

**EPA Superfund  
Record of Decision:**

**US ARMY - FORT RITCHIE  
EPA ID: MD0000795211  
OU 08  
CASCADE, MD  
06/11/2001**

**WASTELAN OU-8**  
**DECISION DOCUMENT FOR OPERABLE UNIT 9 – ADMINISTRATION BUILDING AREA**  
**AT FORT RITCHIE ARMY GARRISON, MARYLAND**

**1.0 PURPOSE**

This Decision Document describes the selection of No Further Action for Operable Unit (OU) 9 – Administration Building Area at Fort Ritchie Army Garrison. No Further Action was selected in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA), the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), the Resource Conservation and Recovery Act (RCRA), and Army Regulation AR 200-1, as applicable.

In 1995, Fort Ritchie was selected for Base Realignment and Closure (BRAC). Fort Ritchie, under the jurisdiction of the MDW, officially closed in September 1998. In preparation for transfer of the property to the PenMar Development Corporation (PMDC) under BRAC, and in support of the BRAC environmental restoration program, an environmental Site Investigation (SI) was initiated in 1996 to determine if the property is environmentally suitable for transfer. Following the SI, a Focused Feasibility Study (FFS) was conducted.

The OU9 Administration Building Area is located in the southeastern portion of the installation and includes the 100, 200, and 300-series buildings. Included within the Administration Building Area are the Health Clinic (Building 341), Dental Clinic (Building 332), Telecommunications Facility (Building 160), and the Photographic Laboratory (Building 301). The OU9 property is planned for continued commercial use by PMDC as part of the Lakeside Corporate Center at PenMar.

SI human health and ecological risk assessment results indicated that no unacceptable risk is associated with current or anticipated future land use for OU9 (commercial land use) due to contaminants in surface soil. However, four metals (aluminum, arsenic, iron, and manganese) were detected in surface soil at concentrations that would pose an unacceptable risk to residential receptors if the future land use were to become residential. Based on this, the recommended alternative in the FFS and original Proposed Plan was Deed Restriction to prevent future residential land use.

Prior to selecting the final alternative for OU9, new information was identified that significantly changed the preferred remedy for the site from what was identified in the original Proposed Plan. Partnering discussions between the Army, USEPA, and MDE, combined with the results of further background soil study, resulted in the identification of only arsenic as a chemical of concern for OU9. Further, arsenic was determined to be present at a concentration exceeding a level protective of human health under a residential exposure scenario at only one OU9 surface soil location. Based on this new information, the Army, USEPA, and MDE concurred that the limited effort necessary to excavate and remove the “hot spot” arsenic contamination, which would result in a No Further Action decision for the site, was more appropriate than the previously identified Deed Restriction alternative.

A time-critical removal action was performed at OU9 to remove the arsenic contaminated soil hot spot using a residential risk-based remediation goal of not to exceed 17 parts per million (ppm). Since the removal of contaminated soil at OU9 was not an alternative presented in the original Proposed Plan, the change in remedy selection could not reasonably be anticipated by the public. Therefore, a Revised Proposed Plan was developed and submitted for public comment in accordance with Section 300.430(f)(3)(ii)(B) of the NCP. The Revised Proposed Plan informed the public of the successful completion of the time-critical removal action and proposed No Further Action as the preferred alternative.

Based on the removal of all contamination associated with unacceptable risks to human health or the environment, the Army has selected No Further Action as the preferred remedial alternative for OU9. This alternative has been selected by the U.S. Army with concurrence from the USEPA, MDE, and the public. Documents supporting this decision are located in the Administrative Record.

**2.0 SITE RISK**

A baseline risk assessment was performed as part of the SI, and was composed of a human health risk assessment (HHRA) and a screening-level ecological risk assessment (ERA). The purpose of the baseline risk assessment was to identify and characterize the toxicity and potential effects on human health and ecological receptors associated with any pollutants or contaminants present in soil at the site.

## **2.1 HUMAN HEALTH RISK**

The HHRA calculated carcinogenic as well as non-carcinogenic risks to potential receptors through exposure to soil via incidental ingestion, dermal absorption, and inhalation.

For the current and expected future receptors at OU9 (site worker/caretaker, teenager trespasser/visitor, and excavation worker), the calculated cumulative cancer risks are within the USEPA acceptable risk range of  $1 \times 10^{-6}$  to  $1 \times 10^{-4}$ . The cumulative non-cancer HIs were less than 1 when HQs for similar target organs were summed. Therefore, there is no unacceptable risk to human health for the current and expected future land-use.

Although residential development is not expected based on future land use plans, child and adult residential cumulative cancer risks are within the USEPA acceptable risk range of  $1 \times 10^{-6}$  to  $1 \times 10^{-4}$ . However, the cumulative non-cancer HI exceeded 1 for both child and adult residents, indicating a potential for adverse health effects. This was primarily due to aluminum, arsenic, iron, and manganese. Further study of the concentrations of these metals in background soils indicated that only arsenic concentrations at OU9 were statistically higher than background. A risk-based soil cleanup goal for arsenic of not to exceed 17 ppm was calculated to be protective of both child and adult residential receptors. This cleanup goal was met during the time-critical removal action. As a result, there is no unacceptable risk to human health for the current and future land use at OU9.

