

ACQUISITION,
TECHNOLOGY
AND LOGISTICS**THE UNDER SECRETARY OF DEFENSE**3010 DEFENSE PENTAGON
WASHINGTON, DC 20301-3010

DEC 7 2004

**MEMORANDUM FOR INFRASTRUCTURE EXECUTIVE COUNCIL MEMBERS
INFRASTRUCTURE STEERING GROUP MEMBERS
DIRECTOR, DEFENSE LOGISTICS AGENCY
CHAIRMEN, JOINT CROSS-SERVICE GROUPS****SUBJECT: Transformation Through Base Realignment and Closure (BRAC 2005) Policy
Memorandum Four - Selection Criteria 7 and 8****Background**

The Secretary of Defense memorandum of November 15, 2002, established the authorities, organizational structure, goals, and objectives for the Department's development of BRAC 2005 recommendations. Policy Memoranda One through Three provide further guidance on implementing BRAC 2005. This memorandum is the fourth in a series of Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)) policy memorandum implementing BRAC 2005. The USD (AT&L) will issue additional policy guidance, as necessary, throughout the BRAC process.

Purpose

This guidance clarifies how the Department will (1) assess a community's infrastructure to determine the ability of the community to support military missions and forces, and the quality of life that it can provide to military personnel and their families; and (2) consider the environmental impact of different closure and realignment scenarios as it develops its closure and realignment recommendations. This memorandum applies to the Military Departments and Joint Cross-Service Groups (JCSGs).

Policy Guidance**I. Selection Criterion Seven****A. Policy**

Selection Criterion 7 examines "the ability of both the existing and potential receiving communities' infrastructure to support forces, missions, and personnel." In order to assess a community against criterion 7, the Department has identified ten community attributes – demographics, child care, cost of living, education, employment, housing,



medical, safety/crime, transportation, and utilities – that it believes best capture the criterion.

B. Reports

The criterion 7 Joint Process Action Team (JPAT), created by the ISG to develop a Department of Defense (DoD)-wide approach to applying criterion 7, provided the Military Departments and the Joint Cross-Service Groups (JCSGs) with a report for each military installation using the template at Appendix A. The criterion 7 reports, using certified data, summarize the ten attributes of the community in which a military installation is located. The specific data used to create the reports is resident in the OSD Military Value Analysis Database and will be made available for review by the Military Departments and JCSGs. The JPAT will also maintain the data in a single database.

C. Implementation

The Military Departments and JCSGs will use the criterion 7 reports to compare the ability of different communities' infrastructure to support missions, forces, and personnel associated with individual scenarios. The Military Department with real property responsibility for an installation that may be affected by multiple scenarios will also consider the ability of the community's infrastructure to support missions, forces, and personnel associated with all scenarios affecting that installation. When the same community infrastructure is utilized by installations of two or more Military Departments, the Military Departments will consider the ability of the community's infrastructure to support missions, forces, and personnel associated with all scenarios affecting those installations. In the event a decision to close or realign an installation or activity is determined using an element of Criterion 7 as the discriminating factor, the responsible Military Service or Joint Cross Service Group will notify the JPAT 7 Executive Agent Functional Representative (AF/DPX) in writing. In these instances, the JPAT 7 team will review the particular element identified, ensuring accuracy.

II. Selection Criterion Eight

A. Policy

Selection criterion 8 assesses “the environmental impact, including the impact of costs related to potential environmental restoration, waste management, and environmental compliance activities” of closure and realignment recommendations. The environmental impacts that the Department must consider under criterion 8 fall into three areas: environmental resource impacts; impacts of costs related to potential environmental restoration; and impacts of costs related to potential waste management and environmental compliance activities. The Department will consider these impacts as discussed below.

1. Environmental Resources Impacts

In order to assess and consider the environmental resource impacts of different scenarios, the Department has identified ten environmental resource areas for consideration: Air Quality; Cultural/Archeological/Tribal Resources; Dredging; Land Use Constraints/Sensitive Resource Areas; Marine Mammals/Marine Resources/Marine Sanctuaries; Noise; Threatened and Endangered Species/Critical Habitat; Waste Disposal; Water Resources; and Wetlands.

2. Impact of Potential Environmental Restoration Costs

The Department will consider the impact of costs related to potential environmental restoration through the review of certified data for pre-existing, known environmental restoration projects at installations that are identified during scenario development as candidates for closure or realignment. In this regard, the certified data considered by decision makers will only include the FY03 current estimate of costs to complete for Installation Restoration (IR) sites managed and reported under the Defense Environmental Restoration Account (DERA). It is important to note that under DERA, the costs are generally calculated on a “clean-to-current-use” clean-up standard. The cost of environmental restoration will not dictate any installation closure decision but will be noted by the appropriate Military Department and DLA in the installation environmental profile, the summary of scenario environmental impacts, and the summary of cumulative scenarios’ environmental impact discussed below. The presence of IR sites is considered as a land use constraint for installations receiving missions as a result of a realignment decision. Since the Department of Defense has a legal obligation to perform environmental restoration regardless of whether a base is closed, realigned, or remains open, environmental restoration costs at closing bases will not be considered in the cost of closure calculations.

Decision makers should be aware that although the remediation of munitions contamination is a form of environmental restoration, the costs of remediating munitions contamination on operational ranges are not captured in the existing estimated cost to complete for IR sites. Additionally, estimates of such costs are not available in an auditable or certifiable form without site survey and preliminary analysis of contamination, which is not attainable within the BRAC analytical timeframe. Experience to date has shown that the cost to remediate ranges varies from small to very significant amounts depending on a variety of aspects. These aspects are the type, quantity, and location of potential munitions used over the entire life of the range; potential other uses of the range such as open burn, open detonation and burial sites; potential future land-use use of the range; and the lack of an agreed upon process for identifying and removing such hazards. In order to consider the impact of these costs in the absence of credible estimates, when a Military Department develops a scenario summary for a scenario that involves a closure of an operational range, it will identify the potential impact of closing an operational range where the extent of financial liability is

uncertain. For example, the scenario summary might note: "Decision makers should be aware that the closure decision contemplated in this scenario would necessitate the closure of X ranges and the remediation of any munitions contaminants on the ranges. The cost and time required to remediate the ranges is uncertain and may be significant, potentially limiting near-term reuse of the range portion of the facility."

3. Impact of Potential Waste Management and Environmental Compliance Costs

Recurring and non-recurring environmental compliance and waste management costs are captured in Criterion 5 using the Cost of Base Realignment Actions (COBRA) estimates of Base Operating Support (BOS) costs generated for each scenario being evaluated as part of the scenario analysis process. Any one-time waste management and compliance costs associated with closing a facility (e.g., costs generated as result of operating permit closure regulations) or similar one-time costs associated with realignment actions (expanding treatment or compliance operation permits) are also identified in COBRA. The Military Departments, and DLA for property it exclusively operates as a stand-alone installation, will ensure that these one-time costs are included in the summary of scenario environmental impacts and the summary of cumulative scenarios' environmental impact so that decision makers can consider the impact of these costs in their criterion 8 consideration.

B. Reports

1. Installation Environmental Profiles

The Military Departments with real property responsibility for installations, and DLA for property it exclusively operates as a stand-alone installation, have prepared environmental profiles in the format provided at Appendix B for their respective installations. The profiles use certified environmental data of a particular installation and array the environmental resource areas and cost data to present the current picture of that installation's environmental condition and its ability to assume new missions given that condition. Decision makers will use these profiles in their BRAC scenario analyses. Each profile will also serve as a guide to the raw environmental data regarding a particular installation and allow the decision maker to consider how a particular scenario may impact the environmental condition at that installation(s).

