

SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS [TABS FINAL VERSION]

SCENARIO #636

TITLE: IND-0108 CLOSE HAWTHORNE ARMY DEPOT

GENERAL DESCRIPTION: Close Hawthorne Army Depot. Relocate the storage and demilitarization functions to Tooele Army Depot.

This assessment is based on the following assumptions:

- 1. Moving storage and demilitarization functions involves 0 personnel and no new construction**

ANALYST: _____

LAST UPDATE: 27 APRIL 2005

Env Resource Area	<i>Gaining Installation Assessment</i> Inst Name: Tooele AD	Analyst Comments (& data source(s) that drive assessment)
Air Quality	Impact expected. In attainment for all pollutants. No Air Permits and associated thresholds reported. An Air Permit will likely be necessary to accept new demilitarization mission. Added operations will require New Source Review permitting.	#213 In attainment for all pollutants per State Division of Air Quality web site http://www.airquality.utah.gov/planning/nonattainment.htm . #211 - No permit/Major Source thresholds reported #214 Not projected to be in non-attainment areas #212 No Top 5 Haz. Pollutants reported #218/ISR No restrictions #220 No Permits (reported N/A)
Cultural/Archeological/Tribal Resources	No Impacts. 2 archeological/sacred sites identified and one site restricts training in 150 acre area. Cultural/ archeological/tribal resources currently restrict operations. Additional operations may impact these resources, which may lead to delays and costs.	#229, 231 No cemeteries/native people's sites #233 48% installation surveyed #235 No Historic properties/districts identified #230 2 archeological/sacred burial sites identified and one site restricts training in 150 acre area. #234 Skull Valley Band of Goshute Indians has asserted interest in some archeological resource – contact is rare #236 No programmatic Agreement
Dredging	No Impact	No dredging impacts for this scenario.
Land Use Constraints/Sensitive Resource Areas	No Impact	#30 - 12,360 buildable acres available #201 No constraints #254, #256 No SRA restrictions CERL Study – Minimal encroachment
Marine Mammals/Marine Resources/Marine Sanctuaries	No Impact	There are no impacts to marine resources from this proposal.
Noise	No Impact. Low noise generation from new mission and low encroachment.	#239 Installation has 18.7 acres of Noise zone II that extend off the installation boundaries

<p>Threatened & Endangered Species/Critical Habitat</p>	<p>No Impact.</p>	<p>#249 No restrictions #259 No TES #260 No critical habitat #261 No biological opinion #262 No species restrictions #263, 264 No candidate species, no proposed habitat</p>
<p>Waste Management</p>	<p>No Impact</p>	<p># 269 Gaining installation has a RCRA Part X Permit</p>
<p>Water Resources</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 #282 No industrial waste water treatment plant #293 No potable water restrictions #297 Installation uses one On Military Installation Govt Owned Plant and one Off Military Installation Publicly Owned Plant for sewage treatment. On Installation Sewage Treatment plant may require upgrade based on reported permitted/maximum daily outflows #291- Installation uses one Off Military Installation Publicly Owned plant and one On Military Installation Govt Owned Plant for potable water. IREM reports infrastructure can support 608 additional personnel</p>
<p>Wetlands</p>	<p>No Impact</p>	<p>#251 Wetlands survey completed on 06/01 #257 There are no jurisdictional wetlands on installation.</p>

**SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED);
SCENARIO #638**

Env Resource Area	<i> Losing Installation Assessment</i> Inst Name: Hawthorne Army Depot	Analyst Comments (& data source(s) that drive assessment)
Air Quality	No impact	#213 All NAAQS in attainment.
Cultural/Archeological/Tribal Resources	Installation has 3 archeological sites, on burial site, and 1,790 historic properties. Surveys and consultation with the SHPO will be required to ensure protection of cultural & historic resources at the installation.	#230 - 3 arch sites #232 - sites with high archeological potential were reported. #231 – One Native people/burial site #235 - Has 1,790 historic properties
Drudging	No impact	
Land Use Constraints/Sensitive Resource Areas	Special waste management areas include several IRP sites and 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 environmental media.	#273-MMRP sites present – DERP ARC - \$361.6M DERP Operational Range Costs – 16 operational ranges (test, training, impact; 27K+ acres including 3 small arms ranges) #240 - DERA (IRP)CTC: \$ 21.079M; \$28.25M spent through FY03
Marine Mammals/Marine Resources	No impact	
Noise	No impact	
Threatened & Endangered Species/Critical Habitat	Federally listed species include Lahontan Cutthroat Trout, and Bald Eagle. Continued management and/or deed restrictions may be necessary to insure future protection.	#259- TES (Lahontan Cutthroat Trout, Bald Eagle) reported, no restrictions. #260-#264 No candidate species / habitat was reported.
Waste Management	Special waste management areas include RCRA TSD 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 water contamination issues includes TCE, TNT, RDX, Petroleum Hydrocarbons (gasoline), PCE, TNB, Tetryl, and DNT. Surface water contamination includes UXO. 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 TCE, TNT, RDX, Petroleum Hydrocarbons (gasoline), PCE, TNB, Tetryl, and DNT. All except RDX are below EPA Region actions levels. #281 - Surface water contaminated with UXO on range and installation. #822 Has domestic and industrial wastewater treatment plants.

Wetlands	No impact	
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SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED);
SCENARIO #638

IMPACTS OF COSTS

Env Resource Area	Gaining Installation Inst Name: Tooele AD	Losing Installation Inst Name: Hawthorne Army Depot
Environmental Restoration*		DERA CTC (IRP & MMRP): \$383.2M 13 Operational Ranges - cost to cleanup (UXO clearance and restoration) estimated between \$29.2M - \$324.8M DERP ARC 2003: DERA IRP = \$21.6M DERA MMRP = \$361.6M
Waste Management		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	-New Source Review Analysis and Permitting -\$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
COBRA Costs:	-New Source Review -\$100K -Realignment NEPA at gaining base – industrial-\$1M (EIS)	EBS plus disposal EIS - \$1.3M

INSTALLATION ENVIRONMENTAL PROFILE
HAWTHORNE ARMY DEPOT

1. Air Quality (DoD Question #210-225):

- a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O₃ (1 hour & 8 Hour), and PM (PM₁₀, and PM_{2.5}). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O₃, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.
- b. HAWTHORNE ARMY DEPOT is in Attainment for all Criteria Pollutants. It holds a CAA Major Operating Permit. It holds a CAA Minor Operating Permit.

2. Cultural/Archeological/Tribal Resources (DoD Question #229-237):

- a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.
- b. Historic property has been identified on HAWTHORNE ARMY DEPOT. There is no programmatic agreement for historic property in place with the SHPO. It has sites with high archeological potential identified, which do not restrict construction and do not restrict operations. Formal consultation with Native Tribes is currently occurring.

3. Dredging (DoD Question # 226-228):

- a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.
- b. HAWTHORNE ARMY DEPOT has no impediments to dredging.

4. Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273):

- a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes

information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

- b. HAWTHORNE ARMY DEPOT reports that 17320 unconstrained acres are available for development out of 147236 total acres. HAWTHORNE ARMY DEPOT has spent \$0M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at \$0M. HAWTHORNE ARMY DEPOT has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and some with the potential for expansion. It has Military Munitions Response Areas.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

- a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.
- b. HAWTHORNE ARMY DEPOT is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

- a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.
- b. HAWTHORNE ARMY DEPOT does not have noise contours that extend off the installation's property. It has published noise abatement procedures for the main installation. It has published noise abatement procedures for the training and/or RDT&E range. It has published noise abatement procedures for the auxiliary airfield.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

- a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.
- b. HAWTHORNE ARMY DEPOT reported that federally-listed TES are present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

- a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.
- b. HAWTHORNE ARMY DEPOT has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) that accepts off-site waste. HAWTHORNE ARMY DEPOT has an interim or final RCRA Part

X facility that accepts off-site waste. HAWTHORNE ARMY DEPOT has an on-base solid waste disposal facility that is 45% filled.

9. Water Resources (DoD Question # 258, 274-299):

- a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.
- b. HAWTHORNE ARMY DEPOT does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is reported. The state requires permits for the withdrawal of groundwater. The installation reported restrictions or controls that limited the production or distribution of potable water.

