

**SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS**

**[TABS FINAL VERSION]**

**SCENARIO #634**

**TITLE: IND-0106V2 CLOSE KANSAS AAP**

**GENERAL DESCRIPTION:** Close Kansas Army Ammunition Plant. Relocate the Sensor Fuzed Weapon/Cluster Bomb function to McAlester AAP. Relocate the 155MM ICM artillery function and the 60MM, 81MM and 120MM mortar functions to Milan AAP. Relocate the 105 and 155MM HE artillery function to Iowa AAP. Relocate the missile warhead production function to Iowa AAP and McAlester AAP. Relocate the detonators/relays/delays workload to Crane AAP.

This assessment is based on the following assumptions:

1. Moving Sensor Fuzed Weapon/Cluster Bomb function, and relocate the missile warhead production function to McAlester AAP - involves 0 personnel and no new facilities.
2. Relocate the 155MM ICM artillery function and the 60MM, 81MM and 120MM mortar functions - involves 0 personnel and no new facilities at Milan AAP.
3. Relocate the 155MM ICM artillery function, and relocate the missile warhead production function involves 0 personnel and no new facilities at Iowa AAP.
4. Relocate the detonators/relays/delays workload involves no personnel added to Crane AAP and no new facilities.
5. Though no personnel or new construction is associated with this scenario, full SSEIs for each installation were developed since industrial output are assumed to increase

**ANALYST:** \_\_\_\_\_

**LAST UPDATED:** 5/4/2005

Env Resource Area	#1 Gaining Installation Assessment Inst Name: <u>McAlester AAP</u>	Analyst Comments (& data source(s) that drive assessment)
Air Quality	No impact. In attainment for CO and other pollutants are "unclassifiable". No new construction, only upgrading existing facilities	#211 - No permit/Major Source threshold exceedances reported. #213 in attainment for CO and Ozone (1 hour) and all other pollutants are "unclassifiable" #218/ISR2 No mission impact indicated #220 Major Operating Permit, Title V permits for installation.
Cultural/Archeological/Tribal Resources	No Impact. No archeological or native people's sites identified and no restrictions on construction/training/operations. 211 historic properties identified.	#229, 231 No cemeteries/native people's sites #232 High potential for archeological sites #230 No archeological resources identified. #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 211 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, no acres required (per phone conversation with Industrial JCSG team. (RIA) 1-3-05). #201 No constraints on operations #254 No SRAs restricting training/mission #256 No SRAs nearby CERL Study - minimal encroachment

<b>Marine Mammals/Marine Resources/Marine</b>	No Impact	There are no impacts to marine resources from this proposal.
<b>Noise</b>	No Impact	#239 No Noise contours that extend offsite.
<b>Threatened &amp; Endangered Species/Critical Habitat</b>	One federally listed species (American Burying Beetle) on installation which causes restrictions on any soil disturbance activity greater than 5 acres – consultations with USFWS required.  Additional operations may further impact threatened / endangered species leading to additional restrictions on training or 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
<b>Waste Management</b>	No Impact.	#269 - Installation has a RCRA X Permit (interim or final status not specified)
<b>Water Resources</b>	Impaired waterway may be further impacted by additional operations. Significant mitigation measures to limit releases may be required to reduce impacts to water quality and achieve USEPA Water Quality Standards.	#276 Installation not over a recharge zone #278 Not subject to McCarren Act #279 Installation does discharge to an impaired waterway (organic loading), but current operations do not currently impair waterway #293 No potable water restrictions #282 Daily industrial wastewater treatment unknown. IREM- Infrastructure can support 1,974 additional personnel-Scenario adds 55 personnel. (50 SFW/Cluster Bomb, 5 Missile)
<b>Wetlands</b>	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 #IND-0106V2 (634)**

