10.0 Environmental Action Plan

10.1 Purpose

The purpose of this Environmental Action Plan (EAP) is to delineate the steps necessary to complete the action(s) identified for Fort Monmouth in the Department of Defense Base Closure and Realignment Report (May 2005). Cost and schedule estimates will provide a baseline for planning, budgeting, and executing BRAC actions should the President and Congress ratify the DOD BRAC recommendation for Fort Monmouth.

10.2 Assumptions

Fort Monmouth developed this EAP with the assumption that the DOD BRAC recommendation for Fort Monmouth will be approved as stated in the Department of Defense Base Closure and Realignment Report (May 2005). Fort Monmouth further assumes that no other (non-BRAC) significant changes to the Fort Monmouth mission will occur in the BRAC 2005 timeframe (FY06-FY11) and that BRAC funding will be available to conduct these actions when requested. All estimated costs are reported in constant FY07 U.S. dollars.

BRAC 05 recommends closing Fort Monmouth and realigning both mission functions and major tenants into multiple locations that result in consolidation of like or similar functions into synergy specific installations to increase efficiencies and reduce costs. Key to this closure is the relocation of CECOM, a Major Subordinate Command of the AMC, to Aberdeen Proving Ground as a complement to the synergy being established at Aberdeen. Utilization of the total capacity of the RDT&E Command is enhanced by consolidation. Non-RDT&E tenants/activities are being realigned to installations that have like mission functions where Army and DOD synergy is enhanced.

10.3 General

Fort Monmouth is in compliance with its environmental permits; however certain Government-owned/operated utilities (sanitary sewage collection, stormwater) need modifications to meet new regulatory requirements. Utilities would remain in service; environmental permits authorizing these operations would have to be transferred to the local reuse authority. The installation's Title V Air Permits would also have to be transferred so that operation of building heating boilers and emergency generators could continue.

Property transfers would involve closing and cleanup of certain operations,

services and facilities including the following:

- Firefighters Training Academy and a pistol range which is under construction (Training/Testing);
- Base support maintenance shops, motor pool, storage yards, mission related shops (Industrial/Maintenance)
- Hazardous waste 90-day storage, base support warehouses, roads & ground storage yards, mission related storage (Storage/Warehousing)
- Radioactive source material at the CECOM Directorate of Safety

● Restoration

Suspected hazardous waste sites were initially identified at Fort Monmouth in a 1980 report prepared by the U.S. Army Environmental Center (USAEC). This report identified an initial 37 sites with known or suspected waste materials on the Main Post and the two sub posts (Charles Wood and Evans Area). In February 1993, the Directorate of Public Works (DPW) entered into a written agreement with the New Jersey Department of Environmental Protection (NJDEP) to investigate all areas of known or suspected contamination. With the onset of BRAC 93, all Evans related issues were removed from further consideration under the PA phase. The CECOM BRAC Office became the lead agency for managing all BRAC 93 program initiatives for the Evans Area.

Fort Monmouth has a total of 43 IRP sites. Thirty seven sites are response complete (RC). Six sites are in active remediation. Eleven sites are being addressed under a long term monitoring (LTM) program. The NJDEP administers all sites. There is no National Priority List site.

10.4 Concept of Operations (For Closures)

Action	FY06	FY07	FY08	FY09	FY10	FY11	Total
Programmatic Environmental Review	$	$	$	$	$	$	$
ECP Phase I	$	$	$	$	$	$	$
ECP Phase II	$	$	$	$	$	$	$
Compliance	$	$	$	$	$	$	$
Cleanup	$	$	$	$	$	$	$
Totals	$	$	$	$	$	$	$

BRAC related costs are captured in Attachment C, Exhibits FM-2-A & FM-2-AC.

10.4.1 Database Entries / Updates

Environmental cleanup data is updated semiannually in AEDB-R and AEDB-CC. Existing projects will be updated in the spring of 2006 to reflect new BRAC requirements. New projects will be added to AEDB-R in the spring of 2006.

10.4.2 Interaction with Environmental Regulators (For closures)

Fort Monmouth currently holds a number of environmental permits issued by the New Jersey Department of Environmental Protection authorizing air source operations, stormwater discharges, and underground storage tanks for petroleum products. The Installation is also a generator of hazardous waste with 90 day storage facilities and also operates a Universal Waste facility. The permits and registrations associated with these activities would need to be transferred to the local reuse authority in order for these facilities to continue to be maintained in a caretaker mode until final disposition of the Installation takes place.

The DPW enjoys an excellent working relationship with the New Jersey Department of Environmental Protection which will allow the Installation, at the proper time, to transfer and/or terminate applicable environmental permits.

Restoration Program

In February 1993, the Directorate of Public Works (DPW) entered into a Memorandum of Agreement (MOA) with the NJDEP to investigate all areas of known or suspected contamination and remediate per State laws and regulations.