(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):

HAWTHORNE ARMY DEPOT has 5493.1999999999998 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.797 MGD of potable and non-potable water, with the capacity to produce 2.3700000000000001 MGD. It processed on average 4.0000000000000001E-2 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 0.125 MGD. It processed on average 0.11 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 0.28000000000000003 MGD.

10. Wetlands (DoD Question # 251, 257):

- a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.
- b. HAWTHORNE ARMY DEPOT reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.

INSTALLATION ENVIRONMENTAL PROFILE

TOOELE ARMY DEPOT

1. Air Quality (DoD Question #210-225):

- a. The Clean Air Act (CAA) establishes health-based standards for air quality and all areas of the country are monitored to determine if they meet the standards. A major limiting factor is whether the installation is in an area designated nonattainment or maintenance (air quality is not meeting the standard) and is therefore subject to more stringent requirements, including the CAA General Conformity Rule. Conformity requires that any new emissions from military sources brought into the area must be offset by credits or accounted for in the State Implementation Plan (SIP) emissions budget. The criteria pollutants of concern include: CO, O₃ (1 hour & 8 Hour), and PM (PM₁₀, and PM_{2.5}). Installations in attainment areas are not restricted, while activities for installations in non-attainment areas may be restricted. Non-attainment areas are classified as to the degree of non-attainment: Marginal, Moderate, Serious, and in the case of O₃, Severe and Extreme. SIP Growth Allowances and Emission Reduction Credits are tools that can be used to accommodate increased emissions in a manner that conforms to a state's SIP. All areas of the country require operating permits if emissions from stationary sources exceed certain threshold amounts. Major sources already exceed the amount and are subject to permit requirements. Synthetic minor means the base has accepted legal limits to its emissions to stay under the major source threshold. Natural or true minor means the actual and potential emissions are below the threshold.
- b. TOOELE ARMY DEPOT is in Attainment for all Criteria Pollutants.

2. Cultural/Archeological/Tribal Resources (DoD Question #229-237):

- a. Many installations have historical, archeological, cultural and Tribal sites of interest. These sites and access to them often must be maintained, or consultation is typically required before changes can be made. The sites and any buffers surrounding them may reduce the quantity or quality of land or airspace available for training and maneuvers or even construction of new facilities. The presence of such sites needs to be recognized, but the fact that restrictions actually occur is the overriding factor the data call is trying to identify. A programmatic agreement with the State Historic Preservation Office (SHPO) facilitates management of these sites.
- b. No historic property has been identified on TOOELE ARMY DEPOT. There is no programmatic agreement for historic property in place with the SHPO. It does not have sites with high archeological potential identified. Contact with Native Tribes has rarely occurred.

3. Dredging (DoD Question # 226-228):

- a. Dredging allows for free navigation of vessels through ports, channels, and rivers. Identification of sites with remaining capacity for the proper disposal of dredge spoil is the primary focus of the profile. However, the presence of unexploded ordnance or any other impediment that restricts the ability to dredge is also a consideration.
- b. TOOELE ARMY DEPOT has no impediments to dredging.

4. Land Use Constraints/Sensitive Resource Areas (DoD Question #198-201, 238, 240-247, 254-256, 273):

- a. Land use can be encroached from both internal and external pressures. This resource area combines several different types of possible constraints. It captures the variety of constraints not otherwise covered by other areas that could restrict operations or development. The areas include electromagnetic radiation or emissions, environmental restoration sites (on and off installation), military munitions response areas, explosive safety quantity distance arcs, treaties, underground storage tanks, sensitive resource areas, as well as policies, rules, regulations, and activities of other federal, state, tribal and local agencies. This area also captures other constraining factors from animals and wildlife that are not endangered but cause operational restrictions. This resource area specifically includes information on known environmental restoration costs through FY03 and the projected cost-to-complete the restoration.

- b. TOOELE ARMY DEPOT reports that 13460 unconstrained acres are available for development out of 23063 total acres. TOOELE ARMY DEPOT has spent \$82.29999999999997M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at \$19M. TOOELE ARMY DEPOT has Explosive Safety Quantity Distance Arcs, none of which require safety waivers, and all with the potential for expansion. It has Military Munitions Response Areas.

