

EXECUTIVE SUMMARY

The South Area Preliminary Assessment (PA) was conducted to gather information regarding potential releases of contaminants in the South Area at Hill Air Force Base (Hill AFB). The study focused on historical systemic releases from the industrial wastewater and storm sewers and from buildings engaged in industrial activities. The South Area PA assessed areas that have been associated with industrial activity and/or industrial and hazardous waste management. The South Area is defined by the following boundaries: the flight line on the east, route 193 on the south, U.S. Interstate 15 on the west, and a line from the southern MAMS area fence line across to Building 1 on the north. The scope of the study included acquiring historical records, reviewing and evaluating the information with respect to a set of screening criteria, and documenting and presenting the findings and conclusions in a format that will be a useful reference for developing plans for future investigations. The information and conclusions in the study were intended to be used to develop plans for further investigation as part of the CERCLA process.

Sources of historical information included the Hill AFB History Office, the Hill AFB Civil Engineering (CE) Office, Hill AFB Bioenvironmental (SGB), the Hill AFB Real Estate Office, the U.S. Department of Agriculture (USDA), and Interviews of Base personnel. Historical maps and photographs, and detailed information compiled annually by the Base historian were obtained from the History Office. The CE office provided record drawings from 1935 to 1993, which were used to identify specific equipment and systems that may have been associated with contaminant releases. SGB provided historical occupational health records, which were used to identify chemicals used over the history of the Base and facilities and processes associated with certain chemicals. The Real Estate Office provided information about current facilities in the South Area including building functions, years constructed, and major users. The USDA was a source of historical aerial photographs of the Base. Interviews of Base personnel were used to identify specific activities of concern and clarify and verify information obtained from other sources.

The area that is currently Hill AFB is composed of the former Ogden Arsenal and the former Hill Field. The former Ogden Arsenal, which was established in 1920, is located in the northwestern portion of the Base and is not included in this study. Hill Field was activated in 1940. During World War II, Hill Field was used as a supply depot, a training facility, and an aircraft maintenance and rehabilitation facility. Hill Field was renamed Hill AFB in 1948, and the primary activities at Hill during the late 1940s were equipment storage and disposal. Aircraft maintenance and supply activities increased once again during the Korean Conflict. Hill AFB doubled in size in 1955 when the Ogden Arsenal was transferred to the Air Force. The 13,500-foot runway was completed in 1957. Hill AFB was responsible for assembling and managing ICBMs, and maintaining and supporting air munitions, landing gear, photographic equipment, and training devices in the late 1950s and 60s. Activities in the 1970s and 80s included logistics management of F-16s, ICBMs, and the SDI Air Launch Vehicle and maintenance of C-130s and OV-10s.

The industrial operations conducted at Hill AFB for maintenance, repair, and storage of aircraft, missile systems, vehicles, and railroad engines used and generated chlorinated and non-chlorinated hydrocarbons, solvents, acids, bases, and metals including Stoddard Solvent, trichloroethene, trichloroethane, carbon tetrachloride, dichlorobenzene, methylene chloride, toluene, xylenes, methyl ethyl ketone, chloroform, nickel, cadmium, silver, zinc chromate, phenols, rust inhibitor oils, synthetic lubricants, and petroleum products and fuels for ground vehicles and aircraft. Contaminants may have been released during industrial operations and during the collection, treatment, and disposal of wastes. Current and past waste management practices at Hill AFB have included discharge to the industrial wastewater, stormwater, and sanitary sewers; collection in drums; on-site disposal in Base landfills, disposal pits, ponds, and natural depressions; on-site treatment at the IWTP and the historical Sewage Disposal Plant; recycling; and off-site treatment and disposal. The following industrial processes were considered potential sources: aircraft, vehicle, and locomotive maintenance; wash racks, cleaning, painting, and corrosion control; degreasing; repair of aircraft components; fabrication; pest control; service stations; laboratories; photographic processes; fueling and defueling; engine testing; chemical use and storage; oil/water separators; storage tanks; dip tanks; distillation; and waste or wastewater generation.

Specific locations of potential source areas were summarized on a series of maps and tables containing the following current and historical information: buildings; sewer lines, catch basins, and manholes; stormwater discharge ponds; salvage and storage yards; areas where staining was observed on aerial photographs; and processes, equipment, and activities that may have resulted in releases of contaminants. The findings were grouped for developing plans for future investigations using the following criteria: geographical locations, similarity of contaminants and sources, hydrogeology, surface characteristics, age, source size, and source complexity. Ten recommended sampling areas were formed based upon the grouping criteria: industrial wastewater and storm sewers; discharge points for waste management systems, including storm water discharge ponds; fueling and fuel storage areas; waste management areas; tenant aircraft facilities; flight line aircraft maintenance areas (west of the flight line); older maintenance shops (Building 238 area); newer maintenance shops (IWTP area); warehouses and storage areas; and historical multiple use facilities, including Buildings 5 and 100.