Final

Responses to Questions Asked by Community Members at the Fort Monmouth Environmental Open House

Note: At the Fort Monmouth Environmental Open House held Nov. 3 2007 at Gibbs Hall, community members were provided the opportunity to leave written questions related to the presentations at the event. What follows are the questions left by a community member and the responses prepared by the Environmental Branch of the Fort Monmouth Directorate of Public Works (DPW).

Frequently Used Acronyms
BRAC – Base Realignment and Closure
DPW – Fort Monmouth Directorate of Public Works
ECP – Environmental Condition of Property
FMERPA -- Fort Monmouth Economic Revitalization Planning Authority
MCDH -- Monmouth County Department of Health
NJDEP – New Jersey Department of Environmental Protection
RAB – Restoration Advisory Board

1. What table/display contains the public health study and assessment for Fort Monmouth base workers, military, and local residents who may have been exposed or contaminated by pollution, hazards and toxins in the air, water, soil on the base?

The purpose of the open house was to present information concerning Fort Monmouth's restoration program to the local community. One hundred and twenty six poster boards containing information (i.e. text, data tables, maps) on Fort Monmouth's 43 restoration sites were presented. Restoration Advisory Board members to include Army officials, local community members, and representatives from New Jersey Department of Environmental Protection and the Monmouth County Department of Health (MCDH) were on hand to answer questions from local residents. The types of contaminants present and their impact on soil, groundwater, surface water, and sediment were presented and discussed at the open house.

Archival reports prepared by U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM) were reviewed as part of the Environmental Condition of Property (ECP) process. Those reports contained information on assessments made of workers and the public. The industrial hygiene reports went back to the mid 1950s and documented the types of processes, amount and type of chemicals used in the workplace, whether engineering controls (ventilation) were in place, and what personal protective equipment was being used by the workers. In many cases this information formed the basis for determining what buildings needed further study as part of the Site Investigation portion of the follow-up to the ECP.

We have not found any documentation indicating that we had a release that resulted in a public health threat, and we have not called for an Agency for Toxic Substance and Disease Registry (ATSDR) review.

The final ECP report is the document that summarizes these health studies for post workers, to include military and civilians, and local residents. It is the compilation of our reviews of the historical information from the National Archives, Army archival reports, interviews with individuals, and reviews of historical maps. The final ECP Phase I did not document any events or conditions in or on any Fort Monmouth facilities or property that constituted a significant health threat to employees or nearby residents.

2. If there is no study, why has it not been done?

Information relating to health studies is provided in our response to Question # 1.

3. Are base workers, military and local residents aware of unusual illness or sickness for themselves or others?

There is no record of any pollutant release at Fort Monmouth which may have impacted the health and safety of local community residents, base workers or military personnel.

Extensive research was conducted by Shaw Environmental & Infrastructure, Inc. during the completion of the Environmental Condition of Property (ECP) Report. The ECP assessment included a thorough review of all pertinent historical records; interviews of current and former employees, and comprehensive site inspections were conducted. The ECP assessment did not identify any illness or sickness as it relates to long-term exposure of Fort Monmouth personnel. There is no pending or prior litigation as it relates to long-term exposure of Fort Monmouth personnel.

4. Is the base really as clean as is being presented?

All information relating to Fort Monmouth's restoration program has been presented and made available to the membership of the Restoration Advisory Board (RAB). The Restoration Advisory Board is comprised of army officials, local community members, and representatives from the New Jersey Department of Environmental Protection (NJDEP) and the Monmouth County Department of Health (MCDH). In addition, the status of Fort Monmouth's 43 restoration sites was presented at an open house conducted on 3 November 2007. Several members of the RAB, including representatives from the NJDEP and MCDH, participated in the event. The NJDEP has provided oversight of Fort Monmouth's restoration program since its inception in 1993. Reports relating to the 43 sites have been submitted to the NJDEP starting in December of 1993 and continuing through the present date. Our presentations included thousands of sample results which included a range from non-detect to above the NJDEP criteria for various pollutants. We did not exclude any reports or data to mislead the public in any way.