2. Summary of Scenario Environmental Impacts

For those scenarios that the Military Departments and JCSGs have conducted a COBRA run and believe need to receive complete criteria review, the scenario proponent will request that a Summary of Scenario Environmental Impacts be prepared using the template at Appendix C. The purpose of this summary report is to summarize the environmental impacts of a particular scenario thereby providing the decision makers

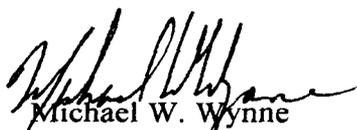
with information they need to fully consider environmental impacts. The Military Department with real property responsibility for the affected installation(s) and DLA for property it exclusively operates as a stand-alone installation will prepare the summaries upon request. The Summary will consist of an overview of the certified data and potential impacts, including the impacts of costs related to potential environmental restoration, waste management, and environmental compliance activities, as explained above.

3. Summary of Cumulative Environmental Impacts

The third report is the Summary of Cumulative Environmental Impacts on a particular installation. Using the template at Appendix D, the Military Departments, and DLA for property it exclusively operates as a stand-alone installation, will summarize the cumulative environmental impacts of all candidate recommendations affecting a particular installation. The Summary of Cumulative Impacts will be compiled from the individual scenario summaries prepared earlier.

C. *Implementation*

The Military Departments and the JCSGs are responsible for adhering to the criterion 8 policy contained herein. The Military Departments and JCSGs will use certified environmental data, installation profiles, scenario impact summaries, and cumulative environmental impact summaries in their deliberative assessments of BRAC closure and realignment decisions. The Military Departments and DLA are responsible for preparing these documents and providing analytical assistance as necessary.



Michael W. Wynne
(Acting USD, Acquisition, Technology & Logistics)
Chairman, Infrastructure Steering Group

Appendices

- A) Criterion 7 Report Template
- B) Criterion 8 Installation Environmental Profile Template
- C) Criterion 8 Summary of Scenario Environmental Impacts Template
- D) Criterion 8 Summary of Cumulative Environmental Impacts Template

Appendix A Template

Installation Criteria 7 Profile

Notional AFB, State

Demographics

The following tables provide a short description of the area near the installation/activity. Notional AFB is **9.4** miles from **Cityville, State (XX)** the nearest city with a population of 100,000 or more. The nearest Metropolitan Statistical Area (MSA) is

MSA	Population
Cityville, XX	302,963

The following entities comprise the Military Housing Area (MHA):

County/City	Population
Jones	153,963
Smith	1,025
Allen	33,646
Lee	9,040
Moore	74,769
Roberts	23,339
Total	295,782

Child Care

This attribute captures the number of nationally accredited child-care centers within the local community: **25**

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)	\$40,500
Median House Value	(US Avg \$119,600)	\$85,600
GS Locality Pay	("Rest of US" 10.9%)	13%
O-3 with dependents BAH Rate		\$1,124
In-state tuition for family member		Yes
In-state tuition continues if member PCSs out of state		Yes

Education

This attribute defines the population in local school districts and identifies capacity. The pupil/teacher ratio, graduation rate, 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 the 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.

School District(s) Capacity		26,323
Students Enrolled		25,326
Average Pupil/Teacher Ratio		16:1
High School Students Enrolled		3121
Average High School Graduation Rate	(US Avg 67.3%)	67%
Average composite SAT I score	(US Avg 1026)	920
Average ACT score	(US Avg 20.8)	27
Available Graduate/PhD Programs		12
Available Colleges and or Universities		3
Available Vocational and or Technical Schools		1

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	3.8%	4.1%	5.5%	6.4%	5.6%
National	4.2%	4.0%	4.7%	5.8%	6.0%

The annual job growth rates for the last five years:

	1999	2000	2001	2002	2003
Local Data	1.2%	1.3%	1.1%	1.0%	1.2%
National	1.5%	2.4%	.03%	-.31%	.86%

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. Vacant housing units may also include units that are vacant but not on the market for sale or rent.

Total Vacant Housing Units	235
Vacant Sale Units	135
Vacant Rental Units	75

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	705	940	302,963
Ratio	1:430	1:322	
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	3012
National UCR	4118.8

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 Notional AFB to nearest commercial airport: **8** miles

Is Notional AFB 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**

Appendix B Template

Installation Environmental Profile

Installation X Environmental Profile

(DON will list the activities on Installation X who submitted certified data)

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

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

b. [Specific summary of data regarding Installation X]

2. Cultural/Archeological/Tribal Resources (DoD Questions #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 Profile is trying to identify. A programmatic agreement with the State Historic Preservation Office or a Tribal Historic Preservation Office facilitates management of these sites.

b. [Specific summary of data regarding Installation X]

3. Dredging (DoD Questions # 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. [Specific summary of data regarding Installation X]

4. Land Use Constraints/Sensitive Resource Areas (DoD Questions #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. [Specific summary of data regarding Installation X]

5. Marine Mammal/Marine Resources/Marine Sanctuaries (DoD Questions #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. [Specific summary of data regarding Installation X]

6. Noise (DoD Questions # 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 may then be 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. [Specific summary of data regarding Installation X]

7. Threatened and Endangered Species/Critical Habitat (DoD Questions #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 profile identifies the presence of the resource, TES, candidate or critical habitat, even if they do not result in restrictions, as well places where restrictions do exist.

b. [Specific summary of data regarding Installation X]

8. Waste Management (DoD Questions # 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. [Specific summary of data regarding Installation X]

9. Water Resources (DoD Questions # 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), by which 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. [Specific summary of data regarding Installation X]

10. Wetlands (DoD Questions # 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. [Specific summary of data regarding Installation X]

Appendix C Template

Summary of Scenario Environmental Impacts

[Describe scenario specifically: description must cite all specific details explored in the COBRA runs] *Below is an illustration with hypothetical installations and their impacts.*

General Environmental Impacts

Environmental Resource Area	Camp Swampy Losing Training Asset	Base Oceanview receiving training asset
Air Quality	No Impact	Oceanview is in moderate nonattainment for carbon monoxide and severe nonattainment for ozone. Conformity determination may have to be conducted.
Cultural/Archeological/Tribal Resources	Disposition of the historic barracks will have to be determined	No impact
Dredging	No Impact	No impact
Land Use Constraints/Sensitive Resource Areas	No impact	There may be an impact on approximately 1,000 acres of sensitive resource area.
Marine Mammals/Marine Resources/ Marine Sanctuaries	No impact	No impact
Noise	Noise will be reduced at Camp Swampy	Noise will increase at Base Oceanview but may not affect local community
Threatened& Endangered Species/Critical Habitat	No impact	Increased monitoring of species X may be required to ensure training will not impact the breeding habitat during the months of April and May
Waste Management	Reduces waste disposals associated with the training assets.	Increases waste disposal associated with the training assets.
Water Resources	Reduces water resources.	Increases water consumption, but Oceanview has sufficient water resources to accommodate training assets
Wetlands	No impact	No Impact

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Summary of Scenario Environmental Impacts (cont'd)

Impacts of Costs

	Camp Swampy	Base Oceanview
Environmental Restoration	Restoration Costs through FY 03 and Cost to Complete estimate	Restoration Costs through FY 03 and Cost to Complete estimate
Waste Management	None	None
Environmental Compliance	None	Air conformity assessment may be required; requirement for expanded air permits may be likely; the cost is approximately \$X

Appendix D Template

Summary of Cumulative Environmental Impacts

[Here list all the candidate recommendations that serve as an additional function at Base X]

1. *Candidate # 23 – describe each scenario referring to original individual Summary document*
2. *Candidate # 28 – brief description*
3. *Candidate #30 – brief description]*

Below is an illustration with a hypothetical installation and impacts.

