



INITIAL ASSESSMENT STUDY
NAVAL STATION
ROOSEVELT ROADS, PUERTO RICO

FIGURE 8-1
SITE MAP
SITES 1, 2, 3, & 19

2.3.1 Site 1, Quebrada Disposal Site, Vieques. This disposal area is located in the north-central portion of the NAF, Vieques, south of North Shore Road, within and adjacent to a quebrada which discharges to the Vieques Passage and ultimately to the Atlantic Ocean and the Caribbean Sea (see Figure 2-2). The site was in use from the early 1960s to the late 1970s by both civilian and U.S. Navy personnel. The site covers an area approximately 500 feet long by about 20 feet deep, and is about four feet wide. The IAS team estimates that there are about 1,500 cubic yards of trash at the site, including ordnance carriers; cans of oil and lubricants; solvents; paint; rubble; buried and exposed 55-gallon drums; cars; and all types of general base trash. The material apparently was tumbled down the side of the quebrada, and is partially buried. Some material lies on the bottom of the quebrada, where it has been transported further toward the Vieques Passage by the water that floods the quebrada.

No reliable information exists of the amount of material present that may be hazardous. The IAS team has calculated that possibly 15 cubic yards (between 3,000 and 13,000 pounds) of material could be considered hazardous when disposed, primarily solvents and paints (see page 8-1).

The disposal area is approximately 350 meters south of the Vieques Passage, and is about 10 meters above sea level. The slope of the quebrada is about 3%, with the exception of the 50 meters nearest the Vieques Passage, where the slope is about 10%. The soils in the quebrada are in the Coamo-Guarnani-Vives Association, and are moderately permeable (10^{-3} to 10^{-4} cubic meters per second).

Receptors in the Vieques Passage include such endangered species as the Caribbean manatee and the hawksbill, leatherback, green, and loggerhead sea turtles.

Contamination also could enter the human food chain through the consumption of fish caught in this area by base personnel or the local civilian population.

Site 1 is recommended for a Confirmation Study.

2.1 SITE 1, QUEBRADA DISPOSAL SITE, VIEQUES. This disposal site is located in a quebrada (an intermittent drainage area) south of North Shore Road in the north-central portion of the Naval Ammunition Facility (NAF), Vieques. A dirt road, present along the east side of the quebrada, facilitated easy access to the site. The site was in use from the early 1960s to the late 1970s by both civilian and U.S. Navy personnel (see Figure 8-1).

No records of the disposal site were found at the archives or in the base files; none of the base personnel were aware the site existed. The site had not been previously noted during the various environmental surveys done on the islands. This is not surprising, since the site is impossible to see from Route 70, and nearly invisible even from a helicopter. The U.S. Fish and Wildlife Service representative at NAF Vieques found the site solely by accident.

Site boundaries extend approximately 500 feet along the quebrada in a southerly direction from North Shore Road. The quebrada varies from 20 to 30 feet wide and 10 to 20 feet deep. It is estimated that there are over 1,500 cubic yards (500 feet x 20 feet x 4 feet) of material present at the site, including buried and exposed apparently empty 55-gallon drums, ordnance carriers (2.75-inch rocket launchers), POL, solvent and paint cans, rubble, fluorescent light fixtures, and cars as well as all types of base trash including glass, metal, tires, wood, etc. The material had been tumbled over the side of the quebrada, apparently beginning at the southern end of the quebrada and moving northward along the east side of the quebrada. Attempts had been made to shore up the sides of the quebrada where the material had been deposited. Several steel posts, usually used by combat engineers to string barbed wire or other fencing material, had been driven into the sides of the quebrada apparently to stabilize the mass of disposed material. Some of the material, especially solvent containers, have become detached from the main pile and were lying in the silt and sand at the bottom of the quebrada, where they had apparently been washed to when water was flowing in the quebrada.

Estimating the amount of potentially hazardous material that may have been disposed of at this site is difficult. The assumption will be made that no more than one percent of the material is hazardous, based on the low level of industrial-type activity at NAF, Vieques. One percent of 1,500 cubic yards is 15 cubic yards; using the figure of roughly 800 pounds per cubic yard for municipal garbage (Tchobanoglous et al., 1977), approximately 12,000 pounds or six tons of hazardous material may have been disposed of at this site.