To date, 15 sites have received No Further Action (NFA) approvals from the NJDEP. Soil removal actions have been completed at three other sites and await NFA approval. Remedial Investigation reports for three other sites have been submitted for NFA approval. The remaining 22 sites are monitored on a continuing basis and are being

actively managed under one or more of the following remediation strategies: active groundwater and soil treatment, in situ bioremediation of groundwater and soil, and monitored natural attenuation of groundwater. The Army is committed to being a good steward of the environment and also meeting the compliance requirements of applicable federal and state environmental regulations.

Further environmental condition investigations are ongoing as part of the BRAC Environmental Condition of Property Phase II. When the investigations are complete and if any results reveal contamination, we will identify the new environmental sites and inform NJDEP.

5. What are the costs for proper cleanup? Is there (an) economic interest in under-reporting existing conditions?

Between Fiscal Year (FY) 1993 and FY 2007 the Army has spent approximately $14,336,000.00 on restoration activities at Fort Monmouth. Programmed funding for FY2008 is set at $545,000.00. Fort Monmouth's 'Cost to Complete' estimate for restoration activities from FY 2009 through FY 2011 is programmed at $861,430.00. The Cost to Complete estimate may be subject to change based upon the findings of the Site Investigation which is currently underway. The Army is committed to identifying all potential environmental liabilities prior to property transfer. Fort Monmouth officials have no economic interest in under reporting existing conditions.

6. What has been the record in toxic base cleanups around the county and world?

Through FY 2006, the Department of Defense (DoD) has conducted environmental cleanup activities at 31,173 sites on 1,810 active and BRAC installations and 2,808 Formerly Used Defense Sites (FUDS) properties. DoD has completed all response actions at 22,895 sites (approximately 73 percent) and is making progress toward achieving its environmental cleanup goals for the remaining sites.

Over the past 10 years, DoD invested almost $42.4 billion to ensure the success of its environmental programs. In FY2006, DoD obligated approximately $4.1 billion for environmental activities-$204.1 million for conservation; $1.4 billion for environmental cleanup at active installations and FUDS; $568.2 million for BRAC environmental requirements; $1.5 billion for compliance; $125.2 million for pollution prevention; and $261.3 million for environmental technology. While all of DoD's environmental programs work toward the same goal of maintaining readiness while protecting human health and the environment, each program has a unique focus, and thus different funding needs.

Source: Defense Environmental Program Annual Report to Congress

7. Why has the Pentagon been seeking exemptions from US public health and environmental laws?

Fort Monmouth officials have not sought exemptions from federal or state public health or environmental laws. Information relating to Pentagon activities is not within Fort Monmouth's purview.

8. Have you researched the Fort Monmouth environmental documents at the Monmouth County library's reference desk in Shrewsbury?

The Directorate of Public Works (DPW) Environmental Branch is the source of the restoration documents available at the Monmouth County library located in Shrewsbury, NJ. All documents residing at the Monmouth County library have been submitted to the NJDEP. Community RAB members have received duplicate information and training.

9. Why are these documents not available more easily on a Fort Monmouth RAB or FMERPA website?

We estimate that the documents should be posted by February 29, 2008.

10. Why has the RAB - remediation advisory board - been in existence for about a year, but the public has not been allowed to attend environmental briefing meetings? Why does the RAB report to the army, but not to FMERPA? Why is it called remediation, not clean up?

The Restoration Advisory Board includes members from the local community, as well as members from the Army, county and state. Army officials conducted monthly training sessions which started in February 2007 and were completed in August 2007. Fort Monmouth's 43 restoration sites were topics of discussion at the monthly training sessions. Fort Monmouth held its first public RAB meeting on September 4, 2007. This meeting was followed up with a restoration program open house that was held on November 3, 2007. Future RAB meetings will be open to the public unless a closed meeting is called for training of the board members. The acronym "RAB," means Restoration Advisory Board, as established by the Office of the Secretary of Defense and is the standard name used to replace the former Technical Review Committee (TRC). The RAB is an Army-sponsored activity. The RAB is intended to bring together community members who reflect the diverse interests within the local community, enabling the early and continued two-way flow of information, concerns, values, and needs between the affected community and the installation.

