
FINAL

Community Relations Plan Former Raritan Arsenal

Prepared for
U.S. Army Engineering and Support Center, Huntsville District

4280 University Square

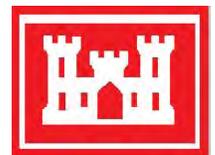
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Acronyms and Abbreviations

AOC	area of concern
CD	compact disc
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR	<i>Code of Federal Regulations</i>
CRP	Community Relations Plan
CWM	chemical warfare materiel
DERP	Defense Environmental Restoration Program
DoD	Department of Defense
EE/CA	Engineering Evaluation/Cost Analysis
EOD	Explosive Ordnance Disposal
EPA	(United States) Environmental Protection Agency
FS	Feasibility Study
FUDS	Formerly Used Defense Site
FY	fiscal year
GSA	General Services Administration
MMRP	Military Munitions Response Program
NFA	No Further Action
NJDEP	New Jersey Department of Environmental Protection
RAB	Restoration Advisory Board
RI	Remedial Investigation
TAPP	Technical Assistance for Public Participation
U.S.	United States
USACE	United States Army Corps of Engineers
UXO	unexploded ordnance

Overview of Community Relations Plan

1.1 Purpose

The United States Army Corps of Engineers (USACE) has prepared this **Community Relations Plan (CRP)** for environmental and munitions investigation and cleanup activities at the former Raritan Arsenal located in Edison, New Jersey (**Figure 1- 1**). The former Raritan Arsenal was previously owned by the U.S. Department of Defense (DoD). Because DoD no longer owns this property and the property was transferred prior to October 17, 1986, the property is considered a **Formerly Used Defense Site (FUDS)**.

DoD is responsible for evaluating and cleaning up DoD-generated environmental contamination at FUDS properties under the Defense Environmental Restoration Program (DERP). The USACE manages the evaluation and cleanup of these properties. The USACE, New York District, is responsible for investigating and cleaning up contamination at the former Raritan Arsenal and for implementing the public involvement activities outlined in this plan.

DoD conducts the investigation and cleanup of FUDS properties in accordance with the **Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)**, commonly called **Superfund**, as amended by the **Superfund Amendments and Reauthorization Act of 1986** and the **National Oil and Hazardous Substances Pollution Contingency Plan**, commonly called the National Contingency Plan.

USACE has prepared this CRP as part of its obligations under CERCLA and the National Contingency Plan and in compliance with:

- Engineer Pamphlet 200-3-1, September 2011, Public Participation Requirements for Defense Environmental Restoration Program
- USACE Engineer Regulation 200-3-1, May 2004, Environmental Quality—Formerly Used Defense Sites Program Policy
- U.S. Environmental Protection Agency (EPA), April 2005, Superfund Community Involvement Handbook (EPA 540-K-05-003)

1.2 Public Involvement Goals

This CRP identifies issues of community concern regarding the **site**, establishes public involvement goals, and provides a strategy for giving the public accurate and timely information about the cleanup of the former Raritan Arsenal.

USACE will use the activities outlined in this CRP to help ensure that community members are informed about and are provided opportunities to be involved in the environmental cleanup process at the former Raritan Arsenal. USACE intends to be forthright, responsive, clear, and proactive in its communications with stakeholders.

Stakeholders in the environmental restoration process are:

- Current owners of property on the former Raritan Arsenal
- The lead environmental regulatory agency—**New Jersey Department of Environmental Protection (NJDEP)**
- Local residents, officials, interest groups, and other members of the public who express an interest in the site

The goals of the public involvement program for former Raritan Arsenal are to:

- Ensure that stakeholders understand that personal property and public safety is the highest priority
- Serve the community's information needs by keeping property owners, local residents, officials, and other stakeholders informed in a timely manner

- Provide property owners, local residents, officials, and other stakeholders an opportunity to review and comment on studies being conducted, as well as proposed cleanup alternatives and decisions
- Keep the public informed about ongoing and planned public involvement activities
- Encourage and enable the public to get involved
- Identify and deal responsively with public concerns
- Foster and maintain a climate of understanding and trust between stakeholders and USACE by explaining to stakeholders how USACE considered their comments, what actions USACE plans to take, and why USACE reached its decisions

1.3 Contents of the Community Relations Plan

The information included in this CRP is based on demographic research conducted on the surrounding communities, the summary of historical site activities presented in the 2007 Management Action Plan with updates provided by USACE contractors, the 1992 CRP that included community interviews in 1991, and new community input obtained through interviews and questionnaires in spring 2012. Interview participants included local municipal and county officials, residents, and environmental organization members.

The CRP is organized as follows:

- Section 1 presents an overview of the CRP and USACE's public involvement goals and objectives.
- Section 2 describes the site location, description, ownership, and history.
- Section 3 presents community background and profile.
- Section 4 summarizes USACE's public involvement program.
- Section 5 presents the references used in this plan.
- **Appendix A** supplements Section 2, by providing a summary matrix of the history and investigation and remediation status for the individual Investigation Areas.
- **Appendix B** provides a detailed summary of feedback received in the 2012 community interviews
- **Appendix C** provides a contact list of the major property owners' representatives and others who make up the Stakeholders Working Group.
- **Appendixes D through F** provide contact lists of federal, state, and local officials, environmental and civic groups, and media contacts.
- **Appendix G** provides examples of public notices and fact sheets.
- **Appendix H** presents potential public meeting locations and the public **information repository** location.
- **Appendix I** provides a glossary of terms commonly used in the Army's environmental restoration and munitions response programs. Words and phrases in the glossary appear in **bold** in this CRP.

Site Description

This section presents the historical and geographical background of the former Raritan Arsenal, also referred to as the “site.” This section also presents an overview of the previous environmental investigations. Additional details are provided in **Appendix A**.

2.1 Location and Use of the Property

2.1.1 Location

The former Raritan Arsenal is located in Middlesex County, New Jersey (Congressional District NJ-6), approximately 20 miles southwest of lower Manhattan. Most of the site is located in the southern portion of Edison Township, with a small portion in Woodbridge Township. The site occupies approximately 3,200 acres and is bordered on the south by the Raritan River, on the north and northwest by Woodbridge Avenue, on the west by Mill Road and Patrol Road, and on the east by Clearview Avenue.

2.1.2 Site History

The Raritan Arsenal was used extensively for U.S. Army operations from 1917 to 1963. Arsenal operations included:

- Receipt, storage, and maintenance of ammunition shipped from other ordnance facilities or returned from overseas
- Renovation of ammunition designated for long-term storage
- Salvage of outmoded or seriously deteriorated ammunition
- Ordnance research and development
- Shipment and receipt of weapons
- Ordnance training for troops stationed at the Arsenal and at other installations in the Mid-Atlantic region

During operations, waste materials, including ordnance, were routinely burned or buried on the site, which was the standard method of disposal at that time. A more detailed history of the site is available in the Raritan Arsenal Management Action Plan (see Section 2.3.1).

Operations at the Raritan Arsenal were phased out between 1961 and 1963. To convert the facility from military to civilian use, a group of local government officials and citizens recommended that two-thirds of the property be targeted for future industrial use. In 1964, the General Services Administration (GSA) sold approximately 2,360 acres to private landowners and transferred approximately 360 acres to Middlesex County, which were developed as Middlesex County College in 1966 and Thomas Edison Park in the 1970s. GSA retained the remaining land.

EPA purchased Building 212 and a 164-acre parcel from GSA in 1988. In 1989, GSA transferred 3.2 acres of land to a local nonprofit organization. This parcel was the first surplus federal property in the nation to be transferred under the Stewart B. McKinney Homeless Assistance Act.

In 1962 and 1963, in preparation for closure, the Army decommissioned the Arsenal grounds and buildings, which resulted in many of the areas being surface-cleared of munitions or partially decontaminated, to the extent practicable and customary at that time. Areas of the site were identified for further study to address the disposal of ordnance and other wastes during former Raritan Arsenal operations.

In 1985, the former Raritan Arsenal was one of the first sites to receive a preliminary assessment under DERP-FUDS. When the potential for ordnance was found, the site was programmed for a large-scale site investigation. When removal actions began in 1991, local community concern about potential health safety effects was high, particularly

in regards to soil contamination at the Middlesex County College baseball field and at Thomas Edison Park. Media coverage was intense and the Congressional representative became involved. In response to public concerns, USACE established a Technical Review Committee and implemented weekly press releases to get accurate and timely information to the public. Currently, the level of community concern is moderate to low, as a result of the established cleanup program and good working relationships with stakeholders.

Sections 3.2.3 and 3.3.3 provide more information about specific community concerns, based on community interviews in 1992 and 2012, and how the USACE community relations program has evolved since that time.

The USACE investigations of the former Raritan Arsenal concluded that contamination was present from conventional, high-**explosive** ordnance, smokeless powder, low explosives, and munitions-related items, and also from hazardous and toxic waste. It is currently uncertain whether the non-munitions-related hazardous and toxic waste contamination identified in some of the investigation areas is attributable to former DOD activities, or whether that contamination is attributable to activities that occurred after the closure of the Arsenal in 1963.

