

FINAL

Community Involvement Plan Iowa Army Ammunition Plant Middletown, Iowa

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U.S. Army Corps of Engineers
Louisville District

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STATEMENT OF INDEPENDENT TECHNICAL REVIEW

Environmental Services at Iowa Army Ammunition Plant Middletown, Iowa

U.S. ARMY CORPS OF ENGINEERS LOUISVILLE DISTRICT

CH2M HILL, Inc., has completed the Final submittal of the **Community Involvement Plan, Iowa Army Ammunition Plant, Middletown, Iowa**. Notice is hereby given that an independent technical review (ITR) has been conducted that is appropriate to the level of risk and complexity inherent in the project, as defined in the Project Management Plan and Contractor Quality Control Plan. During the ITR, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of assumptions; methods, procedures, and material used in analyses; the appropriateness of data used and level of data obtained; and reasonableness of the results, including whether the product meets the U.S. Army Corps of Engineers (USACE)'s needs consistent with the law and existing USACE policy.

Project Manager



5/1/2017

Signature

Date

Mike DeRosa

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5/1/2017

Signature

Date

Kim-Lee Yarberry

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Acronyms and Abbreviations

AEC	United States Atomic Energy Commission
ATSDR	Agency for Toxic Substances and Disease Registry
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CIP	Community Involvement Plan
CRP	Community Relations Plan
DERP	Defense Environmental Restoration Program
DoD	U.S. Department of Defense
FUSRAP	Formerly Utilized Sites Remedial Action Program
HMX	octogen
IAAAP	Iowa Army Ammunition Plant
IDA	Inert Disposal Area
IRP	Installation Restoration Program
ITR	independent technical review
MMRP	Military Munitions Response Program
N/A	not applicable
OU	operable unit
RAB	Restoration Advisory Board
RCRA	Resource Conservation and Recovery Act of 1976
RDX	cyclonite
ROD	Record of Decision
SARA	Superfund Amendments and Reauthorization Act of 1986
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency

Overview of the Community Involvement Plan Update

The U.S. Army has prepared this Community Involvement Plan (CIP) Update for environmental investigation and potential restoration activities at the Iowa Army Ammunition Plant (IAAAP) in Middletown, Iowa (Figure 1-1). The IAAAP is an active Joint Munitions Command facility currently operated by civilian contractor American Ordnance, LLC. The current mission of the IAAAP is to load, assemble, and pack ammunition items, including projectiles, mortar rounds, warheads, demolition charges, and munitions components such as fuses, primers, and boosters.

The original IAAAP CIP, then known as a Public Involvement and Response Plan, was prepared in 1991 and updated in 2001 as a Community Relations Plan (CRP). A 2011 addendum to the 1991 and 2001 plans addressed only those portions of the IAAAP that had been under control of the former United States Atomic Energy Commission (AEC) for weapons-assembly operations.

The U.S. Army has prepared this CIP as part of its obligations under the **Comprehensive Environmental Response, Compensation, and Liability Act of 1980**¹ (CERCLA), as amended by the **Superfund Amendments and Reauthorization Act of 1986** (SARA) and the **National Oil and Hazardous Substances Pollution Contingency Plan** (40 *Code of Federal Regulations*, Part 300), commonly known as the National Contingency Plan. The CIP is prepared to help ensure that the public is informed about the investigation and is involved in potential restoration decisions at the IAAAP. This CIP was prepared in compliance with the following:

- *Defense Environmental Restoration Program (DERP) Management Manual* (4715.20, March 9, 2012).
- U.S. Army Corps of Engineers (USACE) Engineer Pamphlet 200-3-1, *Public Participation Requirements for Defense Environmental Restoration Program* (September 2011). (This document supersedes Engineer Pamphlet 1110-8-3, *Public Participation Requirements in the Defense Environmental Restoration Program for Formerly Used Defense Sites* [April 2004]).
- U.S. Army Public Involvement Toolkit, available online at <http://www.asaie.army.mil/Public/IE/Toolbox/default.html>.
- **U.S. Environmental Protection Agency** (USEPA), *Superfund Community Involvement Handbook* (January 2016).

This CIP identifies community concerns and expectations, establishes public involvement goals and objectives, and provides a strategy for giving the public accurate, consistent, and timely information about the investigation and potential restoration at the IAAAP. The U.S. Army will implement the public involvement activities outlined in this CIP.

1.1 Public Involvement Goals

The U.S. Army will use the activities outlined in this CIP to inform and involve the community about the environmental investigation and potential restoration process. Stakeholders in the environmental restoration process are the following:

¹ Terms in **bold** in this CIP are defined in the glossary (Appendix K).

- U.S. Army
- USEPA Region 7, federal environmental regulatory agency
- U.S. Fish and Wildlife Service
- **Iowa Department of Natural Resources**, state regulatory agency
- The community—local residents, business owners, elected officials, interest groups, and members of the media who express an interest in environmental issues at the IAAAP (see Appendixes C and H through J)

The public involvement program has the following goals:

- Inform stakeholders that personal and property safety is the highest priority
- Identify options for distributing information to the community
- Provide local residents, officials, other stakeholders, and the public with an opportunity to review and comment on environmental restoration activities
- Inform the public of public involvement activities
- Listen to public input
- Identify and address public concerns

1.2 Environmental Regulatory Process

The U.S. Army is responsible for evaluating and cleaning up environmental contamination at the IAAAP. The IAAAP was placed on USEPA’s National Priorities List in August 1989 due to surface water contaminated with explosives leaving (that is, migrating from) the installation boundary. An interagency agreement signed by USEPA Region 7 and the U.S. Army in September 1990 became effective in December 1990. The agreement defines objectives, responsibilities, and procedural and schedule frameworks for implementing the U.S. Army’s Installation Restoration Program (IRP) at the IAAAP.

Environmental restoration activities are being conducted in accordance with CERCLA, as amended by SARA, the **Resource Conservation and Recovery Act of 1976 (RCRA)**, the National Contingency Plan. CERCLA, as amended by SARA, focuses on the management and remediation of non-operating sites with media contaminated with hazardous substances. Sites that currently handle solid and hazardous waste are regulated under RCRA.

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 as follows:

1. Public Involvement. Public involvement is the process for engaging in dialogue and collaboration with communities potentially affected by sites. Its purpose is to give the community, including local residents, business owners, elected officials, interest groups, and members of the media who express an interest in the site, the opportunity to be informed about activities at the site and to provide input into restoration decisions that are made for the site. CERCLA, as implemented by the National Contingency Plan, requires specific community involvement activities that must occur at certain points throughout the CERCLA process. Section 4.2 of this CIP discusses the required specific community involvement activities.
2. Preliminary Assessment and/or Site Inspection. Site investigations typically begin with a **preliminary assessment** and/or **site inspection** 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. 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.

3. Remedial Investigation. Based on the results of the preliminary assessment and/or site inspection, a **remedial investigation** may be needed at a site. A remedial investigation 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 remedial investigation is to determine the **nature and extent of contamination** at each site and the risk that contamination presents to human health and the environment. 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.
4. Feasibility Study. If the remedial investigation determines that cleaning up a site is needed to address human health or ecological risk, then a **feasibility study** is conducted. The study evaluates various remedial alternatives for the site.
5. Proposed Plan. The **proposed plan** summarizes the remedial alternatives developed in the feasibility study and recommends a preferred alternative. The public has an opportunity to comment on the proposed plan during a formal **public comment period**. Site information is compiled in an **administrative record file** and is placed in an **information repository** established at a convenient location, such as a local library, 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**.
6. Record of Decision or Decision Document. At the end of the public comment period, an appropriate remedial alternative to protect human health and the environment is chosen. The Record of Decision (ROD) or **decision document** explains the selected **remedial action** and includes the responsiveness summary.
7. Remedial Design and Remedial Action. The final stage in the process is the **remedial design and remedial action**. During the remedial design, the technical specifications for treatment remedies and technologies are developed. The remedial action is the actual construction or implementation phase of the restoration process.
8. Removal Action. A **removal action** is a response to a release that threatens the public health or welfare or the environment. Removal actions may be conducted at any point in the CERCLA process described above. These actions vary in duration and are categorized by their urgency and duration. **Emergency removals** require an immediate response to releases or threatened releases to the environment and are typically initiated within hours or days of determining that a removal action is appropriate. **Time-critical removal actions** are situations where remediation activities must begin within six months of discovery of hazardous materials to protect public health and safety. **Non-time-critical removal actions** occur when a removal action is appropriate but the situation allows for a planning period of six months or more before beginning removal activities. Because these sites do not present an immediate threat to public health or safety, more time is available to thoroughly assess potential threats and evaluate cleanup alternatives. For a non-time-critical removal action, an **engineering evaluation and cost analysis (EE/CA)** describing the remedial approach is prepared before beginning the removal action. (EPA, 2016)

1.3 Contents of This Community Involvement Plan

The information in this CIP is based on demographic research conducted on nearby communities, technical environmental documents related to the IAAAP, and interviews conducted with stakeholders in October 2016. Interviewees included Restoration Advisory Board (RAB) members, local and county government officials and agencies, educators, and residents.

