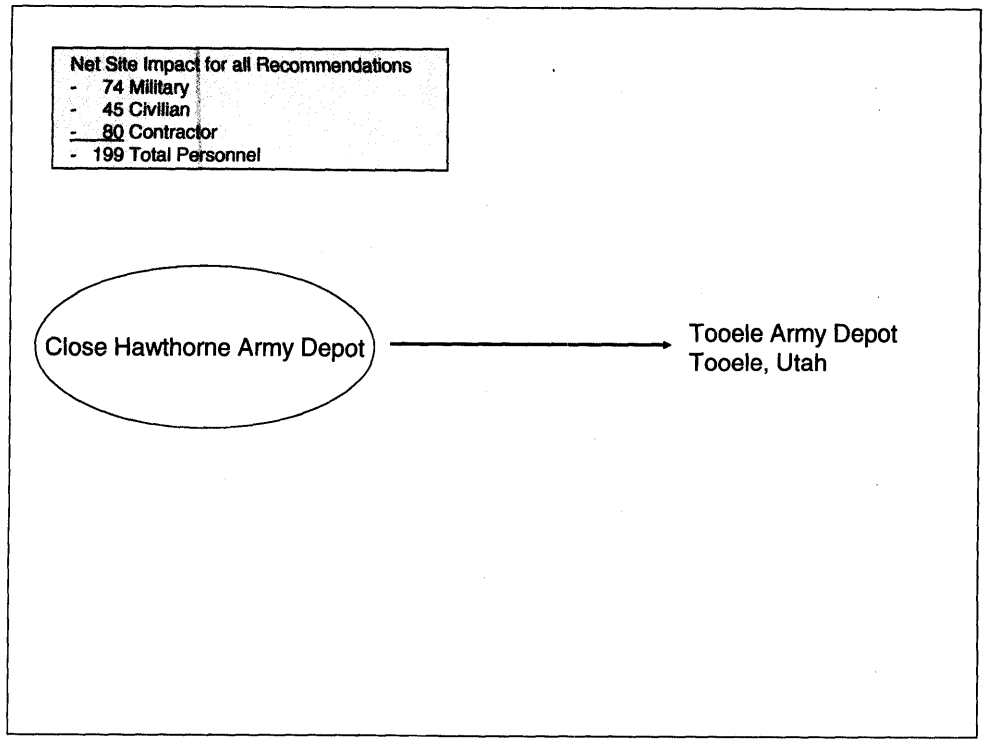
J&CS - Industrial Reccomendations													
Base Name	ST	Page	Component	Action	Lead Analyst	MV#1	MV#2	MV#3	MV#4	MV#5	MV#6	MV#7	MV#8
Riverbank Army Ammunition Plant	CA-Coyle	Ind - 5	Active	Closure	George Delgado								
Rock Island Arsenal	IL	Ind - 5	Active	Gainer	George Delgado								
Sierra Army Depot, CA													
Crane Army Ammunition Activity	IN	Ind - 6	Active	Gainer	George Delgado								
McAlester Army Ammunition Plant	OK	Ind - 6	Active	Gainer	George Delgado								
Sierra Army Depot	CA-Coyle	Ind - 6	Active	Realign	George Delgado								
Tooele Army Depot	UT-Hansen	Ind - 6	Active	Gainer	George Delgado								
Rock Island Arsenal, IL													
Anniston Army Depot	AL	Ind - 7	Active	Gainer	Valerie Mills								
Letterkenny Army Depot	PA	Ind - 7	Active	Gainer	Valerie Mills								
Rock Island Arsenal	IL	Ind - 7	Active	Realign	Valerie Mills								
Newport Chemical Depot, IN													
Newport Chemical Depot	IN	Ind - 8	Active	Closure	George Delgado								
Undistributed or Overseas Reductions	US	Ind - 8	Active	Realign	George Delgado								
Kansas Army Ammunition Plant, KS													
Kansas Army Ammunition Plant	KS	Ind - 9	Active	Closure	George Delgado								
Iowa Army Ammunition Plant	IA	Ind - 9	Active	Gainer	George Delgado								
Crane Army Ammunition Activity	IN	Ind - 9	Active	Gainer	George Delgado								
McAlester Army Ammunition Plant	OK	Ind - 9	Active	Gainer	George Delgado								
Milan Army Ammunition Plant	TN	Ind - 9	Active	Gainer	George Delgado								
Lima Tank Plant, OH													
Lima Tank Plant	OH	Ind - 10	Active	Realign	George Delgado								
Mississippi Army Ammunition Plant, MS													
Mississippi Army Ammunition Plant	MS	Ind - 11	Active	Closure	George Delgado								
Rock Island Arsenal	IL	Ind - 11	Active	Gainer	George Delgado								
Undistributed or Overseas Reductions	US	Ind - 11	Active	Realign	George Delgado								
Hawthorne Army Depot, NV													
Hawthorne Army Depot	NV-Bilbray	Ind - 12	Active	Closure	George Delgado								
Tooele Army Depot	UT-Hansen	Ind - 12	Active	Gainer	George Delgado								
Undistributed or Overseas Reductions	US	Ind - 12	Active	Realign	George Delgado								
Watervliet Arsenal, NY													
Watervliet Arsenal	NY	Ind - 13	Active	Realign	George Delgado								
Umatilla Chemical Depot, OR													
Umatilla Army Depot	OR	Ind - 14	Active	Closure	George Delgado								
Lone Star Army Ammunition Plant, TX													
Lone Star Army Ammunition Plant	TX	Ind - 16	Active	Closure	George Delgado								
Iowa Army Ammunition Plant	IA	Ind - 16	Active	Gainer	George Delgado								
Crane Army Ammunition Activity	IN	Ind - 16	Active	Gainer	George Delgado								
McAlester Army Ammunition Plant	OK	Ind - 16	Active	Gainer	George Delgado								
Milan Army Ammunition Plant	TN	Ind - 16	Active	Gainer	George Delgado								
Deseret Chemical Depot, UT													
Deseret Chemical Depot	UT-Hansen	Ind - 17	Active	Closure	George Delgado								

J&CS - Industrial Reccomendations						
Base Name	Comments					
Riverbank Army Ammunition Plant	One source, small quantities					
Rock Island Arsenal						
Sierra Army Depot, CA						
Crane Army Ammunition Activity						
McAlester Army Ammunition Plant						
Sierra Army Depot	California stopped demiling of munitions					
Tooele Army Depot						
Rock Island Arsenal, IL						
Anniston Army Depot						
Letterkenny Army Depot						
Rock Island Arsenal						
Newport Chemical Depot, IN						
Newport Chemical Depot	Qualified to end of mission date; question of completion date for demil					
Undistributed or Overseas Reductions						
Kansas Army Ammunition Plant, KS						
Kansas Army Ammunition Plant	Language land, facilities and, equipment to LRA; potentially proprietary processes					
Iowa Army Ammunition Plant						
Crane Army Ammunition Activity						
McAlester Army Ammunition Plant						
Milan Army Ammunition Plant						
Lima Tank Plant, OH						
Lima Tank Plant	Footprint currently in full usage					
Mississippi Army Ammunition Plant, MS						
Mississippi Army Ammunition Plant	Community supports closure					
Rock Island Arsenal						
Undistributed or Overseas Reductions						
Hawthorne Army Depot, NV						
Hawthorne Army Depot	Many concerns regarding missions and demil					
Tooele Army Depot	Concerns about storage and demil capacities					
Undistributed or Overseas Reductions						
Watervliet Arsenal, NY						
Watervliet Arsenal	No personnel impact, disestablish capacity reduce footprint					
Umatilla Chemical Depot, OR						
Umatilla Army Depot	Qualified to end of mission date; question of completion date for demil					
Lone Star Army Ammunition Plant, TX						
Lone Star Army Ammunition Plant	Language land, facilities and, equipment to LRA; potentially proprietary processes					
Iowa Army Ammunition Plant						
Crane Army Ammunition Activity						
McAlester Army Ammunition Plant						
Milan Army Ammunition Plant						
Deseret Chemical Depot, UT						
Deseret Chemical Depot	Qualified to end of mission date; question of completion date for demil					



Hawthorne Army Depot, NV

Recommendation: Close Hawthorne Army Depot, NV.

Relocate Storage and Demilitarization functions to Tooele Army Depot, UT.

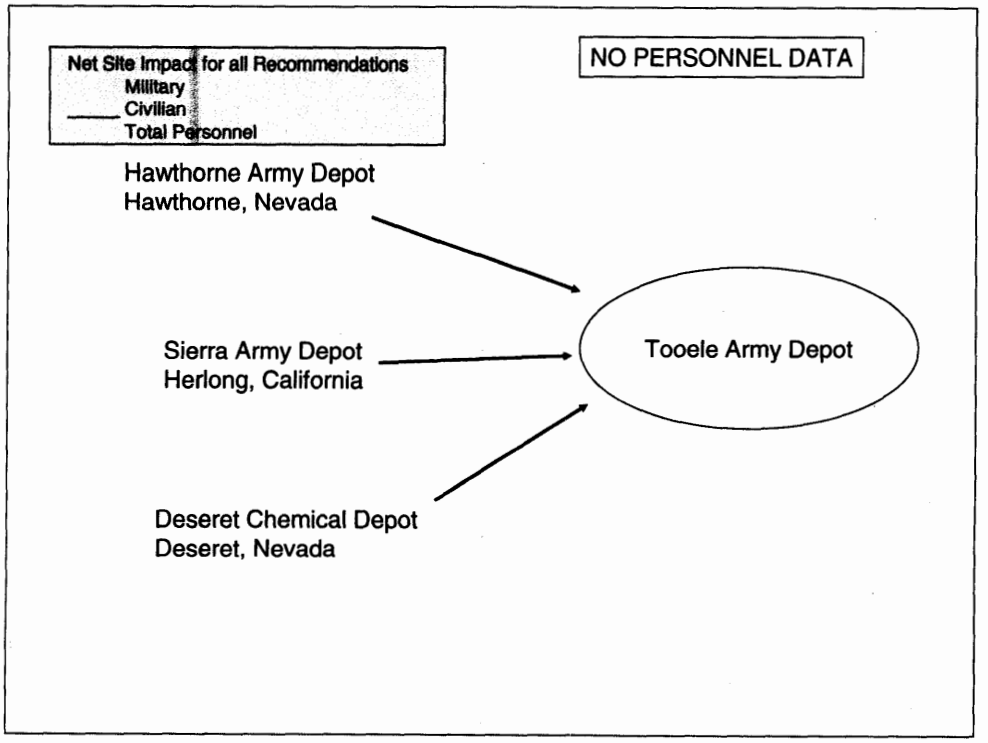
Justification: Capacity and capability for Storage and Demilitarization exists at numerous munitions sites.

To reduce redundancy and remove excess from the Industrial Base, the closure allows DoD to create centers of excellence and establish deployment networks that support readiness.

Hawthorne Army Depot has infrastructure problems that severely limit the ability to offload.

Net Site Impact for all Recommendations
- 74 Military
- 45 Civilian
- 80 Contractor
- 199 Total Personnel

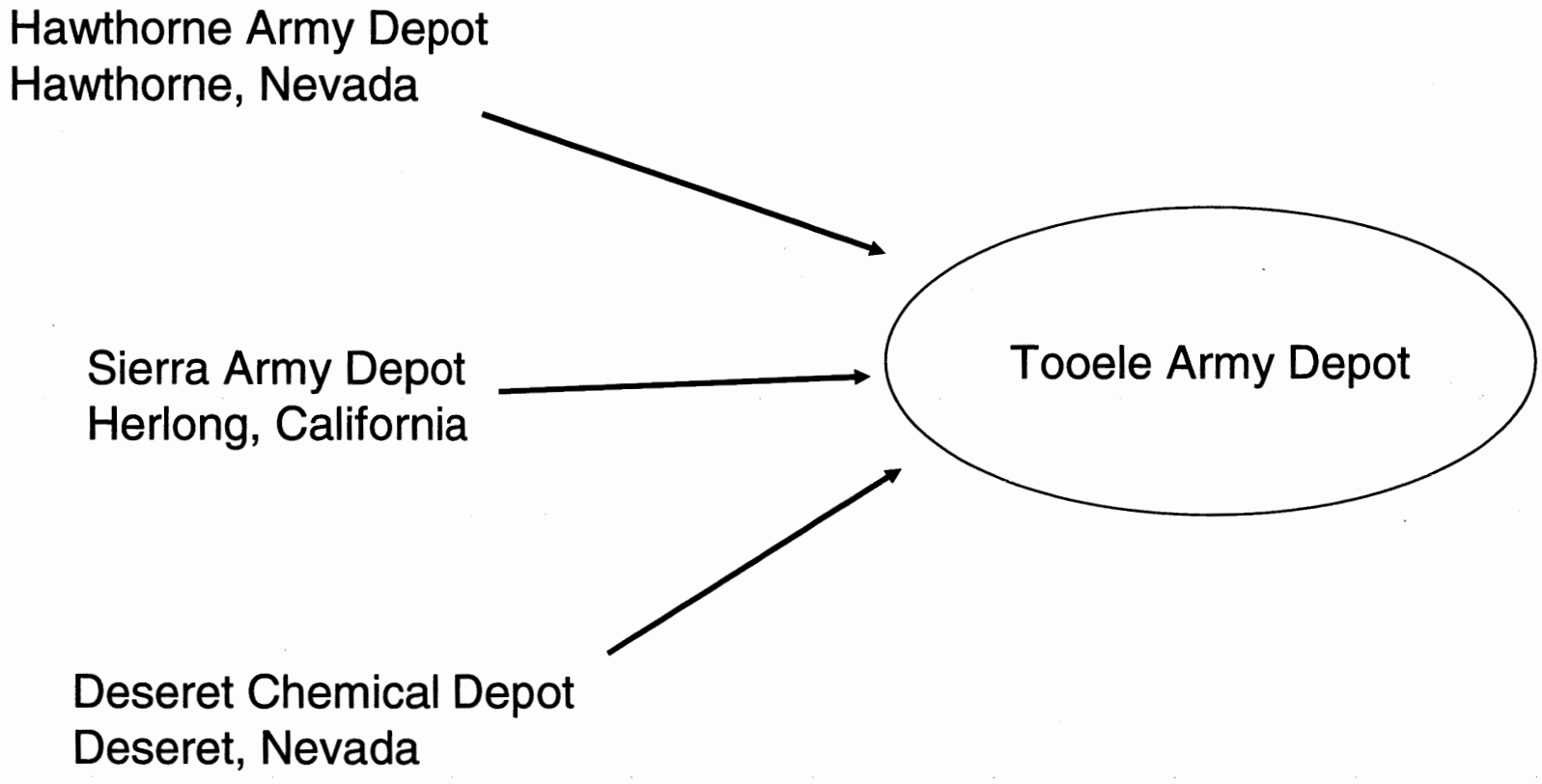
Close Hawthorne Army Depot → Tooele Army Depot
Tooele, Utah



- Close Hawthorne Army Depot, NV. Relocate Storage and Demilitarization functions to Tooele Army Depot, UT.
- Close Deseret Chemical Depot, UT. Transfer the storage igloos and magazines to Tooele Army Depot, UT.
- Realign Sierra Army Depot, CA. Relocate Storage to Tooele Army Depot, NV

Net Site Impact for all Recommendations
Military
_____ Civilian
Total Personnel

NO PERSONNEL DATA



Environmental Impact: This recommendation has potential impact to water resources at Mississippi Army Ammunition Plant. The installation has both domestic and industrial wastewater treatment plants that may require closure. Significant mitigation measures must be taken at Rock Island to limit release of pollutants during loadings. This recommendation has no impact on air quality; cultural, archeological, or tribal resources; dredging; land use constraints or sensitive resource areas; marine mammals, resources, or sanctuaries; noise; threatened and endangered species or critical habitat; or wetlands. This recommendation will require spending approximately $1.4M for environmental compliance activities. This cost was included in the payback calculation. Mississippi Army Ammunition Plant reports $2.3M in environmental restoration costs. Because the Department has a legal obligation to perform environmental restoration regardless of whether a base is closed, realigned, or remains open, this cost was not included in the payback calculation. This recommendation does not otherwise impact the costs of environmental restoration, waste management, and environmental compliance activities. The aggregate environmental impact of all recommended BRAC actions affecting the bases in this recommendation has been reviewed. There are no known environmental impediments to implementation of this recommendation.

Hawthorne Army Depot, NV

Recommendation: Close Hawthorne Army Depot, NV. Relocate Storage and Demilitarization functions to Tooele Army Depot, UT.

Justification: Capacity and capability for Storage and Demilitarization exists at numerous munitions sites. To reduce redundancy and remove excess from the Industrial Base, the closure allows DoD to create centers of excellence and establish deployment networks that support readiness. Hawthorne Army Depot has infrastructure problems that severely limit the ability to offload.

Payback: The total estimated one-time cost to the Department of Defense to implement this recommendation is $180.3M. The net of all costs and savings to the Department during the implementation period is a savings of $59.2M. Annual recurring savings to the Department after implementation are $73.4M with a payback beginning immediately. The net present value of the costs and savings to the Department over 20 years is a savings of $777.7M.

Economic Impact on Communities: Assuming no economic recovery, this recommendation could result in a maximum potential reduction of 326 jobs (199 direct jobs and 127 indirect jobs) over the period 2006-2011 in the Reno-Sparks, NV Metropolitan Statistical Area, which is less than 0.1 percent of the economic area employment. The aggregate economic impact of all recommended actions on this economic region of influence was considered and is at Appendix B of Volume I.

Community Infrastructure Assessment: A review of community attributes indicates no issues regarding the ability of the infrastructure of the community to support missions, forces, and

personnel. There are no known community infrastructure impediments to implementation of all recommendations affecting the installations in this recommendation.

Environmental Impact: This recommendation has expected impact on air quality at Tooele Army Depot. Air Conformity analysis will likely be necessary. Surveys and consultation with the State Historic Preservation Officer will be required at Hawthorne Army Depot. Restoration monitoring/sweeps, access controls and/or deed restrictions may be required at Hawthorne to prevent disturbance and health/safety risks, and/or long-term release of toxins to environmental media. Restoration and/or monitoring of contaminated media may be required after closure. Hawthorne also has domestic and industrial wastewater treatment plants that may require closure. This recommendation has no impact on dredging; cultural, archeological, or tribal resources; marine mammals, resources, or sanctuaries; noise; or wetlands. This recommendation will require spending approximately $1.5M for environmental compliance activities. This cost was included in the payback calculation. Hawthorne reports approximately $383.2M in environmental restoration costs. Because the Department of Defense has a legal obligation to perform environmental restoration regardless of whether an installation is closed, realigned, or remains open, this cost was not included in the payback calculation. This recommendation does not otherwise impact the costs of environmental restoration, waste management, and environmental compliance activities. The aggregate environmental impact of all recommended BRAC actions affecting the bases in this recommendation has been reviewed. There are no known environmental impediments to implementation of this recommendation.

Watervliet Arsenal, NY

Recommendation: Realign Watervliet Arsenal, NY, by disestablishing all capabilities for Other Field Artillery Components.

Justification: The Department no longer requires the capability for Other Field Artillery Components at Watervliet Arsenal. The Department will require and will retain at Watervliet Arsenal the capability to support core cannon tube, rotary forge, and swage. Disestablishing the Other Field Artillery Components capability will allow the Department to reduce its overall footprint at Watervliet Arsenal. It will also allow the Department to explore partnering with the local community, perhaps through a leaseback arrangement. This type of partnering could allow the government to reduce its footprint while maintaining that portion of Watervliet Arsenal needed to fulfill core capabilities.

Payback: The total estimated one-time cost to the Department of Defense to implement this recommendation is $63.7M. The net of all costs and savings to the Department during the implementation period is a cost of $46.8M. Annual recurring savings to the Department after implementation are $5.2M with a payback expected in 18 years. The net present value of the costs and savings to the Department over 20 years is a savings of $5.2M.

Economic Impact on Communities: This recommendation will not result in any job reductions over the period 2006-2011 in the Troy, NY Metropolitan Statistical Area. The aggregate

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IJCSG - Munitions / Armaments Capacity Report

Function	*Site*	*Current Capacity**	*Current Usage**	*Maximum Capacity**	*Capacity Required To Surge**	*Capacity Available to Surge/Excess Capacity**
MUNITIONS DEMILITARIZATION						
	ANNISTON ARMY DEPOT	23,670.0	2,281.0	23,670.0	0	21,389.0
	BLUE GRASS ARMY DEPOT	10,608.9	971.3	13,060.6	0	12,089.3
	CRANE ARMY AMMUNITION ACTIVITY	6,302.7	2,861.6	6,850.7	0	3,989.1
	HAWTHORNE ARMY DEPOT	38,049.2	0.0	38,049.2	0	38,049.2
	IOWA AAP	749.2	730.2	749.2	0	19.0
	KANSAS ARMY AMMUNITION PLANT	376.0	7.0	393.0	0	386.0
	LAKE CITY AAP	182.0	161.0	243.0	0	82.0
	LETTERKENNY ARMY DEPOT	3,957.3	491.7	7,522.9	0	7,031.2
	LONE STAR AAP	1,178.0	758.3	2,142.6	0	1,384.3
	MCALESTER AAP	11,551.0	788.0	11,551.0	0	10,763.0
	PINE BLUFF ARSENAL	12.0	0.4	10.6	0	10.2
	RED RIVER ARMY DEPOT	6,798.5	224.4	8,158.2	0	7,933.8
	TOOELE ARMY DEPOT	11,416.0	584.2	51,388.0	0	50,803.8

* Capacity is measured in short tons

IJCSG Summary Military Value Report for Munitions

Activity:	*Score:*
Demilitarization	
HAWTHORNE ARMY DEPOT	0.8181
TOOELE ARMY DEPOT	0.7257
MCALESTER AAP	0.6995
LETTERKENNY ARMY DEPOT	0.4704
BLUE GRASS ARMY DEPOT	0.3104
CRANE ARMY AMMUNITION ACTIVITY	0.2971
RED RIVER ARMY DEPOT	0.1671
IOWA AAP	0.1420
ANNISTON ARMY DEPOT	0.1205

IJCSG Summary Military Value Report for Munitions

Activity:	*Score:*
PINE BLUFF ARSENAL	0.0078
KANSAS ARMY AMMUNITION PLANT	0.0074
LONE STAR AAP	0.0071
LAKE CITY AAP	0.0006

IJCSG Summary Military Value Report for Munitions

Activity:	*Score:*
Storage and Distribution	
MCALESTER AAP	0.6168
HAWTHORNE ARMY DEPOT	0.5789
CRANE ARMY AMMUNITION ACTIVITY	0.4131
RED RIVER ARMY DEPOT	0.3298
TOOELE ARMY DEPOT	0.3282
SIERRA ARMY DEPOT	0.2879
BLUE GRASS ARMY DEPOT	0.2607
LOUISIANA AAP	0.2441
ANNISTON ARMY DEPOT	0.1803
LETTERKENNY ARMY DEPOT	0.1671

IJCSG Summary Military Value Report for Munitions

Activity:	*Score:*
UMATILLA CHEM DEPOT	0.1280
MILAN AAP	0.1117
IOWA AAP	0.0642
PINE BLUFF ARSENAL	0.0409
RADFORD AAP	0.0377
LAKE CITY AAP	0.0375
PUEBLO CHEM DEPOT	0.0332
DESERET CHEMICAL DEPOT	0.0268
KANSAS ARMY AMMUNITION PLANT	0.0231
NEWPORT CHEM DEPOT	0.0205
LONE STAR AAP	0.0090
HOLSTON AAP	0.0024

IJCSG - Munitions / Armaments Capacity Report

Function	*Site*	*Current Capacity**	*Current Usage**	*Maximum Capacity**	*Capacity Required To Surge**	*Capacity Available to Surge/Excess Capacity**
MUNITIONS STORAGE						
	ANNISTON ARMY DEPOT	3,296.4	2,293.9	3,296.4	0	1,002.5
	BLUE GRASS ARMY DEPOT	6,021.0	4,817.4	6,021.0	0	1,203.6
	CRANE ARMY AMMUNITION ACTIVITY	8,020.8	5,721.3	8,020.8	0	2,299.5
	DESERET CHEMICAL DEPOT	909.0	709.0	909.0	0	200.0
	HAWTHORNE ARMY DEPOT	9,738.0	5,603.0	9,738.0	0	4,135.0
	HOLSTON AAP	405.8	90.6	405.8	0	315.2
	IOWA AAP	1,148.8	503.4	1,148.8	0	645.4
	KANSAS ARMY AMMUNITION PLANT	1,238.5	895.9	1,238.5	0	342.6
	LAKE CITY AAP	1,094.0	1,094.0	1,094.0	0	0.0
	LETTERKENNY ARMY DEPOT	3,613.4	2,472.2	3,613.4	0	1,141.2
	LONE STAR AAP	1,030.6	824.5	1,030.6	0	206.1
	LOUISIANA AAP	350.0	270.4	350.0	0	79.6
	MCALESTER AAP	10,637.1	6,522.0	10,637.1	0	4,115.1
	MILAN AAP	3,258.1	829.9	3,258.1	0	2,428.2
	MISSISSIPPI AAP	105.4	0.0	105.4	0	105.4
	NEWPORT CHEM DEPOT	11.6	11.6	11.6	0	0.0
	PINE BLUFF ARSENAL	4,192.2	3,794.4	4,192.2	0	397.8
	PUEBLO CHEM DEPOT	1,475.2	161.6	1,475.2	0	1,313.6

* Capacity is measured in ksf

IJCSG - Munitions / Armaments Capacity Report

Function	*Site*	*Current Capacity**	*Current Usage**	*Maximum Capacity**	*Capacity Required To Surge**	*Capacity Available to Surge/Excess Capacity**
MUNITIONS STORAGE						
	RADFORD AAP	921.2	641.6	921.2	0	279.6
	RED RIVER ARMY DEPOT	2,747.6	1,732.9	2,747.6	0	1,014.7
	SIERRA ARMY DEPOT	5,649.5	1,019.0	5,649.5	0	4,630.5
	TOOELE ARMY DEPOT	5,239.6	3,265.0	5,239.6	0	1,974.6
	UMATILLA CHEM DEPOT	2,457.7	728.1	2,457.7	0	1,729.6

* Capacity is measured in ksf

COBRA REALIGNMENT SUMMARY REPORT (COBRA v6.10) - Page 1/2
Data As Of 5/2/2005 10:48:53 AM, Report Created 5/2/2005 10:48:57 AM

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

Starting Year : 2006
Final Year : 2011
Payback Year : Immediate

NPV in 2025($K): -777,701
1-Time Cost($K): 180,272

Net Costs in 2005 Constant Dollars ($K)

	2006	2007	2008	2009	2010	2011	Total	Beyond
MilCon	0	0	0	0	0	0	0	0
Person	0	0	0	0	0	-3,370	-3,370	-8,082
Overhd	-34,913	-34,913	-34,913	-34,913	-34,913	-59,046	-233,610	-65,334
Moving	0	0	46,700	46,700	46,700	1,157	141,256	0
Missio	0	0	0	0	0	0	0	0
Other	6,000	6,000	2,006	2,406	634	19,456	36,502	0
TOTAL	-28,913	-28,913	13,793	14,193	12,421	-41,803	-59,222	-73,416

	2006	2007	2008	2009	2010	2011	Total
POSITIONS ELIMINATED							
Off	0	0	0	0	0	2	2
Enl	0	0	0	0	0	72	72
Civ	0	0	0	0	0	25	25
TOT	0	0	0	0	0	99	99
POSITIONS REALIGNED							
Off	0	0	0	0	0	0	0
Enl	0	0	0	0	0	0	0
Stu	0	0	0	0	0	0	0
Civ	0	0	0	0	0	20	20
TOT	0	0	0	0	0	20	20

Summary:

Close Hawthorne Army Depot, NV. Relocate Storage and Demilitarization functions to Tooele Army Depot, UT.

COBRA REALIGNMENT SUMMARY REPORT (COBRA v6.10) - Page 2/2
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Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
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Costs in 2005 Constant Dollars ($K)

	2006	2007	2008	2009	2010	2011	Total	Beyond
MilCon	0	0	0	0	0	0	0	0
Person	0	0	0	0	0	827	827	37
Overhd	0	0	0	0	0	1,724	1,724	0
Moving	0	0	46,700	46,700	46,700	1,157	141,256	0
Missio	0	0	0	0	0	0	0	0
Other	6,000	6,000	2,006	2,406	634	19,456	36,502	0
TOTAL	6,000	6,000	48,706	49,106	47,333	23,164	180,309	37

Savings in 2005 Constant Dollars ($K)

	2006	2007	2008	2009	2010	2011	Total	Beyond
MilCon	0	0	0	0	0	0	0	0
Person	0	0	0	0	0	4,197	4,197	8,119
Overhd	34,913	34,913	34,913	34,913	34,913	60,770	235,334	65,334
Moving	0	0	0	0	0	0	0	0
Missio	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
TOTAL	34,913	34,913	34,913	34,913	34,913	64,967	239,531	73,453

COBRA PERSONNEL/SF/SUSTAINMENT/RECAP/BOS DELTAS REPORT (COBRA v6.10)
Data As Of 5/2/2005 10:48:53 AM, Report Created 5/2/2005 10:48:57 AM

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

Personnel

Base	Start*	Finish*	Change	%Change
HAWTHORNE DEPOT	119	0	-119	-100%
TOOELE	1,083	1,083	0	0%
BASE X (ARMY)	109	129	20	18%
TOTAL	1,311	1,212	-99	-8%

Square Footage

Base	Start	Finish	Change	%Change	Chg/Per
HAWTHORNE DEPOT	9,578,000	0	-9,578,000	-100%	80,487
TOOELE	9,415,000	9,415,000	0	0%	0
BASE X (ARMY)	60,640	60,640	0	0%	0
TOTAL	19,053,640	9,475,640	-9,578,000	-50%	96,747

Base Operations Support (2005$)

Base	Start*	Finish*	Change	%Change	Chg/Per
HAWTHORNE DEPOT	0	0	0	0%	0
TOOELE	17,873,628	17,873,628	0	0%	0
BASE X (ARMY)	0	0	0	0%	0
TOTAL	17,873,628	17,873,628	0	0%	0

Sustainment (2005$)

Base	Start	Finish	Change	%Change	Chg/Per
HAWTHORNE DEPOT	30,420,932	0	-30,420,932	-100%	255,638
TOOELE	6,913,145	6,913,145	0	0%	0
BASE X (ARMY)	118,709	118,709	0	0%	0
TOTAL	37,452,786	7,031,854	-30,420,932	-81%	307,282

Recapitalization (2005$)

Base	Start	Finish	Change	%Change	Chg/Per
HAWTHORNE DEPOT	34,912,754	0	-34,912,754	-100%	293,384
TOOELE	13,283,457	13,283,457	0	0%	0
BASE X (ARMY)	5,725,274	5,725,274	0	0%	0
TOTAL	53,921,486	19,008,732	-34,912,754	-65%	352,654

Sustain + Recap + BOS (2005$)

Base	Start	Finish	Change	%Change	Chg/Per
HAWTHORNE DEPOT	65,333,686	0	-65,333,686	-100%	549,022
TOOELE	38,070,230	38,070,230	0	0%	0
BASE X (ARMY)	5,843,983	5,843,983	0	0%	0
TOTAL	109,247,900	43,914,214	-65,333,686	-60%	659,936

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

	Plant Replacement Value (2005$)				
Base	Start	Finish	Change	%Change	Chg/Per
HAWTHORNE DEPOT	3,596,013,700	0	-3,596,013,700	-100%	30,218,602
TOOELE	1,368,196,102	1,368,196,102	0	0%	0
BASE X (ARMY)	22,901,098	22,901,098	0	0%	0
TOTAL	4,987,110,900	1,391,097,200	-3,596,013,700	-72%	36,323,371

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

* "Start" and "Finish" values for Personnel and BOS both include the Programmed Installation Population (non-BRAC) Changes, so that only changes attributable to the BRAC action are reflected in the "Change" columns of this report.

TOTAL COBRA REALIGNMENT DETAIL REPORT (COBRA v6.10) - Page 1/12
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Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

ONE-TIME COSTS -----($K)-----	2006	2007	2008	2009	2010	2011	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
O&M							
CIV SALARY							
Civ RIF	0	0	0	0	0	402	402
Civ Retire	0	0	0	0	0	48	48
CIV MOVING							
Per Diem	0	0	0	0	0	122	122
POV Miles	0	0	0	0	0	7	7
Home Purch	0	0	0	0	0	408	408
HHG	0	0	0	0	0	135	135
Misc	0	0	0	0	0	20	20
House Hunt	0	0	0	0	0	89	89
PPP	0	0	0	0	0	177	177
RITA	0	0	0	0	0	181	181
FREIGHT							
Packing	0	0	0	0	0	1	1
Freight	0	0	0	0	0	11	11
Vehicles	0	0	0	0	0	0	0
Unemployment	0	0	0	0	0	31	31
OTHER							
Info Tech	0	0	0	0	0	4	4
Prog Manage	0	0	0	0	0	0	0
Supt Contrac	0	0	0	0	0	0	0
Mothball	0	0	0	0	0	1,724	1,724
1-Time Move	0	0	46,700	46,700	46,700	0	140,099
MIL PERSONNEL							
MIL MOVING							
Per Diem	0	0	0	0	0	0	0
POV Miles	0	0	0	0	0	0	0
HHG	0	0	0	0	0	0	0
Misc	0	0	0	0	0	0	0
OTHER							
Elim PCS	0	0	0	0	0	309	309
OTHER							
HAP / RSE	0	0	0	0	0	0	0
Environmental	0	0	0	2,400	0	0	2,400
Misn Contract	0	0	0	0	0	0	0
1-Time Other	6,000	6,000	2,006	6	634	19,456	34,102
TOTAL ONE-TIME	6,000	6,000	48,706	49,106	47,333	23,127	180,272

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

RECURRINGCOSTS -----($K)-----	2006	2007	2008	2009	2010	2011	Total	Beyond
O&M								
Sustainment	0	0	0	0	0	0	0	0
Recap	0	0	0	0	0	0	0	0
BOS	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	37	37	37
TRICARE	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Off Salary	0	0	0	0	0	0	0	0
Enl Salary	0	0	0	0	0	0	0	0
House Allow	0	0	0	0	0	0	0	0
OTHER								
Mission Activ	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
TOTAL RECUR	0	0	0	0	0	37	37	37
TOTAL COST	6,000	6,000	48,706	49,106	47,333	23,164	180,309	37

ONE-TIME SAVES -----($K)-----	2006	2007	2008	2009	2010	2011	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
O&M							
1-Time Move	0	0	0	0	0	0	0
MIL PERSONNEL							
Mil Moving	0	0	0	0	0	0	0
OTHER							
Environmental	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	0	0	0	0	0	0	0

RECURRINGSAVES -----($K)-----	2006	2007	2008	2009	2010	2011	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
Sustainment	0	0	0	0	0	25,858	25,858	30,421
Recap	34,913	34,913	34,913	34,913	34,913	34,913	209,476	34,913
BOS	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	831	831	1,662
MIL PERSONNEL								
Off Salary	0	0	0	0	0	125	125	250
Enl Salary	0	0	0	0	0	2,966	2,966	5,933
House Allow	0	0	0	0	0	274	274	274
OTHER								
Procurement	0	0	0	0	0	0	0	0
Mission Activ	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
TOTAL RECUR	34,913	34,913	34,913	34,913	34,913	64,967	239,531	73,453
TOTAL SAVINGS	34,913	34,913	34,913	34,913	34,913	64,967	239,531	73,453

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

ONE-TIME NET -----($K)-----	2006	2007	2008	2009	2010	2011	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
O&M							
Civ Retir/RIF	0	0	0	0	0	450	450
Civ Moving	0	0	0	0	0	1,153	1,153
Info Tech	0	0	0	0	0	4	4
Other	0	0	46,700	46,700	46,700	1,755	141,854
MIL PERSONNEL							
Mil Moving	0	0	0	0	0	309	309
OTHER							
HAP / RSE	0	0	0	0	0	0	0
Environmental	0	0	0	2,400	0	0	2,400
Misn Contract	0	0	0	0	0	0	0
1-Time Other	6,000	6,000	2,006	6	634	19,456	34,102
TOTAL ONE-TIME	6,000	6,000	48,706	49,106	47,333	23,127	177,872

RECURRING NET -----($K)-----	2006	2007	2008	2009	2010	2011	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
Sustainment	0	0	0	0	0	-25,858	-25,858	-30,421
Recap	-34,913	-34,913	-34,913	-34,913	-34,913	-34,913	-209,476	-34,913
BOS	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	-794	-794	-1,625
TRICARE	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Mil Salary	0	0	0	0	0	-3,091	-3,091	-6,183
House Allow	0	0	0	0	0	-274	-274	-274
OTHER								
Procurement	0	0	0	0	0	0	0	0
Mission Activ	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
TOTAL RECUR	-34,913	-34,913	-34,913	-34,913	-34,913	-64,930	-239,494	-73,416
TOTAL NET COST	-28,913	-28,913	13,793	14,193	12,421	-41,803	-59,222	-73,416

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

Base: HAWTHORNE DEPOT, NV (3235L)

ONE-TIME COSTS ($K)	2006	2007	2008	2009	2010	2011	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
O&M							
CIV SALARY							
Civ RIFs	0	0	0	0	0	402	402
Civ Retire	0	0	0	0	0	48	48
CIV MOVING							
Per Diem	0	0	0	0	0	122	122
POV Miles	0	0	0	0	0	7	7
Home Purch	0	0	0	0	0	408	408
HHG	0	0	0	0	0	135	135
Misc	0	0	0	0	0	20	20
House Hunt	0	0	0	0	0	89	89
PPP	0	0	0	0	0	177	177
RITA	0	0	0	0	0	181	181
FREIGHT							
Packing	0	0	0	0	0	1	1
Freight	0	0	0	0	0	11	11
Vehicles	0	0	0	0	0	0	0
Unemployment	0	0	0	0	0	31	31
OTHER							
Info Tech	0	0	0	0	0	4	4
Prog Manage	0	0	0	0	0	0	0
Supt Contrac	0	0	0	0	0	0	0
Mothball	0	0	0	0	0	1,724	1,724
1-Time Move	0	0	31,574	31,574	31,574	0	94,723
MIL PERSONNEL							
MIL MOVING							
Per Diem	0	0	0	0	0	0	0
POV Miles	0	0	0	0	0	0	0
HHG	0	0	0	0	0	0	0
Misc	0	0	0	0	0	0	0
OTHER							
Elim PCS	0	0	0	0	0	309	309
OTHER							
HAP / RSE	0	0	0	0	0	0	0
Environmental	0	0	0	1,300	0	0	1,300
Misn Contract	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	634	19,456	20,090
TOTAL ONE-TIME	0	0	31,574	32,874	32,208	23,127	119,783

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

Base: HAWTHORNE DEPOT, NV (3235L)

RECURRINGCOSTS -----($K)-----	2006	2007	2008	2009	2010	2011	Total	Beyond
O&M								
Sustainment	0	0	0	0	0	0	0	0
Recap	0	0	0	0	0	0	0	0
BOS	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	0	0	0
TRICARE	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Off Salary	0	0	0	0	0	0	0	0
Enl Salary	0	0	0	0	0	0	0	0
House Allow	0	0	0	0	0	0	0	0
OTHER								
Mission Activ	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
TOTAL RECUR	0	0	0	0	0	0	0	0
TOTAL COSTS	0	0	31,574	32,874	32,208	23,127	119,783	0

ONE-TIME SAVES -----($K)-----	2006	2007	2008	2009	2010	2011	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
O&M							
1-Time Move	0	0	0	0	0	0	0
MIL PERSONNEL							
Mil Moving	0	0	0	0	0	0	0
OTHER							
Environmental	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	0	0	0	0	0	0	0

RECURRINGSAVES -----($K)-----	2006	2007	2008	2009	2010	2011	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
Sustainment	0	0	0	0	0	25,858	25,858	30,421
Recap	34,913	34,913	34,913	34,913	34,913	34,913	209,476	34,913
BOS	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	831	831	1,662
MIL PERSONNEL								
Off Salary	0	0	0	0	0	125	125	250
Enl Salary	0	0	0	0	0	2,966	2,966	5,933
House Allow	0	0	0	0	0	274	274	274
OTHER								
Procurement	0	0	0	0	0	0	0	0
Mission Activ	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
TOTAL RECUR	34,913	34,913	34,913	34,913	34,913	64,967	239,531	73,453
TOTAL SAVINGS	34,913	34,913	34,913	34,913	34,913	64,967	239,531	73,453

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

Base: HAWTHORNE DEPOT, NV (3235L)

ONE-TIME NET -----($K)-----	2006	2007	2008	2009	2010	2011	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
O&M							
Civ Retir/RIF	0	0	0	0	0	450	450
Civ Moving	0	0	0	0	0	1,153	1,153
Info Tech	0	0	0	0	0	4	4
Other	0	0	31,574	31,574	31,574	1,755	96,478
MIL PERSONNEL							
Mil Moving	0	0	0	0	0	309	309
OTHER							
HAP / RSE	0	0	0	0	0	0	0
Environmental	0	0	0	1,300	0	0	1,300
Misn Contract	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	634	19,456	20,090
TOTAL ONE-TIME	0	0	31,574	32,874	32,208	23,127	119,783

RECURRING NET -----($K)-----	2006	2007	2008	2009	2010	2011	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
Sustainment	0	0	0	0	0	-25,858	-25,858	-30,421
Recap	-34,913	-34,913	-34,913	-34,913	-34,913	-34,913	-209,476	-34,913
BOS	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	-831	-831	-1,662
TRICARE	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Mil Salary	0	0	0	0	0	-3,091	-3,091	-6,183
House Allow	0	0	0	0	0	-274	-274	-274
OTHER								
Procurement	0	0	0	0	0	0	0	0
Mission Activ	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
TOTAL RECUR	-34,913	-34,913	-34,913	-34,913	-34,913	-64,967	-239,531	-73,453
TOTAL NET COST	-34,913	-34,913	-3,338	-2,038	-2,705	-41,840	-119,747	-73,453

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

Base: TOOELE, UT (49878)

ONE-TIME COSTS -----($K)-----	2006	2007	2008	2009	2010	2011	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
O&M							
CIV SALARY							
Civ RIFs	0	0	0	0	0	0	0
Civ Retire	0	0	0	0	0	0	0
CIV MOVING							
Per Diem	0	0	0	0	0	0	0
POV Miles	0	0	0	0	0	0	0
Home Purch	0	0	0	0	0	0	0
HHG	0	0	0	0	0	0	0
Misc	0	0	0	0	0	0	0
House Hunt	0	0	0	0	0	0	0
PPP	0	0	0	0	0	0	0
RITA	0	0	0	0	0	0	0
FREIGHT							
Packing	0	0	0	0	0	0	0
Freight	0	0	0	0	0	0	0
Vehicles	0	0	0	0	0	0	0
Unemployment	0	0	0	0	0	0	0
OTHER							
Info Tech	0	0	0	0	0	0	0
Prog Manage	0	0	0	0	0	0	0
Supt Contrac	0	0	0	0	0	0	0
Mothball	0	0	0	0	0	0	0
1-Time Move	0	0	15,125	15,125	15,125	0	45,376
MIL PERSONNEL							
MIL MOVING							
Per Diem	0	0	0	0	0	0	0
POV Miles	0	0	0	0	0	0	0
HHG	0	0	0	0	0	0	0
Misc	0	0	0	0	0	0	0
OTHER							
Elim PCS	0	0	0	0	0	0	0
OTHER							
HAP / RSE	0	0	0	0	0	0	0
Environmental	0	0	0	1,100	0	0	1,100
Misn Contract	0	0	0	0	0	0	0
1-Time Other	6,000	6,000	2,006	6	0	0	14,012
TOTAL ONE-TIME	6,000	6,000	17,131	16,231	15,125	0	60,488

