

**SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS**

**[TABS FINAL VERSION]**

**SCENARIO # 645 & 164**

**TITLE: IND-0117V3 CLOSE DESERET CHEMICAL DEPOT**

**GENERAL DESCRIPTION:** CLOSE DESERET CHEMICAL DEPOT UPON COMPLETION OF THE DESTRUCTION OF STORED CHEMICAL AGENTS AND THE DESTRUCTION OF THE PRODUCTION FACILITIES. TRANSFER THE STORAGE IGLOOS AND MAGAZINES TO TOOEE ARMY DEPOT.

NOTES:

NO MILCON OR PERSONNEL INVOLVED IN RECOMMENDATION. BUNKERS/IGLOOS WITH AMMUNITION AT DESERET WOULD SIMPLY BE INCORPORATED INTO TOOLE, SO NO MILCON. BOUNDRIES OF TOOLE WOULD BE EXPANDED. ASSUMING ENVIRONMENTAL COSTS FOR DESERET SINCE THE REMAINDER OF DESERET WOULD STILL HAVE TO BE INVESTIGATED PRIOR TO DISPOSAL

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

LAST UPDATE: **27 APRIL 2005**

Env Resource Area	<i>Gaining</i> Installation Assessment Inst Name: <b>N/A</b>	Analyst Comments (& data source(s) that drive assessment)
Air Quality		
Cultural/ Archeological Resources		
Dredging		
Land Use Constraints/Sensitive Resource Areas		
Marine Mammals/Marine Resources/Marine Sanctuaries		
Noise		
Threatened & Endangered Species/Critical Habitat		
Waste Management		
Water Resources		

Wetlands		
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**SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED);**  
**SCENARIO # (IND-0117v3)164**

Env Resource Area	<i>Losing</i> Installation Assessment Inst Name: <b>Deseret Chemical Depot</b>	Analyst Comments (& data source(s) that drive assessment)
Air Quality	No impact	#213 Reported N/A indicating in attainment for all Criteria Pollutants
Cultural/Archeological/ Tribal Resources	Surveys and consultation with the SHPO will be required to determine disposition of archeological and historical resources.	#230 -1 Arch Resources identified #231- Native People sites on/contiguous to installation. #234 - Native Tribes assert an interest, no formal consultation. #232 Sites with high potential for Arch resources were identified #235 No Historic Property - no resources identified. #236 - No Programmatic Agreement in place
Dredging	No impact	#227 – N/A
Land Use Constraints/Sensitive Resource Areas	Restoration +/- monitoring of contaminated media will likely be required after closure to prevent significant long-term impacts to the environment.	#273 - Installation has MMRA's reported DERP 2003 shows MMRP CTC \$59.6M 1 operational ranges reported- OB/OD range #240 DERA sites reported - CTC is \$7.25M. * CMA reports 6 Sites contain likely buried mustard munitions or spills – cleanup not programmed or funded– cost TBD
Marine Mammals/Marine Birds	No impact	#248-250, 252, 253 – N/A
Noise	No impact	#239 – N/A
Threatened & Endangered Species/Critical Habitat	Federally listed species (Bald Eagle) is found on installation. Continued management and/or deed restrictions will be necessary to insure future protection of the Federally listed species.	#259 1 TES (Bald Eagle) on installation, no restrictions reported. #260, 263, 264 – No critical habitat, no candidate species/habitat identified
Waste Management	Special waste management areas at the installation include a RCRA TSD facility. Restoration, monitoring/sweeps, access control, and/or deed restrictions may be required for former waste management areas to prevent disturbance, health and safety risks, and/or long-term release of toxins to environmental media.	#265 Has RCRA TSD facility on site #269 Has a RCRA Subpart X Permit #272 No permitted solid waste disposal facility