The CIP is organized as follows:

- Section 1 summarizes the CIP and the U.S. Army’s public involvement goals.
- Section 2 describes the site and its history.
- Section 3 presents the community background and profile.
- Section 4 summarizes the U.S. Army’s public involvement program.
- Section 5 lists the references used in this plan.

Appendix material is also included:

- Appendix A provides the questionnaire used in community interviews and distributed by email.
- Appendix B is a directory of IAAAP RAB members.
- Appendix C lists media contacts.
- Appendix D presents potential public meeting locations.
- Appendix E contains templates for news releases and newspaper advertisements and a sample flyer.
- Appendix F lists the public information repository and administrative record file locations.
- Appendix G lists U.S. Army and regulatory agency contacts.
- Appendixes H, I, and J provide stakeholder contact lists of key community leaders, elected officials, and interested parties.
- Appendix K is a glossary of terms commonly used in environmental restoration programs. Terms appearing in **bold** in this CIP are defined in the glossary



LEGEND

-  Plant Boundary
-  City Boundary
-  County Boundary

Note:
1. 2015 Esri World Imagery Basemap

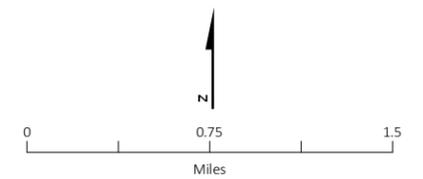


FIGURE 1-1
Site Location Map
Iowa Army Ammunition Plant
Middletown, Iowa

Site Description and History

This section summarizes the historical and geographical details of the environmental and munitions response sites at the IAAAP and previous environmental investigations.

2.1 Location and Surrounding Areas

The IAAAP is located in southeastern Iowa in the southern portion of Des Moines County, Iowa, which borders Lee County to the south and Henry County to the west. The IAAAP consists of 19,011 acres adjacent to Middletown, and it is approximately 8 miles west of Burlington, which, with a population of 25,436, is the largest city in Des Moines County.

The IAAAP is located near U.S. Highway 34, which runs east–west through Iowa from Illinois to Nebraska. U.S. Route 61, which runs north–south on the western shore of the Mississippi River, is accessible to the east in Burlington. The Great River (MacArthur) Bridge on Highway 34 in Burlington spans the Mississippi River, connecting southeast Iowa with west-central Illinois.

Regional transportation needs are met by air, bus, and rail transportation services. The Southeast Iowa Regional (Burlington) Airport, southwest of the city, provides freight and passenger services; the Burlington Northern/Santa Fe Railroad and Amtrak provide rail services; and Burlington Trailways and Burlington Urban Service provide regional and local bus transportation, respectively.

The facility is a government-owned, contractor-operated military industrial installation under the jurisdiction of the U.S. Army Joint Munitions Command, headquartered in Rock Island, Illinois. Its primary mission is to load, assemble and pack ammunition items, including projectiles, mortar rounds, warheads, demolition charges, and munitions components such as fuses, primers, and boosters.

The IAAAP was established in July 1941 as the Iowa Ordnance Plant. The plant's mission was to load, assemble, and pack 75-millimeter and 155-millimeter artillery shells and 100-pound to 1,000-pound aerial bombs. The original cost of the plant was \$30 million. It produced munitions for World War II until August 1945 and was operated by a private contractor. Operations reverted to U.S. Army control from 1946 until 1951. The plant has been a government-owned, contractor-operated installation under the operation of two different contractors since that time. The U.S. Army changed the name of the facility to the Iowa Army Ammunition Plant in the early 1960s. Munitions were produced for military activities in Southeast Asia in the 1960s and early 1970s. The former AEC maintained a presence at the facility from 1947 until 1975.

The IAAAP continues to be an active U.S. Army production facility, but it has been determined that past disposal practices at the IAAAP have released hazardous substances into the environment. The U.S. Army's primary concern is the protection of human health and the environmental restoration of the site.

2.2 History of Investigation and Restoration

In 1975, the U.S. Department of Defense (DoD) began a program to identify and investigate potentially hazardous sites at military installations. In 1980, Congress passed CERCLA, also known as Superfund, which required the identification, investigation, and restoration of sites contaminated by past releases of hazardous substances. In 1986, Congress amended CERCLA to create the DERP under the SARA. Section 211 of the SARA requires the DoD to carry out its DERP in accordance with CERCLA. Both CERCLA and SARA establish the legal requirements for identifying, investigating, and remediating inactive hazardous waste sites. The U.S. Army follows USEPA guidelines in conducting investigation and restoration work under DERP.

To reduce the risks to human health and the environment, the DoD established two program categories within DERP: the Installation Restoration Program (IRP) and the Military Munitions Response Program (MMRP). The IRP focuses on releases of hazardous substances, pollutants, and contaminants that pose environmental health and safety risks. The MMRP addresses environmental health and safety hazards associated with unexploded ordnance, discarded military munitions, and munitions constituents on former and current military sites.

2.3 Overview of Environmental Sites

This summary of environmental sites at the IAAAP is based on the fiscal year 2015 DERP *Installation Action Plan* (U.S. Army, 2016). The primary contaminants at IAAAP are explosives, metals, and **volatile organic compounds**, which are found in soils, groundwater, and surface water at the site.

The primary source of these contaminants is historically accepted operating practices during which explosives-contaminated wastewater and sludge were discharged to uncontrolled lagoons and impoundments on the IAAAP property. Additional sources of contamination included open burning of explosives materials and munitions and landfilling of waste material. These former disposal practices are no longer acceptable under current, more stringent environmental regulations. Currently, wastewater generated onsite is treated and recycled. Only a small portion of the treated wastewater, containing residual explosives and other contaminants, is discharged to the surface. This discharge is regulated under the plant's National Pollutant Discharge Elimination System permit, which includes agreed-upon discharges set by the state.

In August 1989, the installation was proposed for the National Priorities List, because surface water contaminated with explosives was leaving the installation boundary. The site was placed on the National Priorities List in August 1990. In September 1990, a Federal Facility Agreement was signed by USEPA Region 7 and the U.S. Army; it became effective in December 1990.

The FFA originally listed 30 solid waste management units, or areas from which contaminants might migrate. These were designated IAAP-1 through IAAP-30. Site IAAP-023, the Deactivation Furnace site, was then merged with IAAP-021, the Demolition Area site, because IAAP-023 is located within the confines of the demolition area. Shortly after the FFA was signed, additional sites, designated IAAP-031 through IAAP-043, were identified. Sites IAAP-032 through IAAP-035 were then collectively listed under the number IAAP-032, because of their proximity to one another. The Line 800 Pinkwater Lagoon was added as IAAP-044.

In 1991, the preliminary assessment/site inspection was conducted. In 1996, the installation-wide remedial investigation was completed. An operable unit (OU) was created to address contaminated soils from 15 sites, and in March 1998, the interim OU1 soils ROD was signed to address the excavation, relocation, and placement of contaminated soils from these sites to IAAP-020, the Inert Disposal Area (IDA). The final soils ROD, signed in September 1998, addressed the treatment of the most highly contaminated portion of that soil.