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

Base: TOOELE, UT (49878)

RECURRINGCOSTS -----($K)-----	2006	2007	2008	2009	2010	2011	Total	Beyond
O&M								
Sustainment	0	0	0	0	0	0	0	0
Recap	0	0	0	0	0	0	0	0
BOS	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	0	0	0
TRICARE	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Off Salary	0	0	0	0	0	0	0	0
Enl Salary	0	0	0	0	0	0	0	0
House Allow	0	0	0	0	0	0	0	0
OTHER								
Mission Activ	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
TOTAL RECUR	0	0	0	0	0	0	0	0
TOTAL COSTS	6,000	6,000	17,131	16,231	15,125	0	60,488	0

ONE-TIME SAVES -----($K)-----	2006	2007	2008	2009	2010	2011	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
O&M							
1-Time Move	0	0	0	0	0	0	0
MIL PERSONNEL							
Mil Moving	0	0	0	0	0	0	0
OTHER							
Environmental	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	0	0	0	0	0	0	0

RECURRINGSAVES -----($K)-----	2006	2007	2008	2009	2010	2011	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
Sustainment	0	0	0	0	0	0	0	0
Recap	0	0	0	0	0	0	0	0
BOS	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Off Salary	0	0	0	0	0	0	0	0
Enl Salary	0	0	0	0	0	0	0	0
House Allow	0	0	0	0	0	0	0	0
OTHER								
Procurement	0	0	0	0	0	0	0	0
Mission Activ	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
TOTAL RECUR	0	0	0	0	0	0	0	0
TOTAL SAVINGS	0	0	0	0	0	0	0	0

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

Base: TOOELE, UT (49878)

ONE-TIME NET -----($K)-----	2006	2007	2008	2009	2010	2011	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
O&M							
Civ Retir/RIF	0	0	0	0	0	0	0
Civ Moving	0	0	0	0	0	0	0
Info Tech	0	0	0	0	0	0	0
Other	0	0	15,125	15,125	15,125	0	45,376
MIL PERSONNEL							
Mil Moving	0	0	0	0	0	0	0
OTHER							
HAP / RSE	0	0	0	0	0	0	0
Environmental	0	0	0	1,100	0	0	1,100
Misn Contract	0	0	0	0	0	0	0
1-Time Other	6,000	6,000	2,006	6	0	0	14,012
TOTAL ONE-TIME	6,000	6,000	17,131	16,231	15,125	0	60,488

RECURRING NET -----($K)-----	2006	2007	2008	2009	2010	2011	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
Sustainment	0	0	0	0	0	0	0	0
Recap	0	0	0	0	0	0	0	0
BOS	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	0	0	0
TRICARE	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Mil Salary	0	0	0	0	0	0	0	0
House Allow	0	0	0	0	0	0	0	0
OTHER								
Procurement	0	0	0	0	0	0	0	0
Mission Activ	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
TOTAL RECUR	0	0	0	0	0	0	0	0
TOTAL NET COST	6,000	6,000	17,131	16,231	15,125	0	60,488	0

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

Base: BASE X (ARMY), US (XARMY)

ONE-TIME COSTS -----($K)-----	2006	2007	2008	2009	2010	2011	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
O&M							
CIV SALARY							
Civ RIFs	0	0	0	0	0	0	0
Civ Retire	0	0	0	0	0	0	0
CIV MOVING							
Per Diem	0	0	0	0	0	0	0
POV Miles	0	0	0	0	0	0	0
Home Purch	0	0	0	0	0	0	0
HHG	0	0	0	0	0	0	0
Misc	0	0	0	0	0	0	0
House Hunt	0	0	0	0	0	0	0
PPP	0	0	0	0	0	0	0
RITA	0	0	0	0	0	0	0
FREIGHT							
Packing	0	0	0	0	0	0	0
Freight	0	0	0	0	0	0	0
Vehicles	0	0	0	0	0	0	0
Unemployment	0	0	0	0	0	0	0
OTHER							
Info Tech	0	0	0	0	0	0	0
Prog Manage	0	0	0	0	0	0	0
Supt Contrac	0	0	0	0	0	0	0
Mothball	0	0	0	0	0	0	0
1-Time Move	0	0	0	0	0	0	0
MIL PERSONNEL							
MIL MOVING							
Per Diem	0	0	0	0	0	0	0
POV Miles	0	0	0	0	0	0	0
HHG	0	0	0	0	0	0	0
Misc	0	0	0	0	0	0	0
OTHER							
Elim PCS	0	0	0	0	0	0	0
OTHER							
HAP / RSE	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
Misn Contract	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	0	0	0	0	0	0	0

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

Base: BASE X (ARMY), US (XARMY)

RECURRINGCOSTS -----($K)-----	2006	2007	2008	2009	2010	2011	Total	Beyond
O&M								
Sustainment	0	0	0	0	0	0	0	0
Recap	0	0	0	0	0	0	0	0
BOS	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	37	37	37
TRICARE	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Off Salary	0	0	0	0	0	0	0	0
Enl Salary	0	0	0	0	0	0	0	0
House Allow	0	0	0	0	0	0	0	0
OTHER								
Mission Activ	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
TOTAL RECUR	0	0	0	0	0	37	37	37
TOTAL COSTS	0	0	0	0	0	37	37	37

ONE-TIME SAVES -----($K)-----	2006	2007	2008	2009	2010	2011	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
O&M							
1-Time Move	0	0	0	0	0	0	0
MIL PERSONNEL							
Mil Moving	0	0	0	0	0	0	0
OTHER							
Environmental	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	0	0	0	0	0	0	0

RECURRINGSAVES -----($K)-----	2006	2007	2008	2009	2010	2011	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
Sustainment	0	0	0	0	0	0	0	0
Recap	0	0	0	0	0	0	0	0
BOS	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Off Salary	0	0	0	0	0	0	0	0
Enl Salary	0	0	0	0	0	0	0	0
House Allow	0	0	0	0	0	0	0	0
OTHER								
Procurement	0	0	0	0	0	0	0	0
Mission Activ	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
TOTAL RECUR	0	0	0	0	0	0	0	0
TOTAL SAVINGS	0	0	0	0	0	0	0	0

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

Base: BASE X (ARMY), US (XARMY)

ONE-TIME NET -----($K)-----	2006	2007	2008	2009	2010	2011	Total
CONSTRUCTION							
MILCON	0	0	0	0	0	0	0
O&M							
Civ Retir/RIF	0	0	0	0	0	0	0
Civ Moving	0	0	0	0	0	0	0
Info Tech	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
MIL PERSONNEL							
Mil Moving	0	0	0	0	0	0	0
OTHER							
HAP / RSE	0	0	0	0	0	0	0
Environmental	0	0	0	0	0	0	0
Misn Contract	0	0	0	0	0	0	0
1-Time Other	0	0	0	0	0	0	0
TOTAL ONE-TIME	0	0	0	0	0	0	0

RECURRING NET -----($K)-----	2006	2007	2008	2009	2010	2011	Total	Beyond
FAM HOUSE OPS	0	0	0	0	0	0	0	0
O&M								
Sustainment	0	0	0	0	0	0	0	0
Recap	0	0	0	0	0	0	0	0
BOS	0	0	0	0	0	0	0	0
Civ Salary	0	0	0	0	0	37	37	37
TRICARE	0	0	0	0	0	0	0	0
MIL PERSONNEL								
Mil Salary	0	0	0	0	0	0	0	0
House Allow	0	0	0	0	0	0	0	0
OTHER								
Procurement	0	0	0	0	0	0	0	0
Mission Activ	0	0	0	0	0	0	0	0
Misc Recur	0	0	0	0	0	0	0	0
TOTAL RECUR	0	0	0	0	0	37	37	37
TOTAL NET COST	0	0	0	0	0	37	37	37

COBRA ECONOMIC IMPACT REPORT (COBRA v6.10)
Data As Of 5/2/2005 10:48:53 AM, Report Created 5/2/2005 10:48:56 AM

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

HAWTHORNE DEPOT, NV (3235L)

	2006	2007	2008	2009	2010	2011	Total
Jobs Gained-Mil	0	0	0	0	0	0	0
Jobs Lost-Mil	0	0	0	0	0	74	74
NET CHANGE-Mil	0	0	0	0	0	-74	-74
Jobs Gained-Civ	0	0	0	0	0	0	0
Jobs Lost-Civ	0	0	0	0	0	45	45
NET CHANGE-Civ	0	0	0	0	0	-45	-45
Jobs Gained-Stu	0	0	0	0	0	0	0
Jobs Lost-Stu	0	0	0	0	0	0	0
NET CHANGE-Stu	0	0	0	0	0	0	0

TOOELE, UT (49878)

	2006	2007	2008	2009	2010	2011	Total
Jobs Gained-Mil	0	0	0	0	0	0	0
Jobs Lost-Mil	0	0	0	0	0	0	0
NET CHANGE-Mil	0	0	0	0	0	0	0
Jobs Gained-Civ	0	0	0	0	0	0	0
Jobs Lost-Civ	0	0	0	0	0	0	0
NET CHANGE-Civ	0	0	0	0	0	0	0
Jobs Gained-Stu	0	0	0	0	0	0	0
Jobs Lost-Stu	0	0	0	0	0	0	0
NET CHANGE-Stu	0	0	0	0	0	0	0

BASE X (ARMY), US (XARMY)

	2006	2007	2008	2009	2010	2011	Total
Jobs Gained-Mil	0	0	0	0	0	0	0
Jobs Lost-Mil	0	0	0	0	0	0	0
NET CHANGE-Mil	0	0	0	0	0	0	0
Jobs Gained-Civ	0	0	0	0	0	20	20
Jobs Lost-Civ	0	0	0	0	0	0	0
NET CHANGE-Civ	0	0	0	0	0	20	20
Jobs Gained-Stu	0	0	0	0	0	0	0
Jobs Lost-Stu	0	0	0	0	0	0	0
NET CHANGE-Stu	0	0	0	0	0	0	0

SCENARIO ERROR REPORT (COBRA v6.10)
Data As Of 5/2/2005 10:48:53 AM, Report Created 5/2/2005 10:48:56 AM

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

SCENARIO DATA:
"Industrial" is not a recognized Department.

COBRA INPUT DATA REPORT (COBRA v6.10)
Data As Of 5/2/2005 10:48:53 AM, Report Created 5/2/2005 10:48:56 AM

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

INPUT SCREEN ONE - GENERAL SCENARIO INFORMATION

Model Year One : FY 2006
Model does Time-Phasing of Construction/Shutdown: Yes

Base Name, ST (Code)	Strategy:
HAWTHORNE DEPOT, NV (3235L)	Closes in FY 2011
TOOELE, UT (49878)	Realignment
BASE X (ARMY), US (XARMY)	Realignment

INPUT SCREEN TWO - DISTANCE TABLE
(Only shows distances where personnel or equipment are moving)

Point A:	Point B:	Distance:
HAWTHORNE DEPOT, NV (3235L)	BASE X (ARMY), US (XARMY)	1,750 mi

INPUT SCREEN THREE - MOVEMENT TABLE

Transfers from HAWTHORNE DEPOT, NV (3235L) to BASE X (ARMY), US (XARMY)

	2006	2007	2008	2009	2010	2011
Officer Positions:	0	0	0	0	0	0
Enlisted Positions:	0	0	0	0	0	0
Civilian Positions:	0	0	0	0	0	20
Student Positions:	0	0	0	0	0	0
NonVeh Missn Eqpt(tons):	0	0	0	0	0	0
Suppt Eqpt (tons):	0	0	0	0	0	0
Military Light Vehicles:	0	0	0	0	0	0
Heavy/Special Vehicles:	0	0	0	0	0	0

INPUT SCREEN FOUR - STATIC BASE INFORMATION

Name: HAWTHORNE DEPOT, NV (3235L)

Total Officer Employees:	2	Base Service (for BOS/Sust):	Army
Total Enlisted Employees:	72	Total Sustainment($K/Year):	30,421
Total Student Employees:	0	Sustain Payroll ($K/Year):	0
Total Civilian Employees:	45	BOS Non-Payroll ($K/Year):	0
Accomp Mil not Receiving BAH:	43.3%	BOS Payroll ($K/Year):	0
Officer Housing Units Avail:	0	Family Housing ($K/Year):	133
Enlisted Housing Units Avail:	0	Installation PRV($K):	3,596,014
Starting Facilities(KSF):	9,578	Svc/Agcy Recap Rate (Years):	103
Officer BAH ($/Month):	1,304	Homeowner Assistance Program:	No
Enlisted BAH ($/Month):	979		
Civ Locality Pay Factor:	1.109		
Area Cost Factor:	1.16		
Per Diem Rate ($/Day):	86		
Freight Cost ($/Ton/Mile):	0.33		
Vehicle Cost ($/Lift/Mile):	4.84		
Latitude:	0.000000		
Longitude:	0.000000		

TRICARE	In-Pat Admits	Out-Pat Visits	Prescrip
CostFactor	0.00	0.00	0.00
Actv MTF	0	0	0
Actv Purch	0	0	
Retiree	0	0	0
Retiree65+	0	0	0

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

INPUT SCREEN FOUR - STATIC BASE INFORMATION

Name: TOOELE, UT (49878)

Total Officer Employees:	38	Base Service (for BOS/Sust):	Army
Total Enlisted Employees:	519	Total Sustainment($K/Year):	8,200
Total Student Employees:	0	Sustain Payroll ($K/Year):	1,287
Total Civilian Employees:	526	BOS Non-Payroll ($K/Year):	17,874
Accomp Mil not Receiving BAH:	0.0%	BOS Payroll ($K/Year):	15,984
Officer Housing Units Avail:	1	Family Housing ($K/Year):	22
Enlisted Housing Units Avail:	0	Installation PRV($K):	1,368,196
Starting Facilities(KSF):	9,415	Svc/Agcy Recap Rate (Years):	103
Officer BAH ($/Month):	981	Homeowner Assistance Program:	Yes
Enlisted BAH ($/Month):	737		
Civ Locality Pay Factor:	1.109		
Area Cost Factor:	1.05		
Per Diem Rate ($/Day):	119		
Freight Cost ($/Ton/Mile):	0.33		
Vehicle Cost ($/Lift/Mile):	4.84		
Latitude:	40.533333		
Longitude:	-112.300000		

TRICARE	In-Pat Admits	Out-Pat Visits	Prescrip
CostFactor	4,160.52	84.00	0.00
Actv MTF	0	1,092	0
Actv Purch	33	1,888	
Retiree	0	2,617	0
Retiree65+	0	32	0

Name: BASE X (ARMY), US (XARMY)

Total Officer Employees:	1	Base Service (for BOS/Sust):	Army
Total Enlisted Employees:	7	Total Sustainment($K/Year):	262
Total Student Employees:	0	Sustain Payroll ($K/Year):	143
Total Civilian Employees:	101	BOS Non-Payroll ($K/Year):	0
Accomp Mil not Receiving BAH:	0.0%	BOS Payroll ($K/Year):	0
Officer Housing Units Avail:	0	Family Housing ($K/Year):	92
Enlisted Housing Units Avail:	0	Installation PRV($K):	22,901
Starting Facilities(KSF):	61	Svc/Agcy Recap Rate (Years):	4
Officer BAH ($/Month):	1,676	Homeowner Assistance Program:	No
Enlisted BAH ($/Month):	1,219		
Civ Locality Pay Factor:	1.140		
Area Cost Factor:	1.08		
Per Diem Rate ($/Day):	174		
Freight Cost ($/Ton/Mile):	0.33		
Vehicle Cost ($/Lift/Mile):	4.84		
Latitude:	0.000000		
Longitude:	0.000000		

TRICARE	In-Pat Admits	Out-Pat Visits	Prescrip
CostFactor	0.00	0.00	0.00
Actv MTF	0	0	0
Actv Purch	0	0	
Retiree	0	0	0
Retiree65+	0	0	0

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

INPUT SCREEN FIVE - DYNAMIC BASE INFORMATION

Name: HAWTHORNE DEPOT, NV (3235L)

	2006	2007	2008	2009	2010	2011
1-Time Unique Cost ($K):	0	0	0	0	634	19,456
1-Time Unique Save ($K):	0	0	0	0	0	0
1-Time Moving Cost ($K):	0	0	31,574	31,574	31,574	0
1-Time Moving Save ($K):	0	0	0	0	0	0
Env Non-MilCon Reqd($K):	0	0	0	1,300	0	0
Activ Mission Cost ($K):	0	0	0	0	0	0
Activ Mission Save ($K):	0	0	0	0	0	0
Misn Contract Start($K):	0	0	0	0	0	0
Misn Contract Term ($K):	0	0	0	0	0	0
Supt Contract Term ($K):	0	0	0	0	0	0
Misc Recurring Cost($K):	0	0	0	0	0	0
Misc Recurring Save($K):	0	0	0	0	0	0
One-Time IT Costs ($K):	0	0	0	0	0	0
Construction Schedule(%):	0%	0%	0%	0%	0%	0%
Shutdown Schedule (%):	0%	0%	0%	0%	0%	0%
Misn Milcon Avoidnc($K):	0	0	0	0	0	0
Procurement Avoidnc($K):	0	0	0	0	0	0

MTF Closure Action: None Fac ShDn(KSF): 9,578 FH ShDn: 0.000%

Name: TOOELE, UT (49878)

	2006	2007	2008	2009	2010	2011
1-Time Unique Cost ($K):	6,000	6,000	2,006	6	0	0
1-Time Unique Save ($K):	0	0	0	0	0	0
1-Time Moving Cost ($K):	0	0	15,125	15,125	15,125	0
1-Time Moving Save ($K):	0	0	0	0	0	0
Env Non-MilCon Reqd($K):	0	0	0	1,100	0	0
Activ Mission Cost ($K):	0	0	0	0	0	0
Activ Mission Save ($K):	0	0	0	0	0	0
Misn Contract Start($K):	0	0	0	0	0	0
Misn Contract Term ($K):	0	0	0	0	0	0
Supt Contract Term ($K):	0	0	0	0	0	0
Misc Recurring Cost($K):	0	0	0	0	0	0
Misc Recurring Save($K):	0	0	0	0	0	0
One-Time IT Costs ($K):	0	0	0	0	0	0
Construction Schedule(%):	0%	0%	0%	0%	0%	0%
Shutdown Schedule (%):	0%	0%	0%	0%	0%	0%
Misn Milcon Avoidnc($K):	0	0	0	0	0	0
Procurement Avoidnc($K):	0	0	0	0	0	0

MTF Closure Action: None Fac ShDn(KSF): 0 FH ShDn: 0.000%

Data As Of 5/2/2005 10:48:53 AM, Report Created 5/2/2005 10:48:56 AM

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

INPUT SCREEN FIVE - DYNAMIC BASE INFORMATION

Name: BASE X (ARMY), US (XARMY)

	2006	2007	2008	2009	2010	2011
1-Time Unique Cost ($K):	0	0	0	0	0	0
1-Time Unique Save ($K):	0	0	0	0	0	0
1-Time Moving Cost ($K):	0	0	0	0	0	0
1-Time Moving Save ($K):	0	0	0	0	0	0
Env Non-MilCon Reqd($K):	0	0	0	0	0	0
Activ Mission Cost ($K):	0	0	0	0	0	0
Activ Mission Save ($K):	0	0	0	0	0	0
Misn Contract Start($K):	0	0	0	0	0	0
Misn Contract Term ($K):	0	0	0	0	0	0
Supt Contract Term ($K):	0	0	0	0	0	0
Misc Recurring Cost($K):	0	0	0	0	0	0
Misc Recurring Save($K):	0	0	0	0	0	0
One-Time IT Costs ($K):	0	0	0	0	0	0
Construction Schedule(%):	0%	0%	0%	0%	0%	0%
Shutdown Schedule (%):	0%	0%	0%	0%	0%	0%
Misn Milcon Avoidnc($K):	0	0	0	0	0	0
Procurement Avoidnc($K):	0	0	0	0	0	0

MTF Closure Action: None Fac ShDn(KSF): 0 FH ShDn: 0.000%

INPUT SCREEN SIX - BASE PERSONNEL INFORMATION

Name: HAWTHORNE DEPOT, NV (3235L)

	2006	2007	2008	2009	2010	2011
Off Scenario Change:	0	0	0	0	0	-2
Enl Scenario Change:	0	0	0	0	0	-72
Civ Scenario Change:	0	0	0	0	0	-25
Off Prog nonBRAC Change:	0	0	0	0	0	0
Enl Prog nonBRAC Change:	0	0	0	0	0	0
Civ Prog nonBRAC Change:	0	0	0	0	0	0
Stu Prog nonBRAC Change:	0	0	0	0	0	0
Prog FH Privatization:	0%	0%	0%	0%	0%	0%

STANDARD FACTORS SCREEN ONE - PERSONNEL

SF File Descrip:

Perc Officers Accompanied:	72.00%	Priority Placement Program:	39.97%
Perc Enlisted Accompanied:	55.00%	PPP Actions Involving PCS:	50.70%
Officer Salary($/Year):	124,971.93	Civilian PCS Costs ($):	35,496.00
Enlisted Salary($/Year):	82,399.09	Home Sale Reimburse Rate:	10.00%
Civilian Salary($/Year):	59,959.18	Max Home Sale Reimburs($):	50,000.00
Avg Unemploy Cost($/Week):	272.90	Home Purch Reimburse Rate:	5.00%
Unemployment Eligibility(Weeks):	16	Max Home Purch Reimburs($):	25,000.00
Civilians Not Willing To Move:	6.00%	Civilian Homeowning Rate:	68.40%
Civilian Turnover Rate:	9.16%	HAP Home Value Reimburse Rate:	13.46%
Civilian Early Retire Rate:	8.10%	HAP Homeowner Receiving Rate:	18.44%
Civilian Regular Retire Rate:	1.67%	RSE Home Value Reimburse Rate:	0.00%
Civilian RIF Pay Factor:	86.32%	RSE Homeowner Receiving Rate:	0.00%
Civ Early Retire Pay Factor:	18.03%		

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

STANDARD FACTORS SCREEN TWO - FACILITIES

	Army	Navy	Air Force	Marines
Service Sustainment Rate	87.00%	93.00%	92.00%	97.00%
Unit Cost Adjustment (BOS)	10332.00	8879.00	3032.00	3904.00

Program Management Factor:	10.00	MilCon Site Prep Cost ($/SF):	0.74
Mothball (Close) ($/SF):	0.18	MilCon Contingency Plan Rate:	5.00%
Mothball (Deac/Realn) ($/SF):	0.45	MilCon Design Rate (Medical):	13.00%
Rehab vs. MilCon (Default):	47.00%	MilCon Design Rate (Other):	9.00%
Rehab vs. MilCon (Red):	64.00%	MilCon SIOH Rate:	6.00%
Rehab vs. MilCon (Amber):	29.00%	Discount Rate for NPV/Payback:	2.80%

STANDARD FACTORS SCREEN THREE - TRANSPORTATION

Material/Assigned Mil (Lb):	710	Storage-In-Transit ($/Pers):	373.76
HHG Per Off Accomp (Lb):	15,290.00	POV Reimburse($/Mile):	0.20
HHG Per Enl Accomp (Lb):	9,204.00	Air Transport ($/Pass Mile):	0.20
HHG Per Off Unaccomp (Lb):	13,712.00	IT Connect ($/Person):	200.00
HHG Per Enl Unaccomp (Lb):	6,960.00	Misc Exp($/Direct Employee):	1,000.00
HHG Per Civilian (Lb):	18,000.00	Avg Mil Tour Length (Months):	30.02
Total HHG Cost ($/100Lb):	8.78	One-Time Off PCS Cost($):	10,477.58
Equip Pack & Crate($/Ton):	180.67	One-Time Enl PCS Cost($):	3,998.52

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

FOOTNOTES FOR SCREEN ONE
==========
Close Hawthorne Army Depot, NV. Relocate Storage and Demilitarization functions to Tooele Army Depot, UT.

FOOTNOTES FOR SCREEN THREE
==========
Per Army, there are 20 Civilians at Hawthorne who must be relocated as a result of post closure. Base X used until destination is determined. These are the 20 positions noted to move in FY 11. The goal is to complete demil mission by FY 11. Will keep them at Hawthorne until the demil mission is complete. Equipment movement is captured in Screen 5.

FOOTNOTES FOR SCREEN FIVE
==========
HAWTHORNE:
FY 08 $31,574k: Cost to ship 59,481 STS of stock (MA-2 Action 7)

FY 09 $31,574k: Cost to ship 59,481 STS of stock (MA-2 Action 7)
FY 09 $1,300k: From page 4 of criteria 8, Summary of Scenario Environmental Impacts, "COBRA costs"; for environmental baseline survey (EBS); FY 09 was selected because the shipment of serviceable stock begins in FY 08 and finishes in FY 10 and the Military Departments wants to make sure permits, waivers, and restrictions are in place by FY 08 and decommissioning is complete by the end of FY 11.

FY 10 $31,574k: Cost to ship 59,481 STS of stock (MA-2 Action 7)

FY 10 $633.7k: Cost to move 16" Navy Gun Tubes to Crane (PCH and transportation)

FY 11 $19,456k: Movement of PODS, RF9 rotary furnace, hot gas decontamination equipment, washout, and APE (MA-12 Action 8)

TOOELE:
FY 06 $6,000k: Cost for buildings to house equipment (MA-12 Action 8)

FY 07 $6,000k: Cost for buildings to house equipment (MA-12 Action 8)

FY 08 $2,006k: $2,000 Cost for buildings to house equipment (MA-12 Action 8)
$6 Cost for training
FY 08 $15,125k: Cost to receipt 59,481 STONS (MA-2 Action 7)

FY 09 $15,125k: Cost to receipt 59,481 STONS (MA-2 Action 7)

FY 09 $1,100k: From page 4 of criteria 8, Summary of Scenario Environmental Impacts, "COBRA costs"; for environmental New Source Review, Environmental Industrial Study (EIS); FY 09 was selected because the shipment of serviceable stock begins in FY 08 and finishes in FY 10 and the Military Departments wants to make sure permits, waivers, and restrictions are in place by FY 08 and decommissioning is complete by the end of FY 11.

FY 10 $15,125k: Cost to receipt 59,481 STONS (MA-2 Action 7)

FOOTNOTES FOR SCREEN SIX
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OFF/ENL/CIV Scenario Change numbers are derived from Screen Four - Total Officer Employees, Total Enlisted Employees, and Total Civilian Employees minus the 20 civilians employees moved in Screen 3

TOTAL COBRA MILITARY CONSTRUCTION ASSETS REPORT (COBRA v6.10)
Data As Of 5/2/2005 10:48:53 AM, Report Created 5/2/2005 10:48:57 AM

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

All values in 2005 Constant Dollars

Base Name	Total MilCon*	Milcon Cost Avoidence	Total Net Costs
HAWTHORNE DEPOT	0	0	0
TOOELE	0	0	0
BASE X (ARMY)	0	0	0
Totals:	0	0	0

* All MilCon Costs include Design, Site Preparation, Contingency Planning, and SIOH Costs where applicable.

COBRA NET PRESENT VALUES REPORT (COBRA v6.10)
Data As Of 5/2/2005 10:48:53 AM, Report Created 5/2/2005 10:48:57 AM

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

Year	Cost($)	Adjusted Cost($)	NPV($)
2006	-28,912,754	-28,516,282	-28,516,282
2007	-28,912,754	-27,739,574	-56,255,857
2008	13,792,966	12,872,855	-43,383,002
2009	14,192,966	12,885,380	-30,497,622
2010	12,420,666	10,969,223	-19,528,399
2011	-41,803,145	-35,912,598	-55,440,997
2012	-73,415,662	-61,352,671	-116,793,668
2013	-73,415,662	-59,681,587	-176,475,255
2014	-73,415,662	-58,056,018	-234,531,273
2015	-73,415,662	-56,474,726	-291,005,999
2016	-73,415,662	-54,936,504	-345,942,503
2017	-73,415,662	-53,440,179	-399,382,682
2018	-73,415,662	-51,984,610	-451,367,291
2019	-73,415,662	-50,568,686	-501,935,978
2020	-73,415,662	-49,191,329	-551,127,307
2021	-73,415,662	-47,851,488	-598,978,795
2022	-73,415,662	-46,548,140	-645,526,934
2023	-73,415,662	-45,280,291	-690,807,226
2024	-73,415,662	-44,046,976	-734,854,202
2025	-73,415,662	-42,847,253	-777,701,455

TOTAL COBRA ONE-TIME COST REPORT (COBRA v6.10) - Page 1/4
Data As Of 5/2/2005 10:48:53 AM, Report Created 5/2/2005 10:48:57 AM

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

(All values in 2005 Constant Dollars)

Category	Cost	Sub-Total
Construction		
Military Construction	0	
Total - Construction		0
Personnel		
Civilian RIF	401,788	
Civilian Early Retirement	47,956	
Eliminated Military PCS	308,849	
Unemployment	31,157	
Total - Personnel		789,749
Overhead		
Program Management Cost	0	
Support Contract Termination	0	
Mothball / Shutdown	1,724,040	
Total - Overhead		1,724,040
Moving		
Civilian Moving	962,783	
Civilian PPP	177,480	
Military Moving	0	
Freight	12,822	
Information Technologies	4,000	
One-Time Moving Costs	140,099,160	
Total - Moving		141,256,245
Other		
HAP / RSE	0	
Environmental Mitigation Costs	2,400,000	
Mission Contract Startup and Termination	0	
One-Time Unique Costs	34,101,680	
Total - Other		36,501,680
Total One-Time Costs		180,271,714
One-Time Savings		
Military Construction Cost Avoidances	0	
Military Moving	0	
One-Time Moving Savings	0	
Environmental Mitigation Savings	0	
One-Time Unique Savings	0	
Total One-Time Savings		0
Total Net One-Time Costs		180,271,714

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

Base: HAWTHORNE DEPOT, NV (3235L)
(All values in 2005 Constant Dollars)

Category	Cost	Sub-Total
Construction		
Military Construction	0	
Total - Construction		0
Personnel		
Civilian RIF	401,788	
Civilian Early Retirement	47,956	
Eliminated Military PCS	308,849	
Unemployment	31,157	
Total - Personnel		789,749
Overhead		
Program Management Cost	0	
Support Contract Termination	0	
Mothball / Shutdown	1,724,040	
Total - Overhead		1,724,040
Moving		
Civilian Moving	962,783	
Civilian PPP	177,480	
Military Moving	0	
Freight	12,822	
Information Technologies	4,000	
One-Time Moving Costs	94,722,900	
Total - Moving		95,879,985
Other		
HAP / RSE	0	
Environmental Mitigation Costs	1,300,000	
Mission Contract Startup and Termination	0	
One-Time Unique Costs	20,089,680	
Total - Other		21,389,680
Total One-Time Costs		119,783,454
One-Time Savings		
Military Construction Cost Avoidances	0	
Military Moving	0	
One-Time Moving Savings	0	
Environmental Mitigation Savings	0	
One-Time Unique Savings	0	
Total One-Time Savings		0
Total Net One-Time Costs		119,783,454

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

Base: TOOELE, UT (49878)
(All values in 2005 Constant Dollars)

Category	Cost	Sub-Total
Construction		
Military Construction	0	
Total - Construction		0
Personnel		
Civilian RIF	0	
Civilian Early Retirement	0	
Eliminated Military PCS	0	
Unemployment	0	
Total - Personnel		0
Overhead		
Program Management Cost	0	
Support Contract Termination	0	
Mothball / Shutdown	0	
Total - Overhead		0
Moving		
Civilian Moving	0	
Civilian PPP	0	
Military Moving	0	
Freight	0	
Information Technologies	0	
One-Time Moving Costs	45,376,260	
Total - Moving		45,376,260
Other		
HAP / RSE	0	
Environmental Mitigation Costs	1,100,000	
Mission Contract Startup and Termination	0	
One-Time Unique Costs	14,012,000	
Total - Other		15,112,000
Total One-Time Costs		60,488,260
One-Time Savings		
Military Construction Cost Avoidances	0	
Military Moving	0	
One-Time Moving Savings	0	
Environmental Mitigation Savings	0	
One-Time Unique Savings	0	
Total One-Time Savings		0
Total Net One-Time Costs		60,488,260

Data As Of 5/2/2005 10:48:53 AM, Report Created 5/2/2005 10:48:57 AM

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

Base: BASE X (ARMY), US (XARMY)
(All values in 2005 Constant Dollars)

Category	Cost	Sub-Total
Construction		
Military Construction	0	
Total - Construction		0
Personnel		
Civilian RIF	0	
Civilian Early Retirement	0	
Eliminated Military PCS	0	
Unemployment	0	
Total - Personnel		0
Overhead		
Program Management Cost	0	
Support Contract Termination	0	
Mothball / Shutdown	0	
Total - Overhead		0
Moving		
Civilian Moving	0	
Civilian PPP	0	
Military Moving	0	
Freight	0	
Information Technologies	0	
One-Time Moving Costs	0	
Total - Moving		0
Other		
HAP / RSE	0	
Environmental Mitigation Costs	0	
Mission Contract Startup and Termination	0	
One-Time Unique Costs	0	
Total - Other		0
Total One-Time Costs		0
One-Time Savings		
Military Construction Cost Avoidances	0	
Military Moving	0	
One-Time Moving Savings	0	
Environmental Mitigation Savings	0	
One-Time Unique Savings	0	
Total One-Time Savings		0
Total Net One-Time Costs		0

COBRA SUSTAINMENT/RECAP/BOS/HOUSING CHANGE REPORT (COBRA v6.10)
Data As Of 5/2/2005 10:48:53 AM, Report Created 5/2/2005 10:48:57 AM

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

Net Change($K)	2006	2007	2008	2009	2010	2011	Total	Beyond
Sustain Change	0	0	0	0	0	-25,858	-25,858	-30,421
Recap Change	-34,913	-34,913	-34,913	-34,913	-34,913	-34,913	-209,476	-34,913
BOS Change	0	0	0	0	0	0	0	0
Housing Change	0	0	0	0	0	0	0	0
TOTAL CHANGES	-34,913	-34,913	-34,913	-34,913	-34,913	-60,770	-235,334	-65,334

HAWTHORNE DEPOT, NV (3235L)

Net Change($K)	2006	2007	2008	2009	2010	2011	Total	Beyond
Sustain Change	0	0	0	0	0	-25,858	-25,858	-30,421
Recap Change	-34,913	-34,913	-34,913	-34,913	-34,913	-34,913	-209,476	-34,913
BOS Change	0	0	0	0	0	0	0	0
Housing Change	0	0	0	0	0	0	0	0
TOTAL CHANGES	-34,913	-34,913	-34,913	-34,913	-34,913	-60,770	-235,334	-65,334

TOOELE, UT (49878)

Net Change($K)	2006	2007	2008	2009	2010	2011	Total	Beyond
Sustain Change	0	0	0	0	0	0	0	0
Recap Change	0	0	0	0	0	0	0	0
BOS Change	0	0	0	0	0	0	0	0
Housing Change	0	0	0	0	0	0	0	0
TOTAL CHANGES	0	0	0	0	0	0	0	0

BASE X (ARMY), US (XARMY)

Net Change($K)	2006	2007	2008	2009	2010	2011	Total	Beyond
Sustain Change	0	0	0	0	0	0	0	0
Recap Change	0	0	0	0	0	0	0	0
BOS Change	0	0	0	0	0	0	0	0
Housing Change	0	0	0	0	0	0	0	0
TOTAL CHANGES	0	0	0	0	0	0	0	0

TOTAL COBRA PERSONNEL IMPACT REPORT (COBRA v6.10) - Page 1/4
Data As Of 5/2/2005 10:48:53 AM, Report Created 5/2/2005 10:48:56 AM

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

	Rate	2006	2007	2008	2009	2010	2011	Total
CIVILIAN POSITIONS REALIGNING OUT		0	0	0	0	0	20	20
Early Retirement*	8.10%	0	0	0	0	0	2	2
Regular Retirement*	1.67%	0	0	0	0	0	0	0
Civilian Turnover*	9.16%	0	0	0	0	0	2	2
Civs Not Moving (RIFs)*	6.00%	0	0	0	0	0	1	1
Civilians Moving (the remainder)		0	0	0	0	0	15	15
Civilian Positions Available		0	0	0	0	0	5	5
CIVILIAN POSITIONS ELIMINATED		0	0	0	0	0	25	25
Early Retirement	8.10%	0	0	0	0	0	2	2
Regular Retirement	1.67%	0	0	0	0	0	0	0
Civilian Turnover	9.16%	0	0	0	0	0	2	2
Civs Not Moving (RIFs)*	6.00%	0	0	0	0	0	2	2
Priority Placement#	39.97%	0	0	0	0	0	10	10
Civilians Available to Move		0	0	0	0	0	9	9
Civilians Moving		0	0	0	0	0	5	5
Civilian RIFs (the remainder)		0	0	0	0	0	4	4
CIVILIAN POSITIONS REALIGNING IN		0	0	0	0	0	20	20
Civilians Moving		0	0	0	0	0	20	20
New Civilians Hired		0	0	0	0	0	0	0
Other Civilian Additions		0	0	0	0	0	0	0
TOTAL CIVILIAN EARLY RETIREMENTS		0	0	0	0	0	4	4
TOTAL CIVILIAN RIFS		0	0	0	0	0	7	7
TOTAL CIVILIAN PRIORITY PLACEMENTS#		0	0	0	0	0	10	10
TOTAL CIVILIAN NEW HIRES		0	0	0	0	0	0	0

* Early Retirements, Regular Retirements, Civilian Turnover, and Civilians Not Willing to Move are not applicable for moves under fifty miles.

Not all Priority Placements involve a Permanent Change of Station. The rate of PPP placements involving a PCS is 50.70%

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

Base: HAWTHORNE DEPOT, NV (3235L)	Rate	2006	2007	2008	2009	2010	2011	Total
CIVILIAN POSITIONS REALIGNING OUT		0	0	0	0	0	20	20
Early Retirement*	8.10%	0	0	0	0	0	2	2
Regular Retirement*	1.67%	0	0	0	0	0	0	0
Civilian Turnover*	9.16%	0	0	0	0	0	2	2
Civs Not Moving (RIFs)*	6.00%	0	0	0	0	0	1	1
Civilians Moving (the remainder)		0	0	0	0	0	15	15
Civilian Positions Available		0	0	0	0	0	5	5
CIVILIAN POSITIONS ELIMINATED		0	0	0	0	0	25	25
Early Retirement	8.10%	0	0	0	0	0	2	2
Regular Retirement	1.67%	0	0	0	0	0	0	0
Civilian Turnover	9.16%	0	0	0	0	0	2	2
Civs Not Moving (RIFs)*	6.00%	0	0	0	0	0	2	2
Priority Placement#	39.97%	0	0	0	0	0	10	10
Civilians Available to Move		0	0	0	0	0	9	9
Civilians Moving		0	0	0	0	0	5	5
Civilian RIFs (the remainder)		0	0	0	0	0	4	4
CIVILIAN POSITIONS REALIGNING IN		0	0	0	0	0	0	0
Civilians Moving		0	0	0	0	0	0	0
New Civilians Hired		0	0	0	0	0	0	0
Other Civilian Additions		0	0	0	0	0	0	0
TOTAL CIVILIAN EARLY RETIRMENTS		0	0	0	0	0	4	4
TOTAL CIVILIAN RIFS		0	0	0	0	0	7	7
TOTAL CIVILIAN PRIORITY PLACEMENTS#		0	0	0	0	0	10	10
TOTAL CIVILIAN NEW HIRES		0	0	0	0	0	0	0

* Early Retirements, Regular Retirements, Civilian Turnover, and Civilians Not Willing to Move are not applicable for moves under fifty miles.

Not all Priority Placements involve a Permanent Change of Station. The rate of PPP placements involving a PCS is 50.70%

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

Base: TOOELE, UT (49878)	Rate	2006	2007	2008	2009	2010	2011	Total
CIVILIAN POSITIONS REALIGNING OUT		0	0	0	0	0	0	0
Early Retirement*	8.10%	0	0	0	0	0	0	0
Regular Retirement*	1.67%	0	0	0	0	0	0	0
Civilian Turnover*	9.16%	0	0	0	0	0	0	0
Civs Not Moving (RIFs)*	6.00%	0	0	0	0	0	0	0
Civilians Moving (the remainder)		0	0	0	0	0	0	0
Civilian Positions Available		0	0	0	0	0	0	0
CIVILIAN POSITIONS ELIMINATED		0	0	0	0	0	0	0
Early Retirement	8.10%	0	0	0	0	0	0	0
Regular Retirement	1.67%	0	0	0	0	0	0	0
Civilian Turnover	9.16%	0	0	0	0	0	0	0
Civs Not Moving (RIFs)*	6.00%	0	0	0	0	0	0	0
Priority Placement#	39.97%	0	0	0	0	0	0	0
Civilians Available to Move		0	0	0	0	0	0	0
Civilians Moving		0	0	0	0	0	0	0
Civilian RIFs (the remainder)		0	0	0	0	0	0	0
CIVILIAN POSITIONS REALIGNING IN		0	0	0	0	0	0	0
Civilians Moving		0	0	0	0	0	0	0
New Civilians Hired		0	0	0	0	0	0	0
Other Civilian Additions		0	0	0	0	0	0	0
TOTAL CIVILIAN EARLY RETIRMENTS		0	0	0	0	0	0	0
TOTAL CIVILIAN RIFS		0	0	0	0	0	0	0
TOTAL CIVILIAN PRIORITY PLACEMENTS#		0	0	0	0	0	0	0
TOTAL CIVILIAN NEW HIRES		0	0	0	0	0	0	0

* Early Retirements, Regular Retirements, Civilian Turnover, and Civilians Not Willing to Move are not applicable for moves under fifty miles.

Not all Priority Placements involve a Permanent Change of Station. The rate of PPP placements involving a PCS is 50.70%

Data As Of 5/2/2005 10:48:53 AM, Report Created 5/2/2005 10:48:56 AM

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

Base: BASE X (ARMY), US (XARMY)	Rate	2006	2007	2008	2009	2010	2011	Total
CIVILIAN POSITIONS REALIGNING OUT		0	0	0	0	0	0	0
Early Retirement*	8.10%	0	0	0	0	0	0	0
Regular Retirement*	1.67%	0	0	0	0	0	0	0
Civilian Turnover*	9.16%	0	0	0	0	0	0	0
Civs Not Moving (RIFs)*	6.00%	0	0	0	0	0	0	0
Civilians Moving (the remainder)		0	0	0	0	0	0	0
Civilian Positions Available		0	0	0	0	0	0	0
CIVILIAN POSITIONS ELIMINATED		0	0	0	0	0	0	0
Early Retirement	8.10%	0	0	0	0	0	0	0
Regular Retirement	1.67%	0	0	0	0	0	0	0
Civilian Turnover	9.16%	0	0	0	0	0	0	0
Civs Not Moving (RIFs)*	6.00%	0	0	0	0	0	0	0
Priority Placement#	39.97%	0	0	0	0	0	0	0
Civilians Available to Move		0	0	0	0	0	0	0
Civilians Moving		0	0	0	0	0	0	0
Civilian RIFs (the remainder)		0	0	0	0	0	0	0
CIVILIAN POSITIONS REALIGNING IN		0	0	0	0	0	20	20
Civilians Moving		0	0	0	0	0	20	20
New Civilians Hired		0	0	0	0	0	0	0
Other Civilian Additions		0	0	0	0	0	0	0
TOTAL CIVILIAN EARLY RETIRMENTS		0	0	0	0	0	0	0
TOTAL CIVILIAN RIFS		0	0	0	0	0	0	0
TOTAL CIVILIAN PRIORITY PLACEMENTS#		0	0	0	0	0	0	0
TOTAL CIVILIAN NEW HIRES		0	0	0	0	0	0	0

* Early Retirements, Regular Retirements, Civilian Turnover, and Civilians Not Willing to Move are not applicable for moves under fifty miles.

