

Pollution 'Hot Spots' Taint Water Sources

TOXIC WASTE: A Federal Failure. Second in a series.

NEXT: As many military bases in the United States prepare to close, a dispute simmers over how to pay for the pollution they will leave behind.

June 18, 1990 | JOHN M. BRODER | TIMES STAFF WRITER

HEIDELBERG, West Germany — The U.S. military services have only recently begun to take stock of pollution at bases abroad, so it's impossible to compile a comprehensive list of the military's worst overseas "hot spots."

But because of German sensitivity to environmental matters and American plans to close scores of excess military facilities here, a clearer picture of the extent of the problem has emerged in West Germany than anywhere else in the world.

Based on Defense Department documents and numerous interviews with U.S. officials in Europe and Washington, the following sites stand out as the most serious known cases of contamination in West Germany:

Rhine-Main Air Base: West German contractors doing exploratory work last year for expansion of the passenger terminal at the large U.S. air base near Frankfurt discovered a massive and fast-spreading plume of jet fuel contaminating the subsurface water table. The source was leaking underground fuel tanks and pipelines. A soil and water decontamination operation is under way, which West German officials expect to take at least five years and \$15 million to complete.

Bitburg Air Base: The base for years polluted the Kyll River and feeder streams with organic waste, chemicals and solvents because of inadequate sewage treatment facilities. The Air Force completed a new treatment plant last year in response to protests from West German authorities. The base's underground fuel system has been 90% replaced after extensive leaks in tanks and pipelines. An unused Matador missile site controlled by the base is known to be contaminated, but there is no money to clean it up, base officials said. The 100-meter by 200-meter site is fenced and abandoned, awaiting cleanup funds.

Mannheim: The motor pool area at Taylor Barracks in Mannheim is at the top of the Army's most-polluted list in West Germany. Trichloroethylene and other chlorinated hydrocarbons used as solvents for cleaning military vehicles leached into the water table and were found by West German officials as part of a drinking water surveillance program. A pump-and-treat operation is under way to clean the underground aquifer. Cleanup costs will be at least \$10 million over a seven-year period.

Germersheim: During highway construction at this town near Karlsruhe, West German engineers discovered a one-inch thick layer of heavy oil sitting atop the subsurface water table. The oil was traced to a leaking heating oil tank inside the fence line of a U.S. Army depot. Investigation discovered a 265,000-gallon spill, three-quarters of which had migrated outside the U.S. facility. So far, \$9 million has been spent on cleanup, but much more work remains on clearing away contaminated soil and treated the polluted aquifer.

Mainz Army Depot: Mainz is one of a handful of major repair depots in Europe, where tanks, armored personnel carriers and heavy trucks are stripped down and cleaned, using a variety of powerful chemical solvents. The facility generated tons of industrial wastes, some of which are known to have contaminated ground water supplies. The Army considers it one of its most serious pollution problems, but tests have not yet determined the full extent of contamination.

Bad Kreuznach: A dry cleaning plant at the Army's Rose Barracks leaked toxic and carcinogenic chemicals into drinking water supplies for 25 years. Four civilian employees, including one American, were indicted by the West Germans for ground-water contamination after the pollution was discovered in 1986. Cleanup costs are about \$130,000 a year now, but U.S. officials would not predict the final cost of remediation. "Bad" in German means "spa"--"and when the water well is polluted it's real bad for business," said Robert E. Dunn, chief of the foreign law branch at the Army's Judge Advocate General's office in Europe.

Wurzburg: Another Army dry cleaning plant here is known to have contaminated the underground water table.

Grafenwohr and Hohenfels: Landfills at these two major American military exercise centers are suspected of containing a variety of dangerous wastes, including unexploded rifle and artillery ammunition. Numerous other landfills on U.S. bases in West Germany and around the world are similarly thought to be potentially serious sites of soil and water contamination. "In years past, some (dangerous) things were not viewed as hazardous and were dumped in landfills," said Maj. Gen. Bill Ray, the Army's chief of engineers in Europe. "Any dumps built before 1975 were nothing more than holes in the ground."