

SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS

[TABS FINAL VERSION]

SCENARIO #650

TITLE: IND-0122 CLOSE LONE STAR AAP

GENERAL DESCRIPTION: Close Lone Star Army Ammunition Plant. Relocate the storage and demilitarization functions to McAlester AAP. Relocate the 105mm and 155mm ICM artillery, MLRS artillery, hand grenades, 60 mm and 81mm mortars functions to Milan AAP. Relocate mines function and detonators/relays/delays workload to Iowa AAP. Relocate demolition charges functions to Crane AAA.

This assessment is based on the following assumptions:

1. Relocating the storage and demilitarization functions involves no new personnel or new facilities at McAlester.
2. Relocating the 105mm and 155mm ICM artillery, MLRS artillery, hand grenades, 60 mm and 81mm mortars functions involves workload equal to 135 personnel and no new facilities added to Milan AAP. No actual personnel transfer.
3. Relocating mines functions involves workload equal to 10 personnel and no new facilities added to Iowa AAP. No actual personnel transfer. Relocating the detonators/relays/delays workload involves workload equal to 25 personnel. No actual personnel transfer. Basic capability exists at Iowa for mine functions, no need to construct lead processing plant, per phone conversation with IND JCSG representative, April 28, 2005.
5. Relocating demolition charges involves workload equal to 10 personnel added to Crane AAP. No actual personnel transfer.

ANALYST: _____

DATE: 28 APRIL 2005

Env Resource Area	#1 Gaining Installation Assessment Inst Name: <u>McAlester AAP</u>	Analyst Comments (& data source(s) that drive assessment)
Air Quality	Likely No Impact. Although no transfer of personnel or new construction, permit and threshold exceedences have been reported. Additional activity may require Air Conformity Analysis.	#211 – Threshold exceedences reported for PM10 and VOC #212-Exceeds major source threshold for Manganese #213 In attainment for CO and Ozone (1 hour) rest are “unclassifiable” (Per EPA website, considered in attainment) #218/ISR2 No mission impact indicated #220 Major Operating Permit, Title V permits for installation.
Cultural/Archeological/Tribal Resources	Likely no impact due to no new construction required. A very limited portion these installation has been surveyed for cultural resources (<5%); therefore, the extent of cultural resources on the installation and impacts to these resources is uncertain.	#201 No constraints #229, 231 No cem/native people’s sites #230 No arch resources identified. #232- High potential for arch sites #233 – 4.45% of installation surveyed #234 – Choctow, Caddo, Quapaw, Wichita, Chickasaw, have asserted interest in some archeological resource #235 – 5 Historic districts identified with 210 historic properties #236 – No Prog. Agreement in place ISR2 - no adverse impact to mission.
Dredging	No Impact	No dredging impacts for this scenario.

Land Use Constraints/Sensitive Resource Areas	No Impact	#30 - 28,290 buildable acres available 0 acres required for additional storage buildings or expansion (per phone conversation with Don Morrison et.al. (RIA) 1-3-05). #254 -No SRAs restricting training/mission #256 -No SRAs nearby CERL-Minimal Encroachment
Marine Mammals /Marine Resources/Sanctuaries	No Impact	There are no impacts to marine resources from this proposal.
Noise	No Impact	#239 - No Noise contours that extend offsite.
Threatened & Endangered Species/Critical Habitat	No Impact. TES on installation include American Burying Beetle and restrict operations. Additional operations may further impact TES, leading to additional restrictions on operations.	#249 - No restrictions #259 - 1 species (American Burying Beetle) inhabits main installation area (soil disruptions of >5 acres must be coordinated with USFWS) #260 - No critical habitat #261 - No biological opinion #262 - No restrictions #263, 264 - No candidate species, no proposed habitat
Waste Management	No Impact	#269- Installation has a RCRA X Permit (interim or final status not specified) #265 – Has hazardous waste TSD facility (RCRA Part B Permit) #272 – Has SWDF; 33% filled
Water Resources	Likely No Impact. Water quality impaired by pollutant loadings. Current operations may contribute to impaired water quality. Significant mitigation measures to limit releases may be required to reduce impacts to water quality and achieve USEPA Water Quality Standards. Wastewater permit modifications/pollution prevention measures may be required due to additional workload.	#276 Installation not over a recharge zone #278 Not subject to McCarren Act #279 Installation discharges to an impaired waterway (organic loading), but current operations do not further impair waterway #293 No potable water restrictions #282 Installation uses one On Military Installation Gov't-Owned Plant for industrial wastewater treatment #297 – Installation uses one On Military Installation Gov't-Owned STP #291-1 On Military Installation Gov't-Owned Plant for potable water IREM -infrastructure can support additional 1,974 personnel
Wetlands	No Impact	#251 Installation surveyed 9/20/99 #257 6.86% of installation is constrained by wetlands.

SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED);
SCENARIO #650

Env Resource Area	#2 <i>Gaining</i> Installation Assessment Inst Name: Milan AAP	Analyst Comments (& data source(s) that drive assessment)
Air Quality	No Impact – No new construction planned.	#211 – No exceedences reported for known criteria pollutants. #212-No exceedences reported #213 In attainment for all pollutants #218/ISR2 No mission impact indicated #220 Major Operating Permit, Title V permits for installation.
Cultural/Archeological/Tribal Resources	No Impact due to no new construction required.	#229 Cemeteries are present #230 11 unspecified sites of high archeological interest which do not impact mission or land use #231 Native people sites identified #232-Areas with high potential for archaeological resources identified #233 7.2% of the installation surveyed #234 No tribes have asserted interest #235 1 Historic District identified #236 Programmatic agreement in place
Dredging	No Impact	No dredging impacts for this scenario.
Land Use Constraints/Sensitive Resource Areas	No Impact	#30/#198 1,848 buildable acres available; 0 needed. #201 No constraints #254, #256 No SRA restricting training/mission
Marine Mammals/Marine Resources/Marine	No Impact	There are no impacts to marine resources from this proposal.
Noise	No Impact.	#239 106 acres of Noise Zone III and 994 acres of Noise Zone II extend off installation, which is moderately encroached by development.
Threatened/Endangered Species/Critical	No Impact	#249, 259, 260 No TES or critical habitat and no restrictions present. #261 thru 264 No biological opinions, no candidate species.
Waste Management	No Impact	# 269. Gaining installation has a RCRA X Permit (interim status) #272-Permitted SWDF #265-Permitted Hazardous waste TSDF

Water Resources	No Impact. Wastewater permit modifications/pollution prevention measures may be required due to additional workload.	#276 Installation not over a recharge zone #278 Not subject to McCarren Act #279 Installation does not discharge into impaired waterway #291- 1 On Military Installation Gov't-Owned Plant for potable water #292 Significant capacity remains in potable water - IREM reports infrastructure can support additional 742 people #293 No restrictions reported #297 Significant capacity remains for municipal and industrial effluent #282-Installation has one On Military Installation Gov't-Owned Plant for industrial wastewater
Wetlands	No Impact	#257 1.6% of installation is restricted by wetlands – specifics on restrictions not provided #251-Survey complete

Subject: Summary of Scenario Environmental Impacts (Continued);