Not all Priority Placements involve a Permanent Change of Station. The rate of PPP placements involving a PCS is 50.70%

COBRA PERSONNEL YEARLY PERCENTAGES REPORT (COBRA v6.10)
Data As Of 5/2/2005 10:48:53 AM, Report Created 5/2/2005 10:48:56 AM

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

Base: HAWTHORNE DEPOT, NV (3235L)

	Pers Moved In/Added		MilCon	Pers Moved Out/Eliminated		ShutDn
Year	Total	Percent	TimePhase	Total	Percent	TimePhase
2006	0	0.00%	33.33%	0	0.00%	0.00%
2007	0	0.00%	16.67%	0	0.00%	0.00%
2008	0	0.00%	16.67%	0	0.00%	0.00%
2009	0	0.00%	16.67%	0	0.00%	0.00%
2010	0	0.00%	16.67%	0	0.00%	0.00%
2011	0	0.00%	0.00%	119	100.00%	100.00%
TOTALS	0	0.00%	100.00%	119	100.00%	100.00%

Base: TOOELE, UT (49878)

	Pers Moved In/Added		MilCon	Pers Moved Out/Eliminated		ShutDn
Year	Total	Percent	TimePhase	Total	Percent	TimePhase
2006	0	0.00%	33.33%	0	0.00%	16.67%
2007	0	0.00%	16.67%	0	0.00%	16.67%
2008	0	0.00%	16.67%	0	0.00%	16.67%
2009	0	0.00%	16.67%	0	0.00%	16.67%
2010	0	0.00%	16.67%	0	0.00%	16.67%
2011	0	0.00%	0.00%	0	0.00%	16.67%
TOTALS	0	0.00%	100.00%	0	0.00%	100.00%

Base: BASE X (ARMY), US (XARMY)

	Pers Moved In/Added		MilCon	Pers Moved Out/Eliminated		ShutDn
Year	Total	Percent	TimePhase	Total	Percent	TimePhase
2006	0	0.00%	0.00%	0	0.00%	16.67%
2007	0	0.00%	0.00%	0	0.00%	16.67%
2008	0	0.00%	0.00%	0	0.00%	16.67%
2009	0	0.00%	0.00%	0	0.00%	16.67%
2010	0	0.00%	100.00%	0	0.00%	16.67%
2011	20	100.00%	0.00%	0	0.00%	16.67%
TOTALS	20	100.00%	100.00%	0	0.00%	100.00%

COBRA TOTAL PERSONNEL SUMMARY REPORT (COBRA v6.10)
Data As Of 5/2/2005 10:48:53 AM, Report Created 5/2/2005 10:48:56 AM

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

TOTAL SCENARIO POPULATION (FY 2005, Prior to BRAC Action):

Officers	Enlisted	Students	Civilians
41	598	0	672

TOTAL PERSONNEL REALIGNMENTS, ENTIRE SCENARIO):

	2006	2007	2008	2009	2010	2011	Total
Officers	0	0	0	0	0	0	0
Enlisted	0	0	0	0	0	0	0
Students	0	0	0	0	0	0	0
Civilians	0	0	0	0	0	20	20
TOTAL	0	0	0	0	0	20	20

TOTAL SCENARIO POSITION CHANGES, ENTIRE SCENARIO:

	2006	2007	2008	2009	2010	2011	Total
Officers	0	0	0	0	0	-2	-2
Enlisted	0	0	0	0	0	-72	-72
Civilians	0	0	0	0	0	-25	-25
TOTAL	0	0	0	0	0	-99	-99

TOTAL SCENARIO POPULATION (After BRAC Action):

Officers	Enlisted	Students	Civilians
39	526	0	647

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

PERSONNEL SUMMARY FOR: HAWTHORNE DEPOT, NV (3235L)

BASE POPULATION (FY 2005, Prior to BRAC Action) FOR: HAWTHORNE DEPOT, NV (3235L)

Officers	Enlisted	Students	Civilians
2	72	0	45

PERSONNEL REALIGNMENTS:
To Base: BASE X (ARMY), US (XARMY)

	2006	2007	2008	2009	2010	2011	Total
Officers	0	0	0	0	0	0	0
Enlisted	0	0	0	0	0	0	0
Students	0	0	0	0	0	0	0
Civilians	0	0	0	0	0	20	20
TOTAL	0	0	0	0	0	20	20

TOTAL PERSONNEL REALIGNMENTS (Out of HAWTHORNE DEPOT, NV (3235L)):

	2006	2007	2008	2009	2010	2011	Total
Officers	0	0	0	0	0	0	0
Enlisted	0	0	0	0	0	0	0
Students	0	0	0	0	0	0	0
Civilians	0	0	0	0	0	20	20
TOTAL	0	0	0	0	0	20	20

SCENARIO POSITION CHANGES FOR: HAWTHORNE DEPOT, NV (3235L)

	2006	2007	2008	2009	2010	2011	Total
Officers	0	0	0	0	0	-2	-2
Enlisted	0	0	0	0	0	-72	-72
Civilians	0	0	0	0	0	-25	-25
TOTAL	0	0	0	0	0	-99	-99

BASE POPULATION (After BRAC Action) FOR: HAWTHORNE DEPOT, NV (3235L)

Officers	Enlisted	Students	Civilians
0	0	0	0

PERSONNEL SUMMARY FOR: TOOELE, UT (49878)

BASE POPULATION (FY 2005, Prior to BRAC Action) FOR: TOOELE, UT (49878)

Officers	Enlisted	Students	Civilians
38	519	0	526

BASE POPULATION (After BRAC Action) FOR: TOOELE, UT (49878)

Officers	Enlisted	Students	Civilians
38	519	0	526

PERSONNEL SUMMARY FOR: BASE X (ARMY), US (XARMY)

BASE POPULATION (FY 2005, Prior to BRAC Action) FOR: BASE X (ARMY), US (XARMY)

Officers	Enlisted	Students	Civilians
1	7	0	101

Department : Industrial
Scenario File : Z:\Cobra\Munitions&Armaments\IND 0108 Close Hawthorne AD\IND 0108 Close Hawthorne AD Cobra 05022005.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\\Desktop\COBRA 6.10\BRAC2005.SFF

PERSONNEL REALIGNMENTS:
From Base: HAWTHORNE DEPOT, NV (3235L)

	2006	2007	2008	2009	2010	2011	Total
Officers	0	0	0	0	0	0	0
Enlisted	0	0	0	0	0	0	0
Students	0	0	0	0	0	0	0
Civilians	0	0	0	0	0	20	20
TOTAL	0	0	0	0	0	20	20

TOTAL PERSONNEL REALIGNMENTS (Into BASE X (ARMY), US (XARMY)):

	2006	2007	2008	2009	2010	2011	Total
Officers	0	0	0	0	0	0	0
Enlisted	0	0	0	0	0	0	0
Students	0	0	0	0	0	0	0
Civilians	0	0	0	0	0	20	20
TOTAL	0	0	0	0	0	20	20

BASE POPULATION (After BRAC Action) FOR: BASE X (ARMY), US (XARMY)

Officers	Enlisted	Students	Civilians
1	7	0	121

Economic Impact Report

This report depicts the economic impact of the following Scenarios:

IND-0108: Close Hawthorne Army Depot

The data in this report is rolled up by Region of Influence

As of: Tue May 10 11:51:10 EDT 2005

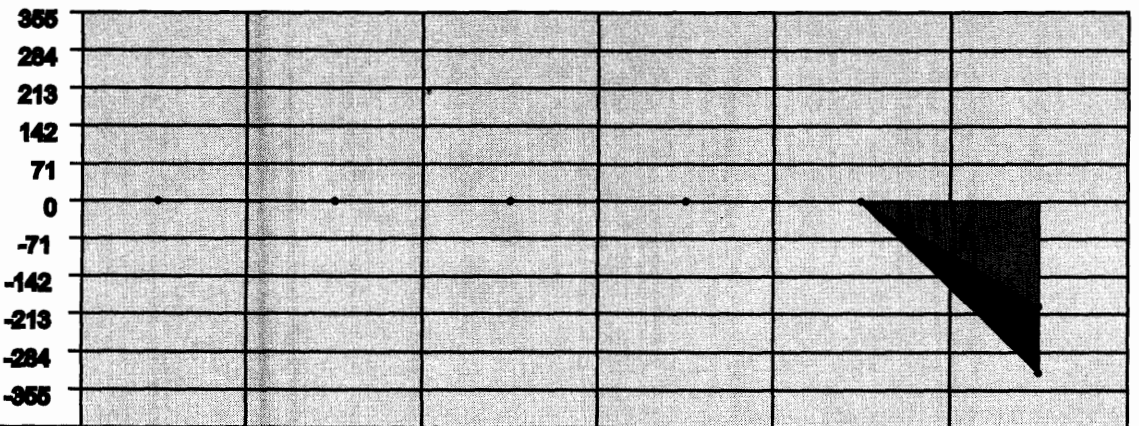
ECONOMIC IMPACT DATA

Scenario: All Selected (see title page)
Economic Region of Influence(ROI): Reno-Sparks, NV Metropolitan Statistical Area
Base: All Bases
Action: All Actions

Overall Economic Impact of Proposed BRAC-05 Action:

ROI Population (2002):	365,166
ROI Employment (2002):	243,270
Authorized Manpower (2005):	119
Authorized Manpower(2005) / ROI Employment(2002):	0.05%
Total Estimated Job Change:	-326
Total Estimated Job Change / ROI Employment(2002):	-0.13%

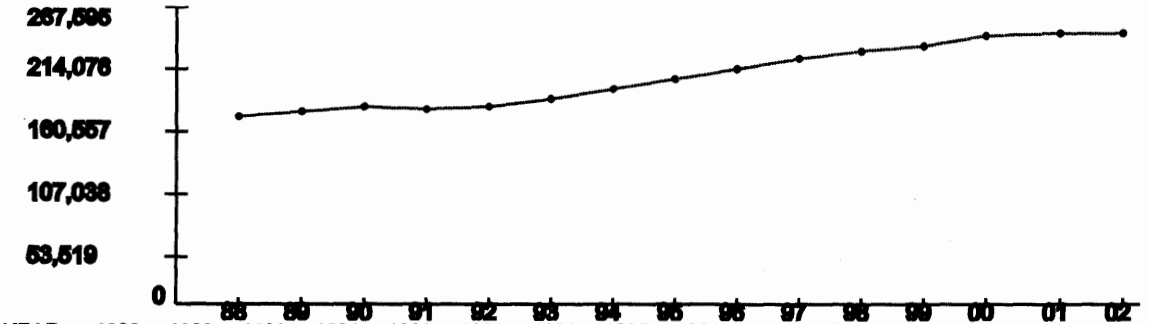
Cumulative Job Change (Gain/Loss) Over Time:



YEAR:	2006	2007	2008	2009	2010	2011
Direct Military:	0	0	0	0	0	-74
Direct Civilian:	0	0	0	0	0	-45
Direct Student:	0	0	0	0	0	0
Direct Contractor:	0	0	0	0	0	-80
Cumulative Direct:	0	0	0	0	0	-199
Cum Indir/Induc:	0	0	0	0	0	-127
Cumulative Total:	0	0	0	0	0	-326

Reno-Sparks, NV Metropolitan Statistical Area Trend Data

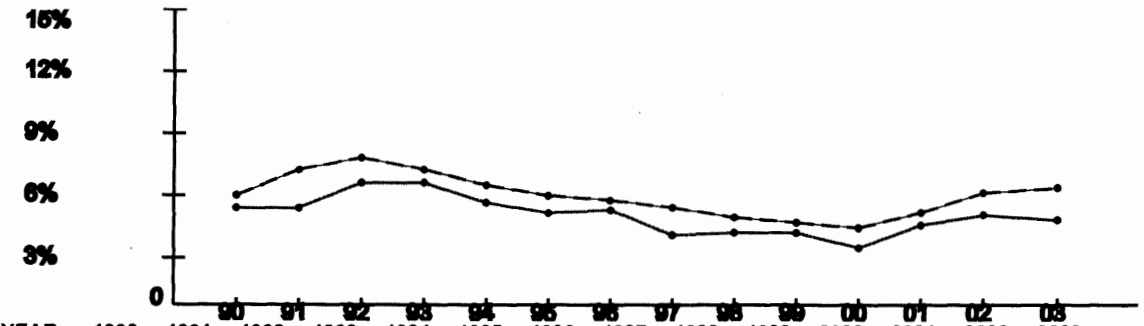
Employment Trend (1988-2002)



YEAR:	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Index:	1	1.02	1.05	1.05	1.05	1.09	1.15	1.2	1.25	1.3	1.35	1.37	1.42	1.43	1.44

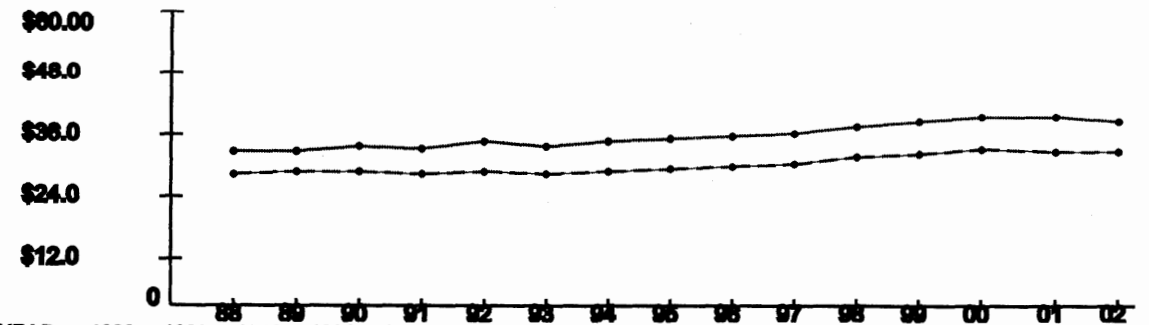
Represents the ROI's indexed employment change since 1988

Unemployment Percentage Trend (1990-2003)



YEAR:	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
ROI:	5.06%	4.99%	6.22%	6.29%	5.24%	4.73%	4.86%	3.67%	3.79%	3.72%	2.98%	4.11%	4.6%	4.38%
USA:	5.6%	6.83%	7.5%	6.91%	6.09%	5.59%	5.4%	4.94%	4.51%	4.21%	3.99%	4.74%	5.79%	5.99%

Per Capita Income x $1,000 (1988-2002)



YEAR:	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
ROI:	$31.4	$31.66	$32.4	$32.17	$33.46	$32.66	$33.51	$34.14	$34.63	$34.94	$36.34	$37.37	$38.49	$38.43	$37.6
USA:	$26.96	$27.48	$27.42	$26.87	$27.35	$27.18	$27.53	$27.86	$28.35	$29.04	$30.35	$30.86	$31.89	$31.72	$31.61

Note: National trend lines are dashed

HAWTHORNE ARMY DEPOT, NV

Demographics

The following tables provide a short description of the area near the installation/activity. HAWTHORNE ARMY DEPOT is 133 miles from Reno, NV, the nearest city with a population of 100,000 or more. The nearest metropolitan statistical area (MSA) is

MSA	Population
Las Vegas, NV MSA	1,563,282

The following entities comprise the military housing area (MHA):

County/City	Population
Mineral	5071
Total	5,071

Child Care

This attribute captures the number of nationally accredited child-care centers within the local community: 0

Cost of Living

Cost of Living provides a relative measure of cost of living in the local community. General Schedule (GS) Locality Pay provides a relative scale to compare local salaries with government salaries and Basic Allowance for Housing (BAH) is an indicator of the local rental market. In-state tuition is an indicator of the support provided by the state for active duty family members to participate in higher-level education opportunities.

Median Household Income	(US Avg $41,994)	$32,891	Basis: 1 of 1 county
Median House Value	(US Avg $119,600)	$59,500	
GS Locality Pay	("Rest of US" 10.9%)	10.9%	
O-3 with Dependents BAH Rate		$1,304	
In-state Tuition for Family Member		Yes	
In-state Tuition Continues if Member PCSs Out of State			

Education

This attribute defines the population in local school districts and identifies capacity. The pupil/teacher ratio, graduation rate, percentage of certified teachers and composite SAT I/ACT scores provide a relative quality indicator of education. This attribute also attempts to give communities credit for the potential intellectual capital they provide.

NOTE: "MFR" means a Memorandum For Record is on file at the installation/activity/agency to document problems in obtaining the required information. Reasons for not being able to obtain information may be that the school district refused to provide the information or the school district does not use or track the information.

If the installation/activity/agency has incomplete information from the local school system in order to accurately compute a score in this area, the number of school districts reporting information will be captured in addition to the computed answer.

		Basis
School District(s) Capacity	1,820	5 of 5 districts
Students Enrolled	729	5 of 5 districts
Average Pupil/Teacher Ratio	10.1:1	5 of 5 districts
High School Students Enrolled	211	1 of 1 district
Average High School Graduation Rate (US Avg 67.3%)	100.0%	1 of 1 district
Average Composite SAT I Score (US Avg 1026)	1060	1 of 1 district
Average ACT Score (US Avg 20.8)		1 of 1 district
Available Graduate/PhD Programs	0	
Available Colleges and/or Universities	1	
Available Vocational and/or Technical Schools	0	

Employment

Unemployment and job growth rates provide a relative merit of job availability in the local community. National rates from the Bureau of Labor Statistics are also provided.

The unemployment rates for the last five-years:

	1999	2000	2001	2002	2003
Local Data	8.4%	10.0%	8.8%	6.1%	6.4%
National	4.2%	4.0%	4.7%	5.8%	6.0%
Basis:	1 of 1 county	1 of 1 county	1 of 1 county	1 of 1 county	1 of 1 county

The annual job growth rate for the last five-years:

	1999	2000	2001	2002	2003
Local Data	-19.1%	1.5%	-10.0%	4.2%	-3.8%
National	1.5%	2.4%	.03%	-.31%	.86%
Basis:	1 of 1 county	1 of 1 county	1 of 1 county	1 of 1 county	1 of 1 county

Housing

This attribute provides an indication of availability of housing, both sales and rental, in the local community. Note: according to the 2000 Census, Vacant Sale and Vacant Rental Units do not equal Total Vacant Housing Units; Total Vacant Housing Units may also include units that are vacant but not on the market for sale or rent.

Total Vacant Housing Units	669	Basis: 1 of 1 county
Vacant Sale Units	59	
Vacant Rental Units	234	

Medical Providers

This attribute provides an indicator of availability of medical care for military and DoD civilians in the local community. The table reflects the raw number of physicians/beds and ratio of physicians/beds to population.

	# Physicians	# Beds	Population	
Local Community	8	35	5,071	Basis: 1 of 1 county
Ratio	1:634	1:145		
National Ratio (2003)	1:421.2	1:373.7		

Safety/Crime

The local community's Uniform Crime Reports (UCR) Index for 2002 per 100,000 people and the national UCR based on information from the Federal Bureau of Investigation (FBI) for 2002:

Local UCR	4,498.0	Basis: 1 of 1 county
National UCR	4,118.8	

Transportation

Distance to an airport shows convenience and availability of airline transportation. Public transportation shows potential for members and DoD civilians to use it to commute to/from work under normal circumstances and for leisure.

Distance from HAWTHORNE ARMY DEPOT to nearest commercial airport: 133.0 miles
Is HAWTHORNE ARMY DEPOT served by regularly scheduled public transportation? No

Utilities

This attribute identifies a local community's water and sewer systems' ability to receive 1,000 additional people.

Does the local community's water system have the ability to meet an expanded need of an additional 1,000 people moving in the local community? Yes

Does the local community's sewer system have the ability to meet an expanded need of an additional 1,000 people moving in the local community? Yes

TOOELE ARMY DEPOT, UT

Demographics

The following tables provide a short description of the area near the installation/activity. TOOELE ARMY DEPOT is 38.6 miles from Salt Lake City, UT, the nearest city with a population of 100,000 or more. The nearest metropolitan statistical area (MSA) is

MSA	Population
Salt Lake City, UT MSA	1,333,914

The following entities comprise the military housing area (MHA):

County/City	Population
Davis	238994
Salt Lake	898387
Tooele	40735
Total	1,178,116

Child Care

This attribute captures the number of nationally accredited child-care centers within the local community: 0

Cost of Living

Cost of Living provides a relative measure of cost of living in the local community. General Schedule (GS) Locality Pay provides a relative scale to compare local salaries with government salaries and Basic Allowance for Housing (BAH) is an indicator of the local rental market. In-state tuition is an indicator of the support provided by the state for active duty family members to participate in higher-level education opportunities.

Median Household Income	(US Avg $41,994)	$49,369	Basis: 3 of 3 counties
Median House Value	(US Avg $119,600)	$155,869	
GS Locality Pay	("Rest of US" 10.9%)	10.9%	
O-3 with Dependents BAH Rate		$1,029	
In-state Tuition for Family Member		Yes	
In-state Tuition Continues if Member PCSs Out of State			

Education

This attribute defines the population in local school districts and identifies capacity. The pupil/teacher ratio, graduation rate, percentage of certified teachers and composite SAT I/ACT scores provide a relative quality indicator of education. This attribute also attempts to give communities credit for the potential intellectual capital they provide.

NOTE: "MFR" means a Memorandum For Record is on file at the installation/activity/agency to document problems in obtaining the required information. Reasons for not being able to obtain information may be that the school district refused to provide the information or the school district does not use or track the information.

If the installation/activity/agency has incomplete information from the local school system in order to accurately compute a score in this area, the number of school districts reporting information will be captured in addition to the computed answer.

		Basis
School District(s) Capacity	12,000	1 of 1 district
Students Enrolled	9,916	1 of 1 district
Average Pupil/Teacher Ratio	26.1:1	1 of 1 district
High School Students Enrolled	2,417	1 of 1 district
Average High School Graduation Rate (US Avg 67.3%)	90.0%	1 of 1 district
Average Composite SAT I Score (US Avg 1026)		1 of 1 district
Average ACT Score (US Avg 20.8)	20	1 of 1 district
Available Graduate/PhD Programs	1	
Available Colleges and/or Universities	1	
Available Vocational and/or Technical Schools	0	

Employment

Unemployment and job growth rates provide a relative merit of job availability in the local community. National rates from the Bureau of Labor Statistics are also provided.

The unemployment rates for the last five-years:

	1999	2000	2001	2002	2003
Local Data	5.5%	3.1%	4.3%	6.2%	5.7%
National	4.2%	4.0%	4.7%	5.8%	6.0%
Basis:	3 of 3 counties	3 of 3 counties	3 of 3 counties	3 of 3 counties	3 of 3 counties

The annual job growth rate for the last five-years:

	1999	2000	2001	2002	2003
Local Data	2.3%	1.7%	- .6%	-1.4%	1.7%
National	1.5%	2.4%	.03%	-.31%	.86%
Basis:	3 of 3 counties	3 of 3 counties	3 of 3 counties	3 of 3 counties	3 of 3 counties

Housing

This attribute provides an indication of availability of housing, both sales and rental, in the local community. Note: according to the 2000 Census, Vacant Sale and Vacant Rental Units do not equal Total Vacant Housing Units; Total Vacant Housing Units may also include units that are vacant but not on the market for sale or rent.

Total Vacant Housing Units	19,895	Basis: 3 of 3 counties
Vacant Sale Units	5,769	

Vacant Rental Units	8,207	

Medical Providers

This attribute provides an indicator of availability of medical care for military and DoD civilians in the local community. The table reflects the raw number of physicians/beds and ratio of physicians/beds to population.

	# Physicians	# Beds	Population	
Local Community	2,900	2,018	1,178,116	Basis: 3 of 3 counties
Ratio	1:406	1:584		
National Ratio (2003)	1:421.2	1:373.7		

Safety/Crime

The local community's Uniform Crime Reports (UCR) Index for 2002 per 100,000 people and the national UCR based on information from the Federal Bureau of Investigation (FBI) for 2002:

Local UCR	1,459.2	Basis: 3 of 3 counties
National UCR	4,118.8	

Transportation

Distance to an airport shows convenience and availability of airline transportation. Public transportation shows potential for members and DoD civilians to use it to commute to/from work under normal circumstances and for leisure.

Distance from TOOELE ARMY DEPOT to nearest commercial airport: 37.1 miles
Is TOOELE ARMY DEPOT served by regularly scheduled public transportation? Yes

Utilities

This attribute identifies a local community's water and sewer systems' ability to receive 1,000 additional people.

Does the local community's water system have the ability to meet an expanded need of an additional 1,000 people moving in the local community? Yes

Does the local community's sewer system have the ability to meet an expanded need of an additional 1,000 people moving in the local community? Yes

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	*Gaining* Installation Assessment 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.air quality.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 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

Threatened& Endangered Species/Critical Habitat	No Impact.	#249 No restrictions #259 No TES #260 No critical habitat #261 No biological opionion #262 No species restrictions #263, 264 No candidate species, no proposed habitat
Waste Manage ment	No Impact	# 269 Gaining installation has a RCRA Part X Permit
Water Resources	No impact.	#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
Wetlan ds	No Impact	#251 Wetlands survey completed on 06/01 #257 There are no jurisdictional wetlands on installation.

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

Env Resource Area	*Losing* Installation Assessment 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
Dredging	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 Reso	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 TSDF 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	

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 PM2.5). 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 4.00000000000000001E-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.

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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 PM2.5). 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 $82.299999999999997M 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 0.27100000000000002 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.

Recommendation Detail

158 Ind - 12 Hawthorne Army Depot, NV

☐ Y ☐ N 158

DoD Description Close Hawthorne Army Depot, NV. Relocate Storage and Demilitarization functions to Tooele Army Depot, UT.

COBRA Data

1 Time Costs ($M)	Rank/190	% Total	Payback (Years)	6 Year Net ($M)	Rank/190	20-Year NPV ($M)	Rank/190	% Total
$180.30	29	0.75%	Immediate	($59.22)	31	($777.70)	23	1.59%

Lead Analyst George Delgado

Job Impact at Affected Bases

Action	Base Name	State	Net Mil.	Net Civ.	Net Cont.	Total Dir.	Total InDir.	Total Chng
	Tooele Army Depot	UT	0	0	0	0	0	0
Closure	Hawthorne Army Depot	NV	-74	-45	-80	-199	-125	-324
Realign	Undistributed or Overseas Reductions	US	0	20	0	20	0	20
	Net jobs for this Recommendation		**-74**	**-25**	**-80**	**-179**	**-125**	**-304**

Other OSD Recommendations

***See Appendix - Alphabetical Listing of Bases

159 Ind - 13 Watervliet Arsenal, NY

☐ Y ☐ N 159

DoD Description Realign Watervliet Arsenal, NY, by disestablishing all capabilities for Other Field Artillery Components.

COBRA Data

1 Time Costs ($M)	Rank/190	% Total	Payback (Years)	6 Year Net ($M)	Rank/190	20-Year NPV ($M)	Rank/190	% Total
$63.70	78	0.26%	18	$46.81	149	($5.20)	154	0.01%

Lead Analyst George Delgado

Job Impact at Affected Bases

Action	Base Name	State	Net Mil.	Net Civ.	Net Cont.	Total Dir.	Total InDir.	Total Chng
Realign	Watervliet Arsenal	NY	0	0	0	0	0	0
	Net jobs for this Recommendation		**0**	**0**	**0**	**0**	**0**	**0**

Other OSD Recommendations

***See Appendix - Alphabetical Listing of Bases

Appendix P

Environmental Restoration Costs for DoD's 33 Major Proposed Closures

Installation	Cost to Complete Environmental Restoration	Dollars Spent Through FY03	Operational Ranges Cost to Close	Comments
Riverbank Army Ammunition Plant, CA	$10.50M*	$50.2M	0	
Fort Gillem, GA	$18.00M*	$27.1M	$8.8 - 21.4M	11 operational ranges
Fort McPherson, GA	$8.90M*	$11.1M	$3.1 - 29.3M	4 operational & 2 small arms ranges
Newport Chemical Depot, IN	$1.22M*	$16.3M	0*	Has potential buried VX munitions, cost TBD.
Kansas Army Ammunition Plant, KA	$33.18M*	$30.7M	$4.7 - 46.6M	5 operational & 2 small arms ranges
U.S. Army Garrison Selfridge, MI	$13.30M	0	0	
Mississippi Army Ammunition Plant, MS	$2.3M*	0	0	
Hawthorne Army Depot, NV	$383.20M*	$28.5M	$29.2 - 324.8M	16 operational ranges
Fort Monmouth, NJ	$2.90M*	$11M	$15.3 – 110M	11 operational ranges
Umatilla Chemical Depot, OR	$10.29M	$53.5M	$0.5 – 20M	Additional costs for UXO and or chemical contamination
Lone Star Army Ammunition Plant, TX	$2.74M	$21.3M	$1 – 24.2M	3 operational ranges
Red River Army Depot, TX	$62.56M	$17.9M	$6.4 – 73.9M	8 operational & 2 small arms ranges
Deseret Chemical Depot, UT	$66.85M	$23.3M	$1 – 5M	UXO, chemical weapons, building decontamination and range cleanup
Fort Monroe, VA	0*	$1.8M	0*	no operational ranges; UXO in Moat no estimate given
Army Total 14 sites	**$615.94M**	**$292.70M**		
Total all 33 major proposed closures	**$918.14M**	**$684.70M**	**$70M to $655.2M**	

Cost-to-complete environmental restoration includes military munitions response program costs
All cost data pulled from the Summary of Scenario Environmental Impacts provided by DoD, unless marked by a *
**** - Revised or verified cost to complete data from DoD clearinghouse responses***

Munitions Demilitarization Optimizer Database Certification

The Munitions Demilitarization Optimizer Database used in the Joint Munitions Command's demil operations is certified as accurate and complete to the best of the certifier's knowledge and belief.

Ronald A. Herter — 3/2/2005

Name/Grade RONALD A. HERTER/GS-15 — Date
Deputy Chief of Staff AFSC/JMC

Commodity Command Standard System Munitions Stockpile Database Certification

The Commodity Command Standard System Munitions Stockpile Database is certified as accurate and complete to the best of the certifier's knowledge and belief.

Ronald A. Herter — 3/2/2005

Name/Grade RONALD A. HERTER /GS-15 — Date
Deputy Chief of Staff AFSC/JMC

COBRA REALIGNMENT SUMMARY REPORT (COBRA v6.10) - Page 1/2
Data As Of 8/10/2005 2:17:52 PM, Report Created 8/10/2005 2:18:29 PM

Department : Industrial
Scenario File : C:\Documents and Settings\obornj\My Documents\ALT COBRA\Indus\158 - Hawthorne\TAB 3\IND 0108 Close Hawthorne AD Cobra _PersReduct.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

Starting Year : 2006
Final Year : 2011
Payback Year : Immediate

NPV in 2025($K): -716,372
1-Time Cost($K): 179,937

Net Costs in 2005 Constant Dollars ($K)

	2006	2007	2008	2009	2010	2011	Total	Beyond
MilCon	0	0	0	0	0	0	0	0
Person	0	0	0	0	0	-367	-367	-2,092
Overhd	-34,913	-34,913	-34,913	-34,913	-34,913	-59,046	-233,610	-65,334
Moving	0	0	46,700	46,700	46,700	948	141,047	0
Missio	0	0	0	0	0	0	0	0
Other	6,000	6,000	2,006	2,406	634	19,456	36,502	0
TOTAL	-28,913	-28,913	13,793	14,193	12,421	-39,010	-56,429	-67,426

	2006	2007	2008	2009	2010	2011	Total
POSITIONS ELIMINATED							
Off	0	0	0	0	0	1	1
Enl	0	0	0	0	0	0	0
Civ	0	0	0	0	0	30	30
TOT	0	0	0	0	0	31	31
POSITIONS REALIGNED							
Off	0	0	0	0	0	0	0
Enl	0	0	0	0	0	0	0
Stu	0	0	0	0	0	0	0
Civ	0	0	0	0	0	15	15
TOT	0	0	0	0	0	15	15

BRAC STAFF COBRA RE-RUN
PERSONNEL
1 OFFICER, 0 ENLISTED AND 30 CIVILIANS

Summary:

Close Hawthorne Army Depot, NV. Relocate Storage and Demilitarization functions to Tooele Army Depot, UT.

COBRA REALIGNMENT SUMMARY REPORT (COBRA v6.10) - Page 2/2
Data As Of 8/10/2005 2:17:52 PM, Report Created 8/10/2005 2:18:29 PM

Department : Industrial
Scenario File : C:\Documents and Settings\obornj\My Documents\ALT COBRA\Indus\158 - Hawthorne\TAB 3\IND 0108 Close Hawthorne AD Cobra _PersReduct.CBR
Option Pkg Name: IND 0108 Close Hawthorne AD
Std Fctrs File : C:\Documents and Settings\obornj\My Documents\COBRA 6.10 April 21 2005\BRAC2005.SFF

Costs in 2005 Constant Dollars ($K)

	2006	2007	2008	2009	2010	2011	Total	Beyond
MilCon	0	0	0	0	0	0	0	0
Person	0	0	0	0	0	693	693	28
Overhd	0	0	0	0	0	1,724	1,724	0
Moving	0	0	46,700	46,700	46,700	948	141,047	0
Missio	0	0	0	0	0	0	0	0
Other	6,000	6,000	2,006	2,406	634	19,456	36,502	0
TOTAL	6,000	6,000	48,706	49,106	47,333	22,820	179,965	28

Savings in 2005 Constant Dollars ($K)

	2006	2007	2008	2009	2010	2011	Total	Beyond
MilCon	0	0	0	0	0	0	0	0
Person	0	0	0	0	0	1,060	1,060	2,120
Overhd	34,913	34,913	34,913	34,913	34,913	60,770	235,334	65,334
Moving	0	0	0	0	0	0	0	0
Missio	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
TOTAL	34,913	34,913	34,913	34,913	34,913	61,830	236,394	67,453

31 JUL 05

Deseret: 1 Officer, 0 enlisted, 496 civilians and no contractors*.
Newport: 1 Officer, 1 enlisted, 19 civilians and no contractors*.
Umatilla : 1 Officer, 0 Enlisted, 348 Civilians and no contractors*.

25 JUL 05
HAWTHORNE ~~31 MAY 05~~
1 OFFICER, 0 ENLISTED, ~~50~~ 30 CIVILIANS

*Contractors operate the demilitarization facility, but are not used within the depot.

2. For each installation, what is the current Army position on the completion date for the chemical demilitarization?

- o Army need[s] latest dates: N — $ 2,614,960
- o Deseret
- o Newport U - 12,672,273
- o Umatilla D - 5,001,728

	Completion Operations	Closure
Deseret Chemical Depot	4QFY09 - 4 QFY14	4QFY14 - 4QFY19
Umatilla Chemical Depot	2QFY12 - 4QFY17	1QFY16 - 3QFY21
Newport Chemical Depot	3QFY07 - 1QFY12	2QFY10 - 3QFY15

4. According to international treaty, what specifically at each of these chemical demilitarization facilities must be destroyed? Related to the completion of the chemical demilitarization mission, is there any related impact to the installation on which the chemical mission was located?

- o Army need list of items to be destroyed.

See attached pdf file

9. How much money has each of these facilities historically received for recapitalization?
- o Army

DCD

Real Property Maintenance Estimated Cost FY03 $3,665,071
Real Property Maintenance Estimated Cost FY04 $2,067,477
Real Property Maintenance Estimated Cost FY05 $2,141,400

NECD

Real Property Maintenance Estimated Cost FY 03 $3,900,000
Real Property Maintenance Estimated Cost FY 04 $2,585,000
Real Property Maintenance Estimated Cost FY 05 $2,285,000

UMCD

The annual recapitalization costs for Umatilla is estimated at $1,527,216 per annum.

11. Please provide historic requirements for the entire chemical demilitarization account by type of round and the actual program execution dollars spent against those requirements. Please also provide planned program funding and requirements for the POM.

- o Army

The Chem Demil Program is funded separately under the CAMD,A appropriation and is issued to CMA directly from ASALT

Environmental Restoration Cost for the 33 Major Proposed Closures

Installation	DERA Cost to Complete	MMRP Cost to Complete	TOTAL	DERA & MMRP info.; ***FY03 rpt***; ***Revised CTC data from Clearinghouse responses***
Riverbank Army Ammunition Plant, CA	10.73M	0.87M	**11.60M**	DERA has spent $50.2M through FY03; no MMRA; no operational ranges, ***NPL, fact sheets, FY2017***
Fort Gillem, GA	18.63M	0	**18.63M**	DERA has spent $27.1M through FY03; 11 operational ranges, **$8.8M - $21.4M , *FY2026***
Fort McPherson, GA	0.12M	8.78M	**8.90M**	DERA has spent $11.1M through FY03; 4 operational ranges, 2 small arms ranges, **$3.08M – $29.3M**
Newport Chemical Depot, IN	1.32M	0	**1.32M**	DERA has spent $16.3M through FY03; no operational ranges; CMA reports 1 site contains buried VX munitions, cleanup not programmed or funded, cost TBD.
Kansas Army Ammunition Plant, KA	33.39M	0	**33.39M**	DERA has spent $30.7M through FY03; 5 operational ranges, 2 small arms ranges, **$4.7M – $46.6M, *FY2011***
U.S. Army Garrison Michigan (Selfridge), MI	0	13.30M	**13.30M**	Completed IRP, no DERA; no operational ranges; ***RC***
Mississippi Army Ammunition Plant, MS	2.3M	0	**2.30M**	DERA has spent $0 through FY03; indicates they have MMRA, no operational ranges
Hawthorne Army Depot, NV	21.59M	361.65M	**383.24M**	DERA IRP CTC $21.079, has spent $28.5M through FY03; 16 operational ranges, **$29.2M - $324.8M, *FY2032***
Fort Monmouth, NJ	3.13M	0	**3.13M**	DERA has spent $11M through FY03; 11 operational ranges, **$15.3M - $110M**; ***fact sheet, FY2017***

Environmental Restoration Cost for the 33 Major Proposed Closures

Installation	DERA Cost to Complete	MMRP Cost to Complete	TOTAL	DERA & MMRP info.; ***FY03 rpt***; ***Revised CTC data from Clearinghouse responses***
Umatilla Chemical Depot, OR	8.99M	1.30M	**10.29M**	no DERA sites reported in BRAC data call, but DERP 2003 shows 117 sites $53.5M spent through FY03, and CTC is $10.3 M, add'l cost for UXO and or chemical $.5M - $20M, ***NPL, fact sheets, FY2023***
Lone Star Army Ammunition Plant, TX	2.66M	0	**2.66M**	DERA has spent $21.3M through Fy03; 3 operational ranges, **$1.002M - $24.17M** ***NPL, fact sheets, FY2012***
Red River Army Depot, TX	35.72M	26.84M	**62.56M**	DERA has spent $17.9 M through FY03; 8 operational ranges; and 2 small arms ranges, **$6.4M - $73.9M, *IRP CTC $35.718M, MMRP CTC $26.838M, fact sheets, FY2032***
Deseret Chemical Depot, UT	6.46M	59.64M	**66.10M**	DERA has spent $23.3M; UXO, chemical weapons, bldg decon, OB/OD range cleanup cost **$1.04M - $4.98M, *MMRP CTC $59.64M,FY2032***
Fort Monroe, VA	0	0	**0**	no DERA; no operational ranges; MMRP includes UXO in Moat; $0 spent through FY03, ***RC***
Army Total 14 sites	145.04.M	$472.38M	**$617.42M**	

Environmental Restoration Cost for the 33 Major Proposed Closures

Installation	DERA Cost to Complete	MMRP Cost to Complete	TOTAL	DERA & MMRP info.; *FY03 rpt*; *Revised CTC data from Clearinghouse responses*
Naval Weapons Station Seal Beach Detachment, Concord, CA	40.13M	32.99M	**73.12M**	DERA has spent $54.9M through FY03, ***NPL, fact sheets, FY2017***
Naval Support Activity, Corona, CA	0	0	**0**	DERA has spent $0 through FY03, ***RC***
Naval Submarine Base, New London, CT	23.95M	0	**23.95M**	DERA has spent $56.5M through FY03; no MMRP reported, ***NPL, fact sheets, FY2020***
Naval Air Station, Atlanta, GA	0	0	**0**	DERA has spent $0 through FY03, ***RC***
Naval Support Activity, New Orleans, LA	0	0	**0**	DERA has spent $0.3M through FY03, indicates no DERA program, ***RC***
Naval Shipyard Portsmouth, ME	46.55M	0.58M	**47.13M**	DERA has spent $46.8M through FY03, ***NPL, fact sheets, FY2016***
Naval Station, Pascagoula, MS	0	0	**0**	No DERA cost, ***RC***
Naval Air Station, Joint Reserve Base, Willow Grove, PA	10.31M	0	**10.31M**	DERA has spent $6.3M through FY03, ***fact sheet, FY2023***
Naval Station, Ingleside, TX	0	0	**0**	DERA has spent $0 through FY03, ***RC***
Navy Total 9 sites	$120.94	$33.57M	**$154.51M**	

IRP + MMRP CTC for all 33 major closures = $950.22M

Cost to close operational ranges = $69.52M to $1,075.48M this is in addition to the above costs.

DERA – Defense Environmental Restoration Account; MMRP – Military Munitions Response Program; NPL – National Priorities List; RC - Response Complete; FY03 rpt – FY 2003 Annual Report to Congress

8/11/2005

Environmental Restoration Cost for the 33 Major Proposed Closures

Installation	DERA Cost to Complete	MMRP Cost to Complete	TOTAL	DERA & MMRP info.; ***FY03 rpt***; ***Revised CTC data from Clearinghouse responses***
Kulis Air Guard Station, AK	0	0	**0**	DERA has spent $0.752M through FY03, ***RC***
Onizuka Air Force Station, CA	0	0	**0**	***RC***
Otis Air National Guard Base, MA	146.78M	0	**146.78M**	DERA has spent $83.453M through FY03, ***NPL, fact sheets, $146,783,000 from CH Question***
W.K. Kellogg Airport Air Guard Station, MI	0	0	**0**	DERA has spent $7.89M through FY03, ***RC $0 CTC***
Cannon Air Force Base, NM	1.20M	0	**1.20M**	DERA has spent $12.5M through FY03, indicates there are ranges, no cost is given, no info on number of ranges, ***RC***
Niagara Falls Air Reserve Station, NY	1.42M	0	**1.42M**	DERA has spent $9.232M through FY03, ***RC***
Pittsburgh International Airport Air Reserve Station, PA	0	0	**0**	DERA has spent $2.095M through FY03, ***RC***
Ellsworth Air Force Base, SD	25.20M	0	**25.20M**	DERA has spent $67.364M through FY03, indicates this decision would require the closure of two ranges, no cost is given, ***NPL, fact sheets, FY2028***
Brooks City Base, TX	3.62M	0	**3.62M**	DERA has spent $41,863M through FY03
General Mitchell Air Reserve Station, WI	0.07M	0	**0.07M**	DERA has spent $2.062M through FY03
Air Force Total 10 sites	$178.29M	0	**$178.29M**	

POSITION PAPER

This Position Paper is in response to Industrial Joint Cross Service Group (IJCSG) response to OSD BRAC Clearinghouse Tasker C0683 dated 28 July, 2005. The IJCSG continues to have inaccurate data concerning Hawthorne Army Depot. During review of their memorandum from Jay Berry, dated July 28, 2005 to R. Gary Dinsick, Army Team Leader, the following discrepancies are noted in their response to questions raised by the BRAC Committee. HWAD's comments are geared to specific numbered responses provided in memorandum dated July 28, 2005.

