Community Involvement Plan for Rocky Mountain Arsenal Contamination Cleanup

Public Relations Office

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List of Acronyms

ATSDR	Agency for Toxic Substance and Disease Registry
CAB	Citizen Advisory Board
CDPHE	Colorado Department of Public Health and Environment
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CIP	Community Involvement Plan
DIA	Denver International Airport
EPA	Environmental Protection Agency
FFA	Federal Facility Agreement
HWL	Hazardous Waste Double-Lined Landfill
IRA	Interim Response Action
MMAG	Medical Monitoring Advisory Group
MSA	Metropolitan Statistical Area
NPL	National Priorities List
OSHA	Occupational Safety and Health Administration
RAB	Restoration Advisory Board
RCRA	Resource Conservation and Recovery Act
RI/FS	Remedial Investigation/Feasibility Study
RMA	Rocky Mountain Arsenal
ROD	Record of Decision
RVO	Remediation Venture Office
RVPRO	Remediation Venture Public Relations Office
SSAB	Site Specific Advisory Board
TCHD	Tri-County Health Department
TTEC	Tetra Tech Environmental Corporation
VPP	Voluntary Protection Program

1 Introduction

This Community Involvement Plan (CIP) has been developed pursuant to 42 USC 11001 et seq., to guide and facilitate the Remediation Venture Public Relations Office's (RVPRO) interaction with the communities near the Rocky Mountain Arsenal (RMA) about the cleanup program and transition to a National Wildlife Refuge. The Remediation Venture Office (RVO) is composed of the U.S. Army (lead agency), Shell Oil Company (Shell) and the U.S. Fish and Wildlife Service (USFWS). The Army has revised and updated the CIP based on information recently gathered from community interviews, and to reflect recent residential and business growth near the site. The CIP was last updated in March 2004.

The CIP contains the following:

- Site description and history;
- Details about the environmental cleanup projects;
- The government agencies and organizations involved with the site;
- Community background and profile;
- History of the public involvement effort;
- Community interviews summary; and
- RMA's communications program.

The CIP supports the RVPRO's mission to inform, encourage dialogue and receive input from stakeholders and the general public about RMA's history, cleanup and wildlife and its transition to a national wildlife refuge.

2 Site Description and History

2.1 Site Description

RMA is located 10 miles northeast of downtown Denver, Colorado, adjacent to Commerce City and Brighton to the north, Montbello to the south, Denver International Airport to the east, and Commerce City to the west. Residential homes border the site to the north, south and west, and residential and business development is rapidly growing in these areas.

2.2 Site History

In 1942, at the height of World War II, the Army purchased 17,000 acres of land 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 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 by the Army and Shell during these years resulted in the contamination of structures, soil, surface water, sediment, and groundwater.

In 1984, the Army began a systematic investigation of site contamination in accordance with the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) of 1980 and as a result, the site was placed on the National Priorities List (NPL) in 1987. As required by CERCLA, a Remedial Investigation/Feasibility Study (RI/FS) was conducted to determine the nature and extent of the contamination and to develop and evaluate remedial alternatives.

The Army, Environmental Protection Agency (EPA), and Shell signed two documents in the late 1980s. The first was the Federal Facility Agreement (FFA) that specified the process by which decisions will be made for the cleanup of RMA, and established certain cleanup goals. The second was a Settlement Agreement that outlined the procedures for allocation and reimbursement of cleanup costs between the Army and Shell. The FFA provided a framework under which the parties agreed to conduct Interim Response Actions (IRA) on specific contamination problems in advance of the final cleanup plan. The Army is the lead agency responsible for contamination remediation on RMA. Because the groundwater contamination directly south and west of RMA comes from several off-site sources, the Army is not responsible for its cleanup.

The FFA ultimately led to the signing of two Records of Decision (ROD) to address contamination on and off the site. The Off-Post ROD was signed December 19, 1995, and the On-Post ROD was signed June 11, 1996. The RODs provide the framework, purpose, and overall rationale for the remediation actions that must be accomplished at the site. The Army, EPA, and the Colorado Department of Public Health and Environment (CDPHE) signed both RODs. The USFWS and Shell concurred with the on-post ROD.

The Army, serving as the lead agency, and Shell are implementing the selected remedy that includes 31 projects for soils, structures, and the treatment of groundwater contaminants. The EPA, CDPHE, and Tri-County Health Department (TCHD) are conducting regulatory oversight. The Army selected Foster Wheeler Environmental Corporation, now known as Tetra Tech Environmental Corporation (TTEC) in 1997 to serve as the Program Management Contractor. TTEC selects and manages the subcontractors needed to perform the remediation work.

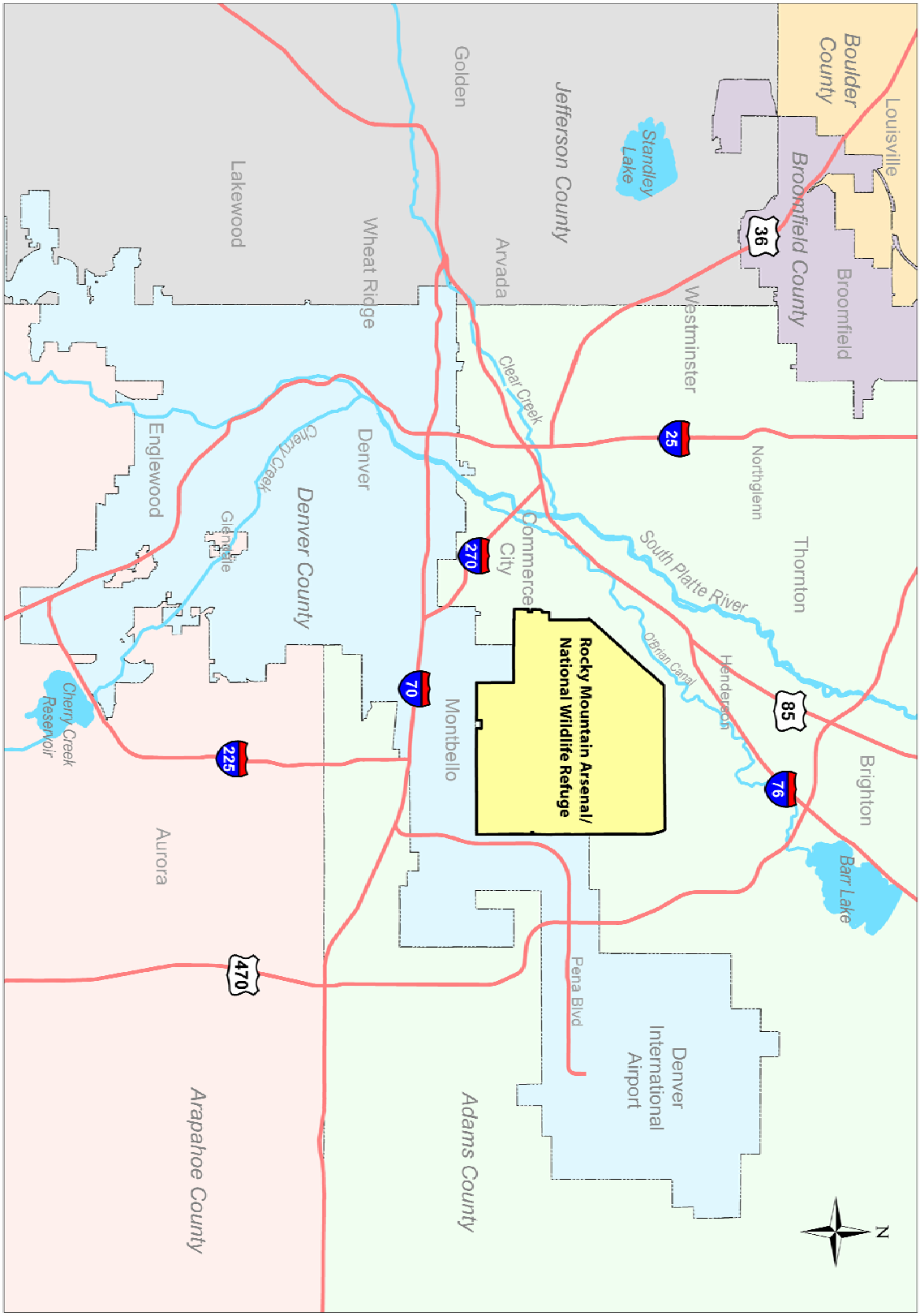
In January 1989, the USFWS established a field office at RMA to manage wildlife, particularly bald eagles and ferruginous hawks. RMA provides habitat for these birds and other wildlife. In October 1992, the U.S. Congress enacted a bill designating approximately 15,000 acres of RMA as one of the nation's largest urban wildlife refuges. The bill allows the transfer of responsibility from the Department of Defense to the Department of Interior once the cleanup process is complete. An existing partnership between the two entities enables the USFWS to manage the wildlife resources, and public use on RMA, while the Army continues its cleanup program.