As significant health and safety threats have been identified, USACE has addressed them. Section 2.3 describes the ongoing environmental and munitions investigations at the former Raritan Arsenal and the status of the identified Investigation Areas.

2.1.3 Current Land Use

Most of the former Raritan Arsenal is now occupied by the Raritan Center, a large light-industrial business park with approximately 14 million square feet of office, research, warehouse, distribution centers, and industrial space occupied by more than 3,000 tenants (**Figure 2-1**). The major landowners of Raritan Center are Federal Business Centers and Summit Associates, Inc., along with a number of smaller property owners.

The northern portion of the property is fully developed, but the southern portion is largely undeveloped wetlands. The Middlesex County Utilities Authority operates a sewage treatment plant pumping station in the southern area. Drinking water at the former Raritan Arsenal is provided by Middlesex Water Company, using offsite **surface water** and **groundwater** sources. Groundwater from aquifers beneath the former Raritan Arsenal is not suitable for potable use due to salt-water intrusion, metals, and total dissolved solids.

In 2001, the Raritan Central Railway company was created, building upon and expanding the existing rail infrastructure of the former Raritan Arsenal. The railway serves Raritan Center and the nearby Heller Industrial Park, providing bulk rail services that connect tenants with the container terminals of the Bay of Newark and nationwide freight lines.

Other Raritan Center tenants include the New Jersey Convention and Exposition Center, several hotels, several banks, a travel agency, a day care center, and the main studio and newsroom of News 12 New Jersey. Shipping centers include regional operations for United Parcel Service and Federal Express, as well as the U.S. Post Office. The Edison Public Safety Center provides onsite police, fire, and emergency medical services.

The western portion of the former Raritan Arsenal contains a mixture of land uses. The Middlesex County College was one of the first new uses of the property. EPA, Region 2, occupies offices, laboratories, and warehouses on land owned by GSA. A number of the original Raritan Arsenal buildings remain on the EPA campus, and several remain on the Middlesex County College campus.

The Thomas A. Edison County Park is a 161-acre Middlesex County property. The CentrePlace at Edison condominium community and a shopping center are located between the college and the EPA campus (**Figure 2-1**). These 30 acres are collectively referred to as “Beechwood Development” after the original development company. East of the shopping center is Amandla Crossing, a 30-apartment transitional housing development for homeless, single-parent families, which is operated by the local nonprofit group Making It Possible to End Homelessness (formerly Middlesex Interfaith Partners with the Homeless).

Land uses adjacent to the former Raritan Arsenal are predominately residential; light industrial, and recreational in nature. The Millbrook Village apartment community borders Middlesex County College on the west. A single-

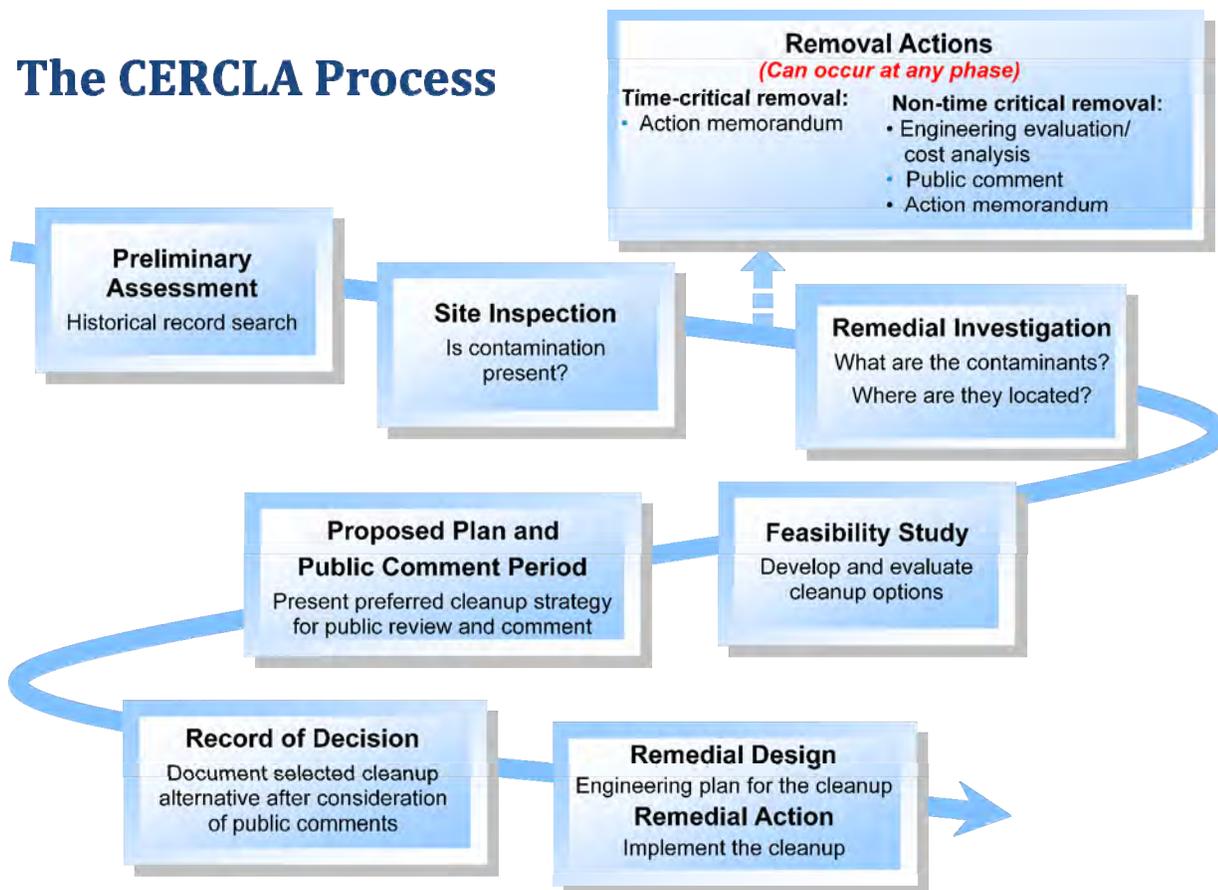
family residential area is located northwest of the former Raritan Arsenal, across Woodbridge Avenue, with small commercial properties including a preschool fronting Woodbridge Avenue. Adjacent land uses to the northeast and east are light industrial, commercial, wetlands conservation, and transportation.

2.2 Investigations and Remedial Actions

2.2.1 The CERCLA Process

As stated in Section 1, DoD conducts the investigation and cleanup of FUDS properties in accordance with CERCLA. The CERCLA process includes a series of activities, several of which are designed to involve the public in the decision-making process.

The typical sequence of activities is:



- Preliminary Assessment**— Site investigations typically begin with a preliminary assessment, to distinguish between sites that pose little or no threat to human health or the environment and sites that may pose a threat and require further investigation. This stage involves a review of historical documents and a visual site inspection.
- Site Inspection**— If the preliminary assessment results in a recommendation for further investigation, a site inspection is performed. During the site inspection, samples (such as water and soil) are collected to confirm or deny the presence of potentially **hazardous substances**.
- Remedial Investigation (RI)**—Based on the results of the preliminary assessment and site inspection, an RI may be needed at a site. An RI is designed to learn more about the site contamination and determine if any known contamination is leaving (that is, migrating from) the site. The primary purpose of the RI is to determine the **nature and extent of contamination** that exists at each site, and the risk that contamination presents to human health and the environment. During this phase, samples are usually collected from the soil,

groundwater, surface water (such as ditches, rivers, or lakes), and sediment. The resulting data provide information about the extent of possible contamination and rate of migration, if applicable.

- **Risk Assessment**—As part of developing RIs, USACE evaluates potential risks to people and to the environment. Human health risk assessments are performed to evaluate potential risks to people. Ecological risk assessments are performed to evaluate potential risks to plants and animals or other ecological receptors. USACE conducts these risk evaluations in accordance with federal standards and NJDEP guidance.
 - The human health risk assessment follows a formal, scientific process that estimates risk based on the contaminants found at the site and how people might be exposed to the contaminants.
 - Similar to a human health risk assessment, an ecological risk assessment considers how ecological receptors could be affected by coming in contact with contaminants at a site. Receptors considered in an ecological risk assessment can include very small organisms living in soil and at the bottom of water bodies, as well as birds, mammals, and fish.
- d. **Feasibility Study (FS)**—If the RI indicates cleanup of a site is needed to address human health risks and/or ecological risks, then an FS is prepared. The FS presents and evaluates various cleanup alternatives for the site.
- e. **Proposed Plan**—The Proposed Plan summarizes the cleanup alternatives developed in the FS, and recommends a preferred cleanup method. The public has an opportunity to comment on the Proposed Plan during an announced formal public **comment period**. Site information is compiled in an **Administrative Record** file and is placed in the general Information Repositories established at convenient locations, such as local libraries, for public review. The public comments received during this public comment period are reviewed and the responses are recorded in a document called a **Responsiveness Summary**.
- f. **Decision Document**—At the end of the public comment period, an appropriate **cleanup** alternative is chosen to protect human health and the environment. A Decision Document is issued that explains the selected cleanup action and includes the Responsiveness Summary.
- g. **Remedial Design and Remedial Action**—The final stage in the process is the remedial design and remedial action. The remedial design phase is where the technical specifications for cleanup remedies and technologies are designed. The remedial action is the actual construction or implementation phase of the cleanup process.