Water Resources	<p>Environmental media contamination issues at installation include metals, explosives, &amp; VOCs reported in groundwater.</p> <p>Restoration and/or monitoring of contaminated media will likely be required after closure to prevent significant long-term impacts to the environment.</p> <p>Installation has 1 government-owned plant for potable water and 3 government-owned plants for sewage treatment on the installation that may require transfer/closure.</p>	<p>#275 Metals, explosives, &amp; VOCs are reported in groundwater on installation.</p> <p>#281 – No surface water contamination reported.</p> <p>#282 – 1 Off Military Installation Commercial Source for industrial wastewater</p> <p>#291-1 On Military Installation Govt Owned Plant for potable water</p> <p>#297-3 On Military Installation Govt Owned Plants for sewage treatment.</p>
Wetlands	No impact	<p>#251- Wetlands survey completed 1/00</p> <p>#257 – 1,500 acres seasonal wetlands identified, no restrictions reported</p>

**SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED);**  
**SCENARIO # 164**

**IMPACTS OF COSTS**

Env Resource Area	Gaining Installation Inst Name: <b>N/A</b>	Losing Installation Inst Name: <b>Deseret Chemical Depot</b>
Environmental Restoration*	None.	<p>Sweep for UXO and or chemical weapons residual contamination - Cost TBD  (6 Sites contain likely buried mustard munitions or spills)</p> <p>#240 DERA sites reported -  MMRP CTC \$59.6M  IRP CTC is \$7.25M</p> <p>OB/OD Range - cleanup cost \$1.04M-4.98M  (reported in FY03 DERP)</p> <p>Controlled burning/decontamination/demolition of industrial buildings/structures heavily contaminated with explosives/metals - \$1M to \$10M+</p>
Waste Management	None.	Restoration/Monitoring of HW sites \$500K - \$10M+.
Environmental Compliance	None.	<p>Environmental Baseline Survey (EBS) \$300K-\$500K.</p> <p>Land Use Controls (LUC) management/enforcement in perpetuity (occurs after transfer) - \$50K -\$100K</p> <p>Asbestos/Lead-based Paint Removal - \$200K - \$1M</p> <p>Access controls / caretaker management of historical/arch/cultural sites \$500K - \$1M (annually)</p>
<b>COBRA Costs:</b>	None.	Installation is a Chemical Plant - \$1.3M (EBS + disposal EIS)

**INSTALLATION ENVIRONMENTAL PROFILE**  
**DESERET CHEMICAL 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, O<sub>3</sub> (1 hour & 8 Hour), and PM (PM<sub>10</sub>, and PM<sub>2.5</sub>). 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 O<sub>3</sub>, 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. DESERET CHEMICAL DEPOT is in Attainment for all Criteria Pollutants. It holds a CAA Major 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. No historic property has been identified on DESERET CHEMICAL 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.

**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. DESERET CHEMICAL 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. DESERET CHEMICAL DEPOT reports that 8084 unconstrained acres are available for development out of 19364 total acres. DESERET CHEMICAL DEPOT has spent \$23.300000000000001M thru FY03 for environmental restoration, and has estimated the remaining Cost to Complete at \$7M. DESERET CHEMICAL 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. DESERET CHEMICAL 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. DESERET CHEMICAL DEPOT does not have noise contours that extend off the installation's property. It does not have 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. DESERET CHEMICAL 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. DESERET CHEMICAL DEPOT has a permitted RCRA Treatment Storage and Disposal Facility (TSDF) that accepts off-site waste. DESERET CHEMICAL DEPOT has an interim or final RCRA Part X facility that accepts off-site waste. DESERET CHEMICAL 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. DESERET CHEMICAL 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):**

DESERET CHEMICAL DEPOT has 4339.8000000000002 Acre-Feet of surplus water potentially available for expansion. On average, it uses 0.193 MGD of potable and non-potable water, with the capacity to produce 1.8 MGD. It processed on average 23.379999999999999 MGD of domestic wastewater in the peak month (past 3 years), with the capacity to process 4.387499999999997E-2 MGD. It processed on average 444.2799999999997 MGD of industrial wastewater in the peak month (past 3 years), with the capacity to process 0 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. DESERET CHEMICAL 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, O<sub>3</sub> (1 hour & 8 Hour), and PM (PM<sub>10</sub>, and PM<sub>2.5</sub>). 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 O<sub>3</sub>, 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.