The Department of Defense began transferring land in 2003, after the EPA certified cleanup actions were complete on those lands. The first parcel of land was located on the western border and was sold to Commerce City in 2004 for commercial and retail development. Proceeds will be used to construct a new USFWS visitor center. In 2004 and again in 2006, land was transferred to the Department of Interior. These land transfers officially established and later expanded the Rocky Mountain Arsenal National Wildlife Refuge to more than 12,500 acres (see page 2-4).

The transformation of the RMA from a former chemical weapons manufacturing site into a premier urban national wildlife refuge will be completed by 2010, almost a year ahead of schedule. After the RMA's remaining cleanup projects are complete, a final 2,500 acres will be transferred to the Department of Interior to increase the Refuge to 15,000 acres. The Army will retain approximately 1,000 acres to maintain its landfills, groundwater treatment systems and covers. These areas will not be part of the Refuge system and will not be accessible to the public.

Rocky Mountain Arsenal and the National Wildlife Refuge
96th Ave.
Highway 2
Commerce City
Rocky Mountain Arsenal
Rocky Mountain Arsenal
Army Retained Property
Upper Derby Lake
(Normally Dry)
Lower Derby Lake
Lake Ladora
Lake Mary
Current Visitor Center
Future Visitor Center
72nd Ave.
Quebec St.
Commerce City's Prairie Gateway
Havana St.
56th Ave.
Montbello
Rocky Mountain Arsenal National Wildlife Refuge
Buckley Rd.

The Rocky Mountain Arsenal and Surrounding Areas



3 Cleanup Program

Following the signing of the on-post ROD, the site has been actively undertaking 31 cleanup projects involving soil, structure, and groundwater contamination (see Appendix H for a list of contaminants). Currently, more than two-thirds of the projects have been completed, with the remainder to be finished by 2010, depending on funding from Congress.

3.1 Completed Cleanup Projects

- **Sanitary Sewer Manhole Plugging Phase I:** The sanitary and chemical sewer project involved filling chemical sewer lines and plugging the sanitary sewer manholes with grout to eliminate potential migration pathways for contaminated groundwater. Completed in 1998, the sanitary and chemical sewer-plugging project was the first of 31 cleanup projects to be finished.

- **Construction of the Hazardous Waste Landfill (HWL):** The hazardous waste landfill is a 35-acre site and was one of the Arsenal's first construction projects. The groundbreaking took place in 1998, and the first of two cells was completely constructed and ready to accept Arsenal-only waste in 1999.

  Using the most advanced technology of the time, the landfill was built using layers of soil, clay and thick plastic liners to keep the waste in place. Designed to last 1,000 years, the landfill met Adams County requirements and received approval from federal, state and local regulatory agencies.

  The landfill reached capacity in 2006 and now its final cover system is being constructed. The cover includes a gravel layer that provides erosion control, a liner system consisting of clay sandwiched between two thick plastic liners and a layer of crushed concrete to prevent burrowing animals from entering the landfill. Once in place, clean soil will be added to create the top of the landfill cover, and native plants and grasses will be added to re-establish the native prairie grassland.

- **Miscellaneous Northern and Southern Tier Soil Remediation:** Portions of ditches, the old wastewater treatment plant and pistol range located in the northern portion of RMA, were excavated and demolished. Buried sediments, ditches, drainage areas, Sand Creek Lateral, and surface soil and structures located in the southern portion of RMA were excavated and/or demolished. Material was taken to the HWL and Basin A (a consolidation area that holds lower-level contaminated material and soil). These projects were completed in 1999. In 2005, contaminated soil along the Sand Creek Lateral bank was identified. The soil was excavated and taken to the HWL and Basin A. This project was completed in 2006.

- **Lake Sediments Remediation:** The Lake Sediments project included removal of contaminated sediment from Upper and Lower Derby Lakes. Following remediation, peninsulas were added to Lower Derby Lake to enhance fishery habitat. Contaminated soil was taken to the HWL and the Basin A consolidation area. This project was completed in 1999.

- **Toxic Storage Yards:** Soil contaminated from past spills or leaks from containers and/or munitions was excavated and taken to the HWL and the Basin A consolidation area. This project was completed in 1999.

- **Shell and Army Complex Trenches Slurry Walls:** An underground slurry wall, consisting of a combination of chemical-resistant clay and soil, was placed around portions of the Shell and Army Complex Trenches to prevent trench waste from further impacting groundwater. A system that removes contaminated groundwater was constructed inside the Complex Army Trenches to lower the water table below the trenches. Groundwater now bypasses the slurry wall and is treated at one of the RMA's groundwater treatment plants. This project was completed in April 2000.

- **M-1 Pits:** A mixture of water and cement was added to stabilize the contaminated soil prior to excavation and disposal into the HWL. This project was completed in 2000.

- **Basin F and Basin F Exterior Soil Remediation Project, Part I:** Soils adjoining a basin that once held waste from old manufacturing activities was excavated and taken to the HWL and the Basin A consolidation area. A large portion of the work was completed in 2003. The remainder of the work has begun and will be completed in 2008 (see section 3.2).

- **Burial Trenches Parts I and II:** Contaminated soil, asbestos and munition debris were removed and taken to the HWL and the Basin A consolidation area. Old munitions were located, removed and destroyed on site with approval from the regulatory agencies. Both phases were completed by 2003.

- **North Plants and South Plants Structures Demolition:** Approximately 260 buildings once used to manufacture chemical agent, fill munitions and blend rocket fuel were demolished. Efforts involved demolishing buildings and foundations, removing contaminated soil, decontaminating and destroying equipment, adding clean soil and site grading. Contaminated material was taken to the HWL and the Basin A consolidation area. Both plants were demolished by 2003, which accounted for 60 percent of the United States' chemical weapons production capabilities.

- **Secondary Basins Parts I and II:** Contaminated soil was excavated and taken to the HWL and Basin A consolidation area. This project was completed in 2003.

- **Section 35 Soil Remediation:** Contaminated surface soil and removal of two small sections of sewer lines left from a previous chemical sewer project were excavated and taken to the HWL and the Basin A consolidation area. This project was completed in 2003. In 2005, contaminated soil along the Sand Creek Lateral bank was identified, excavated and taken to the HWL and Basin A. This project was completed in 2006.

- **South Plants Balance of Areas and Central Processing Area Soil Remediation Project Phases I and II, Parts I and II:** Contaminated soil and old chemical sewer lines were excavated and taken to the HWL and the Basin A consolidation area. This project was completed in 2003.

- **Miscellaneous Structures Phases I and II:** Administrative buildings, old bunkers and warehouses no longer needed to support the cleanup program were demolished. Phase I demolished 102 structures; and Phase II demolished 22 structures. The debris was taken to the HWL and the Basin A consolidation area. Both phases were completed by 2004.

- **Hex Pit:** A disposal pit that held contaminated soil and waste from pesticide manufacturing (hexachlorocyclopentadiene) was excavated and taken to the HWL. This project was completed in 2004.

- **Section 36 Balance of Areas Soil Remediation:** Contaminated soil, chemical sewers, and munition debris were excavated and taken to the HWL and the Basin A consolidation area. Munitions from the old munitions test area were removed and destroyed on site with approval from the regulatory agencies. This project was completed in 2004.

- **Existing Sanitary Landfills:** The sanitary landfill remediation project consisted of seven sites that included sanitary landfills, trenches and surface disposal areas previously used by the Army and its contractors as trash disposal sites. The landfills were excavated and taken to the HWL and the Basin A consolidation area. This project was completed in 2004.

- **Shell Disposal Trenches Remediation Cover:** A RCRA-Equivalent cover, which means the cover design has been proven to meet the same performance standards detailed in the federal Resource Conservation and Recovery Act (RCRA), was constructed over this area. The cover consists of placed soil, crushed concrete that acts as a wildlife barrier to burrowing animals, soil and native vegetation.

  The design takes advantage of Denver's semi-arid climate and uses the soil and vegetation to keep rain and snow melt from moving into the waste. The cover's soil layer acts like a sponge and holds in moisture. The native plants and grasses naturally pump moisture out of the soil through their root systems, where the moisture transpires into the atmosphere. This project was completed in 2007.

  This cover system is being used at six project locations – the Army and Shell Trenches, South Plants Balance of Areas and Central Processing Area Soil Remediation Phase II, Lime Basins, Basin F and Basin A.

- **Basin F Wastepile:** This project involved excavating contaminated soil from the Basin F Wastepile and placing it into the RMA's enhanced landfill. Because the project contained odorous soil, proven odor controls were used, including excavating less than one acre of soil at a time, using odor-suppressing foam, and

covering the site with soil and plastic covers. Odors were monitored at the project location as well as at the perimeter of the site 24 hours a day, seven days a week. Additionally, an on-site meteorological tower helped crews predict weather conditions, air-mixing patterns and optimal working conditions. This project was completed in 2007.

3.2 Current Cleanup Projects

- **Enhanced Hazardous Waste Landfill:** Construction on the enhanced landfill began in 2005 and was finished in approximately 1.5 years. This 37-acre site holds waste from two on-site cleanup projects and is similar to the HWL, but contains an additional protective liner made up of clay and plastic.