The following permits are in effect:

DESCRIPTION		PERMIT#/ P. I.#/UST#	EXPIRATION
Title V Air Permit-Main Post		P.I. #21140	August 11, 2008
Title V Air Permit-Charles Wood		P.I. #21141	August 11, 2008
Public Complex General Stormwater-Main Post		NJG0148555	February 28, 2009
Public Complex General Stormwater-Charles Wood		NJG0148571	February 28 2009
Suneagles Golf Course Water Allocation Permit (non-potable irrigation water)		WAP960001/ PI 2486P	December 31, 2013
Underground Storage Tanks:			
Main Post: 10 tanks		UST# 90010; 81533	Dec 31, 2006
Charles Wood: 3 tanks		UST# 81515	Dec 31, 2006
Hazardous Waste			
Main Post ID Number:		NJ3210020597	No expiration date
Charles Wood ID Number:		NJ2210020978	No expiration date
Class D/Universal Waste Facility		CDG050001	February 18, 2010
Oil Spill Debris (Certificate of Authority to Operate)		None	June 25, 2007
Restoration			
FTMM-53 Bldg. 699 Remediation System-Sanitary Sewer		TWA #010020	N/A
FTMM-22 Bldg. 2700 Remediation System-Sanitary Sewer		TWA #020226	N/A
Corrosive Neutralizing System		TWA #01-0449	N/A

10.4.3 Restoration Advisory Board (RAB) Formation (For closures only)

No risk to human health or the environment is evident; therefore, a restoration advisory board (RAB) was not established for the IRP. The DPW continues to keep both the Fort Monmouth and surrounding communities apprised of restoration activity through the use of public notices and the continued maintenance of our information repositories located at the Van Deusen Library (On-Post) and at the Monmouth County Public Library-Shrewsbury Branch in Shrewsbury, NJ. Community interest has been minimal.

10.4.4 Environmental Condition of Property (ECP) (For closures only)

The ECP is currently being prepared by AEC. Subject plan will undergo extensive review by the U.S. Army Garrison Fort Monmouth. A timeline has yet to be determined for completing the ECP. Timelines for completing the major components of the ECP are also pending at this time.

10.4.4.1 Programmatic Environmental Review (PER) (For closures only)

The PER action is in the hands of AEC at this time. The DPW is working with AEC to develop PER costs.

10.4.4.2 Phase I Environmental Condition of Property (ECP) (For closures only)

The DPW, along with other garrison activities, will conduct a comprehensive review of the Phase I ECP in accordance with established milestones.

10.4.4.3 Phase II Environmental Condition of Property (ECP) (For closures only)

No actions are being taken at this time concerning the implementation of the Phase II ECP. The Phase I ECP is still under development and a timeline for its completion has yet to be established.

10.4.5 BRAC Installation Action Plan (BIAP) (For closures only)

Describe the coordination and scheduling requirements to complete the BIAP. This should include a discussion of the initial BIAP workshop as part of the process to initiate dialogue with the regulators, RAB, and local reuse authority (LRA).

10.4.6 Workplan Development Package

- Perform radiological assessment and scoping survey
- Continue ongoing efforts at 17 Installation Restoration Program sites
- Cap 9 former solid waste landfills
- Investigate and cleanup soils impacted from the historical use of pesticides and herbicides post wide
- Conduct asbestos survey, where necessary, and remediate all friable asbestos identified
- Conduct lead based paint assessment for all residential housing units
- Initiate closure or transfer of the Class D/Universal Waste Recycling Facility at the appropriate time
- Collect and dispose of excess hazardous materials prior to property transfer

10.5 Concept of Operations (For Gaining Installations) – Not Applicable

10.6 POC List / Collaborator List (Army Component, Agency, Personnel, etc.)

A single primary POC should be identified for each garrison, and at least one alternate POC. HQ IMA POC is an alternate to the Region POC. Add the following POCs to the BRAC-D list:

	POC Name	POC Phone	POC Email
BRAC 2005 Environmental Action Plan (EAP) Guidance POC	Mr. Michael Doherty	703-601-1950	Michael.Doherty@hqda.army.mil
BRAC 2005 EAP Guidance Alternate POC	Mr. Todd Beckwith	410-436-1607	Todd.Beckwith@us.army.mil
BRAC 2005 EAP Guidance Alternate POC	Mr. Tim Julius	703-602-2768	Timothy.Julius@hqda.army.mil
BRAC 2005 EAP Guidance Alternate POC	Ms Kristine Kingery	703-601-1598	Kristine.kingery@hqda.army.mil
BRAC 2005 EAP Guidance Alternate POC	Mr. Bryan Frey	703-601-1950	Bryan.Frey@hqda.army.mil
Installation POC	Mr. Dinkerrai M. Desai	732-532-1475	Dinkerrai.Desai@Mail1.monmouth.army.mil
Alternate (optional)			
Regional Readiness Center (RRC) POC			
Facility POC			

10.7 Completed Forms / Attachments

BRAC related environmental costs can be found at Attachment C, Exhibits FM-2-A & FM-2-AC.