In addition, the following activities may occur at any time during the CERCLA process:

- **Interim Actions** are taken, as needed, to reduce imminent risks to human health and the environment while long-term field investigations are being conducted or until a final remedial action is determined. Interim actions can range from **removal actions** to institutional controls, such as putting up a fence or issuing land use instructions to control activities on or near contaminated sites.
- **Removal Actions** can function as either interim or long-term means of addressing potential releases of contaminants and reducing human and ecological exposure. An Action Memorandum documents the results.
- **An Engineering Evaluation/Cost Analysis (EE/CA)** is completed for non-time-critical removal actions and is similar to a fast-track, limited-scope RI/FS. It addresses human health exposure risks, compares removal alternatives, and provides a mechanism for regulatory and public review.
- **A No Further Action (NFA)** Decision Document is developed after a field investigation finds that the levels of contaminants at a particular site do not pose a threat to human health and the environment. The NFA Decision Document provides a means for regulatory agencies to review the investigation and risk assessment and for the public to comment on the no-action decision.

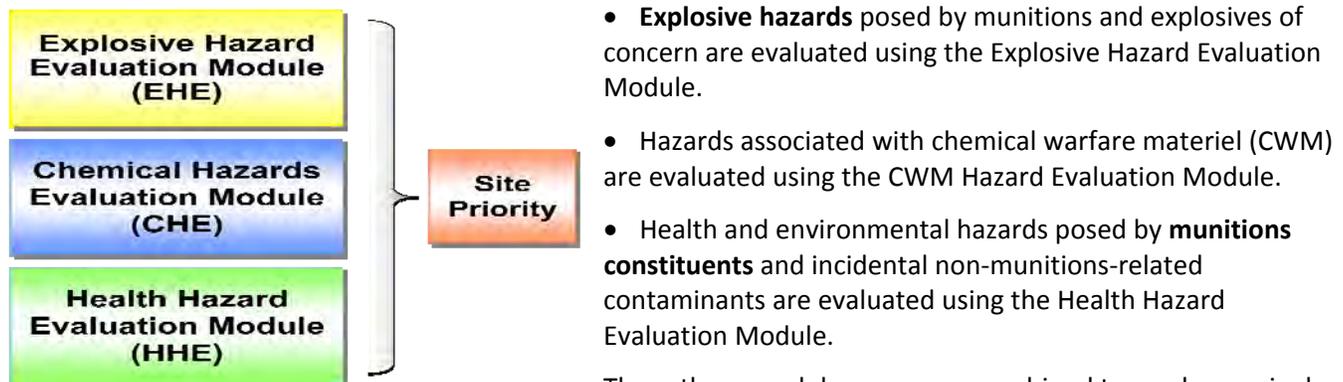
2.2.2 Munitions Response Program

The DoD Military Munitions Response Program (MMRP) works to reduce risks to people and the environment from **munitions and explosives of concern**. The DoD established the MMRP in 2001 in order to more effectively and efficiently (1) investigate the hazards posed by past use and disposal of **military munitions**, and (2) to carry out **response actions**. Munitions investigations and response actions generally follow the CERCLA process.

In order to make the best use of funding, Congress has directed DoD to prioritize all munitions response sites based on the potential risk posed to human health and the environment. The 2005 **Munitions Response Site Prioritization Protocol** (32 *Code of Federal Regulations* [CFR] 179) is a federal rule that applies to all sites included in DoD's inventory of active and former defense sites. It does not include any **operational range**, operating munitions storage or manufacturing facility, or operating munitions treatment or disposal facility.

The Protocol requires USACE to set priorities for munitions response sites, based on the overall conditions at each site. Prioritization is updated as the investigation provides additional information. The Protocol's central feature is the use of three hazard evaluation modules.

A site's relative priority is determined by computing scores for the site under one or more of these modules:



These three module scores are combined to produce a single priority score from 1 to 8, where Priority 1 indicates the highest potential hazard and Priority 8 indicates the lowest potential hazard. A score of Priority 2 is the highest score possible at a site without chemical warfare materials. The priorities do not have specific assigned actions, however. Priority 1 does not mean that an immediate removal action is needed and Priority 8 does not mean that no action is required.

The public has an opportunity to provide input and comments when sites are initially prioritized and when scores are updated as investigations and response actions progress.

After prioritization, munitions sites are sequenced for response action along with other FUDS munitions sites. DoD's policy is that a munitions response site with higher relative risks will be dealt with before a site with lower relative risks. Although the most important factor is a site's relative risk (priority score), other factors can influence sequencing decisions, including:

- Cultural and social factors
- Economic factors
- Reasonably anticipated future land use
- Availability of appropriate technology
- Short-term and long-term ecological effects
- Other environmental impacts

2.3 Summary of Environmental Investigations

In 1987, under provisions of the then-new DERP, USACE conducted a Contamination Evaluation Study. The final report was released in 1990, confirming the presence of buried ordnance, as well as chemical contamination of soil and groundwater on the site.

Since 1989, USACE has completed numerous extensive investigations and removal actions at the former Raritan Arsenal, including the removal of contaminated soil and thousands of buried munitions and explosives of concern that remained on the property from former Raritan Arsenal operations. Over 120 facility-wide and site-specific investigation and removal action reports have been completed, in consultation with regulators and local stakeholders. **Figure 2-2** shows the areas under some phase of investigation and **Appendix A** provides the history and status of each Investigation Area.

In 2000, an EE/CA was performed to analyze the results of all the military munitions investigations and removal actions that were previously accomplished, as well as to identify areas where military munitions still exist. No further removal actions are currently scheduled. The need for further response actions will be determined by the CERCLA investigative and decision-making process, unless an explosive safety hazard is discovered that warrants a time-critical removal action.

In 2013, a site-wide munitions RI will begin. **Figure 2-3** shows the locations of the munitions response sites to be investigated. When that report is complete (anticipated in 2014), USACE will prioritize and sequence areas within the former Raritan Arsenal for additional munitions response actions and will invite the public to participate in the prioritization and sequencing process, as required by the Protocol.

Through fiscal year (FY) 2012, USACE has spent approximately \$ 88.4 million dollars to investigate and clean up soil, groundwater, surface water, and sediment containing hazardous and toxic waste and to remove munitions that pose a safety hazard. The estimated cost to complete the investigation and remediation of the former Raritan Arsenal is approximately \$ 31.8 million, based upon currently available information.

The **Operable Units** and Investigation Areas at the former Raritan Arsenal are listed in section 2.3.2 and their locations are shown on **Figure 2-2**. **Appendix A** provides the history of investigations and remedial actions at each Investigation Area, the status of investigations and remedial actions, and anticipated activities through FY 2013.

2.3.1 Management Action Plan

The Management Action Plan for the former Raritan Arsenal presents historical and other background information about the site, describes the previous investigations, and provides schedules for carrying out investigations and related activities and preparing reports. The 2007 Management Action Plan (Weston Solutions, 2007) is available to the public in the Administrative Record file.

USACE will update the Management Action Plan again in FY 2013.

2.3.2 Operable Units and Investigation Areas at Former Raritan Arsenal

An Investigation Area or area of concern (AOC) is a discrete area where hazardous substances or wastes have been deposited, stored, disposed of, or placed, or where such historical activities are suspected based on prior land use. An Operable Unit is a collection of Investigation Areas or AOCs that are treated together during the RI/FS, often because they are close to each other, have similar cleanup requirements, or had similar types of historical use.

This section summarizes the Operable Units and specific Investigation Areas within each unit. **Figures 2-2** and **2-3** present the locations of these areas. **Appendix A** provides a more detailed description of each area's history of investigations and remedial actions, the status of investigations and remedial actions, and anticipated activities through FY 2013.

The environmental and munitions Investigation Areas at the former Raritan Arsenal have been organized into six Operable (Decision) Units, based on land ownership and type of land use:

- Commercial and Industrial Area
- EPA and GSA Property
- Middlesex County College
- Thomas Edison Park (including Area 9, 10 and 19)

- Undeveloped Wetlands Area
- Site-wide Groundwater, Indoor Air, and Vapor Intrusion

The “Beechwood Development” properties depicted on **Figure 2-1**, located between the EPA and GSA Property and Middlesex County College, are not currently part of any Operable Units. Investigations and remedial actions were completed to support development of these properties. There are some active Investigation Areas near these properties, however. In fall 2013, an RI will take place on EPA property outside the southern perimeter fence of the CentrePlace at Edison condominium community.

Commercial and Industrial Area

The Commercial and Industrial Area is the largest Operable Unit at the Former Raritan Arsenal, covering approximately 2,400 acres that are fully developed. Overall, this Operable Unit is in the RI phase of the CERCLA process.

