



Installation Restoration Program (IRP) Sites New Boston Space Force Station New Boston, New Hampshire

INTRODUCTION

Air Force is continuing to address environmental concerns at the New Boston Space Force Station (NBSFS). Environmental studies are being conducted under an Air Force program termed the Installation Restoration Program (IRP) which is designed to identify, investigate, and cleanup contamination associated with past Air Force activities.

Environmental studies have been conducted at NBSFS since the 1980s. Areas on the base with unique environmental concerns have been split into separate “sites” based on a variety of factors, including location, history of activities, and potential for environmental impact. At NBSFS there are 17 IRP sites. Most have been determined to require No Further Action; however, environmental studies are still underway in some areas. IRP environmental studies focus on whether chemicals used at the base have adversely impacted soil, groundwater, surface water or sediment, and whether or not

they pose a risk/hazard to human health or the environment. One example of this would be the presence fuel-related compounds near former motor pool areas. For sites where a potential risk/hazard is identified, the next step is to evaluate cleanup alternatives that are protective of human health and the environment. The locations of the IRP sites are provided in **Figure 1**.

At NBSFS, the Air Force Civil Engineer Center (AFCEC) acts as the lead agency in addressing environmental restoration at the base. United States Environmental Protection Agency (USEPA) Region I and the New Hampshire Department of Environmental Services (NHDES) are the federal and state agencies that provide regulatory oversight of environmental study and cleanup activities at NBSFS. The USEPA has ceded sole decision authority for regulatory oversight to NHDES.

This fact sheet provides additional information on the IRP environmental studies conducted so far and plans for future activities.



Figure 1 – Location of IRP Sites

ABOUT NBSFS

NBSFS was formerly known as the New Boston Bombing and Gunnery Range and was used as an active bombing range from fall of 1941 until 1956. Until July 2021 it was known as the New Boston Air Force Station.

Presently, the 23rd Space Operations Squadron is headquartered at NBSFS. The 23rd Space Operations Squadron provides assured access to space and cyberspace. The Satellite Control Network provides real-time capability to users performing on-orbit tracking, telemetry, commanding and mission data retrieval services to more than 192 Department of Defense (DoD), National and Civilian satellites performing operations of intelligence, weather, navigation, early-warning and communications. A picture of radomes, which are used to prevent ice from accumulating on antennas is provided in **Figure 2**. These radomes can be seen from many nearby peaks.



Figure 2 – Radomes at NBSFS

HISTORY OF LAND AT NBSFS

The NBSFS property has a rich history. The following is from a United States Department of Interior form adding NBSFS to the National Register of Historic Places in 2002:

The New Boston Air Force Station [now NBSFS] Archaeological District is a time capsule of New Hampshire and New England history. The 2,826-acre District contains a diverse and wide-ranging array of archaeological sites and structures representative of human occupation of the region beginning with the Archaic Period (10,000-3,000 B.P.) and ending with the use of the land as a bombing range during World War II and the early Cold War periods of U.S. history. The district is like no other archaeological district in the region because of its size, quality of preservation, and association with important events and periods in local, state, and regional history. Contained within the district are significant cultural properties associated with the early settlement, agriculture, and industry, as well as prehistoric/historic archaeology, architecture, engineering, transportation, education, and

social and military history. As a result, the district has great potential to provide important contextual information and knowledge about various topics of New Hampshire history.

In addition to the archeological significance, NBSFS supports a relatively high biodiversity. The area contains unique environmental habitat and undisturbed lands. A biodiversity survey conducted at NBSFS in 1997 reported that approximately 98 percent of NBSFS was covered with native vegetation. Approximately 450 plant species were observed within its borders, and approximately 89 percent of the land is forested. Nearly 150 bird species were recorded, with 110 species being confirmed or possible on-site breeders. A number of reptiles, amphibians, and mammals were common throughout the property.

The archeological history and ecological setting of NBSFS are considered when preparing for environmental studies. For example, archeologists are sometimes required to be present during environmental studies and cleanup activities (such as soil removal) to evaluate and minimize the potential for ecological damage or disruption of archeological artifacts.

PFAS AT NBSFS

Under the IRP, Air Force is initiating an environmental study of Per- and Polyfluoroalkyl Substances (PFAS) at NBSFS. This study will be conducted at locations on the NBSFS where historic activities involving the use or storage of PFAS-containing Aqueous Film Forming Foam (AFFF) has been confirmed and, during previous studies, where PFAS has been detected in soil, groundwater, surface water and/or sediment. A separate Fact Sheet has been prepared by Air Force detailing the PFAS environmental study underway at NBSFS. In March 2023, USEPA proposed nationwide drinking water standards or Maximum Contaminant Level (MCLs) for several PFAS.

