

SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS [TABS FINAL VERSION]

SCENARIO #660 TITLE: TECH-0045 ARMY SOLDIER AND BIOLOGICAL CHEMICAL CENTER

General Description: Close Natick Soldier Systems Center, MA. Relocate all functions to Aberdeen Proving Ground, MD. Realign Ft. Belvoir, VA, by relocating the Program Executive Officer for Soldier Systems to Aberdeen Proving Ground, MD. Consolidate all relocating Soldier Systems functions into a combined Soldier & Biological Chemical Center for Land Warfare.

Proposal Affects the following Army installations:

1. Aberdeen PG gains approximately 1100 personnel and construction of 554,000 SF MilCon. (Note: The net personnel change at APG will be negative - COBRA analysis assumes the Ordnance School departing APG (-4508 personnel) prior to the LCM Center moving in.)
2. Ft Belvoir moves approx 85 personnel to APG (PEO Soldier).
3. Soldier Systems Center (Natick) closes.

ANALYST: COL CRABTREE

LAST UPDATE: 4/28/05

Env Resource Area	#1 Gaining Installation Assessment Inst Name: Aberdeen Proving Ground	Analyst Comments (& data source(s) that drive assessment)
Air Quality	<p>Impact Expected.</p> <p>APG is currently in Non-Attainment area for Ozone. Addition of operations may exceed major source thresholds for NOx and VOCs. Added operations will require New Source Review permitting, Air Conformity Analysis and modifications to existing Title V permit.</p>	<p>#213, 219 – In non-attainment for Ozone (EPA web site confirms non-attainment for Ozone 8-hour)</p> <p>#211 – Projected to exceed Major Source thresholds for Nox.</p> <p>#220 – Holds 2 Major Operating Permits (SIC code 9711)</p> <p>#222 – Emissions Credit Trading program available for NOx and VOCs</p> <p>#218 – No restrictions to operations reported due to air quality requirements</p>
Cultural/Archeological/Tribal Resources	<p>78 Historic properties, 5 archeological resources identified to date and areas with high archeological potential, but no restrictions to mission reported.</p> <p>A very limited portion of the installation has been surveyed for cultural resources; therefore, the extent of the cultural resources on the installation and impacts to those resources is uncertain. A potential impact may occur as result of increased time delays and negotiated restrictions, due to Tribal interest. Potential impacts may occur, since resource must be evaluated on a case-by-case basis, thereby causing increased delays and costs.</p>	<p>#233- A very limited portion of the installation has been surveyed for cultural resources (<5%) therefore the extent of cultural resources on the installation and impacts to these resources is uncertain.</p> <p>#235 – 78 Historic properties identified</p> <p>#229 – No known limitations to fee-simple ownership</p> <p>#230 – 5 archaeological resources known on installation; no restrictions reported</p> <p>#231 – Native People sites identified</p> <p>#236 – No Programmatic Agreement with SHPO</p> <p>#201 – Operations are not restricted due to cultural/archaeological/tribal resources however, these resources were identified.</p> <p>#234 – 5 tribes have asserted interest in burial/sacred sites; in contact, but no formal consultation yet.</p> <p>#232 – Areas with high archaeological potential identified.</p>

Dredging	No Impact. If the new unit/activity requires dredging, then UXO and endangered species surveys may be required.	#227 – If new unit/activity requires dredging, then dredging may not be able to occur in the short term due to known dredging impediments. #226 – If the new unit/activity requires dredging, then UXO and endangered species surveys may be required.
Land Use Constraints/Sensitive Resource Areas	No Impact. Four SRAs identified but cause no restrictions.	#30 – 2,863 buildable acres reported, approximately 108 acres required. (based on the 2.5 times the size of a Large Admin Organ; & also Natick occupies 78 acres) #201 - Constraints listed include (4) limited ability to accept new or different missions due to availability of unconstrained land, (5) altered, modified or re-routed flight operations and/or flight patterns and (6) altered, modified or re-routed ground operations. #256 – 4 Sensitive Resource Areas identified but cause no restrictions CERL– Moderate Encroachment
Marine Mammals/Marine Resources/ Marine Sanctuaries	No impact.	#248, #250, #252, #253 - No restrictions #249 – TES listed include Shortnosed Sturgeon (<i>Accipenser brevirostrum</i>) (restricting Poole's Island Shoal waters around island) and Bald Eagle (<i>Haliaeetus leucocephalus</i>), (restricting Poole's Island areas near nest sites, APG Shoreline & Areas near nest sites- affecting 17.2 acres of installation)
Noise	No impact. No noise expected to be generated by this proposal.	#239 – 235,848 acres of Noise Zone 2 extend outside installation, which is moderately encroached by development. #202 – Installation has published noise abatement procedures for main installation and training range but not for auxiliary airfield.