Environmental Resource Area	Base X (Gaining Installation)
Air Quality	Base X is in moderate nonattainment for carbon monoxide and severe nonattainment for ozone. Candidate #23 will require Conformity determination be conducted, but existing air credits should accommodate new mission.
Cultural/Archeological/Tribal Resources	No impact
Dredging	Candidate #28 requires a deepening of the existing channel.
Land Use Constraints/Sensitive Resource Areas	Due to Candidate #30 there will be an impact on approximately 1,000 acres of sensitive natural resource area.
Marine Mammals/Marine Resources/ Marine Sanctuaries	No impact
Noise	Candidate #23 will increase at Base X but will not affect local community
Threatened& Endangered Species/Critical Habitat	Candidate #23 – increased monitoring of species Y will be required to ensure training will not impact the breeding habitat during the months of April and May
Waste Management	All 3 candidates increase waste disposal associated with the training assets.
Water Resources	All 3 candidates increase water consumption, but Base X has sufficient water resources to accommodate training assets
Wetlands	No Impact

Summary of Cumulative Environmental Impacts (cont'd)

Impacts of Costs

	Base Overview
Environmental Restoration	Restoration Costs through FY 03 and Cost to Complete estimate
Waste Management	None
Environmental Compliance	Scenario #23 - Air conformity assessment required; requirement for expanded air permits likely and the estimate for the cost to obtain the permits is approximately \$X

This memorandum will summarize salient provisions of law, and Department of Defense (DoD) practice, with regard to environmental remediation on BRAC sites. Further information may be sourced from the Office of the General Counsel, as needed.

A. Use of Environmental Impact as a Criterion for Making BRAC Recommendations. Section 2913 of the Defense Base Closure and Realignment Act of 1990 (Public Law 101-510), codified at 10 U.S.C. § 2687 note, as amended by Fiscal Year 2002 Department of Defense Authorization Act (Public Law 107-107) (the "BRAC law"), sets forth the selection criteria to be used by the Secretary of Defense (the "Secretary") in making recommendations for closure or realignment of military installations located within the United States and its territories. Section 2913(c)(4) of the BRAC law sets forth "other criteria" to be used by the Secretary, specifically:

The environmental impact, including the impact of costs related to potential environmental restoration, waste management, and environmental compliance activities.

While Section 2913(d) makes it clear that the Secretary shall "give priority consideration to the military value criteria" specified in Section 2913(b), this does not mean that the environmental impact may be disregarded or ignored in making calculations in support of the Secretary's final recommendations for closures or realignments.

If the R&A staff, in reviewing the justification data submitted by DoD in support of its recommendations determines that this data does not adequately address or factor in the environmental impacts (including the costs associated with environmental restoration, management and compliance), then there may be grounds to assert that the Secretary has "substantially deviated" from the selection criteria pursuant to Section 2903(d)(B), thus, providing legal grounds for the Commission to propose changes to the Secretary's recommendations.

B. Funding for Environmental Remediation. In a nutshell, DoD is fully responsible for paying for all present and future environmental remediation costs. The U.S. Congress, in a national defense authorization bill enacted in September 1996 (National Defense Authorization Act for Fiscal Year 1997, Pub. L. No. 104-201, § 322(a)(1), 110 Stat. 2422, 2477 (1996)), established several environmental restoration accounts for the DOD budget. Specifically, a statute codified at 10 U.S.C. § 2703(a) (2000), establishes separate accounts for the DOD in general, the U.S. Army, the U.S. Navy, and the U.S. Air Force. *Id.* § 2703(a)(1)-(4)).

In particular, the U.S. Congress established a separate environmental restoration account for Formerly Used Defense Sites (FUDS). (*See* 10 U.S.C. § 2703(a)(5) (2000)). I have been advised that these accounts are replenished with appropriated

funds by Congress each fiscal year for each service. Thus, DoD does not make use of other appropriations available to the Environmental Protection Agency (EPA), for example, for brown fields cleanup, nor does it have a need to do so.

The remainder of this memorandum gives a general overview of the salient laws that pertain to BRAC site-related environmental remediation and other issues.

C. Legal Overview of Environmental Remediation Concerns.

- CERCLA (Superfund). In 1986, the U.S. Congress reauthorized and amended the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). (*See* Superfund Amendments and Reauthorization Act of 1986, Pub. L. No. 99-499, 100 Stat. 1613; Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), Pub. L. No. 96-510, 94 Stat. 2767 (codified, as amended, in various sections of 26 and 42 U.S.C.).

CERCLA, or Superfund, was reauthorized by the Superfund Amendments and Reauthorization Act of 1986 (SARA)(Pub. L. No. 99-499, 100 Stat. 1613 (codified, as amended, in various sections of 10, 26, and 42 U.S.C.). SARA also established the Defense Environmental Restoration Program (DERP) pursuant to 10 U.S.C. § 2701(a)(1) (2000).

Under Superfund rules, a release or threatened release of a hazardous substance can be mitigated through a removal or a remediation. Whereas a removal involves the short-term removal of the hazardous substance, a remediation involves a long-term environmental restoration. Section 2905(e) of the BRAC law also provides the Secretary with transfer authority, subject to § 120(h) of CERCLA, to transfer by deed any real property or facilities to any person that agrees to perform all necessary environmental restoration.

- Defense Environmental Restoration Program (DERP). The DERP requires the DOD to undertake the environmental restoration of installations and facilities under its jurisdiction. Under § 120 of CERCLA, 42 U.S.C. § 9620, the program is subject to the requirements of Superfund. The DERP is carried out in consultation with the U.S. Environmental Protection Agency (EPA), pursuant to 10 U.S.C. § 2701(a)(3), but DoD is the lead department for environmental cleanup under the DERP. Essentially, the goal of the DERP is to reduce, in a cost-effective manner, the risks to human health and the environment attributable to contamination from DOD activities.

Under DERP, DoD is responsible for the environmental restoration, in accordance with the requirements of CERCLA, 42 U.S.C. § 9620(a), of active facilities and sites that are under DoD jurisdiction, and inactive facilities and sites that were under DoD jurisdiction prior to the enactment of SARA. (*See* 10 U.S.C.

§ 2701(c)(1)(A)-(B) (2000)).

DERP authorizes DoD to contract for services from other federal agencies, state and local government agencies, and non-profit conservation organizations to assist with environmental restoration. (10 U.S.C. § 2701(d)(1) (Supp. II 2002). In addition, § 120 of CERCLA authorizes DoD to contract for services from the EPA for environmental restoration. (See 42 U.S.C. § 9620(e)(2)(2000)).

Further, under DERP, DoD advises affected state and local authorities of proposed environmental restoration, and permits the authorities to provide comments. (See 10 U.S.C. § 2705(a)-(b)). DERP also requires DoD to submit annual reports to the U.S. Congress on defense environmental restoration activities under 10 U.S.C. § 2706(a)(2000).

- Base Closure Redevelopment and Homeless Assistance Act. In addition, as of November 1993, DoD is required by law to make closed installations available to state and local redevelopment authorities. (See National Defense Authorization Act for Fiscal Year 1994, Pub. L. No. 103-160, 107 Stat. 1547(1993); see also § 2905(b) (4), *et seq.* of the BRAC law.) This effort was undertaken in furtherance of economic revitalization of communities affected by base closures, and for assistance with the homeless. The Base Closure Redevelopment and Homeless Assistance Act of 1994, 10 U.S.C. § 2687 note (2000), advanced those goals. (See also § 2905 (b) (6)(F) of the BRAC law.)