Form / Attachment	File Name

Table 10-2. Completed Form/Attachments

Attachment A

Examples:
Operations, services and facilities impacted by BRAC

1 - Training/Testing Operations

Provide training/testing area name, type of training/testing, BRAC recommended change(s), environmental impact(s), environmental requirement, and one-time implementation costs.

The Fort Monmouth Fire Department is a 40 man Department, consisting of 1 Fire Chief, 2 Deputy Fire Chiefs, 1 Battalion Chief, 1 Fire Inspector and 35 Firefighters.

There would be no environmental impacts or training requirements within the Fire & Emergency Services Division necessary to implement the BRAC changes.

The Fire & Emergency Services Division trains consistently on job requirements and performances throughout the year.

Name of test/train area	Type of current testing/training	Recommended change	Environmental impact(s)	Environmental requirement	Implementation cost
Indoor Small Arms Range	Small arms	Indoor small arms range is currently under construction. It is not operational at this time.	Range is designated as a “green range”. The range will be completely lead free.	None identified at this time.	Not determined at this time.
Fire Training Center	Fire fighter training, hazardous materials spill response training.	None at this time.	No environmental impacts identified at this time.	None identified at this time.	Not determined at this time.

2 - Industrial/Maintenance Operations

Provide facility/operation name, type of operation, changes the garrison anticipates from implementing the BRAC recommendation, environmental impact, environmental requirement, and one-time implementation cost.

Name of facility/operation	Type of current operation	BRAC recommended change	Environmental impact(s)	Environmental requirement	Implementation cost
All Office Buildings	Administrative	Closure	Universal Waste (UW) generation.	Dispose using established procedures.	Transportation, Labor & Disposal TBD.
Bldg. 166	Road Shop Material, Equipment Storage	Closure	Hazardous Waste (HW), UW and NJ Class D Waste generation.	Dispose of HW, UW and NJ Class D Waste using established procedures. Transfer usable materials and equipment to other installations as directed by DOD.	Transportation, Labor & Disposal TBD.
Bldgs. 173 & 174	Environmental Laboratory	Closure	HW, UW and NJ Class D Waste generation.	Dispose of HW, UW and NJ Class D Waste using established procedures. Transfer usable materials and equipment to other installations as directed by DOD.	Transportation, Labor & Disposal TBD.
Bldg. 273	Garrison Fuel Station – 3 USTs	Closure	None anticipated.	Close UST systems IAW NJDEP UST closure proc. and N.J.A.C. 7:26E	TBD
Bldgs. 279, 280, 281, 484	Maintenance shops	Closure	HW, UW and NJ Class D Waste generation. Air emission sources.	Dispose of HW, UW and NJ Class D Waste using established procedures. Transfer usable materials and equipment to other installations as directed by DOD. Remove emissions control sources from Air Permit as required.	Transportation, Labor & Disposal TBD.

Name of facility/operation	Type of current operation	BRAC recommended change	Environmental impact(s)	Environmental requirement	Implementation cost
Bldg. 293	Battery Test Facility	Transfer	UW generation.	Dispose of UW using established procedures. Transfer usable materials and equipment to other installations as directed by DOD.	Transportation, Labor & Disposal TBD.
Bldgs. 482, 484 & 2625	Class D/Universal Waste Recycling Facility	Closure	UW and NJ Class D Waste generation. Air emission sources.	Dispose of HW, UW and NJ Class D Waste using established procedures. Transfer usable materials and equipment to other installations as directed by DOD. Remove emissions control sources from Air Permit as required.	Transportation, Labor & Disposal TBD.
Bldg. 488	Drum Washing Facility	Closure	NJ Class D Waste generation.	Dispose of NJ Class D Waste using established procedures. Transfer usable materials and equipment to other installations as directed by DOD.	Transportation, Labor & Disposal TBD.
Bldg. 699	AAFES Gas Station – 6 USTs	Closure	Potential soil and groundwater contamination	Close UST systems IAW NJDEP UST closure proc. and N.J.A.C. 7:26E	TBD
Bldgs. 750, 753 & 754	Motor Pool	Closure	HW, UW and NJ Class D Waste generation.	Dispose of HW, UW and NJ Class D Waste using established procedures. Transfer usable materials and equipment to other installations as directed by DOD.	Transportation, Labor & Disposal TBD.
Bldg. 760	Radio Repair Shop	Closure	UW and NJ Class D Waste generation.	Dispose of UW and NJ Class D Waste using established procedures. Transfer usable materials and equipment to other installations as directed by DOD.	Transportation, Labor & Disposal TBD.