  The landfill is expected to reach capacity by 2008. Once full, a cover system similar to the HWL will be constructed over the landfill (see the Hazardous Waste Landfill project in section 3.1 for details about the cover). The cover construction will be completed by 2010.

- **Basin A:** The basin holds lower-level contaminated soil, demolished structures and debris. It began accepting waste in 1998, is almost full and will accept some building debris from the Miscellaneous Structures Phase III project before its closure in 2008. Once full, a RCRA-Equivalent cover will be constructed over the area (see the Shell Disposal Trenches Cover in section 3.1 for details about the RCRA-Equivalent cover). The cover construction will be completed by 2010.

- **Former Basin F:** The Former Basin F Soils project involves digging up contaminated soil and transporting it to the enhanced landfill. Because the soils contain odorous materials, the project is using the same proven odor-control measures employed for the Basin F Wastepile. The control measures include monitoring odors during the day, seven days a week, and using odor-suppressing foam and soil covers over the excavation areas. Additionally, a meteorologist gathers weather data from an on-site meteorological tower to predict weather conditions and air-mixing patterns. That data allows work to be scheduled during optimal weather conditions to ensure odors are not a nuisance to neighbors or employees. The work is expected to be complete in spring 2008.

- **Section 36 Lime Basins:** In October 2007, crews began work on the Lime Basins project, which involves containing the basins in place by isolating the waste from groundwater and constructing a protective cover over the five-acre site.

  The project began with excavating a trench around the project's perimeter in preparation for installing a 45-foot vertical barrier wall. Once installed, the wall will extend into bedrock, preventing groundwater from entering the basins. Next, crews will add a well that removes groundwater from inside the barrier wall. The groundwater will be treated at one of the RMA's water treatment systems to meet state and federal water quality standards. The project is expected to be completed by spring 2008.

Following the barrier wall installation, a RCRA-Equivalent cover will be constructed over the site (see the Shell Disposal Trenches Cover in section 3.1 for details about the RCRA-Equivalent cover). The cover will be constructed by 2010.

- **South Plants Balance of Areas and Central Processing Area Soil Remediation – Phase II Part III:** A RCRA-Equivalent cover is being constructed over the site (see the Shell Disposal Trenches Cover in section 3.1 for details about the RCRA-Equivalent cover). The cover will be constructed by 2010.

- **Complex (Army) Disposal Trenches Remediation Cover:** A RCRA-Equivalent cover will be constructed over the site (see the Shell Disposal Trenches Cover in section 3.1 for details about the RCRA-Equivalent cover). The cover will be constructed by 2010.

- **Basin F and Basin F Exterior Soil Remediation Project Part I, Phase II:** The remaining contaminated soil is being excavated and consolidated under the Basin F cover (see section 3.3). This project is expected to be complete by 2008.

3.3 Upcoming Cleanup Projects

- **Miscellaneous Structures Phase III:** The final phase involves demolishing 23 structures that are no longer needed to support the cleanup program. This project is anticipated to begin in 2008.

- **Sanitary Sewer Manhole Plugging Phase II:** Identical to the Phase I project, the manholes will be filled with grout to eliminate the sewer lines as potential migration pathways for contaminated groundwater. This project is anticipated to begin in 2008.

- **Basin F and Basin F Exterior Part II:** A RCRA-Equivalent cover will be constructed over the area (see the Shell Disposal Trenches Cover in section 3.1 for details about the RCRA-Equivalent cover). This project is anticipated to begin in 2008.

Site-wide Monitoring and Health and Safety Programs
In concert with the cleanup, strict air monitoring occurs throughout the duration of each contaminated cleanup project to ensure worker and community safety. In an effort to better predict meteorological conditions that affect air and potentially odorous soils, RMA installed a meteorological tower in 2003 that provides real-time data. The station measures wind speed, temperature, precipitation, solar radiation and air stability.

Because many of the cleanup projects involve excavating contaminated soil, a zero dust policy was instituted to ensure contaminated dust does not migrate into nearby communities. In 2003, the policy was modified. More than four million cubic yards of clean soil will be used to construct caps/covers over specified areas described in Section

3 of this document. Furthermore, the soil needs to be dry and loose to ensure successful reseeding of native plants and grasses. Minimal dust suppression efforts are used on these clean soils; however, contaminated soil is still under the strict no dust policy.

RMA's approach to each cleanup project is "safety first, first in safety." In 1999, the Occupational Safety and Health Administration (OSHA) awarded RMA and Foster Wheeler/TTEC with its highest workplace safety award, Voluntary Protection Program (VPP) Star Status. The RMA was one of the first cleanup sites in the country to receive this prestigious award. TTEC was recertified with Star Status in 2002 and again in 2007. Washington Group Intl., Shell's contractor, received OSHA's VPP Star Status in 2004 and was recertified in 2007. Additionally, the Army received Merit Status in 2007 and is the first military site in OSHA Region 8 to be included in the VPP. OSHA's VPP recognizes outstanding efforts of employers and employees who have established exemplary occupational health and safety programs. Each applicant selected for participation in the program undergoes a rigorous weeklong on-site evaluation by OSHA, which culminates in a report recommending Star or Merit Status only for those companies with excellent health and safety programs. The average VPP worksite has a lost workday incidence rate at least 50 percent below the average of its industry.

To ensure the future health and safety of the public and the environment and to meet CERCLA requirements, Five-Year Reviews will be conducted on an ongoing basis at the RMA. Reviews will take place even after the environmental cleanup has concluded, as the cleanup program uses on-site landfills and consolidation areas to hold contaminated waste. During the review, the RVO and regulatory agencies evaluate if environmental standards that affect the RMA have changed, whether the implementation of the RMA's cleanup program continues to be protective of public health and the environment and, if the program can be expected to remain protective into the future. The community involvement component of the review includes notifying the public that a review is under way and holding an official public comment period about the report's findings. Public notices are printed in local newspapers to provide information about the report's findings, public comment periods and ways to obtain a copy of the final report.

4 Government Agencies and Organizations

Government agencies and private companies involved with the environmental cleanup at RMA include: Army, Shell, USFWS, EPA, CDPHE, TCHD and the Agency for Toxic Substance and Disease Registry (ATSDR).

4.1 Remediation Venture Office (RVO)

The RVO, formed in October 1996 to expedite the implementation of the remedy, is an innovative three-party arrangement consisting of personnel from the Army, Shell and the USFWS. Members of the RVO work together to coordinate and provide oversight of the remediation management based on best value concepts, including, but not limited to, quality assurance, health and safety, regulatory compliance, fiscal monitoring, and community involvement. Shell's subcontractor, Washington Group, is also part of the RVO. Along with the Army, Washington Group provides oversight of the cleanup program and manages the groundwater treatment plants.

In 1997, Foster Wheeler, now known as Tetra Tech E.C., was chosen as the program management contractor to design the Arsenal's 31 cleanup projects and manage a variety of subcontractors selected to implement the cleanup designs. Under the Army's lead, the RVO directs Tetra Tech to ensure the performance-based contract meets environmental standards and provides the best value to taxpayers, while completing the cleanup work.

4.2 U.S. Environmental Protection Agency (EPA)

The EPA has oversight responsibility to ensure that contamination problems at RMA are remediated according to CERCLA requirements. Once the cleanup is complete, EPA is the lead agency for deleting land from the Superfund NPL. The EPA is a party to the FFA.

4.3 Colorado Department of Public Health and Environment (CDPHE)

CDPHE administers the state's environmental and public health laws, including the Colorado Hazardous Waste Management Act, a state-delegated Resource Conservation and Recovery Act program. At the RMA, the CDPHE reviews engineering designs and provides field oversight during project implementation to ensure the remedy is consistent with state laws and the RMA Records of Decision. CDPHE also administers the Medical Monitoring Program that was developed to monitor the success of exposure prevention efforts during the environmental cleanup. Although CDPHE did not sign the FFA, they are a full participant in the FFA dispute resolution process.

4.4 Tri-County Health Department (TCHD)

TCHD oversees local public and environmental health issues in Adams, Arapahoe and Douglas Counties. TCHD assists with off-site groundwater monitoring, air and odor monitoring, receives all RVO reports, distributes chemical analyses, comments on engineering designs, and is the Adams County representative for the Certificate of

Designation for RMA's two landfills. While TCHD did not sign the FFA, this agency is acknowledged as a regulatory agency regarding the site's cleanup program.

4.5 Agency for Toxic Substance and Disease Registry (ATSDR)

ATSDR advised the RVO and assisted in the development of the toxicity assessment, exposure assessments, and the risk characterization portions of the endangerment assessments. ATSDR is a party to the FFA.

5 Community Background

5.1 Community Profile

The RMA and Refuge is located 10 miles northeast of downtown Denver, Colorado, in Adams County. A former chemical weapons and agricultural chemical production facility, the RMA is a gateway to the Rockies, sharing its eastern boundary with Denver International Airport (DIA), the fifth busiest airport in the United States, and 10th busiest in the world.