In 1999, the Former Fuel Station Underground Storage Tanks site (IAAP-045) was separated from IAAP-006 to better manage the soil and groundwater restoration efforts from the 1988 removal of the leaking underground storage tanks. Sites IAAP-046 and IAAP-047 were created to address off-post groundwater and the Central Test Area, respectively.

In 2002, nine groundwater sites were created to better manage groundwater restoration (IAAP-002G, IAAP-003G, IAAP-004G, IAAP-010G, IAAP-012G, IAAP-020G, IAAP-032G, IAAP-039G, and IAAP-044G). Sites IAAP-011 and IAAP-044 were consolidated so that they could be better managed, as they are contiguous. In 2012, several additional groundwater sites were established to manage costs and actions associated with groundwater and surface water restoration for a total of 33 groundwater sites, which are categorized as OU6.

In July 2002, areas of the IAAAP that had been used by the former AEC, and thus potentially contained radiological contaminants, were designated by USACE to be managed under the Formerly Utilized Sites Remedial Action Program (FUSRAP). Thus far, seven areas have been identified as FUSRAP areas: Line 1 (IAAP-001), Firing Sites Area (IAAP-030), West Burn Pads Area (part of IAAP-032), Warehouse 3-01 (located in IAAP-003), and Yard G, Yard C, and Yard L (near Warehouses L-1, L-2, and L-3). Four other areas were screened by USACE under FUSRAP in 2004, but no radiological contamination attributable to the AEC was found in these areas. USACE will respond to all releases and threats of releases of hazardous substances, pollutants, or contaminants, with the exception of groundwater and surface water contamination, at all FUSRAP areas.

Sites that are grouped because of common locations, contaminants, or media, such as soils or groundwater, are called an OU. The OUs were restructured in October 2009 and are identified as follows:

- OU1: soils (no change from previous structure)
- OU3: offsite groundwater (formerly addressed offsite and onsite groundwater)
- OU4: inert disposal area closure (formerly installation-wide OU)
- OU5: MMRP (no change from previous structure)
- OU6: onsite groundwater (includes inert disposal area)
- OU7: installation-wide (former OU4 without inert disposal area)
- OU8: FUSRAP-specific; no relevance to inert disposal area
- OU9: contingency soils remedy (now construction debris sites)

In 2004 six sites were transferred from IRP action to remedial action under RCRA. They are the following:

- IAAP-019, Contaminated Clothing Laundry
- IAAP-021, Demolition Area/Deactivation Furnace
- IAAP-024, Contaminated Waste Processor
- IAAP-026, Main Sewage Treatment Plant/Drying Beds
- IAAP-027, Fly Ash Landfill
- IAAP-029, Line 3A Sewage Treatment Plant/Drying Beds

In 2006, OU5 was established to address MMRP sites. Through the MMRP, eight sites have been established at the IAAAP. In 2008, an ROD was signed for site IAAP-020, allowing for the closure of the IDA. In 2009, the U.S. Army identified two construction debris sites that require assessment and possible action. In 2013, these sites were designated as OU9. All media at these two sites are being addressed under OU9. In 2014, an ROD was signed for the remaining OU5 sites.

Additional information about environmental sites at the IAAAP can be found in the fiscal year 2015 DERP *Installation Action Plan* (U.S. Army, 2016) and other reports located at the Environmental Restoration Program office at the IAAAP. Documents can also be reviewed in the Administrative Record file online at <http://www.iaaprestoration.com/adminrecord/>.

Community Background

This section describes the community near the IAAAP and the communication and participation needs of stakeholders during environmental restoration activities. The information in this section is based on in-person community interviews conducted in October 2016.

3.1 Community Profile

The IAAAP is located in Des Moines County in southeastern Iowa, west of Burlington. The IAAAP's workforce is dominated by residents of Middletown, Danville, New London, Mt. Pleasant, West Burlington, Burlington, and Ft. Madison. Some workers commute to the IAAAP from Illinois and Missouri. Due to its continuity of operations and consistently large payroll, the site has developed support from many business and community leaders. Also, because it has been operational since World War II, numerous current and former workers residing in local communities have developed and maintained loyalty to and identification with the installation. Table 3-1 provides detailed demographic and economic data for the communities of Middletown, Burlington, West Burlington, Danville, New London, Mt. Pleasant, and Ft. Madison.

The greater Burlington area has a variety of businesses, including manufacturers of spark plugs, satellite dishes, and construction equipment; healthcare and social services; and food products. Since 2009, greater Burlington has received more than \$300 million in new economic development, which has contributed to the creation of over 1,300 new jobs. Manufacturing is the area's largest employer, accounting for more than 20 percent of the area's workforce. The IAAAP is the greater Burlington area's second largest employer, with 800 employees (Greater Burlington Partnership, 2016).

Regional agricultural crops include corn, soybeans, and pasture grasses. Beef, dairy cattle, hogs, and poultry are also raised on area farms.

Numerous newspapers serve Des Moines County, including dailies such as *The Des Moines Register* and *The Burlington Hawk Eye*, and weeklies such as *The Des Moines County News* and *The Mediapolis News*. Burlington radio stations include 1150 AM KCPS, 1490 AM KBUR, 88.9 FM KAYP, 93.5 FM KKMI, 103.1 FM KDMG, 105.5 KILJ, and 107.3 FM KGRS. Channel 26 KG CW, Channel 8 WQAD, Channel 6 KWQC, and Virtual Channel 18 KLJB serve the southeast Iowa region. Regional television viewers have access to Mediacom Communications Company, which provides a large selection of channels including network stations in the Quad City area of Davenport, Rock Island, and Moline. More detailed information about local news sources mentioned most frequently by participants during the community interviews is found in Section 3.5.

Medical facilities include the Great River Medical Center and Health Systems, Henry County Health Center, and Ft. Madison Community Hospital.

Numerous public and private elementary schools exist throughout the county, including the kindergarten-through-12th-grade Danville Community School, along with six elementary, two middle, one junior high, and three high schools in the Burlington and West Burlington School Districts.

Southeastern Community College, located in West Burlington, offers a comprehensive 2-year program of studies including arts and sciences courses and vocational-technical training. Additional colleges and universities near Des Moines County include Iowa Wesleyan University, in Mt. Pleasant, Iowa; Knox College, in Galesburg, Illinois; Western Illinois University, in Macomb, Illinois; and Monmouth College, in Monmouth, Illinois.

Table 3-1. Demographic and Economic Profile

Community	County	School District	Population		Median Age ^b	Median Household Income ^b	Median Home Value ^b	% Minority ^b	% Poverty ^b	% Speak a Language Other Than English ^b
			Census 2010 ^a	Estimate 2014 ^b						
Middletown	Des Moines	Danville and Burlington Community School Districts	318	302	40	\$52,917	\$102,500	9.3	9.6	2.2
Danville	Des Moines	Danville Community School District	934	989	38.9	\$50,781	\$111,900	4.3	5.8	3.4
Burlington	Des Moines	Burlington Community School District	25,663	25,559	39.9	\$37,223	\$83,300	14.7	19.2	2.9
West Burlington	Des Moines	West Burlington Independent School District	2,968	3,026	46.4	\$39,107	\$96,800	8.4	19.2	1.4
New London	Henry	New London Community School District	1,897	1,844	44.1	\$42,639	\$80,800	3.6	12.5	2.3
Mt. Pleasant	Henry	Mt. Pleasant Community School District	8,668	8,682	34.8	\$45,977	\$108,900	18.0	21.8	7.2
Ft. Madison	Lee	Ft. Madison Community School District	11,051	10,929	40.5	\$41,875	\$76,100	15.0	16.1	1.9
Des Moines County	N/A	N/A	40,325	40,055	41.7	\$42,146	\$144,800	11.2	15.5	4.3

^a U.S. Census Bureau, Census 2010 Demographic Profile.

^b U.S. Census Bureau, 2010–2014 American Community Survey 5-Year Estimates.