2. HWAD's certified data never reported Officers: 2; Enlisted: 72; Civilians: 25; Contractors: 80. This data was reported by the Installation Management Command and HWAD did not certify the numbers they provided. The original certified data from HWAD was not used. HWAD's certified numbers submitted in 2003 were: Officers – 1, Enlisted – 0, Civilians – 45, and Contractors – 463.

3. The response by IJCSG distorts HWAD's training and range capabilities by comparing HWAD to the largest training and test ranges in the nation. HWAD only maintains that its training capabilities added to the survivability of the warfighters and provided ready accessible training areas that were not available at other sites due to range availability. These ranges may be insignificant to IJCSG, but when testimony is given by combat veterans of Afghanistan and Iraq to BRAC Commissioners that training at HWAD saved lives, these ranges take on a significance of their own and saving warfighter lives is a true military value.

4. In HWAD's certified data we did not state we were capable of heavy mounted armored training and to compare HWAD to other installations that have this capability is a misnomer. What HWAD's certified data indicated was ideal training areas and ranges for dismounted troops, particularly those associated with Special Forces. IJCSG is again looking at dated snapshot in time that does not reflect the training that is currently occurring at HWAD. IJCSG has also dismissed that the reason HWAD is being utilized is that many of the cited facilities are at capacity.

5. Again, military services are seeking out HWAD because of its availability and unique characteristics and expandable capabilities with no encroachment for today and future training needs. In addressing capabilities at other installations such as Naval Air Station Fallon in Nevada and Fort Hunter-Liggett in California, IJCSG did not take into consideration the high altitude mountainous terrain that HWAD offers. Much of the fighting in Afghanistan occurs at elevations from 7,000 to 11,000 feet, only HWAD offers this unique training feature. It is also noted that NAS Fallon uses this high elevation at HWAD for training search and rescue helicopter pilots. Contrary to IJCSG's assessment, HWAD's ranges offer unique flexibility that is not available at the more sophisticated and crowded training ranges. This was verified by the Navy during BRAC Commissioner visits to HWAD where unique examples were given where HWAD could respond to critical warfighter needs when other larger ranges could not schedule testing because of full schedules. The net result of using HWAD ranges is that critical problems were resolved and warfighter problems with equipment are being addressed in a timely manner to improve their efficiency and effectiveness in fighting the enemy.

8. IJCSG is missing a key expandability option that HWAD offers that most other installations do not. What they have missed is that there are few places in the United States where the military can request 178 square miles of additional training land without encroachment with cooperation from state and local governments and the Bureau of Land Management to expedite the process. The BRAC task was to look at the future for military value and in this case, this was overlooked.

9. Depending upon the funding levels for demilitarization, the picture changes. For example, from 1994 to 1997, the monthly average demil tonnage for HWAD was 1,354.67 tons.

10. The response provided by IJCSG is simply incorrect concerning tonnage. HWAD's RCRA permits clearly show HWAD has open burning and open detonation capability of 4,950 tons Net Explosive Weight (NEW) per year. The important item not mentioned by IJCSG is that the weight for these two facilities is "net explosive weight". This is interpreted as not including casing or shell weight of the item when calculating tonnage. Including the casing and shell weight in the calculations, depending upon the item, HWAD can process upwards to 50,000 tons of total ammunition weight per year at these facilities. IJCSG did not include processed tonnage that the WADF facility (recycling facility for munitions) is capable of performing. Using the IJCSG data from their response to question 9, this would be an additional 650 tons per year. While HWAD's RCRA permits require us to evaluate items for processing at WADF prior to considering open detonation, this is in keeping with Army policy to reduce dependence on open burning and open detonation. The statement that HWAD must borrow from the out years for emergency demilitarization is simply inaccurate and not supported by the State of Nevada issued RCRA or Air Permits.

13. While HWAD's restoration of ammunition is not unique, neither is any other depot's restoration of ammunition unique. Certainly, HWAD has capabilities for most conventional ammunition that the warfighters would use.

14. IJCSG appear to be using an oxymoron in stating that only certified data was used for analysis when they clearly state that Military Judgment was used, which certainly was not certified by HWAD. Historically, demilitarization funding has fallen short of the projected demilitarization accomplishments because of contract issues, technical issues and other uncertainties. While the Army has made plans for all the demilitarization stocks being processed, because of the listed uncertainties this will in all probability not be achieved. The negotiations to retain OCONUS stocks in country are not in the best interest of the American taxpayer. We end up paying foreign governments and workers for storage and eliminate American jobs. What happens to these stocks when it becomes a necessity to demil them or move them in the event of an unfriendly government?

17. The assertion that climate is not a consideration for covered storage is unfounded. Climate conditions do make a difference in the serviceability of ammunition and cost of maintaining that ammunition. Anyone with basic knowledge of ammunition knows a dry, warm climate is superior to a humid environment. This response also does not address outside storage of

ammunition that will occur should HWAD stocks be moved to other installations that are located in a more humid climate.

19. The 70 mile spur line cited in the IJCSG response is incorrect. The line is actually 54 miles. While the line does tie to east-west lines, they are the main lines used by Union Pacific and are within 100 miles of the major rail distribution center located in Sparks, Nevada. Again, it is asserted that IJCSG used uncertified data to make the determination on HWAD's railroad and shows flawed military judgment.

20. While there may be no issues involved in moving ammunition from state to state, considerations should be given to those states that will not allow import of ammunition for open burning and open detonation, which could impact transportation and ultimately demilitarization sites.

21. It would appear from the aggressive nature of the IJCSG that the fate of the HWAD igloos has already been made – stating the Army will decide what to do with the site and the igloos. Per our understanding the Redevelopment Authority of the community will be given a chance to make this decision? Historically redevelopment has not occurred for excess property provided to the community of Hawthorne.

22. The question here is why did military judgment enter into what was originally to be a military value criteria? Who were these folks that made the military judgment and have they visited HWAD prior to making these recommendations? From the information presented, it would appear they've never been to HWAD or had little knowledge of HWAD. Again, these military judgments did not reflect certified data and are not substantiated by recent review of HWAD operations by the Army's own experts in storage and shipping. The details of their military judgment decision have also not been made public.

- Regarding the statement that Tooele has the same capabilities of demilitarization as HWAD is a stretch of the imagination. If Tooele has the same capabilities that HWAD has, why is it necessary to relocate most of the Western Area Demilitarization Facility to Tooele? From review of Tooele's air permits, it has a 1236 popping furnace. There are no other provisions in the air permits for scrubber systems that would be associated with washout/meltout and stacks associated with more sophisticated equipment that HWAD has. Tooele should be audited to determine its true demilitarization capabilities. If Tooele is including Deseret chemical demilitarization capabilities which are not part of the same Command or mission, this is inaccurate. Deseret is under a separate command and is not scheduled for turnover to Tooele until 2010. The relocation of the WADF systems from HWAD to Tooele is required under BRAC law; however, COBRA did not include cost for removal and transportation of this equipment, estimated to be in excess of $16M. Much of this equipment will not be utilized by Tooele and the Army, but will be warehoused, a total waste of taxpayer funds.

23. COBRA data included movement of 20 civilians associated with the tenant activity at HWAD. COBRA data did not include cost to move specialized equipment or reconstruct the physical facilities needed to support these missions, including some 20,000 tons of Navy mine

material, both explosive and inert. The Naval Undersea Warfare Center (NUWC), HWAD tenant, estimates a cost of $100M to relocate that facility. There appears to be no home for the Navy Fallbrook Testing Division (Marine Corps Programs Office) that would support their range testing functions without competing for training ranges at other CONUS installations.

INDUSTRIAL JOINT CROSS SERVICE GROUP

July 28, 2005

MEMORANDUM FOR R. GARY DINSICK, ARMY
TEAM LEADER

Subject: Hawthorne Army Depot, OSD BRAC Clearinghouse
Tasker C0683

The following is in response to your e-mail inquiry of July 25, 2005, where you asked the following:

1. *Provide the current 2005 percentage of facility utilization.*

Response:

- Hawthorne has the capacity to demil 15,000 tons a year.
- They are current performing 37 percent of what they are capable of doing

2. *Provide updated certified data on the personnel levels by military officer, enlisted, civilian and contractor. Please also include the current tenant population numbers.*

Response:

- Certified personnel levels as reported in the capacity data call is as follows: Officers: 2; Enlisted: 72; Civilians: 25; Contractors: 80
- Updated uncertified personnel numbers: Officers: 1; Enlisted: 0; Civilians: 30; Contractors: 488

3. *How was the training mission taken into consideration for military value? If not considered, why was it not considered? Please comment on each of the below training capabilities that exist at Hawthorne, particularly with regard to its uniqueness.*

Response:

- Per the BRAC Law, the Army treated all installations equally and analyzed the training mission and capacity of every installation studied. The results are reflected in the capacity analysis and the military value (MV) attribute analysis. The following table compares Hawthorne AD to three other installations that are similar using the certified data collected. Hawthorne has a minimal training capability and does not represent a unique training environment. Fort Irwin, CA is approximately 330 miles to the south east and is a high altitude

desert training environment. Dugway and Yuma Proving Grounds also provide the Army with rugged, mountainous terrain similar to HWAD, but on a significantly larger scale.

Installation	Support Army and Joint Training Transformation Capability	Impact Area and Ranges Capability	Maneuver Space / Air Space Capability	Maneuver Land Capability	Direct Fire Capability Measure	Heavy Maneuver Area Measure	Airspace Measure
Dugway PG	8.119	7.727	10	10	10	10	10
Ft Irwin	6.176	6.865	6.786	5.263	10	10	10
Hawthorne AD	2.874	1.279	2.52	3.234	1.031	0	1.012
Yuma PG	9.364	10	9.131	8.719	10	7.567	10

- The Ranges Subgroup of the Education and Training Joint Cross Service Group (E&T JCSG) also evaluated HWAD. It received the lowest MV score of all the Test and Evaluation Ranges. It also ranked near the bottom of their list as a training range with a score of 10.91 compared to 52.4 for Yuma Proving Ground.

4. *With its high altitude desert terrain environment HWAD is a premier military/special forces training site and provides usage of 71,287 acres similar to terrain in Afghanistan and Iraq.*

Response:

- As the capacity data shows, neither HWAD's maneuver capacity or existing ranges represent a premier training site. Similar, the usage data provided by the installation does not demonstrate that it is a premier training site. HWAD reported in their response to training area usage that the annual average number of personnel who used the maneuver training area between 2003 was only 30. They also reported annual average range usage of 1622 personnel

5. *HWAD provides a joint training environment for Navy Special Warfare, Marine Force RECON, Marine Conventional, Army National Guard and, Army Reserve units.*

Response:

- HWAD does provide a minimal joint training environment, however both the maneuver area and training ranges are significantly less capable than other installations. Naval Air Station (NAS) Fallon, NV, which is approximately 70 miles from HWAD, represents the same time of training environment and also received significantly higher scores from the E&T JCSG. Fort Hunter-Liggett, CA also represents a much more robust joint training environment with a larger maneuver area and significantly greater range capability.

6. *Types of training available at HWAD include firing ranges, high altitude patrolling, high angle sniper range and, desert convoy operations. Over 1,500 military personnel have trained at HWAD between Jan 05 and Apr 05.*

Response:

- The training ranges and maneuver space at HWAD present only a small percentage of the Army, Navy, Air Force and Marine Corps capacity in the southwestern United States. Even the small capacity there has been historically underutilized. We believe that much more robust joint training environments exist.

7. *Plans are in the works for an Afghan Village (modular, semi-permanent small urban training facility) and desert live fire convoy training. At the LCpl Carter Test Range planned upgrades include high angle sniper firing range targetry and classroom and hygiene facilities.*

Response:

- This capability already exists at several locations in the southwest. For example, several urban operations sites already exist at Fort Irwin, CA, along with a much greater array of other training resources. This is also true at most of the other installations already mentioned.

8. *HWAD has been working on two proposal to expand its training area by approximately 178 sq miles; 113,919 acres from the Bureau of Land Management and 16 sq miles through acquisition of an adjacent private property owned by Aerojet.*

Response:

- Experience at other installations has shown that it could take many years to acquire additional land. However, even with additional land, HWAD might, at best, represent the potential for an enclave for reserve component training. With virtually no infrastructure and substandard ranges, stationing active duty maneuver units at HWAD would not be an efficient or effective solution.

9. *What is the average historical daily demilitarization at Hawthorne?*

Response:

- Demil at the sites is not tracked daily, it is tracked by month
- The highest average monthly production at Hawthorne is 650 tons

10. Are there any restrictions to demilitarization at Hawthorne? If so, what are they?

Response:

- Yes there are restrictions to demilitarization at Hawthorne. The amount of open burn/open detonation (OB/OD) Hawthorne can do is limited to 4,000 tons a year. If there is an available closed demil process, then OB/OD is not allowed at all. If emergency demil requires OB/OD in excess of the limit, the limit is raised, and tons are "borrowed" from the next year, reducing the amount of OB/OD allowed in that next year.

11. Why was the recommendation made to close Hawthorne with its particularly high demilitarization quantitative military value score (1 of 13 assessed), particularly given their significant recovery rates/cost avoidance for explosives and mixed metals?

Response:

- No one factor determined a recommendation for an installation. After identification of the square footage required to accommodate DoD's storage requirements, Military Judgment and the points of comparison in the process identified in question #22 helped the IJCSG to make a very difficult decision.

12. Please provide historic requirements for the entire conventional demilitarization account by type of round and the actual program execution dollars spent against those requirements. Please also provide planned program funding and requirements for the POM.

Response:

- See attached excel spreadsheet

13. *Is the Hawthorne mission of restoration of ammunition unique? How significant is this mission within the ammunition community? Who, if anyone else performs this mission?*

Response:

- No, Hawthorne's mission of restoration of ammunition is not unique. Hawthorne has no unique conventional or missile maintenance capabilities.
- Currently Hawthorne is performing a Procurement Appropriation funded Recapitalization program to refurbish 105MM HE M1 rounds. Hawthorne will finish this program within the BRAC window. The general rule is that all depots are capable of performing maintenance required for items stored at their site. So wherever the ammo is sent, maintenance will be performed.

- McAlester and Blue Grass are also performing refurbishment of the 105MM HE M1 rounds.

14. Why was the recommendation made to close Hawthorne with its particularly high storage quantitative military value score (2 of 23 assessed) and move it to a lesser valued installation? PEO Ammo estimates that all existing organic depots will be at 100% of storage capacity by FY08. How can we be assured that the storage capacity at Hawthorne will not be required, particularly with the retrograde of munitions from OCONUS?

Response:

- The military value portion of this question is addressed in question #11.
- The IJCSG was limited to utilizing only certified data for analyses. Without knowledge of sources and assumptions it is not possible to conduct an analysis . One of the things that the PEO may have included in their numbers, is the existing demil stockpile. Our analysis shows demil of the existing stockpile, which is 21% of the existing storage.
- The decision made by the IJCSG considered OCONUS return of retrograde from Korea as well as new generations of stocks. Negotiations are underway to retain upward of 80% of the retrograde OCONUS.

15. When will munitions begin to return from OCONUS? What is the planned timeframe over which munitions will be retrograded? Where will they be stored?

Response:

- DoD is working the plan for return of retrograde from Korea.
- Upon arrival, the following decisions will be made concerning where to store retrograde:
  - Installations with available storage space
  - Demilitarization capability

16. Do storage conditions improve at each of the gaining installations? How?

Response:

- No change in storage conditions. Just increase in utilization rates

17. Is climate a consideration for where assets will be stored? How?

Response:

- Climate is not a consideration for covered storage. Earth covered igloos/magazines maintain cool temperatures and low humidity.

18. What is the distance of the gaining installations from the nearest population center?

Response:

- Tooele is 35 miles from Salt Lake City

19. HWAD reports no infrastructure problems that severely limit the ability to offload. Its investigation into concerns over weather related damages to rail revealed only one incident in 20 years and only for a short time. How was the determination made that Hawthorne had challenges with offloading?

Response:

- The IJCSG received storage and distribution briefings from each of the Military Departments. The briefing from the Army stated that Hawthorne has a 70 mile single rail spur that is susceptible to washout and connects only to an East-West rail line.

20. Will there be any issues involved with the movement of munitions from one state to another? Are the costs of any required permits included within the COBRA model?

Response:

- There are no issues involving the movement of munitions from state to state
- Costs for permits are included in the COBRA model

21. How many igloos are located at Hawthorne? How many are filled? What is the intended use for the igloos after the movement of the munitions to the gaining installations?

Response:

- There are 2504 igloos at Hawthorne
- There are 56% filled
- After the movement of munitions, the Army will decide what to do with the site and the igloos.

22. What specifically was the Industrial Joint Cross Service group's military "judgment" that was used to recommend closure of HWAD?

Response:

- Military Judgment occurred through the application of principles established by the Chairman of the Infrastructure Steering Group. These principles addressed Supply, Service & Maintain and Deploy & Employ (Operational):

- Supply, Service & Maintain: The Department needs access to logistical and industrial infrastructure capabilities optimally integrated into a skilled and cost efficient national industrial base that provides agile and responsive global support to operational forces.
- Deploy & Employ (Operational): The Department needs secure installations that are optimally located for mission accomplishment (including homeland defense), that support power projection, rapid deployable capabilities, and expeditionary force needs for reach-back capability, that sustain the capability to mobilize and surge, and that ensure strategic redundancy.

- Following IJCSG analysis of capacity versus requirements and the need for only one west coast presence, other factors began to weigh into the decision making process of which one to retain. Criteria included:
  - Responsiveness to global support to readiness of operational forces via a powerful projection platform network
  - Military readiness in support of the Pacific theater
  - Multi-functional and agile munitions depot
- Points of comparison:
  - Power projection platform and support to readiness
  - Multifunctional:
    - Tooele: Demilitarization, Storage, and Maintenance
    - Hawthorne: Demilitarization and storage
  - Readiness classification:
    - Hawthorne: Tier II (Tier II: Cadre Depots are installations that perform static storage of follow-on war reserve requirements. Daily activity will be minimal for receipts/issues. Workload will focus on maintenance, surveillance, inventory, and demilitarization operations) and demilitarization.)
    - Tooele: Tier I, (Tier I: Active Core Depots installations will support a normal/full-up activity level with a stockage configuration of primarily required stocks and minimal non-required stocks during demilitarization. Normal activity includes daily receipts/issues of training stocks, storage of war reserve stocks required in contingency operations and additional war reserve stocks to augment lower level tier installation power projection capabilities. Installations at this activity level will receive requisite levels of storage support, surveillance, inventory, maintenance, and demilitarization.) Tooele's ammunition storage stockpile consists largely of critical go-to-war stocks that can be quickly out-loaded and moved to transportation nodes in response to all contingencies and mission demands.

- Correlations between probable threats, probable end-strength levels and major military units, and the configuration of facilities needed to support DoD.
- Support to the BRAC operational principles: Supply, Service & Maintain and Deploy & Employ
- Proximity to immediate response capability:
  - Tooele: Located at the intersection of major North-South and East-West rail lines that provide the strategic redundancy required to support war-fighting operations in the 21st century. Its location is a major convergence of trans-continental rail lines, interstate highways (east-west and north-south), and airfields (both military and civilian).
  - Hawthorne: Has a 70 mile single rail spur that connects to an East-West rail line.
- Can we recreate capability that is missing at the gaining site?
  - Hawthorne has the capability to demil 27 different Munitions Items Disposition Action System (MIDAS) class munitions and Tooele has the capability to demil 25 (duplicating 81% of Hawthorne's capability).
  - Hawthorne demils 5 classes of munitions that Tooele does not have the capability to demil
  - Tooele has 3 classes that Hawthorne does not have the capability to demil.
  - Both Hawthorne and Tooele have the ability to perform Open Burn/Open Detonation (OB/OD), incineration, and reclamation and reported comparable capacity. Following demil of the existing stockpile, the remaining multi-functional sites will be able to fulfill the projected 2025 demil requirements.
- Distribution time required to move munitions to the nearest air and seaport distribution hub

23. What consideration was given to the numerous Navy, Marine Corps, Special Forces, Corps of Engineers, DLA and other tenants on Hawthorne?

Response:

- Guidance from the Military Departments was to move the tenants to Base X until they could decide what to do with them. COBRA data shows the movement of 20 Civilians to Base X. Some of the tenants were impacted by other recommendations.

24. Please comment/respond to the enclosed charts, paying particular attention to the narrative in the notes section.

Response:

- It is very difficult to take another person's charts and explain them. Would have to hear the briefing from the author's perspective to appropriately comment.
- The IJCSG considered:
  - Return of retrograde from Korea
  - Receipt of funding to demil the existing stockpile

Should additional information be required, feel free to contact me at 703-560-4317 or e-mail jberry@gallows.vacoxmail.com

Jay Berry
Executive Secretary

Attachment: As stated

Historical Requirements

	FY04	FY05	FY06	FY07
	$$	$$	$$	$$
Bomb	3,922	3,658	4,656	4,656
Cartridges	15,701	15,055	7,841	13,156
Explosive D	0	0	5,156	5,156
Fuzes	1,607	1,499	1,440	1,650
Mines	0	0	2,589	645
Missiles	6,692	12,604	0	0
Projectiles	14,248	10,457	32,160	33,976
Propellant	14,903	14,716	10,335	12,597
Pyro	9,428	10,583	3,279	6,633
Rockets	0	0	132	66
Small Arms	685	1,598	0	203
Torpedoes	0	0	1,092	169
Various	27,563	30,096	12,516	15,938
TOTAL	**94,749**	**100,266**	**81,196**	**94,845**

FY 2003 through FY 2005 Actual Funding

FY03		FY04		FY05	
MUNITION TYPE	FUNDING	MUNITION TYPE	FUNDING	MUNITION TYPE	FUNDING
Bombs	$7,614,811.34	Bombs	$4,005,208.00	Bombs	$0.00
Cartridges	$6,666,086.47	Cartridges	$12,621,771.48	Cartridges	$8,966,364.19
Explosive D	$0.00	Explosive D	$5,210,446.00	Explosive D	$0.00
Fuzes	$3,128,084.26	Fuzes	$2,439,121.00	Fuzes	$212,304.00
High Explosives	$0.00	High Explosives	$1,204,922.00	High Explosives	$2,942,552.00
Mines	$19,036.00	Mines	$3,366,819.00	Mines	$1,828,276.63
Missiles	$0.00	Missiles	$610,000.00	Missiles	$0.00
Projectiles	$9,248,949.58	Projectiles	$11,816,865.82	Projectiles	$8,682,377.00
Prop Charges	$11,401,920.18	Prop Charges	$13,131,038.73	Prop Charges	$4,984,866.37
Pyro	$3,569,693.51	Pyro	$3,163,230.00	Pyro	$815,743.00
Rockets	$0.00	Rockets	$495,357.00	Rockets	$975,125.00
Small Arms	$1,517,031.16	Small Arms	$2,238,088.65	Small Arms	$1,604,961.00
Tech Support	$3,201,968.00	Tech Support	$7,189,918.94	Tech Support	$7,227,714.51
Torpedoes	$20,157.00	Torpedoes	$1,965,000.00	Torpedoes	$0.00
Various Munitions	$7,550,311.82	Various Munitions	$9,352,105.43	Various Munitions	$36,584,813.79
Total	**$53,938,049.31**	**Total**	**$78,809,892.05**	**Total**	**$74,825,097.49**

P-Fom POM Planning

	FY04	FY05	FY06	FY07
	$$	$$	$$	$$
Bomb	3,922	3,658	4,656	4,656
Cartridges	15,701	15,055	7,841	13,156
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TOTAL	**94,749**	**100,266**	**81,196**	**94,845**

DEPARTMENT OF THE ARMY
HAWTHORNE ARMY DEPOT
1 SOUTH MAINE AVENUE
HAWTHORNE, NV 89415-9404

REPLY TO
ATTENTION OF

Office of the Commander

Mr. George M. Delgado, Senior Analyst
Base Closure and Realignment Commission
2521 South Clark Street, Suite 600
Arlington, Virginia 22202

Dear Mr. Delgado:

Reference Briefing on Update for the Global Demil Symposium presented by LTC Kevin Jennings, dated May 10, 2005.

Per our discussion during Hawthorne Army Depot's presentation to Commissioner Coyle on July 11, 2005, I am providing four pages from reference. These charts will substantiate information provided during our brief on demilitarization capabilities and storage shortfalls projected as a result of BRAC.

It was a pleasure having Commission Coyle, you and Analyst Dean Rhody visit HWAD. If you have any questions, please contact me at (775) 945-7001.

Sincerely,

Johnny M. Summers
Lieutenant Colonel, U.S. Army
Commanding

Enclosure

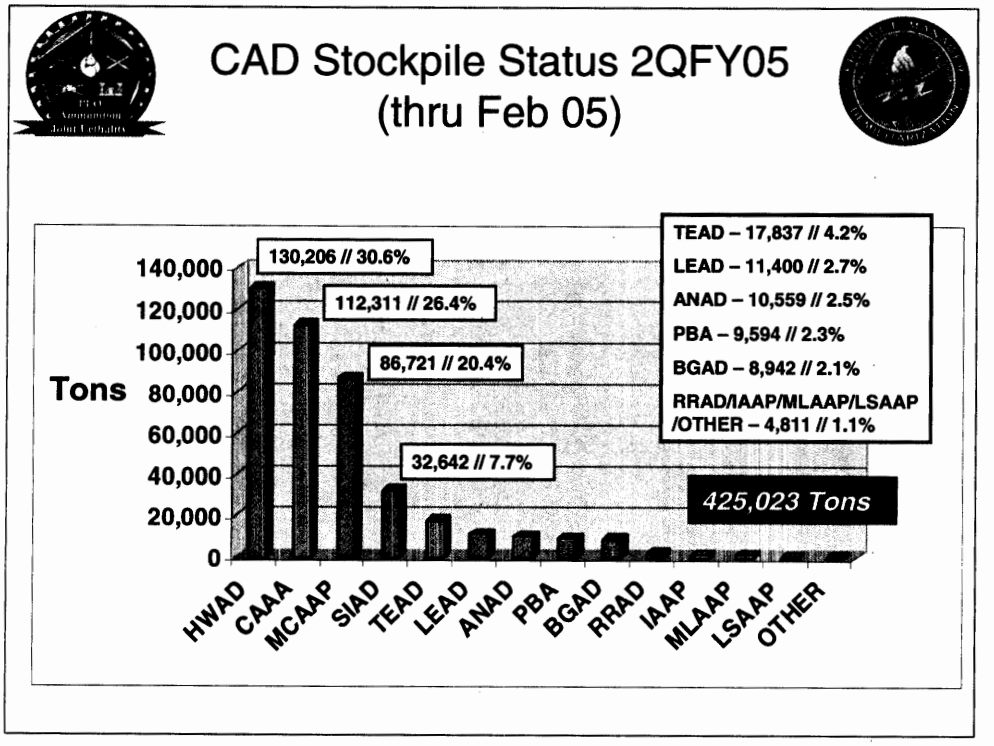
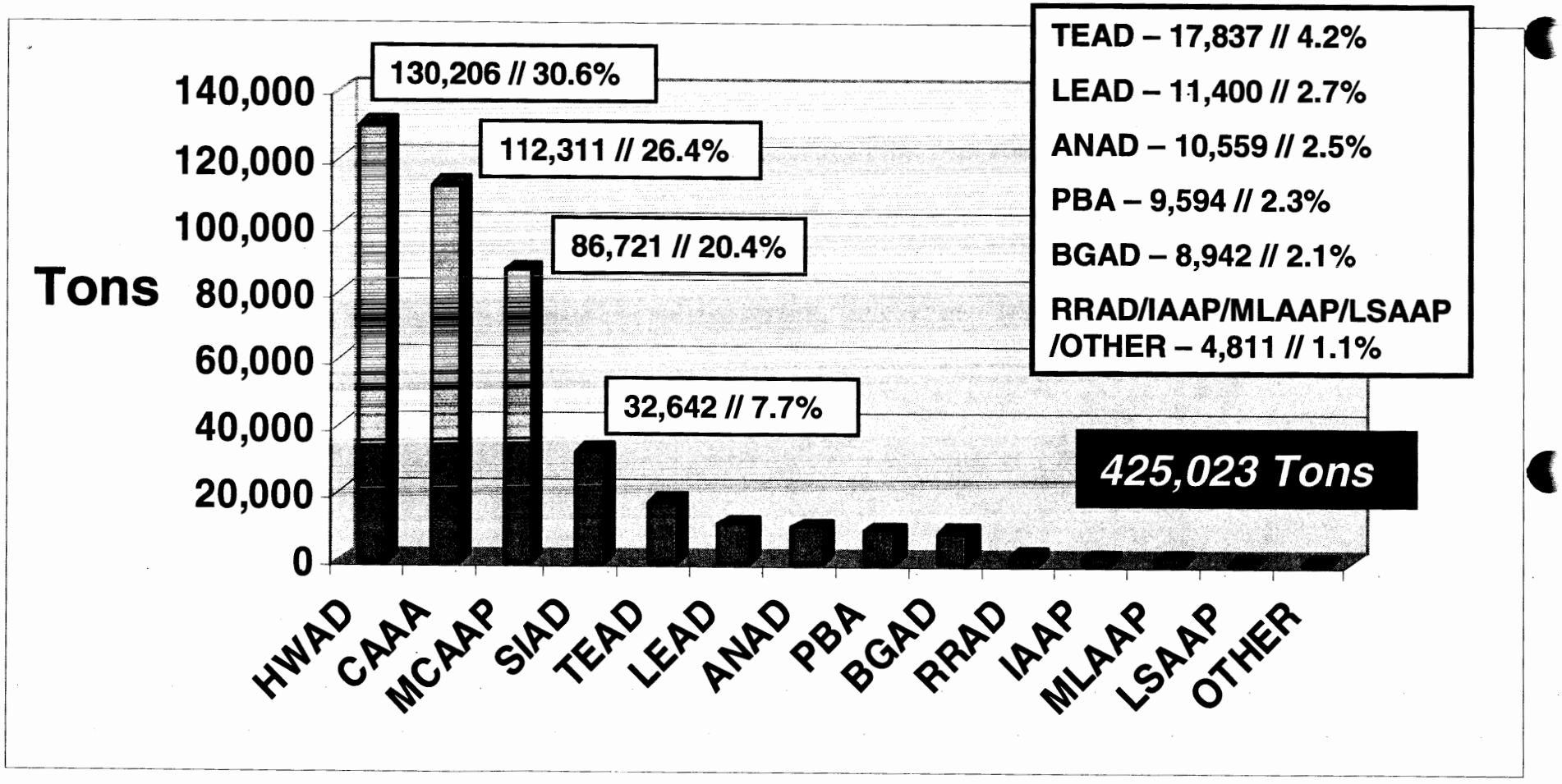


Chart shows total CONUS Demil stockpile distribution.

BRAC 05 moves demil stocks from HWAD, SIAD and RRAD.

Does not account for overseas returns in this slide.

CAD Stockpile Status 2QFY05 (thru Feb 05)



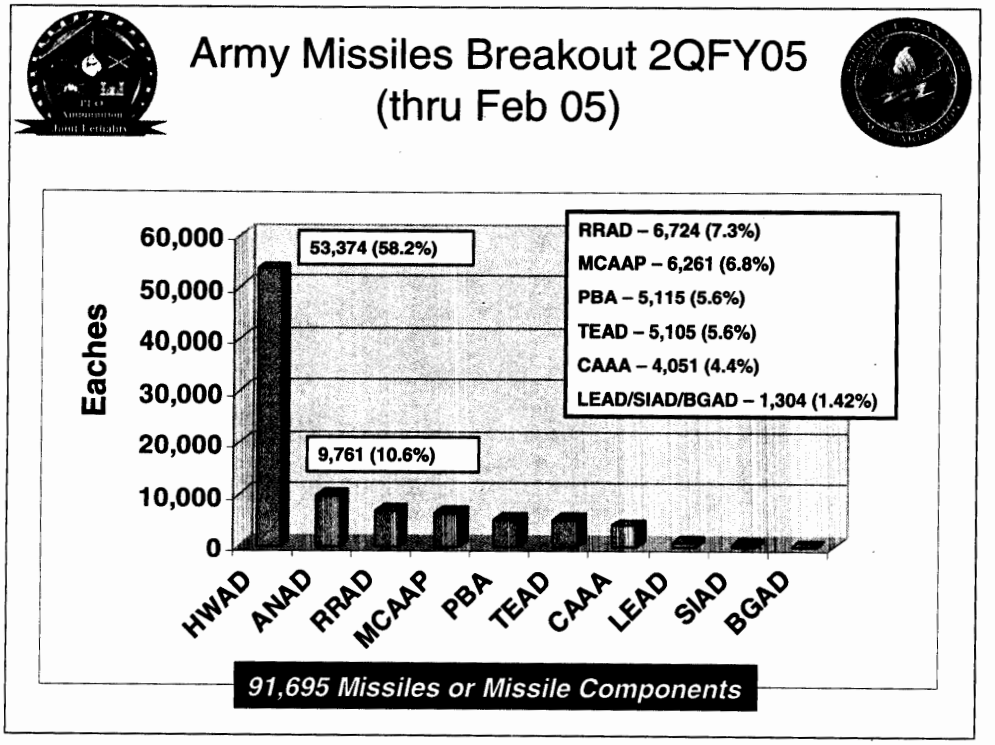
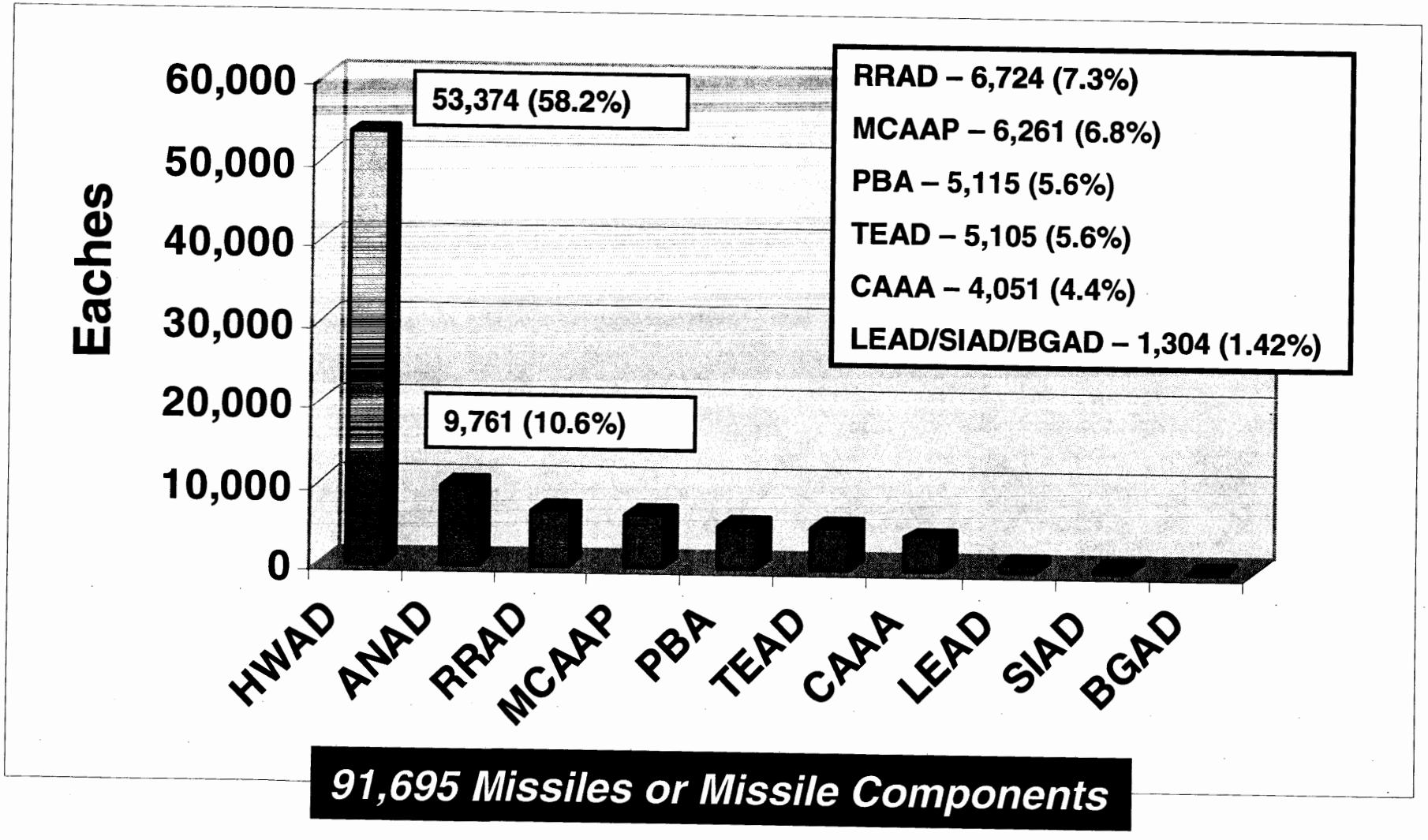


Chart shows the distribution of missiles in the demil account in CONUS.

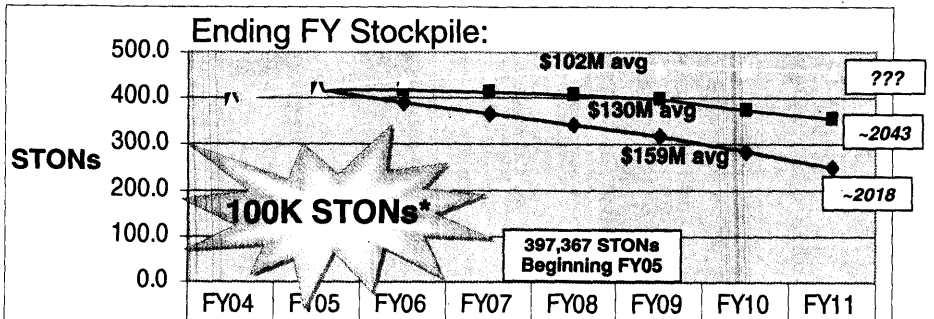
HWAD has the predominant quantity of demil stocks in CONUS.

Army Missiles Breakout 2QFY05 (thru Feb 05)



91,695 Missiles or Missile Components

Will Funding Reduce Stockpile to Strategic Plan Goal?

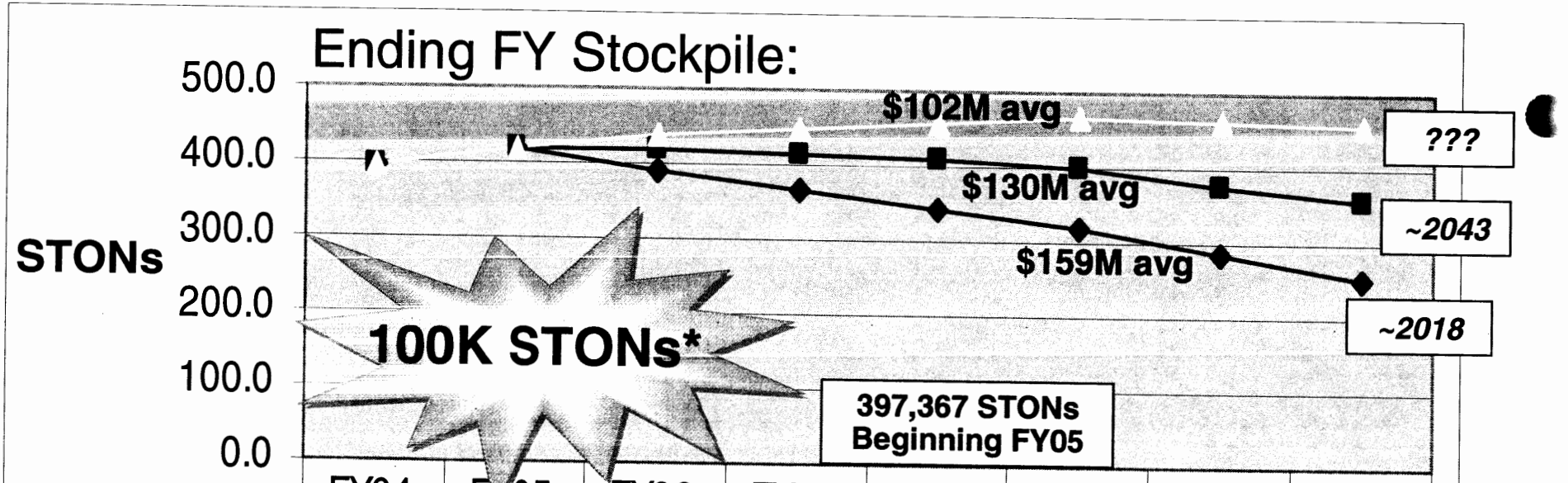


	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
6% Goal	397.4	419.2	391.7	365.8	341.4	318.4	284.4	250.5
Critical	397.4	419.2	417.3	413.8	408.0	398.4	377.7	357.0
Funded	397.4	419.2	436.2	448.5	458.5	465.6	461.8	458.8

**Manageable Level (100K STONs)*

- **This chart shows impact of our funding to reduce the stockpile**
- **The funded is our current POM**
  - **Critical – validated/approved budget (G4) to keep pace with generations**
  - **6% goal – validated/approved budget (G4) to reduce the stockpile**
- **The chart shows that at the current funded level the stockpile will continue to grow to 458.8M stons to FY11 and will not reach a manageable level until sometime after 2043**
- **Critical line shows we do reduce the stockpile but we don't reach a manageable level until 2043**
- **The 6% funding shows we reduce the stockpile to a manageable level (100K STONS)by 2018**

Will Funding Reduce Stockpile to Strategic Plan Goal?