Commerce City – To the west and north of RMA is Commerce City, a community located in Adams County. Commerce City is transforming and revitalizing itself. Located adjacent to the older, central area of Commerce City (Historic City) and directly west of RMA is the Prairie Gateway project. This 770-acre parcel is former RMA land that is being completely redeveloped. The area to the north of RMA (Northern Range) is burgeoning with development, including new homes, apartments, golf courses and areas set aside for shopping, commercial and industrial uses. Reunion is a master-planned community just north of RMA that is expected to include more than 12,000 homes once completed.

Nearby Communities – Brighton, the county seat of Adams County, also has new development areas to the north and northeast of RMA. Henderson, a more rural community is located northwest of RMA. Along the southern boundary to the east is the Montbello neighborhood, part of the City and County of Denver. The remaining portion of RMA's southern boundary (to the west) is the former Stapleton International Airport, one of the largest in-fill urban developments in the United States. Begun in 2001 and emerging over the next 15 to 20 years, Stapleton redevelopment will be a network of urban villages, employment centers and significant open spaces. Other nearby communities include Thornton, Northglenn, Westminster and Aurora.

Denver-area Growth – The RMA is located in the northeast quadrant of the Denver metro area, a large population center historically comprised of six counties. During the last decade, the Denver metro area has expanded in size to include more counties, but the 2005 estimated population for the historical six-county Denver region is 2.58 million (Source: U.S. Census Bureau), an increase of 1.5 percent annually since 2000 (2.40 million). Population growth in the Denver metro area slowed during the early years of the 21st century due to an economic downturn. During the 1990s however, the Denver metro area was one of the fastest-growing areas in the country, increasing in population by more than one-half million people (1.85 million – 1990), with an annual growth rate of 3.0 percent. Recently, the 10-county Denver-Aurora Metropolitan Statistical Area (MSA) that is tracked by the U.S. Census Bureau to reflect the expansion of urban workers into outlying counties was ranked the 14th fastest-growing metro region in the country, out of more than 350, with a population increase of 2.0 percent between July 1, 2005 and July 1, 2006. In addition, the Denver area's year-over-year job growth gain of 50,948 jobs (4.0 percent increase, December 2006 compared to December 2005; Source: Colorado Department of Labor and Employment) outpaced the nation as a whole (1.8 percent).

Adams County Growth – Adams County is one of the fastest-growing regions within the Denver metro area, due in part to the E-470 beltway providing access to DIA and linking

the north and south portions of the metro area along its eastern edge, affordable and available vacant land, and new attractions. During the late 1990s, Adams County experienced strong population growth, increasing to 363,857 by 2000 – an annual growth rate for the decade of 3.7 percent. Since 2000, Adams County's population growth has moderated, increasing by 50,481 to 414,338 in 2006, an annual growth rate of 2.3 percent (source: U.S. Census Bureau). The county now is the fifth most populous in Colorado and fourth in population within the Denver-Aurora MSA. By 2015, Adams County is projected to have 506,298 residents, growing about 2.2 percent annually (source: Colorado State Demography Office).

Commerce City

Population: Commerce City is experiencing tremendous growth. During the 1990s, the city had a solid annual population growth rate of 2.5 percent, giving it a population of 20,991 in 2000. By 2005, Commerce City's population had increased to 35,159, reflecting an annual growth rate of 13.5 percent since 2000. Between July 2004 and July 2005, Commerce City's population grew by 14.3 percent, making it the seventh fastest growing municipality in Colorado among 271 tracked (source: Colorado State Demography Office). In May 2007, the Commerce City Web site estimated its population to be 45,000 living on 65.5 square miles, up from about 21,000 living on 19 square miles in 2000 (source: 2000 U.S. Census). The Commerce City Web site also includes a population projection estimating the city's population to be 70,000 by 2010.

Community Demographics: An early 2006 study of Commerce City residents conducted by the city and a research consultant estimates population at 36,049 as of January 31, 2006, which compares well to State of Colorado and U.S. Census estimates for 2005. The "census" study included responses from more than 3,500 Commerce City residents in all regions of the community. While it confirmed the tremendous population growth in the city, it also showed dramatic shifts in key demographics among residents. For example, the proportion of White, non-Hispanic residents in the City has grown from 44 percent in 2000 (source: U.S. Census Bureau) to 57 percent in January 2006. Furthermore, the proportion of Hispanics (any race) has dropped from 56 percent of the population in 2000 to 43 percent in 2006. Moreover, the proportion of residents with a college degree has increased from 8 percent in 2000 to 37 percent in 2006. Additionally, the proportion of households with an income of $75,000 or more has grown from 10 percent in 2000 to 41 percent in 2006, while home ownership has increased from 60 percent of residents to 87 percent. These demographic shifts within Commerce City are likely due to recent growth in the city from large-scale housing developments in the city's Northern Range.

Northern Range: Commerce City's Northern Range, located north and northwest of RMA, is the high-growth area in the city. Tens of thousands of new residential units – some already built – have been approved for development. Commerce City's own census study in early 2006 aggregated the Northern Range into 17 new "neighborhoods" based upon subdivisions already being developed.

Reunion: One of the largest developments in the Northern Range is Reunion, a 2,500-acre master-planned community being developed by Shea Homes. Already under construction, Reunion is located southwest of E-470 and northeast of RMA. By the end of its 20-year build out, it will consist of 12,000 homes, 900 acres of commercial and retail development, and 320 acres of parks and open space. Reunion was the site of the 2006 Parade of Homes, an annual display of custom homes in a new Denver area subdivision hosted by the Home Builders Association of Metro Denver. More than 85,000 people toured the homes, and five of the six homes were under contract before the event ended – a very unusual occurrence for the Parade.

Prairie Gateway: The development project is a 770-acre parcel of land located along the western edge of the Rocky Mountain Arsenal National Wildlife Refuge. This former RMA land was purchased by Commerce City from the federal government in 2004 and is now the home of the new City Civic and Justice Center. In addition, Dick's Sporting Goods Park opened in April 2007, and is the new 18,000-seat stadium for the Colorado Rapids, Denver's Major League Soccer team. More than 20 full-size outdoor fields surround the new stadium and will be used for soccer, lacrosse and other adult/youth sports. In the future, retail and commercial space is planned for the Prairie Gateway.

Stapleton

Stapleton is a 4,700-acre development on the site of Denver's former Stapleton International Airport. It is one of the largest undeveloped parcels of land in the heart of a major U.S. city. The Stapleton Development Plan created in 1995 is the framework for developing the area. In 1998, Forest City Enterprises was chosen as the master developer of the site. Envisioned for the development are 12,000 homes, 1,100 acres of parks and open space, three million square feet of retail space and 10 million square feet of office space.

Stapleton is part of the City and County of Denver and encompasses land on both the north and south side of I-70. The boundaries generally are Quebec St. to the west, Havana St. to the east, 20th Ave. on the south, and 64th Ave. on the north. A one square-mile section that was formerly part of RMA and is due east of the Prairie Gateway project is part of the Stapleton development.

Construction of Stapleton began in 2001. By 2003, more than 500 families were living in newly constructed homes. By 2006, Stapleton included three schools, its own fire station and three unique shopping and entertainment areas encompassing more than two million square feet of retail space. Northfield Stapleton, located northeast of I-70 and Quebec includes major anchors such as SuperTarget, Macy's and Bass Pro Shops, along with specialty shops, restaurants and entertainment options.

By fall 2007, more than 3,000 homes housing roughly 8,000 residents were completed and the development's first community park, Central Park, has opened.

Brighton

Brighton, the county seat for Adams County, is located northeast of RMA. Historically a farming and ranching community, it too is experiencing rapid growth (7.2 percent annually since 2000). Brighton's population (28,382 – 2005) has doubled since 1990 (14,286). Since 2000, Brighton has approved more than 5,400 dwelling units for construction; 2,027 already have been built. Another 10,000 units are in the planning process. Brighton's largest development is Prairie Center, a 1,760-acre development that will include 4,500 dwelling units and a mix of commercial and industrial uses. Prairie Center is located southeast of Brighton's core city along I-76, just northwest of Barr Lake State Park.

Brighton's racial and ethnic makeup remains fairly constant. According to Brighton's 2006 Community Profile (2000 U.S. Census data), the city's racial composition shows more than three-fourths of all residents are White (77 percent), with much smaller proportions of African-Americans (1 percent), American Indians (2 percent), and Asians (1 percent). According to 2005 estimates of Hispanic ethnicity, 40 percent of Brighton residents consider themselves Hispanic or Latino, only a slight increase from the 38 percent in 2000 and 35 percent in 1990. (Note: Residents who identified themselves as ethnically Hispanic or Latino may come from any racial category.)

Henderson

Henderson is a small agricultural-based community to RMA's northwest. But because Henderson is not an incorporated city within Adams County, there is little current information on what, if any, changes are taking place. However, it can be assumed that Henderson is changing along with those changes taking place in nearby communities.