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Question #248-250, 252-253):

- a. This area captures the extent of any restrictions on near shore or open water testing, training or operations as a result of laws protecting Marine Mammals, Essential Fish Habitat, and other related marine resources.
- b. TOOELE ARMY DEPOT is not impacted by laws and regulations pertaining to Marine Mammal Protection Act, Essential Fish Habitats & Fisheries and Marine Sanctuaries, which may adversely restrict navigation and operations.

6. Noise (DoD Question # 202-209, 239):

- a. Military operations, particularly aircraft operations and weapons firing, may generate noise that can impact property outside of the installation. Installations with significant noise will typically generate maps that predict noise levels. These maps are then used to identify whether the noise levels are compatible with land uses in these noise-impacted areas. Installations will often publish noise abatement procedures to mitigate these noise impacts.
- b. TOOELE ARMY DEPOT has noise contours that extend off the installation's property. Of the 19 acres that extend to off-base property, 0 acres have incompatible land uses. It has published noise abatement procedures for the main installation.

7. Threatened and Endangered Species/Critical Habitat (DoD Question #259-264)

- a. The presence of threatened and endangered species (TES) can result in restrictions on training, testing and operations. They serve to reduce buildable acres and maneuver space. The data in this section reflects listed TES as well as candidate species, designated critical habitat as well as proposed habitat, and restrictions from Biological Opinions. The legally binding conditions in Biological Opinions are designed to protect TES, and critical habitat. The data call seeks to identify the presence of the resource, TES, candidate or critical habitat, even if they don't result in restrictions, as well places where restrictions do exist.
- b. TOOELE ARMY DEPOT reported that federally-listed TES are not present, candidate species are not present, critical habitat is not present, and the installation does not have a Biological Opinion.

8. Waste Management (DoD Question # 265-272):

- a. This resource area identifies whether the installation has existing waste treatment and/or disposal capabilities, whether there is additional capacity, and in some case whether the waste facility can accept off-site waste. This area includes Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal facilities, solid waste disposal facilities, RCRA Subpart X (open/burning/open detonation) and operations.
- b. TOOELE ARMY DEPOT has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) that accepts off-site waste. TOOELE ARMY DEPOT has an interim or final RCRA Part X facility that accepts off-site waste. TOOELE ARMY DEPOT does not have an on-base solid waste disposal facility .

9. Water Resources (DoD Question # 258, 274-299):

- a. This resource area asks about the condition of ground and surface water, and the legal status of water rights. Water is essential for installation operations and plays a vital role in the proper functioning of the surrounding ecosystems. Contamination of ground or surface waters can result in restrictions on training and operations and require funding to study and remediate. Federal clean water laws require states to identify impaired waters and to restrict the discharge of certain pollutants into those waters. Federal safe drinking water laws can require alternative sources of water and restrict activities above groundwater supplies particularly sole source aquifers. Water resources are also affected by the McCarran Amendment (1952), where Congress returned substantial power to the states with respect to the management of water. The amendment requires that the Federal government waive its sovereign immunity in cases involving the general adjudication of water rights. On the other hand existence of Federal Reserve Water Rights can provide more ability to the government to use water on federal lands.
- b. TOOELE ARMY DEPOT does not discharge to an impaired waterway. Groundwater contamination is reported. Surface water contamination is not reported. The state requires permits for the withdrawal of groundwater.

(The following water quantity data is from DoD Question # 282, 291, 297, 822, 825, 826):

TOOELE ARMY DEPOT has 1594.5 Acre-Feet of surplus water potentially available for expansion. On average, it uses .72 MGD of potable and non-potable water, with the capacity to produce 1.7869999999999999 MGD. It processed on average 5.0000000000000003E-2 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 0.2710000000000002 MGD. It processed on average 0 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process (No Capacity Reported) MGD.

10. Wetlands (DoD Question # 251, 257):

- a. The existence of jurisdictional wetlands poses restraints on the use of land for training, testing or operations. In the data call the installations were asked to report the presence of jurisdictional wetlands and compare the percent of restricted acres to the total acres. The presence of jurisdictional wetlands may reduce the ability of an installation to assume new or different missions, even if they do not presently pose restrictions, by limiting the availability of land.
- b. TOOELE ARMY DEPOT reported no wetland restricted acres on the main installation, and no wetland restricted acres on ranges.