In September 1996, a national defense authorization bill also amended the BRAC law to authorize the conveyance of closed installations to state and local redevelopment authorities prior to completion of environmental restoration. (See National Defense Authorization Act for Fiscal Year 1997, Pub. L. No. 104-201, 110 Stat. 2422 (1996) § 334(a), 110 Stat. at 2486; see also 42 U.S.C. § 9620(h)(3)(C) (2000) (providing for early transfer authority under CERCLA)).

- National Priorities List. Not all releases or threatened releases of a hazardous substance are entitled to remediation under CERCLA. Most hazardous waste sites are entitled to removal under Section 105 of CERCLA, a section of law that also requires a list of national priorities for environmental restoration -- the so-called National Priorities List (NPL). (See 42 U.S.C. § 9605(a)(8)(B)).

For the 2005 BRAC list proposed by DoD, 65 installations are on the NPL. All BRAC installations in need of environmental restoration are eligible for long-term environmental remediation regardless of NPL status. (In general, however, the EPA does not assist with the environmental restoration of BRAC installations not on the NPL.)

DRAFT MEMORANDUM: DO NOT RELEASE

Prepared by RUMU SARKAR

July 18, 2005

Page 4 of 4

- NEPA. Section 2905(c) of the BRAC law specifically exempts the President, DoD and the Commission from the provisions of the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. § 4321, *et seq.*), except insofar as DoD will be required to apply NEPA to the process of property disposal during the closure and/or realignment process. *Id.* at § 2905(c)(2)(A)).

There are other complex environmental issues that may be relevant to the 2005 BRAC process, and the foregoing discussion is simply meant to highlight the most important laws controlling the environmental remediation process. Please consult with the Office of the General Counsel further, as necessary.

Sources:

James W. Moeller, "ARSENIC AND AN OLD BASE: LEGAL ISSUES ASSOCIATED WITH THE ENVIRONMENTAL RESTORATION OF DEFENSE SITES IN WASHINGTON, D.C., USED FOR THE DEVELOPMENT AND DISPOSAL OF WORLD WAR I CHEMICAL MUNITIONS," 54 *Cath. U.L. Rev.* 879 (2005).

ACQUISITION,
TECHNOLOGY
AND LOGISTICS**THE UNDER SECRETARY OF DEFENSE**3010 DEFENSE PENTAGON
WASHINGTON, DC 20301-3010

JAN 4 2005

**MEMORANDUM FOR INFRASTRUCTURE EXECUTIVE COUNCIL MEMBERS
INFRASTRUCTURE STEERING GROUP MEMBERS
DIRECTOR, DEFENSE LOGISTICS AGENCY
CHAIRMEN, JOINT CROSS-SERVICE GROUPS****SUBJECT: Transformation Through Base Realignment and Closure (BRAC 2005) Policy
Memorandum Eight - Selection Criterion 8****Background**

The Secretary of Defense's memorandum of November 15, 2002, established the authorities, organizational structure, goals, and objectives for the Department's development of BRAC 2005 recommendations. Policy Memoranda One through Seven provided further guidance on implementing BRAC 2005. This memorandum supplements Policy Memorandum Four by providing additional guidance regarding leased property.

Purpose

Selection criterion 8 assesses "the environmental impact, including the impact of costs related to potential environmental restoration, waste management, and environmental compliance activities" of closure and realignment recommendations. Through criterion 8, the Department considers the environmental impact of different closure and realignment scenarios as it develops its closure and realignment recommendations. This guidance supplements guidance previously provided on how the Department will consider the environmental impact of different closure and realignment scenarios as it develops its closure and realignment recommendations.

Policy Guidance

Policy Memorandum Four provided for the development of Summary of Scenario Environmental Impacts using the template at Appendix C of that memorandum. The purpose of this Summary is to identify the environmental impacts of a particular scenario in order to provide decision makers with the information they need to fully consider environmental impacts. The Military Department with real property responsibility for the affected installation(s), or DLA for property it operates exclusively as a stand-alone installation, is responsible for preparing the Summary. The Summary will consist of an overview of the certified data and potential impacts, including the costs related to potential environmental restoration, waste management, and environmental compliance activities.



For those scenarios where the losing installation is leased property, the scenario proponent may assume, absent data to the contrary, that the owner of that property will continue to lease it for similar purposes; consequently, it may be assumed that departing such a leased location will not adversely affect the environment. Furthermore, because the owner of the leased property will become responsible for all environmental restoration, waste management, and environmental compliance activities at the leased location upon termination of the lease, the scenario proponent may assume that the closure or realignment scenario will not result in costs related to environmental restoration, waste management, and environmental compliance, unless the lease expressly requires such activities before the lease may be terminated (in which case these costs should be included in the Summary). Absent any such lease requirements, the scenario proponent need only request that a Summary of Scenario Environmental Impacts be completed by the Military Department or DLA for the gaining installation.

For those scenarios where the gaining installation is leased property, the scenario proponent may assume that the owner of that property will be responsible for all environmental restoration, waste management, and environmental compliance activities at the leased property. The scenario proponent also may assume that the movement of personnel to the leased location will not result in adverse environmental consequences, and that costs related to environmental restoration, waste management, and environmental compliance will be incurred by the lease owner. If applicable, the scenario proponent need only request that a Summary of Environmental Impacts be completed by the Military Department or DLA for the losing installation.



Michael W. Wynne
(Acting USD (Acquisition, Technology & Logistics))
Chairman, Infrastructure Steering Group

DCN: 11816

ENVIRONMENTAL CONDITION SUMMARY - ALCs

Environmental Conditions	McClellan	Kelly	Tinker	Hill	Robins
Acres Total	2,950	3,996.5	5,001	6,666	8,855
Acres of Known Contamination On Base	664 acres (soil + groundwater) Offbase contamination	46 soil, 1319 groundwater acres; some overlap. Offbase contamination	120 soil, 400 groundwater acres; some overlap. Offbase contamination	370 acres (soil + groundwater) Offbase contamination	1900 acres (soil + groundwater) No offbase contamination
Investigation of Additional Sites Ongoing	Yes	No	Yes	Yes	Yes, but additional sites unlikely
Contamination Sources	- 10 large pits where solvents dumped/burned - Contaminated groundwater affects former drinking wells - Radiation issues - Leaking industrial waste lines - Soil vapor gas - Contamination under structures	- 1 pit where solvents dumped - Leaking industrial waste lines - Leaking jet fuel hydrant - Leaking underground petroleum tanks	- 3 pits where solvents dumped - Radioactive paints in landfills - Leaking industrial waste lines/system - 6 landfills, some with hazardous waste - Groundwater plumes only partially identified	- 1 pit where solvents dumped (100,000 gal.) - Leaking industrial waste lines - 3 hazardous waste landfills - Former plating shop - Contamination under structures	- 1 lagoon (open pit) where solvents dumped - Haz waste landfill (1.5 acres) - Radioactive waste burial site - Pesticides - Groundwater contamination from past industrial practices
Depth of Groundwater Contamination	To -400 ft; deep aquifer	To -25 ft (stops at clay layer)	To -200 ft; aquifer layers	To -80 ft; perched aquifer	2 aquifers, -50ft and -190 ft