N/A = not applicable

Quail, turkey, and deer hunting are popular regional activities. Local lakes and the Mississippi River offer fishing for catfish, crappie, and bass. The Des Moines County Conservation Board manages Starr’s Cave Park and Preserve, a 200-acre area just outside of Burlington. Hiking, camping, fishing, and boating are all available at Geode State Park. The park is a 1,640-acre facility managed by the Iowa Department of Natural Resources and is 15 miles west of Burlington.

Burlington is home to many parks and recreational facilities. Regional parks with picnic facilities include Crapo-Dankwardt Park, Perkins Park, Mosquito Park, Sunnyside Park, and Riverside Park. In addition, there are two public golf courses in the county, a miniature golf course, a roller skating rink, and several other recreational facilities. Community Field, which seats 3,500, is the home of the Burlington Bees, a Class A minor league professional baseball team.

A major regional event that attracts over 100,000 visitors from Iowa, Illinois, northern Missouri, and beyond, is the 6-day-long Burlington Steamboat Days–American Music Festival. The festival is held in June every year. The activities include daily performances of country, rock, big band, rhythm and blues, and jazz at the Miller Outdoor Stage and Memorial Auditorium. Additional festival activities have included fireworks, river cruises, a talent show, parade, and the Snake Alley Art Fair.

3.2 History of Community Concerns

This section provides a history of community concern about environmental contamination at the IAAAP and summarizes documents that focused on community issues.

- **1985.** Community concern about environmental contamination at the IAAAP first became prevalent in 1985, when community residents living along the southern border of the plant expressed concern about potential contamination of their private drinking water wells. The U.S. Army and USEPA investigated and sampled local groundwater. No organic contaminants were detected, and all metals concentrations met regulatory standards for potable drinking water. Combined with the absence of contaminants in perimeter monitoring wells onsite, the U.S. Army and USEPA concluded that no contamination emanating from the IAAAP was affecting offsite potable drinking water wells at that time (ATSDR, 1999).
- **1989–1990.** The IAAAP’s community involvement activities related to environmental restoration were limited before 1989, when the first public involvement and response plan was developed. The plan was based on six interviews conducted in 1989, and 28 additional interviews conducted in 1990. The most common environmental concerns expressed in those interviews related to surface and groundwater contamination coming off the plant property. Participants in both surveys mentioned that concerns about human health impacts from consumption of contaminated well water intensified after claims of potential health impacts made by a family in 1985. Interviewees also expressed concern about the possible impact of contaminants on domestic and wild animals, including deer, which could be hunted and consumed. Local residents also commented that Brush Creek had run with red water in the 1950s. Although that no longer occurred, residents said that memories of the water coloration heightened local sensitivity to water quality issues (USACE, 1991).
- **1992.** When Royal Demolition Explosive was detected in private wells in 1992, the U.S. Army immediately provided bottled water to all affected residents. The U.S. Army then contracted with the Burlington Municipal System and Rathbun Water Company to connect 154 houses in the area to public water. Although the private wells of most homes in the area were not directly affected by groundwater contamination, the U.S. Army took preventive measures to define the affected area broadly (ATSDR, 1999). Fifteen homeowners declined the U.S. Army’s offer to connect to private water at that time. In 2001, the U.S. Army provided connections to public water supply for several additional homeowners who had declined previously (URS, 2005.)

- **1997.** The U.S. Army established a RAB to provide input into ongoing environmental restoration projects, as well as to satisfy regulatory requirements. The RAB consists of representatives of the U.S. Army, USEPA, and the Iowa Department of Natural Resources, as well as community representatives from surrounding towns. It is co-chaired by a U.S. Army representative and a community member.
- **2000–2001.** The plant’s Public Involvement and Response Plan was updated in 2001 and renamed a CRP to reflect updated terminology. In preparation for updating the plan, more than 2000 surveys were distributed by email and in hard-copy in May 2000; 169 surveys were returned by the end of June 2000. The top three environmental concerns expressed by respondents were groundwater, surface water, and air quality. The CRP concluded that residents of the surrounding community were becoming better informed about the installation’s environmental restoration program. It stated that the nature and complexity of the IAAAP’s environmental issues and the news media scrutiny had raised public awareness and concern about environmental and potential public health impacts related to the IAAAP. More than 85 percent of respondents were aware of the RAB and more than 90 percent were aware that environmental restoration activities were underway at the IAAAP (USACE, 2001). Also in 2001, the Agency for Toxic Substances and Disease Registry (ATSDR) issued a public health consultation based on additional data about potential radioactivity (ATSDR, 2001). ATSDR stated that various members of the public and public officials had raised concerns about the potential for residual radioactivity to affect the public health of both workers and local residents. After examining the available data, ATSDR concluded that there were insufficient data to be able to make a determination about potential impact at the time and outlined additional data needs.
- **2003.** In 2003, ATSDR conducted another health consultation based on the availability of additional radiological data. The report focused on potential releases to the environment (ATSDR does not evaluate potential occupational exposures). Instead, the health consultation examined concerns by family members of former employees and some health professionals that employees may have been exposed to dust containing depleted uranium and that their families could have been exposed to dust contaminated with beryllium that may have been carried home on workers’ clothes. After analyzing the available data, ATSDR concluded that there was no evidence of environmental releases of either beryllium or depleted uranium from activities conducted at the IAAAP that would result in adverse human health effects to residents of the facility or those living outside the facility boundary, and that workers’ street clothing worn home was not a potential source of exposure of family members to beryllium (ATSDR, 2003).
- **2011.** USACE issued an addendum to the CRP that focused on sites under FUSRAP. This CRP addendum did not replace the CRP, but rather focused on community concerns about the FUSRAP sites. To gather information for the CRP addendum, the U.S. Army issued postcards and hard-copies of community surveys and received 22 responses. Survey respondents were vaguely familiar with the IAAAP environmental investigation and remediation, although seven were not aware that environmental investigation and remediation was occurring. Interest in being involved in future community involvement was divided: almost one third of the survey respondents had no interest, and the remainder had varying levels of ongoing interest, including those who expressed interest in attending public meetings. Internet updates, mailers sent to the home, and newspaper coverage were the preferred methods of receiving information (USACE, 2011).
- **2013.** ATSDR conducted a health consultation in response to public concerns about potential contaminants found in residential wells and off-property surface water. The health consultation focused on the potential human health effects of exposure to octogen (HMX), cyclonite (RDX), and nitrates. ATSDR compared the highest values of these contaminants found in areas where community residents might come in contact with them, including in four residential wells (although the well with the highest concentration of nitrates is not used for drinking). The health consultation

concluded that exposure to the RDX and HMX levels measured in offsite surface water and sediment are not harmful, although continued monitoring was recommended. In addition, RDX and HMX detected in private wells in 2009 were below levels of health concern and remained at the relatively low levels reported in ATSDR’s 1999 Public Health Assessment. Again, continued monitoring was recommended. Private well water in one home near the IAAAP contained nitrates above the federal drinking standard, but the well is not used for drinking. The source of the nitrates has not been determined and may not be related to IAAAP activities. ATSDR recommended that if residents drink water from that well, they should periodically test the water for nitrate contamination (ATSDR, 2013).

3.3 Community Interviews

In-person interviews were conducted in October 2016 with 11 local stakeholders representing local government and school officials, business leaders, and local residents. Appendix A contains a copy of the questions used to guide the in-person interviews. Additional information was gathered from shorter conversations with two RAB members and several business leaders. A copy of the interview questions was also distributed by email to additional potential stakeholders, but no responses were received.

3.4 Key Community Concerns

Respondents described the region’s attitude toward environmental issues in general to be moderate and focused primarily on conservation from an agricultural perspective, with an emphasis on needing to protect land and water resources for future use.

Overall community interviewees (with the exception of RAB members) were generally aware of environmental contamination at the IAAAP, and several referenced past contamination issues such as discoloration of Brush Creek in the 1950s and contamination of private wells south of the plant. They felt that community members are aware of environmental contamination at the plant, but stated that only people who worked there or had family members who worked there tended to have a greater interest. Otherwise, the plant has been part of the community for as long as people can remember, with “bombs going off all the time” (frequent detonation, vibrations, and noise) when people were growing up nearby.