The Fort Monmouth Economic Revitalization Planning Authority (FMERPA) is a panel that includes members officially appointed by the State of New Jersey that will steer the redevelopment of Fort Monmouth property as it transfers from being a federal military installation to the local communities. It is the only panel recognized by the Army as the Local Redevelopment Authority.

The comments from the RAB will inform decision makers in the Army, Department of Defense and within the FMERPA. It is not the mission of the RAB to discuss future uses of the property following the transfer of Army tenants.

11. Why does FMERPA have a separate environmental subcommittee that has not been included on the year of environmental meetings?

All restoration program information that was provided to the RAB membership was also provided to the FMERPA. The RAB is intended to bring together community members who reflect the diverse interests within the local community, enabling the early and continued two-way flow of information, concerns, values, and needs between the affected community and the installation. The mission of the FMERPA is to develop a reuse plan for Fort Monmouth following the transfer of Army tenants. Four members of the RAB are also active members of the FMERPA Environmental Committee and serve as a conduit for the exchange of information. The Fort Monmouth Garrison Commander solicited community volunteers at a FMERPA monthly meeting and in public announcements published in the press. The RAB community members responded to those requests. Community membership was not restricted to the three host municipalities and includes members from neighboring municipalities who volunteered.

12. How can the subcommittee determine how suitable something is for redevelopment when they have been excluded?

All restoration program information that was provided to the RAB membership was also provided to the FMERPA. Fort Monmouth officials have been responsive to all requests made by the FMERPA. The RAB community members are free to collaborate with the environmental subcommittee as well as their municipalities and the general public.

13. Who is liable if new occupants of the base get sick or find contamination, DOD, army, RAB, FMERPA environmental subcommittee, FMERPA, Eatontown, Tinton Falls, Oceanport taxpayers)?

The DOD, DA and the local FMERPA will work closely with the New Jersey Department of Environmental Protection and the U.S. Environmental Protection Agency to insure that any contamination at a BRAC installation will be cleared prior to transfer. The DoD is responsible for the restoration of all facilities that it has owned or operated where there have been releases from its operations into the environment, as well as those facilities where hazardous substances from its operations have come to be located. Federal Law requires that transfers of federal real property by deed must also include: a) a covenant by the United States that all remedial action necessary to protect human health and the environment has been taken prior to transfer, b) a covenant by the United States to undertake any further remedial action found to be necessary after transfer, and c) a clause granting access to the transferred property in case remedial action or corrective action is found to be necessary after transfer. EPA policy seeks to assure transferees that EPA generally will not consider them liable (with certain exceptions) for contamination that is the result of DoD, or any federal agency, activities on that property. Due to the additional CERCLA liability protections available to certain purchasers of contaminated property provided through the 2002 Brownfields amendments, an addendum is being added to the policy mentioned above. The addendum will address how transferees can

qualify for protection from CERCLA liability as bona fide prospective purchasers (BFPPs). To obtain liability protection, BFPPs must meet the statutory requirements established for this protection. Transferees should be made aware that these requirements include conducting all appropriate inquiries (AAI) in compliance with the final regulations promulgated by EPA (40 CFR Part 312) prior to acquiring the property. Any potential liability protections provided to transferees through covenants received for property transferred from the United States under CERCLA Sections 120(h)(3) or 120(h)(4) and the indemnity provided in Section 330 of Public Law 102-484, as amended by Public Law 103- 160, are not changed given the passage of the 2002 Brownfields amendments. The Brownfields amendments added a potentially useful liability relief provision that may give protection to transferees of federal property to facilitate the transfer of that property.

14. Why does MATRIX want to privatize the remediation/clean up?

Until a transfer agreement has been determined, the Army will make any and all future decisions regarding potential environmental cleanups at Fort Monmouth. The Army does not have any insight in what Matrix may or may not propose regarding potential cleanup remedies after the transfer of the property. This is not within Fort Monmouth's purview. Matrix is a subcontractor for the FMERPA.