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Funded	397.4	419.2	436.2	448.5	458.5	465.6	461.8	458.8

**** Manageable Level (100K STONs)***

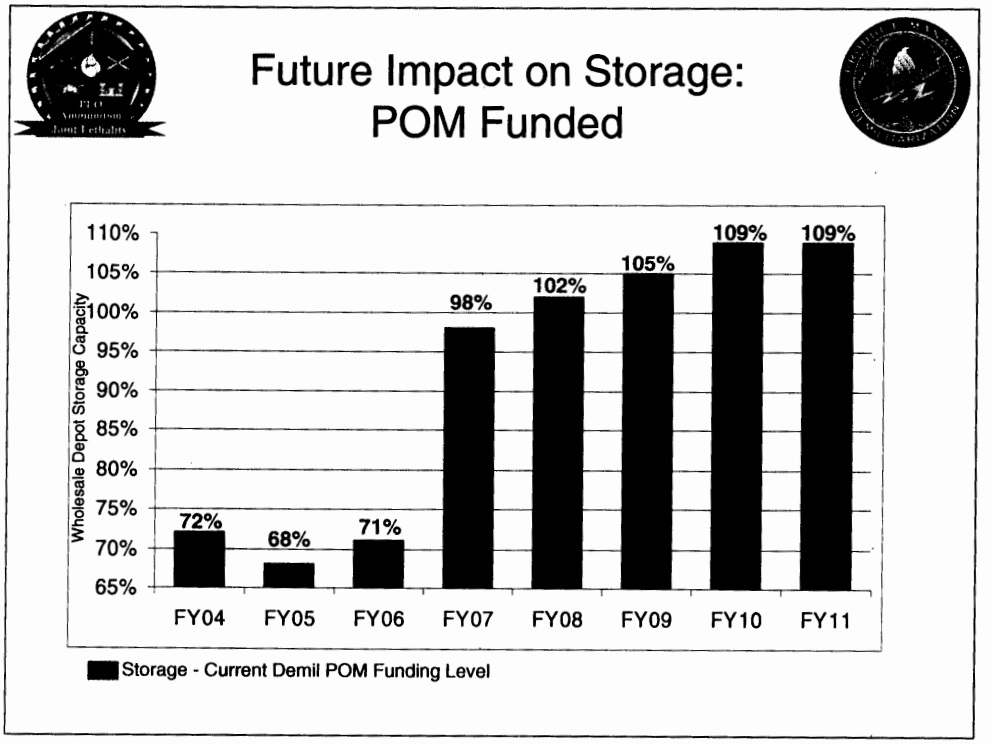
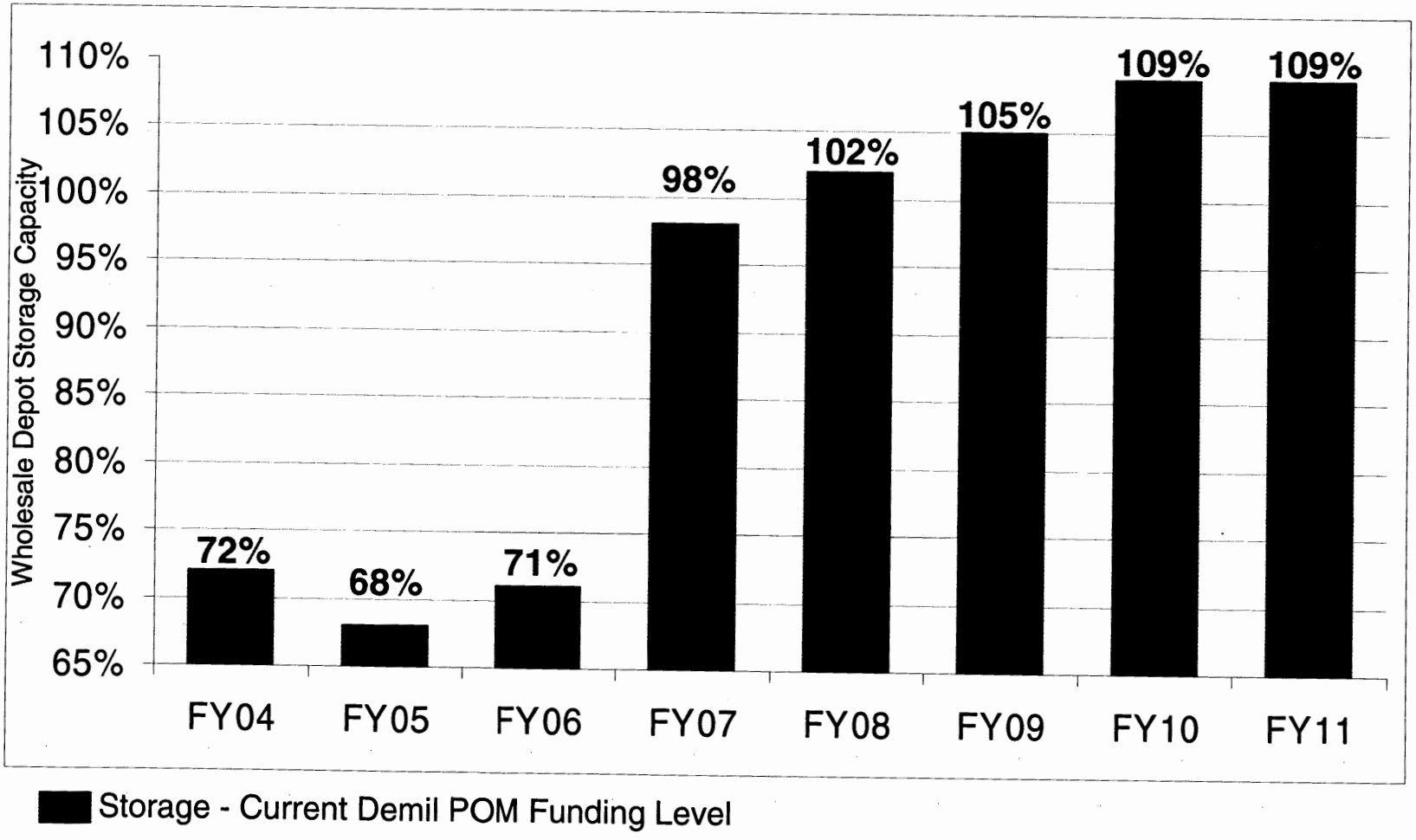


Chart shows the storage impact based on forecasted returns from SWA, Europe and Korea.

Future Impact on Storage: POM Funded



BASE VISIT REPORT

Hawthorne Army Depot, NV

July 11, 2005

COMMISSIONER: Philip Coyle

COMMISSION STAFF:

George Delgado, Analyst Joint & Cross Services Team – Industrial Issues
Dean Rhody, Analyst Army Team

LIST OF ATTENDEES:

LTC John Summers, Commanding Officer, Hawthorne Army Depot
BG Cynthia N. Kirkland, Adjutant General, Nevada National Guard
Wayne Ventrileth, Marine Corps Program Department
LtCol Joseph Dennison, Marine Corps Mountain Warfare Training Center
LtCol Robb Etnyre, Marine Corps Mountain Warfare Training Center
LCDR Mike Strenk, Naval Special Operations
CWO2 Kevin Calloway, Naval Special Operations
Robert Jusko, Naval Undersea Warfare Center, Keyport
Scott Wills, Naval Undersea Warfare Center, Keyport
John Nester, Naval Undersea Warfare Center, Hawthorne
Larry Jones, NAS Fallon
Mark Glass, NAS Fallon
Jerry Bailey, HDSOC
Tiny Cardenas, HWAD
Herman Millsap, HWAD
John Gray, HWAD
Donna Roberts, HWAD
Dave Dillingham, HWAD
Ray Montoya, HWAD
Mike McKnight, HWAD
Jody Gonzales, HWAD
Jewell Benscoter, HWAD

BASE'S PRESENT MISSION:

- Receive, store and, issue/ship conventional ammunition.
- Demilitarize and dispose of unserviceable, obsolete and, surplus ammunition.
- Renovate conventional ammunition.
- Inspect conventional ammunition.
- Provide training facilities to special operations forces and conventional forces.

SECRETARY OF DEFENSE RECOMMENDATION:

Close Hawthorne Army Depot, NV. Relocate Storage and Demilitarization functions to Tooele Army Depot, UT.

SECRETARY OF DEFENSE JUSTIFICATION:

Capacity and capability for Storage and Demilitarization exists at numerous munitions sites. To reduce redundancy and remove excess from the Industrial Base, the closure allows DoD to create centers of excellence and establish deployment networks that support readiness. Hawthorne Army Depot has infrastructure problems that severely limit the ability to offload.

MAIN FACILITIES REVIEWED:

Aerial survey of the installation: 147,236 acres containing 2,915 buildings, 7.68 million square feet of inside storage space, 80 family housing units,16 bachelor housing apts., 1 barracks bldg, 600 miles of roadway and, 267 miles of railway.

- Industrial area
- Western Area Demilitarization Facility (WADF)
- North, Central and, South Magazine Areas
- Demo & Explosive Breaching – 3,183 acres (New Bomb Disposal Range northern and southern detonation areas)
- High Altitude Mountain Training – 49,566 acres (Mount Grant)
- Industrial Combat Training Facilities – 161 acres (101 Compound)
- High Angle Sniper Range (Formal USMC School) and Desert Live Fire Convoy Training – 18,703 acres (Old Bomb)
- Desert Convoy Operations Training – Unlimited acreage
- Walker Lake Training Area (49 square miles)
- C130/Helicopter/Parachute Training at Hawthorne Aviation Facility – 6,000 ft runway (777 acres)
- POW Compound- 4.3 acres (103-30 Compound)
- Lance Corporal Carter Test Range (testing of weapon systems ranging from small arms through mortars, rockets, and artillery)

Visited Building 117-16 Hot Gas Facility (part of the WADF complex)

KEY ISSUES IDENTIFIED

- HWAD has a high storage quantitative military value score (2 of 23 assessed). The recommendation reduces storage capacity as large quantities of ammunition returns (retrograde) from Europe, Korea, and Southwest Asia to CONUS HWAD's underutilized storage capacity could be used to store most overseas retrograde. PEO Ammo estimates that all existing organic depots will be at 100% of storage capacity by FY08.

- As of May 31, 2005 HWAD reports storing 305,348 tons of explosives, and 36,126 inert items. Of the ammunition inventory 47% belongs to the Army, 31% is demilitarization and other, 14% belongs to the Navy, 6% belongs to the Air Force and 2% belongs to the U.S. Marine Corps. Its storage capacity is 56% full as of May 31, 2005.
- HWAD reports no infrastructure problems that severely limit the ability to offload. Its investigation into concerns over weather related damages to rail revealed only one incident in 20 years and only for a short time. Averaged over the last 19 years HWAD received 45,392 tons and shipped 40,346 tons of ammunition each year. As of June 26, 2005 depot supply operations have shipped 12,940 tons and received 13,614 tons.
- HWAD has a high demilitarization quantitative military value score (1 of 13 assessed) the depot only demilitarizes conventional ammunition. For CY 03 HWAD reported demilitarizing 6,535 tons of munitions. In the past 12 years, HWAD has Resource Recovered /Recycled / Disposed 120,848 tons. Explosives/metals recovered from demilitarization operations at HWAD for the past 12 years: Explosives 24,650,000 pounds @ $1.596 per pound = $39,341,400. This figure represents a cost avoidance of buying new explosives. Mixed Metals 91,400,000 pounds with an estimated value of $7,000,000
- The inventory of obsolete ammunition has increased over time due to limitations or diversion of demilitarization funds.
- Continued munitions demilitarization funding limitations or diversions will extend the time required to complete the work. The timeframe for completing the munitions demilitarization mission may extend beyond the BRAC time period.
- Returning munitions from Europe, Korea, and Southwest Asia will create storage and demilitarization difficulties for the entire Army storage system. Closure of Hawthorne will increase the shortfall problem.
- As of May 31, 2005 Hawthorne Army Depot (HWAD) had a total of 553 personnel, 1 military, 50 DoD civilians (including the tenants), 488 contractors and, 14 sub-contractors.
- HWAD restores ammunition deteriorated from rough handling or exposure. This work involves cleaning, rust removal, painting, repair of containers, and component replacement. For CY 03 HWAD reported renovating 3,510 tons of munitions.
- With its high altitude desert terrain environment, HWAD is a premier military/special forces training site. Its training mission was approved Oct. 04, after the BRAC data calls, therefore HWAD did not receive a military value score for the training mission. The training mission provides usage of 71,287 acres similar to terrain in Afghanistan and Iraq.
- HWAD provides a joint training environment for Navy Special Warfare, Marine Force RECON, Marine Conventional, Army National Guard and, Army Reserve units.
- Types of training available at HWAD include firing ranges, high altitude patrolling, high angle sniper range and, desert convoy operations. Over 1,500 military personnel have trained at HWAD between Jan 05 and Apr 05.
- Plans are in the works for an Afghan Village (modular, semi-permanent small urban training facility) and desert live fire convoy training. At the LCpl Carter Test Range planned upgrades include high angle sniper firing range targetry and classroom and hygiene facilities.
- HWAD has been working on two proposal to expand its training area by approximately 178 square miles. The 178 square miles comes from 113,919 acres from the Bureau of

Land Management. In addition, another 16 square miles may be available through acquisition of an adjacent private property owned by Aerojet.

- No encroachment issues.

INSTALLATION CONCERNS RAISED

- HWAD ranked 31 out of 97 installations evaluated for RDTE, production, maintenance, storage/outload, transportation, and demilitarization, officials feel HWAD was undervalued.
- Only GOCO Depot – Largely Commercial – minimally organic, officials feel there is a bias against GOCOs.
- The Industrial Joint Cross Service group used military "judgment" to recommend closure of HWAD. Depot officials would like to know what went into and how the judgments were reached.
- Loss of ammunition storage capacity and loss of demilitarization capacity as retrograde from Europe, Korea and South West Asia looms.
- Notwithstanding its high military value score, HWAD officials felt that its demilitarization capabilities were undervalued
- Loss of training facilities and maneuvering space suited for scenarios similar to those encountered by U.S. forces in Afghanistan and Iraq as we continue unspecified length of time involvement in those countries.
- No consideration for the effect of closure on tenants/customers such as:

  - United States Navy Undersea Warfare Center (NUWC) Detachment Hawthorne (tenant)
  - United States Marine Corps Programs Office ammunition testing (tenant)
  - United States Navy SEAL training
  - United States Marine Corps training
  - Army Special Forces training
  - Puget Sound Naval Shipyard Bulge Plate Explosive Testing/Loading of explosives charges
  - United States Navy Range Scrap Processing; NRSW/Hawthorne Range Residue Processing Program – demilitarization and recycling of range residue scrap.
  - Corps of Engineers FUDS and BRAC Sites Range Scrap Processing
  - DLA Elementary Mercury Storage
  - HWAD is the test bed for the next generation of robotic security systems
  - High Desert Special Operations Center, Limited Liability Co. (HDSOC, LLC) utilizes HWAD facilities and lands to train:
    - Department of Defense military units (USMC, USN)
    - USG Agencies – Border Patrol, US Department of State
    - Other private security companies fulfilling USG contracts in high threat regions in the world.

COMMUNITY CONCERNS RAISED:

- Closure effect on direct and indirect jobs in the area.

- Closure of supporting businesses and reductions of services.
- Economic effect of closure threatens the continued viability of the town of Hawthorne, NV.
- Environmental effects of chemical contamination in areas contaminated by mustard gas and other chemical agents.
- Post-closure usage of the property.

REQUESTS FOR STAFF AS A RESULT OF VISIT:

None

George M. Delgado/Joint and Cross Services Issues – Industrial/ July 20, 2005
Dean Rhody/Army

ADDENDUM:

MR. David Van Saun accompanied Chairman Anthony J. Principi for a base visit to Hawthorne Army Depot on Tuesday 26 July, 2005. Similar briefings and tours as presented during Commissioner Coyle's visit were presented to Chairman Principi. The following persons accompanied the Chairman during his visit, Congressman James A. Gibbons (R) 2nd District State of Nevada, Mr. Robert Herbert, Staff Member for Senator Reid, State of Nevada and Jennifer Meyer, BRAC Legislative Affairs Staff.

George M. Delgado/Joint and Cross Services Issues – Industrial/ July 30, 2005

DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION

BASE SUMMARY SHEET

Hawthorne Army Depot, NV

INSTALLATION MISSION

- The largest ammunition storage depot in the country. There are 3,500 buildings on the 147,000 acre main facility, located in western Nevada. Operated by the Day Zimmerman Hawthorne Corporation for the Army, which acquired the site from the Navy in 1977. Facilities include 2,427 munitions storage igloos, 75% of which are in use; the Western Area Demilitarization Facility, a $68 million, 13 building complex that processes and recycles outdated munitions; and a 700-acre bomb disposal site located 25 miles northeast of Hawthorne. The installation employs around 700 people, all but one of whom are civilians. Over the years chemical weapons have been stored and disposed of at Hawthorne, and there are several areas contaminated by mustard gas and other chemical agents. Much of Oregon's Umatilla Army Depot, Arizona's Navajo Army Depot, and New Mexico's Fort Wingate operations were moved to Hawthorne in the early 1990's. The Navy's Underwater Nuclear Warfare Center had a location here as well.

DOD RECOMMENDATION

- Close Hawthorne Army Depot, NV. Relocate Storage and Demilitarization functions to Tooele Army Depot, UT.

DOD JUSTIFICATION

- Capacity and capability for Storage and Demilitarization exists at numerous munitions sites. To reduce redundancy and remove excess from the Industrial Base, the closure allows DoD to create centers of excellence and establish deployment networks that support readiness. Hawthorne Army Depot has infrastructure problems that severely limit the ability to offload.

COST CONSIDERATIONS DEVELOPED BY DOD

- One-Time Costs: $180.3M
- Net Savings (Cost) during Implementation: $59.2M
- Annual Recurring Savings: $73.4M
- Return on Investment Year: Immediate
- Net Present Value over 20 Years: $777.7M

MANPOWER IMPLICATIONS OF THIS RECOMMENDATION (EXCLUDES CONTRACTORS)

	Military	Civilian	Students
Baseline			
Reductions	(74)	(45)	--
Realignments	--	--	--
Total	**(74)**	**(45)**	**--**

MANPOWER IMPLICATIONS OF ALL RECOMMENDATIONS AFFECTING THIS INSTALLATION (INCLUDES ON-BASE CONTRACTORS AND STUDENTS)

	Out		**In**		**Net Gain (Loss)**	
	Military	Civilian	Military	Civilian	Military	Civilian
This Recommendation	(74)	(125)	--	--	(74)	(125)
Other Recommendation(s)	--	--	--	--	--	--
Total	**(74)**	**(125)**	**--**	**--**	**(74)**	**(125)**

ENVIRONMENTAL CONSIDERATIONS

- This recommendation has expected impact on air quality at Tooele Army Depot. Air Conformity analysis will likely be necessary.
- Surveys and consultation with the State Historic Preservation Officer will be required at Hawthorne Army Depot.
- Restoration monitoring/sweeps, access controls and/or deed restrictions may be required at Hawthorne to prevent disturbance and health/safety risks, and/or long term release of toxins to environmental media. Restoration and/or monitoring of contaminated media may be required after closure. Hawthorne also has domestic and industrial wastewater treatment plants that may require closure.
- This recommendation has no impact on dredging; cultural, archeological, or tribal resources; marine mammals, resources, or sanctuaries; noise; or wetlands.
- This recommendation will require spending approximately $1.5M for environmental compliance activities. This cost was included in the payback calculation.
- Hawthorne reports approximately $383.2M in environmental restoration costs. Because the Department of Defense has a legal obligation to perform environmental restoration regardless of whether an installation is closed, realigned, or remains open, this cost was not included in the payback calculation.
- This recommendation does not otherwise impact the costs of environmental restoration, waste management, and environmental compliance activities.
- The aggregate environmental impact of all recommended BRAC actions affecting the bases in this recommendation has been reviewed. There are no known environmental impediments to implementation of this recommendation.

REPRESENTATION

Governor:	Kenny Guinn (R)
Senators:	Harry Reid (D)
	John Ensign (R)
Representative:	James A. Gibbons (R)

ECONOMIC IMPACT

- Potential Employment Loss: 325 jobs (199 direct and 126 indirect)
- MSA Job Base: 243,270 jobs
- Percentage: 0.1 percent decrease
- Cumulative Economic Impact (Year-Year): N/A

(Note: See Tab J for an Economic Impact Report rerun of the recommendation's data performed by DoD at the request of the BRAC Economist to correct the Region of Influence (ROI). This rerun, which correctly used Mineral County as ROI instead of Reno-Sparks Metropolitan Statistical Area, resulted in 13.63% decline in Mineral County's employment, or a total of 329 job losses (199 direct jobs, as identified by DoD, and 130 indirect jobs). In addition, see Tab K for another rerun, prepared by the BRAC Economist, using updated uncertified personnel data provided by the operating contractor, Day & Zimmermann Corp. This second rerun resulted in 37.13% decline in Mineral County's employment, or a total 896 job losses (539 direct jobs and 357 indirect jobs). If the updated personnel data are to be certified, Mineral County would have the highest the negative economic impacts in the 2005 BRAC round.)

MILITARY ISSUES

- Demilitarization of an increasing inventory of obsolete munitions.
- Limitations in funding for the demilitarization of munitions will continue extending the time required to complete the work. Timeframe may extend beyond BRAC time period.
- Returning munitions from Europe, Korea, and Southwest Asia may create storage and demilitarization difficulties.
- Effect of closure on tenants.
- Loss of training facilities and maneuvering space suited for scenarios similar to those encountered by U.S. forces in Afghanistan and Iraq.

COMMUNITY CONCERNS/ISSUES

- Economic effect to the area in terms of employment and downstream effects on other businesses.
- Environmental effects of chemical contamination in areas contaminated by mustard gas and other chemical agents.
- Post-closure usage of the property.

ITEMS OF SPECIAL EMPHASIS

- What funding level will be required to complete the demilitarization of all unserviceable munitions stored at the depot by 2011? Will the necessary funding to complete the work by 2011 be available? Will the Army complete the work by the desired date, or if the target date is doubtful what contingency plans will the Army implement to ensure completion?
- What storage and demilitarization difficulties will returning unserviceable munitions from Korea, Europe, and Southwest Asia create?
- Can you provide information on the $1.5 million for environmental compliance activities and the $383 million in environmental restoration costs noted in the environmental impact section of the DoD recommendation?
- Is the data contained in the DoD recommendation report accurately portray the nature of your activities? If not, can you provide the Commission with accurate data?
- What is, or what should be, the Army's biggest concern regarding this closure?
- Is there any additional information that you would like to communicate to the Commissioners in order to inform their deliberations regarding this recommendation?

Analysts' Names/Team/Date
George Delgado-JCSG & Dean Rhody -Army/July 6, 2005

Delgado, George, CIV, WSO-BRAC

From: Van Saun, David, CIV, WSO-BRAC
Sent: Saturday, July 09, 2005 7:46 PM
To: Delgado, George, CIV, WSO-BRAC; Farrington, Lester, CIV, WSO-BRAC
Subject: FW: Cannon notes

FYI

-----Original Message-----
From: Robertson, Kathleen, CIV, WSO-BRAC
Sent: Friday, July 08, 2005 10:10 AM
To: Breitschopf, Justin, CIV, WSO-BRAC
Cc: Combs, David, CIV, WSO-BRAC; Van Saun, David, CIV, WSO-BRAC
Subject: Cannon notes

I do not have the speakers,witnesses, but here are my notes, chronological, by subject matter

White Sands

Army Research Lab at White Sands

Has been there for 52 years. Well established lab for testing missiles and counter measures.
Military value will be impacted if moved to MD. What is the primary purpose and justification for this move??
Mission functions do not fit with the missiona and functions of Aberdeen.
Issues of concern:
"We build jammders to test against missiles. This testing cannot be done in MD with the population density issues."
Lasers cannot be tested in MD due to safey and environmental reasons.
Testing capability and capacity is a big issue.
Costs would increase due to the move to Abderdeen as personnel would have to travel back and forth to White Sands to perform test and evaluation.
Impact on mission as many people would not want to do that and this would impact testing.
Significant loss of human capital and expertise also an issue.

Centrifuge issue. Movement of centirfuge. AF wants to mothball one. The one at White Sands is the oldest. But does this compromise AF ability to do G force testing on pilots, who are doing fighter weapon school training at Holloman? Question raised by commissioners Newton and Coyle, is should Brooks centrifuge go to Wright Patterson, leave the one at Holloman. (This may need to be commented on by medical, education-training, technical.

Arizona

Do not want the Mesa Lab located to Wright Patterson. Center of Excellence in Modeling/Simulation and a lot of human capital would be lost. 80% of employees would not move. Gov made counter proposal of allowing Arizona State to take over the function and partner with DoD. Simulations could continue.
Newton asked if all of the lab should be kept there. The response was yes.
Note: Newton asked about the DoD corporate lab strategy to be addressed and this was answered by Clearing House questions that just came back last week.

Nevada

Hawthorne.
Loss of 30% jobs. If you add the indirect, this will be a loss of 50% of jobs in Hawthorne area.
Other uses not considered during evaluation: Marine Corps Training, Navy Special Ops Training. Joint use and functions not identified or fully evaluated during evaulation.
Closure costs: $180M. $840M cost for remediation.

Armament dismantling at Hawthorne has no encroachment issues for consideration, current an future.
Will be difficult for other depots to absorb Hawthorne's mission since many of them will be at capacity(98%) by 2007. How would you recreate the capability at Hawthorne?
Hawthorne believes that important data not considered. Wants a Commissioner visit. (This is being coordinated., Commissioner Coyle will accompany George. George has put together a file in anticipation of the trip (20 July))

Homeland Security Issues (I think this was the governor)

Nevada has many terrorist targets□dams, resorts, etc.

C-130 airlift is vital. If current DoD plan is implemented, there will be one C-130 west of Rockies. Issue, since Active duty cannot assist.

Guard unit in Nevada flies a unique intelligence gathering mission in support of Homeland Security/Defense. Members with expertise would not move and would impact mission capability.

The Goverenors and their TAGs were excluded by DoD from the process. Governor's view is that DoD acted counter to the law in which the governors are to be consulted by DoD.

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NATIONAL DEFENSE RESEARCH INSTITUTE and ARROYO CENTER

RESEARCH BRIEF

Privatizing Military Production

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The end of the Cold War and subsequent reduction in the size of the military raised many questions about how the Army makes or buys its war materiel. It has a large industrial base, parts of which it owns and operates solely and parts of which are run by civilian contractors. Examples include ammunition plants and arsenals that make heavy ordnance such as gun tubes. The base is large compared with current or anticipated needs and thus underused. Furthermore, much of the equipment is aging and inefficient. Finally, industrial production falls outside the Army's inherently governmental function.

Most Western nations with modern armies rely entirely on the private sector to meet their needs for military equipment and ammunition. Indeed, two-thirds of the United States Army's ammunition dollars already go to completely commercial plants. Thus, the question arises: Should privatization play a larger role in the Army's procurement processes? Research carried out in two of the RAND Corporation's federally funded research and development centers, RAND Arroyo Center and RAND National Defense Research Institute, investigated this issue, and the results of the research appear in two publications: *Rethinking Governance of the Army's Arsenals and Ammunition Plants* and *Lessons from the North: Canada's Privatization of Military Ammunition Production.*

Governing the Arsenals and Ammunition Plants

In their investigation of the Army's arsenals and ammunition plants, RAND researchers began by formulating a strategic vision and gaining the Army's agreement with that vision. They then considered options for achieving the vision, ultimately focusing on four:

- Privatize facilities.
- Create a federal government corporation.[1]
- Consolidate facilities and declare unneeded plants excess.
- Invest in new facilities on multifunction installations.

In the end, RAND researchers recommended a mixed strategy. For the ammunition plants, they proposed that the Army attempt to privatize 10 of the 11 plants that contractors operate.[2] (The Army does not own the real estate of the 11th contractor-

Key findings

- Privatizing Army ammunition plants and turning the arsenals into a federal government corporation could save the Army money, foster innovation and efficiency, and enable senior leaders to focus on their priority functions.
- Potential cost savings range from $525 million to $1 billion in the short term, and from $900 million to over $3 billion over the long term.
- Risk associated with privatization and creating a federal government corporation is low.
- Canadian experience in privatizing ammunition plants is relevant and supports argument for privatizing U.S. plants.

[1] Federal government corporations operate at the boundary between the public and private sectors and have characteristics of both. They are relatively common; Congress has created about one a year since World War II. Examples include the Tennessee Valley Authority and the U.S. Enrichment Corporation.

[2] The legislation authorizing a 2005 round of Base Realignments and Closures (BRACs) precluded the closure of any Department of Defense installation outside of BRAC until April 2006 (10 USC 2909). The provision excludes installations, such as the ten contractor-operated ammunition plants, that employ fewer than 300 Department of Defense civilians. Hence, the recommended privatization could be accomplished either as part of a BRAC or outside it.

operated plant, so it was excluded from the recommendation.) They also recommended that the Army retain the three government-operated plants. For the two arsenals, they suggested that the Army create a federal government corporation (FGC) either as an end in itself or as a step toward privatization.[3] This approach would allow the arsenals to continue to meet the Army's needs while using commercial work to absorb their considerable excess capacity.

What Does the Government Get?

This mixed strategy promises a number of benefits. First, it could free senior Army leaders from carrying out tasks for which they have no particular expertise and put those tasks into the hands of those who do. Second, it could open the arsenals and ammunition plants to market forces, which should foster innovation and efficiency. Third, it promises to save the Army money. Over the short term (through fiscal year (FY) 2009), the researchers estimated savings ranging from $525 million to over $1 billion. Long-term savings estimates (through FY 2022) range from $900 million to $3.3 billion.[4] Savings result from different sources: lower ammunition costs due to more efficient production and more competition, revenue from the sale of the plants, and commercial work in the arsenals so that the workforce is fully occupied, which should bring its costs closer to those of private industry.

What About Risk?

These proposals imply major change for how the Army does business, and major change embodies uncertainty and thus risk. For example, estimates about the revenues from the sale of the ammunition plants and future ammunition prices may turn out to be wrong. RAND researchers judge the risk as modest. Congress oversees the organization that would sell the ammunition plants, the General Services Administration (GSA), and if the GSA could not get reasonable offers for the plants, Congress would not approve them. Any sale could carry the contracts to produce ammunition for at least five years. If competition during divestiture did not result in lower ammunition prices, the Army could always retain the plants and, perhaps, consolidate them later.[5]

The risk in making the arsenals an FGC is similarly small. If the FGC cannot achieve estimated efficiencies, even getting part way there saves the Army money. Likewise, if it cannot attract as much commercial business as envisioned, even some work leaves the Army financially better off.

RAND researchers rate as similarly low the risk that the United States will be unable to make enough ammunition during or after future emergencies. As currently configured, the Army's industrial base cannot respond efficiently to such emergencies. In a more privatized industrial base, the degree of manufacturing responsiveness required can be assessed and contracted for on a periodic and routine basis.

As for the argument made by some that insurance, particularly in the current environment of heightened threats of terrorism, might be unavailable or prohibitively expensive, the Army is self-insured now, and it could simply agree to indemnify the purchasers without being any worse off than at present.

What About Costs?

Implementing the recommended strategy will incur costs, but most of these have been factored into the economic analysis that generated the savings. A cost that does not change with privatization is the one associated with environmental cleanup. Under RAND's proposal, the properties would transfer as "excess to ownership but not excess to need"—a procedure that fixes the future use of the plants as one of a like purpose and, therefore, limits the necessary environmental remediation. Using this authority as well as another provision called "early transfer authority" means that the Army, which retains the environmental liability, may continue environmental cleanup at the programmed rate, thereby avoiding any budgetary or programmatic increases.

The Canadian Experience

Canada turned its ammunition production over to private providers over a period of several years. Today, that production base consists of modern, efficient production facilities that earn most of their revenues from sales to other countries, while still providing the Canadian military with its needed munitions. This result suggests that the Canadian experience might offer useful lessons for the United States.

Canada Is Not the United States—but Does It Matter?

Canada differs from the United States along many dimensions. The Canadian military is about one-twentieth the size of that of the United States and, NATO membership notwithstanding, it focuses on domestic defense. Political differences are equally large.

Some would argue that these very substantial differences render the Canadian example moot. RAND analysis suggests otherwise. While the U.S. ammunition base is much larger than that of Canada, in reality it employs a relatively small number of government workers, who operate only 3 of 14 ammunition plants. Government employment at the other plants is small, generally consisting of a handful of government employees who administer contracts and attend to safety and command and control matters. While the privatization process might be more complicated politically, procedures used in Canada could also work in the United States. Furthermore, some of the same issues addressed in the Canadian privatization effort would have to be dealt with in the United States, e.g., employees with vested government benefits and environmental liabilities.

[3] Full privatization could be indefinitely delayed should some overriding reason for continuance under federal control be recognized. Creation of an FGC does not equate to what is normally thought of as a base closure. Thus, it is not clear whether Congress would consider such an action as precluded by the 2005 BRAC authorization.

[4] The low end of the savings range reflects conservative assumptions about the future ammunition market, savings associated with enhanced competition, and other costs. The high end made more optimistic assumptions about these variables.

[5] Researchers regard consolidation as an option that is inferior to privatization. It is likely to have large up-front costs for relocating production lines from closing facilities, and the Army is unlikely to realize any revenue from the sale of excess plants that cannot be sold as going concerns. Further, consolidation inevitably entails the transfer of jobs from one geographic area to another. The proposed strategy avoids these drawbacks.

Insights from the Canadian Experience

The Canadian government is satisfied with the results of the privatization. Privatization of Canada's ammunition industry has had positive economic results, and thus the Canadian government has no interest in returning the plants to government ownership. Despite a sharp drop in government ammunition purchases, employment and production at all three plants that produce ammunition have increased since privatization, and the plants' global market share has increased dramatically. At the same time, plant productivity has improved, lowering prices to the government.

The smaller relative scale of the Canadian privatization does not invalidate the Canadian experience for the United States. The positive outcomes the Canadians report—higher employment and lower prices—resulted from the incentives owners had after privatization to expand their business base, not from the relatively small size of the base. In fact, the larger U.S. government procurement could provide even greater opportunities for efficiencies and savings than are possible in the relatively modest Canadian ammunition budget.

Competition, buyers, and contract types matter. The company that bought the ammunition plants enjoys a near-monopoly in providing munitions to the Canadian government, but it must also compete in often protectionist international markets. As a result, the Canadian government benefits from the increased productivity and efficiency that occur as a result of competitive pressures. The size of the U.S. market and the number of U.S. manufacturers would likely result in competition even for government contracts after privatization of U.S. plants. When the Canadian government decided to privatize its ammunition production, it invited only a few highly qualified firms to bid. It was more interested in ensuring reliable, responsible manufacturing than it was in generating the highest possible proceeds. A similar approach might serve the United States as well in any future privatization. Finally, the Canadian government discovered that its traditional cost-plus contracts lacked incentives for improved productivity. When government purchases declined and the firm decided that it needed to grow its international business to survive, the government agreed to new contract types that provided incentives for the firm to become more efficient and productive.

Bankruptcy is not necessarily a crisis. Despite the failure of the firm that owned one of the ammunition plants, government requirements were met. Oftentimes, too, bankruptcy means only financial reorganization from which a stronger firm emerges. Hence, fear of bankruptcy should not deter privatization. Virtually the entire U.S. industrial base is already privatized, including 70 firms that receive about two-thirds of U.S. ammunition dollars.

Gradual privatization has advantages. The sequential privatization followed by the Canadian government enabled it to learn from each prior experience and provided long-term lessons. Most important, because of its experience with privatization, the government restricted its solicitation to only a handful of stable, reliable, experienced Canadian firms. Further, the early experience mitigated any residual anxiety of privatization and aided the political process.

Providing for affected employees is essential. In the 1986 privatization, the government worked closely with the commercial firms taking over the ammunition production to ensure that employees would not suffer financially from privatization.

Conclusions

The process of moving a large segment of the Army's industrial base into the private sector represents major change. However, the benefits can be substantial, and, as the Canadian experience illustrates, such a change will not jeopardize the Army's ability to meet the nation's security needs. ■

This research brief describes work done for RAND Arroyo Center and RAND National Defense Research Institute documented in *Rethinking Governance of the Army's Arsenals and Ammunition Plants*, by W. Michael Hix, Ellen M. Pint, John Bondanella, Bruce Held, Michael Hynes, David Johnson, Art Pregler, Mike Stollenwerk, and Jerry Sollinger, MR-1651-A (available at http://www.rand.org/publications/MR/MR1651/), 2003, 352 pp., $30, ISBN: 0-8330-3322-0; and in *Lessons from the North: Canada's Privatization of Military Ammunition Production*, by W. Michael Hix, Bruce Held, and Ellen M. Pint, MG-169-OSD (available at http://www.rand.org/publications/MG/MG169/), 2004, 128 pp., $20, ISBN: 0-8330-3634-3. MR-1651 and MG-169 are also available from RAND Distribution Services (phone: 310.451.7002; toll free: 877.584.8642; or email: order@rand.org). The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors. **RAND®** is a registered trademark.

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RB-9048-A/OSD (2004)

SUPPLYING AMMUNITION:
The Lifeblood of the Military

Executive Summary

No part of the defense industrial base is more critical to the success in the Global War on Terror (GWOT) than that which produces munitions. At its most basic level, the function of the U.S. military is to place the energy -- kinetic, chemical or photonic -- on targets. Everything else that the military does is to create the conditions that will allow sufficient energy to be deposited in a timely manner on such targets, the destruction of which will lead to the defeat of any enemy. It is ammunition that makes the military an instrument of war.

The defense industrial base, in general, and the munitions industrial base, in particular, is in a state of crisis. Post Cold War downsizing, consolidation and disinvestment has left the Department of Defense (DoD) hard-pressed to meet the logistics and supply demands of the GWOT. The period from the end of the Cold War to the present saw a 68 percent reduction in the overall capacity of the munitions industrial base. Today, the United States has but a single production facility for small caliber ammunition, a plant that was opened during World War II. The munitions industrial base faces a number of significant challenges in the near-term. These include an aging production base, single-point sources of supply, growing foreign dependencies, inadequate investment, shrinking stockpiles and a lack of surge capacity. Despite recent increases, funding levels still are not adequate to address the full range of demands confronting DoD including replenishing diminished stockpiles, modernizing production capabilities and, simultaneously, preparing for a future of advanced weapons and munitions.

The most immediate requirement of the munitions industrial base is to increase the production of critical munitions, particularly small arms, to meet the growing demand created by the GWOT. This means spending more to buy more. DoD must also address the aging of the munitions industrial base and its growing number of vulnerable component manufacturers. It also requires targeted investments to boost the efficiency of key production lines, and support scarce and financially weak component manufacturers.

At the same time, DoD must create a mechanism that will protect and preserve the newly-expanded capacity when the demand for munitions declines in the future. Part of the solution is to provide stable, long-term funding. Another part is the creation of a munitions industrial base strategic plan. A third is to restore the munitions industrial base planning for a surge capability.

For the long-term, the munitions industrial base must undergo its own transformation. DoD needs to invest in the future capacity of the munitions industrial base to produce advanced weapons that will be employed by a transformed fighting force. R&D funding must be maintained at an adequate level. Support must be given to industry efforts to exploit commercial off-the-shelf (COTS) in the design of future munitions. Expanded public-private partnering must be encouraged and the private sector needs to be given incentives to invest in the munitions industrial base.

SUPPLYING AMMUNITION:
The Lifeblood of the Military

Dr. Daniel Gouré
The Lexington Institute

I. Introduction

> Our trouble will never be raising soldiers. Our trouble will always be the limit of the possibility of transporting, clothing, arming, feeding and caring for our soldiers.
>
> Elihu Root

> We can win without food, we cannot win without ammunition.
>
> General Walton "Bulldog" Walker, USMC

For almost a decade, from the fall of the Soviet Union in 1991 until the events of September 11, 2001, the focus in the Department of Defense (DoD) has been on transformation. Transformation is the exploitation of advances in science and engineering -- particularly those associated with information technologies -- to create new organizations, concepts of operations and strategies with which to wage war. With no peer competitor threatening U.S. survival or the freedom of U.S. allies, defense experts believed that it was possible to use this period, the so-called "strategic pause," to recast the U.S. military into a more powerful instrument of national security, one that could meet the challenges of future adversaries. The vision of transformation advocates reflected in such documents as the *2001 Quadrennial Defense Review* (QDR) and the *2002 National Security Strategy* was of a military that was more strategically deployable, operationally and tactically agile, highly lethal, extremely precise in its use of force and capable of dominating the battle for information. As a result of being transformed. to accomplish its missions, the U.S. military would require less in terms of manpower, equipment, and logistics support than had previously been thought necessary. The result of transformation would be an improvement by an order of magnitude the capabilities of the U.S. military and also, at least in the minds of some, a new American way of war.

It is not surprising that those committed to transforming the U.S. military would focus intensely, although not exclusively, on the development of new capabilities that would support this new vision of warfare. Indeed, the *2001 QDR* advocated a capabilities-based approach to building military forces. In the absence of a clear threat, it was argued that the United States needed a broad range of capabilities to meet all potential security challenges. The particular capabilities represented in each of the Services, with the proper exploitation of C4ISR technologies and concepts of networking, could be organized into a truly joint force.

On September 11, the strategic pause that some thought could last for several decades came to an end. However, the decade that had passed was not wasted. Investments made in transformational capabilities proved decisive in enabling U.S. forces to project power into distant regions rapidly

and effectively. Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) demonstrated the basic validity of the concept of transformation. In both cases, joint forces, exploiting superior information technologies and applications, were able to deploy more rapidly than had been considered possible, outmaneuver their adversaries, apply joint precision firepower with extremely lethal results and achieve overall dominance of the battlefield.

In confronting a new type of threat and prosecuting the Global War on Terrorism (GWOT), the nation discovered that the U.S. military is a superb instrument of war. But it also learned that it is an instrument inadequately supported and sustained by the defense industrial base. Faced with rapidly increasing demand for a wide array of items, the defense industrial base has struggled to meet the military's needs. This is not surprising since the industrial base has been under-resourced for much of the past fifteen years. Parts of this industrial base are aging and have not been modernized in decades. This is particularly true of government-owned facilities. In addition, there are problems in the private sector. In many instances, the private sector is limited in its ability to rapidly expand production. There are numerous single-point sources of critical items in both the public and private parts of the defense industrial base. This system is straining to meet the burden of supporting a military that is itself overstretched. What is most alarming is the realization that, without immediate action, the industrial base that provided the military with the means to deploy and operate more than 8,000 miles from home in its two most recent conflicts may not be able to meet the demands of a protracted global conflict.

The nation is at war. The emphasis in defense investments must shift from a primary focus on transforming the U.S. military to fight future adversaries to a more balanced approach, one that recognizes the paramount need to support current campaigns to defeat this nation's enemies. The military must be given everything it needs to fight and win the war that began on September 11. At the same time, DoD must ensure that there is sufficient investment in truly transformational capabilities, those will be critical to deterring future conflicts but, should the need arise, enabling the U.S. military to decisively defeat any adversary.

No part of the industrial base is more critical to the GWOT than the ammunition sector. At its most basic level, the function of the U.S. military is to place the energy -- kinetic, chemical or photonic -- on targets. Everything else that the military does is to create the conditions that will allow sufficient energy to be deposited in a timely manner on such targets, the destruction of which will lead to the defeat of any enemy. It is ammunition that makes the military an instrument of war.

The munitions industrial base is an exceedingly complex sector. Ammunition includes conventional kinetic and explosive munitions from small arms, artillery and mortar shells, mines and demolition materials to air-delivered bombs, the full array of precision guided munitions (PGMs), torpedoes, and air-to-air and surface-to-air missiles. Soon the munitions base may include directed energy weapons, including lasers and high powered microwaves. The component sub-sectors include propellants, explosive materials, pyrotechnics, fuzes, power supplies and guidance systems. The munitions industrial base is responsible for the full ammunition life cycle, including weapons R&D, production, stockpile management and demilitarization.

