



## **Basin A Consolidation and Remediation Project**

### *Fact Sheet*

#### **REMEDIATION FRAMEWORK**

The On-Post Record of Decision (ROD), which describes the site-wide remedy for the Rocky Mountain Arsenal (RMA), was signed by the U.S. Army, the U.S. Environmental Protection Agency (EPA) and the Colorado Department of Public Health and Environment (CDPHE) on June 11, 1996 with concurrence of the U.S. Fish and Wildlife Service (the Service) and Shell Oil Company (Shell). The U.S. Army, serving as the lead agency, and Shell will implement the ROD which includes 31 projects for soils, structures and the treatment of groundwater. This remediation project will be conducted with EPA and CDPHE oversight. Tetra Tech FW, Inc. Environmental will serve as the Program Management Contractor and will select and manage the subcontractors needed to perform remediation tasks.

#### **INTRODUCTION**

The project area is located in Section 36, which is in the central part of the RMA, and is comprised of Basin A, the Burn Site and a portion of Basin A to Basin B Ditches. These sites are within the high-waterline of Basin A where manufacturing outflow of waste was received and retained from South Plants. Historically, the burn site was used to incinerate munitions and trash from South Plants via the Lime Settling Basins. The Basin A consolidation and remediation project consists of the following:

- Consolidating low-level contaminated soil, structures and debris into the former Basin A;
- Changing the contour of the Basin to promote drainage;
- Covering the consolidation and fill material with a human/biota barrier and vegetated soil cover.

#### **SUMMARY OF SITE HISTORY, CONTAMINATION ISSUES AND SELECTED REMEDY**

The RMA is located adjacent to Commerce City, Colorado to the east, approximately 10 miles northeast of downtown Denver. In 1942, at the height of World War II, the U.S. Army purchased 17,000 acres of land on which to manufacture chemical weapons, such as mustard gas and white phosphorus. Private industry was encouraged to lease facilities at RMA after the war to foster economic growth in the area, offset operational costs and maintain the facilities for national security. Under the lease program, Julius Hyman and Company began producing pesticides in 1946. In 1952, Shell Chemical Company acquired Julius Hyman and Company and continued to produce agricultural pesticides

on-site until 1982. Common industrial and waste disposal practices used during these years resulted in contamination of structures, soil, surface water, sediment and groundwater. Beginning in 1974, 14 Interim Response Actions (IRA) were designed to protect the off-site human health and environment from RMA pollution. To date, all of the IRA are in progress or have been completed. Since the signing of the ROD, 10 of the 31 projects are in the design or implementation phase.

### **SELECTED REMEDY**

Soils that exceed health standards for biota, debris and structural debris will be placed into Basin A. Lesser contaminated surficial soils which do not exceed health standards, but may present unacceptable exposure pathways to biota and uncontaminated soil, will be used as fill material to change the Basin from the current depression to a rise thereby promoting runoff. A human/biota barrier and vegetated soil layer will be placed over the consolidation and fill material to act as a cover. Portions of Basin A potentially contain unexploded ordnance (UXO) at or below ground surface. In order to protect workers during construction operations, a visual sweep will be performed daily of construction areas. In addition, a minimum of one foot of soil will be placed in UXO impacted areas to provide a barrier to prevent potential vehicle contact with UXO. Any UXO discovered during the course of construction will be removed and transported off-site for detonation or other demilitarization process. If the UXO is unstable, it will be detonated on-site. The major design and construction components of the project consist of:

- Closing or protecting wells located within or near the Basin A boundary;
- Consolidating biota exceedance soil, debris and structural debris as designated by the ROD;
- Adding additional surficial soils that contain contaminants that may represent unacceptable exposure pathways to biota and uncontaminated fill material as necessary to change the grade from a depression to a hill, thereby maximizing runoff and minimizing ponding in order to reduce erosion of the cap/cover;
- Constructing a vegetated soil cap cover with a minimum thickness of 4-feet over the human/biota barrier;
- Re-establishing vegetation over the remediation site with natural grasses in accordance with the refuge management plan so that the overall habitat value is improved after remedial actions are complete. Any potential odors, vapors and or particulate emissions occurring during this project will be controlled by the implementation of air quality monitoring, air emission control plans and project construction modifications developed by the parties. The RMA will continue air quality monitoring and control programs throughout all phases of the remediation. If odors, vapors and/or particulate emissions are detected above Federal or Colorado limits and other established operational parameters, modification to the remediation activity will be taken to resolve the problem.

### **PUBLIC NOTIFICATION MILESTONES**

November 18, 1996 30% Conceptual Design Draft

May 5, 1997 60% Intermediate Design

May 7-8, 1997 60% Design Notice published in The Rocky Mountain News, The Denver

**Post**

June 5, 1997 60% Design presentation to the Restoration Advisory Board

July 21, 1997 95% Design Draft Final July 21, 1997 95% Design Notice published in The Rocky Mountain News, The Denver Post

September 4, 1997 95% Design presentation to the Restoration Advisory Board

September 29, 1997 100% Design final

January 9, 1998 Anticipated project start

September 11, 2006 Anticipated project completion

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All reference materials are available at the following locations:

**EPA Superfund Records Center**

999 18th Street

Denver, Colorado 80202

(303) 312-7287

**Joint Administrative Records Facility (JARDF)**

Rocky Mountain Arsenal

Technical Information Center

Building 129 Room 2020

Commerce City, Colorado 80022

(303) 289-0362

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