A Removal Action and RI Summary Report is currently being prepared to document all the previous cleanup work, assess any remaining risks to the human health and environment, and support a Proposed Plan and Decision Document. The following Investigation Areas are located in the Commercial and Industrial Area:

- **Area 2** (8.2 acres): Used for ordnance demolition into the early 1930s; munitions removal actions completed in 1993.
- **Area 3** (25 acres): Used through 1948 for ordnance demolition and burning; munitions removal actions completed 1988 through 1994.
- **Area 4** (25 acres): Used into the early 1920s by private industry to demilitarize various types of ammunition; munitions removal actions completed 1988 through 1995.
- **Area 5** (9.75 acres): Used from 1917 to 1963 as a disposal area for mustard agent, red fuming nitric acid, and potassium cyanide; removal action completed 1995 through 1996. This is the only known chemical munitions area at the former Raritan Arsenal. Although chemical munitions were not reportedly stored at the former Arsenal, leaking shells detected while en route to other destinations were disposed of in trenches.
- **Area 7** (5.9 acres): Several buildings were used from 1961 through 1963 for the destruction of various ammunition components during decommissioning of the Arsenal.
- **Area 8** (48 acres): Used to store and load solid propellant, primarily smokeless powder, and for general ammunition storage.
- **Area 14** (167 acres): Used to deposit material dredged from the Raritan River channel in the 1940s. A cap was installed as a remedial action by Federal Business Centers, during approved development, and no further USACE action is anticipated.
- **Area 15** (4.5 acres): Contained a pond that was used for the disposal of burned scrap and other refuse from a former demolition ground; removal action completed in 1977.
- **Areas 9 and 19** (294 acres, of which 53 acres is Area 9): Former magazine area where explosives were stored and where munitions-related explosions occurred during former Raritan Arsenal operations; removal actions completed in 1963, 1965, 1981, 1987, and 1993.
- **Area 20** (38 acres): An extensively used munitions renovation plant operated in this area; there was a major release of contaminated oil and solvents in the 1980s from an oil reclamation operation at a former magazine.
- **Inland Container property**: A possible former chemical storage area; 10 temporary warehouses were removed in the early 1960s.
- **Owens-Illinois property**: A fuel storage area and possibly a tank farm during former Raritan Arsenal operations.

EPA and GSA Property

This property includes many buildings from the former Raritan Arsenal. Overall, this Operable Unit is in the RI phase of the CERCLA process. Additional investigation might be needed to fill data gaps.

- **Area 1** (0.57 acre): Reportedly used for ordnance demolition into the early 1930s.
- **Area 18G** (21 acres): Raritan Arsenal construction camp, outdoor storage, and commercial dump.
- **Area 18A**: Unlined pond reportedly used to dispose of waste solvents, degreasers, oil, and cosmoline (a rust preventative); removal actions in 1992 and 1998.
- **Area 18B** (50 acres): Western portion was reportedly used as a small arms firing range; contaminated soil removed in 2002.
- **Area 18C**: Subareas include the Former Asbestos Landfill, where the asbestos-contaminated portion was sealed in 1992; an underground tank system associated with Building 256; an area where oil-saturated soil was removed in 1998, 2002 and 2003; four debris disposal areas where contaminated soil and debris were removed in 1998 and 2002; a suspected gas and oil dump south of Building 255 (not confirmed by soil sampling), and another surface soil contamination area.
- **Area 18D** (31 acres): Used heavily during the operation of the former Arsenal; removal action completed in 1990; explosives ordnance disposal response when items were discovered during construction in 2005.
- **Area 18E** (9 acres): Several original former Raritan Arsenal buildings that were used for overhaul, repair, service, maintenance, testing, and rust-proofing of small arms; contaminated soil removed 2011-2012.
- **Area 18F** (13 acres): Part of a 43-acre area active since 1919, with buildings reportedly used for small arms packing. The western 30-acre portion (referred to as "Beechwood Development" including CentrePlace at Edison) is no longer considered part of Area 18F.

Middlesex County College

This property also contains a few original buildings from the former Raritan Arsenal. Overall, this Operable Unit is in the RI phase of the CERCLA process. Due to past removal actions completed, the RI is expected to recommend NFA, subject to regulatory concurrence and public comments.

- **Areas 17/17A** (2 acres): reportedly used as a salvage yard from the 1940s to 1960s; Area 17A was reportedly used as a burning ground to destroy small arms by non-explosive means in the 1950s; removal action at the college baseball field (Area 17A) occurred from 1994 to 1995.
- **Area W**: Administrative and barracks area during former Raritan Arsenal operations; contaminated soil and drums removed in 1998.
- **Area X and Area H**: Administrative and barracks area during former Raritan Arsenal operations; no removal actions; no contamination present above NJDEP soil cleanup criteria or groundwater quality standards.
- **Building 118**: Former Raritan Arsenal hospital building; adapter boosters and two USTs removed in 1991.
- **High Traffic Area**: Sampling was conducted (at the request of the college) in campus locations of high college student and staff activity, to determine if any contaminants existed at levels that could affect human health.
- **Transformer Removal Areas**: Beginning in 1999, 21 transformers and 23 switches, along with contaminated soil, were removed from multiple locations at the college and at the Beechwood and CentrePlace properties.

Thomas A. Edison Park

This Operable Unit is in the RI phase. Additional sampling will be performed to determine if historical magazine explosions resulted in contamination and to collect data for human health and ecological risk assessments.

- **Area 10** (140 acres): Upper Magazine Area, also used for de-priming cartridge cases; explosions in 1919 and 1943; removal actions completed in 1963, 1989, 1992, 1993, 1999, 2000, and 2001.

Undeveloped Wetlands

Most of the former magazines and a 2,000-foot-long loading dock were located in the undeveloped wetlands area. A large fire in the 1980s and a smaller fire in 2012 consumed most of the wooden dock, but remains are still present along the shoreline. Since the area was largely undeveloped, fewer munitions investigations have taken place here. This Operable Unit will be the primary focus for the site-wide munitions RI beginning in 2012 (**Figure 2-4**).

- **Area 11** (11 acres): Used extensively by the Army for loading operations at the former dock, portions of which were contaminated with grenades, mortar shells, and small arms components, and potential disposal pits and trenches; surface clearance and ordnance sweeps in 1963 and 1989; munitions removal actions from 1992 to 1994, 1998, and 2005.
- **Area 12** (84 acres): Material dredged from the river bottom in front of the former dock was disposed of in this area; soil removal actions in 1999, 2004, and 2011.
- **Area 13** (8 acres): Consists of the shoreline beneath the former loading dock, which was known to contain discarded ordnance, the adjacent portion of the Raritan River, and 3 acres of land between the dock area and access road; munitions removal action in 1993.
- **Area 16** (277 acres): Former Lower Magazine Area, contained a total of 95 above-ground magazines that were used to store smokeless powder, primers, and fuzes, along 11 railroad lines used to load and unload trains and smokeless powder; munitions removed in 1985, 1986, 1988, and 1991.
- **Areas 6, 6A, 6B** (130 acres): Historical dredge material impoundment area, burying ground for ammunition components (Areas 6A and 6B), and site of a sulfuric acid manufacturing plant from 1966 until it was demolished in 1997; surface clearance in 1963 and a few inert munitions recovered in 1992.

Site-wide Groundwater, Indoor Air, and Vapor Intrusion

USACE is monitoring natural attenuation (the reduction in contamination due to bacterial activity and other natural processes) of groundwater contamination in 10 discrete AOCs. Overall, this Operable Unit is at the FS phase in the CERCLA process, to determine the need for remedial action and develop remedial alternatives for 6 of the 10 groundwater areas of concern. AOCs, 1, 3, 5, and 7 were determined not to be related to DOD activities. Therefore, these AOCs require no further USACE action and have been dropped from the monitoring program.

Under certain conditions, contaminants in soil or groundwater can evaporate and build up in the indoor air of nearby buildings. Where this has occurred, USACE has installed vapor mitigation systems that reduce air pressure beneath the building and keep vapors from entering the building. Eight industrial buildings are being monitored for vapors in indoor air and soil gas beneath the foundations. NJDEP reviews the indoor air and groundwater monitoring results.

- **AOC 1:** Groundwater plume with a likely offsite source near the entrance of Raritan Center.
- **AOC 2:** Groundwater plume with vapor intrusion issues; vapor mitigations systems installed at affected buildings in 2005 and 2008.
- **AOCs 3 and 4:** Groundwater plumes with no air quality issues.
- **AOC 5:** Groundwater plume with a likely source from operations at Thomas Edison Park.
- **AOC 6:** Groundwater plume with vapor intrusion issues; vapor mitigations systems installed at affected buildings in 2009.
- **AOC 7:** Groundwater plume with no air quality issues.
- **AOC 8:** Groundwater plume with vapor intrusion issues; vapor mitigation systems installed at affected buildings in 2005.
- **AOCs 9 and 10:** Groundwater plume with no air quality issues.