15. Does this allow a bypass of regulations, laws and liability? Would Matrix also get the contract to oversee this? Is this a conflict of interest?

Regardless of who implements the environmental cleanups, before or after the transfer of property, NJDEP will remain the oversight agency for ensuring environmental regulations, laws and liabilites are met and will alleviate concerns of conflict of interest.

16. Does a NFA/no further action ruling by the NJ DEP mean that the site is clean or is it linguistic detoxification?

A No Further Action (NFA) determination is not an attempt to change the name of a toxic condition or findings at a site, as in linguistic detoxification. An NFA is a means of describing the end result of a thorough investigation of a site or area of concern.

A No Further Action determination on the part of the NJDEP can be defined as follows: A written determination by the NJDEP that based upon an evaluation of the historical use of the site, or of an area of concern or areas of concern at that site, as applicable, and any other investigation or action the Department deems necessary, there are no discharged contaminants present at the site, at the area of concern or areas of concern, or at any other site to which a discharge originating at the site has migrated, or that any discharged contaminants present at the site or that have migrated from the site have been remediated in accordance with applicable remediation regulations (N.J.A.C. 7:26E -1.8).

17. (Is) fencing off a contaminated area the best thing for future generations?

Installing a fence around an area of concern for the purpose of restricting site access is a recognized institutional control measure. Each area of concern must be evaluated on a case-by-case basis. The decision to implement an institutional control or engineering control can be influenced by many factors: the contaminants of concern, contaminant levels, the media impacted (e.g. soil, groundwater), migration pathways and potential receptors. All these factors are considered when it comes to making remediation decisions.

18. What is the condition of streams, ponds and bay areas at Fort Monmouth?

The DPW maintains a comprehensive Spill Prevention Control and Countermeasures Program and Stormwater Management Program that is protective of surface water bodies both on and adjoining Fort Monmouth. Current activities at Fort Monmouth are fully compliant with the Clean Water Act.

The DPW has identified tetrachloroethylene (PCE) and trichloroethylene (TCE) in surface water samples collected from Mill Creek where the stream enters the Main Post. TCE and cis-1,2-dichloroethylene have also been identified in surface water samples collected from Husky Brook where the stream enters the Main Post. In addition, Methyl-tert-Butyl ether (MTBE) has been identified in surface water samples collected from Lower Wampum Brook where the stream enters the Charles Wood Area (Pearl Harbor Avenue). The source of these contaminants is not from Fort Monmouth activities. The findings from these sampling events have been presented to the NJDEP, MCDH, and the RAB.

19. What (effect) has pouring toxic things into the drains and sewage system had humans and on the ecosystem?

The disposal of hazardous substances into drains, the sewer system, and trash receptacles is prohibited. The DPW maintains a comprehensive hazardous waste, universal waste, and Class D Materials management program. A Site Investigation is currently being conducted that includes an evaluation of historic activities and their potential impact on surface water bodies. The findings from this investigation will be reported to the NJDEP, FMERPA, and the RAB.

20. What effect have broken tanks and pipes carrying these things had on underground soils and water?

To date, the DPW has removed 467 underground storage tanks (USTs). All former UST locations were evaluated for potential petroleum discharges in accordance with the NJDEP's Technical Requirements for Site Remediation (N.J.A.C. 7:26E). In the event of a petroleum discharge to soil, impacted soils were excavated and properly disposed of. Following removal of impacted soils, post excavation samples would have been collected to document site compliance. If a discharge to groundwater occurred, the UST site was then incorporated into the restoration program for follow-up action. Detailed information

on all sites is available at the Eastern Branch of the Monmouth County Library. That information includes detailed test data on samples taken of underground soil and water.