According to 2000 U.S. Census data, the total population of Henderson was 2,172, a decrease of 20 percent since 1990 (2,718). The racial composition of Henderson residents predominantly is White (83 percent), little changed from the proportion of White residents found in 1990 (88 percent). The proportion of ethnic Hispanic or Latino residents in Henderson has increased only slightly since 1990 (18 percent), which in 2000 totaled 23 percent.

Montbello

Montbello, a neighborhood in the City and County of Denver that shares a boundary on RMA's southern tier, has seen dramatic change since the 1990s. No longer adjacent to an international airport (Stapleton), the community has seen shifts in the composition of its residents.

Population growth within Montbello steadily is increasing. Total estimated population for 2005 is 34,578, a robust annual growth rate of 4.8 percent since 2000 (28,796). The neighborhood is nearly double in size compared to 1990 (17,582).

The change in the community's racial and ethnic makeup is even more striking. In 1990, Montbello's ethnic community of Hispanics and Latinos accounted for just 15 percent of residents. By 2000, that figure had jumped to 36 percent, a 151

percent increase over a 10-year period. By 2005, the proportion of Hispanics was estimated to be 41 percent. Additionally, in 1990, Montbello's racial profile was predominantly that of an African-American community – 60 percent of its residents were African-American, with 29 percent being White. By 2000, the proportion of African-American residents had declined to 45 percent, with 26 percent considered White. By 2005, it was estimated that 39 percent of residents are African-American and 14 percent are White.

While Montbello's historical racial segments continue to decline in population, the Asian/Pacific Islander segment continues to grow. By 2005, it was estimated this racial segment had grown 37 percent since 2000 to 1,204 residents (7.4 percent annual growth). The Asian/Pacific Islander segment still represents a small proportion of all Montbello residents (3.5 percent, 2005 estimate), however its numbers are steadily increasing.

5.2 History of Community Involvement

In the 1950s, residents living north and northwest of the site began to take interest in RMA when crop damage was noticed on nearby farms. The Army began to study the groundwater flowing off the site and detected contamination. In the 1960s, the Army disposed of liquid chemical waste from the Basin F project into a 12,045-foot deep injection well after the Basin F liner began to leak. Some community members and geoscientists believed that the Army's deep injection well might have caused earthquakes in the Denver area. Although this was never proven, the Army stopped using the well in 1966 and sealed it in 1985.

In the mid 1980s, community interest peaked again with the Army's initiation of 14 Interim Response Actions (IRA) for air, soil, water and structures. These response actions focused on immediate cleanup needs while the site was undergoing extensive study.

In the late 1980s, one of the site's 14 IRAs generated strong community interest, concern and involvement. The Basin F IRA involved the transfer of four million gallons of Basin F liquid to three, 1.3 million-gallon holding tanks and approximately 6.5 million gallons to a double-lined holding pond. The project also removed 600,000 cubic yards of sludge, soil, and liner material from Basin F and placed it in the Basin F Wastepile. The project encountered several obstacles, including heavy rainfall. The excess rainfall increased the volume of the Basin F liquid and raised the need for a second double-lined holding pond. Once the liquid was drained from the holding basin, the sludge was mixed with soil so that it could be placed into the Wastepile. This process created strong odors, due in part to the large excavation area, resulting in community concern and frustration. Several public meetings were held. Air purifiers were distributed to affected residents to alleviate odors. Local and federal government agencies studied the odors and determined there were no acute health impacts to residents.

In the early to mid 1990s, RMA had to decide how best to destroy the Basin F liquid waste being stored in holding tanks. After community outreach and input, including a series of public meetings and weekend workshops, the Army, Shell and the USFWS, along with EPA, CDPHE and TCHD, decided to incinerate the liquid waste by means of the submerged quench incinerator. The incinerator began processing the Basin F liquid in

1993. By 1995, the project was complete and had achieved more than 300,000 accident-free staff hours. The project was completed ahead of schedule.

Community involvement continued throughout the 1990s. Through the use of public meetings, publications, videos, and other communication tools, the Army encouraged community involvement in the decision-making process that would ultimately lead to the Record of Decision (ROD). The ROD outlines RMA's final environmental cleanup plans. The RMA Restoration Advisory Board (RAB) and Site Specific Advisory Board (SSAB) were formed with the purpose of informing and answering community questions about the ROD, as well as listening to concerns and receiving input from the community. The Department of Defense recognizes the RAB as the official RMA citizen advisory group. The RAB is composed of community members from the affected neighboring areas, RVO, and regulatory agencies. The board meeting is held on the second Thursday of the month as needed. The SSAB is composed of community members interested in RMA. The advisory boards are still in place today but have changed focus from pre-ROD to post-ROD activities, such as reviewing engineering designs and implementation of the 31 cleanup projects.

The ROD stipulated a Medical Monitoring Advisory Group (MMAG) be formed to evaluate information concerning exposure pathways from the cleanup, to identify and recommend appropriate public health actions and to communicate this information to the community. The CDPHE formed the MMAG in 1996 according to the ROD's provision and in response to citizen concerns about public health protection. The MMAG, composed of community members from the affected neighboring areas, RVO and regulatory agencies, focused on human health monitoring, environmental monitoring, emergency preparedness, and public involvement and education. The MMAG developed recommendations to monitor for any impact on community health during the environmental cleanup, and ensure information about the cleanup and the program is available to the communities. As part of the MMAG's recommendations, the group called for the creation of a Medical Monitoring Program Citizen Advisory Board (CAB). The CAB serves as a communication link to the communities, ensures the MMAG's recommendations are carried forward and makes recommendations to the CDPHE on program implementation. In previous years, the CAB met quarterly. Now, the CAB meets yearly, or as needed.

In 2000, another surge of public interest occurred with the discovery of 10 sarin-filled (nerve gas) bomblets. The bomblets were recovered in an old scrap yard area located in the central portion of the site. Because of RMA's proximity to neighboring communities and downtown Denver, there was high media and public interest about the bomblets and the disposal option selected. Over the course of several months, officials from federal and state governments, including high-ranking Army officers, Colorado Governor Bill Owens, Senator Wayne Allard and Representative Diana DeGette, worked together to determine the best bomblet destruction method that would be protective of the community, RMA workers and the environment. A variety of community outreach tools were implemented including:

- Communicating with elected officials and the media (at times, on a daily basis);
- Distributing door-to-door information bulletins (in English and Spanish);

- Providing 5,000 flyers to local businesses for distribution;
- Recording seven automated pre-recorded phone messages with critical updates that reached more than 31,000 neighbors;
- Providing e-mail updates to nearly 300 residents:
- Updating RMA's Web site daily;
- Hosting five off-site public meetings (with a Spanish interpreter available for the Spanish-speaking community) to explain the destruction options and to provide a forum for community input; and
- Establishing a community information hotline for residents to receive more information or to talk to an RMA representative.

All bomblets were successfully and safely disposed of in 2001 with no impacts to the surrounding community, workers or the environment.

In 2003, the RMA's boundary changed when approximately 950 acres of RMA land along the western border were deleted from EPA's NPL, also known as Superfund. Prior to the land deletion, the EPA initiated a public involvement program that included community briefings and a public comment period to gather public input on the issue. Based on technical information and public response, EPA deleted the land from the NPL in January 2003. As stated in the 1992 Refuge Act, this parcel of land could be sold with the proceeds used for a new USFWS visitor center. Commerce City purchased the land in June 2004. Now known as the Prairie Gateway, this parcel is approximately 770 acres due to a land exchange in 2007. Currently, the land is under commercial and retail development and already includes the world's largest soccer stadium complex, youth soccer fields and a new Commerce City civic center. Future plans include a new high school, open space and retail outlets.

In 2004 and again in 2006, a total of more than 12,000 acres (two-thirds of the site) were deleted from the NPL following the same EPA-lead process. Community briefings and public comment periods were provided to gather public input on the issue. Once the land was deleted from the list, it was transferred from the U.S. Army (Department of Defense) to the USFWS (Department of Interior) for inclusion into the National Wildlife Refuge System. These land transfers officially established and later expanded the Rocky Mountain Arsenal National Wildlife Refuge, one of the largest urban refuges in the country. The Refuge is also one of the largest open spaces in the Denver Metropolitan area. With the establishment and subsequent expansion, average monthly public visitation to the Refuge nearly doubled with each land transfer.

In late 2005, a comprehensive community outreach program was launched to explain the final phase of the Basin F Wastepile project due to community sensitivities. During the initial cleanup in the 1980s, RMA workers dug up all 93 acres at once, which generated odors at the site and in the community until a soil cover could be placed over the project area. Almost two decades later, long-time residents still recalled the strong odors from the project and voiced concerns about a potential repeat of those problems. To ease community concern about the upcoming project, RMA and regulatory agency staff created a community involvement program to discuss how odors would be controlled while completing the final phase of the project. Before the project began, staff met with more than 600 people and held more than 35 community briefings with neighbors,

homeowner associations, school district staff and local schools, community advisory boards, local businesses, civic groups, elected officials and media representatives. Staff also held two open houses in neighboring communities. While the project was underway, updates were provided to the local newspapers and printed in the RMA's quarterly community newsletter, *Milestones*. The Wastepile project began in April 2006 and concluded in June 2007, four months ahead of schedule and with no employee or community odor complaints during the project.

