

FAA Technical Center

New Jersey

EPA ID#: NJ9690510020

EPA REGION 2

Congressional District(s): 02

Atlantic

8 miles northwest of Atlantic City

NPL LISTING HISTORY

Proposed Date: 7/14/1989

Final Date: 8/30/1990

Site Description

The Federal Aviation Administration William J. Hughes Technical Center (FAA) site covers an area of approximately 5,000 acres, eight miles northwest of Atlantic City. The site borders the Garden State Parkway in southeastern New Jersey. Installations on the site include the Atlantic City International Airport, a New Jersey Air National Guard Station and extensive FAA facilities. Activities at the site started in 1942 with the construction of a Naval air base. In late 1958, the FAA, then known as the Airways Modernization Board, took over the operation and has used the facility as an airport and aviation-safety research center. The FAA has identified over 20 areas of concern at the Technical Center. Atlantic City's municipal water supply is provided by nine groundwater supply wells located on the FAA property along the northern edge of the Upper Atlantic City Reservoir. Water is also drawn directly from the Lower Atlantic City Reservoir, which is not on FAA property. An estimated 37,000 residents and 113,000 visitors at peak season obtain drinking water from the Atlantic City wells and reservoir. The reservoirs are fed by the North and South Branches of Absecon Creek which cross portions of the Technical Center grounds.

Site Responsibility: This site is being addressed through Federal actions.

Threat and Contaminants

Volatile organic compounds (VOCs), metals, and pesticides are present in groundwater above NJ maximum contaminant levels (MCLs). The Atlantic City municipal wells are not contaminated and likely to remain that way because they are isolated from the contaminated groundwater by an area-wide clay layer. The clay layer acts to prevent the migration of contaminated groundwater from the upper aquifers to the lower aquifer where the municipal wells draw their water. Soils at the FAA Tech Center are contaminated with metals, PCBs, and PAHs.

Cleanup Approach

The site is currently being addressed under 15 operable units covering 27 areas of concern. Additional areas may be designated in the future as site studies continue.

Response Action Status

Area D (Jet Fuel Farm): A Record of Decision (ROD) was signed September 29, 1989. JP-4 jet fuel has contaminated soil and groundwater at this area. Contaminants of concern include VOCs and Base Neutral Acid (BNA) extractable compounds. The selected remedy includes free-product extraction and incineration, in-situ biodegradation of VOCs and soil venting. It is estimated that 360,000 gallons of floating product and 33,000 cubic yards of contaminated soil are located at this area. A removal action for extraction of the free-floating product was initiated in September 1988. Remedial action commenced in March 1995 with ongoing operation and maintenance. To date, approximately 200,000 gallons of jet-fuel product have been extracted and sent off-site for treatment and approximately 72 million gallons of groundwater have been treated on-site. The operation of the soil-vapor extraction (SVE) is affected by the level of the water table. During periods of heavy rain, the water table rises and interferes with the SVE and the amount of soil vapor captured decreases. Correspondingly, during periods of dry weather, the water table falls and the SVE operates efficiently.

Area 20A (Salvage Yard): A ROD was signed September 28, 1990. In addition, an Explanation of Significant Differences was issued on June 16, 1995 to document a change in polychlorinated biphenyl (PCB)-soil cleanup standards. Storage of old aircraft parts, trucks and cars, scrap metal and 55-gallon drums resulted in contaminated soil and groundwater in this area. Contaminants of concern include VOCs, BNA extractable compounds, PCBs and metals. The selected remedy

includes groundwater extraction with air stripping and excavation and landfill disposal of PCB-contaminated soil. An interim-remedial measure to pump and treat groundwater from the intermediate aquifer has been fully operational since February 1992 and a pump and treat remedy for shallow-aquifer contamination has been operational since September 1996. A removal action of PCB-contaminated soil was completed September 1999.

Area 29 (Fire Training Area): A ROD was signed September 20, 1996. Test burning and extinguishing of fuel fires has contaminated soil and groundwater at this area. Contaminants of concern include VOCs and PCBs. The selected remedy calls for extraction of VOC-contaminated groundwater with on-site carbon adsorption treatment and excavation of PCB-contaminated soils with off-site landfill disposal. Excavation of PCB-contaminated soils and construction of the groundwater remedy has been completed. The groundwater remedy has been operational since Summer 2004.

Area B (Navy Fire Test Facility): A ROD was signed September 20, 1996. The former test facility was used for aircraft fire-training exercises and motor-pool parking. These activities resulted in VOC-contaminated groundwater. The remedy for Area B consists of a groundwater-extraction and treatment system. Construction of the Area B remedy was completed in 2010.

Area 41 (Fuel Farm and Photo Lab): A ROD was signed September 27, 2000. Investigations of the nature and extent of contamination at the 14.5 acre area have been expanded to include adjacent areas; identified in a site-wide U.S. Fish and Wildlife study as being contaminated with PCBs. Past activities at a photographic laboratory, fuel farm and impoundment areas have contaminated soils, sediments and groundwater with VOCs, PCBs, pesticides, metals, phthalate esters and polycyclic aromatic hydrocarbons (PAHs). The remedy for Area 41 includes a groundwater-extraction and treatment system as well as removal and capping of contaminated soils and sediment. During pre-remedial soil sampling, a large area adjacent to Area 41 was discovered to be contaminated with PAHs. This area of PAH-contaminated soil will be treated as a separate area of concern with its own ROD. Remedial action for Area 41 was completed in August 2011.

