene, and bis (2-ethylhexyl) phthalate were extremely low (all 3 µg/L or less) and did not exceed any MCL/MCLG or NCWQS, where applicable. Five detects of iron and three detects of manganese were above the NCWQS. However, elevated levels of iron and manganese are reportedly present throughout MCB Camp Lejeune and MCAS New River and, therefore, may be naturally occurring in the environment.

With respect to the surface water samples collected at Site 48, two fuel-related compounds (toluene and xylene) were detected at low levels. Since these two constituents were also present in the New River upstream of the site, their presence is probably not related to any release at Site 48, and no fuel related activities are suspected to have occurred at Site 48. In addition, inorganics such as aluminum, calcium, iron, lead, magnesium, manganese, potassium, and sodium were detected in the surface water. The detected inorganics were not at elevated levels.

The detected organics found in the sediment samples included pesticides such as DDD, DDE, and DDT, and polynuclear hydrocarbons (PAHs) such as phenanthrene, fluoranthene and pyrene. Detected inorganics included: aluminum, arsenic, cadmium, calcium, chromium, copper, iron, lead, magnesium, manganese, sodium, vanadium, and zinc. Based on the results of the Risk Assessments conducted for Site 48, the detected concentrations of the above-mentioned compounds do not pose a threat to human health or the environment.

TABLE 2

COMPARISON OF COMPOUNDS DETECTED IN GROUNDWATER SAMPLES TO FEDERAL AND STATE CRITERIA
SITE 48
RECORD OF DECISION CTO-0133
MCAS NEW RIVER, JACKSONVILLE, NORTH CAROLINA

Detected Parameter	Concentrations Detected Above Contract Required Limits (µg/L)	GROUNDWATER STANDARDS		Number of Detects Above NCWQS	Number of Detects Above Federal MCL/MCLG
		NCWQS (µg/L)	Federal MCL/MCLG (µg/L)		
ORGANICS:					
Methylene Chloride	12J	5	5	1	1
Trichloroethene	1	2.8	5.0	0	0
Phenol	1J - 3J	NA	NA	NA	NA
Acenaphthalene	2J	NA	NA	NA	NA
Bis (2-ethylhexyl) phthalate	1J - 2J	NA	NA	NA	NA
INORGANICS:					
Aluminum	382J - 6,830J	NA	NA	NA	NA
Calcium	30,600 - 115,000	NA	NA	NA	NA
Chromium	17.5	50	100/100	0	0
Iron	1,900 - 11,900	300	NA	5	NA
Manganese	38.1J - 585	50	NA	3	NA
Sodium	5,750 - 8,760	NA	NA	NA	NA
Zinc	30.3	5,000	NA	0	NA

Notes:
- µg/L = microgram per liter
- NCWQS = North Carolina Water Quality Standard
- MCL = Maximum Contaminant Level
- MCLG = Maximum Contaminant Level Goal
- J = Value is estimated
- NA = Not Applicable

The results of the benthic macroinvertebrate study and fish study conducted as part of the RI did not indicate adverse impacts to the ecology of the New River or the marsh. The results of these studies were comparable to the White Oak River, which was included in the study as a reference station. Fish and crab samples collected for chemical analysis did not exhibit mercury. Low levels of pesticides and inorganics were present in fish.

Since there were some contaminants detected at Site 48, a baseline RA was conducted as part of the RI to identify media that are receiving or may be receiving site-related contamination. Based on the analytical data, no source areas of contamination have been identified at Site 48. The detected organic compounds were identified in only a few samples per media and at concentrations that do not present a risk to human health or the environment. Although various inorganic compounds were detected at the site in all of the media, no specific areas of concern have been noted that would present a risk to human health or the environment. As stated previously, the expected contaminant of concern, mercury, was not detected in any sampled media at the site.