However, in spite of being aware of contamination at the IAAAP, half of those interviewed were not aware that environmental investigation and remediation is occurring. Of the half who were more aware of environmental work at the IAAAP, most were only vaguely aware that “something is going on.” Only RAB members and community members who know RAB members well felt informed about the extent of environmental investigation and remediation occurring at the plant. However, those respondents expressed frustration with the amount of time it takes to study the problems, and wanted to see “more action” toward restoration.

Most interviewees were not aware of the RAB and stated that meetings are not well publicized and are not held at times convenient for most working people in the community. However, those who were aware of the RAB (not just RAB members) mentioned that the meetings can be too “involved” for anyone who does not follow the restoration program.

Most respondents expressed interest in the U.S. Army increasing public awareness of the environmental investigation and restoration at the IAAAP, with those involved in the RAB particularly interested in “getting the word out.” One respondent did not think the U.S. Army should try to increase public awareness, expressing concern that more news about the environmental restoration would only increase community fears about contamination. In his opinion, “no news is good news.”

Most interviewees were not aware that there is an Administrative Record file, and only those that were involved with the RAB knew to contact the environmental restoration program office if they wanted to

know more about the IAAAP IRP. Others replied that they would try to find a contact person online or they would contact someone else they knew at the plant in the hope of identifying the right person to ask.

Most of those interviewed also discussed cancer rates in southeastern Iowa, and stated that it is generally acknowledged that cancer rates are higher in the region than elsewhere. Many former plant employees have died of cancer, and the AEC has compensated some former employees or their families. Several interviewees mentioned the need for other plant workers to also be compensated; this is a major issue in the region for many people, but interviewees recognized that it was not directly related to the environmental restoration program. Interviewees mentioned that no one knows whether cancer rates in the area (among people who did not work there) are associated with contamination from the plant. They stated that some people may make that assumption, but that in general, most people do not.

3.5 Responses to Community Concerns and Communication Needs

In general, those interviewed expressed interest in being kept informed about environmental restoration at the IAAAP. Results of the interviews indicated the public would like to receive information in the following ways:

- **Community Meetings.** Interviewees suggested that more-general, less-frequent updates would be better for the public rather than expecting community members to attend RAB meetings. Many people cannot attend RAB meetings that are held during the day. Some interviewees suggested that updates be given at town and city council meetings once or twice a year.
- **Project Updates.** Most respondents indicated they would like to receive updates directly and suggested that the U.S. Army have a mailing list. Although some interviewees requested updates by email, several said they would prefer to receive something in the mail because they already get too many email messages. Several interviewees suggested using social media such as Facebook, but also cautioned that the page would need to be monitored carefully.
- **Newspapers.** Most respondents recommended the U.S. Army issue project updates periodically in the newspaper (primarily in *The Burlington Hawk Eye* and *Des Moines County News*). They also recommended local radio station KBUR and, to a lesser extent, network news stations based in Davenport and Moline. Several respondents also recommended that the U.S. Army try to get *The Burlington Hawk Eye* to send reporters to RAB meetings and publish articles on the status of site investigation and remediation.
- **Website.** Interviewees were unaware of the project website, which has recently been updated. They said the website address (<http://www.iaaaprestoration.com/>) should be better advertised, possibly by mailing out a postcard or placing a large advertisement in the paper to inform community members of the website address.

U.S. Army's Community Involvement Program

The U.S. Army 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.

Historically, the IAAAP's community relations activities began in the early 1990s. In addition to specific activities required by CERCLA, past community involvement activities have included the following:

- Tours of IAAAP restoration sites for local high school science classes
- Earth Day tours of the installation for the public
- Public survey conducted in 2000
- Websites: one for the RAB and another that addressed restoration projects
- An online administrative record file
- Environmental restoration newsletter

4.1 Community Involvement Plan

The community has asked to be apprised of activities at the IAAAP. In response, the U.S. Army's public involvement program will include public meetings, communications with the local and regional media, and opportunities for the public to obtain information regarding environmental activities. Elements of the public involvement program are dynamic and will be updated, as necessary, to ensure the continued effectiveness of the program.

4.1.1 Restoration Advisory Board

The IAAAP has established a RAB to keep the public informed and involved in its environmental restoration activities as well as to provide opportunities for public involvement in its IRP. The RAB enables the local community and representatives of government agencies to meet and exchange information about IAAAP's environmental restoration program. It also provides an opportunity to review progress and participate in dialogue with the decision makers. RAB members are provided a wide range of technical data regarding remediation actions as well as independent technical assistance in interpreting the data, if necessary. RAB members are encouraged to provide input when choosing between different remediation technologies and they also make recommendations regarding annual project and funding priorities.

The RAB enables the local community and representatives of government agencies to meet and exchange information about the IAAAP's environmental restoration program. These participants then have an opportunity to review progress, participate in dialogue, address concerns, and provide recommendations to the Commander of the IAAAP. The RAB consists of 13 members who represent the IAAAP, federal and state agencies, and the local communities. Appendix B contains a list of current RAB members. The RAB meets quarterly, and RAB meetings are open to the public. RAB meeting agendas and *Restoration News*, the RAB's newsletter, can be found online at <http://www.iaaaprestoration.com/%20rab/>. RAB meeting minutes can be found in the Administrative Record file, online at <http://www.iaaaprestoration.com/%20adminrecord/>.

4.1.2 Public Comment Periods

Public comment periods are formal opportunities for community members to provide input on restoration program documents and proposed decisions. They will be conducted in accordance with provisions of the CERCLA. Comment periods are typically 30 days, but may be extended up to 60 days in response to timely request by one or more affected party(ies). The U.S. Army will consider public comments before making decisions regarding potential proposed remedial actions. A responsiveness summary will document the U.S. Army's responses to public comments and will be made available to the public.

4.1.3 Public Meetings

Public meetings provide an opportunity for information exchange among the U.S. Army, other agencies, the media, and the public. Opportunity for a public meeting is required during formal public comment periods. The U.S. Army may conduct additional public meetings to update the community on the progress of the environmental restoration program and to solicit community input.

The U.S. Army will inform the public of the scheduled time and location of upcoming public meetings by advertisements in the local newspaper, *The Burlington Hawk Eye*. Appendix C lists contact information for *The Burlington Hawk Eye* and other local and regional media organizations. Appendix D identifies potential public meeting locations. Appendix E includes examples of public notices and other outreach materials similar to what may be used for IAAAP community outreach efforts.

4.1.4 Information Repositories and Administrative Record File

The U.S. Army has established a public information repository at the IAAAP (see Appendix F), where environmental documents will be made available to the community before public meetings and public comment periods. The information repository is located at:

Iowa Army Ammunition Plant
17571 DMC Highway 79
Middletown, IA 52638-5000
Phone: 319-753-7616

The Administrative Record file is the legal file containing documents and/or correspondence that form the basis for selecting a response action. The public can view the Administrative Record file online at <http://www.iaaprestoration.com/%20adminrecord/> (see Appendix F).

4.1.5 Communication Techniques and Actions

Based on the results of the community interviews and as appropriate based on any future changes in community interest, the additional communication techniques and actions are currently or may be implemented:

- **Direct contact with stakeholders**—the U.S. Army, USEPA, and Iowa Department of Natural Resources points of contact are available for public information and questions (Appendix G). Contact information for local, state, and federal officials can be found in Appendixes H, I, and J.
- **Mailings**—the U.S. Army will issue informational materials such as public notices, fact sheets, and news releases as appropriate. The U.S. Army will develop and maintain a mailing list of people interested in receiving updates and will issue periodic fact sheets/newsletters providing an overview and status update on restoration activities at the IAAAP.
- **Project website**—the U.S. Army has established a new website for the IAAAP (<http://www.iaaprestoration.com/>) that provides information about the environmental restoration activities at the IAAAP. The website has RAB information, informational materials, fact sheets, and

public notices. The U.S. Army will update the website quarterly, at a minimum, with project status information, RAB meeting information, and links to new documents in the Administrative Record file as new information is available. Because the website is new and many community members may not be aware, the U.S. Army could announce the availability of the new website through a news release and advertisement in *The Burlington Hawk Eye* and a postcard to the mailing list.

