# FORMERLY USED DEFENSE SITES | Donaldson AFB - Adhesive Disposal Area

## Remedial Investigation Phase



SEPTEMBER 2020

### SITE HISTORY

The U.S. Army Corps of Engineers (Corps) manages the environmental restoration of Formerly Used Defense Sites such as the former Donaldson Air Force Base (AFB) which consisted of 2,482 acres located south of Greenville, SC. Donaldson AFB was first activated by the U.S. Government in 1942 when it was commissioned as Greenville Army Air Base for training B-25 crews. In 1948, the base was converted to the Global Headquarters of the Military Air Transport Command and it was renamed Donaldson AFB in 1951. The base was declared excess in 1963. In 1964, the government transferred the property to the City and County of Greenville. After the transfer, the city used much of the property as an industrial park supporting as many as 90 industries. The former AFB is now the Donaldson Center Airport. Business and commercial properties surrounding the Donaldson Center Airport are leased and managed by the South Carolina Technology and Aviation Center (SCTAC). This fact sheet pertains to a project area within the northern part of the former Donaldson AFB. The space was originally identified as Area of Concern (AOC) 8 and is now addressed under Donaldson AFB Hazardous, Toxic, and Radioactive Waste (HTRW) Project 06–also called the Adhesive Disposal Area.

#### **ENVIRONMENTAL INVESTIGATIONS**

The Corps has conducted numerous environmental investigations on the former Donaldson AFB property since the 1990s. Initial investigation efforts in 1990 included an assessment of the Adhesive Disposal Area

following its discovery the same year when a tractor mower was immobilized by sticky material disposed at the site. The substance was a mass of adhesive material used to re-tread aircraft tires that was discarded onsite. Investigation of the site determined that it was also used for open-pit burning of what appears to have been plastics, rubber, paint, fuels, and solvents. Aerial imagery from the 1950s show ground disturbance and roadways leading to the area. Soil and groundwater sampling during the 1999 Phase I and 2000 Phase II Site Assessments identified contamination from metals, petroleum constituents, and solvents at the Adhesive Disposal Area. In 2003, the Corps completed an Interim Remedial Action (IRA) which excavated and disposed of approximately 3,754 tons of contaminated soil in an effort to remove the continued source of groundwater contamination. The IRA was considered successful, although some residual contamination remained. Groundwater



In 2003, over 3,700 tons of soils were excavated at the Adhesive Disposal Area to approximately 13 feet deep. Here a dump truck brings in material to continue backfilling. The backfill was placed in approximately 1-foot lifts and compacted.

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sampling in 2004 indicated that conditions at the site were favorable for natural attenuation of remaining contaminants. Additional sampling in 2011 and 2017 also supported natural attenuation as a remedy; however, the 2011 and 2017 groundwater sampling also identified a layer of free-product petroleum in several monitoring wells, plus elevated levels of several metals at some of the other wells. The Corps installed new wells to better characterize the free-product and metals. No freeproduct or fuel odors were encountered during the installation of new wells. Results of the 2018 sampling from the new wells found only naphthalene, cobalt, and manganese above screening levels. It is suspected that previously identified free-product petroleum and other elevated contaminants were residual within the well casings and the space around the well screen from the older wells.

#### **FUTURE REMEDIATION ACTIONS**

The Corps is currently working on a Remedial Investigation to fill data gaps and provide information needed for a Feasibility Study and a formal decision for the remedy. A human health risk assessment included as part of the investigation determined that the risk to human health at the site is low. Preliminary findings and recommendations from the ongoing Remedial Investigation include the following:

- The Adhesive Disposal Area should be monitored for two additional annual sampling events prior to requesting site closure.
- Monitoring wells installed prior to 2018 should be abandoned.
- Laboratory analysis for metals in groundwater should include both filtered and total metals analyses to differentiate between dissolved concentrations in groundwater and metals present in suspended soil particles.

### For More Information

Documents are available at the **South Carolina Technology and Aviation Center**2 Exchange Street Greenville, SC 29605

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