21. What is the status of the ash and toxic landfills? Is there a proper liner at every site?

Fort Monmouth operated nine solid waste landfills between 1942 and 1981. The nine closed landfill sites range in size from 1.4 to 7.2 acres with a combined total of 39.9 acres. Waste materials disposed of at the nine landfill sites are described in a report titled "Investigation of Suspected Hazardous Waste Sites at Fort Monmouth, New Jersey (Weston December 1993)". The nine closed landfill sites have been thoroughly investigated by the Army. The findings from these investigations have been submitted in report form to the NJDEP. NJDEP has recently provided comments to Fort Monmouth on the M-12, M-14 and M-18 Landfills. NJDEP and Fort Monmouth will continue to discuss the landfills in the future as NJDEP reviews the remaining reports. Groundwater and surface water at the nine landfill sites continues to be monitored on a quarterly basis. There are no liners associated with the closed landfills. Liners were not an industry standard at the time of their operation.

22. What is the status of the toxic pit outside the Myer bldg. that was covered with lime? Has it moved toward the bldg.?

The two neutralization pits (Sites CW-1 and CW-2), which were constructed of reinforced concrete, were taken out of service in December of 2001. As part of the closure of the two neutralization pits, limestone material (69,160 lbs.) was removed from the pits, containerized, and shipped for proper disposal. Following extensive testing of the limestone material, the waste was characterized as non-hazardous and subsequently shipped to CWM Chemical Services, Model City, NY. The internal plumbing of the pits was re-engineered and the pits were then backfilled with clean soil. The concrete roofs of the pits were demolished as were a portion of the side walls. The concrete floor for the two pits remains in place.

In October of 1992, all limestone found within the two neutralization pits was removed and fresh limestone was added to both pits as a precautionary measure. The discharge of corrosive liquids to the two neutralization pits was prohibited by Fort Monmouth officials in the late 1980s. Following extensive testing of the limestone material, the waste was characterized as hazardous and subsequently shipped to Laidlaw Environmental Services of South Carolina, Pinewood, SC in March of 1993.

Sites CW-1 and CW-2 were first investigated during site investigation work conducted in 1994. Information relating to these investigations can be found in a report titled "Site Investigation of Suspected Hazardous Waste Sites at Fort Monmouth, NJ (Weston December 1995)". A groundwater/soil remediation system is currently in operation at Site CW-1. The contaminant plume is confined to the courtyard of the Myer Center. The plume has not encroached onto the Myer Center itself. The contaminant plume is under hydraulic control by means of a groundwater pump and treat system. A No Further

Action request for Site CW-2 was submitted to the NJDEP in March of 2005. The Army is awaiting a response from the NJDEP concerning this request.

23. What about the radiation, PCB, asbestos contaminated sites?

To date, there have been no radiological sites of concern identified on the Main Post or the Charles Wood Area.

Below are summaries of the Fort Monmouth PCB and Asbestos sites:

Site FTMM-09, PCB Transformer - The 1980 Installation Assessment (IA) report (USAEC) identified the M-9 site as a PCB transformer location. The site identified in the IA is where Bldgs. 1150 and 1152 are located. These buildings are found in the western portion of the Main Post, south of Avenue of Memories. Records review and site reconnaissance work conducted under the Preliminary Assessment phase revealed no transformers at the M-9 site were leaking in 1980 or at any other time. Prior to 1989, the policy at Fort Monmouth was to label all transformers as containing PCBs unless available test data proved otherwise. Test results for the transformers located at the M-9 site revealed PCB levels all below 50 parts per million (ppm). Under the Toxic Substance Control Act (TSCA), all transformers containing PCBs at levels less than 50 ppm are considered Non-PCB Class Equipment. An inspection of the M-9 site revealed no oil staining of concrete or soil. A "No Further Action" determination was approved by the NJDEP in 1994.