SECTION 3

Community Background

This section describes local communities near the site, provides a brief history of past community relations activities, and summarizes results of community interviews regarding community concerns about the site and the communication needs of community members.

3.1 Community Profile

The former Raritan Arsenal is located in Middlesex County, the most populous county in the state of New Jersey, and a part of the New York Metropolitan Area. Most of the site is in Edison Township, with a small portion in Woodbridge Township. Sayreville Borough is directly across the Raritan River. These communities are densely populated.

Edison and Woodbridge Townships are the fifth and sixth most populous municipalities in the State of New Jersey. Edison Township was originally incorporated in 1870 as Raritan Township but was renamed “Edison” in 1954, in honor of Thomas Edison’s industrial research laboratory in Menlo Park.

The Metro Park (Amtrak) train station in Woodbridge and the New Jersey Transit commuter train stations in Edison and Metuchen (an independent town in Edison Township) provide convenient transportation to New York City. Proximity to New York and Philadelphia, and a half-hour drive to the largest port on the east coast, has made Middlesex County and Edison Township in particular a transportation and distribution hub for the region’s wholesale trade and industrial base.

Like Edison Township, Woodbridge is working to retain and attract businesses, while cleaning up former industrial areas (brownfields) along the Raritan River and enhancing passive recreational areas along the riverfront. In 2011, Woodbridge Township was certified at the “Sustainable Jersey” Silver level for the third consecutive year and Edison Township was certified at the Bronze level. Sayreville Borough is a 16.3-square-mile waterfront community with a large base of industrial properties, but new technology companies and a growing residential population are changing the character of the town.

Table 3-1 provides demographic and economic data about the communities surrounding the former Arsenal.

TABLE 3-1
Demographic and Economic Profile
Community Relations Plan

	Population 2000 ^a	Population 2010 ^b	Median Income ^c	College Education ^c	Unemploy- ment Rate ^c	Poverty Rate ^c	Percent Minority ^d	Recent Immigrant ^{c,e}	Limited English Proficiency ^c
Middlesex County	750,162	809,858	\$76,355	39.0%	5.5%	7.9%	50.8%	36.9%	16.1%
Edison Township	97,687	99,967	\$86,282	51.1%	5.7%	8.2%	60.6%	41.4%	18.8%
Woodbridge Township	97,203	99,585	\$78,080	31.1%	4.9%	5.9%	49.3%	35.9%	13.0%
Sayreville Borough	40,377	42,704	\$71,719	31.8%	6.0%	3.9%	40.6%	39.1%	11.4%

Sources:

- a. U.S. Census Bureau, 2000 Census (Summary File 1)
- b. U.S. Census Bureau, 2010 Census
- c. U.S. Census Bureau, 2008-2010 American Community Survey
- d. “Minority” is defined as members of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not of Hispanic/Latino origin; or Hispanic/Latino
- e. Foreign born non-native, arrived after 2000

All three municipalities, as well as the county, have gained population since the 2000 Census.

As **Table 3-1** and **Figure 3-1** show, these communities are all diverse, with Edison Township now a “majority minority” community. The trend began in the 1990s and has accelerated in the last decade, with more than one-third of residents having settled in the U.S. since 2000. The largest minority group is now Asian, largely of Indian origin (43 percent and 28 percent, respectively, in Edison). Middlesex County and Edison Township in particular, has the largest population of (Asian) Indians in New Jersey and the third largest in the nation. However, the level of English language proficiency is relatively high, reflecting the professional occupations of the new residents; less than 20 percent of the population where languages other than English are spoken at home are counted as speaking English “less than well.”

Edison Township has the highest percentage of college-educated residents and a higher median income than the county or the other three communities near the site, but also has the highest number of people living below the poverty threshold, including some Census tracts near the former Raritan Arsenal (see **Table 3-1** and **Figure 3-2**). Housing on the former Raritan Arsenal includes 30 units of transitional housing apartments at Amandla Crossing; there are also 45 affordable units in CentrePlace at Edison, about 16 percent of the 285 total homes in that development.

3.2 History of Community Involvement

In 1990, the former Raritan Arsenal began to receive a great deal of attention from the media, local citizens, special interest groups, and local officials. Most of the community has always been aware that the Army had operated the former Raritan Arsenal, as many older residents had worked there, but were not aware of the former Raritan Arsenal's hazardous waste and munitions issues. The DoD mandate to assess and remediate ordnance and chemical contamination at sites such as the former Raritan Arsenal also brought new attention to the site. The findings of the 1990 Contamination Evaluation Study were brought to the public's attention after a series of newspaper articles were published in May 1990. The fact that Middlesex County at that time had the most state-regulated hazardous waste sites of the 21 counties in New Jersey may also have played a role in the community's sensitivity to hazardous waste issues at the former Raritan Arsenal.

In response to heightened community concerns about public safety and the environment, citizen groups held meetings to discuss the site's problems and potential community action. The citizens' group Coalition for a Better Edison formed a special committee to address the Raritan Arsenal's contamination. In August 1990, USACE held a public meeting to discuss the status of the site and scheduled ordnance and hazardous waste activities. More than 50 citizens participated in this meeting.

Concern about the site increased in May 1991, after USACE began detonating excavated ordnance in a designated area on the site. Although a public meeting was held before the work to explain the procedures, noise impacts from the blasts were heard several miles away and caused significant community concern. In response to complaints from local residents and elected officials, USACE modified the onsite demolition procedures. The Corps held another public meeting in August 1991 to provide an update of ordnance activities, and to discuss scheduled environmental remediation work. Local residents and representatives from the Coalition for a Better Edison, Middlesex County Environmental Coalition, and Edison Wetlands Association participated in the meeting.

The USACE established an onsite project office in late 1991. The USACE project officer was designated as a single point of contact for responding to community and media questions and was available for presentations to local community groups.

In 1991, USACE established a Technical Review Committee to maintain a constant dialogue with community members, local agencies, and special interest groups. Initially, the Technical Review Committee met every 1 to 3 months. As community knowledge increased and concern decreased, the meetings gradually became less frequent. This group later became the current Stakeholders Working Group and now meets twice a year (see Section 4.3.5.)

Over time, interest and concern about the former Raritan Arsenal has decreased. As a result, the frequency of public meetings and meetings of the Stakeholders Working Group has also decreased. At present, USACE holds public information meetings twice per year and additionally as needed to solicit public comments whenever a removal action is proposed. (See Sections 4.3.2 and 4.3.3 for more information.)

Other outreach initiatives have included fact sheets, a public website, and regular safety briefings with local public safety officials prior to munitions investigations.

3.3 Community Concerns

3.3.1 Community Interviews

In October 1991, USACE conducted community interviews to improve understanding of community concerns about the former Raritan Arsenal and the ordnance and hazardous waste activities. Interview participants included local citizens, and representatives from environmental groups, civic groups, local agencies, neighborhood associations, and businesses located on the former Raritan Arsenal. In addition, USACE reviewed transcripts from previous public meetings, correspondences, and newspaper articles. The results of these interviews were used to prepare the 1992 CRP.

In 2006, a USACE contractor conducted interviews with key stakeholders as part of updating the 2003 Management Action Plan. Stakeholders interviewed were the NJDEP Case Manager, Township of Edison Public Health Officer, Middlesex County Parks Director, representatives of the large property owners (Federal Business Centers and Summit Associates, Inc.), and a representative of Coalition for a Better Edison. The purpose of these interviews was to identify stakeholder goals and priorities for the ongoing remediation of remaining munitions and hazardous and toxic wastes. According to the 2007 Revised Draft Management Action Plan:

“The stakeholders generally were in agreement that the goals of the environmental restoration should focus on ensuring that remaining groundwater contamination does not pose a risk to current occupants of Raritan Center by impacting indoor air quality. Additional priorities include removing any remaining ordnance, both from soils and from Raritan River sediments, and expediting the removal of toxic and hazardous wastes to allow for development of underutilized parcels of the former Raritan Arsenal.”

In April 2012, in order to update the CRP, USACE conducted interviews and distributed questionnaires to interested persons who responded to a public notice requesting public input. A total of 18 community members participated, including 10 owners (or their representatives) of property on the former Raritan Arsenal, five individuals who work on the site, four local government officials, three individuals who live on or very near the site, and three environmental group members (some participants are counted in more than one of these categories).

3.3.2 Key Community Concerns - 1992

This section summarizes themes and some of the specific key concerns expressed by participants in the 1991 community interviews. The 1992 CRP provides more details about specific community concerns.

Health and Safety

In general, the community felt that there are many unanswered questions about potential health affects related to the site. Employees were concerned about health risks associated with working in offices built near or on top of soils contaminated with hazardous waste and that health risks might increase when soils are disrupted during the investigation and remediation. Participants were also concerned about the site's effect on water quality in the Raritan River and groundwater under the site, and about cleanup standards for ordnance remediation. Participants were specifically concerned about mustard agent and asked if there were evacuation plans in the event of an accident involving mustard agent.

