

Pease Air Force Base Superfund Site Portsmouth and Newington, New Hampshire

Background

The former Pease AFB (Base) is located in Rockingham County in the City of Portsmouth and the Town of Newington, New Hampshire. At the onset of World War II, the airport was used by the U.S. Navy, but the U.S. Air Force (USAF) assumed control in 1951. Under USAF command, the Base served to maintain a combat-ready force capable of long-range bombardment operations.



Quick Facts

Location:	Off of Interstate-95
Acreage:	4,255 acres
Current Uses:	Airport, light industrial, commercial, and open space/wildlife refuge. Approximately 110 acres of airport land and 80 acres of Tradeport land are available for development.
Ownership:	Public
Cleanup Status:	Construction activities complete. Site is in remedial operations & maintenance and long-term remedy performance monitoring phases.
Surrounding Land Uses:	Residential, commercial, and industrial

Various fuels, oils, lubricants, solvents, and protective coatings were used at the Base and, over time, contaminants from these substances were released into the environment. In 1983, the USAF began conducting an environmental cleanup program at Pease AFB under the guidelines of the USAF Installation Restoration Program (IRP) and the New Hampshire Department of Environmental Services (NHDES) Underground Storage Tank (UST) program.

In December 1988, the Department of Defense's Commission on Base Realignment and Closure recommended that Pease AFB, along with 85 other active U.S. military installations, be closed or realigned due to changes in national security objectives. Both personnel and military assets were transferred to other military installations and the Base was closed in March 1991, leaving behind a virtual ghost town of vacant hangars, homes, offices and other buildings. The impact of the Base closure to the New Hampshire seacoast economy, already straining from a national recession, was very significant. More than 1,100 direct civilian and 3,400 military jobs were eliminated and an estimated \$100 million a year was lost to the local economy.

Pease AFB was proposed to the federal National Priorities List (NPL) in 1989 and was listed in 1990. In April 1991, the USAF, EPA, and NHDES signed a Federal Facilities Agreement (FFA) to establish a framework and schedule for future cleanup actions at Pease AFB in accordance with the Superfund statute. One of the practical effects of the FFA was to coordinate cleanup of the 43 identified hazardous waste areas with redevelopment efforts, allowing both processes to occur simultaneously. Early on, State and federal agencies recognized that a strong commitment to working together, along with the involvement of the local communities, would be key to the timely cleanup and reuse of the Base.

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In September 2000, the Air Force completed remedial construction activities for all identified areas on the Base requiring Superfund cleanup actions.

Reuse Status

In April 1992, the USAF and the Pease Development Authority (PDA), the agency created by the New Hampshire legislature to redevelop Pease AFB, entered into a long-term lease of 1,700 acres of the Base for the purpose of developing a public airport. This enabled the PDA to conduct the economic redevelopment of the Base concurrently with on-going environmental cleanup activities. The lease would be converted to a transfer by deed upon the USAF fulfilling Superfund cleanup requirements for the transfer of the property. Also in April 1992, the USAF transferred approximately 200 acres to the New Hampshire Air National Guard (NHANG) and the PDA and NHANG signed a joint use agreement allowing the continued use of the airfield by the NHANG, effectively securing the NHANG's presence at the Base.

On August 12, 1992, approximately 1,100 acres of the Pease AFB were transferred from the USAF to the U.S. Department of Interior's Fish and Wildlife Service for creation of the Great Bay National Wildlife Refuge. In June of 1997, the remaining 1,300 acres were transferred to the PDA via an amendment to the 1992 long-term lease.

Key Reuse Accomplishments

- **218 Companies located at the Pease International Tradeport**
- **In excess of 3,700,000 sq. ft. of new or newly renovated office space**
- **Creation of 5,500 jobs with additional commitments to bring the total to 7,500+ jobs**
- **Air cargo access available via a 11,300 foot runway**
- **New international and domestic passenger terminal with Federal Inspection Service, including customs, agriculture and immigration.**
- **Approximately 1,100 acres preserved as a U.S. Fish & Wildlife Service Wildlife Refuge**



Aerial view of the 11,300 foot runway

The former Pease AFB (now known as the Pease International Tradeport) is currently being redeveloped as a commercial airport and a commercial/industrial park. To date, over 218 companies, employing over 5,500 people, have set up business at the Tradeport. It is projected that a total of over 7,500 jobs will be located here by the end of 2010.