- **RAB Newsletter**—the first edition of *Restoration News*, which replaces *Restoration Pillar*, was published in October 2016 and will be produced quarterly before each RAB meeting: January, April, July, and October. The newsletter will keep the RAB and the public better informed, and improve communication between IAAAP and the community. *Restoration News* is available online at <http://www.iaaaprestoration.com/rab/>.
- **Educational Outreach**—high school environmental science classes could be offered opportunities to tour the facility and learn about environmental restoration efforts at the IAAAP or have an IAAAP representative speak to science classes. In addition to enhancing students' understanding of environmental restoration issues, they could be provided with copies of *Restoration News* or other outreach material to take home.
- **Outreach to Local Officials**—the Base Commander and environmental program manager could provide briefings once or twice a year to town and/or county officials at regularly scheduled meetings.
- **Expand News Media Coverage** —the local newspaper is the primary way people get their information in the local communities. The U.S. Army could increase efforts to engage the local media at *The Burlington Hawk Eye* and generate interest in RAB meetings and other news stories about environmental restoration efforts at the IAAAP.

4.2 Projected Schedule for Community Involvement Activities

To satisfy the community's desire for information and to allow residents to participate in the decision-making process, the U.S. Army may schedule public involvement activities throughout the environmental action process. The activities comply with the community involvement requirements of the National Contingency Plan and CERCLA. Table 4-1 provides a comparison of the timing of public involvement activities and CERCLA milestones.

Table 4-1. Public Involvement Activities

Activity	Community Involvement Plan	Information Repository, Administrative Record File	Website	Fact Sheet ^a / Newsletter	Public Notice	Public Comment Period	Public Meeting/ Informational Session ^b	Responsiveness Summary
Remedial investigation/ feasibility study					—	—		—
Proposed plan				 ^a			 ^b	—
Decision document					—	—		
Remedial design/ remedial action		—	—		—			

^a The proposed plan typically is released as a fact sheet and distributed to stakeholders. A formal proposed plan may be prepared and placed in the information repository. In that case, the proposed plan should be summarized in a fact sheet, and the fact sheet should direct readers to copies of the formal plan.

^b An opportunity for a public meeting is required as part of the proposed plan activity. Other activities may have informational sessions conducted, as needed.

-  Periodic updates
-  Ongoing activity
-  Required by law, regulation, or policy
-  Discretionary activity (determined by level of community interest)

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Appendix A
In-person Community Interview
Questions and Survey Questionnaire

In-person Community Interview Questions and Survey Questionnaire

Iowa Army Ammunition Plant Community Interview Questions for Community Involvement Plan
Interviewee:
Date:
Interviewer:

Thank you for meeting with us! We appreciate your time. This interview should take about a half hour, unless you'd like to talk longer.

Briefly –

The U.S. Army is investigating and cleaning up environmental contaminants at the Iowa Army Ammunition Plant (IAAAP) under the Department of Defense's Installation Restoration Program. An important part of this effort is keeping members of the community informed and involved in the environmental restoration process. The Community Involvement Plan (CIP) for the U.S. Army's work at the IAAAP guides citizen participation in environmental cleanup efforts.

The U.S. Army is updating the CIP, and the opinion of residents about concerns and information needs is an important part of this process. The plan identifies community concerns and describes how the U.S. Army will communicate with the public about environmental restoration at the IAAAP.

Your responses in this interview will be kept strictly confidential and will be used only in a summary format to update the CIP. I will give you the phone number for Katelyn Newton with the U.S. Army Corps of Engineers, Louisville District as well as my own at the end of this interview in case you have any questions.

Ok, if you're ready, let's get started.

GENERAL

1. How long have you been a resident of the local community? _____ years

2. How far do you live from the IAAAP? _____ miles

3. How would you describe your role in the community?

- | | |
|--|--|
| <input type="checkbox"/> former employee of IAAAP <i>[If yes, go to (a) and (b) below]</i> | <input type="checkbox"/> public or elected official |
| <input type="checkbox"/> local resident | <input type="checkbox"/> representative of local environmental group |
| <input type="checkbox"/> business owner | <input type="checkbox"/> community leader |
| <input type="checkbox"/> military or former military | <input type="checkbox"/> RAB member |
| <input type="checkbox"/> representative of homeowner association or other civic group | <input type="checkbox"/> Other (specify) |

- a. How long did you work at the IAAAP? _____ years
- b. What was your job?

ENVIRONMENTAL

- 4. How would you describe the community's attitude toward environmental issues in general?

- 5. What environmental issues tend to be most important to people? (*prompt as needed: energy, water, etc.*)

- 6. Before we contacted you, were you aware that the U.S. Army Corps of Engineers, on behalf of the U.S. Army, is investigating environmental contamination at the IAAAP?
_____ yes _____ no _____ not sure
 - a. If so, what is your general understanding of the program? Do you remember how you learned about it and when?

- 7. Would you say the community is interested in or concerned about environmental contamination at the IAAAP?
_____ yes _____ no _____ not sure
(*If yes, probe for more information.*)

- 8. Do you have any special interest in or concerns about this study, and if so, what?
_____ yes _____ no _____ not sure

9. Do you feel that environmental contamination at the IAAAP has affected the local community?

_____ yes _____ no _____ not sure

a. If yes, in what ways? (*prompt only as needed: health, property values, quality of life, etc.*)

INFORMATION AND COMMUNICATION

10. How do you get your local news?

Newspaper
Name? _____

Radio
Station? _____

Online
Site? _____

Television
Station? _____

Other (*specify*)

11. Do you consider these sources reliable and accurate?

_____ yes _____ no _____ not sure

a. If no, are there other sources you would recommend?

12. Would you be interested in receiving information about the U.S. Army's installation restoration program at the IAAAP?

_____ yes _____ no

If yes:

a. What type of information would you like?

b. How would you prefer to receive that information? (*e.g., mail, email, website updates*)

c. How often would you want to receive information?

d. Are you aware that IAAAP has documents related to the investigation and restoration efforts available for review by appointment at the IAAAP or an online Administrative Record File?

_____ yes _____ no

13. Are there other ways that you think the U.S. Army could provide you with information and let you know about opportunities to participate in decision-making for the IAAAP?

- Newspaper
- Radio/TV
- Information repository

Suggested location:

- Community meetings

Suggested location:

Suggested times/days of the week:

- IAAAP visits
- Website
- Other (describe)

14. Have you had contact with any U.S. Army, state, or environmental officials regarding environmental issues at the IAAAP?

_____ yes _____ no

If yes:

a. Please explain.

b. Have they been responsive to your concerns?

_____ yes _____ no _____ somewhat

Please explain.

15. If you had a question or concern about the IAAAP, what would you do? Is there someone you would contact?

_____ yes _____ no _____ not sure

If yes, name: _____

16. A Restoration Advisory Board or “RAB” has been active at the IAAAP since 1997. The RAB is a group of 11 concerned community members who meet quarterly to receive updates about the environmental investigation and remedial actions and to provide feedback from the community's point of view.

Are you aware there is an active RAB for the IAAAP?

_____yes _____no

If yes, have you attended any meetings or visited the RAB website?

_____yes _____no

Would you be interested in serving on the RAB?

_____ yes _____ no _____ not sure

17. Is there someone in particular you think we should contact as part of these interviews?

Name: _____

Affiliation: _____

Contact information: _____

18. Do you have any other comments or suggestions?

Your participation is important to the success of the environmental restoration program at the IAAAP. Thank you so much for your time. Again, your responses will be kept confidential and will only be used in summary format. Here are the phone numbers for Katelyn Newton of the USACE, Louisville District and me in case you have any other questions or think of anything else? (*provide if yes*)

Iowa Army Ammunition Plant

Survey Questions for Community Involvement Plan

The U.S. Army is investigating and cleaning up environmental contaminants at the Iowa Army Ammunition Plant (IAAAP) under the Department of Defense's Installation Restoration Program. An important part of this effort is keeping members of the community informed and involved in the Installation Restoration Program. The Community Involvement Plan (CIP) for the U.S. Army's work at the IAAAP guides citizen participation in environmental cleanup efforts.