The munitions industrial base encompasses a wide variety of facilities. Included in this sector are government owned-and-operated ammunition facilities, manufacturing arsenals and maintenance depots, government-owned but contractor-operated ammunition plants and contractor owned-and-operated facilities. Arsenals and depots produce little or no munitions but are involved in related activities including the installation, maintenance and repair of dispensing and launch systems.

The responsibility for supplying munitions, the lifeblood of war, to the military falls most heavily on the U.S. Army. The Army is DoD's Single Manager for Conventional Ammunition (SMCA). As the name suggests, the SMCA is responsible for ensuring that all branches of the U.S. military are supplied on a timely basis with the munitions they require. This includes both 64 items common to multiple Services and 107 Service-unique items such as air-delivered weapons and shells for naval guns.[1]

The munitions industrial base is increasingly challenged to meet the needs not just of the GWOT but also of potential future conflicts. The ability of this sector to meet current rapidly expanding demand for a wide range of munitions, particularly small arms ammunition, is by no means certain, despite heroic efforts by industry. Moreover, its ability to meet expected future demand for increasingly sophisticated munitions is threatened by a lack of investment in advanced industrial processes and R&D. Immediate action is necessary to strengthen the ammunition industrial base, thereby ensuring that the military has the munitions it needs to prosecute the GWOT. In addition, a long-term plan to create the ammunition industrial base of the future must be put in place and adequately resourced. Unless both the near and far-term needs of the ammunition industrial base are addressed now, the ability of the U.S. military to achieve the missions it is assigned will be placed at risk, possibly in this war but almost certainly in the next.

II. For Want of a Horseshoe the Kingdom was Lost

The recent history of the munitions industrial base has been one of consolidation, aging and, in the view of some, gradual decline. The period from the end of the Cold War to present saw a 68 percent reduction in the overall capacity of the munitions industrial base. The number of government-owned ammunition facilities shrank from 28 to 13, with a corresponding reduction in production lines from 270 to 73, and in production personnel from 19,000 to 7,000. The number of privately-operated facilities fell from 163 to 69.

The GWOT has spotlighted the U.S. military's strengths and achievements as well as its weaknesses and limitations. One area of weakness highlighted by the GWOT in general and OIF in particular is the uncertain state of the ammunition industrial base. One instructive example of the problems facing the ammunition industrial base is that of small arms ammunition. As a result of continuing high levels of combat in both Iraq and Afghanistan, mobilization of National Guard and Reserve forces and new training requirements for support forces, the demand for small arms ammunition has increased fourfold from pre-GWOT levels. Between 2000 and 2004, DoD's purchases of small arms ammunition have increased from some 350 million rounds to

[1] Alan R. Beuster, "Update on Industrial Issues," Presentation to ICAP, February 12, 2002, p. 4.

approximately 1.4 billion rounds. By 2005, this figure is expected to increase to nearly 2 billion rounds.

Although the U.S. small arms industry has managed to meet most of the increased demand so far, DoD has been forced to look overseas for sources of military-quality ammunition to meet its requirements. The reason for this is that there exists but a single facility in the United States for the production of small arms ammunition for the entire U.S. military -- the Lake City Army Ammunition Plant in Lake City, Missouri. The Lake City facility was opened by then-Senator Harry S. Truman during World War II. Today, this facility is government-owned and contractor-operated, known as a GOCO.

Production at Lake City has been dramatically increased and further increases are planned in an effort to meet the demand for small arms ammunition from domestic sources. However, Lake City is an aging facility, badly in need of investment in modern equipment. It is required to rely on a dwindling number of supporting manufacturers. Ironically, the situation in the sector -- and for the U.S. military -- would have been far worse had not Alliant Techsystems, the company that won the contract to operate Lake City, taken steps a few years ago to acquire the near-bankrupt sole U.S. manufacturer of ammunition links and move their production capability to Lake City.

The reduction in the munitions industrial base was justified on several grounds. First, a smaller post-Cold War military had a reduced requirement for munitions. In 1991, there existed large munitions stockpiles left over from the Cold War. Second, the defense industrial base needed to apply the principles of supply chain management, prevalent in the commercial world, which emphasized lean manufacturing and just-in-time delivery. Third, it was assumed that future regional conflicts would be relatively short, with a breathing space before the next such conflict, allowing time to replenish military stocks. As a result, replenishment times for preferred munitions of two and three years did not appear to planners as posing a significant strategic risk. Fourth, the aforementioned strategic pause provided an opportunity to move from Cold War weapons systems and their associated production facilities to transformational capabilities that required new production facilities. Despite the absence of empirical evidence, it was often assumed that production rates could be rapidly increased in the event of a national emergency.

Procurement budgets have not been sufficient to maintain the health of even this reduced munitions base. As a result, the vendor base below the level of prime contractors has been decimated.[2] Single sources of production exist for more than forty percent of critical munitions components (71 of 302). In a number of instances, these suppliers have been forced to operate at uneconomical rates of production, threatening their financial stability. For some critical components, there exists no U.S. or Canadian supplier.[3] Surge capacity, in many cases, is extremely limited or nonexistent. Facilities can add extra personnel and operate their production lines in two or even three shifts. Such actions run the near-term risk of a decline in production quality as well as a longer-term risk of wearing out machinery. Unfortunately, most munitions

[2] The Industrial College of the Armed Forces, Industrial Study 5240-14, *Munitions*, National Defense University, Fort McNair, Washington, DC, Spring 2003, p.6.

[3] MG Wade H. McManus, U.S. Army Joint Munitions Command, "Industrial Base: Front and Center," a presentation to the Atlanta XXIX Conference, NDIA, April 28-30, 2003, p. 16.

production facilities are constrained by the long lead-times involved in acquiring larger supplies of components.

Moreover, DoD is at risk of not even having access to older-generation munitions. The Cold War era stockpiles are aging rapidly. There are reports that some 60 percent of the Army's ammunition stockpiles are deemed to be in the category of "substitute," rather than the higher quality "preferred." The need for more ammunition to meet increased training requirements is reducing the size of munitions stockpiles and placing greater demands on the aging munitions industrial base. However, the plants that produced older types of munitions often lack modern machinery, employ inadequate quality control processes and do not use modern business practices.[4]

At the same time as the munitions industrial base was consolidating, it was also evolving in response to changes in demand. The most dramatic change in the period came with the introduction of PGMs. In 1985, for example, the U.S. Air Force procured 128,000 dumb bombs and just 4,000 PGMs; in 2004, the Air Force procured 40,000 PGMs but only 9,000 unguided bombs.[5] While the largest fraction of the current PGM inventory are dumb bombs enhanced with smart kits (the obvious example is the highly successful Joint Direct Attack Munition or JDAM), DoD plans to call for the procurement of thousands of sophisticated PGMs, many of which will deploy multi-spectral sensors, netted communications nodes and even their own engines for powered flight. By 2010, the United States will begin deploying "brilliant" munitions capable of a high degree of autonomous operations.

Ironically, the trend towards so-called smart munitions may be exacerbating some of the structural weaknesses of the munitions industrial base. Because precision weapons are more effective then their less clever predecessors, the trend is for DoD to procure fewer of them. The result is smaller production runs, which results in greater financial hardship for the companies that produce such weapons. In addition, precision munitions require components of increasing complexity and sophistication. These components can present production bottlenecks and even strategic vulnerabilities. Virtually all smart munitions require their own power supplies for sensors and/or fuzes. This has created a demand for miniature batteries that can meet exacting military specifications in such areas as shelf life and adaptation to rugged environments. Such batteries have few commercial applications. Another type of critical component is fuzes, particularly advanced, smart fuzes. Over the past decade, the safing, arming and fuzing sector has been in a state of profound decline, shrinking from 31 firms in 1990 to 7 in 2002.[6] Experts point to other components, such as gun hardened electronics, batteries and electro-explosives, as presenting additional areas of concern.

During the 1990s, DoD made a calculated decision to reduce war reserve requirements and to limit the amount of resources tried up in munitions stockpiles by buying less than was required to maintain even those reduced requirements. At the same time, DoD chose not to maintain sufficient standby capacity to provide for a rapid surge in production to meet emerging

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[4] Sandra Erwin, "Munitions Sector 'In Trouble' Despite New Funds," *National Defense,* December 2001.
[5] *Munitions, op. cit.,* p. 5.
[6] ICAF Seminar 10, *Munitions: An Industry in Peril,* The Industrial College of the Armed Forces, Fort McNair, Washington, D.C., June 6, 2002, p.16.

requirements. Now, as a result of the GWOT, this peacetime search for efficiency in the expenditure of defense dollars has run headlong into the wartime need for effectiveness, in this case defined as timely production of the needed quantity and quality of munitions.

The munitions industrial base faces a number of significant challenges in the near-term. These include:

- The age of plants and much of the equipment and infrastructure
- Excess capacity -- in some areas -- and infrastructure
- Numerous single-point sources of supply
- A growing dependence on foreign suppliers
- Disruptive fluctuations in demand
- Shrinkage and aging of stockpiles
- Declining RDT&E capability
- The lack of surge capacity
- No incentives for contractor private investments
- Commercial sources exiting the business
- The move towards PGMs

DoD's munitions-manufacturing policy stipulates that the munitions stockpile must meet peacetime needs, that the stockpile must support two near-simultaneous major regional contingencies and that the munitions manufacturing base must be capable of replenishing the stockpile within three years. The experience of the GWOT, including OEF and OIF, suggests that without significant and sustained investment and improved management, the munitions industrial base will not be able to meet DoD's policy goals. A recent study identified a number of factors that challenged DoD's stockpile goals:

> A period of limited perceived conventional warfare threats to U.S. interests but increasing threats of terrorism and regional conflicts, a large stockpile of increasingly obsolete conventional munitions that is expensive to maintain and manage, tight budget limitations within DoD and advances in electronics and the possibility of revolutionary improvements in energetics may make a large portion of our conventional weapons obsolete.[7]

Although munitions budget trends have improved over the past several years, funding levels are still not adequate to address the full range of demands created by the GWOT and also to replenish diminished stockpiles, modernize production capabilities and prepare for a future of advanced weapons and munitions. In addition, the munitions industrial base suffers from structural and management problems that are the result of more than a decade of undirected downsizing, consolidation and realignment. Reversing these negative trends will require DoD to develop a strategic approach to the long-term evolution of the munitions industrial base.

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[7] National Materials Advisory Board, *Munitions Manufacturing: A Call for Modernization*, The National Academies Press, Washington, DC, 2002, p. 133.

III. Meeting the Expanding Demand for Munitions

In truth, this is not a new story. For years, experts have been warning that inadequate budgets for the purchase of munitions, the maintenance of relevant industrial facilities, the modernization of production capabilities, and the research and development of new munitions all threatened the viability of the munitions industrial base.[8] While it has been possible in areas such as IT to rely much more on commercial products, munitions are a unique set of products with very few commercial analogues. As a result, a unique industrial base is required to produce them. But, because sufficient budgets were not made available to sustain the munitions industrial base, many private companies exited the market; those that remained were left without the resources to modernize their facilities or maintain spare/surge capacity.

The most immediate requirement of the munitions industrial base is to increase the production of critical munitions, particularly small arms, to meet the growing demand created by the GWOT. As noted above, the Lake City plant has expanded production nearly fourfold while also instituting business practice innovations to improve production and maintain quality; further production gains are expected over the next two years. The Army has sought out foreign sources of small arms ammunition to provide a buffer while Lake City increases production and to hedge against even greater demand in the near future.

In the past, foreign competition has led to the demise of domestic production capability. This cannot be allowed to happen in the area of munitions production. Thus, the decision to go overseas to fill the military's demand for ammunition can be justified only as a short-term expedient.

> An acquisition strategy that engages private industry's capabilities to supplement Lake City's capabilities has both historical precedents and provides insurance against some future change in requirements. It also provides a relief valve as Lake City modernizes its production capabilities and expands both its capacity and its workforce....A prudent enhancement of commercial capabilities in addition to the expansion of Lake City's capacity is needed.[9]

The munitions industrial base faces unique challenges. It must expand the production of critical, high-demand munitions while simultaneously pursuing measures designed to make the munitions industrial base more efficient. This means targeted investments to boost the efficiency of key production lines, support for vulnerable and scarce component manufacturers, and the elimination of unnecessary capacity and divestiture of excess physical infrastructure.

Turning again to the small caliber ammunition sector, modest investments in production technology at the Lake City facility could result in significant enhancements to that facility's

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[8] Steven Mullen, "Ammunition Readiness: Current Problems and Future Implications of Army Transformation," Landpower Essay No. 02-1, Institute of Land Warfare, February 2002.

[9] Richard G. Palaschak, "Statement," House Committee on Armed Services (Tactical Air and Land Forces Subcommittee, June 24, 2004, p. 5.

production capacity and cost-effectiveness. As little as $50 million could provide substantial modernization of Lake City's aging production equipment.

Similar consideration needs to be given to investments that maintain and enhance the production capacity of critical component manufactures. Some second- and third-tier suppliers have received federal production line expansion subsidies. The Army needs to aggressively fund ammunition MANTECH projects designed to inject modern manufacturing processes and equipment into the munitions industrial base; resulting in cheaper, higher-quality ammunition. The Army should also continue to fund initiatives such as the Totally Integrated Munitions Enterprise Program (TIME). The TIME program seeks to demonstrate a distributed, flexible manufacturing capability that is cost-effective and can be rapidly reconfigured as needs change. A plan must be developed to address the problem created by the lack of domestic sources for critical items such as nitroguanidine and lead azide. Where necessary, the SMCA must be prepared to exercise its authority, under Section 806 of the 1999 Defense Authorization Act, to restrict the procurement of conventional ammunition to sources within the national technology and industrial base.

DoD, the Services and industry recognize the need to make the munitions industrial base more cost-effective. To this end, efforts have been made, which continues to the present, to reduce excess infrastructure and rationalize production capabilities. For example, over the past few years, Joint Munitions Command (JMC) has reduced its infrastructure by nearly a million square feet of floor space. The Base Realignment and Closure (BRAC) process offers another opportunity to improve the efficiency and lower the costs of the munitions industrial base.

Some experts have suggested that one way of reducing the high costs associated with the munitions and improving the industry's efficiency would be by transferring many of its assets to the private sector.[10] Although such a move makes sense theoretically, it fails to sufficiently account for liability, management and defense budget issues that militate against the private sector from identifying a business case for entering into such a bargain. A better answer, from the perspective of the national interest, would be to enhance and even expand existing public-private partnerships.

One area of significant progress has been the restructuring of the munitions supply chain intended to ensure the adequacy of munitions supplies and their timely delivery to forces in the field. As part of its transformation strategy, the Army Materiel Command (AMC) created several new organizations designed to enhance the linkages between warfighters and the national logistics system. The first of these is the JMC. Another is PEO Ammunition. PEO Ammunition is responsible for R&D and production of most Army-unique and multi-Service munitions. Together, the JMC and PEO Ammunition are responsible for the entire ammunition lifecycle: procurement, production, storage, supply, stockpile management, quality assurance, safety, readiness inspection, maintenance, renovation, shipping, receipt, issue and demilitarization. It is the field agent for the DoD SMCA. As a result of these changes, conventional ammunition management is now unified and integrated under a single chain of command.

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[10] W. Michael Hix, et al, *Rethinking Governance of the Army's Arsenals and Ammunition Plants*, The RAND Corporation, MR-1651-A, 2003.

A third step by the Army is the establishment of the Ground Systems Industrial Enterprise (GSIE), encompassing all the Army's owned and operated arsenals and depots. The creation of the GSIE is an important step in the implementation of AMC's strategy for transforming its business practices. According to the AMC strategy for transformation:

> The GSIE is a consolidation of all ground systems manufacturing and maintenance facilities into a single operating business unit to efficiently utilize the core capabilities of each facility while simultaneously transforming those core capabilities to meet the new technology and equipment demands under Army transformation.[11]

DoD must create a mechanism that will protect and preserve the newly-expanded capacity when the demand for munitions declines in the future. Part of the solution is to provide stable, long-term funding. A second step is the creation of a munitions industrial base strategic plan. Yet a third step in the right direction is to restore the ammunition industrial base planning for all go-to-war munitions and to make the necessary investment today in providing the capability for rapid increases in production of select ammunition, thereby mitigating potential wartime and post-war vulnerabilities.[12] This not only makes strategic and financial sense, but it is the only way to create interest in the private sector towards making its own investments in the munitions industrial base. As one leading expert on the sector observed recently, "The munitions base is ripe for recapitalization."[13] But, without funding stability and a transparent, long-term strategy, the private sector is unlikely to make substantial investments in munitions production.

IV. The Long-Term Transformation of the Munitions Industrial Base

The long-term transformation of the munitions industrial base will be driven by the concomitant transformation, first of the warfighting forces and second, of the logistics system that supports them. Emerging strategic and operational concepts emphasize extremely swift power projection from long distances, the extensive use of precision-strike capabilities, non-linear maneuver, reduced logistics footprints and rapid transition in the phases of conflict. The drive to network-centric warfare is creating demand for entirely new types of munitions incorporating state-of-the-art technologies. Weapons will become more capable and lethal, hence reducing the requirement for large numbers. The Army's Stryker and Future Combat System (FCS) programs point the way to a future in which armored vehicles are smaller and have less storage. Concerns for rear-area security and rapid logistics support will increase demand for smaller, lighter-weight munitions. Finally, the growing interest in enhanced force protection and survivability, as well as in reduced collateral damage, will create a greater interest in new types of explosives, propellants and warheads.

Technology is also leading to the creation of new types of weapons, some based on non-traditional physical principles. Improvements in sensors and position location will permit

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[11] U.S. Army Material Command, *Transformation White Paper*, July 2003, p. 7.
[12] Mullin, *op. cit.*, p. 6.
[13] Palaschak, *op. cit.*, p. 7.

reductions in the size and payloads of some weapons with equal or even greater lethality. The military is extremely interested in next-generation explosives that are insensitive and also possess, preferably, a significant increase in power. Thermobaric explosives will provide enhanced effects against targets in enclosed areas. Directed energy weapons (both lasers and high power microwaves) are currently in development for air, sea and land-based applications. Solid state lasers in the 100kw range could be employed as fire and forget munitions.[14] New small arms ammunition is planned for both the Objective Individual Combat Weapon (OICW) and the Objective Crew Served Weapon (OCSW), as well as for standard small arms.

Logistics considerations need to become part of the initial design work for new weapons systems. Too often in the past, logistics considerations were treated, at best, as afterthoughts. This is no longer possible. It will be important to manage the development of new weapons systems and their munitions in tandem.

For this reason, it is important that the Services remove organizational and management barriers that contribute to disconnects between weapons systems PEOs and those responsible for munitions. For example, management of Army missile programs remains split between PEO Ammo, PEO Air and Missile Defense/PEO Missiles. Similarly, responsibility for munitions to be used by the Army's FCS is the responsibility of PEO Ground Combat Support Service (GCSS) while that for the OICW and the OCSW are the responsibility of PEO Soldier. In other cases, the disconnect may be between the developer, including commercial companies, and the logistics agent that will manage the munition once it is in service.

The increasing reliance in defense production on commercial off-the-shelf (COTS) technologies is both an advantage and a disadvantage for the munitions industrial base. COTS is important as both a way of gaining access to state-of-the art technologies and of achieving greater cost effectiveness in munitions production. Yet, this means that technology cycles get shorter. DoD will find it increasingly difficult to tolerate aging in the munitions industrial base. Contrast a generational cycle time in microprocessors of approximately 18 months with a munitions industrial base that has production equipment dating back to World War II.

In some ways, the challenge is even more complex. The munitions industrial base must transform while simultaneously sustaining.[15] There is a requirement to continue production of traditional items while also modernizing selected elements of the industrial base, introducing transformational production capabilities and retaining capability for rapid expansion of production. Thus, some production items will have very short technology cycles and require continuous stockpile turnover while others will have very long shelf-life and a different maintenance and management scheme.

It has been suggested that ammunition needs to be treated as an acquisition program and not a commodity. As the technology content of modern munitions increases, the character of their development, production and stockpiling is likely to resemble that of platforms and major weapons systems. The concept of spiral development is one that may be very applicable to advanced munitions with their potential for repeated modification and improvement.

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[14] *Munitions, op. cit.*, p. 16.
[15] McManus, *op. cit.*, p. 8.

DoD needs to invest in the future capacity of the munitions industrial base to produce advanced weapons that will be employed by a transformed fighting force. R&D funding must be maintained at an adequate level. Support must be given to the exploitation of opportunities for exploiting COTS in the design of future munitions.

For the long-term, DoD needs to transform the relationship between government and industry. The AMC *Transformation White Paper* described a vision of the future munitions industrial base thus:

> The transformed munitions base will consist of a complimentary and synergistic mix of private sector and government capabilities. It will be multi-purpose and multi-use, and structured to provide the required capabilities and capacity to satisfy peacetime and war needs including reconstitution and replenishment. The lines between government-owned, government-operated facilities and the commercial sector are blurring, as innovative partnerships enable co-utilization of space and transfer of new technologies and capital equipment into the facilities. By leveraging the private sector's capabilities to the maximum extent practicable and economical, the Army will focus its resources on those manufacturing processes and products unique to the national security mission. The challenge is to determine the most efficient public-private partnership arrangements to provide for peacetime, mobilization capability and capacity and wartime support of both current and new systems.[16]

V. Conclusions and Recommendation

It is a common misconception of the defense industrial base that it has no problems that cannot be fixed if given a sufficient allocation of resources. With respect to the munitions industrial base, this is not the case. What are most important are a strategic vision and a long-term plan for the management of the munitions industrial base. Part of such a plan must be a definition of the long-term budget requirements for a modern munitions industrial base. Other aspects of this plan should be the development of multi-year contracts that ensure economic production quantities. The plan should also identify critical sub-sectors and component technologies that must be sustained for the national industrial base.

DoD must initiate a program to modernize selective portions of the munitions industrial base. This includes the principle components of the small arms ammunition sector as well as the sectors involved in the production of propellants, fuzes and critical electronics. In some instances, the introduction of improved business practices and accounting/tracking systems may be sufficient. But in truth, too much of the production capacity of the munitions industrial base is aged and even obsolete. Money needs to be spent now to modernize critical production capabilities.

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[16] AMC, *op. cit.*, p. 6.

The Executive and Legislative branches need to agree on an approach to this sector that maintains sufficient excess industrial infrastructure -- in other words, a surge capability to ensure against critical stockpile failures. Without question, maintaining excess infrastructure, in terms of peacetime demand for munitions, is costly. Failing to maintain an adequate surge capability in the event of hostilities, as the Nation has discovered over the past year, can be deadly.

The U.S. military increasingly is a joint force. The logistics system is following suit. Additional efforts need to be undertaken to increase the joint character of the defense logistics system. It will be important to identify opportunities to design and produce common munitions.

Pulignani, Ronald J LTC ASA(I&E)

From: Kerry Finnegan [Finnegan@lexingtoninstitute.org]
Sent: Monday, July 19, 2004 4:28 PM
To: Pulignani, Ronald J LTC ASA(I&E)
Subject: Ammunition Industrial Base Meeting - 7.22.04 - REMINDER

To: Lieutenant Colonel Ron Pulignani
From: Merrick Carey
Date: July 19, 2004
Re: Ammunition Industrial Base Meeting – 7.22.04 - REMINDER

We are pleased you will be able to join us as The Lexington Institute hosts a Land Warfare Working Group meeting to discuss challenges facing the ammunition industrial base. The meeting will take place on Thursday, July 22 at The Georgetown Club in Washington, D.C. Attached please find a copy of the draft white paper we will be using to focus the discussion along with the guest list.

Please direct any questions to Ms. Kerry Finnegan at 703.522.5828 or via e-mail at Finnegan@lexingtoninstitute.org. Comments on the paper can be sent to Dr. Daniel Goure at goure@lexingtoninstitute.org.

Lexington Institute
Ammunition Industrial Base Meeting
(Lunch Provided)
Thursday, July 22, 2004
The Georgian Room
The Georgetown Club
1530 Wisconsin Avenue, NW
Washington, D.C.
202.333.9330
12:00PM-3:30PM

Ms. Kerry Finnegan
Program Director, Lexington Institute
1600 Wilson Boulevard, Suite 900
Arlington, Virginia 22209
Tel 703.522.5828/ Fax 703.522.5837

INDUSTRIAL JOINT CROSS SERVICE GROUP

June 16, 2005

MEMORANDUM FOR R. GARY DINSICK, ARMY TEAM LEADER

SUBJECT: REQUEST COMMENT ON HAWTHORNE ARMY DEPOT, KANSAS AAP, AND LONE STAR AAP

The following is in response to an e-mail inquiry of June 9, 2005, where you asked the following questions:

Question:
Attached for your review and comment are issues tied to the closure of army bases, Lone Star, Kansas AAP, and Hawthorne Army Depot. For all three installations, representatives of the communities and Day and Zimmerman the contractor stated that the personnel numbers were inaccurate, noting that information provided in response to data calls was not used or incorporated into the final recommendation, and that the contract workforce had not been taken into consideration. In each case, the facility is government-owned, contractor-operated (GOCO), meaning that the workforce is contractual by nature instead of a more typical federal civilian workforce. Please respond as to what the correct personnel figures should be at each installation.

Answer:
Information provided in response to the data call on the civilian and contractor workforce was used in the analysis. There were eight specific Military Value questions that asked each installation to identify the number of Civilian Government Employees and Contractor Employees supporting munitions production, maintenance, storage/distribution and demilitarization. In an effort to ensure all installations were evaluated equally, each installation was told to provide this information as of a specific point in time, September 30, 2003. The workforce numbers utilized in the analysis were originally certified as accurate at the installation level.

Question:
The concern was presented that closure of Hawthorne with movement to Tooele Army Depot was not logical as movement was occurring from a large facility into a smaller facility. How was the decision made to move the Hawthorne mission to Tooele?

Answer:
Size was not the determining factor for site retention, or military value. Tooele is one of the Department's Tier I power projection platforms in the West *(Tier I is defined as*

follows: Active Core Depots installations will support a normal/full-up activity level with a stockage configuration of primarily required stocks and minimal non-required stocks during demilitarization. Normal activity includes daily receipts/issues of training stocks, storage of war reserve stocks required in contingency operations and additional war reserve stocks to augment lower level tier installation power projection capabilities. Installations at this activity level will receive requisite levels of storage support, surveillance, inventory, maintenance, and demilitarization.). It sits at a major convergence of trans-continental rail lines, interstate highways (east-west and north-south), and airfields (both military and civilian). It shipped more than 1,000 containers (20,000 tons plus) of ammunition in support of OEF and OIF and maintains a Stryker Brigade Combat Team (SBCT) ammunition basic load configured in support of the I Corps rapid deployment mission. Tooele's ammunition storage stockpile consists largely of critical go-to-war stocks that can be quickly out-loaded and moved to transportation nodes in response to all contingencies and mission demands.

Question:
With respect to Hawthorne, the community mentioned that there would be a significant issues with permits in Utah and there would also be a significant community (Utah) concern regarding the demil work that would move from Hawthorne to Tooele. Please discuss Utah requirements and information, with regard to environmental permits and requirements to successfully move the Hawthorne mission to Tooele.

Answer:
There is an environmental impact statement provided in Criteria 8 and the analysis includes $1.1M for a New Source Review and Environmental Impact Study. There are no reported Air Permit thresholds or noise impact. There are no known, or anticipated, Tooele community concerns.

Within the mandated BRAC timeframes, Hawthorne will demil in place all existing unserviceable and obsolete stocks. Tooele will receive future demil workload.

Question:
Please discuss how each of the missions at Hawthorne Army Depot was considered in the closer of the facility; particularly their demilitarization capability?

Answer:
The missions identified for Hawthorne are Tier II storage/distribution *(Tier II is defined as follows: Cadre Depots are installations that perform static storage of follow-on war reserve requirements. Daily activity will be minimal for receipts/issues. Workload will focus on maintenance, surveillance, inventory, and demilitarization operations)* and demilitarization. The most critical portion of their mission is storage/distribution.

With respect to the storage and distribution mission Tooele is one of the Department's Tier I power projection platforms in the West and following demil of the existing stockpile, will be able to accommodate future requirements. The demilitarization mission

comparison follows: Hawthorne has the capability to demil 27 different Munitions Items Disposition Action System (MIDAS) class munitions and Tooele has the capability to demil 25 (duplicating 81% of Hawthorne's capability). Hawthorne demils 5 classes of munitions that Tooele does not have the capability to demil and Tooele has 3 classes that Hawthorne does not have the capability to demil. Both Hawthorne and Tooele have the ability to perform Open Burn/Open Detonation (OB/OD), incineration, and reclamation and reported comparable capacity. Following demil of the existing stockpile, the remaining multi-functional sites will be able to fulfill the projected 2025 demil requirements.

Question:
Were any other scenarios explored which did not close Hawthorne, but realigned other sites and moved missions to Hawthorne? If so, what were the scenarios and why were they rejected?

Answer:
There were no scenarios explored that realigned other sites and moved mission to Hawthorne. A guiding principle was to consolidate to multi-function installation that would permit the Army to Supply, Service, Maintain, Deploy, and Employ. The focus of the joint cross service group was to retain as many multi-functional installations as necessary that have the capacity and capability to produce munitions, store/distribute munitions, demil munitions, and perform maintenance on munitions.

A sequential process used in evaluations: The first phase gathered information on capacity, capability, military value data and requirements to support the 20 Year Force Structure Plan. Reviewed the capacity and capability needed to support the military departments. Established priorities: Retain multifunctional infrastructure that supports production, storage/distribution, demilitarization, and maintenance. The second phase of the process was the development of recommendations. Step one established scenarios that ensured we retained the capacity and capability to produce the munitions commodities needed to support the joint forces. Step two established scenarios that made sure we retained the storage/distribution sites needed to provide the power projection platform needed to support rapid deployment (if a site was retained in Step one for production and met the criteria needed in Step two, it was an automatic carry over). Step three retained the sites needed to perform demilitarization (if a site was retained in Steps one and/or two for production and storage/distribution, and met the criteria needed in Step three, it was an automatic carry over). Step four then retained the additional sites needed to perform munitions maintenance.

Question:
With regard to Lone Star and Kansas, please discuss how you accounted for and incorporated the complexity of manufacturing ammunition into the recommendations.

Answer:
The complexity of munitions manufacturing processes were incorporated into the military value portion of the analysis. The sites input to that portion of the analysis is in questions relating to Munitions Explosives Processes, Munitions Metal Parts Processes, Munitions Load, Assemble, and Pack. Those processes were considered and used in BRAC Criteria 1 and Criteria 3.

Question:
There was a discussion and reference to a RAND study which recommended privatization in place of all the ammunition plants. Please provide a COBRA run, analysis and comments on the potential for a suggestion to privatize both Lone Star and Kansas in place.

Answer:
Your request for a COBRA run to privatize Lone Star and Kansas is not possible without an extensive data call. Failure to privatize was not an oversight on our part. Our early analysis noted that out through FY 2004 – FY 2006 the four Load, Assemble, and Pack (LAP) plants that produce similar products (High Explosive (HE) melt pour artillery and mortar rounds) had extremely low production utilization rates (Iowa (35%), Lone Star (5%), Kansas (10%), and Milan (15%)). This was an indicator that there is excess in the industrial base and there a need to reduce the number of LAP plants, not privatize. Privatization in place would not fix the fact that we have too many LAP plants. It merely shifts ownership from the government to the commercial sector while retaining the same number of producers and degrading efficiencies that could result from these recommendations. Ultimately, the Department would still be paying for excess capacity. For instance, if the decision was made to privatize Lone Star and Kansas, and compete the contract among the four LAP plants (two in the government base and two in the commercial sector), and privatized Lone Star won the competition, the government will pay overhead twice. Once to the winner of the competition (through prices paid to Lone Star) and again to maintain the two plants retained within the organic industrial base.

The focus of the BRAC analysis was to perform a strategic and tactical analysis that makes the existing industrial base more efficient while providing DoD with the ability to: Supply, Service, and Maintain *(the Department needs access to logistical and industrial infrastructure capabilities that are optimally integrated into a skilled and cost efficient national industrial base that provides agile and responsive global support to operational forces)* and Deploy & Employ (Operational) *(the Department needs secure installations that are optimally located for mission accomplishment (including homeland defense); that support power projection, rapid deployment, and expeditionary force requirements for reach-back capability; that sustain the capability to mobilize and surge; and that ensure strategic redundancy)*. Our recommendations accomplished that goal.

Privatization splinters workload and degrades the efficiencies established through site closure and closures within the government base allow us to consolidate workload and become more efficient.

BRAC Fact Matrix Comments:
Information on the cost to close is correct. Much of the cost on the BRAC Fact Matrix should not be included in the analysis (cost to demil existing stock, duplication of Western Area Demilitarization Facility (WDAF) (duplicating only portion needed), tenant relocation, loss to the community, and environmental clean-up. The analysis provides for demil in place, relocation of stocks, and facilitization to support future demil and storage requirements. All of the information used in our analysis was originated and certified by the installations and used in the analysis.

Jay Berry
Executive Secretary

DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSION
2521 SOUTH CLARK STREET
ARLINGTON, VA 22202
TELEPHONE: (703) 699-2950

Bob Meyer - Some help please!

June 8, 2005

TO: ebearinghouse@wso.whs.mil

CC: Robert.Meyer.CTR@osd.mil, Nathaniel.Sillin@wso.whs.mil,

FROM: BRAC Commission

SUBJECT: Request Comment on Hawthorne Army Depot, Kansas AAP, and Lone Star AAP.

1. Attached for your review and comment are issues tied to the closure of army bases, Lone Star AAP, Kansas AAP, and Hawthorne Army Depot. For all three installations, representatives of the communities and Day and Zimmerman the contractor stated that the personnel numbers were inaccurate, noting that information provided in response to data calls was not used or incorporated into the final recommendation, and that the contract workforce had not been taken into consideration. In each case, the facility is government-owned, contractor-operated (GOCO), meaning that the workforce is contractual by nature instead of a more typical federal civilian workforce. Please respond as to what the correct personnel figures should be at each installation.

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3. With respect to Hawthorne, the community mentioned that there would be a significant issues with permits in Utah and there would also be significant community (Utah) concern regarding the demil work that would move from Hawthorne to Tooele. Please discuss Utah requirements and any information, with regard to environmental permits and requirements to successfully move the Hawthorne mission to Tooele.

4. Please discuss how each of the missions at Hawthorne Army Depot was considered in the closer of the facility; particularly their demilitarization capability?

5. Were any other scenarios explored which did not close Hawthorne, but realigned other sites and moved missions to Hawthorne? If so, what were the scenarios and why were they rejected?

6. With regard to Lone Star and Kansas, please discuss how you accounted for and incorporated the complexity of manufacturing ammunition into the recommendations.

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Best regards,

R. Gary Dinsick
Army Team Leader

Economic Impact to the Community

BRAC Position:

Potential reduction of 326 jobs over period 2006-2011. Less than .1% of economic area employment (measured against Reno-Sparks, Nevada).

Point	BRAC (2003)	Actual: (2005)	Analysis
Military Personnel	74	1	Incorrect Data – Only the Commander is active military. The 73 were temporary reserves stationed at HWAD during heightened security.
Civilian Personnel	45	45	Correct Data
Contractor Personnel	80	493	Incorrect Data; a total of 448 contractors was reported to the ASIP IMA Southwest in 2003..no one knows where the 80 figure comes from..
Totals	**199**	**539**	**Incorrect data..the 2003 IMA report showed a total 567; since 2003 HWAD lost the Reserves and added more contractors for security…**
Employment Displacement	0.1%	30% - Direct 50% - Mineral County Direct and Indirect	Incorporated the Mineral County displacement figures into the employment data for the Reno/Sparks metropolitan area (243,270 employment) – 133 miles away. Current Mineral County employment is 1,860. Closing the depot could devastate Hawthorne, Nevada. As primary employer in Hawthorne significant economic redevelopment will be required. Annual Payroll - $16.6 million; Subcontracts & Purchases 10/2004 to 3/2005 - $5.9 million ($5.3 million (89%) to small business, women owned, disadvantaged, veteran owned, etc.). 4% of the workforce is Native American.

HWAD Payroll Over $16 Million Annually; Losing 835 Jobs of the 1860 Jobs in Mineral County..

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HAWTHORNE ARMY DEPOT – BRAC FACT MATRIX			
Point	**BRAC Comment**	**Actual Facts**	**Analysis**
Mil Personnel	74	1	Incorrect Data – Only the Commander is active military.
Civ. Personnel	45	45	Correct Data
Contr. Pers.	80	493	Incorrect Data
Employment Displacement Percentages	.1%	31%-50% Mineral County Total job losses	BRAC used employment data for the Reno/Sparks metropolitan area (243,270 employed) which is 133 miles away. Current Mineral County employment is 1,860. Total HWAD displacement is 585. Total projected job loss in county is 970.
Cost to Close In actuality totals approximately $1.28 billion	$180.3 million	**$80.7** million	Relocation of 218,000 tons of munitions, inert material, and IPE to a new location. $39m shipping, $20.4m transportation, $21.3m receipt
		$151 million	Demilitarization of 130,000 tons of munitions stored at HWAD (calculated at current rates). Under perfect conditions – 4.5 years to complete.
	IJCSG Munitions / Armament Capability Report says HWAD does not use its demil capability.	**$157** million of demil facilities duplication at Tooele not calculated. **$500** million for new magazines	Duplication of WADF capabilities at Tooele or other depots at least $157 million for demil facilities plus $500 million new magazines. Not feasible with Tooele space available. Environmental permitting will require 5 to 7 years. HWAD demilitarized 8,070 tons in 2002, 5,913 tons in 2003, and 5,526 tons in 2004. Demil effort is directly proportional to funding. Tooele would need $500 million in new magazines to accommodate incoming munitions from HWAD.
		$10 million tenant relocate not calculated	Relocation of Navy Torpedo Battery Recycling, and Mine Maintenance Detachment and the Marine Corp Weapons Test Detachment ($ 5 million to $15 million), if facilities are available.
	Environmental costs not included by BRAC	Community Direct loss- $38 million, indirect loss - $46 million	As primary employer in Hawthorne extensive economic redevelopment will be required. Annual Payroll - $16.6 million; Subcontracts & Purchases 10/2004 to 3/2005 - $5.9 million ($5.3 million (89%) to small business, women owned, disadvantaged, veteran owned, etc.). 4% of the workforce is Native American
		$383 million	$383 million clean-up required - only if HWAD closed
Discriminating Issues	HWAD does not produce or maintain munitions	Incorrect	HWAD is currently performing the renovation of 300,000 rounds of 105 MM renovation HWAD has performed Load Assembly & Pack (LAP) functions for bomb fuzes, mines, AQMs, and these facilities are still available.
	Railroad Wash-out 3 months per year	Incorrect	Severe weather wash-outs are extremely rare. There have been three wash-outs in the last twenty years and they have not impacted receipt or shipment of munitions. Most shipments & deliveries by truck – Outstanding surge capabilities.
	HWAD is not multi-functional or joint service oriented	HWAD is very multi-functional and Joint Service oriented in all areas of storage, demil, testing, training, manufacturing, & property disposal	• Navy: Fallon training storage – Navy Carrier group storage/surge support for West Coast (in discussion) – Signed MOA to provide range scrap demilitarization. • Marines: High Desert and winter training (ideal Iraq / Afghanistan training simulations). Transient training up to 1000 at a time. • Navy SEALS: High Desert, Mountain, and Water training site (dedicated barracks facilities). • Corp of Engineers: Signed MOA for Range Scrap processing from closed test sites • DLA: Slated for national Mercury storage site summer 06; 4,890 tons

Hawthorne Army Depot Facts:

- 230 Square Miles of irreplaceable un-encroached, environmentally permitted, multi-functional Joint Service land and facilities
- 2400 Steel reinforced concrete magazines, all in serviceable condition
- Storage capacity for 600,000 tons of munitions with 300,000 tons of space available as the only usable space left in the depot system.
- Korea, South West Asia retrogrades will fill this space or otherwise be stored outdoors elsewhere causing Homeland Security and Anti-terrorism issues.
- 700 Industrial process, service support, inert storage buildings mostly all steel reinforced concrete
- 272 miles of railroad
- Facilities in place and operating for production/renovation, demilitarization, storage, receiving, shipping, ammo surveillance, mine and torpedo maintenance, property re-utilization office, scrap sales, open burn, open detonation, weapons and ammunition testing, operational training for Navy SEALS, Marines, National Guard, and Army, rifle ranges, gun ranges, mortar ranges etc. Multi-Functional, Joint Service, extremely low cost to use
- Currently demilitarizing 6-8 thousand tons per year. Capacity to demil 35-40 thousand tons per year
- Open burn, open detonation facilities for emergency destruction of unstable ordnance
- 3 Industrial sized container loading/offloading pads complete with truck and rail access
- 6 Industrial sized loading off /offloading docks complete with truck and rail access
- Army owned water rights and facilities; Cat Creek dam, Black Beauty reservoir, Rose creek reservoir, multiple deep wells
- Western Area Demilitarization Facility (WADF) – Largest fully permitted demilitarization facility in the depot system
- Homeland Security/Anti-terrorism support. All ammo stored in locked, guarded concrete magazines
- On-site laboratory for ammunition and environmental testing
- Range Scrap demilitarization and disposal facilities for joint service customers
- HWAD is sited by original design to service Pacific Fleet and western test and training ranges
- Un-restricted air-space for training operations
- Available adjacent land for expansion of training and testing for Joint Service customers
- 6,000 foot C-130 capable Mineral County airstrip
- Space available to support DLA customer request to store 4890 tons of strategic mercury stockpile
- Space available to store 22 Trident C-4 rocket motors at request of customer
- Space available to support Pacific Fleet customer with just in time delivery of fleet ammo packages to ports on west coast

- Multi-functional use of HWAD land makes for transient training of Marines and Seals at little extra cost

Problems with changing land use of HWAD from current use to public/commercial use:

- HWAD has been used as munitions processing and storage and testing site for over 70 years. To change land use will require extensive multiple site environmental remediation. Army Corps of Engineers estimates approximately $383 million.
- Likely to cause water rights legal battle between Army, State of Nevada and Mineral County that will last many years and cost everyone a lot.
- Buildings constructed for ammunition processing and storage not readily suited to other uses.
- Some HWAD sites may be permanently closed to usage transfer and require care-taker status forever. This is costly with no benefit to tax payer or war fighter.