ENVIRONMENTAL CLEANUP COST ASSUMPTIONS - ALCs

DRAFT - NOT FOR SLIDES

Cleanup Assumptions	McClellan	Kelly	Tinker	Hill	Robins
<u>Assume Open:</u> Cost to Clean (FY 95 to Complete) \$ in Thousands	\$705 million (DERP* est.) to \$925 million (base est.)	\$265 million if risk-based goal \$700 million if drinking water standard	\$297 million	\$236 million	\$72 million (DERP* est.) to \$148 million (base est.)
Cleanup Target Year (if funding adequate)	2034	2030	2023	2010 to implement 2050 and beyond to reach cleanup goal	2001 to implement 2011 and beyond to reach cleanup goal
<u>Assume Closure:</u> Cost to Clean (FY 95 to Complete) \$ in Thousands	\$1.2 billion to \$1.8 billion (base estimate)	Same as above - Unrealistic to assume cleanup could or should be different	Variables of timeframes, reuse, cleanup levels to uncertain too estimate	Response to request to estimate cost to clean in 2 years: \$24+ billion**	Same as above - Unrealistic to assume cleanup could or should be different
Cleanup Target Year (if funding adequate)	2008 to implement 2018 to reach cleanup goals	Same as above	Variables too uncertain to estimate	2-year cleanup scenario, brute force approach: dig it & move it	Same as above

* Defense Environmental Report to Congress, May 1995

** Range estimated at 2 or more orders of magnitude above current cost

DRAFT: ENVIRONMENTAL CLEANUP IMPACTS ON BRAC DECISIONS

The following points summarize the ideas discussed in this memo.

- Existence of environmental contamination may not necessarily hinder base closure or realignment.
- DoD conducts cleanups on open, closing and realigning bases under CERCLA and RCRA.
- DoD is liable for the most part for current and future cleanup costs.
- DoD's progress on base cleanups to date does not allow total cleanup costs to be accurately quantified.
- Environmental cleanups can be tailored to future land use.
- Defense Environmental Restoration Account (DERA) funds cleanup on bases remaining open while BRAC funds address cleanup on closing bases.
- Clean property on closing bases can be expeditiously identified and transferred.

BACKGROUND ON CERCLA AND RCRA:

Environmental cleanup at closing military installations is conducted under CERCLA (Superfund) authority and under RCRA authority.

In 1980, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) was passed. CERCLA created a trust fund, known as the Superfund, to address the nation's most significant hazardous waste sites. Congress passed CERCLA in response to such dramatic contamination problems as Love Canal, NY, and Times Beach, MO. EPA was given authority to respond to hazardous waste problems using the Superfund, and recover costs from responsible parties to reimburse the Superfund. A list of the most serious sites, the National Priorities List (NPL) was established.

As passed in 1980, CERCLA did not specifically address the federal government's property. In the late 1970's DoD began discovering that it had the same impacts from historical mismanagement of chemical and other waste as private industry. Investigatory work was initiated by DoD in the late 1970's and early 1980's, without formal involvement by regulatory agencies such as EPA.

In 1986 CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA). Importantly for DoD, Section 120 was added, which states that federal agencies must comply with CERCLA in the same manner as everybody else. EPA was required to list federal facilities on the NPL, the authority for the selection of cleanup actions for federal facilities on the NPL was given to EPA, and Interagency Agreements between EPA and federal facilities on the NPL were required. In January, 1987 the President issued Executive Order 12580, which gave the Secretary of Defense the authority to respond to contamination on DoD property. As a rule, DoD pays for cleanups at federal facilities. EPA is prevented from spending money from the Superfund at a DoD facility, unless DoD agrees upfront to reimburse EPA.

Military installations can also perform cleanup activities under the Resource Conservation and Recovery Act (RCRA), which passed in 1976 and amended in 1984. RCRA is designed to provide "cradle-to-grave" control of hazardous waste by imposing management requirements on generators and transporters of hazardous wastes and owners and operators of treatment, storage and disposal facilities. RCRA covers federal and private sites, and applies mainly to active facilities. The military can perform cleanup under the Corrective Action portion of RCRA, which requires owners of facilities to take corrective action for all releases of hazardous waste from solid waste management units at the facility. Such units can be tanks, lagoons, waste piles, and other units found on many military installations. In general, the Corrective Action authority under RCRA is analogous to CERCLA. The military often has some discretion about whether to initiate a cleanup action under CERCLA or RCRA Corrective Action.

CERCLA LIABILITY:

Liability for military base cleanups differs from the far-reaching liability for environmental cleanup which exists for private Superfund sites. DoD has sole liability responsibility for property under its ownership, unless it can be demonstrated that a tenant or outside party caused contamination on the base. To further clarify liability, Congress has mandated that DoD provide indemnification from CERCLA liability for contamination caused by DoD to transferees of property at closing bases, so that future owners will bear no responsibility for cleanup of contamination caused by DoD which is discovered after transfer. Non-DoD tenants and owners of base property will be liable for any additional contamination they cause.

THE CERCLA PROCESS:

DoD follows a stipulated process for identifying, investigating, and cleaning up contamination. This process can be summarized by the following steps specified in CERCLA; the substantially equivalent steps in RCRA are identified in brackets:

1) Preliminary Assessment/Site Inspection, PA/SI - DoD searches for contaminated sites, and determines according to measurable criteria whether there are significant threats to public health

or the environment based on this preliminary information. If these threats exist, EPA adds the facility to the NPL. The relative ranking of facilities on the NPL has little or no meaning. From both DoD and EPA's perspective, if a facility is on the NPL, it is a priority. DoD has stated that non-NPL closing bases shall receive attention and funding equivalent to NPL closing bases, but evidence from closing bases has not yet demonstrated this commitment. It is not uncommon for a PA/SI to be completed, a facility listed on the NPL, and subsequently for numerous additional contaminated sites to be identified. For many DoD facilities much of this phase was completed in the late 70's and early 80's. [RCRA equivalent: RCRA Facility Assessment/Preliminary Assessment and Visual Site Inspection]

2) Remedial Investigation/Feasibility Study (RI/FS) - DoD investigates the extent of contamination and evaluates methods to clean it up. A proposed cleanup action goes through a public comment period. After public comment, a decision is made on the cleanup action to take. This decision includes the standards that the cleanup must meet, which must comply with State requirements. If the site is on the NPL, EPA makes the final decision on how the site is to be cleaned up. The majority of complex environmental problems at DoD facilities are in this stage. Until this stage is completed, estimates of cleanup costs cannot be made with confidence. [RCRA equivalent: RCRA Facility Investigation and Corrective Measures Study]

3) Remedial Design/Remedial Action (RD/RA) - The selected cleanup method, referred to as the remedial action, is designed and implemented. When the implemented action has achieved the selected cleanup standards, the action is complete. For facilities on the NPL, EPA must conclude that cleanup standards have been met prior to delisting the facility from the NPL. [RCRA equivalent: Corrective Measures Design, Corrective Measures Implementation]

It is important to recognize that if at any time during this process (as early as the PA/SI phase), it becomes clear that cleanup work should be initiated, DoD has the authority to take an expedited response without going through the entire process of seeking public comment and gaining regulatory agency concurrence. In fact, it is common for a facility to find that a public water supply is threatened, and take an expedited response (or, "removal") to attempt to prevent contamination of the water supply. EPA encourages these expedited responses by DoD as early in the process as possible, but retains its authority to select the final cleanup standards.

CLEANUP STANDARDS:

Depending on whether a base remains open for military use or is closed and ultimately re-used, cleanup standards are determined as case-by-case decisions. Cleanup levels are often expressed in terms of the ultimate use of the property (commercial, residential, recreational, etc.), and are based on numerical risk estimates.