4.0 HIGHLIGHTS OF COMMUNITY PARTICIPATION

The RI report and Proposed Remedial Action Plan (PRAP) for Operable Unit No. 3 (Site 48), the MCAS Mercury Dump, were released to the public on June 7, 1993 and June 18, 1993, respectively. These two documents were made available to the public in the administrative record at information repositories maintained at the Onslow County Public Library and at the MCB Camp Lejeune Library. Also, all addressees on the Site 48 mailing list were sent a copy of the Final PRAP and Fact Sheet. The notice of availability of the PRAP and RI document was published in the "Jacksonville Daily News" on June 14-20, 1993. A public comment period was held from June 21, 1993, to July 21, 1993. In addition, a public meeting was held on June 21, 1993, to respond to questions and to accept public comments on the PRAP for Site 48. The public meeting minutes have been transcribed and a copy of the transcript is available to the public at the aforementioned libraries. A Responsiveness Summary, included as part of this ROD, has been prepared to respond to the significant comments, criticisms and new relevant information received during the comment period. Upon signing this ROD, MCB Camp Lejeune and the DoN will publish a notice of availability of this ROD in the local newspaper, and place this ROD in the information repository located in the Onslow County and MCB Camp Lejeune libraries.

5.0 SCOPE AND ROLE OF THE OPERABLE UNIT

The proposed remedial action identified in this document is the "No Action Alternative". This decision is the only remedial action identified for Site 48. No future actions are proposed for the site. No previous removal or interim actions have been conducted. Operable Unit No. 3 encompasses all of the media at Site 48.

Note that Operable Unit No. 3 is one of 12 operable units at MCB Camp Lejeune and MCAS New River. Separate investigations are being conducted for the other 11 operable units. Therefore, this ROD is applicable to Operable Unit No. 3 (Site 48 only).

6.0 SITE CHARACTERISTICS

A brief overview of the site characteristics related to Site 48 is presented below. Site characteristics include land use, meteorology, surface features, hydrology, geology, hydrogeology, and ecology.

With respect to land use, there are no housing areas with the boundaries of Site 48. Buildings within the site area are currently used for military operations.

Camp Lejeune's average yearly rainfall is approximately 52 inches. Measurable amounts of rainfall occur on 120 days per year, on average. Prevailing winds are generally from the south-southwest ten months of the year, and from the north-northwest during September and October. The average wind speed for coastal observation points in North Carolina is 12 miles per hour.

The topography of Site 48 is predominantly flat with ground surface elevations between 5 feet above mean sea level (msl) and 10 feet above msl. The site elevations drop off sharply at the bank of the New River east of the site, and at the intermittent tributary north of the site.

The terrain around Site 48 indicates that surface water drainage would be toward the New River. The site is approximately 17 miles north of the New River's outlet into the Atlantic Ocean. A marsh area exists north of Site 48 and drains into the New River. The surface waters surrounding Site 48 are tidally influenced. Site 48 lies above the 100-year flood plain, which is 3 feet above msl.

With respect to geology, the site is underlain by unconsolidated deposits of silty clay, silty sand, and silt with clay and sand being the predominant soils. These soils represent the Quaternary "undifferentiated" formation which characterize the surficial aquifer.

Based on the drilling activities conducted at the site and based on published information, the surficial aquifer (water table aquifer) at the site extends to an average depth of 45 feet below ground surface (bgs) at MCB Camp Lejeune and MCAS New River. The main water supply aquifer underlying the site is the Castle Hayne. Groundwater was encountered during the investigations at approximately five to ten feet bgs. Groundwater flow was found to be toward the northeast in the general direction of the New River.

With respect to ecology, Site 48 has three classifications of wetlands, and various protected species such as the American alligator. No other sensitive environments have been identified within the boundaries of Site 48.

7.0 SUMMARY OF SITE RISKS

During the RI, a baseline human health RA and a baseline ecological RA were conducted to evaluate the actual or potential risks to human health or the environment resulting from the presence of contaminants identified at Site 48. A summary of the results of the baseline RAs is presented below.

Human Health Risk Assessment

The baseline human health RA evaluated the potential for chemicals to affect human health, both now and in the future, under a no action scenario. The baseline RA identified chemicals of concern and corresponding environmental concentrations at the site with respect to the physical characteristics of the study area. This information was used to estimate the extent of potential exposure to hypothetical receptors. Finally, theoretical chemical intakes were determined for each receptor. Each potential exposure route was then compared with the most recent toxicological data to inferentially estimate the potential human health effects.

The components of the baseline RA include: identification of chemicals of concern; the exposure assessment; the toxicity assessment; risk characterization; and uncertainty analysis.