Name of facility/operation	Type of current operation	BRAC recommended change	Environmental impact(s)	Environmental requirement	Implementation cost
Bldg 1122	Auto Craft Shop	Closure	HW, UW and NJ Class D Waste generation.	Dispose of HW, UW and NJ Class D Waste using established procedures. Transfer usable materials and equipment to other installations as directed by DOD.	Transportation, Labor & Disposal TBD
Bldg. 1203	One 10,000 gallon UST supporting 2 emergency generators.	Transfer	Potential soil and groundwater contamination	Close UST systems IAW NJDEP UST closure proc. And N.J.A.C. 7:26E	$19,572
Bldg. 1220	Boiler Plant	Closure	UW and NJ Class D Waste generation.	Dispose of UW and NJ Class D Waste using established procedures. Transfer usable materials and equipment to other installations as directed by DOD.	Transportation, Labor & Disposal TBD
Bldg. 2071	Golf Course Maintenance Shop	Closure	UW and NJ Class D Waste generation.	Dispose of UW and NJ Class D Waste using established procedures. Transfer usable materials and equipment to other installations as directed by DOD.	Transportation, Labor & Disposal TBD
Bldgs. 2502-2507	Fabrication and technical support facilities	Transfer	HW, UW and NJ Class D Waste generation. Air emission sources.	Dispose of HW, UW and NJ Class D Waste using established procedures. Transfer usable materials and equipment to other installations as directed by DOD. Remove emissions control sources from Air Permit as required.	Transportation, Labor & Disposal TBD.
Bldg. 2535	Battery Test Facility	Transfer	UW and NJ Class D Waste generation.	Dispose of UW and NJ Class D Waste using established procedures. Transfer usable materials and equipment to other installations as directed by DOD.	Transportation, Labor & Disposal TBD

Name of facility/operation	Type of current operation	BRAC recommended change	Environmental impact(s)	Environmental requirement	Implementation cost
Bldg. 2540	Radiological Testing Lab	Transfer	Compliance with NRC license.	Decommission lab in accordance with NRC license.	TBD
Bldg. 2700	R&D Labs	Transfer	HW, UW and NJ Class D Waste generation.	Dispose of HW, UW and NJ Class D Waste using established procedures. Transfer usable materials and equipment to other installations as directed by DOD.	Transportation, Labor & Disposal TBD
Bldg. 2704	Environmental Test Facility	Transfer	NJ Class D Waste generation.	Dispose of NJ Class D Waste using established procedures. Transfer usable materials and equipment to other installations as directed by DOD.	Transportation, Labor & Disposal TBD
Bldg. 2567	AAFES Gas Station – 3 USTs	Closure	Potential soil and groundwater contamination	Close UST systems IAW NJDEP UST closure proc. and N.J.A.C. 7:26E	TBD

3 - Storage/Warehousing

Provide name of storage or warehouse facility, types of stored materials, the BRAC recommended change, environmental impacts, environmental requirement, and one-time implementation cost.

Name of facility	Type(s) of stored materials	BRAC recommended change	Environmental impact(s)	Environmental requirement	Implementation cost
Bldg. 63	Lumber & building supplies (incl. roofing cement)	Closure	Turn in excess hazardous materials. Evaluate materials for reuse or disposal.	Inventory and transfer all materials to other installations as directed; dispose of unusable materials using established procedures.	Labor & Disposal TBD.
Bldgs 116 & 117	Various supplies for all locations	Closure	Turn in excess hazardous materials. Evaluate materials for reuse or disposal.	Inventory and transfer all materials to other installations as directed; dispose of unusable materials using established procedures.	Labor & Disposal TBD.
Bldgs. 121, 122 & 123	Main Post 90 Day HW Storage Facility	Closure	Notify USEPA and NJDEP of closure and terminate generator ID #.	Dispose of HW, UW and NJ Class D Waste using established procedures.	Labor & Disposal TBD.
Warehouse behind Bldg. 292	Furniture, supplies, ADP equipment	Closure	Turn in excess hazardous materials. Evaluate materials for reuse or disposal.	Inventory and transfer all materials to other installations as directed; dispose of unusable materials using established procedures.	Labor & Disposal TBD.
Bldg. 480	Maintenance Supplies	Closure	Turn in excess hazardous materials. Evaluate materials for reuse or disposal.	Inventory and transfer all materials to other installations as directed; dispose of unusable materials using established procedures.	Labor and transportation TBD.
Bldg. 481 (Make-it-Happen Center)	Do-it-Yourself Center (Supplies and Equipment)	Closure	Turn in excess hazardous materials. Evaluate materials for reuse or disposal.	Inventory and transfer all materials to other installations as directed; dispose of unusable materials using established procedures.	Labor & Disposal TBD.
Bldg. 481 (Make-it-Happen Center)	Household Hazardous Waste (HHW) Storage	Closure	Facility needs to remain in operation as long as there are soldiers living on the installation.	Transfer HHW to Monmouth County HHW program using established procedures.	Labor and transportation TBD.