Cleanup standards may cause cost of cleanup to vary substantially, as the following example indicates. If land is to be re-used for residential purposes, cleanup standards must be set at low concentrations to allow people (especially children) to come into extended, direct contact with soils. This would result in the most stringent standard and the most expensive cleanup. If land is to be used for commercial purposes, short-term exposure by workers to soils

must be considered. Additionally, in many cases, future land owners will want to construct new buildings on the property. The cleanup may need to address soils to a depth of 10 feet in order to protect individuals exposed to soils that are excavated for building foundations. Costs for this action could be significantly less than the residential scenario above. How cleanup standards are selected and the use of risk assessment to determine cleanup decisions are significant items in the current Congressional debate over Superfund reform.

FUNDING FEDERAL FACILITY CLEANUPS:

Federal facility cleanups for bases which are not closing are funded by the Defense Environmental Restoration Account (DERA), an account designated by a congressional appropriation. Compliance money, drawn from base operation and maintenance funds, pays for ongoing environmental compliance activities not related to cleanup. Once a base is approved for closure or realignment, base cleanup activities are paid from environmental restoration funds identified by the military services for each BRAC round and come from the BRAC account. Environmental restoration at BRAC installations may be forced to compete for BRAC funds with other closure-related needs, because although the BRAC account has a statutory floor for environmental expenditures, any expenditures above the floor are not set aside. DERA funds, on the other hand, are "fenced": that is, they are appropriated specifically for environmental restoration and are not available for other DoD uses.

CERCLA AND PROPERTY TRANSFER:

One of the most important requirements in CERCLA impacting closing bases is Section 120(h)(3), which requires that "all remedial action necessary to protect human health and the environment", be taken prior to the deed transfer of property to a party outside the federal government. This provision does not apply to non-deed transfers (leases) or intra-federal government transfers.

In 1992, CERCLA was amended to clarify that this milestone can be met when EPA concludes that the remedial action is in place, and operating pursuant to an approved remedial design. For example, when a ground water extraction and treatment system is necessary to clean up ground water contamination, the property could be transferred after the extraction and treatment system is in place and operating effectively. It is not necessary to wait until cleanup standards are met (which can be decades) prior to the transfer.

It must be noted that very little work at closing bases has reached the Remedial Design/Remedial Action phase, and it will be several years until many bases closed under Rounds I and II can transfer property that has ground water contamination. Typically, actions to address soil contamination will be implemented several years after actions cleaning up ground water. However, recent base cleanups designed to speed reuse have completed both soil and groundwater cleanup in a timely manner, and have allowed large tracts of property at Sacramento Army Depot and Fort Ord (both BRAC 91 closures) to be transferred for reuse.

IF PROPERTY IS CLEAN.....

Many bases, including those on the NPL, contain a significant amount of property which is uncontaminated. The Community Environmental Response Facilitation Act, or CERFA, mandated that the military work with EPA and the states to identify clean property on closing bases which could be readily transferred for reuse. The NPL lists many bases from "fenceline to fenceline", but a significant amount of uncontaminated property has been identified on NPL closing bases. In the future, EPA's nomination of military facilities to the NPL will in many cases forgo the fenceline-to-fenceline approach by listing only the contaminated areas of a base.

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CLEAN AIR AND THE 1995 BRAC: CONCEPTS AND ISSUES

INTRODUCTION

Closure, realignment, and redirect actions which the Department of Defense proposes for the 1995 BRAC will affect the air quality of several local communities. The Clean Air Act's 1990 Amendments produced new air regulations and concepts, and BRAC actions must comply with these regulations.

Air quality concerns will be most significant for bases located in non-attainment areas which will receive activities as a result of major redirects or realignments. Many such bases will have to perform a conformity determination, and may need to obtain emissions reductions credits in order to demonstrate conformity with the Clean Air Act. This memo defines these and other key air terms and issues, and may assist Commission members and staff in considering the air quality consequences of proposed BRAC actions.

POTENTIAL IMPACT ON BRAC

- Significant time and expense needed to quantify and estimate emissions and write conformity determination.
- A base's draft conformity determination could be challenged by the community or the local air district. If a conformity determination is litigated, reassignment and move schedules could be delayed.
- It may not be possible to make a conformity determination for various reasons (air credits might not be available to obtain, it may not be possible to modify the SIP, etc.) If a conformity determination cannot be attained, the military redirect cannot proceed unless the redirect is downsized or the action is legislatively excluded.
- Potential competition between military and community over air credits in areas where one BRAC installation closes and another one receives activities.

AIR QUALITY TERMS

Attainment area: A geographic area in which levels of a criteria air pollutant meet the health-based primary standard (national ambient air quality standard, or NAAQs) for the pollutant. An area may have an acceptable level for one criteria air pollutant, but may have unacceptable levels for others. Thus, an area could be both attainment and nonattainment at the same time. Attainment areas are defined using the NAAQs set by EPA.

Non-Attainment area: A geographic area in which levels of a criteria air pollutant does not meet the health-based primary standard.

Maintenance area: An area formerly in nonattainment which has met attainment standards, but which needs to maintain these standards for an established number of years to be reclassified as an attainment area.

Criteria Air Pollutants: Common air pollutants (such as carbon monoxide, ozone) regulated by EPA on the basis of criteria (information on health and/or environmental effects of pollution).

State Implementation Plan (SIP): Each state submits to EPA a plan (SIP) designed to attain and maintain national air quality standards according to an established schedule. A SIP consists of a detailed description of the programs a state will use to carry out its responsibilities under the Clean Air Act and a demonstration (using air quality modeling) that the SIP will provide for attainment of the National Ambient Air Quality Standards by the Clean Air Act attainment date.

Conformity: The Clean Air Act prohibits a federal agency from supporting an action unless the responsible federal agency determines that the action conforms to the applicable air quality implementation plan for the area. Examples of actions supported by the federal government might include airport expansion activities, federal construction projects, and review and approval of dredging permits. Conformity to an applicable SIP means that the federal actions:

- will not cause or contribute to new violations of any federal ambient air quality standards;
- will not increase the frequency or severity of any existing violations of federal ambient air quality standards; and
- will not delay the timely attainment of federal ambient air quality standards.

A conformity determination is required when the total of direct and indirect emissions caused by a federal action for any given year of a project in a nonattainment or maintenance area exceed specified low-level annual thresholds for the criteria pollutants.

Offset: A method used in the Clean Air Act to give companies which own or operate major sources in non-attainment areas flexibility in meeting overall pollution reduction requirements when changing production processes. If the owner or operator of the source wishes to increase release of a criteria air pollutant, an offset (a reduction of a somewhat greater amount of the same pollutant) must be obtained either at the same plant or by purchasing offsets from another company in the same nonattainment area..

Emission Reduction Credit (ERC): A type of offset which enables the military (or other federal agency) to quantify the direct and indirect emissions associated with the proposed federal action as a means of making a conformity determination. Local districts can establish banking programs as part of their State Implementation Plans to store qualified emission reduction credits (ERCs) for later use in offset trades. These reductions must be real, permanent, quantifiable, surplus, and enforceable in order to be banked. Air districts can credit only those reduction that go beyond reductions already required in a rule or regulation. Banking programs usually require

DRAFT/page 3

that the source apply for the emission reduction credit within a certain time from the date of curtailment or shutdown.

QUESTIONS AND ANSWERS FOR BASES RECEIVING ACTIVITIES IN BRAC 95:

A receiving base is in a non-attainment area and the military needs to demonstrate that new activities can conform to the SIP. How can conformity be demonstrated?

The military can show conformity one of five ways:

1) the total of indirect and direct emissions of the action have specifically been identified in the applicable SIP.

