



2017 Secretary of Defense Environmental Awards Sustainability, Individual/Team Award

Each year since 1962, the Department of Defense (DoD) has honored installations, teams, and individuals for outstanding conservation achievements, innovative environmental practices, and partnerships that improve quality of life and promote efficiencies without compromising mission success. The 2017 Secretary of Defense Environmental Awards cycle encompasses an achievement period from October 1, 2014, through September 30, 2016 (Fiscal Years (FY) 2015-2016). A diverse panel of 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 that cover six subject areas: natural resources conservation; environmental quality; sustainability; environmental restoration; cultural resources management; and environmental excellence in weapon system acquisition.

About the Sustainability, Individual/Team Award

The Sustainability, Individual/Team award recognizes individuals and teams making significant progress to prevent or eliminate pollution at the source, including practices that increase efficiency and sustainability in the use of raw materials, energy, water, or other resources. The sustainability award also recognizes energy efficiency and renewable energy practices, greenhouse gas reduction efforts, procurement of sustainable goods and services, and efforts to plan for climate change resilience. Sustainable practices ensure that DoD protects valuable resources that are critical to mission success. The 2017 winner of the Sustainability, Individual/Team award is *Mr. Jeffery D. Schone, Luke Air Force Base, Arizona*.

About Mr. Jeffery D. Schone, Luke Air Force Base, Arizona

Luke Air Force Base (AFB), located northwest of Phoenix, AZ, is home to the 56th Fighter Wing, which is a unit of the Air Force Education Training Command and is the largest fighter wing in the world. The main base is nearly 2,500 acres in size, with an additional 2,000 acres of easements. The installation includes two runways and 400 buildings, encompassing over four million square feet of space.

Mr. Jeffery Schone is an Environmental Engineer for the 56th Civil Engineering Squadron at Luke AFB. He began his career with DoD in 1997 as an intern participating in the Palace Acquire program at Joint Base Charleston. Mr. Schone manages one of the few remaining Air Force operated wastewater plants and helps to ensure compliance with stringent Active Management Area water conservation requirements. He manages separate comprehensive multi-sector and small municipal storm sewer system permits for stormwater management, and monitors compliance with stringent Clean Air Act Title V air quality permitting and management across the Luke AFB non-attainment area. He oversees the integrated support of Luke AFB's hazardous material management, asbestos and lead toxic substances management, and administers the Luke AFB solid waste, recycling, and hazardous waste management programs. Mr. Schone continues to provide exemplary sustainability leadership, supporting DoD mission-readiness into the future.



Mr. Schone manages multiple environmental sustainability programs and led the integration of sustainable planning and construction in support of the stand-up of the new F-35 aircraft mission.

Major Accomplishments in FY 2015-2016

- Mr. Schone implemented advanced bioremediation (using microorganisms to clean pollution) for all petroleum, oil, and lubricant systems as well as grease trap systems, reducing maintenance and costs by 82 percent and manpower by 97 percent, saving \$125,000 annually. The successful results and benefits of this process were published nationally in the *Industrial Wastewater Digest*. The Arizona Department of Environmental Quality (DEQ) named Mr. Schone one of Arizona DEQ's "Innovative Leaders" for the 2015 Pollution Prevention Week.
- He improved the installation's construction and demolition diversion rates by recycling 2,690 tons of construction and demolition debris. Luke AFB's 98 percent diversion rate far exceeds the DoD goal of 58 percent. Mr. Schone's contributions to the diversion rate also include 100 percent reuse of asphalt and crushed concrete for an extensive runway repair project and for refurbishing 19 parking areas. This concentrated diversion effort saved the installation \$1.2 million in landfill and utility costs.
- When Luke AFB established the first F-35 aircraft maintenance unit, no process was in place for proper waste determination or product inventories, resulting in an increased shelf life expiration rate of 400 percent at a cost of over \$25,000 for disposition. Mr. Schone redefined purchasing processes for 149 F-35 aircraft hazardous materials that the installation ordered in excess and 92 hazardous materials that the installation wouldn't be able to use due to their short shelf life. The reduced or eliminated hazardous material bench stock resulted in a 68 percent decrease in shelf-life monitoring and disposal for a savings of \$147,000 for the first of six F-35 aircraft maintenance units.
- Mr. Schone reclassified the installation's wastewater treatment plant effluent to a Class A+ standard that allowed Luke AFB to reuse 40 percent of the water on its lands, expanding redistribution of non-potable water for dust control and irrigation.
- He provided direct oversight of asbestos and lead abatements that removed future exposure liabilities and potential regulatory actions. Through sustainable and efficient abatement design, Mr. Schone worked to divert 28 tons of regulated material from landfills, resulting in a 98 percent diversion of toxic lead hazardous waste.
- Mr. Schone streamlined compliance recordkeeping for two highly regulated aerospace paint booths for the Luke AFB Clean Air Act Title V renewal permit. This change allowed Luke AFB to achieve an 80 percent reduction in physical records and \$27,000 in monthly savings for paint booth filter testing while operating a violation-free air program for 380 permitted sources.



New and modernized construction and demolition for the F-35 aircraft stand-up has maintained a 98 percent diversion rate and recycled over 2,600 tons of construction and demolition debris. Mr. Schone led the integration of sustainable planning and construction in support of the stand-up of the new F-35 mission.



Mr. Schone negotiated an 80 percent reduction in Clean Air Act Title V recordkeeping paperwork for two highly regulated aerospace paint booths.