Name of facility	Type(s) of stored materials	BRAC recommended change	Environmental impact(s)	Environmental requirement	Implementation cost
Bldg. 497	Maintenance Supplies, plumbing and doors	Closure	Turn in excess hazardous materials. Evaluate materials for reuse or disposal.	Inventory and transfer all materials to other installations as directed; dispose of unusable materials using established procedures.	Labor and transportation TBD.
Bldg. 498	Archived documents, event handouts; misc. furniture	Closure	Transfer records to Local Reuse Authority (LRA) or as directed by DOD.	Inventory and transfer all documents to other installations or the LRA as directed by higher headquarters.	Labor and transportation TBD.
Bldg. 886	Outdoor recreation equipment; computer equipment	Closure	Turn in excess hazardous materials. Evaluate materials for reuse or disposal.	Inventory and transfer all materials to other installations as directed; dispose of unusable materials using established procedures.	Labor and transportation TBD.
Bldg. 900	Furniture; forklift for moving items	Closure	Turn in excess hazardous materials. Evaluate materials for reuse or disposal. *(NOTE: Building reported contaminated with pigeon droppings)*	Inventory and transfer all materials to other installations as directed; dispose of unusable materials using established procedures.	Labor and transportation TBD.
Bldg. 975	Furniture; forklift for moving items	Closure	Turn in excess hazardous materials. Evaluate materials for reuse or disposal.	Inventory and transfer all materials to other installations as directed; dispose of unusable materials using established procedures.	Labor and transportation TBD.
Bldg. 976	Notebook and handheld Computer Equipment; IT Forms & Publications	Closure	Turn in excess hazardous materials. Evaluate materials for reuse or disposal.	Inventory and transfer all materials to other installations as directed; dispose of unusable materials using established procedures.	Labor and transportation TBD.
Bldgs. 2630, 2631 & 2632	Charles Wood 90 Day HW Storage Facility	Closure	Notify USEPA and NJDEP of closure and terminate generator ID #.	Dispose of HW, UW and NJ Class D Waste using established procedures.	Labor & Disposal TBD.

4 - Medical Services

Provide name of the medical facility or service, the BRAC recommended change, environmental impacts, environmental requirement, and one-time implementation costs.

Patterson Army Health Clinic has no radiological waste that would require disposal. Any and all by products are disposed of on a recurring basis through a regulated medical waste contract with Steris Cycle. Under the contract regulated medical waste is picked up twice a month. The current annual fee for this contract is $2,950. From a facilities point of view we do not project any additional requirements from an environmental point of view.

Medical facility/service	BRAC recommended change	Environmental impact(s)	Environmental requirement	Implementation cost
Patterson Army Health Clinic – Bldg. 1075	Closure	Turn in excess hazardous materials. Evaluate materials for reuse or disposal.	Inventory and transfer all materials to other installations as directed; dispose of unusable materials using established procedures.	TBD
Veterinary Clinic Bldg. 810	Closure	Turn in excess hazardous materials. Evaluate materials for reuse or disposal.	Inventory and transfer all materials to other installations as directed; dispose of unusable materials using established procedures.	TBD

5 - Utilities

Provide type of utility, BRAC recommended change, environmental impacts, environmental requirement, and one-time implementation costs.

Name of utility	BRAC recommended change	Environmental impact(s)	Environmental requirement	Implementation cost
Electrical System	Transfer to Local Reuse Authority.	None	None	TBD
Natural Gas System	Utility owned by NJ Natural Gas.	None	None	None
Potable Water Distribution System	Transfer to Local Reuse Authority.	None	None	TBD
Stormwater Drainage System	Transfer to Local Reuse Authority.	Transfer Stormwater Phase II Public Complex Permits to Local Reuse Authority.	Continued compliance with Stormwater Phase II Public Complex Permits.	TBD
Telecommunication System	Transfer to Local Reuse Authority.	None	None	TBD
Wastewater (Sewer) System	Transfer to Local Reuse Authority.	None	Sewage pump stations require the addition of screens and/or comminutors to be in compliance with current regulations	TBD

6 - Leases

Provide name of leaseholder, type of current operation, BRAC recommended change, environmental impact(s), environmental requirement, and one-time implementation cost.

Name of leaseholder	Type of current operation	BRAC recommended change	Environmental impact(s)	Environmental Requirement	Implementation cost
Burger King	Restaurant		Operation generates cooking grease.	Proper disposal of cooking grease.	TBD

Attachment B
Specific BRAC Environmental Requirements

Specific BRAC Environmental Requirements

Compliance

Identify environmental requirements brought about or affected by the proposed BRAC action(s) in each of the following specific media areas. Identify: any permits, licenses, regulatory orders/agreements, etc. associated with the requirement; responsible parties in implementing the requirement; a detailed timeline; and costs.