2) Complete emission offsets for certain specified pollutants are obtained for all direct and indirect emissions associated with the proposed military redirect.

3) The action meets the areawide or local modeling criteria set forth in the rule for certain pollutants, and modeling demonstrates that the action will not cause additional violations of air quality standards.

4) Where there is no post-1990 EPA-approved SIP for a particular area, the determination is made that the action will not cause a net increase in total emissions compared the appropriate baseline year.

5) The State agrees to revise its SIP to accommodate the action's emissions. The State can agree only if it demonstrates that all other SIP requirements are being implemented, it determines that the military redirect has pursued all reasonable mitigation measures, and the military has completed all the air quality analysis needed for a conformity determination. Thereafter, the State is held accountable to rewrite its SIP for federal approval.

Is a conformity determination required to be made for a closing base?

A closure decision does not require conformity analysis. Disposal of property on a closing base could require it, however, because the military and reuse groups may each seek offsets or air credits which the closure would make available for new uses.

How can a receiving base obtain offsets or emission reduction credits in order to make a conformity determination?

The military has various options for obtaining offsets:

- 1) Gain offsets from within the base by reducing other emission-generating functions;
- 2) Obtain offsets or credits from a BRAC 95 closing or realigning base in the same air district;
- 3) Obtain offsets or credits from prior BRAC realignment or closure in the same air district if it can be determined that these credits are still available;

4) Obtain credits from a market for emissions credits, if such a market exists in the air district.

Bear in mind that the receiving base may be openly competing with reuse or community interests for offsets or credits in options 2 and 3.

Air Issues Impacting Closing, Realigning, and Receiving Bases:

Monetary Constraints: If air credits or planning offsets are not available for installations which will receive activities, the military may need to purchase ERCs in the open market. These credits may not be readily available and may be extremely expensive. Application fees are also part of the transaction costs. The process of applying for air credits can be costly in quantifying emissions, paying application fees, and performing conformity analysis. Prior DoD experience indicates that the cost for a major redirect or realignment ranges from \$60,000 to \$100,000. Although air credits or offsets from a closing base in a nonattainment areas are valuable, a base commander may be reluctant to spend money from the base's own BRAC cleanup funds to secure air credits which will benefit new activities in the community or other military bases in the area, but won't benefit the base itself.

Time Constraints: Completing a conformity determination and the environmental impact statement often required when a base receives new military activities can require a year or more. The determination must be complete before the new military activities commence.

Quantifying Emissions: Emissions can be difficult to quantify. A base may not have maintained the necessary data that could be used to quantify emissions. Operations may have slowed down from previous levels so that it is difficult to accurately measure true emission levels, further constraining closing bases from applying for emissions. Air districts may have short timelines for applying for credits (for example, 90 days is the limit in California's South Coast district).

Competing demands for credits or planning offsets: Military installations that are remaining open or expanding in their local air basin may need credits or planning offsets for conformity determinations or for new source permits. The military may seek to apply credits or offsets from closing or realigning installations in the same air district to the receiving base, thereby demonstrating conformity for their expanding mission. Meanwhile, reuse groups for the closing installation may be interested in obtaining air credits or planning offsets to win approval from other federal agencies (e.g., the Federal Aviation Administration) for proposed projects, or as a means of attracting business and revitalizing economic activity at closing bases.

Environmental Analysis Process

Gary Miller
Environmental Analyst

Policy

- Section 2913 of the Defense Base Closure and Realignment Act of 1990 (Public Law 101-510), codified at 10 U.S.C. § 2687 note, as amended by Fiscal Year 2002 Department of Defense Authorization Act (Public Law 107-107) (the "BRAC law"), sets forth the selection criteria to be used by the Secretary of Defense (the "Secretary") in making recommendations for closure or realignment of military installations located within the United States and its territories. Section 2913(c)(4) of the BRAC law sets forth "other criteria" to be used by the Secretary, specifically:
 - The environmental impact, including the impact of costs related to potential environmental restoration, waste management, and environmental compliance activities.

Policy

- Two memorandums provided further direction to the Department of Defense in the implementation of Criteria 8.
 - Policy Memorandum Four dated December 7, 2004. "Transformation Through Base Realignment and Closure (BRAC 2005) Policy Memorandum Four – Selection Criteria 7 and 8" clarified how it would consider the environmental impact of different closure and realignment scenarios as it develops its closure and realignment recommendations.
 - Policy Memorandum Eight dated January 4, 2005. "Transformation Through Base Realignment and Closure (BRAC 2005) Policy Memorandum Eight – Selection Criterion 8" clarified how Criteria 8 would be applied to leased property.

Approach and Process Used to Assess Environmental Impact

- Selection Criteria 8 – Environmental Impact
- Requires DOD to also consider:
 - Impact of cost related to waste management
 - Impact of cost related to compliance activities
 - Impact of cost related to potential environmental restoration
- Process was developed by a Joint Process Action Team (JPAT)

Approach and Process Used to Assess Environmental Impact

- The first data call generated certified environmental data in 10 resource areas:
 - Air Quality
 - Cultural/Archeological/Tribal Resources
 - Dredging
 - Land Use Constraints/Sensitive Resource Areas
 - Marine Mammals/Marine Resources/Marine Sanctuaries
 - Noise
 - Threatened and Endangered Species/Critical Habitat
 - Waste Management
 - Water Resources
 - Wetlands

Approach and Process Used to Assess Environmental Impact

- To facilitate the use of the data the JPAT developed three products to assist in the environmental analysis:
 - Installation Profile
 - Summary of Scenario Environmental Impacts
 - Summary of Cumulative Environmental Impacts

Environmental factors constitute a significant aspect of BRAC analysis

- Environmental data related to installation capacity: Air Quality; Noise Zones extending off-installation; Buildable Acres
- Environment data related to the assessment of military value: Air Quality; Water Resources; Noise Restrictions; Buildable Acres; Urban Sprawl
- During scenario development, environmental profiles highlighting the 10 resources areas
- Cost of Base Realignment Actions

Environmental Cost in COBRA

- Base Operating Support
 - Recurring costs of compliance
 - Recurring costs of pollution prevention
 - Recurring costs of conservation
- One-time Cost related to BRAC scenarios
 - Environmental Baseline Surveys
 - Shut down cost
 - Permit acquisitions
 - NEPA Documentation
- Capacity related cost
 - Incurred when a BRAC action exceeds the environmental capacity of an installation

Environmental Restoration

- Costs were not considered in the payback calculations
- DOD is legally obligated to complete environmental remediation
- GAO report feels this prevents the closing of only clean facilities

Environmental Restoration

- Impacts on the 33 major closures
 - Cost to complete environmental restoration \$362.08 million
 - Army \$144.91 million
 - Navy \$121.40 million
 - Air Force \$95.77 million
 - Remedy complete dates, range from 2011 to 2032
 - Land use controls will restrict reuse
 - Resources will be needed to expedite the completion of the cleanups to allow for redevelopment

Other Impacts to Environmental Restoration

- Costs to remediate operational ranges and chemical weapons were not included in the environmental restoration cost estimates
- Of the 14 major Army closures, 9 list operational ranges requiring military munitions response program (MMRP) action and 2 list potential MMRP action and 2 indicate potential buried chemical weapons

Other Impacts to Environmental Restoration

- Impacts on the 33 major closures
 - Based upon the limited amount of data, an estimated cost to complete MMRP is \$600 million (only some of the facilities included this in the FY03 annual report to Congress and is given as a range for others)
 - The Army will be responsible for \$567 million and the Navy \$33 million
 - No cost is provided for remediation of the potential chemical weapons material