WHITE PAPER
HWAD BRAC ISSUES
[redacted]
5/19/05

1. BRAC says that the effect on personnel of closing Hawthorne Army Depot (HWAD) is 74 military, 45 civilians, 80 contractors. This is incorrect. Closing HWAD will result in the loss of 1 military, 45 civilians and 493 contractors since that is what is present now. Also lost would be many subcontractors not counted as full time. BRAC says this is not important because this is only .1% of the Reno/Sparks metropolitan area which they used for analysis. In actuality HWAD is 133 miles from Reno. The loss of 539 direct jobs represents approximately 27% of the total workforce on Mineral County. The waterfall effect of these jobs lost would result in at least a 46% loss of jobs in Mineral County and probably much more since HWAD is the primary source of outside revenues. It is interesting to note that BRAC used Fallon to compare the impact of shutting down NAS Fallon but used Reno for analysis for shutting down HWAD whereas Reno is 133 miles from HWAD and Fallon is 70 miles from Reno.
2. BRAC says the cost to close HWAD is $180,000,000. Actual Costs will be much higher including $80.7 million for relocation of stocks (there is no magazine storage in the USA that will hold this amount of stocks), $150 million in Demil of stocks at HWAD, $5-15 million to relocate Navy Torpedo and Marine Corps Weapons Test Detachments, Mineral County Redevelopment $27.8 million, many millions to build, prove out, and permit a new demil facility to replace WADF (see paragraph 3) and an estimated $400 million for environmental remediation sufficient to change the land use from a munitions operation to a public operation. BRAC says that environmental remediation is not included as a factor because it is required anyhow. Not accurate. It is required to change the land use from military munitions to public use but in reality that $400 million will never be allocated as long as the land use does not change (i.e. HWAD is not shut down).
3. BRAC says that HWAD capabilities and functions will be transferred to Tooele Army Depot. The cost of doing this is prohibitive in itself. To duplicate HWAD demil facilities would cost $[redacted] million to $[redacted] million and a decade of environmental approval delays. There is no room at Tooele for magazine storage on the scale of HWAD. Tooele is also facing an encroachment problem that would make it vary difficult to build or develop the required facilities needed to replace HWAD. The entire Depot system in the USA is currently out of storage capacity except for HWAD. When Korean and Guam and European retrogrades start coming back in full force (they have already started) all the depot system will be overflowed requiring outdoor storage of ammunition thus producing large Homeland Security issues. HWAD has the only remaining useable 300,000 tons of storage capacity. (See attached chart produced by the Program Manager for Demilitarization).
4. BRAC says HWAD does not maintain or produce munitions. This is not true. HWAD routinely renovates munitions for storage and issue to war-fighter for training programs. HWAD also supports a dedicated formal government Quality

Assurance Specialist Ammunition Surveillance (QASAS) munitions inspections program for active stocks of Ready for Issue (RFI) ammunition.

5. BRAC says HWAD cannot offload and receive munitions because of unreliable rail conditions. This is untrue. HWAD has one of the very best (if not the very best) shipping and receiving record in the depot system. There have been a total of only 3 short rail outages in the last 20 years. No shipping or receiving schedules were missed. Ever. Other major depots (not BRAC'd) located in the East and Midwest cannot claim this. They have a much worse record because of weather and other factors. Also the majority of all shipping and receiving is done by truck. HWAD has access to 3 highways in and out of the area with multiple routes branching off from each of the 3. HWAD was designed and positioned where it is because it is in the perfect location to serve the Pacific Fleet. HWAD is also in the perfect position to serve out ammo to the 2 largest ammunition usage ranges in the western US – namely Fallon NAS and Nellis USAF.
6. BRAC says that installations must multi-functional for production, demil and storage and BRAC says that HWAD is not. This is incorrect.* HWAD is very multifunctional and also highly joint in its customer base. HWAD routinely provides joint demilitarization, renovation, receiving, shipping, storage under the Joint Munitions Command Single Manager for Conventional Ammunition concept. HWAD is also joint in providing access and support for Marines, Navy Seals, and Army training exercises on a regular annual basis. HWAD has evolved in the last year to be the site of preference for desert warfare training for Marines Corps Special Forces and Navy Seals headed to Afghanistan due to the similarity in terrain and climate. HWAD is currently providing joint services support for the processing of Range Scrap and Residue from Navy test ranges and FUD sites in concert with the Army Corps of Engineers. HWAD provides on-site support to the Navy Torpedo and Mine Maintenance Detachment on a permanent year-round basis. HWAD provides Load Assemble and Pack (LAP) services for the production of demo charges for ship testing at Mare Island and Puget Sound, Washington. HWAD is slated for the summer of 2006 to be the site for storage and maintenance of the National Mercury Stockpile because of its capacity and the quality of storage and security. HWAD is the largest and most capable site for the emergency destruction of unstable munitions in the US. HWAD also operates a MILVAN inspection and repair facility that serves all joint customers. HWAD routinely supplies serviceable containers to Tooele and other military bases so that they may meet their surge/mobilization plan requirements. This effort is in addition to HWAD meeting its own container requirements.
7. If anything HWAD is severely underutilized. With approximately 10 million square feet of manufacturing space, over 2,500 storage magazines, its proven out-loading and receiving capability, benchmark inventory program, ability to inspect, repair, and stuff 188 containers a day, available demilitarization processes that have grown since the initial BRAC review, customer interest in HWAD for the storage of mercury and ammunition to support pacific fleet operations and so on HWAD should be work loaded to take advantage of its geographical location and proven ability to provide needed services to all the branches of the military.

8. *And also very faulty logic when it comes to Supply Depot Operations and Demil Operations. Just think where Wal Mart would be if they insisted that production, disposal, storage and distribution be performed all in one place).

INDUSTRIAL JOINT CROSS SERVICE GROUP

June 16, 2005

MEMORANDUM FOR R. GARY DINSICK, ARMY TEAM LEADER

SUBJECT: REQUEST COMMENT ON HAWTHORNE ARMY DEPOT, KANSAS AAP, AND LONE STAR AAP

The following is in response to an e-mail inquiry of June 9, 2005, where you asked the following questions:

Question:
Attached for your review and comment are issues tied to the closure of army bases, Lone Star, Kansas AAP, and Hawthorne Army Depot. For all three installations, representatives of the communities and Day and Zimmerman the contractor stated that the personnel numbers were inaccurate, noting that information provided in response to data calls was not used or incorporated into the final recommendation, and that the contract workforce had not been taken into consideration. In each case, the facility is government-owned, contractor-operated (GOCO), meaning that the workforce is contractual by nature instead of a more typical federal civilian workforce. Please respond as to what the correct personnel figures should be at each installation.

Answer:
Information provided in response to the data call on the civilian and contractor workforce was used in the analysis. There were eight specific Military Value questions that asked each installation to identify the number of Civilian Government Employees and Contractor Employees supporting munitions production, maintenance, storage/distribution and demilitarization. In an effort to ensure all installations were evaluated equally, each installation was told to provide this information as of a specific point in time, September 30, 2003. The workforce numbers utilized in the analysis were originally certified as accurate at the installation level.

Question:
The concern was presented that closure of Hawthorne with movement to Tooele Army Depot was not logical as movement was occurring from a large facility into a smaller facility. How was the decision made to move the Hawthorne mission to Tooele?

Answer:
Size was not the determining factor for site retention, or military value. Tooele is one of the Department's Tier I power projection platforms in the West *(Tier I is defined as*

follows: Active Core Depots installations will support a normal/full-up activity level with a stockage configuration of primarily required stocks and minimal non-required stocks during demilitarization. Normal activity includes daily receipts/issues of training stocks, storage of war reserve stocks required in contingency operations and additional war reserve stocks to augment lower level tier installation power projection capabilities. Installations at this activity level will receive requisite levels of storage support, surveillance, inventory, maintenance, and demilitarization.). It sits at a major convergence of trans-continental rail lines, interstate highways (east-west and north-south), and airfields (both military and civilian). It shipped more than 1,000 containers (20,000 tons plus) of ammunition in support of OEF and OIF and maintains a Stryker Brigade Combat Team (SBCT) ammunition basic load configured in support of the I Corps rapid deployment mission. Tooele's ammunition storage stockpile consists largely of critical go-to-war stocks that can be quickly out-loaded and moved to transportation nodes in response to all contingencies and mission demands.

Question:
With respect to Hawthorne, the community mentioned that there would be a significant issues with permits in Utah and there would also be a significant community (Utah) concern regarding the demil work that would move from Hawthorne to Tooele. Please discuss Utah requirements and information, with regard to environmental permits and requirements to successfully move the Hawthorne mission to Tooele.

Answer:
There is an environmental impact statement provided in Criteria 8 and the analysis includes $1.1M for a New Source Review and Environmental Impact Study. There are no reported Air Permit thresholds or noise impact. There are no known, or anticipated, Tooele community concerns.

Within the mandated BRAC timeframes, Hawthorne will demil in place all existing unserviceable and obsolete stocks. Tooele will receive future demil workload.

Question:
Please discuss how each of the missions at Hawthorne Army Depot was considered in the closer of the facility; particularly their demilitarization capability?

Answer:
The missions identified for Hawthorne are Tier II storage/distribution *(Tier II is defined as follows: Cadre Depots are installations that perform static storage of follow-on war reserve requirements. Daily activity will be minimal for receipts/issues. Workload will focus on maintenance, surveillance, inventory, and demilitarization operations)* and demilitarization. The most critical portion of their mission is storage/distribution.

With respect to the storage and distribution mission Tooele is one of the Department's Tier I power projection platforms in the West and following demil of the existing stockpile, will be able to accommodate future requirements. The demilitarization mission

comparison follows: Hawthorne has the capability to demil 27 different Munitions Items Disposition Action System (MIDAS) class munitions and Tooele has the capability to demil 25 (duplicating 81% of Hawthorne's capability). Hawthorne demils 5 classes of munitions that Tooele does not have the capability to demil and Tooele has 3 classes that Hawthorne does not have the capability to demil. Both Hawthorne and Tooele have the ability to perform Open Burn/Open Detonation (OB/OD), incineration, and reclamation and reported comparable capacity. Following demil of the existing stockpile, the remaining multi-functional sites will be able to fulfill the projected 2025 demil requirements.

Question:
Were any other scenarios explored which did not close Hawthorne, but realigned other sites and moved missions to Hawthorne? If so, what were the scenarios and why were they rejected?

Answer:
There were no scenarios explored that realigned other sites and moved mission to Hawthorne. A guiding principle was to consolidate to multi-function installation that would permit the Army to Supply, Service, Maintain, Deploy, and Employ. The focus of the joint cross service group was to retain as many multi-functional installations as necessary that have the capacity and capability to produce munitions, store/distribute munitions, demil munitions, and perform maintenance on munitions.

A sequential process used in evaluations: The first phase gathered information on capacity, capability, military value data and requirements to support the 20 Year Force Structure Plan. Reviewed the capacity and capability needed to support the military departments. Established priorities: Retain multifunctional infrastructure that supports production, storage/distribution, demilitarization, and maintenance. The second phase of the process was the development of recommendations. Step one established scenarios that ensured we retained the capacity and capability to produce the munitions commodities needed to support the joint forces. Step two established scenarios that made sure we retained the storage/distribution sites needed to provide the power projection platform needed to support rapid deployment (if a site was retained in Step one for production and met the criteria needed in Step two, it was an automatic carry over). Step three retained the sites needed to perform demilitarization (if a site was retained in Steps one and/or two for production and storage/distribution, and met the criteria needed in Step three, it was an automatic carry over). Step four then retained the additional sites needed to perform munitions maintenance.

Question:
With regard to Lone Star and Kansas, please discuss how you accounted for and incorporated the complexity of manufacturing ammunition into the recommendations.

Answer:
The complexity of munitions manufacturing processes were incorporated into the military value portion of the analysis. The sites input to that portion of the analysis is in questions relating to Munitions Explosives Processes, Munitions Metal Parts Processes, Munitions Load, Assemble, and Pack. Those processes were considered and used in BRAC Criteria 1 and Criteria 3.

Question:
There was a discussion and reference to a RAND study which recommended privatization in place of all the ammunition plants. Please provide a COBRA run, analysis and comments on the potential for a suggestion to privatize both Lone Star and Kansas in place.

Answer:
Your request for a COBRA run to privatize Lone Star and Kansas is not possible without an extensive data call. Failure to privatize was not an oversight on our part. Our early analysis noted that out through FY 2004 – FY 2006 the four Load, Assemble, and Pack (LAP) plants that produce similar products (High Explosive (HE) melt pour artillery and mortar rounds) had extremely low production utilization rates (Iowa (35%), Lone Star (5%), Kansas (10%), and Milan (15%)). This was an indicator that there is excess in the industrial base and there a need to reduce the number of LAP plants, not privatize. Privatization in place would not fix the fact that we have too many LAP plants. It merely shifts ownership from the government to the commercial sector while retaining the same number of producers and degrading efficiencies that could result from these recommendations. Ultimately, the Department would still be paying for excess capacity. For instance, if the decision was made to privatize Lone Star and Kansas, and compete the contract among the four LAP plants (two in the government base and two in the commercial sector), and privatized Lone Star won the competition, the government will pay overhead twice. Once to the winner of the competition (through prices paid to Lone Star) and again to maintain the two plants retained within the organic industrial base.

The focus of the BRAC analysis was to perform a strategic and tactical analysis that makes the existing industrial base more efficient while providing DoD with the ability to: Supply, Service, and Maintain *(the Department needs access to logistical and industrial infrastructure capabilities that are optimally integrated into a skilled and cost efficient national industrial base that provides agile and responsive global support to operational forces)* and Deploy & Employ (Operational) *(the Department needs secure installations that are optimally located for mission accomplishment (including homeland defense); that support power projection, rapid deployment, and expeditionary force requirements for reach-back capability; that sustain the capability to mobilize and surge; and that ensure strategic redundancy)*. Our recommendations accomplished that goal.

Privatization splinters workload and degrades the efficiencies established through site closure and closures within the government base allow us to consolidate workload and become more efficient.

BRAC Fact Matrix Comments:
Information on the cost to close is correct. Much of the cost on the BRAC Fact Matrix should not be included in the analysis (cost to demil existing stock, duplication of Western Area Demilitarization Facility (WDAF) (duplicating only portion needed), tenant relocation, loss to the community, and environmental clean-up. The analysis provides for demil in place, relocation of stocks, and facilitization to support future demil and storage requirements. All of the information used in our analysis was originated and certified by the installations and used in the analysis.

Jay Berry
Executive Secretary

INDUSTRIAL JOINT CROSS SERVICE GROUP

June 16, 2005

MEMORANDUM FOR DUKE TRAN, SENIOR ECONOMIST,
REVIEW & ANALYSIS

SUBJECT: HAWTHORNE ARMY DEPOT ECONOMIC IMPACT REPORT

The following is in response to your e-mail inquiry of June 14, 2005, where you asked for a revised economic impact statement for Hawthorne Army Depot using Mineral County as its economic region of influence instead of Reno-Sparks Metropolitan Statistical Areas. That report is attached.

Jay Berry
Executive Secretary

Attachment:
As Stated

Economic Impact Report

This report depicts the economic impact of the following Scenarios:

IND-0108: Close Hawthorne Army Depot

The data in this report is rolled up by Region of Influence

As of: Thu Jun 16 13:55:55 EDT 2005

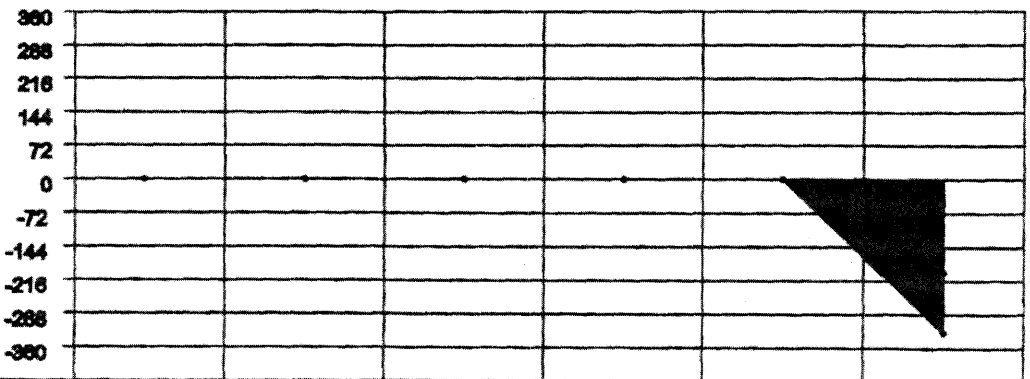
ECONOMIC IMPACT DATA

Scenario: All Selected (see title page)
Economic Region of Influence(ROI): Mineral County, NV
Base: All Bases
Action: All Actions

Overall Economic Impact of Proposed BRAC-05 Action:

ROI Population (2002):	4,768
ROI Employment (2002):	2,413
Authorized Manpower (2005):	119
Authorized Manpower(2005) / ROI Employment(2002):	4.93%
Total Estimated Job Change:	-329
Total Estimated Job Change / ROI Employment(2002):	-13.63%

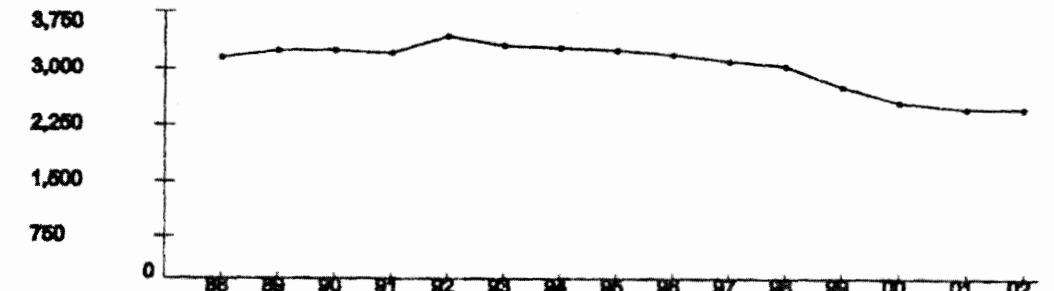
Cumulative Job Change (Gain/Loss) Over Time:



YEAR:	2006	2007	2008	2009	2010	2011
Direct Military:	0	0	0	0	0	-74
Direct Civilian:	0	0	0	0	0	-45
Direct Student:	0	0	0	0	0	0
Direct Contractor:	0	0	0	0	0	-80
Cumulative Direct:	0	0	0	0	0	-199
Cum Indir/Induc:	0	0	0	0	0	-130
Cumulative Total:	0	0	0	0	0	-329

Mineral County, NV Trend Data

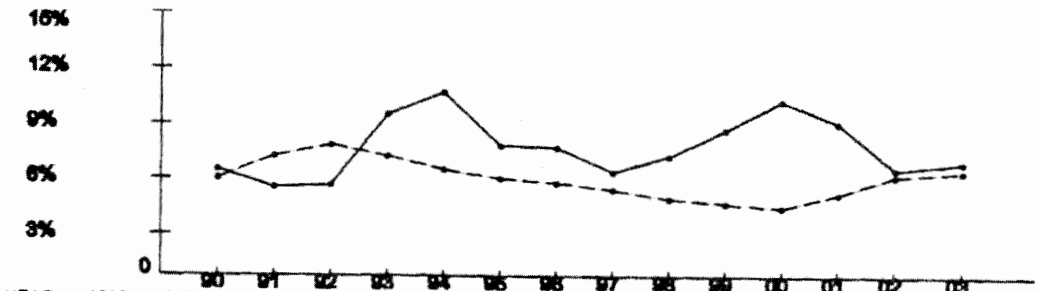
Employment Trend (1988-2002)



YEAR:	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Index:	1	1.02	1.02	1.02	1.09	1.05	1.04	1.02	1.01	0.98	0.96	0.86	0.79	0.77	0.77

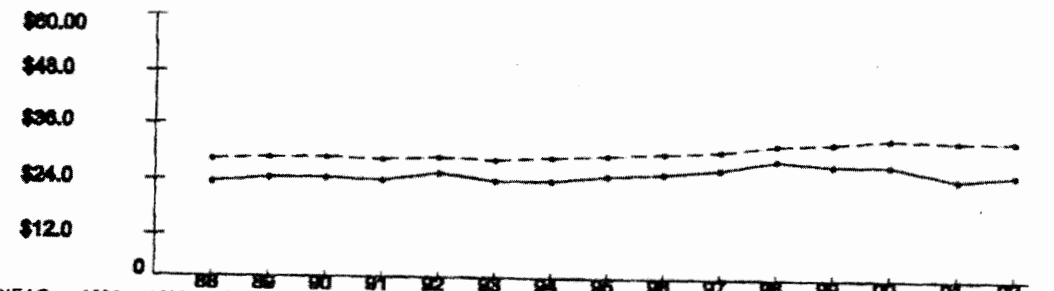
Represents the ROI's indexed employment change since 1988

Unemployment Percentage Trend (1990-2003)



YEAR:	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
ROI:	6.1%	5.18%	5.28%	9.27%	10.44%	7.44%	7.42%	5.96%	6.84%	8.4%	10.05%	8.73%	6.07%	6.44%
USA:	5.6%	6.83%	7.5%	6.91%	6.09%	5.59%	5.4%	4.94%	4.51%	4.21%	3.99%	4.74%	5.79%	5.99%

Per Capita Income x $1,000 (1988-2002)



YEAR:	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
ROI:	$22.14	$23.07	$23.12	$22.7	$23.91	$22.55	$22.72	$23.6	$24.18	$24.75	$26.82	$26.07	$25.97	$22.99	$24.03
USA:	$26.96	$27.48	$27.42	$26.87	$27.35	$27.18	$27.53	$27.86	$28.35	$29.04	$30.35	$30.86	$31.89	$31.72	$31.61

Note: National trend lines are dashed

Economic Impact Report

This report depicts the economic impact of the following Scenarios:

BRAC IND1: Hawthorne Army Depot (data provided by Day and Zimmermann)

The data in this report is rolled up by Action

As of: Fri Jul 22 09:31:04 EDT 2005

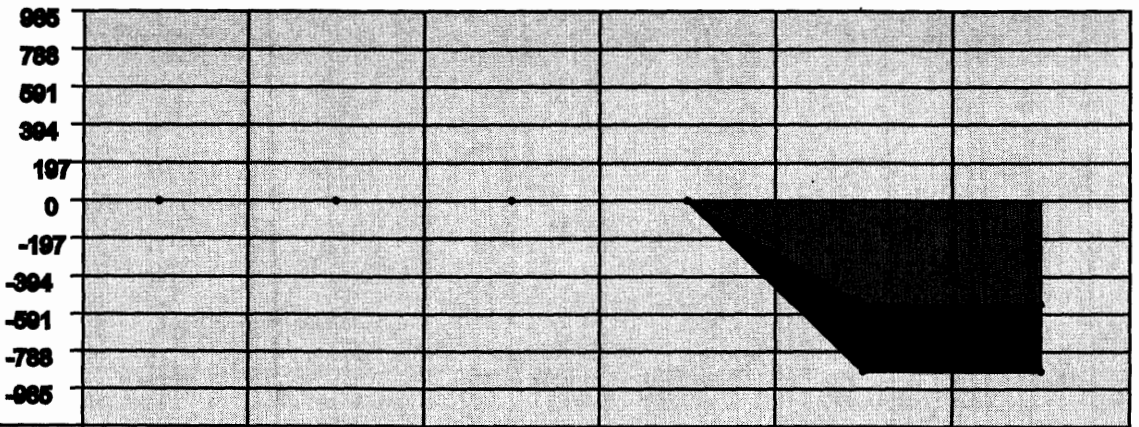
ECONOMIC IMPACT DATA

Scenario: Hawthorne Army Depot (data provided by Day and Zimmermann)
Economic Region of Influence(ROI): Mineral County, NV
Base: HAWTHORNE DEPOT
Action: BRAC's New Fact Metrix

Overall Economic Impact of Proposed BRAC-05 Action:

ROI Population (2002):	4,768
ROI Employment (2002):	2,413
Authorized Manpower (2005):	119
Authorized Manpower(2005) / ROI Employment(2002):	4.93%
Total Estimated Job Change:	-896
Total Estimated Job Change / ROI Employment(2002):	-37.13%

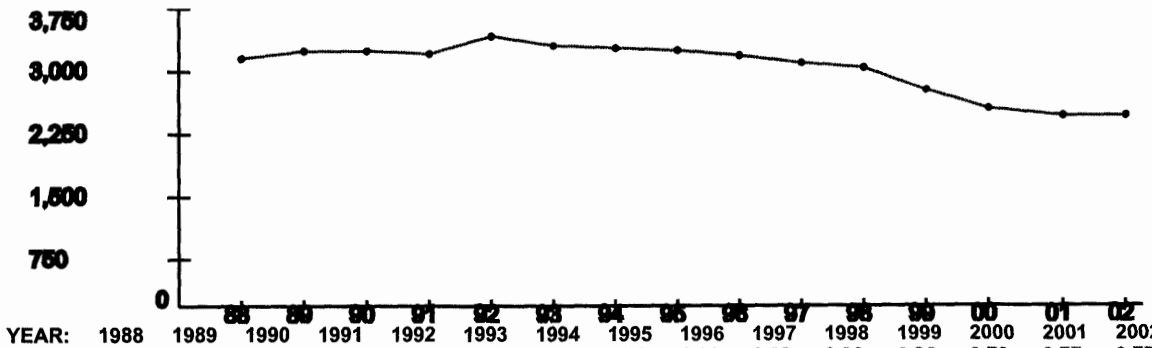
Cumulative Job Change (Gain/Loss) Over Time:



YEAR:	2006	2007	2008	2009	2010	2011
Direct Military:	0	0	0	0	-1	0
Direct Civilian:	0	0	0	0	-45	0
Direct Student:	0	0	0	0	0	0
Direct Contractor:	0	0	0	0	-493	0
Cumulative Direct:	0	0	0	0	-539	-539
Cum Indir/Indux:	0	0	0	0	-357	-357
Cumulative Total:	0	0	0	0	-896	-896

Mineral County, NV Trend Data

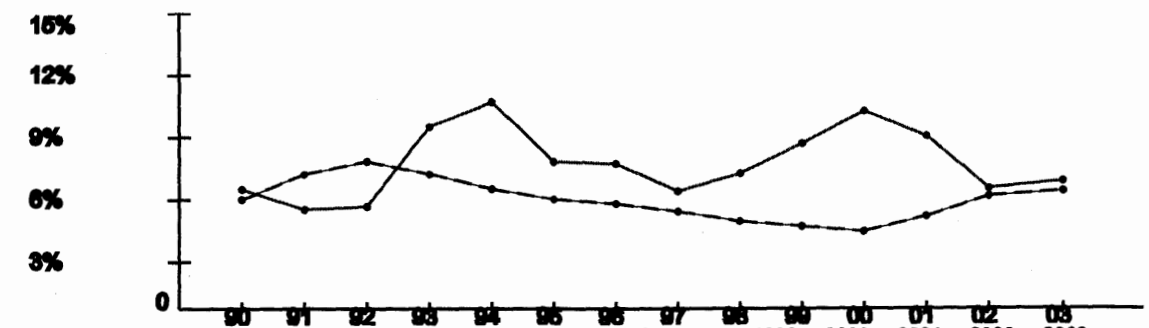
Employment Trend (1988-2002)



YEAR:	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Index:	1	1.02	1.02	1.02	1.09	1.05	1.04	1.02	1.01	0.98	0.96	0.86	0.79	0.77	0.77

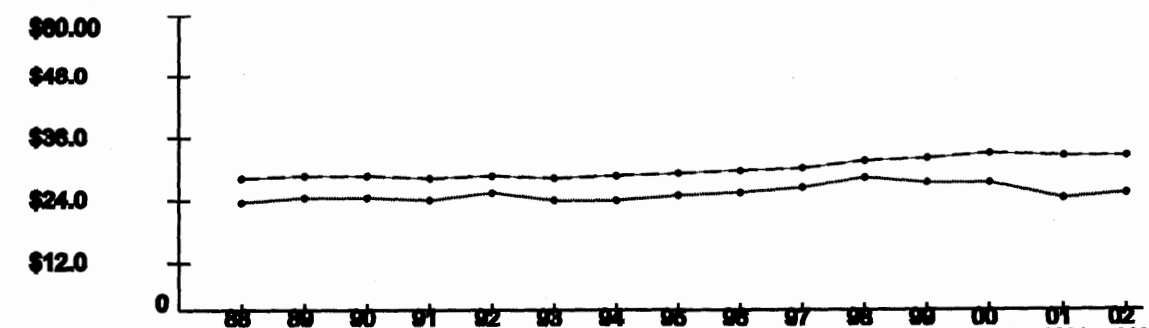
Represents the ROI's indexed employment change since 1988

Unemployment Percentage Trend (1990-2003)



YEAR:	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
ROI:	6.1%	5.18%	5.28%	9.27%	10.44%	7.44%	7.42%	5.96%	6.84%	8.4%	10.05%	8.73%	6.07%	6.44%
USA:	5.6%	6.83%	7.5%	6.91%	6.09%	5.59%	5.4%	4.94%	4.51%	4.21%	3.99%	4.74%	5.79%	5.99%

Per Capita Income x $1,000 (1988-2002)



YEAR:	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
ROI:	$22.14	$23.07	$23.12	$22.7	$23.91	$22.55	$22.72	$23.6	$24.18	$24.75	$26.82	$26.07	$25.97	$22.99	$24.03
USA:	$26.96	$27.48	$27.42	$26.87	$27.35	$27.18	$27.53	$27.86	$28.35	$29.04	$30.35	$30.86	$31.89	$31.72	$31.61

Note: National trend lines are dashed

INDUSTRIAL JOINT CROSS SERVICE GROUP

June 16, 2005

MEMORANDUM FOR DUKE TRAN, SENIOR ECONOMIST,
REVIEW & ANALYSIS

SUBJECT: HAWTHORNE ARMY DEPOT ECONOMIC IMPACT REPORT

The following is in response to your e-mail inquiry of June 14, 2005, where you asked for a revised economic impact statement for Hawthorne Army Depot using Mineral County as its economic region of influence instead of Reno-Sparks Metropolitan Statistical Areas. That report is attached.

Jay Berry
Executive Secretary

Attachment:
As Stated

Economic Impact Report

This report depicts the economic impact of the following Scenarios:

IND-0108: Close Hawthorne Army Depot

The data in this report is rolled up by Region of Influence

As of: Thu Jun 16 13:55:55 EDT 2005

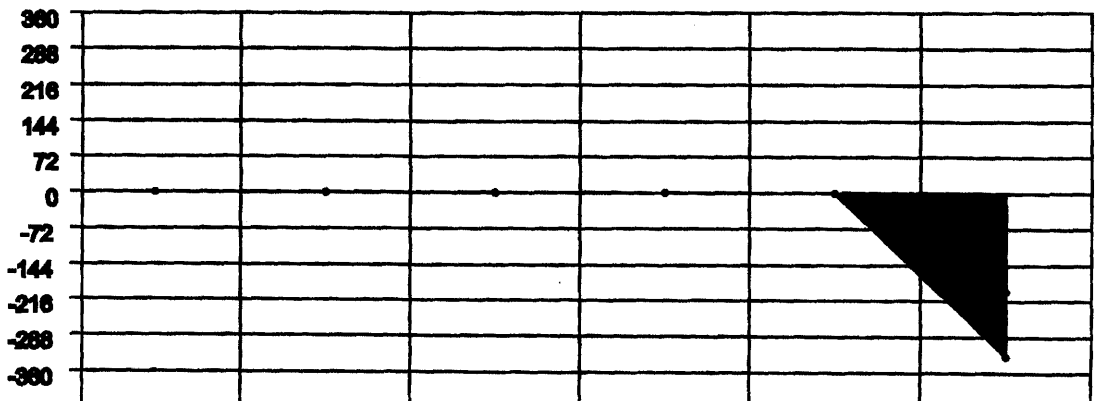
ECONOMIC IMPACT DATA

Scenario:	All Selected (see title page)
Economic Region of Influence(ROI):	Mineral County, NV
Base:	All Bases
Action:	All Actions

Overall Economic Impact of Proposed BRAC-05 Action:

ROI Population (2002):	4,768
ROI Employment (2002):	2,413
Authorized Manpower (2005):	119
Authorized Manpower(2005) / ROI Employment(2002):	4.93%
Total Estimated Job Change:	-329
Total Estimated Job Change / ROI Employment(2002):	-13.63%

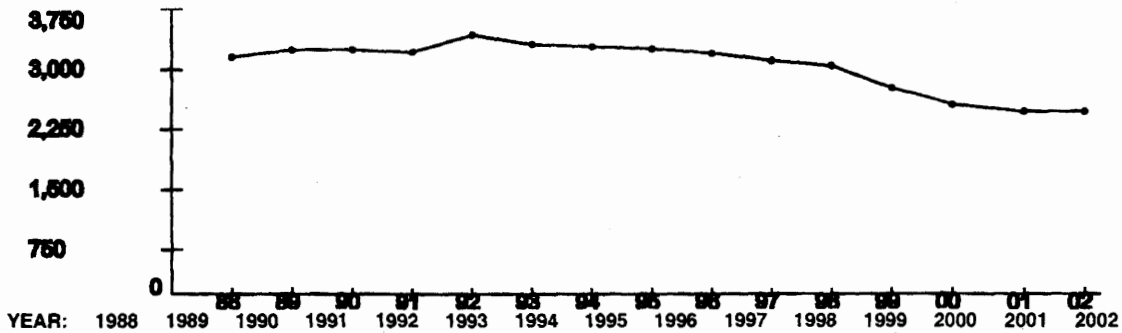
Cumulative Job Change (Gain/Loss) Over Time:



YEAR:	2006	2007	2008	2009	2010	2011
Direct Military:	0	0	0	0	0	-74
Direct Civilian:	0	0	0	0	0	-45
Direct Student:	0	0	0	0	0	0
Direct Contractor:	0	0	0	0	0	-80
Cumulative Direct:	0	0	0	0	0	-199
Cum Indir/Induc:	0	0	0	0	0	-130
Cumulative Total:	0	0	0	0	0	-329

Mineral County, NV Trend Data

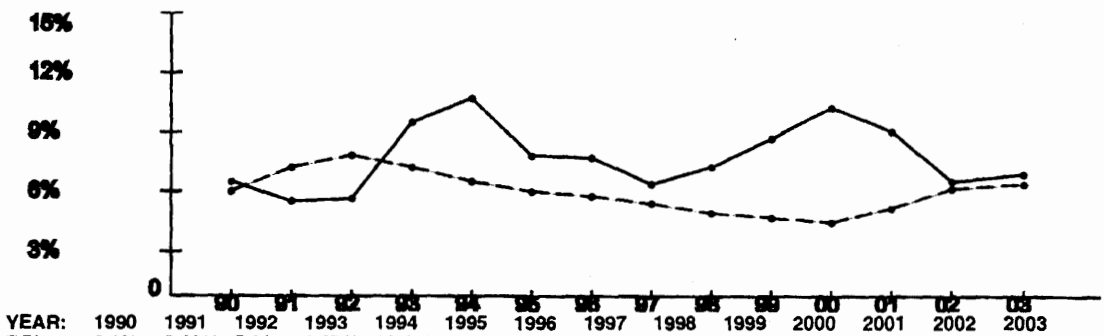
Employment Trend (1988-2002)



YEAR:	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Index:	1	1.02	1.02	1.02	1.09	1.05	1.04	1.02	1.01	0.98	0.96	0.86	0.79	0.77	0.77

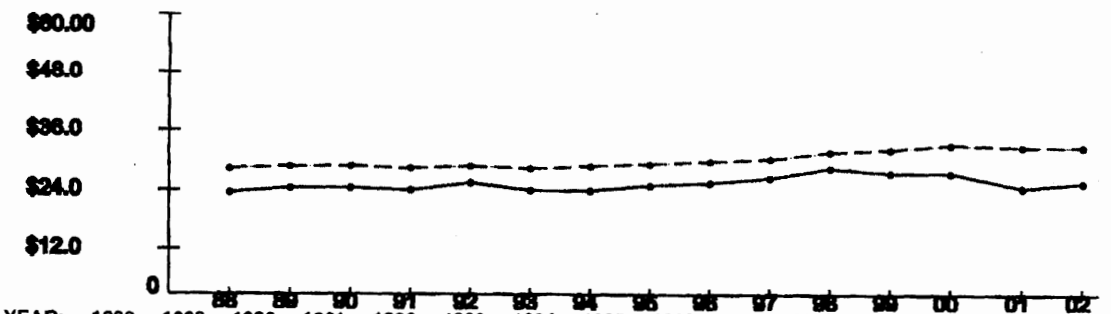
Represents the ROI's indexed employment change since 1988

Unemployment Percentage Trend (1990-2003)



YEAR:	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
ROI:	6.1%	5.18%	5.28%	9.27%	10.44%	7.44%	7.42%	5.96%	6.84%	8.4%	10.05%	8.73%	6.07%	6.44%
USA:	5.6%	6.83%	7.5%	6.91%	6.09%	5.59%	5.4%	4.94%	4.51%	4.21%	3.99%	4.74%	5.79%	5.99%

Per Capita Income x $1,000 (1988-2002)



YEAR:	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
ROI:	$22.14	$23.07	$23.12	$22.7	$23.91	$22.55	$22.72	$23.6	$24.18	$24.75	$26.82	$26.07	$25.97	$22.99	$24.03
USA:	$26.96	$27.48	$27.42	$26.87	$27.35	$27.18	$27.53	$27.86	$28.35	$29.04	$30.35	$30.86	$31.89	$31.72	$31.61

Note: National trend lines are dashed

DEFENSE BASE CLOSURE AND REALIGNMENT COMMISSSION
2521 CLARK STREET
ARLINGTON, VIRGINIA 22202
(703) 699-2950

MEMORAUNDUM OF MEETING

DATE: June 8, 2005

TIME: 9:00 AM

MEETING [X] *or* **PHONE CALL [ ] WITH:**

Day & Zimmermann Corp. Group

SUBJECT:

Hawthorne Army Depot
Kansas Army Ammunition Plant
Lone Star Army Ammunition Plant
Mississippi Army Ammunition Plant
Newport Chemical Depot

Note: All of the above installations are Government-Owned Contractor-Operated (GOCO) facilities for which Day & Zimmermann Corp. is the operating contractor.

PARTICIPANTS:

Name/Title/Phone Number:

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Commission Staff:

Gary Dinsick, Army Team Leader
Elizabeth Bieri, Army Team Analyst
*George Delgado, Industrial-Joint Cross Services Issues Team Analyst

SUMMARY/NOTES:

Hawthorne Army Ammunition Depot

- Conditions have changed since 2003 data calls therefore COBRA submittal different from current numbers.
- Incorrect conclusions were reached by the Joint and Cross Services Team because data call numbers submitted for personnel were not included in the final report.
- Except for the installation Commander no military personnel are currently stationed at Hawthorne Army Ammunition Depot.
- Hawthorne Army Ammunition Depot is a Tier II Government Owned Contractor Operated (GOCO) munitions depot capable of shipping 2,000 tons of ammunition in 3 days.
- GOCOs provide an approach to rationalize the capacity of all ammunition functions (production, storage, renovation, and demilitarization) through competition.
- The decision shows a strategy to reduce GOCO's and to consolidate the workload into government owned government operated facilities.
- It's a capacity issue, particularly storage and demilitarization.
- Move to Tooele Army Ammunition Depot in Utah, a smaller installation than Hawthorne, is difficult as its storage space for ammunition is almost full. By 2007 all 8 current depots will be full with the returning ammunition (retrograde) from the Pacific rim, Europe, and Southwest Asia. The services will need to demilitarize 440K tons to create space for the overseas retrograde.
- There will be state licensing and permits issues at Toole and significant community issues. No encroachment issues exist at Hawthorne as it is surrounded by Federal lands, Tooele has encroachment issues.
- What is important are the types of facilities at Hawthorne, not the workload.
- Hawthorne's ammunition demilitarization capabilities were undervalued. The facility was not in full use during the 2003 data collection period and the data showed 0 munitions demilitarization when in fact Hawthorne was demilitarizing 6,000 tons per year.
- The demilitarization facility constructed in 1971-1972 was upgraded with new interiors, equipment, and technology and was accepted for use in 1984. The upgraded facility has a 50 year system design life that resulted in one of the few environmentally friendly ammunition demilitarization facilities in the country.
- The depot has two types of magazines in use by the Navy and the Marines for munitions storage that will need to be relocated.
- Hawthorne includes facilities appropriate for multi-function training, for example its area 101 is an urban training facility that looks like Iraq/Iran used by Seals, the US Marines, and Special Forces units who also use the barracks during training rotations.
- Hawthorne is currently working on providing a convoy live fire training scenario in its facilities.

- If Hawthorne closes down there will be significant community issues as the unemployment rate in the area will reach 27%.
- COBRA numbers do not include the tenants who will have to move if the depot closes down.
- Environmental clean up estimated at around $383 Million were not included in the closing costs or payback for closure.
- The group recommends a BRAC commissioner visit to Hawthorne or as a minimum a staff visit.

Kansas Army Ammunition Plant

- Data does not consider current production at the depot.
- Expensive to move the facility due to specialized equipment i.e. a centrifuge.
- The Army will need to direct this workload movement to other Army ammunition activities or it could be competitively awarded to a non-U.S. source.

Lone Star Army Ammunition Plant

- There were data errors on personnel and capacity.
- No recognition in the data as to the complexity of producing ammunition.
- Potential for work to be contracted to SNC, Canada this will invalidate the projected savings, and the industrial base then will migrate to Canada. The Army will need to direct this workload movement to other Army ammunition activities or it could be competitively awarded to a non-U.S. source.
- Local use authority takes charge of the facilities and leases the facilities to Day & Zimmermann.

Day & Zimmermann Group summary:

- Concur with the assessment of overcapacity but believe the way to rationalize the capacity at the ammunition depots is through competition.
- Data used by the Joint and Cross Services team was inaccurate.
- It is a mistake to move Hawthorne into a smaller facility (Toole).
- Hawthorne's demilitarization capability was undervalued.
- Hawthorne was targeted for closure and the analysis was made to fit.
- Did the Joint and Cross Services' Team consider a scenario to close Toole Army Ammunition Depot?

Day & Zimmermann Group recommendations:

- Keep Hawthorne Army Ammunition depot open
- Privatize Kansas and Lone Star Army Ammunition Plants in place
- Agree with closures of Mississippi Army Ammunition Plant and Newport Chemical Depot
- Data call information in disagreement, query DOD.

Meeting was adjourned at 10:00AM, June 8, 2005.
* Person responsible for this Memorandum: George M. Delgado

Chapter 6, Sec. 158: Hawthorne Army Depot - NV

(DOD Justification slide)

Thank you Mr. Van Saun.

Mr. Chairman and Commissioners, the Department of Defense justifies the closure of Hawthorne Army Depot by stating that it will reduce redundancy and remove excess capacity for storage and demilitarization from the industrial base. Additionally, the action will allow creation of centers of excellence and deployment networks to support readiness. In its justification the Department identified infrastructure problems that limit the depot's ability to offload munitions.

The Department of Defense expects this closure to require one-time costs of $180.3 M dollars and generate a 20-year

net present value savings of $777.7 million dollars with an immediate payback. According to the department closure affects 139 personnel positions, 20 of whom are tenants that will relocate to an as of yet undetermined location.

(Issues Slide)

This slide summarizes the key issues that were developed during analysis of this recommendation and are grouped by their associated selection criteria.

Mr. Chairman and Commissioners the staff found sufficient discrepancies in the data to call into question the decision to close Hawthorne Army Depot. In the next few slides I will summarize the most salient ones. Our review revealed that unused munitions demilitarization capabilities of about

30,000 tons per year and about 44% unused storage capabilities at Hawthorne Army Depot may be needed as significant quantities of munitions are expected to start returning in the near future from Korea, Europe and Southwest Asia. For example, munitions in Korea total 507,000 short tons, final quantities of returning have not been established, but not all will return. Added to our current stockpiles, these munitions will require demilitarization and /or storage for obsolete and usable items. Past diversions from the conventional munitions demilitarization account have resulted in increasing stockpiles of obsolete munitions that have increasingly filled available storage space. The Department of Defense plans to introduce a wedge for demilitarization funds of around $541 million dollars for fiscal years 06 through 11 to reduce its current backlog of approximately 390,000

short tons. The degree of success of the wedge during higher priority wartime needs will consequently have an effect on conventional munitions demilitarization and storage problems. Returning overseas munitions will add to these problems.