Scope of the Study

Participants wanted to know if there were any records that indicated the use of radioactive material at the site, and if the USACE investigation would include sampling for radioactive contamination. (Subsequent investigation determined that radioactive waste is not an issue at the former Raritan Arsenal.) Citizens wanted to make sure that potential contamination outside of the 17 Investigation Areas also would be addressed. (Additional Investigation Areas have been added since that time.)

Public Involvement and Information

Interview participants explained that the community needed access to more information about site activities, sampling results, and potential health and environmental risks. One respondent noted that, "when information is not constant, the public thinks nothing is being accomplished." They asked for regular public meetings, sending meeting announcements to a mailing list, using videos to communicate technical information, distribution of information to newspapers, and keeping local officials informed so they can answer public questions.

Agency Credibility

Because several USACE Districts and Divisions were involved in the remediation at that time, management of the site appeared fragmented and citizens were confused about where to call for information. Citizens were also concerned that regulatory agencies, specifically EPA and NJDEP, would not be involved in an oversight capacity. (Because the former Raritan Arsenal is not a Superfund site, NJDEP is the lead environmental regulatory agency.)

Future Land Use

Citizens were concerned that a proposed mixed-used development (known as "Rivertown") in the southern portion of the former Raritan Arsenal might destroy existing wetlands and questioned whether it should be built on an area with known hazardous waste and ordnance contamination. (This proposed development did not happen.)

3.3.3 Key Community Concerns - 2012

This section presents themes and specific key concerns expressed by participants in the 2012 community interviews. **Appendix B** of this CRP provides a more detailed summary of the 2012 interview responses. Because interview and questionnaire responses are confidential, individuals are not named.

Overall, the level of community interest and concern reveals a mature cleanup program, with which most directly affected stakeholders are comfortable, and a community at large that is not highly concerned about what's happening on a self-contained, industrial area.

On a scale of 1 to 10, with 10 being the most concerned about the environmental and munitions cleanup, the average level of concern was less than 5; two participants rated their level of concern at 10 and three participants at 1 or less. Only three local residents had heard comments or questions from other residents, while seven property owners or local officials had heard comments or questions from their tenants or constituents.

Because the community is growing and changing, new residents are not aware of the site's history. The twice-yearly public meetings that USACE holds were described as particularly helpful to residents. Occasionally, a media article, an unexpected munitions discovery, or activities like the recent removal action at Area 18E in winter 2011 and 2012, which was visible from Woodbridge Avenue, briefly raises questions and concerns.

Property owners and local officials reported that sharing what they know about the site and USACE cleanup actions generally satisfies those who have questions. Interview participants who were not aware of the site before the interviews wanted to know more about it.

Stakeholders were described as "cautiously concerned" about the possibility of munitions or contaminated soil being discovered, but confident that USACE is "just a call away." Onsite landowners are financially concerned and want to see the cleanup completed, but without compromising on safety.

Health and Safety

Fewer participants in the 2012 interviews were strongly concerned about potential health and safety risks related to the site. Specific concerns included: protecting human health and the environment from exposure to hazardous and toxic waste, vapor intrusion, brush fires, and the possibility that firefighters responding could encounter munitions.

Public Involvement and Information

Stakeholders Working Group members and local government officials expressed satisfaction in the type and frequency of information they have been receiving. About half of the interview and questionnaire participants were aware of the public website. Over half had attended public meetings and all of those felt that the information was presented effectively. One respondent described “timely and effective communications.”

Participants from the fairly new CentrePlace at Edison condominium community (onsite) and Millbrook Village apartment community (adjacent to the site) were not aware of the history of environmental remediation at the former Raritan Arsenal, indicating a need to focus outreach on residents of these communities – in particular, when work is being done near that area of the site.

Newspapers (44 percent) and television (39 percent) remain the primary means by which local residents get news and information, indicating the need to develop or continue relationships with members of the media who have learned about the site and will put out information to the public.

Agency Credibility

The single point of contact is key success factor for the community relations program. About half of the 2012 participants had contacted an official for information about the former Raritan Arsenal. Of those, 78 percent had contacted the USACE Project Manager and 56 percent had contacted the NJDEP case manager (respondents could identify more than one); one respondent had asked the Township Health Department and one had asked their Congressman. Nearly 90 percent said that the officials they contacted had been responsive to their questions.

Future Land Use

Some participants emphasized the need for proper and effective cleanup of contamination prior to any potential recreational or industrial and transportation development of the riverfront and new access roads.

3.3.4 Response to Concerns and Communication Needs

Nearly all (83 percent) of 2012 participants were interested in being kept informed. Most respondents feel that information should be provided either quarterly (33 percent) or as needed (44 percent). A variety of outreach methods will best serve the community. People said they would like to receive information in the following ways:

- E-mail: 72 percent
- Regular mail: 11 percent
- Public meetings: 33 percent
- Website: 33 percent
- Newspaper articles: 22 percent (specific suggestion: press releases in local newspapers)
- Television: 17 percent (specific suggestion: news pieces on Channel 12, New Jersey Network public access channel) every few years
- Site visits: 11 percent

To be responsive to community concerns, USACE will keep local stakeholders informed and aware of opportunities to participate in decision making throughout completion of environmental remediation at the former Raritan Arsenal. Specific ongoing and planned activities are described in Section 4.

USACE Community Relations Program

The USACE, New York District, will promote open, two-way communications with the community and provide opportunities for meaningful involvement. Understanding the community's interests enables the project delivery team to respond to public interest in and concerns about the environmental investigation, with specific attention to health, safety, and environmental issues of concern to the community.

USACE's community relations program includes meetings twice a year, fact sheets, a web site, and frequent personal contact with affected property owners. Elements of the community relations program are dynamic and will be updated, as necessary, to ensure the continued effectiveness of the program.

4.1 Keeping the Community Informed

4.1.1 Designate Points of Contact

The individuals listed in **Table 4-1** currently serve as the USACE and NJDEP points of contact for inquiries from stakeholders, the public, and the media. The USACE point of contact is onsite, in office trailers located on the EPA portion of the former Raritan Arsenal, at least several days per week.

USACE established the onsite office and single point of contact in response to the 1991 community interviews. As several 2012 community interview respondents noted, the close working relationship between the USACE Project Manager and stakeholders has been important to the success of the cleanup program. In addition, having the same NJDEP case manager for many years has provided invaluable institutional knowledge for stakeholders to draw upon.

TABLE 4-1

Public Points of Contact

Community Relations Plan – Former Raritan Arsenal

Sandra L. Pietro, Project Manager	Anthony Cinque, Case Manager
U.S. Army Corps of Engineers – New York District 2890 Woodbridge Avenue Edison, NJ 08818 917-790-8487 Sandra.L.Pietro@usace.army.mil	New Jersey Department of Environmental Protection Bureau of Case Management, 5th Floor 401 East State Street, CN-028 Trenton, NJ 08625 609-633-1416 Anthony.Cinque@dep.state.nj.us

4.1.2 Maintain Administrative Record File and Information Repository

Description: The Administrative Record File is a collection of documents used by USACE and NJDEP in reaching decisions about cleaning up the former Raritan Arsenal. This file includes technical plans and studies, proposed cleanup plans, health and ecological risk evaluations, Decision Documents, significant correspondence among government agencies, records of notifications to and participation by the public, and responses made by USACE to public comments. CERCLA requires that an Administrative Record File documenting the selection of a response action be established at or near the facility.

The Information Repository is required to be at a convenient location where community members can access the Administrative Record File and can read official documents about the status of the environmental restoration program at the former Raritan Arsenal.

Goal: To provide access to site-specific information so that the public may make informed comments on the selection of environmental restoration actions at the former Raritan Arsenal.

Method: The Information Repository and Administrative Record File for the former Raritan Arsenal are maintained by USACE, New York District, in their onsite offices at the former Raritan Arsenal. When public interest was high during the 1990s, the Information Repository was established at two locations: the Edison Public Library and the USACE onsite office. When documents are released for public comment, USACE announces the availability of the document, providing the point of contact for information about accessing the document and the Administrative Record File.

Use of the Information Repository is low. Nearly 80 percent of the 2012 interview and questionnaire respondents had never visited it. Reviewing the full Administrative Record File requires making an appointment, because the USACE offices are located on the secure and gated EPA property. All public notices and fact sheets have advised interested people to contact the USACE Project Manager for more information, which has not led to many requests to view the Administrative Record.

Several community interviews recommended that USACE make a copy of the Administrative Record File available on compact discs (CDs) at another more easily accessible location, such as the Middlesex County College Library or Edison Township Public Library. To determine the need for an alternative location, USACE will advertise the availability of the onsite Administrative Record File (upon appointment) on the public website (see Section 4.1.3) and in all public notices.

Timing: The Administrative Record File was opened as soon as response actions began at the former Raritan Arsenal, and it will remain open until the last Decision Document has been signed. The Administrative Record file is continuously updated with copies of new documents.

4.1.3 Maintain Public Website

Description: Internet technology allows information to be made available quickly and to be delivered in a user-friendly manner.

Goal: To provide a resource for people to obtain information about the former Raritan Arsenal cleanup program at their own convenience.