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Threatened & Endangered Species/Critical Habitat</p>	<p>Installation has Federally listed species (Shortnosed Sturgeon, Bald Eagle), that affect 17.2 acres of the installation and restricts night time flying operations (protection buffers around nests) on 7.9% of installation. Additional operations may further impact threatened/endangered species leading to additional restrictions on training or operations.</p>	<p>#249 – TES listed include Shortnosed Sturgeon (<i>Accipenser brevorostrum</i>) (restricting Poole's Island Shoal waters around island) and Bald Eagle (<i>Haliaeetus leucocephalus</i>), (restricting Poole's Island areas near nest sites, APG Shoreline & Areas near nest sites- affecting 17.2 acres of installation) #259 – TES listed include Shortnosed Sturgeon (<i>Accipenser brevorostrum</i>) and Bald Eagle (<i>Haliaeetus leucocephalus</i>). The Bald Eagle has delayed operations due to protection of buffers around nests during nesting season on approximately 7.9% of installation. #260 – No critical habitat identified #261 – Biological Opinion for Bald Eagle restricts range operations #262 – Development restrictions reported. Eagles: Existing Biological Opinions have limited impacts as they impose a monitoring responsibility primarily; some sites are protected. The ongoing Biological Assessment and subsequent Opinion will include an incidental take statement and some mitigation limits for some of the SOCOM training functions is expected. The extent of the limits is unclear, as the BA is still in development. Sturgeon: APG has a BA and BO from NOAA containing no limitations. APG is to coordinate with them if specific projects pose a risk. #263, #264 – No candidate species/habitat reported #201 - TES have restricted operations by limiting night flying times.</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Waste Management</p>	<p>No impact.</p>	<p>#269 – Interim RCRA Subpart X OB/OD Permit, Permit has been submitted #265- Installation is a permitted hazardous waste RCRA Treatment Storage and Disposal (TSD) facility. #272 – Not a permitted solid waste disposal facility</p>

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Water Resources</p>	<p>Minimal impact expected.</p> <p>Water quality is impaired by pollutant loadings. Significant mitigation measures to limit releases may be required to reduce impacts to water quality and achieve US EPA water quality standards.</p>	<p>#276 – Installation not located over a sole-source aquifer #278 – McCarren Amendment does not apply #293 – Potable water restrictions in FY99 (33 days), FY01 (134 days) and FY02 (147 days). Source restrictions to prevent exceeding withdrawal permits, FY99 (9% of time restriction in place), FY01 (37%), FY02 (40%) from CHPPM Water Resources Report. #291 – Installation uses one Gov’t owned on-installation plant and one publically owned off-installation plant for potable water. IREM indicates capacity for potable water to support 33,500+ personnel #279 –Installation discharges to impaired waterway; nutrient discharges from installation further impair waterway but is not a source of potable water. #297 – Two Sewage treatment plants on site; 1 gov’t owned, 1 privatized. #282 – Industrial Gov’t owned wastewater treatment system located on installation. #822, 824, 825, 826, ISRII – no restrictions reported</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Wetlands</p>	<p>No impact.</p>	<p>#251- Survey completed 04/92. #257 – Wetlands affect 0.3% of range and installation each but do not restrict operations.</p>

SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED)

SCENARIO #660 (TECH-0045)

Env Resource Area	#1 Losing Installation Assessment Inst Name: Ft Belvoir	Analyst Comments (& data source(s) that drive assessment)
Air Quality	No impact	Environmental impact is considered neutral or positive to losing installation for all 10 environmental resource areas.
Cultural/ Archeological Resources	No impact	
Dredging	No impact	
Land Use Constraints/Sensitive Resource Areas	No impact	
Marine Mammals/ Marine Resources / Marine Sanctuaries	No impact	
Noise	No impact	
Threatened & Endangered Species/ Critical Habitat	No impact	
Waste Management	No impact	
Water Resources	No impact	
Wetlands	No impact	

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SCENARIO #660 (TECH-0045)

Env Resource Area	#2 <i>Losing</i> Installation Assessment Inst Name: Soldier Systems Center	Analyst Comments (& data source(s) that drive assessment)
Air Quality	Potential positive impact	#213 – In serious non-attainment for ozone (1-hour) and NO2
Cultural/Archaeological Resources	No impact	#230 – No archaeological resources identified #231 – No Native People sites identified #232 – No sites with high archaeological potential identified. #235 – No historic property identified.
Dredging	No impact	
Land Use Constraints/Sensitive Resource Areas	Environmental media contamination issues include IRP sites. Restoration, and/or monitoring of contaminated media will likely be required after closure to prevent significant long-term impacts to the environment.	#240 - DERA restoration sites - \$19M CTC, \$32.8M spent thru FY03. No operational ranges
Marine Mammals/Reptiles/Marine Species	No impact	
Noise	Potential positive impact.	#202- Noise abatement procedures in place in the form of - Flight Path Restriction (14 June 1995) #239 - Noise contours extend off installation.
Threatened & Endangered Species/Critical Habitat	No impact	#259 – No TES identified #260 – No Critical Habitat identified #263 – No candidate species identified. #264 – No proposed habitat for critical species
Waste Management	Special waste management areas at the installation include temporary RCRA TSD storage area (<90 days). Restoration, monitoring/sweeps, access controls, and/or deed restrictions may be required for these areas to prevent disturbance, health and safety risks, and/or long-term release of toxins to environmental media.	#265 – No permitted hazardous waste TSD facility - The facility is a large quantity generator with a less than 90 day storage area. #272 – No permitted SWDF #269 – No RCRA Subpart X OB/OD Permit #273 – No MMRA