The staff found no problems in infrastructure that limit loading and offloading of munitions at Hawthorne. The depot has 3 container loading/offloading pads and 6 docks with multiple rail and truck access. Our queries regarding this issue identified one instance in 20 years in which weather related damage to rail occurred that only required a short period to repair. The depot prides itself in not having missed its delivery schedule during this time period. The next two bullets show statistics on shipments to and from the depot.

The staff found a significant list of services provided by the depot that may have been under considered in the decision to close the depot. The depot performs a variety of services including, range scrap processing for the Navy and Corps of Engineer, testing and loading of explosive charges, ammunition testing, ammunition restoration, testing for the next generation of robotic security systems and, has signed an agreement with the Defense Logistics Agency to store the military's entire stockpile of elementary mercury. Furthermore, the depot offers Joint training opportunities in 71,287 acres of high altitude desert terrain like Iraq and Afghanistan The types of training opportunities include high angle sniper & other firing ranges, high altitude patrol and, desert convoy operations. Over 1,500 military personnel had trained between January and April of 2005. The last

bullet shows a list of current tenants and customers the depot services.

The Department of Defense underestimated the economic impact of closing Hawthorne by erroneously using the Reno-Sparks Metropolitan Area as its baseline location. Hawthorne is located approximately 130 miles from the Reno-Sparks Metropolitan area and does not draw its personnel from that location. The depot draws its personnel from the Mineral County, Nevada Region of Influence. Recalculation of economic impact in the appropriate region of influence and with correct personnel figures yielded a 37% negative impact to the county - the largest impact in this BRAC round.

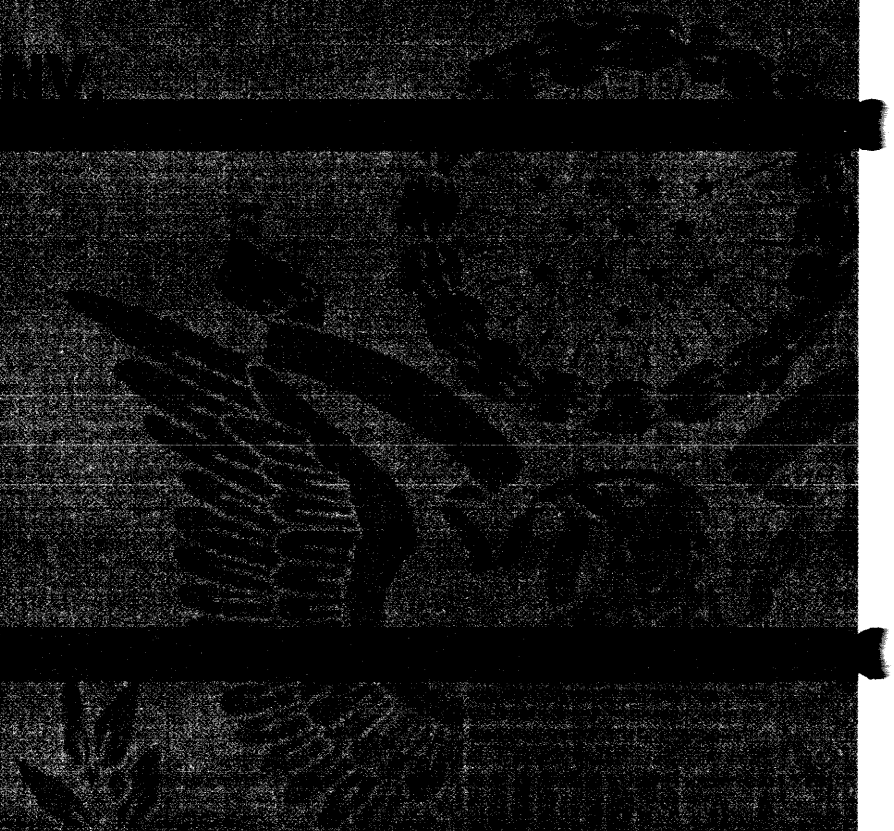
The staff found that environmental clean up costs may reach as high as $708 million dollars if the depot closes. Current estimated restoration costs are $383.24 million dollars. In addition, an estimate of between $29.2 M and $324.8 M would be required for clean up of 16 operational ranges. Clean up costs will fluctuate depending on the future use standard selected after closure of the depot.

Mr. Chairman and Commissioners we found that for the Hawthorne Army Depot recommendation there were deviations from final criteria #s 1, 2, 3, 6 and 8.

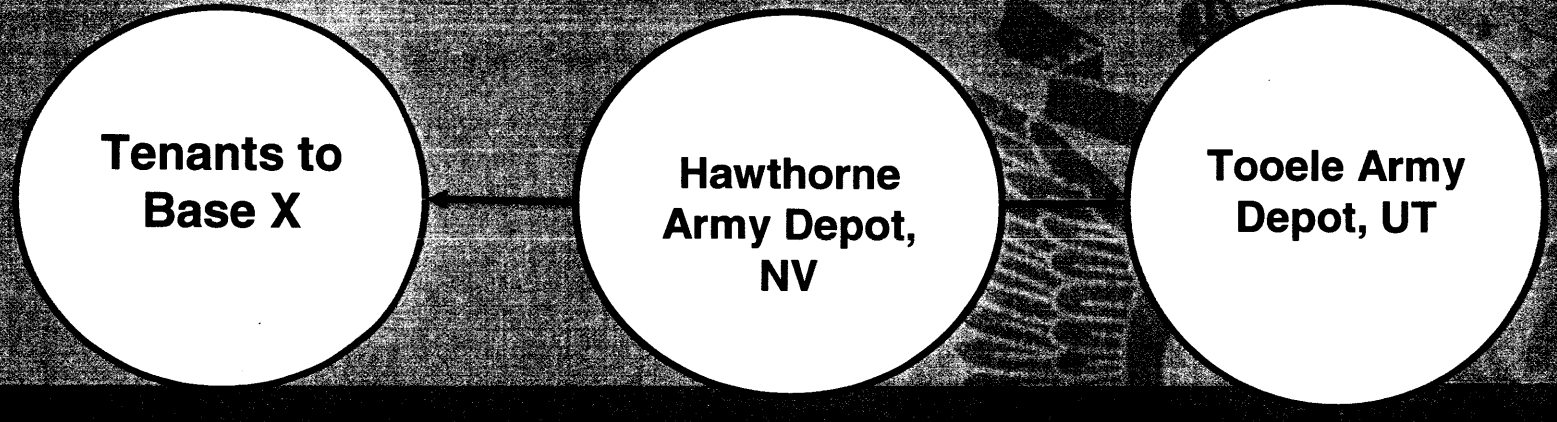
This concludes my testimony and we are ready to answer questions you or the other commissioners may have.

Sec. 158: Hawthorne Army Depot - NV
DoD Recommendation

Close Hawthorne Army Depot, NV



Sec. 158: Hawthorne Army Depot - NV
Associated Installations



Sec. 358: Hawthorne Army Depot - NV
DoD justification

- Reduce redundant and remove excess from the Industrial Base
- Capacity/capability for storage and demilitarization exists at other locations
- Creation of centers of excellence and deployment networks that support readiness
- Infrastructure problems limit the ability to operate mission

COBRA:

- $180.3 M one time costs
- ($77.7) M 20-year Net Present Value Savings
- Immediate Payback
- Affects 139 personnel positions

Environmental: DoD estimated remediation cost is $388.2 M

Sec. 158: Hawthorne Army Depot - NV Issues

C1/C3

- Impact of [illegible] demilitarization and storage capacity as unknown quantities of ammunition return from overseas

C2

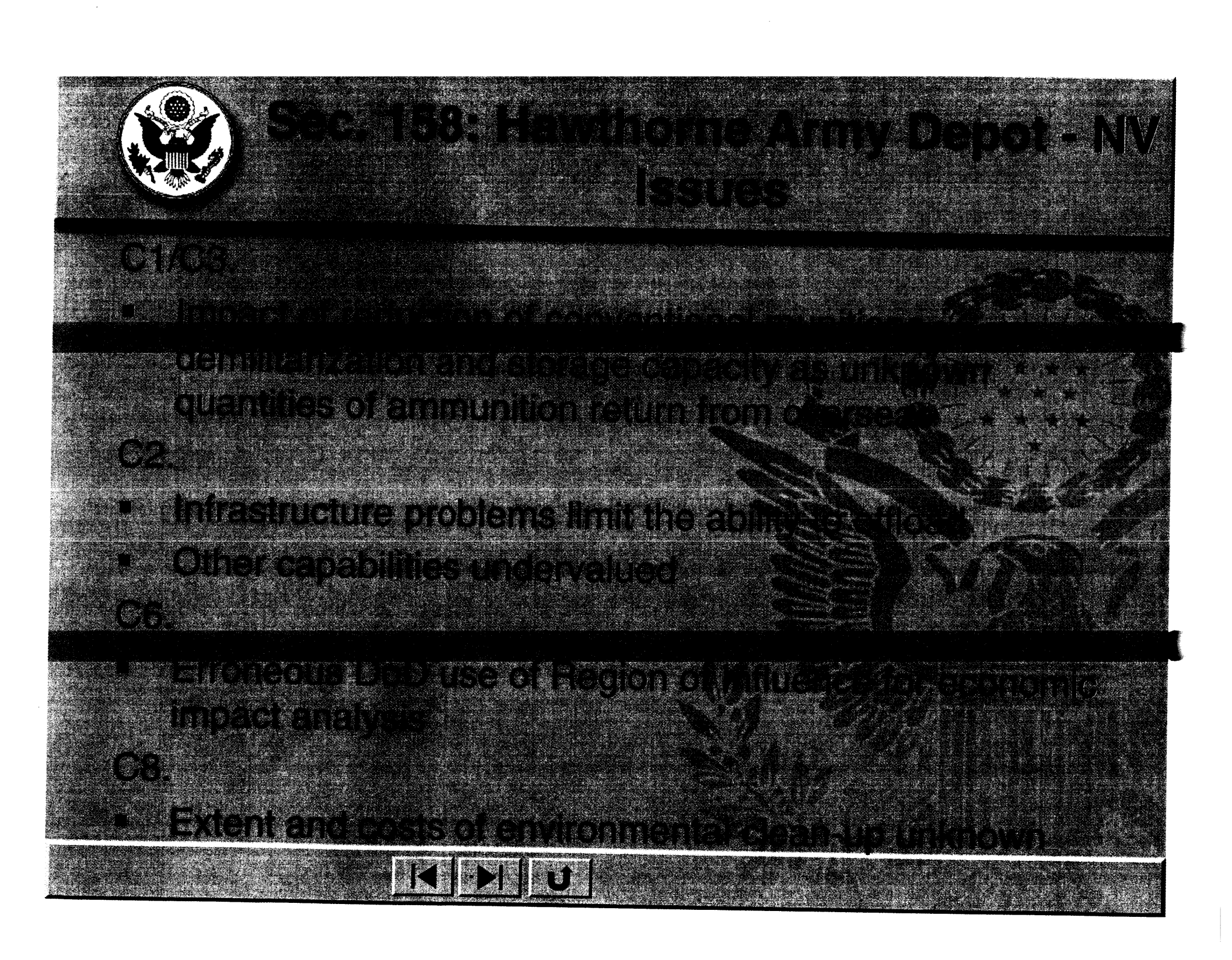
- Infrastructure problems limit the ability to flow
- Other capabilities undervalued

C5

- Erroneous DoD use of Region of Influence for economic impact analysis

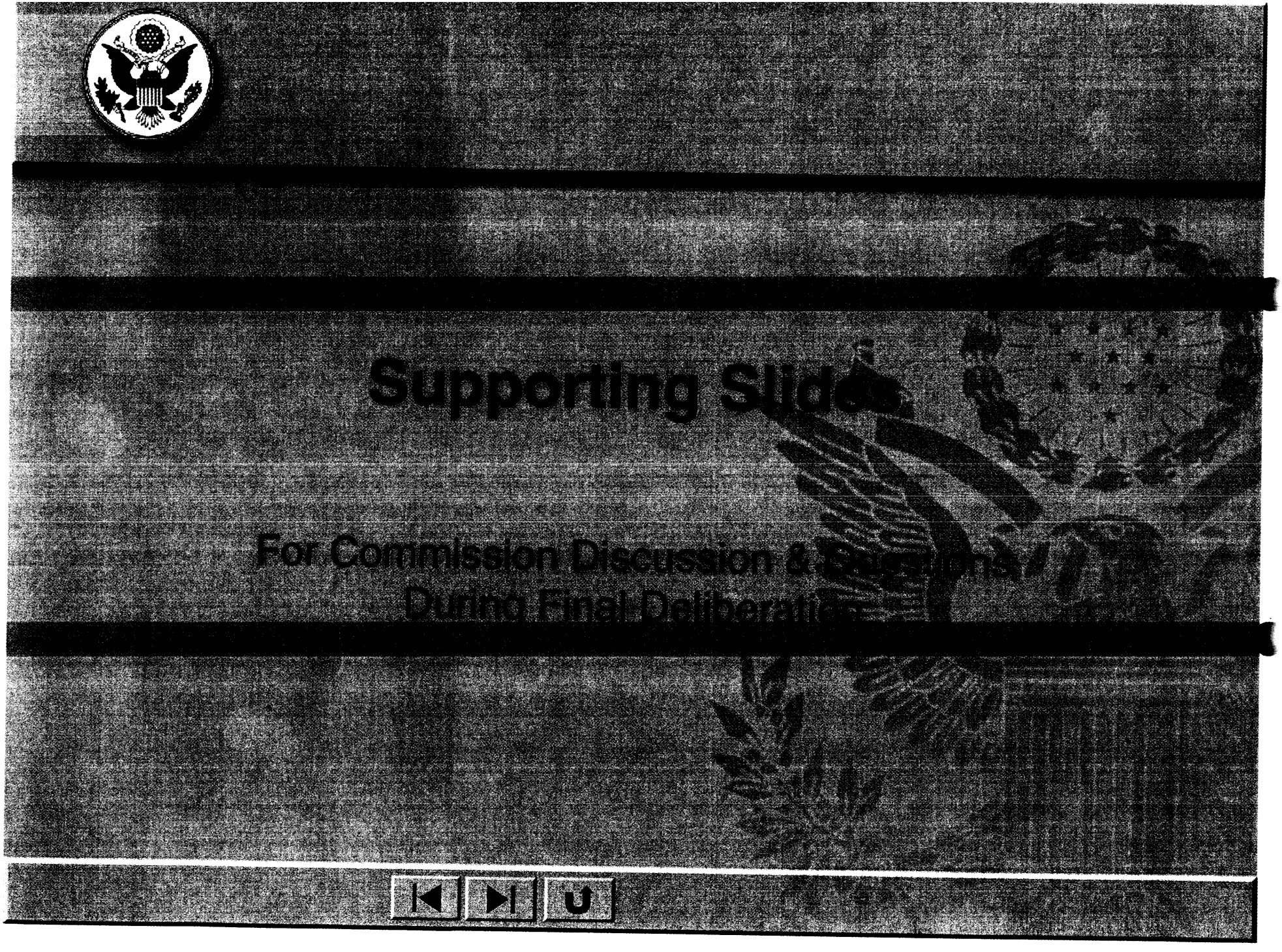
C8

- Extent and costs of environmental clean-up unknown



Sec. 158: Hawthorne Army Depot - NV
DoD Recommendation

Close Hawthorne Army Depot, NV.


Supporting Slides
For Commission Discussion &
During Final Deliberations

Sec. 158: Hawthorne Army Depot - NV
Munitions demilitarization/storage (C1/C3)

Issue:

- Impact of realigning unknown quantities of overseas munitions to return

- Remove excess, reduce redundancy

Community Position:

- Demilitarization and storage capabilities underutilized

Commission Staff Findings:

- Conventional munitions demilitarization funds historically shorted
- Continued underfunding worsens obsolete munitions backlog
- [illegible] capacity of about [illegible] (pending limited)
- Storage capacity 600,000 tons, 56% full (5/05)
- Unused capabilities could reduce the returning munitions problem

Sec. 158: Hawthorne Army Depot - NV
2. Problems with offloading (C2)

Issue:

- Limited ability to offload munitions due to infrastructure problems.
- Infrastructure problems severely limit the ability to offload munitions.

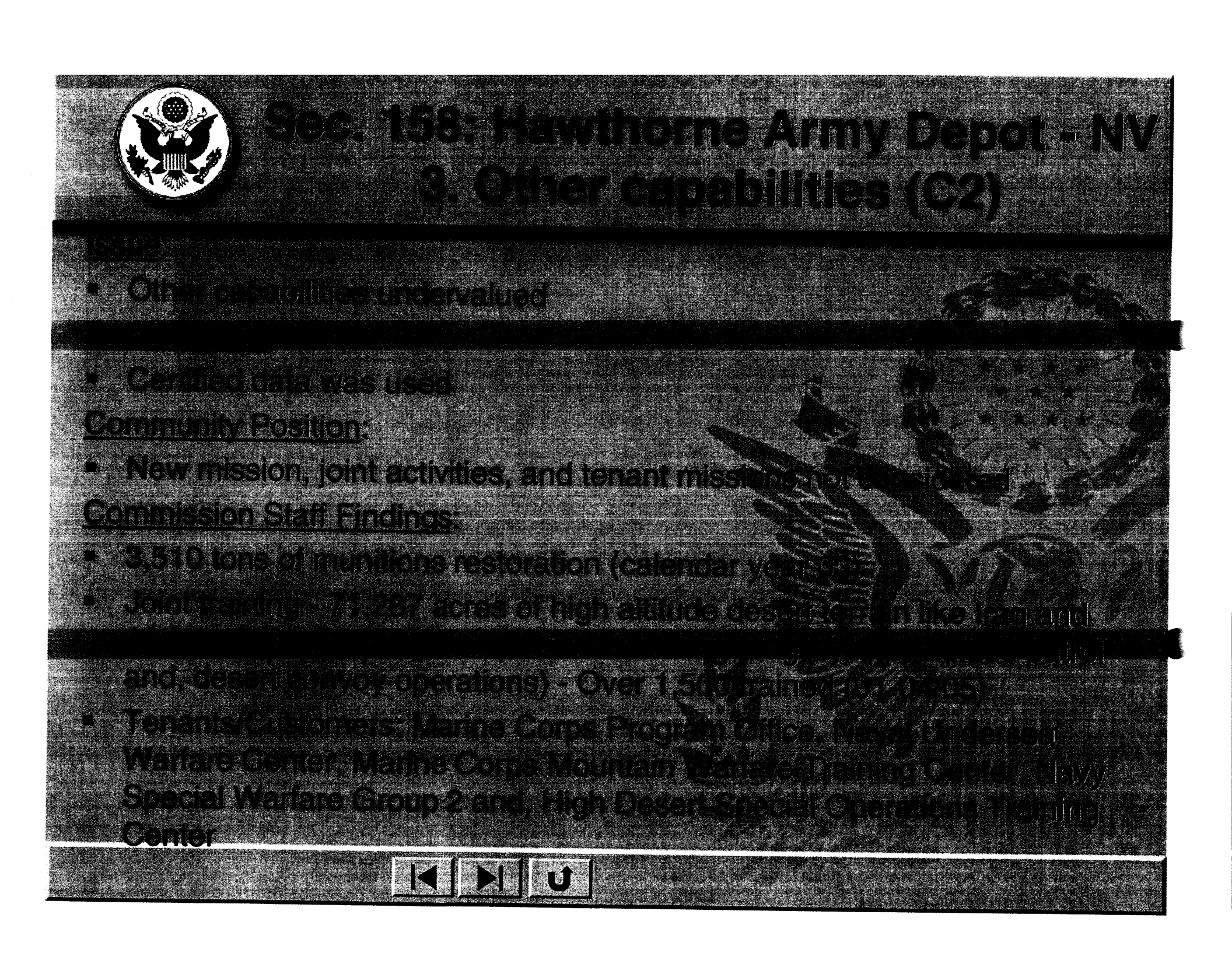
Community Position:

- No munitions offload problems

Commission Staff Findings:

- 3 container loading/offloading pads and 6 docks with [illegible] rail and truck access
- Averaged over the last 19 years received 43,392 tons and shipped 40,346 tons of ammunition per year
- Supply operations shipped 12,940 tons and received 13,614 tons (6/26/05)

Sec. 158: Hawthorne Army Depot - NV
3. Other capabilities (C2)



- Other capabilities undervalued

- Certified data was used

Community Position:

- New mission, joint activities, and tenant missions not considered

Commission Staff Findings:

- 3,510 tons of munitions restoration (calendar year 05)
- Joint training - 71,287 acres of high altitude desert terrain like Iran and Afghanistan and desert convoy operations) - Over 1,500 trained per year (FY05)
- Tenants/Customers: Marine Corps Program Office, Naval Undersea Warfare Center, Marine Corps Mountain Warfare Training Center, Navy Special Warfare Group 2 and, High Desert Special Operations Training Center

Sec. 158: Hawthorne Army Depot - NV
4. Economic Impact (C6)

Issue:

- DoD erroneous use of The Reno-Sparks Metropolitan Statistical Area

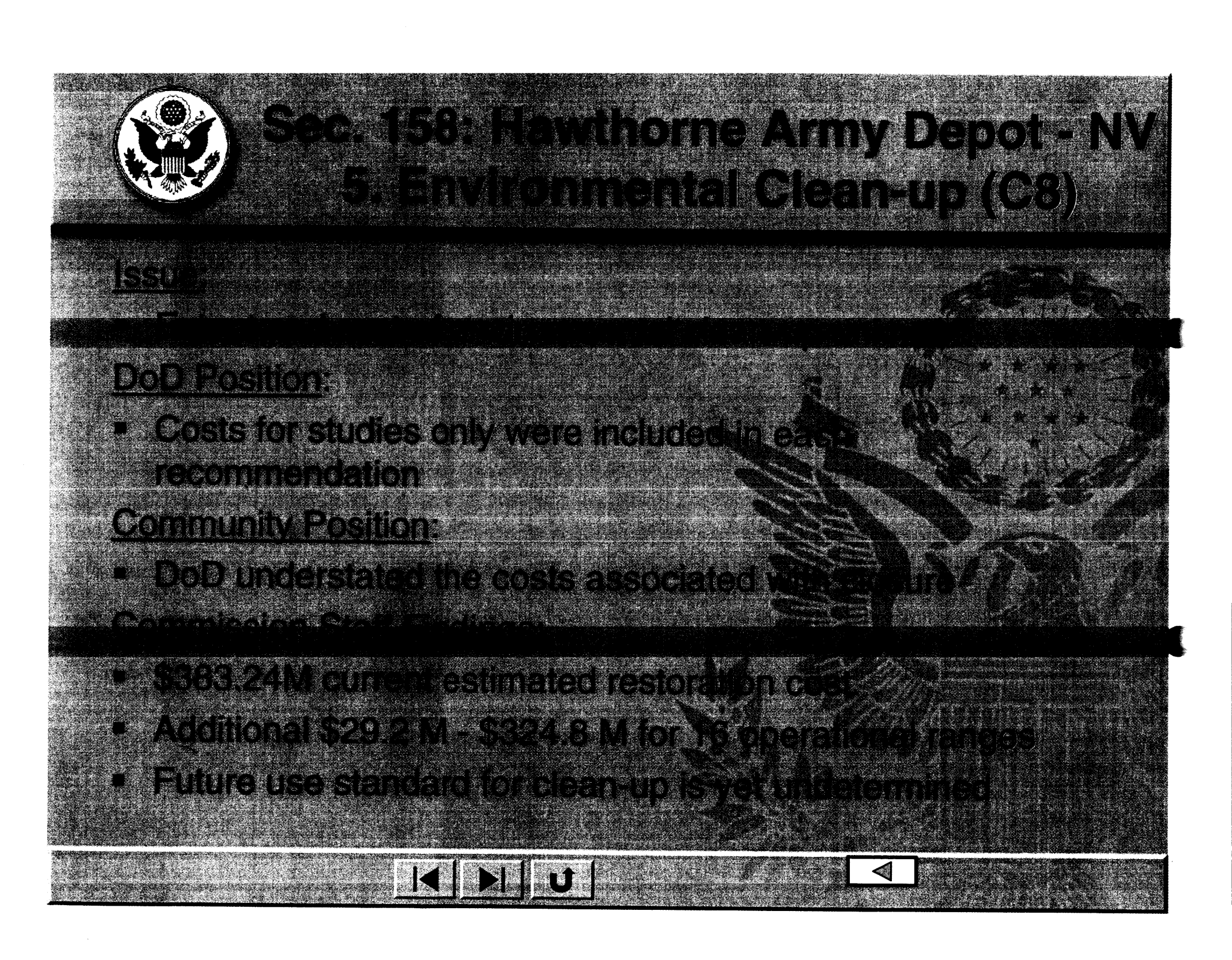
- Reno-Sparks Metropolitan Statistical Area less than 0.1% negative economic impact
- Recalculated economic impact for the correct area

Community Position:

- Direct job losses will be 30%; total economic impact [illegible] 50%
- Closure will turn the town of Hawthorne into a ghost town

- Identified and requested DoD correct the impact area to the Mineral County, Nevada Region of Influence
- Recalculation with correct personnel figures yielded a 37% negative impact to the county - the largest impact in the BRAC round

Sec. 158: Hawthorne Army Depot - NV
5. Environmental Clean-up (C8)



Issue:

DoD Position:

- Costs for studies only were included in each recommendation

Community Position:

- DoD understated the costs associated with [illegible] Commission Staff Findings
- $383.24M current estimated restoration cost
- Additional $29.2 M - $324.8 M for 16 operational ranges
- Future use standard for clean-up is yet undetermined

Staff Assessment

Deviation from Final Selection Criteria

	Military Value					Other		
Criterion	C1	C2 (1, 2)	C3	C4	C5	C6	C7	C8
Deviation	X	X	X			X		X

X=Deviation

Sec. 158: Hawthorne Army Depot - NV
5. Cost & Savings (C5)

COBRA DATA		
	DoD COBRA Run	Staff Excursion (correct personnel #s)
One Time Cost	$180.3 M	$179.9 M
Net Implementation (Savings)	($59.2 M)	($56.4 M)
Annual Recurring (Savings)	($73.4 M)	($67.4 M)
Payback Period	Immediately	Immediately
Net Present Value at 2025 (Savings)	($777.7 M)	($716.3 M)

Analysis: Hawthorne Army Depot, NV (Industrial #12, Closure)

- Only GOCO Depot – Largely Commercial – minimally organic
- DoD's positions:
  - Capacity and capability for Storage and Demilitarization exists at numerous munitions sites.
  - To reduce redundancy and remove excess from the Industrial Base, the closure allows DoD to create centers of excellence and establish deployment networks that support readiness.
  - Hawthorne Army Depot has infrastructure problems that severely limit the ability to offload.
- HWAD has a high storage quantitative military value score (2 of 23 assessed).
- The recommendation reduces storage capacity as large quantities of ammunition returns (retrograde) from Europe, Korea, and Southwest Asia to CONUS
  - More than 2,400 storage structures, its storage capacity is 56% full as of May 31, 2005.
  - HWAD's underutilized storage capacity could be used to store most overseas retrograde.
  - PEO Ammo estimates that all existing organic depots will be at 100% of storage capacity by FY08.
- As of May 31, 2005 HWAD reports storing 305,348 tons of explosives, and 36,126 inert items.
  - Of the ammunition inventory:
    - 47% belongs to the Army,
    - 31% is demilitarization and other,
    - 14% belongs to the Navy,
    - 6% belongs to the Air Force and,
    - 2% belongs to the U.S. Marine Corps.
- Timing of retrograde munitions may not coincide with additional igloo availability at Tooele. Delay in completion of chem. demil mission at Deseret, will delay transfer of its igloos to adjacent Tooele Army Depot.
- HWAD reports no infrastructure problems that severely limit the ability to offload.
  - Its investigation into concerns over weather related damages to rail revealed only one incident in 20 years and only for a short time.
  - Averaged over the last 19 years HWAD received 45,392 tons and shipped 40,346 tons of ammunition each year.
  - As of June 26, 2005 depot supply operations have shipped 12,940 tons and received 13,614 tons.
- HWAD has a high demilitarization quantitative military value score (1 of 13 assessed) the depot only demilitarizes conventional ammunition.
  - For CY 03 HWAD reported demilitarizing 6,535 tons of munitions.
  - In the past 12 years, HWAD has Resource Recovered /Recycled / Disposed 120,848 tons.

- Explosives/metals recovered from demilitarization operations at HWAD for the past 12 years:
  - Explosives 24,650,000 pounds @ $1.596 per pound = $39,341,400. This figure represents a cost avoidance of buying new explosives.
  - Mixed Metals 91,400,000 pounds with an estimated value of $7,000,000

- The inventory of obsolete ammunition has increased over time due to limitations or diversion of demilitarization funds.
- Continued munitions demilitarization funding limitations or diversions will extend the time required to complete the work. The timeframe for completing the munitions demilitarization mission may extend beyond the BRAC time period.
- Returning munitions from Europe, Korea, and Southwest Asia will create storage and demilitarization difficulties for the entire Army storage system. Closure of Hawthorne will increase the shortfall problem.
- As of May 31, 2005 Hawthorne Army Depot (HWAD) had a total of 553 personnel, 1 military, 50 DoD civilians (including the tenants), 488 contractors and, 14 sub-contractors.
- HWAD restores ammunition deteriorated from rough handling or exposure. This work involves cleaning, rust removal, painting, repair of containers, and component replacement. For CY 03 HWAD reported renovating 3,510 tons of munitions.
- With its high altitude desert terrain environment, HWAD is a premier military/special forces training site.
  - Its training mission was approved Oct. 04, after the BRAC data calls, therefore HWAD did not receive a military value score for the training mission.
  - The training mission provides utilization of 71,287 acres similar to terrain in Afghanistan and Iraq.
  - HWAD provides a joint training environment for:
    - Navy Special Warfare,
    - Marine Force RECON,
    - Marine Conventional,
    - Army National Guard and,
    - Army Reserve units.
  - Types of training available at HWAD include:
    - firing ranges,
    - high altitude patrolling,
    - high angle sniper range and,
    - desert convoy operations.
  - Over 1,500 military personnel have trained at HWAD between Jan 05 and Apr 05.

Analysis: Hawthorne Army Depot, NV (Industrial #12, Closure)

  - Plans are in the works for an Afghan Village (modular, semi-permanent small urban training facility) and desert live fire convoy training. At the LCpl Carter Test Range planned upgrades include high angle sniper firing range targetry and classroom and hygiene facilities.
  - HWAD has been working on two proposals to expand its training area by approximately 178 square miles.
    - The 178 square miles comes from 113,919 acres from the Bureau of Land Management.
    - In addition, another 16 square miles may be available through acquisition of an adjacent private property owned by Aerojet.
- No encroachment issues.
- The community contends that DoD:
  - used erroneous data for employment and economic consideration,
  - undervalued depot capabilities,
  - excluded consideration of joint activities and tenants and,
  - understated the costs associated with closure.
- The community argues that closure of the depot will result in the loss of about 10 million square feet of storage capacity now filled to almost 70% of capacity (depot reported 56% as 5/31/05).
- DoD erroneously used The Reno-Sparks Metropolitan Statistical Area for its economic impact analysis.
  - The correct Region of Influence is Mineral County, Nevada.
  - The community contends that closure of Hawthorne Army Depot would result in direct job losses of 30% in the town of Hawthorne.
  - Adding the effect on indirect jobs, total job losses could reach as high as 50%.
- Mineral County is 98% federally managed and the community is concerned that closure of the depot will make the small town of Hawthorne a ghost town.
- The town of Babbit, immediately adjacent to Hawthorne, was razed as the result of the Navy pullout from Hawthorne in 1985. Twenty years later, no development of Babbit has occurred due to the weak local economy in Hawthorne.
- Environmental restoration cost:
  - DERA Cost to Complete – 21.59 M
  - MMRP Cost to Complete – 361.65 M
  - Total – 383.24 M
  - DERA IRP CTC $21.079, has spent $28.5M through FY03; 16 operational ranges, $29.2M - $324.8M, FY2032

Recommendation #158, Hawthorne Army Depot (Ind-12)

Community advocates pointed out the slowed rates of munitions demilitarization makes storage capacity a more valuable commodity in the next few years as DoD faces the return of large quantities of ammunition from overseas. Estimates of about 600,000 tons to return in 2007, would fill the existing depot system to 98% of capacity. Elimination of Hawthorne's storage capacity will require building an additional 1,000 magazines at a cost of $500 million. Hawthorne's demilitarization facilities are the most environmentally friendly in the Army, and re-creating them at Tooele would cost between $157 and $340 million, and take seven years to complete. On-going joint activities at Hawthorne include Navy Special Forces High Desert Training, Navy Undersea Warfare Center, Marine Corps Sniper Team Training and weapons testing, Army Ranger High Desert Training and processing of Air Force and Navy bombing ranges scrap. The depot's training facilities are particularly well suited to simulating conditions in the Middle East. The community disagreed with DoD's estimates for closure costs and believed that the costs could exceed $840 million and reach as high as $1.2 billion. Funds would be needed to retire outdated munitions, create duplicate capability elsewhere, and for environmental remediation. Additionally, the community argued that insufficient weight was given to the fact that the depot faces no encroachment problems, as it is surrounded by Bureau of Land Management and U.S Forest Services controlled lands. In direct response to DoD's contention of offload problems at Hawthorne due to washouts at its facilities, the community countered that with an average yearly rainfall of no more than 5 inches no offload problems exist. The community strenuously questioned the application of military judgment in the Hawthorne closure decision.

The community contended that DoD used erroneous data for employment and economic consideration. Based on community input, DoD corrected the Region of Influence to Mineral County, Nevada. The community contended that closure of Hawthorne Army Depot would result in direct job losses of 30% in the town of Hawthorne with indirect effects driving total job losses as high as 50%. Community leaders and elected representatives claimed the economic impacts would be so devastating that the local area would never recover and become a ghost town, noting that Mineral County is 98% federally managed They believed detrimental effects included reduced property values and property tax revenue. Effects could include default on a $6 million school bond and loss of revenues for education, including Community College programs, potential loss of a hospital in Western Central Nevada, loss of a paid fire department, loss of quality of life programs (parks, libraries, museums, youth programs), loss of dental and medical service providers, increased fees for other services (water, sewer and, garbage collection) and downsizing or closure of the only food and pharmacy store in town. The community argued that closure of the depot will result in the loss of about 10 million square feet of storage capacity now filled to almost 70% of capacity. In sum, the community contends the DoD recommendation is a massive deviation of Selection Criteria 6.

IJCSG - Munitions / Armaments Capacity Report

Function	*Site*	*Current Capacity**	*Current Usage**	*Maximum Capacity**	*Capacity Required To Surge**	*Capacity Available to Surge/Excess Capacity**
MUNITIONS STORAGE						
	ANNISTON ARMY DEPOT	3,296.4	2,293.9	3,296.4	0	1,002.5
	BLUE GRASS ARMY DEPOT	6,021.0	4,817.4	6,021.0	0	1,203.6
	CRANE ARMY AMMUNITION ACTIVITY	8,020.8	5,721.3	8,020.8	0	2,299.5
→	DESERET CHEMICAL DEPOT	909.0	709.0	909.0	0	200.0
✳	HAWTHORNE ARMY DEPOT	9,738.0	5,603.0	9,738.0	0	4,135.0
	HOLSTON AAP	405.8	90.6	405.8	0	315.2
	IOWA AAP	1,148.8	503.4	1,148.8	0	645.4
→	KANSAS ARMY AMMUNITION PLANT	1,238.5	895.9	1,238.5	0	342.6
	LAKE CITY AAP	1,094.0	1,094.0	1,094.0	0	0.0
	LETTERKENNY ARMY DEPOT	3,613.4	2,472.2	3,613.4	0	1,141.2
→	LONE STAR AAP	1,030.6	824.5	1,030.6	0	206.1
	LOUISIANA AAP	350.0	270.4	350.0	0	79.6
	MCALESTER AAP	10,637.1	6,522.0	10,637.1	0	4,115.1
	MILAN AAP	3,258.1	829.9	3,258.1	0	2,428.2
→	MISSISSIPPI AAP	105.4	0.0	105.4	0	105.4
→	NEWPORT CHEM DEPOT	11.6	11.6	11.6	0	0.0
	PINE BLUFF ARSENAL	4,192.2	3,794.4	4,192.2	0	397.8
	PUEBLO CHEM DEPOT	1,475.2	161.6	1,475.2	0	1,313.6

* Capacity is measured in ksf

IJCSG - Munitions / Armaments Capacity Report

Function	*Site*	*Current Capacity**	*Current Usage**	*Maximum Capacity**	*Capacity Required To Surge**	*Capacity Available to Surge/Excess Capacity**
MUNITIONS STORAGE						
	RADFORD AAP	921.2	641.6	921.2	0	279.6
→	RED RIVER army DEPOT	2,747.6	1,732.9	2,747.6	0	1,014.7
→	SIERRA ARMY DEPOT	5,649.5	1,019.0	5,649.5	0	4,630.5
	TOOELE ARMY DEPOT	5,239.6	3,265.0	5,239.6	0	1,974.6
→	UMATILLA CHEM DEPOT	2,457.7	728.1	2,457.7	0	1,729.6
		73,561.5	44,001.7			29,559.8
(19.2%) →		-14,149.9	-5,921.0 (13.5%)			-8,123.5
		59,411.6	38,080.7			21,436.3
* HAWTHORNE AD		-9,738.0	-5,603.0			-4,135.0
		49,673.6	32,477.7			17,301.3
			1 (21% DEMIL)			(15% SURGE)
			6,820.3			

507 K KOREA 5,577,000 SQ FT
FACTOR .11 STONS → SQ FT

50

* Capacity is measured in ksf

Current cap	Current usage	Excess
74,470.5	44,710.7 (60.0)	29,759.8 (40)

post zone w/o Semi

CAPACITY	USAGE	Empty
50,582.6	44,710.7 (88%)	5871.9 (12%)
	5,577	
	50,287.7 (99%)	

With 21% Semi

	44,710,7		
	-9,382.2		
50,582.6	353285	69%	31%
50,582.6	40905.5	80%	

Army owned Ammunition Production Facilities

GOCO Ammunition Plants	Operating Contractor	Location	Manufacturing Process	Status
Badger	Olin Corporation	Baraboo, WI	Propellant	Excess
Cornhusker	None	Grand Island, NE	LAP	Excess
Hawthorne	Day & Zimmerman, Inc.	Hawthorne, NV	LAP	Excess
			Ammo Storage	Tier 2 Depot
Hays	NA	Pittsburgh, PA	MPTs	Disposed
Holston	BAE	Kingsport, Tenn	Explosive	Active
Indiana	Indiana Reuse Authority.	Charlestown, IN	Propellant & LAP	Excess
Iowa	American Ord (GDLS/D&Z)	Middletown, IA	LAP	Active
Joliet		Joliet, IL	LAP & Explosives	Excess
Kansas	Day & Zimmerman	Parsons, KS	LAP	Active
Lake City	Alliant TechSystems	Independence,MO	Small Caliber	Active
Lone Star	Day & Zimmerman, Inc.	Texarkanna, TX	LAP	Active
Longhorn		Marshall, TX	LAP	Excess
Louisiana	Valentec	Shreveport, LA	MPTS	Semiactive
			LAP	Excess
Milan	American Ord (GDLS/D&Z)	Milan, TN	LAP	Active
Mississippi	Day and Zimmerman	Stennis Space Ctr., MS	MPTS	Semiactive
			LAP	Excess
Newport	None	Newport, IN	Explosives	Excess
Radford	Alliant Techsystems, Inc.	Radford, VA	Propellant	Active
Ravenna	Mason & Hanger	Ravenna, OH	LAP	Excess
Riverbank	Norris Industries	Riverbank, CA	MPTS	Active
Scranton	Chamberlain Mfg.	Scranton, PA	MPTS	Active
St. Louis	None	St. Louis, MO	MPTS	Excess
Sunflower	Spec-Pro	Desoto, KS	Propellant	Excess
Twin Cities		New Brighton, MN	LAP & MPTS	Excess
Volunteer	Tecumseh	Chattanooga, TN	Explosives	Excess
(GOGO)				
Crane Army Ammo Act*	NA	Bloomington, IN	LAP & Depot	Active
McAlester Army Ammo Plant	NA	McAlester,OK	LAP & Depot	Active
Pine Bluff Arsenal	NA	Pine Bluff,ARK	LAP	Active

* Navy Installation

June 8, 2005

Hawthorne (#2 depot in country)

- incorrect conclusions
- factual errors
- GOCOs (competition, larger workforce)
- COBRA submittal different from numbers
- 27% contractor unemployment rate high paying jobs
- Daniel 64 tons - ordnance

~~[illegible]~~

~~[illegible]~~

move to Tooele
(pretty much full - max out storage in 07)

- not enough space in 8 depots as is

Daniel 440K tons
boats scale
returns [illegible] [illegible]

- shipped 3K tons in 10 days (surge)
- capacity issue
- licensing issue (state)
- Facilities there, not workload
- numbers do not include tenants
2 sets magazines
 - Navy
 - Marine Corp.
- multi-function training
(10,000 acres) urban training
looks like Iraq / Iran
- mil all gone
 - Seals } use barracks
 - Spec Forces }
- consolidate into gov. operated, earmarked
do swap with GOCOs

- constructed 71-72 accepted use 1984
  50 yr. life
- upgraded project technology
- environmentally friendly process
  used in country
- encroachment in Tooele will
  not happen in Hawthorne
- bad data
- move from large to small not right
- dempf. fab. undervalued
- 3 ton factor TNT

environment 888 mill. cleanup?

comparison with Tooele

Day & Zimm
Kansas & Lone Star
LS
- concur [illegible] capacity
- compat. to rationalization
- privatization

- data across Lone Star
- employment
- capacity

- computation most work will go to Canada
invalidates the savings
- industrial base move to Canada
- local use authority base capability
DZ separate provide you products
* LT priority in place

* Kansas

- expensive move facility,
(centrifuge weapon)

* Data call info in disagreement
[illegible] DOD

Kansas closure
- Mississippi
- Newport

Rec: Staff visit Hawthorne

currently at Hawthorne (26 of 64)
286, 496
49% denial

LCCTR (~~Rob Hanger~~)
slide 37 of 64
questions on not including
~~Hawthorne~~

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slide 38
~~slide~~ not included on charts
$25 mill estimate to close
& more

Training
Mountain Scout/Switch Course
cannot be without 58 cal shoot
and only at HWAD
(not Mountain Warfare Training
Center)

Community Representation

- Sen Reid rep.
- Congressman rep.
- John DiSyork (Sen Titus)
  - ANG rep
  - HWAD
- Mike McGuinness (assembly)
- Richard Bryan Board (assembly)
  - mission, expand borders
  - encroachment (training & testing)
  - pre decision then data to fit
  - GOCBs
  - economic losses
- Kenneth Chase, Pres. School Board System
  - 684 students
  - funding
  - lose 65% of students
  - Min. Co. 27% poverty rate
- Tom Fitzgerald (Hosp. Board of Trustees)
  - home health reduce
  - MRI (75-135 miles)
- Lisa Barstow, retired fed. empl.
- Laurie Thom - Fallon Tribe
  - input & participate