DoD STATEMENT REGARDING PROPOSED PFAS MCLs

The DoD respects and values the public comment process on this proposed nationwide drinking water rule and looks forward to the clarity that a final regulatory drinking water standard for PFAS will provide. In anticipation of the final standard that EPA expects to publish by the end of 2023, the Department is assessing what actions DoD can take to be prepared to incorporate EPA's final regulatory standard into our current cleanup process, such as reviewing our existing data and conducting additional sampling where necessary. In addition, DoD will incorporate nationwide PFAS cleanup guidance, issued by EPA and applicable to all owners and operators under the federal cleanup law, as to when to provide alternate water when PFAS are present.

IRP SITES

The environmental study history of the 17 IRP sites is long and complex. However, environmental studies at most of the sites have determined that No Further Action is required. NHDES is reviewing these determinations, and has requested that additional data be collected support the determinations. These studies are ongoing. Below is a summary of the two IRP sites where additional cleanup activities were recently determined to be necessary.

POLYCYCLIC AROMATIC HYDROCARBONS

PAHs are a class of chemicals that occur naturally in coal, crude oil, and gasoline. They result from burning coal, oil, gas, wood, garbage, and tobacco. PAHs can bind to or form small particles in the air. High heat when cooking meat and other foods will form PAHs. Naphthalene is a manmade PAH used in the United States to make other chemicals and mothballs.

IRP SITE 7

IRP Site 7 is a storm water drainage system disposal site with an oil-water separator (OWS) located in a parking lot area adjacent to the Logistics Branch Motor Pool. Monitoring wells, which allow collection of groundwater samples for analyses, and soil borings, which allow collection of soil samples at depth for analyses, were completed at the Site. Eleven new monitoring wells and five soil borings were drilled in 2020. These locations, plus five existing monitoring wells near the site, were sampled in 2020-2021. Based on the environmental study, potential human health risks were identified due to metals in soil and metals and polycyclic aromatic hydrocarbons [PAHs]) in groundwater. A Feasibility Study is being prepared to evaluate potential cleanup activities for the site.

IRP SITE 18

IRP Site 18 is the location of the former wastewater treatment plant (WWTP) that ceased operation in 2006. The former WWTP received sanitary waste from the main operational area of the base. Two new monitoring wells were installed in 2020. These locations plus five existing monitoring wells near the site were sampled in 2020-2021. In addition, 10 surface water and 10 soil samples were collected in areas near the former WWTP effluent discharge pipe. Based on the environmental study, ecological risk was identified in surface water due to copper. The environmental study concluded that the primary source appears to have been the WWTP outfall discharge, which has since been eliminated. A Feasibility Study is being prepared to evaluate potential cleanup activities for the site. **Figure 3** shows a picture of a drill rig at NBSFS during a recent environmental study.



Figure 3 – A drill rig at NBSFS

NEXT STEPS

IRP environmental studies will continue at NBSFS. Air Force's goals for the IRP sites still being studied are to: (1) finish the studies, (2) develop Feasibility Studies at sites where potential risk/hazard to human health or the environment is identified, (3) select remedies that will protect both human health and the environment, and (4) complete environmental cleanup. The Feasibility Studies will look at a variety of approaches to minimize potential future risk at each site. In general, approaches include removing contamination or limiting allowable site use (for example, not allowing installation of new drinking water wells). Some cleanup activities could result in some environmental damage, such as tree-clearing or disturbance of wetlands. Air Force will work with all stakeholders to balance cleanup activities with preserving the unique archeological and natural landscape at NBSFS. Like all environmental work at NBSFS, Air Force's will keep the community informed and encourages community input.

FOR MORE INFORMATION

For answers to questions you may have on environmental cleanup at NBSFS, please contact Brett Dubner, AFCEC Remedial Project Manager, at 508-968-4670 x3001 or via email at brett.dubner.1@us.af.mil.

ONLINE INFORMATION

Administrative Record:

<https://ar.afcec-cloud.af.mil/>

General NBSFS Information:

<https://www.spacebasedelta1.spaceforce.mil/New-Boston-SFS-New-Hampshire/>