As the site evolved into a Refuge, plans to reintroduce bison on former RMA land became a reality in 2007. As part of a nation-wide conservation effort and pilot program, 16 wild bison with no detectible cattle genes, were brought to the Refuge in March 2007. Prior to their arrival, the USFWS conducted briefings with elected officials, neighbors, the school district and community groups to answer questions and gauge community attitudes about their potential arrival. These briefings included information about how bison management activities and tours would be coordinated with ongoing remedy projects on other areas of the site. The USFWS solicited public comment on their bison pilot program and received more than 1,500 comments, with most being very supportive of their return. The reintroduction received local, national and international media attention as well as made the Refuge a destination attraction. Tours to see the bison were booked several months in advance and visitation numbers more than doubled.

6 Community Interviews

In summer 2007, the Army, USFWS, Shell, EPA, CDPHE and TCHD conducted confidential one-on-one community interviews to gain a better understanding of community perceptions and concerns about the RMA, hear community thoughts about the cleanup and the site's continued transition into a national wildlife refuge, and preferences for receiving RMA information. Approximately 30 local residents, elected officials, stakeholders, business leaders, school teachers and USFWS volunteers were interviewed (see Appendix G for the list of community interview questions). Interview responses to the questions are summarized in five main areas: 1) Site Awareness, 2) Cleanup Questions and Concerns, 3) Outreach Materials and Delivery, 4) Site Visitation 5) General Comments.

6.1 Results of Community Interviews

1. Site Awareness

The majority of the respondents have been aware of RMA for more than 30 years. They became aware of the site and its history from living in close proximity to the RMA or from the 1960s earthquakes that were thought to be RMA-related. Within this group, some respondents had detailed knowledge about RMA's history, cleanup projects, groundwater contamination and transition to a national wildlife refuge. The minority became aware of the site over the last five to 15 years through local organizations, site visits or family members who once worked at the RMA.

2. Cleanup Questions, Comments and Concerns

The majority did not have concerns about the site. Within this group, some were happy to see the cleanup moving forward, trust the agencies working at the site, and think the cleanup has been successful. A minority had concerns about the cleanup, which were centered on long-term management of waste left in place. There is confusion as to who will enforce regulations regarding the waste left behind after the remediation is complete. There is also concern that people will not be as aware as they should about remaining and past contamination because the information provided to them is too Refuge-focused.

Sample of concerns:

- Whether the public will have an opportunity to participate in the development of the Long-Term Groundwater Monitoring Plan—or review the document and provide comments—to insure the treatment systems perform as designed
- Whether the Five-Year Review process will include full regulatory and public participation once the clean up is complete
- Funding concerns
- Future management of covers and contained contaminated waste
- Inadequacy of signage around the covers and concern that growing native grasses could eventually cover the signs if they aren't posted higher
- Whether numerous incidents of cancer on a particular street near the Arsenal are related to the clean up

- The medical monitoring program is inadequate
- Whether or not the Prairie Gateway land that once belonged to the RMA is free of contaminants
- Too much emphasis has been placed on the Refuge before the cleanup program is completed. This is disingenuous because the Arsenal cleanup program becomes overshadowed.
- People who gave up their land in the late 1930s and early 1940s were never appropriately compensated

3. Outreach Materials, Delivery and Contacts

A. Outreach Materials

The majority cited Milestones as the most recent and consistent source of information about the RMA. Most respondents noted that the newsletter contained timely, complete information about the cleanup and Refuge. A few respondents felt the newsletter should also feature details and differing viewpoints about various cleanup design options considered and the rational for the selections made. Others mentioned receiving WildNews, or attending tours or briefings for local groups as other frequent avenues of information.

In 2006, the Milestones newsletter became a bilingual publication (English and Spanish) to ensure that the increasingly diverse communities around the Arsenal received information about the remedy. Respondents were asked their opinions about the bilingual newsletter. Two-thirds thought it was important for the newsletter to be in both English and Spanish in order to reach the entire community, with a few noting that local schools and city government also provide bilingual information. The minority felt that a bilingual newsletter was a waste of money, contributes to people not learning English, or didn’t have an opinion on the issue.

When asked about what kinds of information is of interest, most respondents chose updates on cleanup projects, information about long-term plans for the site and related changes in the surrounding community, and information about nature and environmental education programs as the highest-ranking options. Historical site information and details about the Refuge fishing program were also of interest.

B. Information Delivery

The majority appreciated receiving information in several formats. Overall, Milestones, on-site tours and the Web site were the highest-ranking options, with many stating that the information provided is very helpful. The minority mentioned community events, e-mail, local newspapers and Channel 8 as other communication avenues.

C. Community Contacts

The majority of respondents who needed to contact someone at the site were able to do so and/or already have established points of contact. Others noted the Web site as their source for information.

4. Site Visitation

The majority had visited the site either as part of a briefing, a nature/environmental education program or Refuge site tour.

The minority had not visited the site, but planned to in the near future. Within this group, many asked where and how to access the Refuge, as well as the hours of operation. Others in the minority group had not visited or suggested people visit the Refuge when contaminated soil work wasn't taking place.

A few respondents noted that the site is intimidating to visit due the chain-link fence, guard shack and ID requirement. Additionally, many Spanish-speaking families hesitate to visit the Refuge because the guard shack looks unfriendly and resembles a police checkpoint. One respondent suggested creating a special Refuge pass, which could be made available at community locations to make the entrance experience less intimidating.

5. General Comments

The following is a collection of the general comments received from respondents:

- Pleased with the cleanup and transition to a national wildlife refuge.
- Positive comments about the overall community outreach program. The information provided was factual and timely.
- When soliciting for public comment, it would be helpful to provide feedback as to how the comments were used in the decision-making process.
- Long-time residents noted that the site is more forthcoming with information, that it is easier to have questions answered and the information is more readily available than in years past.
- Site representatives are active in the community and are approachable.
- The Web site and newsletter are very informative.
- Ensure cleanup history is preserved for current and future Refuge visitors.
- Not enough time in general to comment on documents.
- Questions and concerns regarding the long-term operations and maintenance of the Army retained land (approximately 1,000 acres).
- Pleased to see the off-post groundwater contamination reducing.
- Questions about how long the groundwater treatment systems would be in operation.
- Raise awareness of the site by publicizing site tours so people can experience the RMA/Refuge first-hand.
- Happy to see bison at the site.
- View the Refuge as an asset to their community.

7 Activities, Objectives and Timing

Based on survey findings, community interviews and feedback from community advisory board members, the RVO community involvement plan is designed to promote two-way communication between citizens and the installation. Additionally, it is intended to provide opportunities for meaningful and active public involvement in the process. It also identifies methods for providing timely and appropriate information that responds to residents' questions and concerns.

1. ACTIVITY: Information Repository and Administrative Record	
Objective:	Continue to make available to the public documents relating to cleanup decisions and designs, site history, transitioning the site to a national wildlife refuge and other documents available for public comment.
Method:	The Joint Administrative Record and Design Facility (JARDF) is located at the RMA in Building 129. Office hours are from noon to 4 p.m. Monday – Friday or by appointment by calling 303-289-0983. Documents also are available at EPA's Superfund Records Center, 1595 Wynkoop, Denver, Colorado and at the CDPHE, Hazardous Materials and Waste Division Records Center, 4300 Cherry Creek Drive South, Denver, Colorado. EPA's office hours are Monday – Friday 8:00 a.m. to 4:30 p.m. CDPHE's office hours are Monday – Friday 8:00 a.m. to 5:00 p.m. For other information repositories, see Appendix E.
Timing:	The information repository was established in 1989. It will remain open until the cleanup is complete.
2. ACTIVITY: Respond promptly to inquiries from local residents, public officials, community groups, community leaders and the media	
Objective:	To maintain two-way communication between stakeholders and the RVO, EPA, CDPHE and TCHD.
Method:	Written responses, public and/or advisory board meetings, access to RMA's information repository and administrative record, and EPA's Superfund Records Center provide the basis for prompt responses. Community involvement staff ensures a response is received in a timely manner, when possible.
Timing:	Responses to inquiries are coordinated as soon as possible.
3. ACTIVITY: Publish public notices/public comment periods	
Objective:	To give the community an opportunity to review and comment on various RMA documents including cleanup designs at the 30 and 95 percent design phases.
Method:	Public notices are printed in the Rocky Mountain News, Denver Post, Brighton Blade, Commerce City Beacon and Gateway News using a standardized format. The public notices announce the availability of the document, duration of the public comment period (minimum of 30 days with an extension upon request), contain information about the project or issue, where to find more information and a point of contact for comments. This information also is posted on the RMA Web site.
Timing:	Comment periods will be announced as appropriate.

