



2022 Secretary of Defense Environmental Awards Environmental Quality, Non-Industrial Installation 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 conservation, environmental quality, sustainability, environmental restoration, cultural resources management, and environmental excellence in weapon systems acquisition.

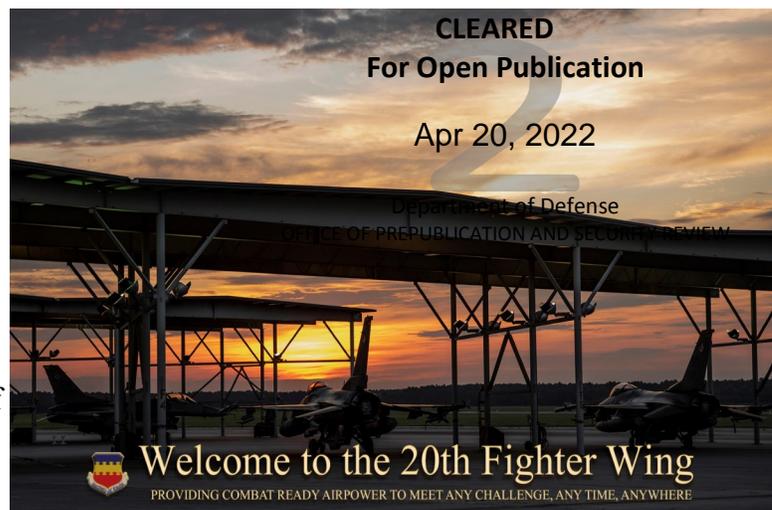
About the Environmental Quality, Non-Industrial Installation Award

The Environmental Quality, Non-Industrial Installation award recognizes efforts to ensure mission accomplishment and the protection of human health and the environment in the areas of environmental planning, waste management, and compliance with environmental laws and regulations (e.g., Clean Air Act, Clean Water Act, Resource Conservation and Recovery Act, Safe Drinking Water Act, Toxic Substances Control Act). Meeting or exceeding all environmental requirements not only enhances the protection of our environmental assets, but also sustains DoD's ability to effectively train and maintain readiness. Non-industrial installations are large or small installations that include ranges, test centers, contracting and policy agencies/organizations/offices, and research and development centers. The 2022 winner of the Environmental Quality, Non-Industrial Installation award is *Shaw Air Force Base, South Carolina*.

About Shaw Air Force Base, South Carolina

Shaw Air Force Base (AFB) in South Carolina is located seven miles west of Sumter, South Carolina, and encompasses 3,326 acres. It is home to the 20th Fighter Wing, the Department of the Air Force's largest F-16 "Fighting Falcon" combat wing, whose mission is to provide combat-ready airpower and airmen. The AFB employs 7,259 active-duty members, 764 civilians, and over 700 contractors.

Merging mission and environmental stewardship, Shaw AFB has implemented an Environmental Management System (EMS). Shaw AFB employs a dynamic, EMS-centric Cross-Functional Team that engages personnel across a broad range of specialties. The Environmental Quality program oversees content and implementation of six installation-level management plans that instill procedures, best management practices, and controls on environmental aspects of the mission. In addition, Environmental Quality personnel conduct monthly internal inspections, review project designs and work requests, and manage compliance permits and registrations.



F-16s at Shaw AFB stand ready to meet any challenge, anytime, anywhere.

Major Accomplishments in FY 2020-2021

- Shaw installed a supervisory controls and data acquisition system to continuously monitor production and treatment from six drinking water wells that serve 10,000 airmen, dependents, civilians, and contractors. Separately, Shaw AFB constructed a \$3.2 million perfluorooctane sulfonate/perfluorooctanoic acid filtration system for its \$75 million groundwater treatment plant and is evaluating its legacy volatile organic compound treatment units and viability of newer systems.
- In FY21, Shaw AFB reduced its in-service underground storage tanks (UST) by 42 percent. The base eliminated a gasoline storage requirement and consolidated diesel and jet fuel storage into two above-ground storage tank (AST) systems. The two environmentally safer AST systems replaced UST capacity of 48,000 gallons with only 11,000 gallons of above-ground storage.
- Shaw AFB maintains and operates a 1.2 million gallon per day wastewater treatment plant (WWTP) serving approximately 20,000 military, civilian, and contractor personnel. This mission-critical WWTP has operated without interruption or permit violation for more than 12 years. Monitoring of wastewater parameters are consistently 75 to 90 percent below the allowable limits of the National Pollutant Discharge Elimination System permit.
- During FY20-21, Shaw AFB completed 24 Request for Environmental Impact Analyses, including an action for temporary bed-down of Kingpin, a tactical command/control unit that serves as lead control/reporting center enabling air operations across U.S. Central Command. Shaw AFB completed Environmental Impact Assessment processes for \$434 million in mission-critical projects supporting Central Command, base security, and operations for the MQ-9 Reaper.
- During FY20-21, Shaw AFB reduced its total waste by 10 percent over the previous two-year period, or an average of 210 tons per year. The base segregated and diverted an additional 39 tons of non-hazardous waste from the landfill by transporting it, along with its regulated hazardous waste, to a treatment facility to avoid substances leaching to the soil.
- Civil Engineer personnel, led by members of the Petroleum, Oils and Lubricants cross-functional team, repurposed two out-of-service petroleum storage tanks, eliminating a replacement cost of \$22,000 each. For the minor cost of material expenses, these tanks increased operations efficiency, saving approximately 1,000 man-hours per year, and allowed a \$230,000 R-11 refueler that had been taken out of operation to return to servicing aircraft.



Two newly installed ASTs that replaced three aging USTs in the Aerospace Ground Equipment yard.



Shaw AFB Plant Operator Mr. Tony Quercero and South Carolina Department of Health and Environmental Control Inspector Ms. Shemeka Galloway review the aerator basins at Shaw AFB's WWTP.