Other Impacts to Environmental Restoration

- Cost to Complete data does not include cost of controlled burning, decontamination or demolition of industrial structures heavily contaminated with explosives
- Of the 33 major closures, 6 indicate this is a potential issue and provide a range of cost for this of \$1 million to \$10 million for each facility

Summary

- Environmental Restoration cost including the cost associated with the Military Munitions Response Program are substantial
- If structures at closing facilities are heavily contaminated, DoD may need to decontaminate and these cost are not currently captured by the Environmental Restoration cost to complete
- Current completion dates for environmental restoration may impact reuse

**POTENTIAL AGENDA
ENVIRONMENTAL HEARING
AUGUST 11, 2005**

A. DOD POLICY REGARDING ENVIRONMENTAL ISSUES

B. DOD POLICY RELATING TO BRAC ISSUES

C. ENVIRONMENTAL IMPACTS AT GAINING FACILITIES (National Environmental Policy Act)

- 1. Increased Air Pollution (Clean Air Act)**
- 2. Increased Water Consumption (Safe Drinking Water Act)**
- 3. Increased Waste Water Treatment (Clean Water Act)**
- 4. Increased Solid/Hazardous Waste Generation (Resource Conservation Recovery Act)**
- 5. Cultural and Resource Planning**
 - a. Increased Noise Issues**
 - b. Prehistoric and Historic Sites**
 - c. Endangered Species Act**
 - d. Migratory Bird Protection**
 - e. Marine Mammal Protection**
 - f. Wetlands Protection and Mitigation**

D. ENVIRONMENTAL ISSUES AT CLOSING FACILITIES

- 1. Closure Implementation Process**
 - a. Pecking Order for Property Transfer**
 - b. Factors Affecting Cleanup Costs**
 - i. Current Use Versus Proposed Reuse (Local Redevelopment Authority)**
 - ii. Risk Mitigation Approach (Remediation versus Institutional Controls)**
 - iii. Contaminated Media (soil, air, surface water, groundwater)**
 - iv. Risk Mitigation (source, pathway, receptor)**

E. NUMBER OF INSTALLATIONS REQUIRING CLEANUP BRAC 2005

- 1. Closures**
- 2. Realignments where turnover is involved**
- 3. Reuse Issues**
 - a. Conflicts between closing installation and Federal, State regulatory agencies**
 - b. Conflicts between current and proposed use**
 - c. Interservice conflicts**

F. KNOWN ISSUES ON INSTALLATIONS

G. METHODS OF COSTING

H. COBRA COSTS CAPTURED

I. UNCAPTURED COSTS

5.4.95

To: Marilyn Wasleski

From: Deirdre Nurre

RE: Environmental Issues: Ogden Versus Sharpe/Tracy

During the Commission's site visit to Defense Depot Ogden (DDOU), questions were raised about the Sharpe/Tracy facility's ability to accept hazardous storage from DDOU. I spoke with Walt Larsen of the State of California Cal/EPA, and Eudith Hendricks and Wesley J. Harris of Defense Distribution West to look into the statements submitted by Alicia Richardson for Mike Pavich of Hill/DDO '95 Inc. Both of the DDRW staff have regional responsibilities including both DDRW and DDOU.

1) Richardson states that "it is questionable if the VOC emission aspect of moving DDOU stocks to California has been considered. It may not be possible under current law." While it is possible that VOCs may increase at Sharpe/Tracy due to additional stocks, I see no clear reason why the "VOC emission aspect of moving current stocks to California" would be a problem under current law. Sharpe and Tracy are in a nonattainment area, but it is unlikely that increased movement of stocks would trigger clean air act conformity requirements. At maximum, approximately 300 persons would be moving to Sharpe/Tracy. This number is unlikely to trigger conformity requirements.

2) Richardson states that the Part B permit currently held by California depots would require modification to add necessary EPA waste codes, and that California requires an initial deposit of \$25K plus \$100/hr review fees to research and make these changes.

According to DDRW, the hazardous waste facility constructed was built to accommodate hazardous waste storage for Tracy, Castle AFB, and Rough and Ready. The latter two facilities never made use of the capacity because they closed. Because the facility was designed with this large capacity, it has the maximum size Part B permit for hazardous waste storage. DDRW staff state that the facility will not need to apply for additional waste codes unless DLA wants to store pyrotechnics or explosives, the only two items for which Tracy would need a permit modification.

According to Walt Larsen, Director of the Fees Unit for Cal/EPA, a permit modification could cost anywhere from \$2000 minimum, up to 40% of the permit fee for a large facility. Tracy is permitted as a large facility.

3) According to Richardson, California requires a hazardous waste facility fee for waste processed. This would cost at least \$16,000/year for the amount of material that DDOU mission material generates (250 tons).

DDRW replies that Sharpe and Tracy would pay a higher facility waste fee if they were to acquire additional hazardous waste as a result of DDOU closing. DDRW staff note that hazardous waste facility fees are paid currently by Sharpe, Tracy, and Ogden. They note further that management changes which are currently being planned to reduce hazardous waste storage at Tracy would help to limit the hazardous waste facility fee.

3) Richardson says that California charges manifest fees for each manifest containing hazardous material and a correction fee for each manifest improperly completed. DDOU processes about 100 manifests/year.

California charges \$12 per manifest for hazardous material shipment or \$6 for recycled hazardous materials shipment. Since DDOU processes 100 manifests per year, it appears that additional manifest fees would not run over \$1200 a year. I have no information on the "correction fee", but assuming it is less than the fee for a manifest itself, it must be under \$12.

4) Richardson states that "California depots have been assessed \$19,000 in environmental fines and penalties. DDOU has received none. Additional violations with high fine potential were documented during FY'94 inspections. Fines assessed were unknown at this time."

DDRW confirmed that notice of violation was made by the State of California against Sharpe in February of 1994. The violation was made for recordkeeping and for holding some items in excess of one year. DDRW attributed the problem to poor tracking by DRMS, and added that new recordkeeping is in place for building 605 where the problem occurred.

DDRW further noted that an internal DLA operational review of hazardous materials operations generated 6 notices of problems in this area at DDOU. The review was conducted in October/November 1994.

In my view, the violations don't seem particularly significant to the closure/realignment decision. To the extent that fines are imposed to induce better compliance with environmental waste law, one could infer that California depots are running a better environmental program than they did before.

The information provided does not allow us to reach a conclusion that Ogden necessarily runs a cleaner program than Sharpe or Tracy. It is unclear whether the California or Utah environmental inspection program are equally vigilant.

5) Richardson states that there are 16 active underground storage tanks at the two California depots. DDOU has removed all their tanks. Underground tanks are a tremendous environmental liability.

While it may have been a good management decision on DDOU's part to have removed their underground tanks, such tanks exist on most military facilities and may have to be cleaned up in the future if they leak. Continuing to operate at DDOU will not prevent the military from having

to investigate and/or clean up underground tanks at Sharpe/Tracy. The military will be financially liable for the Sharpe/Tracy tanks regardless of closing DDOU or keeping it open.

6) Richardson's concluding paragraph implies that DDOU has special facilities, a specially trained and experienced workforce, and a track record of success which DDRW does not. My impression is that although DDRW will need to add storage capacity for hazardous materials (an activity for which no special permits are needed), it seems to have sufficient capacity, permits, and staff experience to accept hazardous waste storage activity. Costs will increase for Tracy's hazardous waste facility fee and for additional manifests, but DLA will no longer be paying a hazardous waste facility fee at DDOU.