4. ACTIVITY: Conduct public meetings	
Objective:	Inform stakeholders about cleanup-related issues and to solicit community input that can be used by the RVO and regulatory agencies in the decision-making process.
Method:	To ensure public meetings are convenient for residents to attend, they are held in the evenings or on weekends and may be at an off-site location. For specific topics, comment cards are made available to the public, the meeting is videotaped and a court reporter may record the meeting.
Timing:	As needed
5. ACTIVITY: Conduct Restoration Advisory Board meetings	
Objective:	Continue to hold RAB meetings to inform the community and receive input on cleanup designs, design changes and the cleanup progress.
Method:	By holding RAB meetings (open to the public), citizens are informed about cleanup designs, design changes and the cleanup progress, and have the opportunity to ask questions, provide input and receive feedback from the RVO and regulatory agencies. Advisory board members are encouraged to share information with residents within their community.
Timing:	RAB meetings are usually held the second Thursday of the month on an as-needed basis, at RMA in Building 129 beginning at 5:30 p.m.
6. ACTIVITY: Continue distributing a community newsletter	
Objective:	To provide information to the community about current cleanup projects, the overall remedy program and refuge-related activities.
Method:	The distribution of Milestones and WildNews will continue. Newsletters will be sent to residents residing in Commerce City, Henderson, Brighton, Montbello and Stapleton. Additional zip codes near RMA may be added to ensure the newsletter reaches RMA neighbors in new residential developments. The USFWS's WildNews newsletter will continue to be incorporated into Milestones to increase its distribution. Milestones and WildNews are posted on RMA's Web site. A condensed electronic e-mail version of Milestones and WildNews, titled RMA Today, will continue to be sent to elected officials and media representatives to keep them apprised of site issues and activities.
Timing:	Ongoing
7. ACTIVITY: Provide timely and appropriate information to the local community about upcoming site activities, cleanup projects and public events	
Objective:	To provide opportunities for meaningful and active community involvement by providing current information to stakeholders.
Method:	Post information on RMA's Web site, mail a community newsletter to residents near RMA, attend other community advisory board meetings, provide an abbreviated newsletter to elected officials and media representatives, host on-site events, distribute information to local media outlets, provide updates to elected officials, post information in local newspapers, attend community events, record current information on the RMA community information line, and provide presentations to local community groups about RMA.
Timing:	Ongoing

8. ACTIVITY: Provide timely and appropriate information to local media of upcoming issues and site milestones on a regular basis	
Objective:	To provide the media with current and accurate information that can be disseminated to the community.
Method:	Send media news releases, invite the media on-site as necessary, and continue to develop productive relationships with the media to ensure accurate coverage of site projects and progress.
Timing:	Ongoing
9. ACTIVITY: Responsiveness Summaries	
Objective:	To summarize comments received during comment periods or public meetings, to document how the RVO has considered those comments, and to provide responses to comments.
Method:	A responsiveness summary is prepared containing a summary of comments and responses.
Timing:	The responsiveness summary is finalized as soon as possible after the public comment period has closed.
10. ACTIVITY: Maintain RMA's Web site	
Objective:	To provide the public with electronic information about RMA.
Method:	The RMA Web site contains historical information, fact sheets on remedy projects, press releases, public outreach information such as the community newsletter and wildlife-related programs, key contacts, events, public meetings and how to become involved at RMA.
Timing:	Ongoing
11. ACTIVITY: Five-Year Review Public Involvement	
Objective:	To provide the public with the opportunity to comment on the cleanup over the past five years.
Method:	The next Five-Year Review process starts in 2010. Printing public notices in local newspapers will notify the community that the Review will be conducted. Once finalized, public notices in local newspapers will announce the document is complete and where to obtain a copy.
Timing:	2010, ongoing
12. ACTIVITY: Preserve the Site's History	
Objective:	To provide the public with historical information about the site.
Method:	As part of the USFWS's environmental education programs, a public historical tour will be developed highlighting the prehistory of the land, as well as the eras of settlers, homesteaders and the RMA. The tour will also provide information about prehistoric and historic artifacts found at the site. In addition to a tour, a site video highlighting the cleanup program and transition to a national wildlife refuge will be available for visitors to view at the visitor center. Also, an RMA historical information pamphlet will be created and made available to visitors.
Timing:	2008/2009

13. ACTIVITY: Modify the Current Refuge Welcome Gate House	
Objective:	To change the appearance of the old Army gate house at 56th Avenue and Havana Street (Refuge public entrance).
Method:	A fresh coat of vibrant paint, weed removal and fencing modifications will spruce up this former military structure into a Refuge welcome entrance. The change will make the Refuge entrance more visible and less intimidating.
Timing	2008
14. ACTIVITY: Future RMA Community Resources Beyond 2010	
Objective:	To inform the public about points of contact and ways to obtain site information once the program is complete.
Method:	Identify and inform the public about future RMA community resources that will be available to address questions or concerns that may arise.
Timing	2009/2010
15. ACTIVITY: Continue Attending Community Outreach Events	
Objective:	To inform the public and answer questions about the site's history, cleanup projects and status, and continued transition to a national wildlife refuge.
Method:	Attend outreach events in Commerce City, Montbello and Brighton
Timing	2008 – 2010

APPENDIX A

Community Involvement Coordinators

U.S Army- contractor Susan Ulrich 303-289-0250 susan.ulrich@us.army.mil 72nd Ave. and Quebec Street, Building 129 Commerce City, CO 80022	*Shell Oil Company* Mike Gaughan 303-298-1818 mgaughan@mgacommunications.com 1125 17th Street, Suite 1800 Denver, CO 80202	*U.S. Fish and Wildlife Service* Sherry James 303-289-0659 sherry_james@fws.gov 72nd Ave. and Quebec Street, Z-80 Commerce City, CO 80022
Environmental Protection Agency Jennifer Chergo 303-312-6601 chergo.jennifer@epa.gov 1595 Wynkoop St. Denver, CO 80202	*Colorado Department of Public Health and the Environment* Warren Smith 303-692-3373 warren.smith@state.co.us 4300 Cherry Creek Drive South Denver, CO 80246	*Tri-County Health Department* Ken Conright 303-288-6816 kconrigh@tchd.org 4201 E. 72nd Avenue Commerce City, CO 80022

APPENDIX B

Elected Officials

COMMERCE CITY ELECTED OFFICIALS

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Tony Johnson City Council, At Large 5291 W. 60th Ave. Commerce City, CO 80022 303-289-3600 303-289-3688 (fax) tjohnson@c3gov.com	Kathy Teter City Council, At Large 5291 W. 60th Ave. Commerce City, CO 80022 303-289-3600 303-289-3688 (fax) kteter@c3gov.com	Jason McEldowney City Council, At Large 5291 W. 60th Ave. Commerce City, CO 80022 303-289-3600 303-289-3688 (fax) jmceldowney@c3gov.com
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ADAMS COUNTY COMMISSIONERS

W.R. “Skip” Fisher 450 S. Fourth Ave. Brighton, CO 80601 303-654-6100 303-659-0577 (fax) District 1	Alice Nichol 450 S. Fourth Ave. Brighton, CO 80601 303-654-6100 303-659-0577 (fax) District 2	Larry Pace 450 S. Fourth Ave. Brighton, CO 80601 303-654-6100 303-659-0577 (fax) District 3

DENVER CITY COUNCIL

John Hickenlooper, Mayor 1700 Lincoln St., Ste. 2000 Denver, CO 80203 720-865-9000 720-865-8791 (fax) MileHighMayor@ci.denver.co.us	Rick Garcia City Council District 1 2785 Speer Bldv., Ste. 246 Denver, CO 80211 303-458-4792 303-458-4791 (fax) rick.garcia@ci.denver.co.us	Jeanne Faatz City Council District 2 3100 S. Sheridan Bldv., Unit D Denver, CO 80227 303-763-8562 303-763-8564 (fax) Jeanne.faatz@ci.denver.co.us
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Doug Linkhart City Council, At Large 1437 Bannock, Ste. 451 Denver, CO 80202 720-865-8000 720-865-8003 (fax) linkhartatlarge@ci.denver.co.us	Carol Boigon City Council, At Large 1437 Bannock, Ste. 451 Denver, CO 80022 720-865-8100 720-865-8103 (fax) carol.boigon@denvergov.org	

COLORADO ELECTED OFFICIALS

Sen. Wayne Allard 7340 E. Caley, Ste 215 Englewood, CO 80111 303 220-7414 303 220-8126 (fax)	Sen. Ken Salazar 2300 15th St., Suite 450 Denver, CO 80202 303-455-7600 303-455-8851 (fax)	U.S. Rep. Diana DeGette 600 Grant St., Ste. 202 Denver, CO 80203 303-844-4988 303-844-4996 (fax)
U.S. Rep. Mark Udall 8601 Turnpike Dr. No. 206 Westminster, CO 80031 303-650-7820 303-650-7827 (fax)	U.S. Rep. John Salazar 134 W. B St. Pueblo, CO 81003 719-543-8200 719-543-8204 (fax)	U.S. Rep. Marilyn Musgrave 3553 Clydesdale Pkwy, Ste. 110 Loveland, CO 80538 970-663-3536 970-663-5270 (fax)
U.S. Rep. Doug Lamborn 3730 Sinton Rd., Ste. 150 Colorado Spgs, CO 80907 719-520-0055 719-520-0840 (fax)	U.S. Rep. Tom Tancredo 6099 S. Quebec St., Ste. 200 Centennial, CO 80111 720-283-9772	U.S. Rep. Ed Perlmutter 12600 W. Colfax Ave. Ste. B400 Lakewood, CO 80215 303-866-2909
Stephanie Takis Colorado State Senator, District 25 200 E. Colfax Denver, CO 80203 303-866-4855	Peter Groff Colorado State Senator, District 33 200 E. Colfax Denver, CO 80203 303-866-4864	