The U.S. Army is updating the CIP. The opinion of residents about the concerns and information needs is an important part of this process. Responses to the short survey below will be documented in the CIP and help the U.S. Army provide the community with factual, timely, and clear information that will promote public participation in the decision-making process.

Please complete the survey as soon as you can – your opinion is important. Surveys completed after November 4, 2016 may not arrive in time to be documented in the CIP.

If you have specific questions about the survey or if you would like to speak personally with a representative, contact Katelyn Newton at the U.S. Army Corps of Engineers, Louisville District by phone at 502-315-6773 or email at katelyn.c.newton@usace.army.mil.

Your participation is important to the success of the Installation Restoration Program at the IAAAP. Thank you so much for your time. Your responses will be kept confidential and will only be used in summary format. If you have any additional questions or think of anything you want to add, please feel free to contact Katelyn Newton at the U.S. Army Corps of Engineers, Louisville District.

1. What do you know about the environmental impact of past operating activities at the IAAAP?

- I don't know anything about it.
- I know a little about it.
- I know a lot about it.

2. Are you aware of investigations underway at the IAAAP as a result of past operations?

- No
- Yes
- Maybe

3. Do you know anything about current environmental cleanup at IAAAP?

- I don't know anything about it.
- I know a little about it.
- I know a lot about it.

4. Have you ever spoke with anyone at IAAAP or with the U.S. Army about concerns that you may have?

- No

- Yes
- Maybe

5. Have you participated in community outreach activities involving the IAAAP?

- No
- Yes
- Maybe

If yes, please describe them here

6. Would you like to be involved in future community outreach activities involving the IAAAP?

- No
- Yes
- Maybe

7. Would you come to a public meeting about environmental cleanup at the IAAAP?

- No
- Yes
- Maybe

8. If you have previously heard about the environmental cleanup at IAAAP, how did you hear about it?

- Newspaper
- Radio
- TV
- Friends or Neighbors
- Community Organizations
- Internet/Social Media
- Public Meetings
- Never Heard Anything
- Other

9. Would you like to see the documents (called an Administrative Record File) that tell about past environmental investigations and current cleanup?

- No

- Yes
- Maybe

10. If yes/maybe, where would you like to view the Administrative Record File?

- On paper at the IAAAP (appointments to review documents must be made in advance)
- Electronically on the internet

11. How would you like to get information about the environmental cleanup at the IAAAP?

- Newspaper
- Public Meetings
- Radio
- TV
- Information mailed to my home
- Internet
- Email

12. How often would you like to receive information?

- Weekly
- Monthly
- Quarterly
- Other (please specify) _____

13. Do you have any additional comments?

14. If you would like to stay informed about IAAAP cleanup, please contact Katelyn Newton of the U.S. Army Corps of Engineers, Louisville District by email at katelyn.c.newton@usace.army.mil or telephone at (502) 315-6773.

Please e-mail the completed survey to katelyn.c.newton@usace.army.mil or mail to:

**Katelyn C. Newton
Public Affairs Specialist
U.S. Army Corps of Engineers, Louisville District
CELRL-PA
P.O. Box 59
Louisville, KY 40201-0059**

Appendix B
IAAAP Restoration Advisory Board
Members

IAAAP Restoration Advisory Board Members

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IDNR Representative
dan.cook@dnr.iowa.gov

Mark Hagerla
Community Member
hagerlafarm@aol.com

Hans Trousil
Community Member
trousilh@westburlington.org

Bruce Workman
Community Member
workmanb@burlingtoniowa.org

Dean Vickstrom
Community Member
sdvickstrm@aol.com

Vaughan Moore
Community Member

Thurman Huffman
Community Member

Doug Coyle
Community Member
coyledouglas144@yahoo.com

Robert Haines
Community Member
rohaines@mchsi.com

Appendix C

Media Contacts

Media Contacts

Newspapers

The Burlington Hawkeye

800 South Main Street

Burlington, IA 52601

Phone: 319-754-8461

Website: www.thehawkeye.com

The Des Moines County News

204 Broadway Street

West Burlington, IA 52655

Phone: 319-752-8328

The Fort Madison Daily Democrat

1226 Avenue H

Fort Madison, IA 52627

Phone: 319-372-6421

E-mail: editor@dailydem.com

Television Stations

KWQC-TV Channel 6

805 Brady Street

Davenport, IA 52803

General Manager: John Mann

Phone: 563-383-7000

Website: www.kwqc.com

E-mail: contact through website

WQAD-TV Channel 8

3003 Park 16th Street

Moline, IL 61265

News Director: Alan Baker

Phone: 309-764-8888

Website: www.wqad.com

E-mail: contact through website

Radio Stations

Pritchard Broadcasting Corporation

KBUR-AM, KBKB-AM, KDMG-FM, KKMI-FM, WQKQ-FM, KHDK-FM

Burlington, Fort Madison and New London (IA) and Dallas City (IL)

610 N 4th Street, Suite 300, Burlington, IA 52601 Studio: 319-754-1490

Phone: 319-752-5402

Website: www.kbur.com

E-mail: contact through website

Titan Broadcasting, LLC

KGRS (Burlington) and KBKB (Fort Madison)

610 N 4th St, Suite 310

Burlington, IA 52601

Phone: 319-752-2701

Website: www.kgrsfm.com
E-mail: contact through website

KILJ AM-FM
2411 Radio Drive
Mt. Pleasant, IA 52641
Phone: 319-385-8728
Website: www.kilj.com
E-mail: contract through website

Appendix D
Meeting Locations

Meeting Locations

Bob Dodds Insurance Agency
108 North Main Street
Danville, IA 52623

Burlington Public Library
210 Court Street
Burlington, IA 52601

Burlington /West Burlington Chamber of Commerce
610 North 4th Street
Burlington, IA 52601

Comfort Suites
1780 Stonegate Center Drive
Burlington, IA 52601

Danville City Hall
105 West Shephard Street
Danville, IA 52623

PZAZZ Motor Inn Resort Complex
3001 Winegard Drive
Burlington, IA 52601

Appendix E

Public Involvement Tools

Public Involvement Tools

The USACE templates for news releases and newspaper advertisements and sample flyer that are potentially applicable for this project are listed below. The templates and samples listed are examples and have not been updated for a specific project. The list of examples of public involvement tools that may be needed is not all-inclusive.

- Public Comment Period News Release Template
- Public Comment Period Newspaper Advertisement Template
- Sample Information Repository Flyer
- Public Meeting News Release Template
- Administrative Record Newspaper Advertisement Template

Appendix F
Information Repository and
Administrative Record File Locations

Information Repository and Administrative Record File Locations

The Information Repository, which contains hard copies of the Administrative Record File are available at the following location:

Iowa Army Ammunition Plant
17571 DMC Highway 79
Middletown, IA 52638-5000

The public can view the Administrative Record file online at <http://www.iaaprestoration.com/adminrecord/>.