Human receptors at Operable Unit No. 3 (Site 48) could be potentially exposed to contaminants of concern in more than one medium and through multiple exposure pathways associated with each medium. Under current and future land use conditions, Site 48 does not pose an unacceptable risk to any potential receptor group by USEPA or NC DEHNR standards. This is primarily because of the types of contaminants detected on site, as well as the low concentrations present in each medium. Therefore, the quantitative RA concluded that the existing use and potential future use of the site would not pose a threat to human health or the environment.

Ecological Risk Assessment

The Ecological RA conducted at Site 48 consisted of: evaluating fish and benthic macroinvertebrates for population statistics, and collecting fish and crabs for tissue analysis. The study was conducted in the New River and in the marsh area north of Site 48. The results of the Ecological RA indicated that the ecology in the New River and the marsh area appeared to be healthy. No mercury was detected in any fish or crab samples. Pesticides and several inorganics were detected in the fish samples. Based on the RA, the detected levels of these compounds do not pose a threat to human health or the environment. The RA concluded that these compounds were not site related. The results from the Ecological RA indicated that the ecology of the New River and marsh area appears to be healthy and is comparable to other similar waters (i.e., the White Oak River).

Risk Assessment Conclusions

Based on the results of the RI and the human health and ecological RAs, the current or future land uses at Site 48 are protective of human health and the environment. Based on current data, neither soil nor groundwater were impacted from any release or suspected release of contaminants at the site. Contaminants detected in surface water and sediment do not appear to be related to Site 48.

No further environmental investigations are recommended for this site. The sampling and analysis performed is sufficient to characterize the site and develop conclusions with respect to potential impacts to the public health and the environment.

No remedial response actions are justifiable at Operable Unit No. 3, since the site media pose no current or potential adverse impacts to public health or the environment.

8.0 DESCRIPTION OF THE "NO ACTION" ALTERNATIVE

From an analysis of all available and pertinent information for Site 48, MCAS Mercury Dump, it is concluded that remedial actions are not necessary for the protection of human health or the environment. Therefore, the selected remedial alternative for the site is No Action. This alternative will consist of leaving the site as is. No additional sampling or monitoring will be necessary since the conditions at the site are protective of human health and the environment. This remedial alternative will have no costs associated with it.

9.0 STATUTORY DETERMINATIONS

A summary of the statutory determinations is outlined below.

- **Protection of Human Health and the Environment**

  The selected remedy is protective of human health and the environment, as conditions at Site 48 were shown in the risk assessments to pose no threat.

  No unacceptable short-term risks or cross-media impacts will be caused by this remedy.

- **Attainment of Applicable or Relevant and Appropriate Requirements (ARARs)**

  The selected remedy will attain all ARARs.

- **Utilization of Permanent Solutions and Alternative Treatment Technologies or Resource Recovery Technologies to the Maximum Extent Practicable**

  No alternatives were developed for Site 48 as the risk assessments showed there was no risk to human health or the environment. The No Action Alternative is protective, effective, attains ARARs, and is the most cost-effective solution for Site 48. Therefore, treatment at this site is impracticable.

- **Preference for Treatment as a Principal Element**

  The preference for treatment as a principal element was not satisfied, due to the No Action Alternative having been determined to be the best solution for the site.

10.0 RESPONSIVENESS SUMMARY

Overview

MCB Camp Lejeune and the DoN, with the assistance of USEPA, Region IV and the NC DEHNR, selected a preferred alternative for Site 48, the MCAS Mercury Dump at MCAS New River, Jacksonville, North Carolina. The preferred remedial action alternative specified in the PRAP was the No Action Alternative.

Judging from the lack of comments received during the public comment period and from the attendance at the public meeting, the local community does not appear to be concerned with the proposed No Action Alternative for the site. No private citizens attended the public meeting, and no comments were received during the comment period.

The purpose of this responsiveness summary is to identify the comments and concerns of the local community regarding the selected alternative, and to document how MCB Camp Lejeune/DoN considered the comments and concerns during the selection of the alternative.

Background on Community Involvement

No past community interest in the potential contamination at the MCAS Mercury Dump (Site 48) has been documented. This may be due to the fact that the site is located within the Marine Corps Air Station, and therefore, does not present concern to the community.

Summary of Comments Received During the Public Comment Period and Responses

No comments were raised during the Operable Unit No. 3 (Site 48) public comment period or during the public meeting. Therefore, no responses to comments have been included in this responsiveness summary. The comment period was held between June 21, 1993 and July 21, 1993. The public meeting was held on June 21, 1993.