Zoning at the Tradeport allows for four different types of development: an airport zone, an airport industrial zone, an industrial zone, and a business/commercial zone. There is also a natural resource protection zone consisting of

approximately 780 acres set aside for the protection of the environment and to provide a buffer to airport uses. As a result of the USAF meeting critical cleanup milestones for the Base, in December 2003, the PDA accepted from the USAF a quitclaim deed transferring 2,535 acres of the former Base, and accepted by deed the remaining 268 acres in September 2005. These

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property conveyances represent a major environmental restoration and redevelopment milestone for the USAF, NHDES, PDA and EPA.

Approximately 190 acres of land are still available for redevelopment at the Pease Tradeport, with 80 of those acres located outside the airport area of operations and 110 acres available within the airport.

Cleanup Status

Even prior to the Pease AFB being designated a Superfund NPL site, the USAF, NHDES, and EPA agreed to prioritize the cleanup of five contamination source areas that posed a particular threat to human health and the environment. Following the NPL listing, a Base-wide strategic plan was developed to expedite the site investigation and cleanup time-lines, and to facilitate the timely deed transfer of the Pease AFB property. To streamline this effort, the 43 identified areas of contamination were grouped into eight zones, or so-called “operable units,” based on geographic location, similar ground water regimes and geologic units. The strategic plan was memorialized as an amendment to the FFA in March 1993. Importantly, there was continuous communication with the PDA during the development and implementation of the strategic plan to ensure that the Base reuse plans and cleanup activities were coordinated.



Renovated Commercial Building

Throughout the Superfund process, the three agencies also undertook numerous response actions to reduce any immediate health risks that were identified, and implemented pilot studies to evaluate promising cleanup technologies.

Eleven Superfund Record of Decisions (RODs) have been completed for Pease AFB which address all the areas evaluated during the remedial investigation/feasibility study (RI/FS) process. The selected remedies included a variety of innovative technologies (e.g., soil vapor extraction/air sparging and permeable reactive barrier technology), as well as more conventional cleanup solutions (e.g., landfill capping, soil excavation with off- and on-site disposal, and ground water extraction and treatment). By September 2000, the Air Force completed remedial construction activities for all identified areas on the Base requiring cleanup actions.



Construction of a Reactive Barrier to Treat Contaminated Ground Water

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The long-term cleanup and monitoring operations will ensure that there are no unacceptable risks to humans and the environment due to contaminated ground water, soil, and sediments. The cleanup action performance is being evaluated on a routine basis by the USAF to ensure that the remedies are operating successfully and will attain the cleanup objectives. As part of this performance monitoring process, the USAF will continue to evaluate how the remedies and the associated performance monitoring plans can be optimized to accelerate cleanup time-frames and make them more cost effective.

In December 2003, the 1995 Zone 3 ROD, which covers the airport/industrial portion of the former Base, was amended to more effectively address historical ground water contamination



Haven Water Supply Well Treatment System

and to ensure that public health continues to be protected. The amended remedy, along with other Zone 3 cleanup modifications, included the design and construction a facility to treat ground water at the Haven water supply well should contaminated Zone 3 ground water threaten this highly valuable public drinking water supply. The amended Zone 3 remedy ensures that the necessary quality and quantity of water is available to support on-going Base redevelopment and to meet the growing water needs of the New Hampshire seacoast. To meet the requirements of the Zone 3 ROD Amendment, the USAF completed construction of the Haven well ground water treatment plant in September 2005.

To date, the Air Force has spent or committed over \$160 million in the cleanup of Pease AFB.

For Additional Information

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EPA Web site: <http://www.epa.gov/region1/superfund/index2.htm>

Air Force Real Property Agency Web site: <http://www.afarpa.hq.af.mil/ols/pease.htm>

Pease Development Authority Web site: <http://www.peasedev.org>