Site FTMM-29 (CW-7), Former PCB Transformer Location - The 1980 IA report (USAEC) identified the CW-7 site as a PCB transformer location. Prior to its removal, the referenced transformer was located near the front entrance of the Officers Club (Bldg. 2000). The Officers Club is located on the same grounds as the Charles Wood golf course. Prior to 1989, the policy at Fort Monmouth was to label all transformers as containing PCBs unless available test data proved otherwise. Test results for the transformer located at the CW-7 site revealed PCB levels at 223,091 ppm. The PCB Class transformer was removed from service on 10 September 1990 and shipped for offsite disposal on 24 September 1990. Under the Site Investigation (SI) phase, four surface soil samples were collected to evaluate the potential impact the transformer had on site soils. PCBs were detected above NJDEP Direct Contact Soil Cleanup Criteria in all four samples. Sample concentrations ranged from 6 mg/kg to 100 mg/kg. The NJDEP cleanup action level for PCBs in soil is 0.49 mg/kg. Sampling conducted under the SI phase demonstrated that PCBs were migrating horizontally within the soil column. In May 1996, a remedial investigation was implemented to completely delineate PCB levels both horizontally and vertically within the soil column. The remedial investigation was a combination of field screening techniques and sample collection for laboratory analysis. Environmental data gathered under the RI phase identified PCBs as migrating both horizontally and vertically within the soil column. Restoration funding was received in FY97 to implement a corrective action at the CW-7 site. The selected remedial action involved removing the contaminated soil from the site thereby eliminating the contaminant of concern. Cleanup work commenced in November 1997 and was

completed in February 1998. Off-site disposal of PCB contaminated soils was completed in June 1998. A post remedial action report was submitted to the NJDEP in September 2005.

Site FTMM-47, Former PCB Transformer Areas - All locations where PCB transformers had formerly been located were inspected for evidence of spills. Eight sites were identified where a PCB transformer was either formerly located over soil and/or concrete with signs of visible oil staining. The former PCB transformer locations are as follows: buildings 292, 686, 718, 1002, 1004, 1208, 1209 and 1220. PCB transformers formerly utilized at buildings 292, 686, 718 and 1004 were located over soil. Transformers formerly utilized at buildings 1002, 1208 and 1209 were located over concrete. Transformers formerly utilized at building 1220 were located both over soil and concrete. Under the SI phase, soil and concrete chip samples were collected for PCB analysis. PCB results for all soil samples were detected below the NJDEP Direct Contact Soil Cleanup Criteria. Elevated PCB levels were identified in the concrete samples collected from buildings 1002, 1208 and 1209. Upon further evaluation, the oil staining at each of these locations is generally minor in nature, both in their horizontal distribution and in the depth at which the staining penetrates the concrete. These minor source areas are not a threat to human health or the environment. At present the active use of transformers at buildings 1002, 1208 and 1209 preclude the possibility of any remedial work. At such time when the transformers are replaced or removed from service, the minor PCB source areas shall be addressed accordingly.

Materials containing PCB were identified in a report titled "Investigation of Suspected Hazardous Waste Sites at Fort Monmouth, New Jersey (Weston December 1993)" as being disposed of in the nine closed solid waste landfills in the form of electronic components (i.e. electrical ballasts). The PCB containing wastes found within the closed solid waste landfills are covered by a one foot cap of soil and said materials pose little to no risk to human health or the environment.

Site FTMM-10 Asbestos Storage Area -- is the former location where containers of new spray-on asbestos were stored in a metal shed until they were used elsewhere in the facility. The primary purpose of the shed was to store machine parts for the Building 1220 boiler plant. During the Preliminary Assessment phase (1993), the metal shed was inspected for evidence of asbestos containing materials; however, none were found. An NFA determination was approved by the NJDEP in 1994.

Asbestos containing materials were also identified in a report titled "Investigation of Suspected Hazardous Waste Sites at Fort Monmouth, New Jersey (Weston December 1993)" as being disposed of in the nine closed solid waste landfills in the form of construction debris. The asbestos containing materials found within the closed solid waste landfills are covered by a one foot cap of soil and said material poses no risk to human health or the environment in its current state.

24. How are sensitive Native American sites being protected?

To date, there have been no sensitive Native American sites identified at Fort Monmouth.

25. When will life support systems of air, water, earth protection be understood as important to survival?

The Directorate of Public Works (DPW), U.S. Army Garrison Fort Monmouth, is staffed with dedicated environmental professionals who are committed to protecting natural resources and promoting sound environmental stewardship practices. The DPW maintains a strong environmental program that is committed to excellence and the safe guarding of human health and the environment.