RCRA

Fort Monmouth currently has two hazardous waste generator ID numbers and two 90 day hazardous waste storage yards and a household hazardous waste (HHW) storage facility for post residents. HHW will be accumulated and transferred to the Monmouth County HHW facility until all residents have been transferred.

Due to the variety of research, industrial, maintenance, and remedial activities that upon closure may generate hazardous waste and universal waste, the 90-day yards will remain active until transfer of the property is imminent. Wastes will be identified, accumulated, stored and disposed using existing methods and contracts. In order to properly identify wastes it will be necessary to maintain a competent level of laboratory support. At the time of closure, EPA Region 2 will be notified to deactivate the generator ID numbers. Excess hazardous materials that are turned in, prior to a mission's departure, will be evaluated for reuse. If it is determined that these materials cannot be reused, said materials will be properly characterized and processed for disposal using established procedures.

CAA

Fort Monmouth currently holds two Title V air permits (P.I. 21140-Main Post, P.I. 21141-Charles Wood). The facility is compliant with all requirements of the current air permits.

The permits will need to be either cancelled or transferred to the local reuse authority in order to remove source operating responsibility from the U.S. Army.

CWA

Fort Monmouth currently holds and maintains two NJDEP Phase II Public Complex General Stormwater permits; one for Main Post and one for the Charles Wood Area. Both permits, and their associated programs, must continue in full force until closure. At closure, the permits will either have to be cancelled or transferred to local municipalities. Since the local municipalities are a designated “Tier A” area under NJDEP stormwater regulations, it is likely that the permits will be transferred into existing municipal Tier A stormwater permits. This will probably require a final inspection by the NJDEP Bureau of Permits and Enforcement Division to determine that all stormwater programs are complete and meet the regulatory requirements. In addition, any demolition or construction work will require wetland impact determinations and transition area waivers and stream encroachment permits may need to be obtained for such work.

The Suneagles Golf Course Water Allocation Permit will need to be transferred to the local development authority so that the irrigation system can remain in operation.

SDWA

Fort Monmouth does not have a drinking water treatment facility. All drinking water is bulk purchased from New Jersey American Water Company. Base closure will not impact the local water use.

NCA

Per Environmental Noise Consultation NO 52-34-0662-91, dated 31 January 1991, US Army Environmental Hygiene Agency (Now CHPPM), no additional monitoring or survey work is required for the noise generated at Fort Monmouth.

TSCA

Fort Monmouth currently has 243 buildings that will need to be included in a BRAC Closure Asbestos Survey. These buildings total approximately 1,300,927 sq ft. The cost estimate for performing the survey is $590,000.00. There may be damaged/friable asbestos which could cost upwards of $200,000.00 to remediate.

Fort Monmouth currently has 86 housing units in the Russel (even numbers), Allen, Megill, Hope and Hemphill areas which will require Lead Base Paint surveys. The cost estimate to perform the survey is $130,000.00. Housing units in the Russel (odd numbers), Carty, Gossellin, Helms, Pinebrook and Mitchell are not included in this requirement because of previous renovation work performed at said locations.

NRC

First, understand that it is difficult to estimate the costs due to the complexity of the process that must be executed. This process would start with an assessment of all historical use of radioactive material at Fort Monmouth, to include not only CECOM, but also all other tenant activities. The summary you provided which was developed by David Alberth, USACHPPM, provides an adequate overview of potentially impacted locations.

Based on the type of materials and the use of the materials as uncovered by that historical assessment, locations will be classified to determine the level of scoping surveys that will need to be performed in order to determine if the area is releasable or if there is contamination present which would require decontamination to below acceptable release limits. If any of the potential contamination is fixed, it could require extraction and disposal of the actual building materials as part of the decommissioning effort. Although we would not expect the level of decontamination that was required at the Camp Evans Area, it is hard to determine what level of effort is actually needed until the assessment and scoping surveys are completed.

Note that the Nuclear Regulatory Commission requires licensees to file "Statements of Financial Assurance" in which they have identified potential decommissioning costs for certain levels of licensable material based on actual site closures over the last few decades. It is our opinion that the amount cited for these purposes would be the best estimate of what might be needed for the decommissioning of Fort Monmouth. Currently, that amount is $1.2 million.

The above cost estimate does not include transportation and set-up costs of the primary sources that need to be relocated to Aberdeen Proving Ground in order to continue our mission. Based on estimates we obtained for a previous data call from the Garrison, we estimate these costs to be approximately $130K.

Existing Cleanup

Installation Restoration Program (IRP)

Fort Monmouth has a total of 43 IRP sites. Thirty seven sites are response complete (RC). Six sites are in active remediation. Eleven sites are being addressed under a long term monitoring (LTM) program. The NJDEP administers all sites. There is no National Priority List site.

Program Specifics: Contaminants of concern are Chlorinated Compounds, Petroleum/Oil/Lubricants, Lead, Polychlorinated Biphenyls, Pesticides, Benzene, Arsenic, and Cadmium. Media of concern are soil, groundwater, and surface water. Cumulative funding through FY05 is $13,192K with the cost to complete (CTC) being $1,729K. The date for having all remedies in place was February 2003 with long term monitoring through 2010.