Env Resource Area	#2 Gaining Installation Assessment Inst Name: <u>Milan AAP</u>	Analyst Comments (& data source(s) that drive assessment)
Air Quality	No Impact. In attainment for all pollutants.	#211 – CO permit/Major Source thresholds 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. 1 Historic district identified but specific resources not identified and 11 archeological sites neither of which impose restrictions of any kind.	#229 Cemeteries are present #230 11 archeological sites which do not impact mission or land use or training. #231 Native people sites identified #232 High potential for archeological sites #233 7.2% of the installation surveyed #234 No tribes have asserted interest #235 1 Historic District identified but no resources identified #236 Programmatic agreement in place
Dredging	No Impact	No dredging impacts for this scenario.
Land Use Constraints/Sensitive Resource Areas	No Impact	#30 1,848 buildable acres available; 0 needed. #201 No constraints #254, #256 No SRA restricting training/mission CERL Study – Moderate encroachment
Marine Mammals/Marine Resources/Marine	No Impact	There are no impacts to marine resources from this proposal.
Noise	No Impact.	#239 433 acres of Noise Zone 2 that extends outside the installation boundaries, 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)

<p><b>Water Resources</b></p>	<p>No Impact.</p>	<p>#276 Installation not over a recharge zone                  #278 Not subject to McCarren Act                  #279 Installation does not discharge into impaired waterway                  #291- #292 Significant capacity remains in potable water - IREM reports infrastructure can support additional 742 people; scenario adds 20 pers                  #293 No restrictions reported                  #297 Significant capacity remains for municipal and industrial effluent                  #282-Installation has one On Military Installation Govt Owned Plant for industrial wastewater</p>
<p><b>Wetlands</b></p>	<p>No Impact.</p>	<p>#251 Installation surveyed on 06/98                  #257 1.6% of installation is restricted by wetlands – specifics on restrictions not provided</p>

**SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED);**  
**SCENARIO #IND-0106V2 (634)**

Env Resource Area	#3 Gaining Installation Assessment Inst Name: <u>Iowa AAP</u>	Analyst Comments (& data source(s) that drive assessment)
Air Quality	No Impact. In attainment for all pollutants and no exceedances expected.	#211 - No permit/Major Source thresholds exceedances reported #213 In attainment for all pollutants #218/ISR – Open burning operations is restricted which impacts installation but not impacting mission #220 Major Operating Permit, Title V permits for installation.
Cultural/Archeological/Tribal Resources	No Impact. Cultural/archeological/tribal resources currently restrict operations. Additional operations may impact these resources which may lead to increased delays and costs.	#229 Cemeteries are present #230 291 archeological resources/sacred sites that restrict future construction and training. #231 Native people sites identified #233 100% of the installation surveyed #234 3 Tribes (Iowa Tribe, Sac and Fox, and Winnebago) have asserted interest in resources, but contact is rare. #235 No Historic Districts/Sites identified #236 No Programmatic agreement in place
Dredging	No Impact	No dredging impacts for this scenario.
Land Use Constraints/Sensitive Resource Areas	No Impact	#30 2,806 buildable acres available and 0 needed – existing capacity exists #201 No constraints #254 No SRAs restricting training/mission #256 2 SRA nearby, but not restricting mission CERL Study – Moderate encroachment
Marine Mammals/Marine Resources/Marine	No Impact	There are no impacts to marine resources from this proposal.
Noise	No Impact	#239 No noise constraints currently and contours do not extend offsite.

<p><b>Threatened &amp; Endangered Species/Critical Habitat</b></p>	<p>One federally listed species (Indiana Bat) which affects 27% of the installation by preventing/restricting training that uses smoke or blank ammunition from March 15 through October 31.</p> <p>Additional operations may further impact threatened / endangered species leading to additional restrictions on training or operations.</p>	<p>#249 No restrictions                  #259 1 Federal TES species (Indiana Bat) on site, affects 27% of installation (no training on smoke and blank ammo for 5 months)                  #260 No critical habitat                  #261 No biological opinion                  #262 No restrictions                  #263, 264 No candidate species, no proposed habitat</p>
<p><b>Waste Management</b></p>	<p>No Impact.</p>	<p># 269 Gaining installation has a RCRA X Permit (interim status)</p>
<p><b>Water Resources</b></p>	<p>No Impact</p>	<p>#276 Installation not over a recharge zone                  #278 Not subject to McCarren Act                  #279 Installation does not discharge into impaired waterway                  #293 No potable water restrictions                  #291 Installation uses one Off Military Installation Publicly Owned for potable water                  #282 Installation uses one On Military Installation Gov't Owned Plant for industrial wastewater treatment                  IREM reports infrastructure can support additional 4,385 pers; scenario adds 15</p>
<p><b>Wetlands</b></p>	<p>No Impact</p>	<p>#251 Installation Surveyed in 1999                  #257 0.6% of installation is restricted by wetlands – avoid wetlands altogether and obtain permit prior to making any modifications.</p>

**SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED);**  
**SCENARIO #IND-0106V2 (634)**

Env Resource Area	#4 Gaining Installation Assessment Inst Name: <u>Crane AD</u>	Analyst Comments (& data source(s) that drive assessment)
Air Quality	Impact expected. CO, NOX, PM10 threshold exceedances likely due to additional operations. Addition of operations at the receiving installation will require New Source Review Permitting. A more detailed emission analysis will be required to determine regulatory impact of new activities. This function also requires permits for a lead treatment plant.	#213 – Installation is in attainment area for all criteria pollutants. #211 - Major Source thresholds exceedances reported for NOX, PM10 and CO #212-Exceedences for Manganese reported #220 -Major operating permit #218/ISR2 - No mission impact indicated.
Cultural/Archeological/Tribal Resources	63 archeological sites identified, with restrictions on future construction and training / operations. 66 historic properties identified.  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. Cultural/archeological/tribal resources currently restrict operations. Additional operations may impact these resources which may lead to increased delays and costs.	#201 No constraints #229, 231 No cemeteries/native people's sites #232 – High potential for archeological sites #230 63 archeological resources that do not restrict current construction but constricts future construction and training/operations reported #233 – 2.34% of installation surveyed #234 – No tribes have asserted interest; #235- 3 historic districts with 66 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 15 acres required (based on 1 40,000 SF facility- twice the size of a small admin org) #254, #256 No SRA restricting training/mission CERL Study – Minimal encroachment
Marine Mammals/Marine Resources/Marine	No Impact	There are no impacts to marine resources from this proposal.
Noise	Due to nature of additional operations and associated testing further evaluation is required.	#239 – 4,650 acres of Noise Zone 2 that extends outside the installation boundaries, which is minimally encroached by development.

<b>Threatened &amp; Endangered Species/Critical Habitat</b>	Installation has two Federally Listed species (Indiana Bat and Bald Eagle) which affect 80 acres of land by preventing the destruction of trees within a 600 foot radius from nesting site during certain times. Additional operations may further impact threatened / endangered species leading to additional restrictions on training or operations.	#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
<b>Waste Management</b>	No Impact – permit modifications may be required for lead processing	Q#269 – Has RCRA Part X Permit
<b>Water Resources</b>	Impaired waterway may be further impacted by additional operations. Significant mitigation measures to limit releases may be required to reduce impacts to water quality and achieve USEPA Water Quality Standards. Installation may need upgrades to industrial wastewater treatment to handle additional lead wastes.	#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 Installation uses 13 On Military Installation Govt Owned Plants for industrial wastewater treatment #291 Installation uses one On Military Installation Govt Owned Plant for potable water production IREM indicates infrastructure can support additional 1,020 personnel scenario adds none.
<b>Wetlands</b>	No Impacts.	#251 - Installation surveyed on 6/98 #257 - 5% of the installation has restricted wetlands (no dredging)

**SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED);**  
**SCENARIO #IND-0106V2 (634)**

Env Resource Area	<i>Losing</i> Installation Assessment Inst Name: <b>Kansas AAP</b>	Analyst Comments (& data source(s) that drive assessment)
Air Quality	No impact	#213 All NAAQS in attainment.
Cultural/ Archeological Resources	Surveys and consultation with SHPO will be required to ensure protection of cultural resources at the installation.	#230, 231, 235 No Arch or Historic sites reported. #232 - Sites with high potential for arch resources were reported.
Drudging	No impact	
Land Use Constraints/Sensitive Resource Areas	Special waste management areas at the installation include several IRP sites and operational ranges. 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 environmental media.	#240 – DERP IRP: \$ 33.183M, spent \$30.7M through FY03 No MMRP sites FY02 DERP ARC - 5 operational ranges and 1 small arms range
Marine Mammals/Marine Resources	No impact	
Noise	No impact	
Threatened & Endangered Species/Critical	No impact	#259-264 No TES or candidate species / habitat was identified
Waste Management	Special waste management areas include RCRA TSD, OB/OD facilities, and solid waste disposal facility. Restoration, monitoring /sweeps, access controls, and/or deed restrictions may be required to prevent disturbance and health/safety risks from these areas.	#265 Has RCRA TSD facility #269 Has RCRA Subpart X Permit #272 Has permitted solid waste disposal facility
Water Resources	Groundwater contamination issues include metals, VOCs, and explosives. Surface water contamination includes Dioxins/Furans. Restoration and/or monitoring of contaminated media may be required after closure. Installation has domestic and industrial wastewater treatment plants that may require closure.	#275 - Groundwater contamination includes Arsenic, chromium, copper, lead, Manganese, VOC's (Tetrachloroethene (PCE), Trichloroethene (TCE) Vinyl Chloride), and explosives, (RDX, HMX, TNT). #281 - Surface water contamination includes Dioxins/Furans. #822 Has domestic and industrial wastewater treatment plants.

Wetlands	No impact	
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SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED);  
 SCENARIO #IND-0106V2 (634)

**IMPACTS OF COSTS**

Env Resource Area	Gaining Installations Inst Name: <b>McAlester, Milan, Iowa, Crane</b>	Losing Installation Inst Name: <b>Kansas AAP</b>
Environmental Restoration*	None	DERA CTC: \$ 33.183M 6 Operational Ranges - cost to cleanup (UXO sweep and restoration) estimated between \$4.7M - \$46.6M.
Waste Management	None	Restoration of hazardous waste sites - \$500K - \$10M  Land Use Controls management/enforcement in perpetuity - \$50K - \$100K  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> -Realignment NEPA at gaining base – industrial \$1M (EIS) -Endangered Species Management (includes monitoring)-\$20K-\$2M -Install Best Mgt Practices to protect impaired waterways and reduce non-point source runoff from training areas and ranges - \$100K - \$3M. <u>Milan:</u> -Air Conformity Analysis - \$25K-\$75K -New Source Review Analysis - \$100K-\$500K. -Realignment NEPA at gaining base – industrial \$1M (EIS)	-Environmental Baseline Survey (EBS) \$300K-\$500K  -Access controls/caretaker management of cultural sites \$500K-\$1M

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Environmental Compliance (CONT'D)</b></p>	<p><u>Iowa:</u>                      -Realignment NEPA at gaining base – industrial- \$1M (EIS)                      -Endangered Species Management (includes monitoring)-\$20K-\$2M  <u>Crane:</u>                      Air Conformity Analysis - \$25K-\$75K                      New Source Review Analysis - \$100K-\$500K.                      Archeological/tribal resources inventory - \$25 -                      -Endangered Species Management (includes monitoring)-\$20K-\$2M                      -Install Best Mgt Practices to protect impaired waterways and reduce non-point source runoff from training areas and ranges - \$100K - \$3M.</p>	
<p><b>COBRA Costs:</b></p>	<p><u>McAlester:</u>                      -NEPA-\$1M (EIS)  <u>Milan:</u>                      - NEPA \$1M (EIS)  <u>Iowa:</u>                      -NEPA \$1M (EIS)  <u>Crane:</u>                      -New Source Review - \$100K                      -Air Conformity Analysis -\$50K                      -NEPA \$1M (EIS)</p>	<p>EBS plus disposal EIS - \$1.3M</p>