Method: The USACE maintains a public information web site for the former Raritan Arsenal at <http://www.nan.usace.army.mil/Missions/Environmental/EnvironmentalRemediation/FormerlyUsedDefenseSites/FormerRaritanArsenal.aspx>. The website provides public meeting notices, fact sheets, a description of the property and its history, public meeting presentations, and maps.

As recommended by 2012 interview respondents, USACE will work with the Township of Edison to put a link from the Home page of the Township website to the USACE Raritan Arsenal public website. Currently, there is a link from the Township's Environmental Health Inspections & Services web page, which is not as visible.

Timing: Updated twice per year, or more frequently as needed.

4.1.4 Maintain a Contact List of Interested Parties

Description: A list of persons known or anticipated to be interested in environmental restoration and munitions response activities at the former Raritan Arsenal.

Goal: To provide information directly to stakeholders about Environmental Restoration Program activities.

Method: USACE maintains an e-mail and mailing list of affected property owners and local officials who need to be notified regularly of USACE activities on the site. Lists of key contacts are found in **Appendixes C** through **F** (these lists do not include all onsite property owners; to protect privacy, the names and e-mail or mailing addresses of private individuals are not included).

In January 2011, USACE mailed a notice to all property owners within the Raritan Arsenal boundary, after an unexpected discovery of an inert munitions item during a construction project. The purpose was to remind other property owners that it is possible to find isolated munitions in unexpected locations and to inform them about the safety precautions to take if a suspect item is found. Similar mailings to property owners will be made periodically. In 2012, USACE mailed a notice to all onsite property owners and selected nearby property owners and environmental group leaders, to request participation in CRP interviews and determine interest in establishing a **Restoration Advisory Board (RAB)**.

During the 2012 interviews, 72 percent of the respondents expressed interest in an e-mail list. Therefore, USACE will consider adding establishing a general e-mail list, to provide public meeting notices and occasional updates about the former Raritan Arsenal to other interested persons. The e-mail list will include persons who have expressed interest during community interviews or at public meetings and community groups with an interest in the site. Other interested individuals will be added to the list upon request.

Timing: As needed.

4.1.5 Publish Notices in Local Newspapers

Description: A concise announcement of upcoming public meetings and other events related to the Environmental Restoration Program.

Goal: To notify interested persons about events and activities related to the former Raritan Arsenal cleanup program.

Method: USACE places public notices in the *Middlesex County News/Star Ledger* and the *Home News Tribune*. Notices are placed in the legal advertising section, because that is where public meeting notices are customarily found in these newspapers.

USACE will continue to place paid public notices to announce public meetings and public comment periods for environmental restoration documents in local newspapers. For greater visibility, notices may be placed as display advertisements, rather than as legal notices. As suggested by 2012 interview respondents, USACE will also place meeting notices in the Community Calendar sections of the *Criterion News Advertiser*.

Contact information for these newspapers is provided in **Appendix F**. Example public notices can be found in **Appendix G**.

As recommended by 2012 interview respondents, USACE will work with the Township of Edison to put a link from the Township website to the USACE website, and will consider announcing public meetings on the Township Facebook page.

Timing: Public notices are placed to advertise the twice-yearly public meetings (see Section 4.3.3) and as needed, to advertise public comment periods and additional public meetings for environmental remediation Decision Documents.

4.1.6 Prepare and Distribute Fact Sheets

Description: Fact sheets and newsletters are concise documents (typically 1 to 4 pages for a fact sheet, more for a newsletter) written to summarize information from key documents, such as RIs and Proposed Plans, and to update the public about the status of the cleanup program. They use language suitable for non-technical audiences and may include straightforward graphics as needed to illustrate technical issues and concepts.

Goal: To provide stakeholders with accurate, easy-to-understand information and to promote understanding of the issues and approaches involved in USACE environmental investigations and munitions response activities.

Method: USACE will continue to develop and distribute periodic fact sheets providing the community with the site-wide status of the former Raritan Arsenal cleanup. As appropriate, fact sheets may also focus on cleanup milestones at specific environmental or munitions sites of particular interest to the community.

USACE posts fact sheets on the public website and distributes them at public meetings. Fact sheets could also be distributed by mail or e-mail, placed in the public library, and provided to environmental and other interested civic groups for distribution to their memberships.

Timing: As needed, but at least twice yearly to coincide with the regularly scheduled public information meetings (see Section 4.3.3).

Example fact sheets can be found in **Appendix G**.

4.2 Bringing Issues of Concern to the Attention of the USACE

4.2.1 Discovery of Munitions or Suspected Munitions

Munitions or munitions related items can come in many shapes and sizes, and may be visible on the surface or partially buried, uncovered during excavation activities, or exposed by erosion and fires. When anyone encounters or believes that they may have encountered a munition or munition related item, they should consider it extremely dangerous.

The USACE encourages the public to learn the 3R's of explosive safety.



Recognize - recognizing when you may have encountered a munition is key to reducing the risk of injury or death. If you encounter or suspect you may have encountered a munition, consider it extremely dangerous. Remember, munitions are sometimes hard to identify.

Retreat - If you encounter or suspect you may have encountered a munition, do not touch, move or disturb it, but immediately and carefully (*do not run*) leave the area following the same path on which you entered. If you can, mark the general area, not the munition, in some manner (e.g., with a hat, piece of cloth, or tying a piece of plastic to a tree branch).

Report - When you think you may have encountered a munition, notify your local law enforcement – call 911.

Civil authorities are primarily responsible for rendering safe and disposing of improvised explosives devices, nonmilitary commercial explosives, or similar dangerous items that are discovered. Responses to military munitions will vary depending on the severity of the hazards presented and the need for a rapid response. In situations where military munitions create an actual or potential imminent threat to human health and the environment (including property) and where immediate action is needed to control, mitigate or eliminate the threat, Emergency Ordnance Disposal (EOD) personnel will respond to such situations. EOD units are on call 24 hours every day to provide emergency response teams in support of military and public safety and/or law enforcement authorities at the federal, state, and local levels.

Multiple military munitions found within a discrete location, or repeat findings of military munitions within a discrete area may indicate the need for a planned munitions response. In such cases, the responding EOD unit

may advise the requesting authority (e.g., Edison Police Department) to contact the USACE New York District for determinations of support.

4.2.2 Other Issues and Concerns

Aside from formal meetings and scheduled information sessions, a process is in place for the public or other interested parties/stakeholders to bring issues of concern to the attention of the USACE. Issues of concern should be directed (via letter, e-mail or phone) to the point of contact listed on the USACE public information website for the former Raritan Arsenal:

<http://www.nan.usace.army.mil/Missions/Environmental/EnvironmentalRemediation/FormerlyUsedDefenseSites/FormerRaritanArsenal.aspx>.

The USACE will then provide a response to that concern within 30 calendar days and will take appropriate action for any follow through activities. The USACE will also provide further information related to the outcome of any action/response taken by the USACE or other agencies/organizations to the person or persons initiating the original concern, as well as to any other relevant stakeholders.

4.3 Providing Opportunities for Community Involvement

4.3.1 Community Relations Plan

Description: A written plan of action that provides for interaction with stakeholders, the public, local officials, and environmental groups, and obtaining their input at appropriate points during the cleanup process.

Goal: To provide a foundation for maintaining two-way communication with the public, to create an understanding of environmental restoration and related actions, to ensure public input into decision-making processes related to affected communities, and to make certain that USACE is aware of and responsive to public concerns.

Method: The USACE CRP for the former Raritan Arsenal is based on interviews with Stakeholder Group members, local officials, environmental groups, and other interested community members. A summary of the 2012 interview results is included in **Appendix B**. For privacy and confidentiality, the names of people interviewed are not published.

The CRP will be made available to the public in the Information Repository, Middlesex County College Library, and on the public website.

Timing: A CRP was initially prepared for the former Raritan Arsenal in 1992. This CRP was prepared in 2012 and will be updated again in approximately 5 years, or if community interest and concern notably increases before that time.

4.3.2 Stakeholders Working Group

Description: The keystone of the USACE community relations effort at the former Raritan Arsenal is the Stakeholders Working Group. This group is composed of representatives of the major property owners, NJDEP, EPA (as a property owner, not as a regulator), and Edison Township, Coalition for a Better Edison / Edison Greenways, and Edison Wetlands Association. A local newspaper reporter sometimes attends these meetings, which helps get information out to the public in advance of public meetings. **Appendix C** provides contact information for the members of the Stakeholders Working Group.

Goal: To exchange information on a regular basis with stakeholders in the cleanup program.

Method: USACE provides an update of completed and planned activities at the Stakeholders Working Group meetings. Before each meeting, USACE asks members for items they wish to discuss, then distributes an agenda and an advance copy of the presentation. Meetings are held in the daytime, because most members are attending

as part of their working day. After the Working Group meeting, USACE solicits feedback from Working Group members before the presentation is prepared for the public information meeting (several weeks later).

