

INSTALLATION ENVIRONMENTAL PROFILE  
**SHAW AFB**

**1. Air Quality (DoD Question #210-225):**

- a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O<sub>3</sub> (1 hour & 8 Hour), and PM (PM<sub>10</sub>, and PM<sub>2.5</sub>). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O<sub>3</sub>, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.
- b. [Shaw AFB is in Attainment for all Criteria Pollutants. It holds a CAA Major Operating Permit.](#)

**2. Cultural/Archeological/Tribal Resources (DoD Question #229-237):**

- a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.
- b. [Historic property has been identified on Shaw AFB.](#) There is a programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, [which do not restrict construction and do not restrict operations.](#)

**3. Dredging (DoD Question # 226-228):**

- a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.
- b. [Shaw AFB has no](#) impediments to dredging.

**4. Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273):**

- a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include

electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

- b. Shaw AFB reports that 1001 unconstrained acres are available for development out of 15948 total acres. Shaw AFB has spent \$53.6M thru FY03 for environmental restoration, and has estimated the remaining the Cost to Complete at \$27M. Shaw AFB has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and some with the potential for expansion.

**5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):**

- a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.
- b. Shaw AFB is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

**6. Noise (DoD Question # 202-209, 239):**

- a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.
- b. Shaw AFB has noise contours that extend off the installation's property. Of the 10602 acres that extend to off-base property, 671 acres have incompatible land uses. It does not have published noise abatement procedures for the main installation. It has noise contours that extend off of the range property. Of the 2327 acres that extend to off-range property, 0 acres have incompatible land uses. It does not have published noise abatement procedures for the training and/or RDT&E range.

**7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)**

- a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.
- b. Shaw AFB reported that federally-listed TES are present, candidate species are not present, critical habitat is not present, and that Shaw AFB does not have a Biological Opinion.

**8. Waste Management (DoD Question # 265-272):**

- a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.
- b. [Shaw AFB does not have](#) a permitted RCRA Treatment Storage and Disposal Facility (TSDF). [Shaw AFB does not have](#) an interim or final RCRA Part X facility. [Shaw AFB does not have an on-base solid waste disposal facility](#).

**9. Water Resources (DoD Question # 258, 274-299):**

- a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.
- b. [Shaw AFB discharges](#) to an impaired waterway. Groundwater contamination [is](#) reported. Surface water contamination [is not](#) reported. [The state requires permits for the withdrawal of groundwater. Exceedances of drinking water standards are reported, during at least one of the last three reporting periods.](#)

**10. Wetlands (DoD Question # 251, 257):**

- a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.
- b. [Shaw AFB](#) has [2%](#) wetland restricted acres on the military installation.