## **2.2 ECOLOGICAL RISK**

Quantitative ecological risk evaluation at OU9 was determined to be unnecessary due to the limited presence of chemicals and poor habitat quality at the site. This conclusion was reached during a site visit by the USEPA Region III Biological Technical Assistance Group.

## **3.0 REMEDIAL ALTERNATIVES**

With concurrence from the USEPA and MDE, the Army has selected No Further Action as the preferred remedial alternative for OU9. No CERCLA remedial action is necessary at OU9 since all contamination associated with unacceptable risks to human health or the environment was removed as part of a time-critical removal action completed in September 2000.

## **4.0 PUBLIC/COMMUNITY INVOLVEMENT**

Fort Ritchie has a Restoration Advisory Board (RAB) which has been actively involved throughout the environmental investigation activities conducted during the SI. The RAB includes representatives from the USEPA, Region III, and MDE, as well as members of the local community.

Comments on the Proposed Plan were solicited from the public by the U.S. Army prior to selecting No Action for OU9. No written or oral comments were received during the public comment period.

## **5.0 DECLARATION**

No further action is necessary at OU9 to ensure the protection of human health and the environment. Therefore, none of the CERCLA §121 statutory determinations are necessary since no remedy is being selected. Since no hazardous substances are present onsite above levels that allow for unlimited use and unrestricted exposure, the five-year review will not apply at this site.

## **6.0 APPROVAL AND SIGNATURE**

In summary, the Army will implement No Further Action for OU9 at Fort Ritchie. The total cost for this action is below \$2 million, therefore, the appropriate approval authority is the Installation Commander for Fort Ritchie. Since Fort Ritchie is a closed BRAC site and therefore has no Installation Commander, the appropriate approval authority is from the BRAC Environmental Coordinator and Military District of Washington (MDW) BRAC Officer.

Approval By:

William D. Hofmann  
William D. Hofmann  
BRAC Environmental Coordinator

11 June 01  
Date

William M. Spigler  
William M. Spigler  
MDW BRAC Officer

11 June 01  
Date

# **ATTACHMENT A**

**Response to Comments on the  
Proposed Plan for Operable Unit 9  
Fort Ritchie Army Garrison  
from Public Meeting – 3 April 2001**

No comments on the OU9 Proposed Plan were received during the public meeting held on 3 April 2001 (see below). Transcripts from the public meeting have been included in the Administrative Record, which is located at the following information repositories:

- Washington County Library
- Blue Ridge Summit Library
- BRAC Transition Office, 123 Richine Street

Additionally, no written comments were received during the comment period on the Proposed Plan.

**Response to Comments on the  
Draft Decision Document for Operable Unit 9  
Fort Ritchie Army Garrison  
from USEPA Region III**

**Point of Contact for the following comments – Mary Cooke at (215) 814-5129**

**Comment 1. General**

**Comment:** EPA would prefer that the ROD guidance format be used, particularly since that format and language address/incorporate CERCLA/NCP requirements.

**Response:** The Army is following the Army BRAC Guidance (USAEC, April 1999) since this is a non-NPL site. This approach is also consistent with the Decision Documents for OUs 2, 6, and 12 that were finalized and signed previously for Fort Ritchie.

**Comment 2: Section 2.0, Paragraph 3, First Sentence**

**Comment:** After "... protective of human health" add "under a residential exposure scenario."

**Response:** The text has been clarified.

**Comment 3. Section 3.0**

**Comment:** Change title to read "Summary of Remedial Alternative" (no "s"): Rewrite to say that after removal, no CERCLA remedial action is necessary because no unacceptable risk to human health and the environment.

**Response:** The title is consistent with Army guidance. See the Response to Comment 1. This section has been revised to indicate that no CERCLA remedial action is necessary at this site as a removal action was completed in September 2000, wherein all contamination associated with unacceptable risks to human or the environment was removed from the site.

**Comment 4. Section 4.0, Paragraph 1, Fourth Sentence**

**Comment:** "... instead of the previously selected ..." Change "selected " to "preferred."

**Response:** The document has been updated. This information has been incorporated into Section 1.

**Comment 5. Section 4.0, Paragraph 2, First Sentence**

**Comment:** "... the change in remedy selection ..." Change to read "... the proposed change in remedy selection..."

**Response:** The document has been updated. This information has been incorporated into Section 1.

**Response to Comments on the  
Draft Decision Document for Operable Unit 9  
Fort Ritchie Army Garrison  
from MDE**

*Point of Contact for the following comments – John Fairbank at (410) 631-3418*

**Comment 1.**

**Comment:** The Federal Facilities Section of the Maryland Department of the Environment's Waste Management Administration has no further comments on the above-referenced document.

**Response:** None required.