1. Six Active Sites M-2, M-5, CW-1, 699, 812, & 886 (DSERTS sites FTMM-02, 05, 22, 53, 64, & 66) required the development of active treatment technologies based upon contaminant concentrations and potential downgradient receptors.

- The M-2 Landfill site exhibits elevated levels of benzene and chlorobenzene in ground water. Elevated levels of PCBs were also identified within site soils. The selected remedial technology called for the initial injection of Enzyme Enhanced Bioremediation and subsequent injections of Oxygen Release Compounds (ORC) into shallow ground water to accelerate contaminant degradation. The DPW has incorporated a document equivalent to a Declaration of Environmental Restriction (DER) into the Fort Monmouth Installation Master Plan for the PCB soil contamination. A Classification Exception Area (CEA) for site ground water was filed with the NJDEP as part of the Remedial Action Work Plan submittal. The CEA restricts the use of ground water within a defined area until such time that contaminants of concern achieve compliance with the NJDEP Ground Water Quality Criteria. The cleanup strategy includes remedial action operations until the end of 2005 and then continued compliance monitoring of groundwater as a key component of monitored natural attenuation.

- The M-5 Landfill site exhibits elevated levels of PCE in ground water. The selected remedial technology called for the injection of Hydrogen Release Compound (HRC) into shallow ground water to enhance contaminant degradation. The cleanup strategy includes remedial action operations until the end of 2005 with continued compliance monitoring of groundwater as a key component of monitored natural attenuation.

- The CW-1 site exhibits elevated levels of TCE, PCE and DCE in ground water. The selected remedial technologies called for using a combination of a ground water pump and treat system, air sparging and soil vapor extraction techniques. The cleanup strategy includes system operation until the end of 2005 with continued compliance monitoring of groundwater as a key component of monitored natural attenuation.

- The 699 site exhibits high levels of benzene, ethyl benzene, toluene, xylene and MTBE in site soil and groundwater. The selected remedial technology called for using a combination of a ground water pump and treat system, air sparging and soil vapor extraction techniques. In addition, the use of Enzyme Enhanced Bioremediation products was stipulated for the localized treatment of soils. The cleanup strategy includes system operation until the end of 2008 with continued compliance monitoring of groundwater as a key component of monitored natural attenuation.

- The 812 site exhibits elevated levels of PCE, TCE, DCE, vinyl chloride, benzene, xylenes and lead in ground water. The selected remedial technology called for the injection of HRC into shallow ground water to enhance contaminant degradation. A CEA for site ground water was filed with the NJDEP. The cleanup strategy includes remedial action operations until the end of 2005 with continued compliance monitoring of groundwater as a key component of monitored natural attenuation.

- The 886 site exhibits elevated levels of TPHC in site soil and trace levels of free phase petroleum (degraded fuel oil #2) in site ground water. The selected remedial technology called for the excavation and removal of contaminated soil exceeding the N.J. Residential Direct Contact Soil Cleanup Criteria and the construction of an automated product recovery system. The cleanup strategy includes product recovery and continued compliance monitoring of groundwater as a key component of monitored natural attenuation.

2. Eleven Long Term Monitoring Sites M-3, M-8, M-12, M-18, 296, 290, 80, 108, 2567, 1122 and 283 (DSERTS site FTMM-03, 08, 12, 18, 54, 55, 56, 57, 58, 59 & 61) were all selected for monitored natural attenuation. Four out of the eleven sites are former landfill areas that exhibit elevated levels of benzene, chlorobenzene, arsenic and lead in ground water. The remaining seven areas are former underground storage tank sites

that exhibit elevated to moderate levels of benzene, ethylbenzene, toluene, xylene, TCE, and lead in ground water. Compliance monitoring of ground water continues at these sites with estimated completion by 2010.

Sites undergoing investigation or cleanup under the IRP may need to be accelerated or modified to support transfer or realignment. BRAC funding will be needed to support these changes.

Compliance Cleanup (CC)

Currently, there are no sites undergoing investigation or cleanup under the CC program.

Military Munitions Response Program (MMRP)

Evidence of an outdoor pistol range located in the 1200 area of the Main Post was uncovered during preparation of the PA report. The former range was located just east of Bldg. 1220, along North Drive. A long-term DPW employee indicated that the pistol range was operational between the late 1930s and the early 1950s. The range was closed with the onset of construction activities in the 1200 area. Small arms training was moved to Naval Weapons Station Earle following closure of the Main Post facility. The former location of the pistol range has been developed for approximately forty years with no evidence the former range existed. Grounds in the general vicinity of the former range, which were not affected by construction, are completely grass covered.

“No Further Action” determination approved by the NJDEP. This site has been reclassified by the Army Environmental Center for possible further investigation under MMRP.