SCENARIO #650

Env Resource Area	#3 <i>Gaining</i> Installation Assessment Inst Name: Iowa AAP	Analyst Comments (& data source(s) that drive assessment)
Air Quality	No Impact. In attainment for all criteria pollutants.	#213 – In attainment for all criteria pollutants #211 –No exceedences reported #212-No exceedences reported #220 – Holds 1 Major Operating Permit (SIC code 9711, 3483) and has a Title V application on file with the State; however, a permit has not been issued. #222 – No Emissions Credit Trading program available #218 –Restrictions reported on open burning operations for installation due to IDNR regulations on open burning restrictions/ban.
Cultural/Archeological/Tribal Resources	Likely no impact due to no new construction required. Cultural resources currently restrict operations. Additional operations may impact these resources, which may lead to restrictions on these operations as well. Potential impacts may occur since resources must be evaluated on a case-by-case basis, thereby causing increased delays and costs.	#233- Installation 100% surveyed #235 – No historic prop identified #230 – 291 Known historic and prehistoric arch sites, restricts future construction and trng/opns. No restrictions within chain-link fenced production areas. Addit'l survey req'd on agricultural land if ground disturbance is > 8". All other areas require addit'l survey work for any ground disturbance. #231 – Native People sites identified #236 – No Progr. Agreement with SHPO #234 – 3 tribes assert interest in archaeological sites, rare interaction #232 – Areas with high arch potential identified
Dredging	No Impact - no dredging required for scenario.	#226, 227, 228 – Not applicable
Land Use Constraints/Sensitive Resource Areas	No Impact. Two SRAs identified but cause no restrictions.	#30 – 2,806 BA available, 0 required #201 – No constraints reported #256 – 2 Sensitive Resource Areas identified but cause no restrictions CERL-Moderate encroachment
Marine Mammals/ Marine Resources / Marine Sanctuarie	No impact	#248, #249 #250, #252, #253 - No restrictions
Noise	No impact - no major noise expected due to this proposal.	#239 – Installation does not have noise contours that extend off installation.

<p>Threatened & Endangered Species/Critical Habitat</p>	<p>No impact.</p> <p>TES on installation include Indiana Bat (<i>Myotis sodalists</i>), which has delayed operations for training on smoke or blank ammunition from March 15 to October 31 and prohibits tree cutting from April 1 to September 30. Impacts 27% of installation.</p> <p>TES already restrict operations. Additional operations may further impact TES leading to additional restrictions on operations.</p>	<p>#259 – TES on installation include Indiana Bat (<i>Myotis sodalists</i>), which has delayed operations for training on smoke or blank ammunition from March 15 to October 31 and prohibits tree cutting from April 1 to September 30. Impacts 27% of installation.</p> <p>#260 – No critical habitat identified</p> <p>#261 – No Biological Opinion</p> <p>#262 – No development restrictions reported.</p> <p>#263, #264 – No candidate species/habitat reported</p> <p>#201 – No restrictions reported</p>
<p>Waste Management</p>	<p>No impact.</p>	<p>#269 – Installation has RCRA Subpart X OB/OD Permit, and Iowa AAP interim RCRA Part B permit for OB/OD, submitted 11/1988.</p> <p>#265- Has RCRA (TSD) facility.</p> <p>#272 –Has permitted solid waste disposal facility, 85% filled.</p>
<p>Water Resources</p>	<p>Likely No Impact. Wastewater permit modifications/pollution prevention measures due to additional workload may be required. Installation may need upgrades to industrial wastewater treatment systems for lead processing.</p>	<p>#276 – Installation not located over a sole-source aquifer</p> <p>#278 – McCarren Amend does not apply</p> <p>#293 – No potable water restrictions</p> <p>#291 –1 publicly owned off-installation plant for potable water.</p> <p>IREM indicates remaining capacity for potable water to support 4,385 personnel</p> <p>#279 –Installation does not discharge to impaired waterway</p> <p>#297 – Two On Military Installation Govt Owned Sewage Treatment Plants</p> <p>#282 – 1 Industrial Gov’t owned wastewater treatment system located on installation.</p> <p>#822, 824, 825, 826, ISRII – no restrictions reported</p>
<p>Wetlands</p>	<p>No impact.</p>	<p>#251- Survey completed 08/99.</p> <p>#257 – Wetlands affect 0.6% of installation, restrict operations by avoiding wetlands if possible and obtain permit if required.</p>

**SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED);
SCENARIO #650**

Env Resource Area	#4 Gaining Installation Assessment Inst Name: Crane AD	Analyst Comments (& data source(s) that drive assessment)
Air Quality	Likely no impact. Although in attainment for criteria pollutants and no new construction required, air permit modifications required due to reported threshold exceedences and addition of signal and grenade/explosive/mine activities. Air Conformity Analysis required.	#213 – Installation is in attainment area for all criteria pollutants. #211 - Exceeded major source threshold limits for NOX, PM10 and CO. #212-No permit limits reported #220 -Major operating permit #218/ISR2 - No mission impact indicated.
Cultural/Archeological/Tribal Resources	Likely no impact; no new construction required. Cultural/archaeological/historical resources currently restrict operations. Additional operations may impact these resources, which may lead to restrictions on these operations as well. 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.	#229, 231 No cemeteries/native people’s sites #233 - 2.34% installation surveyed #230 - 63 archeological resources; most restrict future construction and training/operations #232 - High potential for arch sites #234 - No tribes have asserted interest; #235 - 3 historic districts with 64 total resources #236 - Programmatic Agreement in place. ISR2 - No adverse impact to mission.
Dredging	No Impact	No dredging impacts for this scenario.
Land Use Constraints/Sensitive Resource Areas	No Impact	#30 - 5,429 buildable acres available and 0 needed. #254, #256 No SRA restricting training/mission #201 No constraints CERL-Minimal encroachment
Marine Mammals/Marine Resources/Marine	No Impact	There are no impacts to marine resources from this proposal.
Noise	No Impact.	#239 – 28,865 acres of Noise Zone II extend off range and 4,650 acres of Noise Zone II extend off installation. 15,341 acres of Noise Zone III extend off range, which is minimally encroached by development.

<p>Threatened & Endangered Species/Critical Habitat</p>	<p>No Impact. TES on installation include the Indiana Bat and Bald Eagle, which affects 80 acres.</p> <p>TES already restrict operations. Additional operations may further impact TES, leading to additional restrictions on operations.</p>	<p>#249 - No restrictions #259 - 2 Federal TES species (Indiana Bat, Bald Eagle) on site, affects 80 acres (no destruction of trees 600 feet radius distance from nesting site during certain times) #260 - No critical habitat #261 - No biological opinion #262 - No restrictions #263, 264 - No candidate species, no proposed habitat</p>
<p>Waste Management</p>	<p>No Impact.</p>	<p>#269 – Has RCRA Subpart X Permit #265 – Has hazardous waste TSD facility #272 – Has SWDF; 70% filled</p>
<p>Water Resources</p>	<p>Likely No Impact. Water quality impaired by pollutant loadings. Current operations may contribute to impaired water quality. Significant mitigation measures to limit releases may be required to reduce impacts to water quality and achieve USEPA Water Quality Standards.</p> <p>Wastewater permit modifications/pollution prevention measures may be required due to additional workload.</p>	<p>#276 Installation not over a recharge zone #278 Not subject to McCarren Act #279 Installation does discharge into impaired waterway (E.coli)– which is source of drinking water #293 No potable water restrictions #282 Numerous On Military Installation Govt Owned Plants for industrial wastewater treatment. Significant industrial wastewater treatment capacity on installation. IREM indicates water infrastructure can support additional 1,020 personnel #291-1 On Military Installation Govt Owned Plant for potable water #297-1 On Military Installation Govt Owned Plant for sewage treatment</p>
<p>Wetlands</p>	<p>No Impact.</p>	<p>#251 - Installation surveyed on 6/98 #257 - 5% of the installation has restricted wetlands (no dredging)</p>

SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED)

SCENARIO #650 (IND-0122V2)