APPENDIX C

Interested Parties

National Wildlife Federation Rocky Mountain Resources Clinic University of Colorado 2260 Baseline, Suite 100 Boulder, CO 80302 Tom Dougherty (303) 786-8001	Sierra Club Southwest Regional Office 1452 E. Northcrest Dr. Highlands Ranch, CO 80126 Sandy Horrocks (303) 470-1352 (H) (303) 397-5891 (W)	Site Specific Advisory Board Mary Light 303-288-5683
Commerce City Business and Professional Association Rhonda Hathaway 303-288-3383	Citizen's Advisory Board CDPHE 4300 Cherry Creek Dr. So. Denver, CO 80022 Warren Smith 303-692-3373	Environmental Learning for Kids (ELK) Stacy Gilmore 303-371-8658

APPENDIX D

Restoration Advisory Board Members

Mike Benallo Commerce City Resident 303-287-3634	Steve Berendzen U.S. Fish and Wildlife Service 303-289-0350	Diane Buell Montbello Resident 303-371-1294
Rene Bullock Community Co-chair and Commerce City Resident 303-287-6747	Ed Burke Brighton Resident 303-655-2102	David Busby Commerce City Resident 303-287-8282
Ken Conright TCHD 303-288-6816	Reba Drotar Commerce City Resident 303-286-1593	Cozetta Hammock-West Montbello Resident 720-404-4165
Scott Jaquith Commerce City Resident 303-288-1335	Ken Mitchell Brighton Resident 303-659-0828	Susan Newton CDPHE 303-692-3321
Charlie Scharmann Rocky Mountain Arsenal, Installation Co-chair 303-289-0180	Roger Shakely Shell Oil Company 303-853-3942	Kathy Teter Commerce City Resident 303-287-9325
Laura Williams EPA 303-312-6660	Jennifer Chergo Alternate for Laura Williams 303-312-6601	Dan Collins Alternate for Ken Conright 303-288-6816
Mike Gaughan Alternate for Roger Shakely 303-298-1818	Bruce Huenefeld Alternate for Charlie Scharmann 303-289-0240	Tom Jackson Alternate for Steve Berendzen 303-289-0253
Ken Vogler Alternate for Susan Newton 303-692-3383		

APPENDIX E

Information Repositories

Joint Administrative Record and Design Facility Rocky Mountain Arsenal Building 129 Commerce City, CO 80022 Hours: Monday – Friday Noon to 4:00 p.m. or by appointment 303-289-0362	U.S. Environmental Protection Agency Superfund Records Center 1595 Wynkoop Denver, CO 80202 303-312-6473 Hours: Monday – Friday 8:00 a.m. to 4:30 p.m.	Colorado Department of Public Health and Environment Hazardous Materials and Waste Management Division Records Center 4300 Cherry Creek Dr So. Denver, CO 80246 Hours: Monday – Friday 8:00 a.m. to 5:00 p.m.
Brighton Library 575 So. 8th Ave. Brighton, CO 80601 303-659-2572 Hours: Mon 1 p.m. – 8 p.m. Tu, Wed, Fri & Sat – 10 a.m. to 5:00 p.m. Thurs 1 p.m. to 6:00 p.m.	Commerce City Library 72nd Ave and Monaco Commerce City, CO 80022 303-287-0063 Hours: Mon & Thurs - 1:00 p.m. to 8:00 p.m. Tues, Wed & Sat - 10 a.m. to 5:00 p.m.	Montbello Library 12955 Albrook Drive Denver, CO 80239 303-373-0767 Hours: Mon, Tues & Wed - 10:00 a.m. to 9:00 p.m. Thurs & Sat – 10:00 a.m. to 5:30 p.m.
Denver Public Library 1357 Broadway Denver, CO 80204 303-640-6200 Hours: Mon, Tues & Thurs- 10:00 a.m. to 9:00 p.m. Thurs, Fri & Sat. – 10:00 a.m. to 5:30 p.m. Sun 1:00 p.m. to 5:00 p.m.		

APPENDIX F

Community Meeting Locations

Rocky Mountain Arsenal 72nd and Quebec Street Commerce City, CO 80022 Meeting Rooms: Assembly Room, Board Room and Visitor Center	Adams City High School 4625 E. 68th Ave. Commerce City, CO 80022 303-289-3111 Contact: Mr. Bob Wathen Capacity: 300 Cost: Free Comment: Free parking	Hanson Elementary 7133 E. 73rd Ave. Commerce City, CO 80022 303-853-5800 Capacity: 200 Cost: Free Comment: Free Parking
Doubletree Hotel 3203 Quebec Denver, CO 80207 303-321-3333 Contact: Molly Flagg Capacity: 5 – 1,000 Cost: Based on attendees and needs Comment: Free Parking – up to 500 cars	Montbello High School 5000 Crown Blvd. Denver, CO 80239 303-764-3352 Contact: Kim Hanley Capacity: Classroom – 30, Cafeteria – 160 Auditorium – 500 Cost: Depends on room, hours, etc. Hours: Weekdays after school and weekends Comment: Betty Emerson, Asst. Principal	Montbello Library 12955 Albrook Dr. Denver, CO 80239 303-373-0767 Contact: Janice Matherson Capacity: 25 – 75 Cost: Free Hours: Mon, Tues & Wed - 10:00 a.m. to 9:00 p.m. Thurs & Sat – 10:00 a.m. to 5:30 p.m. Closed on Fri and Sun Comment: Possible private meeting charge of $25. After hours, $50 fee for security guard parking
Montbello Recreation Center 4397 Crown Blvd. Denver, CO 80239 303-373-8710 Contact: Lamar Miller Capacity: 30 Cost: Free Hours: Mon – Fri – 9:00 a.m. to 8:00 p.m. Sat. 8:00 a.m. to 5:00 p.m.	Tri-County Health Department 4301 E. 72nd Avenue Commerce City, CO 80022 303-288-6816 Contact: Melody Mascarenaz Capacity: 100 Cost: Free Hours: Vary	Embassy Suites 1-70 and Havana Aurora, CO 303-375-0400 ext. 135 Contact: Margaret Capacity: Varies Cost: Varies Hours:

APPENDIX G

2007 Interview Questionnaire

QUESTIONS:

1. How long have you lived in the area?

2. What do you know about the Rocky Mountain Arsenal, and when did you first become aware of it?

3. Do you have any questions or concerns about the Arsenal's clean-up program and the long-term plans for the site?

4. What is the last information you remember receiving about the Arsenal? How did you get that information? (e.g., presentation, newspaper article, newsletter, etc.)

5. If you received our newsletter Milestones, how do you feel about the newsletter being printed in both English and Spanish?

6. Have you visited the Rocky Mountain Arsenal National Wildlife Refuge, and if so, for what purpose? (e.g., hiking, fishing, nature programs, etc.)

7. What kinds of information about the Arsenal and Refuge would interest you? (Read through list and check all that apply.)

   __Updates on clean-up projects
   __Refuge activities, program schedules, etc.
   __Volunteer opportunities at the Refuge
   __Historical information about the Rocky Mountain Arsenal
   __Information about long-term plans for the site and related changes in the surrounding community
   __Details about fishing opportunities at the Refuge
   __Information about special events and public meetings
   __Other:_____

8. When you receive information from the Arsenal, how would you like to receive it?

   __Web site
   __Newsletter
   __E-mail
   __Other mailer (postcard, letter, etc.)
   __Newspaper
   __Open house meetings
   __Presentations to HOAs or community groups
   __Site tour
   __Newspaper ads
   __ Channel 8
   __Community events (informational displays/tables)

9. If you have received information about the Arsenal and Refuge in the past, has it been helpful? Why or why not?

10. Have you ever needed to contact someone at the Arsenal or Refuge for information? If so, were you able to get the information you needed?

11. Do you have any other comments or questions you would like to share?

12. Is there any one in the community you think we should talk with?

APPENDIX H

Contaminants of Concern

Aldrin	**Arsenic**	**Benzene**
Cadmium	**Carbon Tetrachloride**	**Chlordane**
Chloroacetic Acid	**Chlorobenzene**	**Chloroform**
Chromium	**DBCP**	**DCPD**
DDE	**DDT**	**1,2 – Dichlororethane**
1,1 – Dichloroethylene	**Dieldrin**	**Endrin**
HCCPD	**Isodrin**	**Lead**
Mercury	**Methylene Chloride**	**1,1,2,2 – Tetrachloroethane**
Tetrachloroethylene	**Toluene**	**TCE**