Between meetings, the USACE Project Manager communicates regularly with individual Working Group members and other property owners to coordinate work scheduled on their property and to inform them of activities that could affect their operations or might otherwise be of interest to them. Working Group members can call the USACE Project Manager whenever an issue arises that might require USACE attention.

Timing: The Stakeholders Working Group meets twice a year, usually in the spring and fall, about 1 month before the regular public information meetings (see Section 4.2.3).

4.3.3 Hold Public Meetings

Description: A public meeting is a gathering where USACE and NJDEP can hear the public's views and concerns about an action or proposal and provide the public with updated information on the progress of the cleanup process. Public meetings must be held upon request whenever a formal public comment period is required under CERCLA regulations.

Goal: To provide information to the community about environmental restoration activities, provide a forum for the community to ask questions, and allow the community to voice any concerns they may have.

Method: To encourage the greatest possible participation, meetings are held in the evening and at locations that offer a well-equipped meeting room, are convenient to local community residents, and do not require entry to the EPA property through the security gate. Locations that have been successfully used for recent meetings are listed in **Appendix H**.

USACE advertises meetings in local newspapers (see Section 4.1.4) approximately 2 weeks before the meeting date and posts the meeting information on the public website. Meetings will include presentations, displays, and an opportunity to ask questions and provide comments. Meetings held to solicit comments during a formal public comment period will use a court reporter to generate a verbatim transcript of oral comments, in addition to written comments.

USACE will continue to place recorded presentations on the township's local access television station, for those who are unable to attend meetings or do not use the Internet as an information source.

Timing: USACE holds public information meetings twice yearly and additional meetings whenever a formal public comment period is required, for example, upon completion of Proposed Plans. USACE also will hold a public meeting whenever an environmental restoration or munitions response activity is planned that would be expected to generate a high level of public interest or concern.

4.3.4 Provide Public Comment Periods

Description: Public comment periods are held to solicit public input on major decisions in the CERCLA process, primarily the selection of removal actions or final cleanup remedies. At the conclusion of a public comment period, a Responsiveness Summary is prepared to summarize relevant comments received from the public.

Goal: Public comment periods provide community members with an opportunity for meaningful involvement in the process and provide the USACE with valuable information for use in making decisions. Responsiveness Summaries document how the USACE has considered those comments during the decision-making process.

Method: USACE will make documents available for public review – an EE/CA report for planned removal actions and a Proposed Plan for remedial actions – and will announce a 30-day public comment period by publishing a notice in local newspapers and on the public website (see Sections 4.1.5 and 4.1.3). A Responsiveness Summary will be issued as part of the Decision Document that follows a Proposed Plan, or the Action Memorandum that follows an EE/CA.

Timing: A comment period lasts a minimum of 30 days. The public comment period can be extended an additional 30 days if requested by the public. Public meetings are held within the public comment period. The Decision Document and Action Memorandum will be made available for public review in the Information Repository before the cleanup action begins.

4.3.5 Evaluate Interest in a Restoration Advisory Board

Description: A RAB is an advisory group for the restoration process, with members from the local community, affected property owners, USACE, environmental regulatory agencies, and other interested parties. RAB community members should reflect the diverse interests within the local community and should live or work in the affected community or be directly affected by the cleanup program in other ways.

Goal: To serve as a forum for effective communication among community members, USACE, and regulatory agencies to represent the interests of the general public and to serve as a community point of contact for questions and concerns about the cleanup program.

Method: The DoD RAB Rule (32 CFR Part 202), issued May 2006, and the accompanying Restoration Advisory Board Rule Handbook (Office of the Secretary of Defense, March 2007) provide a framework for promoting participation in the environmental restoration process. That includes what activities can be performed by a RAB, how to establish a RAB, the requirement for individualized RAB operating procedures, the responsibilities of RAB members, and the steps required to adjourn a RAB when a site has been remediated, or to dissolve a RAB when it is not functioning.

The DoD RAB Rule states that:

“...a RAB should be established when there is sufficient and sustained community interest, and any of the following criteria are met:

- (1) The closure on an installation involves the transfer of property to the community,
- (2) At least 50 local citizens petition the installation for creation of a RAB,
- (3) Federal, state, tribal, or local government representatives request the formation of a RAB, or
- (4) The installation determines the need for a RAB. To determine the need for establishing a RAB, an installation should: (i) Review correspondence files (ii) Review media coverage, (iii) Consult local community members, (iv) Consult relevant government officials, and (v) Evaluate responses to communication efforts, such as notices placed in local newspapers and, if applicable, announced on the installation Web site.”

Closure of Raritan Arsenal and property transfer took place decades before DoD began establishing RABs. USACE has never received a citizens’ petition requesting a RAB, and the regulatory agencies have indicated only that they would support an official DoD RAB, if USACE determines one is necessary.

USACE established a Technical Review Committee for the former Raritan Arsenal in 1991, in response to community desire for more frequent updates about the cleanup process. In 2001, the Technical Review Committee was re-designated as a RAB.

After the RAB Rule was published, USACE evaluated the group’s operations for compliance. Because there had not been a formal process of recruiting additional community members, USACE published a notice in 2006 to solicit community interest in serving on a RAB. This effort did not result in additional community members. Therefore, the existing group has continued to function as a Stakeholders Working Group, composed of representatives from the major property owners, local government, and two local environmental groups.

At a December 10, 2009, public meeting, USACE again requested community input on whether an official DoD RAB should be established. A notice of the public meeting and request for input on establishing a RAB was published on November 16 through 20, 2009. USACE received 13 letters from the local community, from three interested citizens, six property owners of the former Raritan Arsenal site, and members of two community groups. Seven of these individuals expressed interest in establishing an official DoD RAB, but the remaining letters recommended that USACE continue to conduct public outreach by hosting public information meetings and

coordinating with the property owners and regulatory agencies to communicate the progress of site work under the FUDS program. In May 2010, USACE determined that this input did not show sufficient community interest to support a RAB.

In April 2012, USACE again placed a public notice and held a public meeting to determine interest in establishing a RAB (see notice in Appendix G). Persons interested in becoming RAB members were encouraged to attend the meeting or contact the USACE Project Manager. Only two people filled out a RAB Community Interest form. The 18 individuals who were interviewed for the CRP update were asked if they were interested in becoming RAB members; 12 of them replied that they might be, while six either were not interested or did not see the need for a RAB. In July 2012, USACE determined that this input did not show sufficient community interest to support a RAB.

Technical Assistance for Public Participation (TAPP): Under 32 CFR Part 203 (February 1998), TAPP is available for a RAB to obtain outside technical assistance, if other resources are not available to help them understand and provide input into Environmental Restoration Programs. The RAB identifies a project and DoD procures a technical assistance contractor. Funding is provided for up to \$25,000 per year or 1 percent of the total restoration cost, whichever is less, with a limit of \$100,000 total over the life of the program at any one facility. The funding is taken from the budget for the program at the facility.

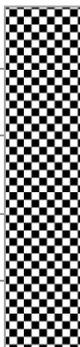
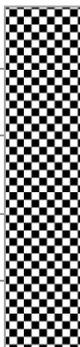
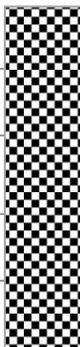
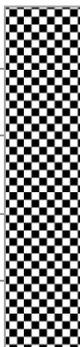
The Stakeholders Working Group was asked in 2009 if technical assistance through TAPP would be useful to them, which would be another reason to establish a formal DoD RAB. The members advised USACE that existing technical resources (including consultants hired by the large property owners) were sufficient and that USACE funding was better spent on the cleanup program.

Timing: USACE conducted public outreach to determine the need for a RAB in 2006, 2009, and 2012. USACE will continue to evaluate community interest in establishing a RAB approximately every 2 years, in accordance with the DoD "RAB Rule."

4.4 Projected Schedule for Community Relations Activities

The schedule for community relations activities will be based on times identified during the community interviews. To meet the information desires of the community and allow area residents to participate in the decision-making process, USACE may schedule public involvement activities throughout the environmental action process. The activities comply with the public involvement requirements of the National Contingency Plan and CERCLA. **Table 4-2** provides a tentative schedule for anticipated CERCLA milestones.

TABLE 4-2
Community Relations Schedule
Community Relations Plan

Activity	Community Involvement Plan	Stakeholders Working Group	Information Repository, Administrative Record File	Web Site	Fact Sheet	Public Notice	Public Comment Period	Public Meeting	Responsiveness Summary
Twice-yearly status updates		○		○	○	○		○	
Preliminary Assessment/ Site Inspection									
Munitions Response: Initial prioritization		●				●			
Munitions Response: Change in prioritization or scheduling		●							
Remedial Investigation/ Feasibility Study	●	○	●	○	○				
Proposed Plan					● (a)	●	●	●	
Decision Document						●			●
Remedial Design/ Remedial Action					○	○			
Removal Actions (6 months planning)					○	●	●		
Engineering Evaluation/ Cost Analysis					○	●	●	○	●

a. Proposed Plans are typically developed in a fact sheet format to meet this requirement.



Periodic updates



Ongoing activity

● Required activity

○ Discretionary activity

SECTION 5

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