

2022 Secretary of Defense Environmental Awards Environmental Restoration, Individual/Team Award

Each year since 1962, the Secretary of Defense has honored installations, teams, and individuals for outstanding achievements in Department of Defense (DoD) environmental programs. These accomplishments include outstanding conservation activities, innovative environmental practices, and partnerships that improve quality of life and promote efficiencies without compromising DoD's mission success. The 2022 Secretary of Defense Environmental Awards cycle encompasses an achievement period from October 1, 2019, through September 30, 2021 (Fiscal Years [FY] 2020-2021). A diverse panel of 53 judges with relevant expertise representing Federal and state agencies, academia, and the private sector evaluated all nominees to select one winner for each of the nine categories. These nine categories cover six subject areas including natural resources management, and environmental quality, sustainability, environmental restoration, cultural resources management, and

About the Environmental Restoration, Individual/Team Award

The Environmental Restoration, Individual/Team award recognizes efforts to protect human health and the environment by cleaning up hazardous substances, pollutants or contaminants, and munitions in a timely, cost-efficient, and responsive manner. Restoring these sites impacted by past DoD activities protects military personnel, their families, and the public from potential human health, environmental, and safety hazards. The 2022 winner of the Environmental Restoration, Individual/Team award is *Glenbrook Road Remedial Action Team, U.S. Army Corps of Engineers North Atlantic Division, Maryland*.

About Glenbrook Road Remedial Action Team, U.S. Army Corps of Engineers North Atlantic Division, Maryland

The Glenbrook Road Remedial Action Team achieved a historic milestone within the environmental restoration program by completing an extensive and complex remedial action at Glenbrook Road in Washington, DC. The team's purpose was the cleanup and restoration of a residential property containing a unique burial of discarded World War I experimental chemical warfare agents. Glenbrook Road is one of many private properties included in the Spring Valley Formerly Used Defense Site and

is the largest waste burial area associated with work of the American University Experiment Station. Due to site history. condition, and location, the Glenbrook Road team faced daunting technical, engineering, health and safety, regulatory, and community relations challenges beyond those experienced by any other project in the history of the U.S. Army Corps of Engineers (USACE)-Baltimore environmental restoration program. The team met its goals of protecting human health and the environment by reducing risk in the safest manner possible, while achieving cleanup acceptance from regulators and the community.



During the height of remedial efforts, a tent covered the Glenbrook Road Remedial Action site. The tent allowed the team to work safely and efficiently while they excavated and removed hazardous materials and contaminated soil.

Major Accomplishments in FY 2020-2021

- The team remediated, removed, or recovered 556 munition items, 2,139 pounds of laboratory debris, 53 intact and sealed glass containers of chemical agent, and 7,500 tons of contaminated soil. This was accomplished near occupied private properties, a major university campus, and public streets.
- The team partnered and interacted with stakeholders through a robust program management system. With support at all management levels, the team collaborated with internal offices as well as higher levels in USACE and the Department of the Army to ensure that all regulatory and legal requirements were met and that adequate funds were available for the Glenbrook Road cleanup. Collaboration with regulators and the community went above and beyond regulatory requirements; stakeholders had



Ordnance and Explosive Safety Specialist Mr. James Ennis prepares a 75 mm munitions debris item for cutting on a remotely operated bandsaw, February 2021. Cutting a munition item is part of the process to render a munition safe.

a comprehensive understanding of site hazards and the cleanup process, and decisions were reached with as much transparency and consensus as possible.

- The team researched and advocated the use of health standards not typically employed to include the Acute Exposure Guideline Levels standards developed by the U.S. Environmental Protection Agency and Oak Ridge National Laboratory, and the temporary emergency exposure limits developed by the U.S. Department of Energy. This research provided quantitative safety planning that allowed for the development of detailed and precise airborne hazard modeling to protect workers and the public. This innovation can be used on other recovered chemical warfare materiel sites undergoing cleanup, should these hazards be encountered.
- The team made special efforts to transfer knowledge and innovation, opening the site to multiple individuals from other DoD agencies who came to work on some aspect of the project and who would go on to support other highly critical mission-essential DoD tasks. The team hosted

numerous DoD engineering interns, West Point cadets, and foreign engineering officers who came to the site for in-depth briefings on technologies being employed and tours of the operation. The team engaged with interested members of the media to tell the Army and DoD side of the story on this project. One member of the media affiliated with the *New York Times* wrote several favorable articles about the project detailing the effort and commitment of the team.

• The team reduced risk through use of a Chemical Agent Filtration System (CAFS) to filter nonstandard hazards at the site. The Army developed the CAFS to filter a multitude of chemical agents. The CAFS works most efficiently when it can run 24/7 at a project site. The team also designed, built, and deployed unique sound suppression structures that housed the motors and allowed the filters to run quietly.



Three large chemical agent filters are connected to the containment tent by ductwork. These filters were adapted for use at this site with sound suppression structures so that their large electric motors would not disturb the neighborhood after hours.