Sites undergoing investigation or cleanup under the MMRP may need to be accelerated or modified (e.g., residential use instead of industrial use) to support transfer or realignment. BRAC funding may be needed to support these changes.

New Cleanup

Eight of the former landfill sites are located on the Main Post and one is located in the

Charles Wood Area. The nine landfill sites were never closed in accordance with the New Jersey Solid Waste Management Act, N.J.A.C. 7:26-2A. Six landfill sites continue to exhibit both organic and inorganic contaminants within site ground water above NJDEP Ground Water Quality Criteria. In a letter dated 4 April 1996, the NJDEP requested that all nine sites meet the closure requirements as outlined in N.J.A.C. 7:26-2A. To meet this requirement the DPW would have to implement closure activities in the form of capping for approximately 38.5 acres of former landfill space. It should be noted that all nine sites have been closed for at least seventeen years and have naturally vegetated over this time period. As an alternate approach, the DPW proposed collecting surface soil samples from each of the nine landfills to document that the existing cover material does not contain contaminant levels above the New Jersey Residential Direct Contact Soil Cleanup Criteria and/or established background levels. In a letter dated August 10, 1998, the NJDEP approved our alternate sampling approach. Remedial investigation reports were prepared and submitted to the NJDEP for each of the nine landfill sites, a “No Further Action” determination for all nine sites has been requested from the NJDEP based on a land use restriction. The DPW incorporated a document equivalent to a Declaration of Environmental Restriction (DER) into the Fort Monmouth Installation Master Plan for the soil contamination found at the nine landfill sites. For BRAC purposes, capping of these sites needs to be re-evaluated.

Sites undergoing investigation or cleanup, or listed as “response complete” in the AEDB-R, AEDB-CC, or AEDB-M may require additional investigation and possible cleanup to achieve final regulatory closeout (no further action).

Attachment C
Modified
FM-2-A and FM-2-AC

Base Realignment & Closure Exhibit FM-2-A
Financial Management Action Plan
Environmental Restoration Costs by Installation

Submitting Command/Region:

SECDEF Package: FT. MONMOUTH, NJ

Package:

Installation	FY 2005 ($K)	FY 2006 ($K)	FY 2007 ($K)	FY 2008 ($K)	FY 2009 ($K)	FY 2010 ($K)	FY 2011 ($K)	Totals ($K)
One Time Implementation Costs								
Studies								**0**
Phase I Review		11						**11**
Soil Assessment-Undeveloped areas		2,247						**2,247**
DERA Sites -17 Sites		439	446	427	279	92	46	**1,729**
Asbestos Building Survey				590				**590**
Lead Based Paint Risk Assessment					130			**130**
Cleanup								
Contaminated Soil Excavation			35					**35**
Contaminated Soil Transportation/Disposal			5,427					**5,427**
UST Removal - 13 active tanks			254					**254**
Landfill Areas - Capping				14,543				**14,543**
MMRP - Former Pistol Range				1,295				**1,295**
Asbestos Removal/Encapsulation					200			**200**
Hazardous Material/Waste Disposal				100	100			**200**
								0
NEPA			350					**350**
								0
								0
								0
								0
								0
Total Environmental Restoration Costs ($K):	**0**	**2,697**	**6,512**	**16,955**	**709**	**92**	**46**	**27,011**

Base Realignment & Closure Exhibit FM-2-AC
Financial Management Action Plan
Environmental Restoration Costs Narrative Justification by Installation

Submitting Command:

SECDEF Package: FT. MONMOUTH, NJ

Package:

Installation	Amount ($K)	FY	Narrative Justification
			STUDIES
FT. MONMOUTH, NJ	11	2007	Phase I Review
FT. MONMOUTH, NJ	2,247	2007	Soil Assessment-Undeveloped areas
FT. MONMOUTH, NJ	1,729	2007	DERA Sites -17 Sites
FT. MONMOUTH, NJ	590	2007	Asbestos Building Survey
FT. MONMOUTH, NJ	130	2007	Lead Based Paint Risk Assessment
			CLEANUP
FT. MONMOUTH, NJ	35	2007	Contaminated Soil Excavation
FT. MONMOUTH, NJ	5,427	2007	Contaminated Soil Transportation/Disposal
FT. MONMOUTH, NJ	254	2007	UST Removal - 13 active tanks
FT. MONMOUTH, NJ	14,543	2007	Landfill Areas - Capping
FT. MONMOUTH, NJ	1,295	2007	MMRP - Former Pistol Range
FT. MONMOUTH, NJ	200	2007	Asbestos Removal/Encapsulation
FT. MONMOUTH, NJ	200	2007	Hazardous Material/Waste Disposal
			NEPA
FT. MONMOUTH, NJ	350	2007	To prepare the NEPA documentation.
Total Environmental Restoration Costs ($K):	**27,011**		