

Approach Zones at the end of the runway is considered an incompatible land use. Low density housing in the community of Moose Creek is subjected to noise levels that exceed the recommended day-night level of 65 decibels. The local government, Eielson AFB, and the community of Moose Creek are working to minimize future noise impacts.

Fort Greely. There would be impacts to geology and soils, socioeconomics, and water resources from continued activities at Fort Greely. These impacts could include some soil damage from vehicles, weapons, and fires. Some soil erosion with net soil loss and water quality impacts would occur near training activities. Localized long-term damage to permafrost could occur as a result of ground training and fire damage from training. The Army has developed mitigation measures to minimize these impacts. Training maneuvers, if conducted repeatedly in the same area, could result in cumulative impacts to water resources. The Army has implemented measures to minimize impacts to water resources.

Yukon Training Area. Impacts to geology and soils and water resources would be similar to those described for Fort Greely.

Preferred Alternative—Environmental Impacts

The Preferred Alternative identified in the NMD Deployment EIS was to deploy up to 100 GBI missiles in silos at Fort Greely, Alaska, to include supporting infrastructure and components with an XBR at Eareckson AS, Shemya, Alaska, and to upgrade existing EWRs. No locations for IDTs were identified in the EIS, but several IDT sites were subsequently evaluated in the GMD VOC EA. Environmental impacts expected to result from a deployment decision are summarized below. Building and fielding of an IDO capability at Fort Greely, as a subset of activities evaluated in the EIS, would have the same as or incrementally fewer impacts than those described in the EIS.

Fort Greely, Alaska. This was the preferred GBI siting alternative in the Final EIS and is the selected site for up to 40 GBI silos, BMC2, 1 additional IDT, supporting facilities (including backup power) and infrastructure, and FOC. The EIS concluded that deployment of the GBI at Fort Greely could result in impacts to health, safety, and socioeconomics. In the unlikely event of a liquid propellant leak from the GBI system, hazardous propellant gases could extend beyond the base boundary. The Occupational Safety and Health Administration (OSHA) Permissible

Exposure Limit for nitrogen tetroxide could be exceeded up to 760 meters (2,493 feet) from the source of the leak, affecting less than 14 hectares (35 acres) of undeveloped land outside the base boundary and would not affect the Fort Greely Cantonment area. Exposure at these levels in the open-air conditions would be mildly irritating to the eyes and nose and could induce coughing. Given the small quantities of liquid propellant, multiple safety systems in system design, and the presence of an emergency response team, the overall risk to public health and safety would be low. Mutual aid agreements with local fire departments would need to be updated to inform them of the additional hazards and safety considerations of GBI deployment. To reduce the potential for forest fires affecting the GBI element site, the fire protection status for the proposed area would need to be changed from Full Protection to Critical Protection. Critical Protection status would give the highest level of fire fighting provided by the Bureau of Land Management Alaska Fire Service. The U.S. Army would need to coordinate this revision with the Alaska Fire Service. It is anticipated that construction and operation of the GBI element at Fort Greely would provide an economic benefit to the surrounding regions, partially offsetting the loss of jobs at the base as a result of previous Base Realignment and Closure (BRAC) cutbacks.

Upgraded Early Warning Radars

Under the Preferred Alternative in the EIS, the EWRs at Beale AFB, CA; Clear AFS, AK; and Cape Cod AFS, MA would be upgraded. The VOC EA analyzed upgrades to the Beale EWR, with similar upgrades to the Cobra Dane radar at Eareckson AS. The upgrades would involve replacement of electronic hardware and computer software. The radiated peak and average power, radar antenna patterns, and operating bands of the radars would remain unchanged from current operations. Consequently, the public exposure to radio frequency radiation from the UEWRs over a 30-minute averaging period would be similar to that from the existing early warning radars and would be well within the most applicable criteria, the American National Standards Institute/Institute of Electrical and Electronics Engineers standard. The U.S. Air Force is in the process of preparing a supplement to their Atmospheric Interceptor Technology Program Environmental Assessment, 1979 to address maintenance and sustainment of operations for the early warning radars.

Alternatives Not Selected—Environmental Impacts

Several alternative locations for deployment of GBIs in the NMD Deployment EIS are not selected at this time. In addition, this ROD does not include a decision concerning construction or operation of an XBR. Potential environmental impacts at those sites not selected for IDO fielding of GBIs are summarized below. As with the preferred alternative, fielding of an IDO capability at any of these sites would have similar or incrementally fewer impacts than those described in the EIS.

GBI and BMC2 Locations

Clear AFS, Alaska. Deployment of the GBI at this location could result in impacts to biological resources, geology and soils, health and safety, and socioeconomics. Construction activities could cause impacts to approximately 2.7 hectares (6.6 acres) of wetlands under the GBI Alternative Site A or 55 hectares (135 acres) under the GBI Alternative Site B. The wetland permitting process would be coordinated with appropriate Federal and state agencies and would entail review of proposed activities and development of mitigation measures. There would be the potential to impact permafrost during construction on Clear AFS. Prior to final design and construction, a comprehensive geotechnical investigation would be conducted to determine the exact nature of the soils and ground-water levels in the area. The site layout would be adjusted to minimize any impacts in the unlikely event that unstable permafrost were encountered. Depending on the ground-water levels, missile silos might be slightly elevated to avoid water incursion during construction and operations. The potential health hazard from liquid propellant leaks at the GBI Alternative Site B would be similar to that at Fort Greely. However, OSHA exposure limits for nitrogen tetroxide could affect up to 122 hectares (302 acres) of undeveloped land outside of the base boundary and the on-base administrative and housing areas. It is anticipated that construction and operation of the GBI element at Clear AFS would provide an economic benefit to the surrounding regions.

Yukon Training Area (Fort Wainwright)/Eielson AFB, Alaska. Deployment of the GBI at this location could result in impacts to biological resources, cultural resources, geology and soils, and socioeconomics. Construction activities could impact approximately 46 hectares (113 acres) of