Env Resource Area	<i>Losing Installation Assessment</i> Inst Name: Lone Star AAP	Analyst Comments (& data source(s) that drive assessment)
Air Quality	No impact	#213 All NAAQS in attainment.
Cultural/Archaeological/ Tribal Resources	Surveys and consultation with SHPO will be required to ensure protection of cultural resources at the installation.	#230, 235 No Arch or Historic sites reported. #231 – Sacred sites/Native People’s Sites on installation #232 - Sites with high potential for arch resources were reported.
Dredging	No impact	
Land Use Constraints/ Sensitive Resource Areas	Remediation of munitions contaminants on 3 operational ranges may be required - cost and impact TBD after EBS.	#273 No MMRA’s Range Inventory - 3 operational ranges #240 - DERA CTC: \$ 2.742M; \$21.3M spent thru FY03. Operational Range costs -\$1.002M to \$24.176M per Ex
Marine Mammals/ Marine Birds	No impact	
Noise	No impact	
Threatened & Endangered Species/ Critical Habitat	Federally listed species include the American Alligator. Continued management and/or deed restrictions may be necessary to insure future protection.	#259- 1 TES (American Alligator) with no restrictions. #260-264 No candidate species / habitat was identified
Waste Management	Special waste management areas include RCRA TSDF, solid waste disposal facility, and OB/OD area. Restoration, monitoring /sweeps, access controls, and/or deed restrictions may be required to prevent disturbance and health/safety risks and/or long-term release of toxins to environmental media.	#265 Has RCRA TSD facility #269 Has RCRA Subpart X Permit #272 Has permitted solid waste disposal facility
Water Resources	Groundwater water contamination issues include Benzene, 1,1-Dichloroethene, cis-1,2,-Dichlorethene, and Vinyl Chloride. Surface water contamination includes cadmium, copper, zinc, lead, and barium. Restoration and/or monitoring of contaminated media may be required after closure in order to prevent significant long-term impacts to the environment. Installation has industrial wastewater treatment plant that may require closure.	#275 - Groundwater contamination includes Benzene, 1,1-Dichloroethene, cis-1,2,-Dichlorethene, and Vinyl Chloride. #281 - Surface water contamination includes cadmium, copper, zinc, lead, and barium. #822 Has industrial wastewater treatment plant. #297-No sewage treatment plant #291 – Off installation publicly-owned plants for potable water
Wetlands	No impact	

**SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED);
SCENARIO #650 (IND-0122v2)**

IMPACTS OF COSTS

Env Resource Area	Gaining Installation Inst Name: McAlester, Milan, Iowa, Crane	Losing Installation Inst Name: Lone Star AAP
Environmental Restoration*	None	DERA CTC: \$2.742M 3 Operational Ranges - cost to cleanup (UXO sweep and restoration) estimated between \$2.1M - \$5.8M (AEC Operational Range Database). Operational Range costs -\$1.002M to \$24.176M
Waste Management	None	Restoration/monitoring of hazardous waste sites - \$500K - \$10M+ Land Use Controls management/enforcement in perpetuity - \$50K - \$100K (annual) Asbestos/Lead-based Paint Removal - \$200K-\$1M -Controlled burning/decontamination/demolition of industrial structures/buildings heavily contaminated with explosives/metals -\$1M-\$10M+
Environmental Compliance	<u>McAlester:</u> -Air Conformity Analysis -\$25K-\$75K (incl no mitigation costs) -Realignment NEPA – \$1M (EIS- industrial) -Endangered Species Management (includes monitoring) -\$20K-\$2M -Install Best Management Practices to protect impaired waterways and reduce non-point source runoff from training areas and ranges -\$100K-\$3M <u>Milan:</u> -Realignment NEPA at gaining base – industrial-\$1M (EIS)	Environmental Baseline Survey (EBS) \$300K-\$500K. -Access controls/caretaker management - \$500K-\$1M (annual)

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Environmental Compliance (CONT'D)</p>	<p><u>Iowa:</u> -Realignment NEPA – \$1M (EIS- industrial) -Endangered Species Management (includes monitoring) -\$20K-\$2M</p> <p><u>Crane:</u> -Air Conformity Analysis -\$25K-\$75K (incl no mitigation costs) -Realignment NEPA – \$1M (EIS- industrial) -Endangered Species Management (includes monitoring) -\$20K-\$2M -Install Best Management Practices to protect impaired waterways and reduce non-point source runoff from training areas and ranges -\$100K-\$3M</p>	
<p>COBRA Costs:</p>	<p><u>McAlester:</u> -NEPA-\$1M (EIS)</p> <p><u>Milan:</u> -NEPA-\$1M (EIS)</p> <p><u>Iowa:</u> -NEPA-\$1M (EIS)</p> <p><u>Crane:</u> -Air Conformity Analysis -\$50K -NEPA-\$1M (EIS)</p>	<p>EBS plus disposal EIS - \$1.3M</p>