Water Resources	<p>Ground and surface water contamination includes Tetrachloroethylene and Trichloroethylene. Restoration and/or monitoring of contaminated media may be required after closure.</p> <p>Potential positive impact – Installation currently uses Town of Natick Public Water Treatment Plant; closing base will eliminate use of public plant for installation.</p>	<p>#275 – Tetrachloroethylene and Trichloroethylene found in approximately 25 acres of groundwater (70 feet beneath surface) under approximately 89 acres of this facility. Approximate/Regulatory time to clean them up is 15-25 years. Facility uses Town of Natick for potable water.</p> <p>#281 – No surface water contamination reported.</p> <p>#291 - Installation currently uses Town of Natick Public Water Treatment Plant</p>
Wetlands	No impact	<p>#251 – Wetland survey completed 11/98</p> <p>#257 – Wetlands cover 18% total range, impose no restrictions.</p>

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IMPACTS OF COSTS

Env Resource Area	Gaining Installation Inst Name: Aberdeen Proving Ground	Losing Installation Inst Name: Ft Belvoir, Soldier Systems Center
Environmental Restoration*	None.	<u>Ft Belvoir:</u> None <u>Soldier Systems Center:</u> DERA restoration - \$19M CTC
Waste Management	None.	None.
Environmental Compliance	-Air Conformity Analysis - \$25K-\$75K -New Source Review Analysis and -Permitting - \$100K-\$500K -Archeological/tribal resources inventory - \$25-\$100 per acre. - Historical building/structure inventory - \$500 - \$1,500 per structure -Evaluation to determine if arch/tribal site is significant - \$15K - \$40K per site - Evaluation to determine if historic buildings/structures are significant -\$1K-\$2K per site -Conduct Tribal government to government consultation \$500 to \$2,000 per meeting (TDY costs) -Develop Programmatic Agreement -\$10K -Endangered Species Management (includes monitoring) \$20K-\$2M -Realignment NEPA (EA) \$100K.	<u>Ft Belvoir:</u> None <u>Soldier Systems Center:</u> -Environmental Baseline Survey (EBS) \$300K-\$500K - Restoration/monitoring of Hazardous Waste Sites - \$500K - \$10M - Asbestos / lead paint removal - \$200K - \$1M. - Land Use controls management / enforcement in perpetuity - \$50K - \$100K per year.
COBRA Costs:	Air Conformity Analysis - \$50K New Source Review - \$100K NEPA (EIS) \$1M	<u>Soldier Systems Center:</u> EBS + Disposal NEPA - \$550K

Environmental Impact Summary

Aberdeen Proving Grounds

This recommendation moves additional personnel and causes new construction at Aberdeen Proving Ground, which is located in a region that is currently in Non-attainment for Ozone. These events will require an Air Conformity Analysis to evaluate the impact to Air Quality and a New Source Review and permitting effort prior to allow construction. Aberdeen has 78 Historic properties, and 5 archeological resources identified and reports areas with high archeological potential, but no restrictions to mission reported. A very limited portion of the installation has been surveyed for cultural resources; therefore, the extent of the cultural resources on the installation and impacts to those resources are uncertain. Potential impacts may occur as result of increased times delays and negotiated restrictions, due to tribal interest in archeological sites. APG has two federally listed species (Short-nosed Sturgeon, and Bald Eagle), that affect 17.2 acres of the installation and restricts night time flying operations (protection buffers around nests) on 7.9% of installation. Additional operations may further impact threatened/endangered species leading to additional restrictions on training or operations. Water quality is impaired by pollutant loadings. Significant mitigation measures to limit releases may be required to reduce impacts to water quality and achieve US EPA water quality standards. No adverse impact to any other environmental resource area is expected.

Fort Belvoir

Since installation is only losing personnel, no adverse impacts to any environmental resource areas are expected.

Soldier Systems Center (Natick)

This recommendation closes the Soldier Systems Center (Natick, MA). This installation has no operational ranges that require closure. Natick has contaminated areas that are being addressed through the Installation Restoration Program. Special waste management areas include a temporary RCRA TSD storage area. Ground and surface water contamination includes Tetrachloroethylene and Trichloroethylene. Restoration, monitoring/sweeps, access controls, and/or deed restrictions may be required for these areas to prevent disturbance, health and safety risks, and/or long-term release of toxins to the environment. No adverse impact to any other environmental resource area is expected.