Area U (Absecon Creek Watershed): Investigations into the nature and extent of mercury contamination in the Absecon Creek Watershed have been completed. Although no source of mercury contamination attributable to historic or current operations has been identified, mercury contaminated sediment has been found in Absecon Creek and two downstream reservoirs. Mercury levels in pickerel and bass from the reservoirs have resulted in a fishing advisory recommending "no consumption". Fishing is not allowed in either reservoir. Since FAA was able to attribute the mercury contamination to the Naval Air Station which previously occupied the site, responsibility for Area U has been taken over by the Formerly Used Defense Site (FUDS) program. FUDS plans on submitting an RI report for Area U in 2012.

Area A (Navy R & D Landfill), Area J (Excavation Area near Runway) and Area N (Building 214, Catapult Test Area): Environmental investigations and risk evaluations at these areas demonstrated that contaminant concentrations do not pose a threat to human health or the environment. The EPA signed a ROD on July 22, 1997, which stated no further action for Areas J and N, and continued groundwater monitoring required for Area A.

Area 27 (Fuel Mist Test Area), Area 56 (Abandoned Navy Landfill), Area F (Air Blast Facility), Area R (Trash Dump in the Vicinity of Building 169), and Area S (Excavation West of Tilton Road): A non-time critical removal action at Area 27 took place in the late 1980's, which involved the removal of approximately 800 tons of contaminated soil. Environmental investigations and risk evaluations at these areas demonstrated that contaminant concentrations do not pose a threat to human health or the environment. A ROD for Areas 27, 56, F, R, and S was signed on September 28, 1999 documenting the need for residential land use restrictions as well as continued groundwater monitoring for Areas 56 and R.

Area C (Butler Aviation Fuel Spill), Area H (Salvage Yard near Sewage Treatment Plant) and Area M (Building 202 Gelled Fuel Test Area): Environmental investigations and risk evaluations at these areas demonstrate that contaminant concentrations do not exceed regulatory cleanup criteria. The EPA signed a ROD September 30, 1994 which stated that no remedial action is required, with continued groundwater monitoring at Area C. Monitoring is needed at Area C to insure that a jet-fuel spill at Butler Aviation, located off FAA property, is not impacting groundwater in this area.

Area G (Transformer Storage Area): A ROD was signed September 30, 1992 to document the decision of no further action. Two non-time critical removal actions of PCB-contaminated soil and concrete took place in the Fall of 1989 and the Spring of 1990. Approximately 62 tons of excavated soil and concrete debris were disposed of in an approved Toxic Substance Control Act (TSCA) facility.

Area I (Former Incinerator Building) and Area Q (Fire Station): Environmental investigations and risk evaluations at these areas demonstrate that contaminant concentrations do not exceed regulatory cleanup criteria. The EPA signed a ROD August 17, 1994 which stated that no further action is required.

Area P (Building 204 Fuel Spill): A non-time critical removal action involving fuel-contaminated soil and ground water took place in June 1987. Approximately 700 tons of soil was excavated, treated and disposed off-site. Environmental investigations and risk evaluations at this area demonstrate that contaminant concentrations do not exceed regulatory cleanup criteria. The EPA signed a ROD February 13, 1997 which stated that no further action is required.

Area E (Building 11 Tank Excavation): A ROD was signed September 26, 2003. Soils and groundwater have been contaminated with petroleum and pesticides. The remedy for Area E includes excavation of contaminated soils, free-product removal of petroleum, and pump and treat of pesticide-contaminated groundwater. Construction of the remedy began in 2011 and is expected to be completed in 2012.

Area W Landfill: In 2005, FAA identified the Area W landfill and also discovered a broken glass tube in the area that was consistent with Chemical Agent Identification Sets (CAIS). CAIS contained chemical warfare agents at low concentrations for military training. FAA subsequently constructed a fence around the landfill in 2005. FUDS completed an investigation of Area W landfill in 2006 for chemical warfare agents (CWA) in soil and groundwater and did not detect any CWA. EPA sampled homeowner wells from nearby residences located on English Creek Avenue in 2006 and did not detect any CWA or other contaminants that might have been associated with landfill activities. FUDS has submitted a site investigation report in December 2011 documenting that site contaminants were not above levels of concern.

The New Jersey Air National Guard (NJANG) began site investigations in November 1991 at four areas of concern which they lease from the FAA Technical Center. FAA and NJANG signed a Memorandum of Agreement in March 1995 outlining the coordination for completion of investigations and remedial activities. NJANG submitted a preliminary report of investigations to the EPA in May 1993. Environment investigation of the NJANG sites completed by FAA between 1996 and 2002. In 2003, the Air National Guard took over the management of the of their sites and submitted a feasibility study in November 2011..

Site Facts: An Interagency Agreement between the EPA and the FAA became final on May 17, 1993.

Cleanup Progress

As discussed above, contaminated soils have been removed and groundwater remedies have been implemented at several sites which have limited the potential for exposure to hazardous wastes. Ongoing remedial designs and investigations are being concluded at the remaining areas of concern at the FAA Technical Center site. A third Five-Year Review was signed September 23, 2009 which stated that all remedies are protective of human health and the environment.

Site Repositories

USEPA Records Center 290 Broadway, 18th floor New York, NY 10007 (212) 637-4308

U.S. Department of Transportation Federal Aviation Administration Facility Services and Engineering Division, Bldg. 270, Room B-101 Atlantic City International Airport Atlantic City, NJ 08405 (609) 485-6644