Appendix G
U.S. Army and Regulatory Contacts

U.S. Army and Regulatory Contacts

Iowa Army Ammunition Plant Contact

Acting Environmental Restoration Program Manager/Chief Operations Support Division

17571 DMC Highway 79

Middletown, IA 52638-5000

Office: 319-753-7150

E-mail: steven.j.bellrichard.civ@mail.mil

Environmental Protection Specialist

17571 DMC Highway 79

Middletown, IA 52638-5000

Office: 319-753-7616

E-mail: Jennifer.l.busard.civ@mail.mil

USACE Contacts

Contracting Officer Representative

600 Dr. Martin Luther King, Jr. Place

Louisville, KY 40202-2232

Office: 502-315-6372

E-mail: aaron.b.steele@usace.army.mil

U.S. Army Corps of Engineers

Louisville District

Public Affairs Office

PO Box 59

Louisville, KY 40201-0059

Office: 502-315-6773

E-mail: Katelyn.C.Newton@usace.army.mil

Army Environmental Command Contact

Environmental Support Manager

2450 Connell Road Bldg. 2264/125-2

Fort Sam Houston, TX 78234

Office: 210-466-1706

E-mail: zaynab.r.murray.civ@mail.mil

Regulatory Contact

U.S. Environmental Protection Agency, Region 7

11201 Renner Blvd.

Mail Code: SUPRIANE

Lenexa, KS 66219

Office: 913-551-7763

E-mail: Mehta.sandeep@epa.gov

Iowa Department of Natural Resources

Wallace State Office Building

502 East 9th Street, 4th Floor

Des Moines, IA 50319-0034

Email: dan.cook@dnr.iowa.gov

Appendix H

Local Officials

Local Officials

City of Burlington

400 Washington Street
Burlington, IA 52601
319-753-8120

Shane Campbell
Mayor
319-753-8120

Annie Wilson
Council Member
319-753-8120

Robert Fleming
Council Member
319-753-8120

Tim Scott
Council Member
319-753-8120

Jim Davidson
Mayor Pro Tem
319-753-8120

Mack MacGregor, Asst. City Manager
3510 Division Street
Burlington, IA 52602
319-753-6171

Ryne Thornburg, City Engineer
3510 Division Street
Burlington, IA 52602

Matt Trexel, Fire Chief
418 Valley Street
Burlington, IA 52601

City of Danville

Trent Henkelvig
Mayor
PO Box 265
Danville, IA 52623
319-392-4685

Des Moines County

Bob Beck, Supervisor
513 North Main
Burlington, IA 52601
319-208-5645

Jim Holley, Environmental
513 North Main
Burlington, IA 52601
319-753-8290

City of Fort Madison

811 Avenue East
Fort Madison, IA 52627

Brad Randolph
Mayor
319-372-7700 ext. 207

Joey Herren
Fire Chief
319-372-7700 ext. 215

Larry Driscoll
Public Works Director
319-372-7700 ext. 204

City of Middletown

120 Mechanic Street
Middletown, IA 52638
319-752-8340

Doug Coyle
Mayor

Orrin Asmus
Councilmember

A.J. Fesler
Councilmember

Ryan Freitag
Councilmember

Earl Martin
Councilmember

Jason Green
Councilmember

LOCAL OFFICIALS

City of West Burlington

122 Broadway Street
West Burlington, IA 52655
319-752-5451

Hans Trousil
Mayor

Rod Crowner
Council
319-759-1298

Kara Steward
Council
319-850-8559

Therese Lees
Council

Doug Ervine
Council

Shaun Ryan
Fire Chief

State of Iowa

Stuart Schmitz, Dept. of Public Health
321 East 12th Street
Des Moines, IA 50319
515-281-4944

Appendix I
State Elected Officials

State Elected Officials

Iowa Senate

Senator Thomas Courtney
2609 Clearview
Burlington, IA 52601
319-759-5334

Iowa House of Representatives

Representative Dennis Cohoon
8151 138th Street
Burlington, IA 52601
515-281-3221

Representative Thomas Sands
13247 130th Street
Wapello, IA 52653
319-729-2280

Appendix J
Federal Elected Officials

Federal Elected Officials

Senator Chuck Grassley
201 West 2nd Street Ste. 720
Davenport, IA 52801
563-322-4331

Senator Joni Ernst
201 West 2nd Street Ste. 806
Davenport, IA 52801
563-322-0677

Representative Dave Loebsack
209 West 4th Street Ste. 104
Davenport, IA 52801
563-323-5988

Appendix K

Glossary

Glossary

Administrative Record file: A file containing information that is used to make decisions about an environmental site, including work plans, verified sampling data, final reports and studies, maps, and public health assessments. The file is available for public review.

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA): The federal law, commonly known as Superfund, passed in 1980 and modified in 1986 by the Superfund Amendments and Reauthorization Act (SARA). CERCLA requires responsible parties to clean up releases of hazardous substances and certain pollutants and contaminants and sets out a process for investigating and making decisions about sites that may need to be cleaned up.

Decision document: At the end of the public comment period associated with a proposed plan, an appropriate cleanup alternative is chosen to protect human health and the environment. The decision document explains the selected cleanup action and includes the responsiveness summary.

Emergency removal: A short-term action requiring immediate removal of hazardous materials to protect human health and the environment.

Engineer evaluation and cost analysis: A document describing the remedial approach for a non-time-critical removal action. It is prepared before beginning the removal action.

Feasibility study: Presents and evaluates various alternatives for remedial actions at the site.

Groundwater: Water found beneath the earth's surface that fills spaces between sand, soil, and rock. In aquifers, groundwater occurs in sufficient quantities that can be used as a source of water for drinking, irrigation, and other purposes.

Information repository: A file containing current information, technical reports, reference documents and other information about a cleanup program. The information repository is usually located in a public building that is convenient for local residents, such as a public library.

Iowa Department of Natural Resources: The state agency responsible for enforcement of state laws protecting the environment.

National Oil and Hazardous Substance Pollution Contingency Plan (National Contingency Plan): The National Contingency Plan is the federal government's principal guidance for responding to both oil spills and hazardous substance releases.

Nature and extent of contamination: The questions that a remedial investigation is designed to answer, for example: What types of chemicals or physical hazards, such as petroleum products, solvents, or metals, are present (nature)? and How large/wide and deep is the area in which the contamination is found (extent)?

Non-time-critical removal action: A removal action that occurs when the situation allows for a planning period of six months or more before beginning removal activities. These sites do not present an immediate threat to public health or safety.

Preliminary assessment: The first step in the CERCLA process is to assess available information about a site and its surrounding area. A preliminary assessment is designed to determine whether a site poses little or no threat to human health and the environment or if a potential threat requires further investigation.

Proposed plan: A plan for a site cleanup that summarizes the remedial alternatives developed in the feasibility study and recommends a preferred alternative. The proposed plan is issued for public comment.

Public comment period: A time period, lasting usually 30 days, for the public to review and comment on various documents and actions.

Remedial action: The cleanup of environmental contamination; the actual construction or implementation of the selected cleanup alternative at a site.

Remedial design: The phase during which technical specifications for cleanup remedies and technologies are developed.

Remedial investigation: Extensive and detailed studies of the nature and extent of the contamination at the site, including field testing and sampling, site characterization, and conducting formal risk assessments. This phase in the CERCLA process occurs after a site inspection reveals a real or potential threat to human health and the environment exists. The RI is used to determine whether cleanup is required and to provide data for a feasibility study of cleanup alternatives.

Removal action: A short-term response to an immediate threat to human health or the environment. Removal actions may be conducted at any point in the CERCLA process. They vary in duration and are categorized by their urgency and duration.

Resource Conservation and Recovery Act (RCRA): A law enacted by Congress in 1976 with the primary goal of protecting human health and the environment from the potential hazards of waste disposal, conserving energy and natural resources, reducing the amount of waste generated, and ensuring that wastes are managed in an environmentally sound manner. RCRA regulates the management of solid waste (e.g., garbage), hazardous waste, and underground storage tanks holding petroleum products or certain chemicals.

Responsiveness summary: A summary of oral and written public comments received during a public comment period. It is a key part of the decision document, highlighting the community's concerns.

Site inspection: If the preliminary assessment results in a recommendation for further investigation, a site inspection is performed. Investigators collect samples (such as soil and water) to determine whether hazardous substances are present at a site.

Superfund Amendments and Reauthorization Act of 1986 (SARA): The law that refined and expanded CERCLA in 1986, formally establishing the Defense Environmental Restoration Program and its funding mechanism, the Defense Environmental Restoration Account.

Surface water: Bodies of water that are aboveground, such as rivers, lakes, and streams.

Time-critical removal action: A removal action that is conducted when remediation activities must begin within six months of discover of hazardous materials to protect public health and safety.

U.S. Environmental Protection Agency: The independent federal agency, established in 1970, that regulates environmental matters and oversees the implementation of environmental laws.

Volatile organic compound: A contaminant that evaporates into the air easily, such as a paint thinner or industrial solvent.