

a large area. These emissions would not cause a significant water quality impact. Water quality monitoring would continue on an as-needed basis.

## 2. Vandenberg Air Force Base

*a. Air Quality.* Under the No Action Alternative, current missile activities would continue. Under Alternative 2 (Selected Alternative) and Alternative 3, the results of modeling to determine exhaust emissions of aluminum oxide, hydrogen chloride, and carbon monoxide show that concentrations produced by dual launches of a Ground-Based Interceptor would remain within NAAQS, California AAQS, and U.S. Air Force standards. Based upon this, the proposed launches would not cause or contribute to violation of any air quality standards. Under Alternative 1, 2 and 3 the results of modeling a dual Peacekeeper target launch to determine exhaust emissions of aluminum oxide, hydrogen chloride, and carbon monoxide show that the level of hydrogen chloride would be below the 1-hour Air Force standard, but would exceed the peak hydrogen chloride standard for a short duration. Other emissions were determined to be within NAAQS and California AAQS. A single Peacekeeper target launch would be within NAAQS, California AAQS, and U.S. Air Force standards. The proposed launches would not cause or contribute to violation of any air quality standards.

*b. Biological Resources.* Under all alternatives, temporary effects to vegetation from emissions, discoloration and foliage loss and temporary, short-term startle effects from noise to wildlife and birds are possible. Although a remote possibility, individual animals close to the water's surface could be hit by debris.

*c. Cultural Resources.* Under the No Action Alternative, resources would continue to be managed in accordance with cultural resources regulations. For GBI launches under Alternative 2 (Selected Alternative) and Alternative 3, possible minor modifications may be required for buildings 1819 and 1900, as well as LF-02, LF-03, or LF-10. All of these are listed as National Register of Historic Places-eligible. Prior to the reuse of these facilities, consultation would occur with the State Historic Preservation Officer to ensure their protection or appropriate mitigation to preserve information concerning these buildings. Only in the unlikely event of flight termination over land (necessary debris recovery within the region of influence) would the possibility for impacts to cultural resources from off-road vehicle activity exist. Even then, all areas affected by ground impacts of

flight hardware would be cleared of all recoverable debris in strict accordance with current Vandenberg Air Force Base policy. Under Alternatives 1, 2, and 3, possible minor modifications may be required for target facilities. LF-03 and LF-06 are listed as National Register of Historic Places-eligible. Prior to the reuse of these facilities, consultation would occur with the State Historic Preservation Officer to ensure facilities, consultation would occur with the State Historic Preservation Officer to ensure their protection or appropriate mitigation to reserve information concerning the sites. The potential for impacts due to a flight termination over land would be the same as in Alternative 2.

*d. Land Use.* Under the No Action Alternative, there would be no impact Vandenberg Air Force Base publicizes recreation availability, and activities are consistent with the California Coastal Zone Management Program. Under Alternative 2 (Selected Alternative) and Alternatives 1 and 3, disruption to land use would occur from routine closures of recreation areas near the region of influence during launches. Such action would represent a minimal impact to land use.

## 3. Ronald Reagan Ballistic Missile Test Site

*Biological Resources.* Under all alternatives, temporary effects to vegetation from emissions, discoloration and foliage loss and temporary, short-term startle effects from noise to wildlife and birds are possible. Although a remote possibility, individual animals close to the water's surface could be hit by debris. Personnel would be instructed to avoid areas designated as avian or sea turtle nesting or avian roosting habitat and to avoid all contact with any nest that may be encountered.

## 4. Pacific Missile Range Facility

*a. Air Quality.* Under the No Action Alternative, current missile activities would continue. Under Alternative 2 (Selected Alternative) and Alternatives 1 and 3, it is anticipated that operation of the TPS-X or continued missile launches would have no adverse impacts on regional air quality at PMRF. Therefore, there would be no change to the region's current attainment statistics.

*b. Biological Resources.* Under the No Action Alternative, short-term disturbance to wildlife, including migratory birds, from minor site preparation activities and increased personnel could occur. Reflection from outdoor lighting could disorient the Newell's Townsend's shearwater.

Temporary effects to vegetation from emissions, discoloration and foliage loss and temporary, short-term startle effects from noise to wildlife and birds are possible. Although a remote possibility, individual animals close to the water's surface could be hit by debris. For Alternative 2 (Selected Alternative) and alternatives 1 and 3, the TPS-X Radar is not expected to add any additional impacts above those identified in the No Action alternative because the TPS-X will not radiate lower than 5 degrees above horizontal and the relatively small radar beam would normally be in motion which reduces the probability of bird species remaining within this limited region of space.

*c. Hazardous Materials and Hazardous Waste.* Under the No Action Alternative, continued handling and use of limited quantities of hazardous and toxic materials related to pre-launch, launch and post-launch activities would generate small quantities of hazardous waste. Under Alternative 2 (Selected Alternative) and alternatives 1 and 3, in addition to missile launch activities, TPS-X Radar activities would generate small quantities of hazardous waste. The use and disposal of hazardous materials and wastes would be in accordance with Pacific Missile Range Facility, State of Hawaii, Environmental Protection Agency, Occupational Safety and Health Administration, Department of Transportation, and Department of Defense policies and procedures.

*d. Health and Safety.* Under the No Action Alternative, planning and execution of target launches would continue. Ground and Launch hazard Areas, Notices to Airmen and Notices to Mariners, and implementation of Safety plans would protect workers and the general public. Under Alternative 2 (Selected Alternative) and Alternatives 1 and 3, TPS-X Radar Electromagnetic Radiation hazard zones would be established within the beam's tracking space and near emitter equipment. A visual survey of the area would verify that all personnel are outside the hazard zone prior to startup. The TPS-X Radar would be prevented from illuminating in a designated cutoff zone, in which operators and all other system elements would be located. Potential interference with other electronic and emitter units (flight navigation systems, tracking radars, etc.) would also be examined prior to startup. Compliance with federal, state, and local health and safety requirements and regulations, safety procedures relative to radar operations, as well as Department of Defense and Pacific Missile Range Facility Safety Policy would result in no impacts to health and safety. Missile